West Metro Fire Rescue

Risk Assessment

West Metro
Fire Rescue

2022

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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 2017 to 2021.

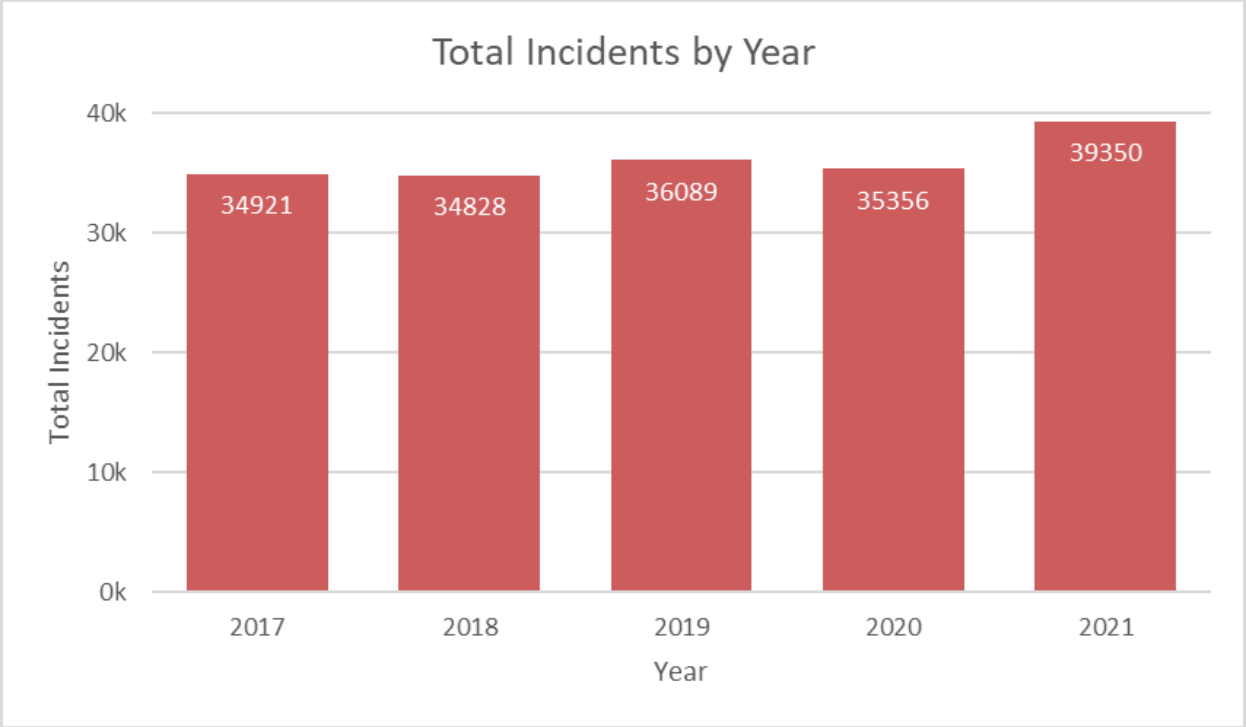


Figure 1

Five Year Incident Type Summary								
Year	**Alarm**	**EMS**	**Fire**	**Public Assist**	**Hazmat**	**Rescue**	**Other**	**Total**
2017	4114	23598	573	2530	319	161	3626	**34921**
2018	3997	23004	625	2309	328	175	4390	**34828**
2019	3699	23652	478	2959	333	128	4840	**36089**
2020	3507	22830	629	2988	360	127	4915	**35356**
2021	3977	25280	648	3322	377	145	5601	**39350**
Total	**19294**	**118364**	**2953**	**14108**	**1717**	**736**	**23372**	**180544**
Percent	**10.69%**	**65.56%**	**1.64%**	**7.81%**	**0.95%**	**0.41%**	**12.95%**	**100.00%**

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 2021. 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 average of EMS calls in 2021 was 2.9% less than the five-year average from 2017 through 2021. Figure 2 shows incident types for the past five years and Figure 3 shows the same incident types for 2021.

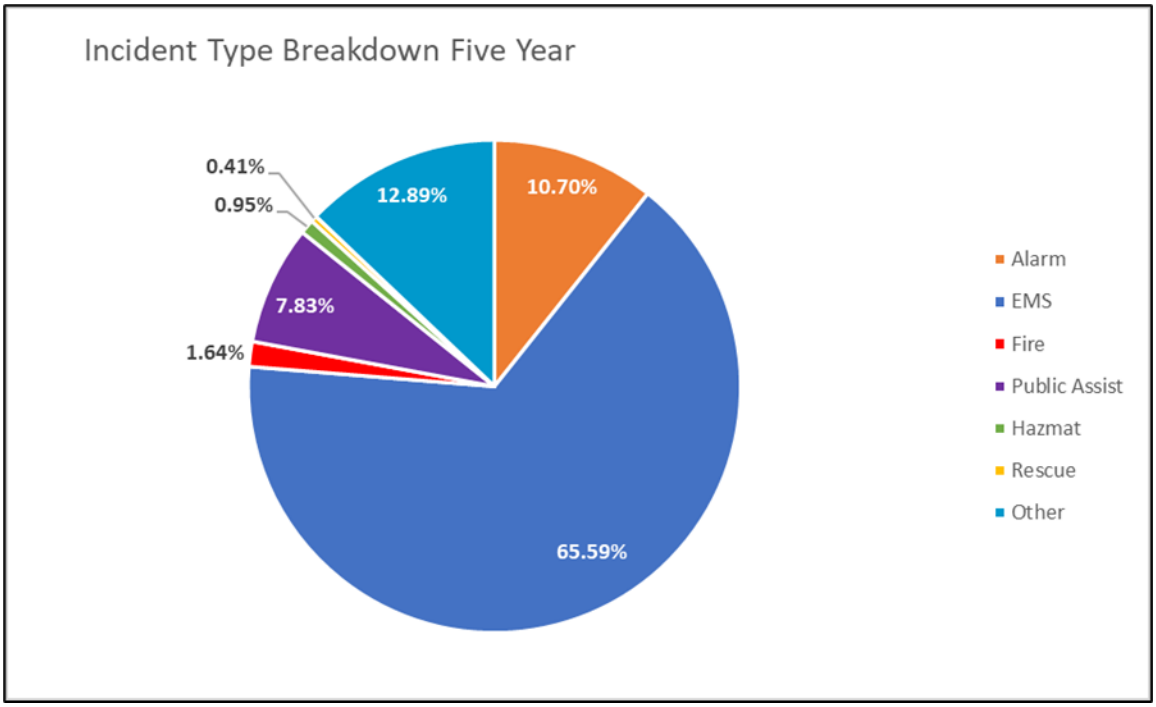


Figure 2

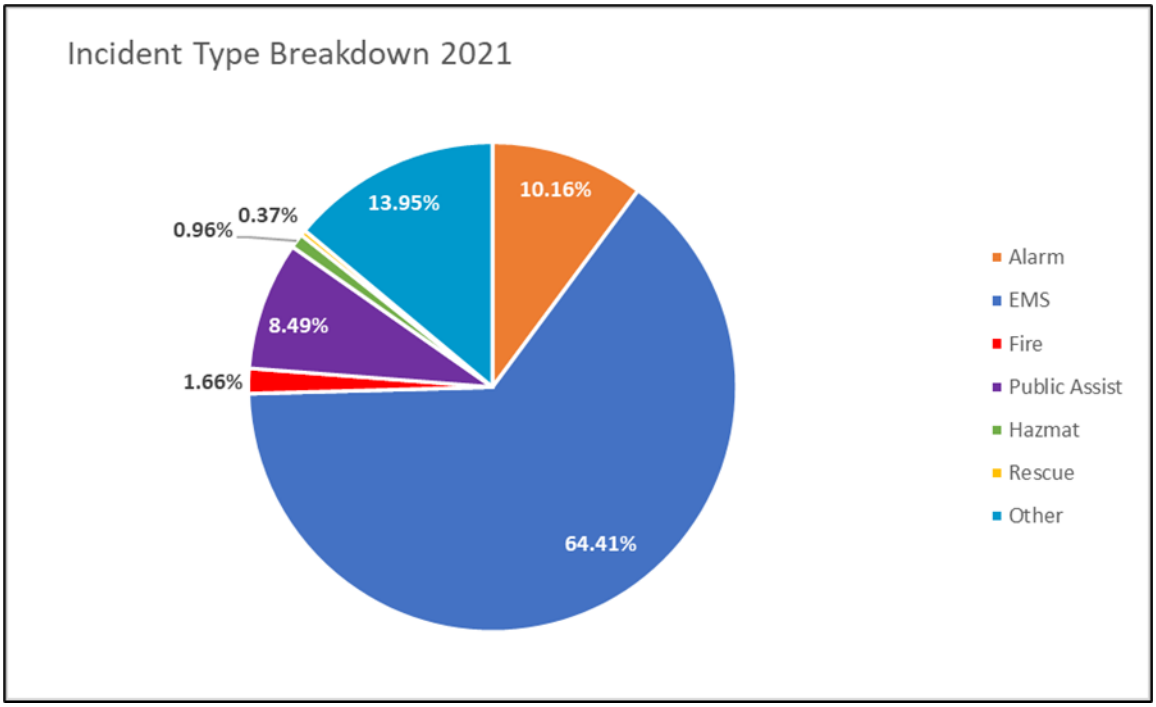


Figure 3

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.

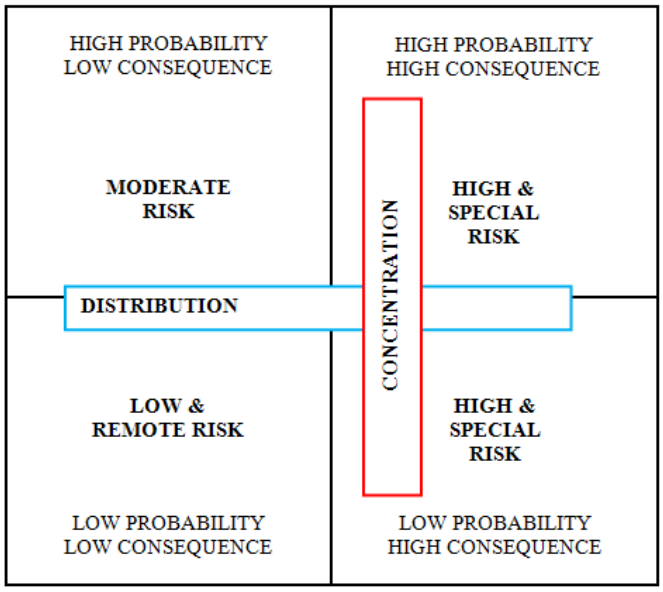


Figure 4

It is recognized 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 2017-2021 (Number of Incidents)									
	Low Risk			Moderate Risk			High or Special Risk		
	Type	NFIRS Code	Count	Type	NFIRS Code	Count	Type	NFIRS Code	Count
High Frequency	Low Risk EMS*	311 320-324	20,456	Moderate Risk EMS*	311 320-324	42,731	High Risk EMS*	311 320-324	3,360
	Alarms	700-730 733-740 743-799	18,730	EMS (2017-2018 all considered moderate risk in previous RMS)	311 320-324	30,529	Multi-Family Structure Fire	111	162
	Outside smoke investigation	651 653	1,128	Unknown odor or Haz Mat investigation; no Haz Mat found	650 652 671	988			
	Carbon monoxide incident	424	473	Natural gas or LPG leak	412	873			
	Outside rubbish, trash, or waste fire	151	431	Electrical hazard, short circuit, overheated motor, ballast, arcing	440-443 445	680			
	Elevator rescue	353	412	Alarms in: DFC & NREL St. Anthony Hospital Lutheran Hospital or	731-732 741-742 (Water Flows)	446			
	Passenger vehicle fire, other than motor home	131-135 138	382	Structure fire involving an enclosed building	111	439			
	Dumpster or other outside trash receptacle fire	154	257	Gasoline or other flammable liquid spill	411	244			
	Electrical hazard, lines down	370-372 444	244	Vehicle Extrication	352	166			
	Grass fire	143	182						
	Natural vegetation fire, not otherwise classified	140-141	170						
Low Frequency	Outside rubbish fire, not otherwise classified	150	130	Brush, or brush and grass mixture fire	142	147	Commercial Structure Fire	111	88
	Cooking fire, confined to container	113	126	Fire in a structure other than a building	112	126	Water or ice related rescue	360-365	36
	Chimney or flue fire, confined to chimney or flue	114	12	Oil or other combustible liquid spill	413	41	High angle rescue	356	31
	Self-propelled recreational vehicle fire	136	12	Other hazardous condition or radioactive	400 430 431	38	Chemical spill or leak	422	27
	Attempted burning or illegal action other	480-482	12	Chemical hazard (no spill or leak)	421	20	Nursing/Assisted Living Fires	111	10
	Vehicle Accident (no injury), other accident	460 463	11	Flamm/comb gas or liquid condition, other	410	18	Toxic condition, other	420	10
	Recreational vehicle non-self-propelled fire	137	8	Refrigeration leak	423	6	Extrication of victims from a building	351	4
	Extrication of victims from equipment	357	5	Explosive, bomb removal (for bomb scare, use 721)	471	2	Biological hazard, confirmed or suspected	451	3
							Brush/Grass Fire > 100 acres	142	2
							Confined space rescue	355	2
							Multi-Alarm Road or Freight Fire	132	1
							Trench or below grade rescue	354	1
							Mass Casualty Incidents	Any	1

Table 2

* 2019-2021 only

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	2500	12.96%	20499	17.32%	573	19.40%	1813	12.85%	195	11.36%	96	13.04%	4892	20.93%	30568	16.93%
Station-02	1733	8.98%	9751	8.24%	238	8.06%	1156	8.19%	149	8.68%	86	11.68%	1663	7.12%	14776	8.18%
Station-03	1501	7.78%	9630	8.14%	189	6.40%	1189	8.43%	104	6.06%	74	10.05%	1819	7.78%	14506	8.03%
Station-04	1384	7.17%	7665	6.48%	164	5.55%	951	6.74%	127	7.40%	81	11.01%	1138	4.87%	11510	6.38%
Station-05	613	3.18%	3576	3.02%	102	3.45%	476	3.37%	45	2.62%	40	5.43%	710	3.04%	5562	3.08%
Station-06	861	4.46%	2744	2.32%	88	2.98%	209	1.48%	53	3.09%	19	2.58%	527	2.25%	4501	2.49%
Station-07	1906	9.88%	10923	9.23%	261	8.84%	1348	9.55%	122	7.11%	61	8.29%	1551	6.64%	16172	8.96%
Station-08	1116	5.78%	8299	7.01%	187	6.33%	1080	7.66%	110	6.41%	38	5.16%	1055	4.51%	11885	6.58%
Station-09	289	1.50%	2482	2.10%	91	3.08%	148	1.05%	49	2.85%	27	3.67%	845	3.62%	3931	2.18%
Station-10	1877	9.73%	9390	7.93%	194	6.57%	1144	8.11%	114	6.64%	70	9.51%	1180	5.05%	13969	7.74%
Station-11	217	1.12%	1432	1.21%	50	1.69%	133	0.94%	50	2.91%	10	1.36%	289	1.24%	2181	1.21%
Station-12	1596	8.27%	8076	6.82%	174	5.89%	943	6.68%	158	9.20%	27	3.67%	1327	5.68%	12301	6.81%
Station-13	792	4.10%	3117	2.63%	89	3.01%	369	2.62%	60	3.49%	21	2.85%	574	2.46%	5022	2.78%
Station-14	856	4.44%	3134	2.65%	82	2.78%	432	3.06%	86	5.01%	14	1.90%	654	2.80%	5258	2.91%
Station-15	233	1.21%	1260	1.06%	53	1.79%	140	0.99%	66	3.84%	9	1.22%	379	1.62%	2140	1.19%
Station-16	1337	6.93%	12060	10.19%	255	8.64%	1903	13.49%	160	9.32%	41	5.57%	3152	13.49%	18908	10.47%
Station-17	480	2.49%	4182	3.53%	128	4.33%	663	4.70%	66	3.84%	13	1.77%	888	3.80%	6420	3.56%
Station Undefined	3	0.02%	144	0.12%	35	1.19%	11	0.08%	3	0.17%	9	1.22%	729	3.12%	746	0.41%
Total	**19294**	**100.00%**	**118364**	**100.00%**	**2953**	**100.00%**	**14108**	**100.00%**	**1717**	**100.00%**	**736**	**100.00%**	**23372**	**100.00%**	**180544**	**99.90%**

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 are 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 by Station 2017 – 2021 Stations 1 - 9	NFIRS Code	Station-01	Station-02	Station-03	Station-04	Station-05	Station-06	Station-07	Station-08	Station-09
Authorized controlled burning (631)	631	21	9	11	8	6	3	7	6	3
Brush, or brush and grass mixture fire (142)	142	17	19	10	15	6	12	12	10	8
Camper or recreational vehicle (RV) fire (not self-propelled) (137)	137	1	2	0	0	0	0	0	2	0
Chimney or flue fire, confined to chimney or flue (114)	114	1	1	1	1	0	0	1	1	0
Commercial compactor fire, confined to rubbish (117)	117	0	0	0	0	0	0	0	1	0
Cooking fire, confined to container (113)	113	26	8	9	8	2	3	19	10	3
Dumpster or other outside trash receptacle fire (154)	154	58	22	13	13	6	7	30	18	5
Fire in mobile prop used as a fixed structure, other	120	0	0	0	0	0	0	0	0	0
Fire in mobile home used as fixed residence (120, 121)	121	4	0	0	0	0	0	1	0	0
Fire in motor home, camper, recreational vehicle used as residence (122)	122	3	0	0	0	0	0	0	0	0
Fire in portable building, fixed location (123)	123	1	1	1	1	0	0	2	0	0
Fuel burner/boiler malfunction, fire confined (116)	116	2	1	0	1	0	1	0	1	0
Grass fire (143)	143	15	13	7	9	10	4	12	7	21
Natural vegetation fire, not otherwise classified (140)	140	14	3	12	10	1	5	22	13	3
Off-road vehicle or heavy equipment fire (138)	138	0	0	0	0	0	0	0	1	1
Outside equipment fire (162)	162	5	2	1	1	1	0	6	5	0
Outside rubbish fire, not otherwise classified (150)	150	17	10	6	1	1	2	5	7	1
Outside rubbish, trash or waste fire (151)	151	67	32	26	21	8	5	31	25	3
Passenger vehicle fire, other than motor home (131)	131	55	28	22	15	10	6	23	19	10
Prescribed fire (632)	632	0	0	0	0	0	0	0	0	0

Fire Incidents by Station 2017 – 2021 Stations 1 – 9 cont.	NFIRS Code	Station-01	Station-02	Station-03	Station-04	Station-05	Station-06	Station-07	Station-08	Station-09
Road freight or transport vehicle fire (132)	132	2	3	3	2	20	5	3	4	6
Self-propelled motor home or recreational vehicle fire (136)	136	1	0	0	1	2	0	1	0	0
Special outside fire, not otherwise classified (160)	160	30	11	14	9	4	1	17	8	3
Structure fire involving an enclosed building (111)	111	121	53	45	54	21	28	66	45	14
Structure fire other than in building (trestle, pier, poles, fence) (112)	112	27	5	11	8	4	4	15	5	4
Trash or rubbish fire in a structure, contained (118)	118	5	7	6	1	0	3	7	2	0
Unauthorized burning (561)	561	76	33	26	29	10	12	41	30	2
Vehicle fire, not otherwise classified (130)	130	2	0	0	0	1	1	0	1	0
Water vehicle fire (134)	134	0	0	0	0	0	0	0	0	0
Cultivated grain or crop fire	171	0	0	0	0	0	0	0	0	0
Cultivated orchard or vineyard fire 172	172	0	0	0	0	0	0	0	0	0
Cultivated trees or nursery stock fire (173)	173	1	0	0	0	0	0	0	0	0
Cultivated vegetation, crop fire, other (170)	170	1	0	0	0	0	0	0	0	0

Fire Incidents by Station 2017 – 2021 Stations 10 - 17	NFIRS Code	Station-10	Station-11	Station-12	Station-13	Station-14	Station-15	Station-16	Station-17	Out Of District
Authorized controlled burning (631)	631	8	1	6	1	3	4	10	3	0
Brush, or brush and grass mixture fire (142)	142	21	2	5	5	6	8	11	7	9
Camper or recreational vehicle (RV) fire (not self-propelled) (137)	137	1	0	2	0	0	0	0	0	0
Chimney or flue fire, confined to chimney or flue (114)	114	0	0	1	1	3	0	2	0	0
Commercial compactor fire, confined to rubbish (117)	117	0	0	0	0	0	0	0	0	0
Cooking fire, confined to container (113)	113	7	2	8	3	7	3	13	5	1
Dumpster or other outside trash receptacle fire (154)	154	22	6	9	4	5	0	14	6	0
Fire in mobile prop used as a fixed structure, other	120	0	0	0	0	0	0	0	0	0
Fire in mobile home used as fixed residence (120, 121)	121	0	0	0	0	0	0	0	0	0
Fire in motor home, camper, recreational vehicle used as residence (122)	122	0	0	0	0	0	0	0	0	0
Fire in portable building, fixed location (123)	123	1	1	0	1	0	0	3	0	0
Fuel burner/boiler malfunction, fire confined (116)	116	2	0	0	0	0	0	2	0	0
Grass fire (143)	143	15	3	8	9	10	2	11	7	2

Fire Incidents by Station 2017 – 2021 Stations 10 – 17 cont.	NFIRS Code	Station-10	Station-11	Station-12	Station-13	Station-14	Station-15	Station-16	Station-17	Out Of District
Natural vegetation fire, not otherwise classified (140)	140	11	1	9	5	3	5	12	13	3
Off-road vehicle or heavy equipment fire (138)	138	0	0	0	0	0	0	0	0	0
Outside equipment fire (162)	162	1	1	4	4	1	1	1	2	0
Outside rubbish fire, not otherwise classified (150)	150	5	1	3	1	1	4	12	3	0
Outside rubbish, trash or waste fire (151)	151	18	6	20	6	4	3	23	14	0
Passenger vehicle fire, other than motor home (131)	131	27	5	17	17	11	0	27	8	4
Prescribed fire (632)	632	0	0	0	0	0	0	0	0	1
Road freight or transport vehicle fire (132)	132	0	4	0	3	0	1	3	6	3
Self-propelled motor home or recreational vehicle fire (136)	136	0	0	3	0	2	0	1	1	0
Special outside fire, not otherwise classified (160)	160	5	2	9	0	1	2	11	8	2
Structure fire involving an enclosed building (111)	111	62	12	62	23	26	7	58	30	16
Structure fire other than in building (trestle, pier, poles, fence) (112)	112	6	2	7	4	5	2	15	7	0
Trash or rubbish fire in a structure, contained (118)	118	1	0	1	0	2	0	5	0	0
Unauthorized burning (561)	561	41	11	26	14	15	9	51	11	3
Vehicle fire, not otherwise classified (130)	130	0	0	1	1	0	1	0	1	0
Water vehicle fire (134)	134	0	0	0	0	0	0	0	0	0
Cultivated grain or crop fire	171	0	0	0	0	0	0	0	0	0
Cultivated orchard or vineyard fire 172	172	0	0	0	0	0	0	0	0	0
Cultivated trees or nursery stock fire (173)	173	0	0	0	0	0	0	0	0	0
Cultivated vegetation, crop fire, other (170)	170	0	0	0	0	0	0	0	0	0

Table 5

The District tracks property loss and property value saved as a result of fire and firefighting efforts. Table 6 shows total fire loss within the District from 2017 to 2021 while Figure 5 shows the fire loss trend over the same time period. Although approximately $26 million in property value was lost due to fire over last five years, $8.6 billion of pre-fire property value was preserved. The structure fires shown in Table 6 are NFIRS codes 111 through 118 excluding 112. All 113 through 118 fires are assumed to be contained. 111 fires are further sorted by structure type and then the amount of fire spread provided in the records management system.

YEAR	STRUCTURE FIRES	FIRES CONTAINED TO ROOM OF ORIGIN	% FIRES CONTAINED TO ROOM OF ORIGIN	DETECTOR ACTIVATIONS	SPRINKLER HEAD ACTIVATIONS	TOTAL PROPERTY & CONTENT PRE-INCIDENT VALUE	TOTAL PROPERTY & CONTENT LOSS	TOTAL PROPERTY & CONTENT SAVED	WILDLAND FIRES
*2017	250	210	84%		9	$7,594,668,869	$4,045,871	$7,590,622,998	110
*2018	252	201	79.80%		10	$529,364,191	$4,058,471	$525,305,720	90
2019	166	128	77.11%	38	7	$236,916,960	$3,085,153	$233,831,807	60
2020	170	131	77.05%	77	18	$265,948,455	$5,808,055	$260,140,400	113
2021	178	108	70.62%	42	7	$211,763,634	$9,379,790	$202,838,844	98
Total	**1031**	**760**	**73.71%**	**157**	**51**	**$8,838,662,109**	**$26,377,340**	**$8,812,739,769**	**471**

Table 6 * represents data prior to current records management system

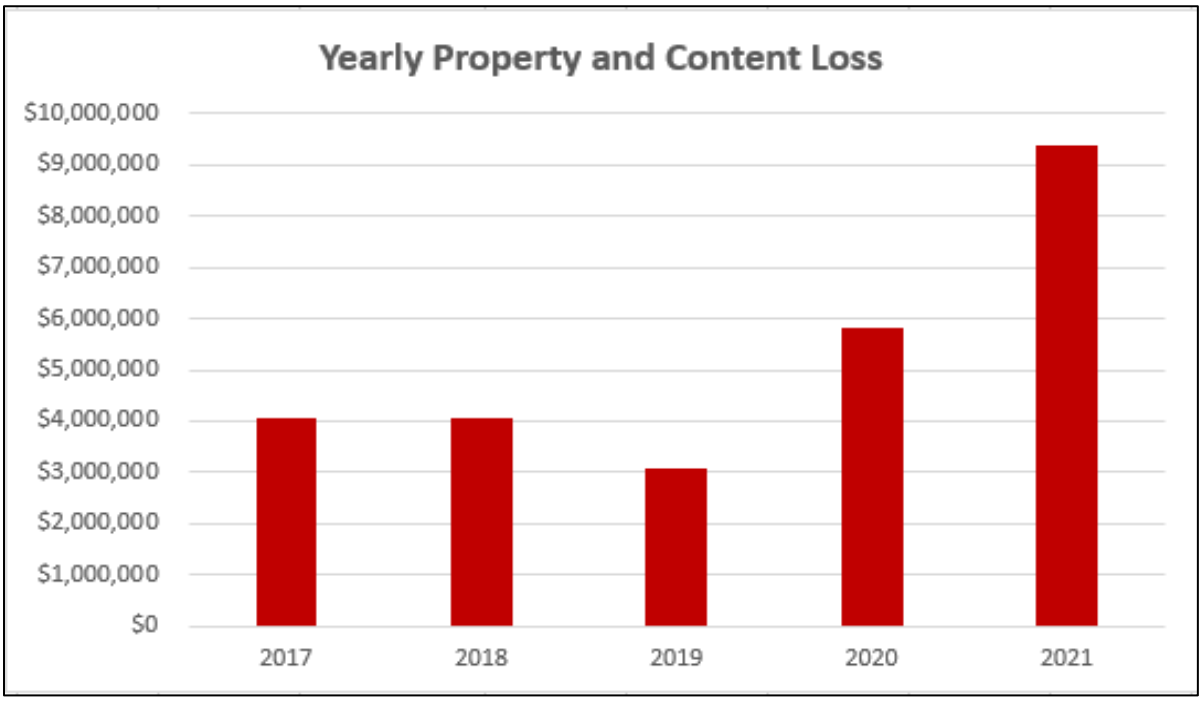


Figure 5

Emergency Medical Risk Assessment

From 2017 to 2021, emergency medical services (EMS) incidents were 67.3% 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 12 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 2017 to 2021. 66.67% 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 2017 - 2021	2017	2018	2019	*2020	2021
Total EMS Incidents	23,941	23,557	25,126	22,831	25,181
Patient Transports	17,003	16,043	16,446	15,894	17,555
% Transports	71.02%	68.10%	65.45%	69.62%	66.67%
Emergent Transports	1,105	1,175	1,244	1,436	1,706
% Transports Emergent	6.50%	7.32%	7.56%	9.03%	9.72%

Table 7

*EMS call volume throughout April and May of 2020 was much lower due to the first wave of the COVID-19 pandemic.

A hospital alert occurs when a paramedic notifies a receiving hospital that a patient is in need of specialized services, such as when the patient is having a stroke or heart attack. Table 8 shows the pre-hospital alerts from 2017 through 2021.

EMS PRE-HOSPITAL ALERTS	2017 TOTALS	2018 TOTALS	2019 TOTALS	2020 TOTALS	2021 TOTALS
Sepsis Notification	56	53	59	70	141
STEMI (ST Elevation Myocardial Infarction) Alert	65	67	58	79	105
Stroke Alert	134	103	114	234	251
Trauma Alert	64	44	51	69	80
Total Alerts	**319**	**267**	**282**	**452**	**577**

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 is only available from 2017 forward. This information 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 2021.

CARDIAC ARREST RETURN OF SPONTANEOUS CIRCULATION	2017 TOTALS	2018 TOTALS	2019 TOTALS	2020 TOTALS	2021 TOTALS
No Return of Spontaneous Circulation	85	146	162	193	193
Yes, Prior to ED Arrival Only	23	62	48	60	88
Yes, at Arrival at the ED	2	9	32	7	8
Yes, Sustained for 20 Consecutive Minutes	4	19	8	11	13
Total Arrests (7/29/2017 Forward Due to NEMSIS 3.0)	**114**	**236**	**250**	**271**	**302**

Table 9

The highest probability of EMS risk is a mass causality 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. The District runs multiple MCI auto accident incidents each year. 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 2017 through 2021. 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.

EMS Transports Mutual Aid Given 2017 - 2021	2017	2018	2019	2020	2021	Total
Arvada	22	11	12	0	0	**45**
Aurora	0	0	0	0	0	**0**
Denver Health (functional change in 2019)	283	110	18	3	14	**428**
Fairmount	14	4	0	0	2	**20**
Foothills	0	1	0	0	0	**1**
Golden	7	15	19	7	7	**55**
Inter-Canyon	0	0	9	0	1	**10**
Other	53	9	1	0	7	**70**
Pleasant View	14	8	2	6	6	**36**
South Metro	6	3	22	0	0	**31**
Total	**399**	**161**	**83**	**16**	**37**	**696**

Table 10

Automatic Aid

The District entered into two automatic aid agreements in 2019. The first, in January, with the South Metro Fire Rescue Authority (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) the unit is responding from. 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, structure fires, and wildland fires only. The agreement was amended in order to keep District resources in their respective response districts. The District is anticipating a 75% 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 a 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 where 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.

Automatic Aid 2019-2021	Given	Received
Arvada Fire Protection District	1,484	873
South Metro Fire Rescue	471	267

Table 11

EMS Transports - Auto Aid Given	2019	2020	2021	Total
Arvada Fire Protection District	89	133	688	910
South Metro Fire Rescue	190	82	231	503
Total	**279**	**215**	**919**	**1413**

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 effect 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 12 shows the occurrence of hazardous materials incidents throughout the District.

Hazardous Materials Incidents by Planning Zone 2017-2021

Planning Zone	Incident Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Out of District	Total
Combustible and flammable gas or liquid spills or leaks, other	410	2	1	2	3	0	0	1	4	0	0	0	0	0	1	0	3	1	0	18
Gasoline or other flammable liquid spill	411	30	28	21	18	8	1	16	13	9	17	6	16	8	8	3	30	11	1	244
Gas leak (natural gas of LPG)	412	99	78	38	55	20	27	71	43	27	46	30	100	35	50	52	68	34	0	873
Oil or other combustible liquid spill	413	9	6	2	3	0	1	1	2	0	4	3	1	1	3	0	3	2	0	41
Chemical hazard (no spill or leak) or potential spill or leak	420	0	1	0	1	1	1	0	0	1	0	0	1	0	2	1	1	0	0	10
Chemical spill of leak. Includes unstable, reactive, explosive material	421	3	0	2	1	3	0	3	2	0	1	0	1	1	1	1	0	1	0	20
Refrigeration leak. Includes ammonia	422	2	1	7	2	3	0	0	0	1	1	0	1	2	1	0	4	0	2	27
Carbon monoxide incident. Excludes incidents with nothing found	423	1	0	0	2	0	0	0	0	0	0	0	1	0	0	0	2	0	0	6
Toxic chemical condition, other	424	48	33	31	42	10	23	30	46	10	45	11	36	13	20	9	49	17	0	473
Biological hazard, confirmed or suspected	451	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
Total for Planning Zone		**194**	**149**	**104**	**127**	**45**	**53**	**122**	**110**	**48**	**114**	**50**	**158**	**60**	**86**	**66**	**160**	**66**	**3**	**1715**
Percentage		**11.31%**	**8.69%**	**6.06%**	**7.41%**	**2.62%**	**3.09%**	**7.11%**	**6.41%**	**2.80%**	**6.65%**	**2.92%**	**9.21%**	**3.50%**	**5.01%**	**3.85%**	**9.33%**	**3.85%**	**0.17%**	**100.00%**

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 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 'back country' 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 for falls and injuries on non-vehicle accessible trails.

The District includes roadways that are above grade, such as US Highway 285 that 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 2017-2021

Planning Zone	Incident Type	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	Out of District	Total
Extrication, rescue, other	350	7	4	2	8	2	4	3	1	1	5	0	4	3	3	2	7	0	1	57
Extrication of victim(s) from building/structure	351	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	4
Extrication of victim(s) from vehicle	352	19	14	20	8	5	3	12	17	10	18	7	10	7	7	1	4	4	0	166
Removal of victim(s) from stalled elevator	353	64	63	48	61	31	11	39	3	0	38	1	12	5	2	2	27	4	2	413
Trench/below-grade rescue	354	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Confined space rescue	355	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	2
High-angle rescue	356	1	0	0	1	1	1	0	0	11	4	1	0	3	0	2	1	1	4	31
Extrication of victim(s) from machinery	357	0	2	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	5
Total for Planning Zone		**92**	**83**	**71**	**79**	**39**	**19**	**56**	**22**	**22**	**66**	**10**	**26**	**18**	**12**	**8**	**39**	**9**	**8**	**679**
Percentage		**13.55%**	**12.22%**	**10.46%**	**11.63%**	**5.74%**	**2.80%**	**8.25%**	**3.24%**	**3.24%**	**9.72%**	**1.47%**	**3.83%**	**2.65%**	**1.77%**	**1.18%**	**5.74%**	**1.33%**	**1.18%**	**100.00%**

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 exposures to drowning. Table 15 shows the occurrence of water rescue incidents throughout the District.

Technical Rescue (Water Rescue) Incidents by Planning Zone 2017-2021																				
Planning Zone	**Incident Type**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**Out of District**	**Total**
Water & Ice-related rescue, other	**360**	1	0	1	0	1	0	1	6	1	0	0	0	1	0	0	2	0	0	14
Swimming/recreational water areas rescue	**361**	0	1	0	1	0	0	1	1	3	0	0	0	2	1	0	0	1	2	13
Ice Rescue	**362**	0	0	2	0	0	0	1	8	0	4	0	0	0	0	0	0	1	0	16
Swift water rescue	**363**	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	2	0	5
Watercraft rescue	**365**	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2
Eletrical rescue, other	**370**	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	3
Trapped by power lines	**372**	1	1	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	5
Total for Planning Zone		**4**	**3**	**3**	**2**	**1**	**0**	**5**	**16**	**5**	**4**	**0**	**1**	**3**	**2**	**1**	**2**	**4**	**2**	**58**
Percentage		**6.90%**	**5.17%**	**5.17%**	**3.45%**	**1.72%**	**0.00%**	**8.62%**	**27.59%**	**8.62%**	**6.90%**	**0.00%**	**1.72%**	**5.17%**	**3.45%**	**1.72%**	**3.45%**	**6.90%**	**3.45%**	**100.00%**

Table 15

Wildfire Risk Assessment

The threat of wildfire is an on-going 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 30th, 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 shrub lands 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-resistive 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.

West Metro Fire Rescue Communities Risk 50 Hazard Ratings		
Community Name	**Score**	**Adjective Rating**
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 to plan, the District has developed and launched a Wildfire Risk Map on the District's website. Any user can identify wildfire risk by entering an address into the map search. The tool also allows users to submit feedback or questions regarding the tool.

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 special operations and was put in place to enhance wildfire mitigation, community engagement, deployment management, training, and response oversight.

Wildland Fire Incidents 2017-2021	2017	2018	2019	2020	2021	Total	Percent
Brush, or brush and grass mixture fire (142)	55	38	8	22	22	145	29.71%
Cultivated trees or nursery stock fire (173)	0	1	0	0	0	1	0.20%
Cultivated vegetation, crop fire, other (170)	0	0	0	0	1	1	0.20%
Forest fire (141)	9	5	0	4	1	19	3.89%
Grass fire (143)	25	28	32	52	45	182	37.30%
Natural vegetation fire, not otherwise classified (140)	40	27	20	31	22	140	28.69%
Total	129	99	60	109	91	488	100.00%

Table 17

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.

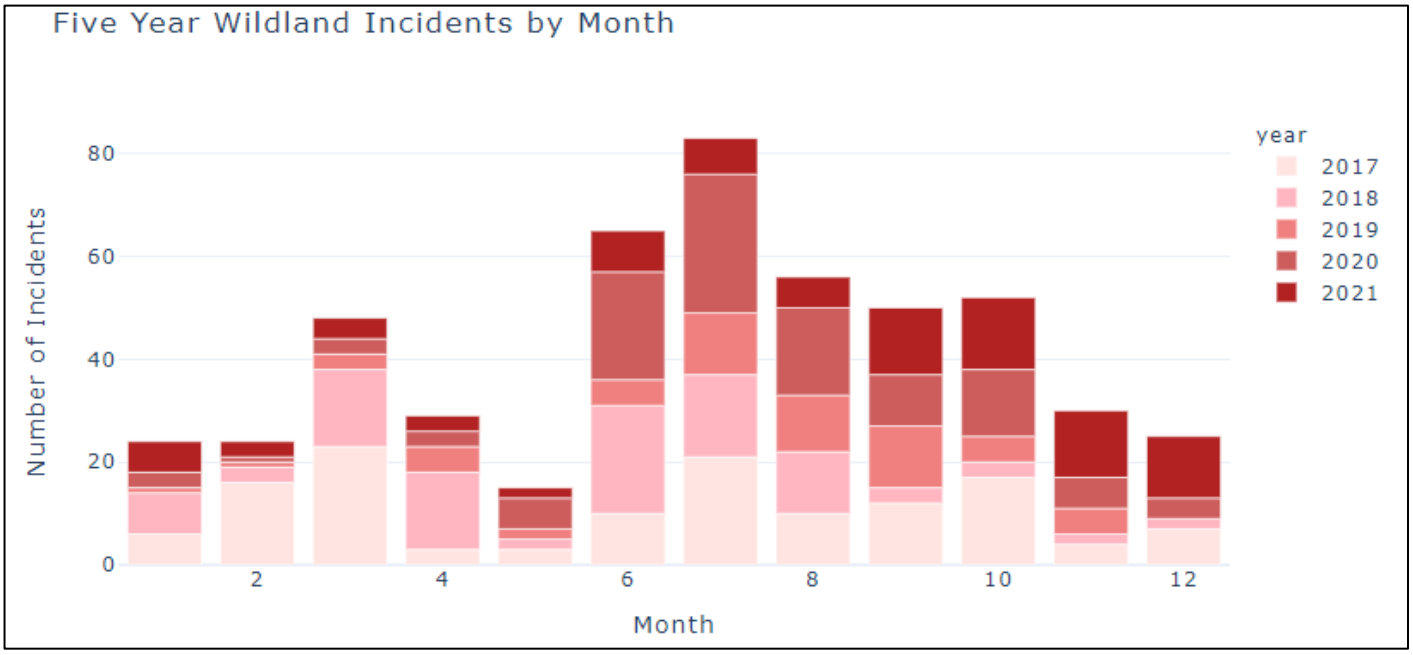


Figure 6

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 2017-2021																				
Planning Zone	**Incident Type**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**Out of District**	**Total**
Natural vegetation fire, other	**140**	18	3	11	9	2	6	21	13	2	13	1	5	5	4	3	14	11	1	142
Forest, woods, or wildland fire	**141**	0	0	0	0	0	0	0	0	4	1	0	0	1	1	3	0	0	18	28
Brush or brush-and-grass mixture fire	**142**	19	17	8	10	5	6	10	8	8	14	1	5	3	4	7	11	6	5	147
Grass fire	**143**	16	12	9	8	8	9	12	5	23	21	3	13	10	9	4	11	7	2	182
Cultivated vegetation, crop fire, other	**170**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Cultivated trees or nursery stock fire	**173**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total for Planning Zone		**54**	**32**	**28**	**27**	**15**	**21**	**43**	**26**	**37**	**49**	**5**	**23**	**19**	**18**	**18**	**36**	**24**	**26**	**501**
Percentage		**10.78%**	**6.39%**	**5.59%**	**5.39%**	**2.99%**	**4.19%**	**8.58%**	**5.19%**	**7.39%**	**9.78%**	**1.00%**	**4.59%**	**3.79%**	**3.59%**	**3.59%**	**7.19%**	**4.79%**	**5.19%**	**100.00%**

Table 18

Floods 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 snow melt, 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 Fifteen Planning Zone. The basin is a large watershed with multiple tributaries reaching to 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 13th 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 6th Avenue by flyover. The rail line continues to parallel 6th 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 increases. 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. Tornados 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** – The 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 a 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.

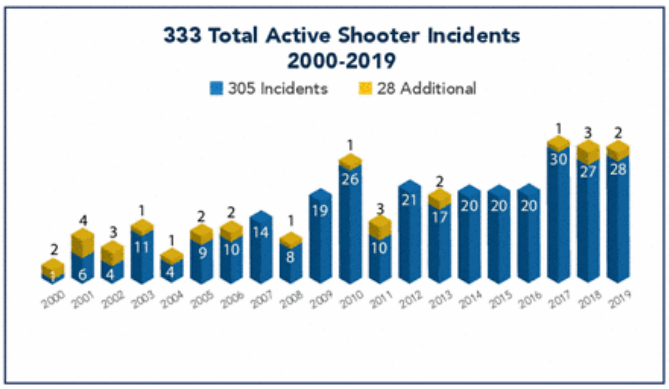


Table 19

In the past 20 years, Colorado has experienced 13 active shooter incidents, 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 incident 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.

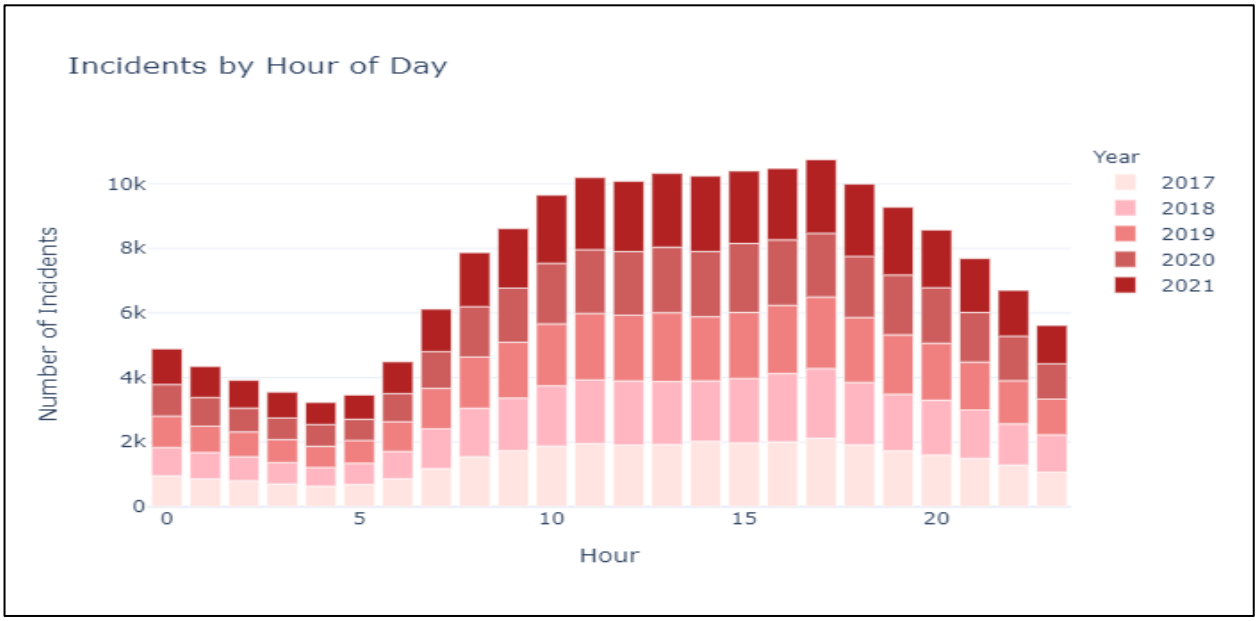


Figure 7

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.

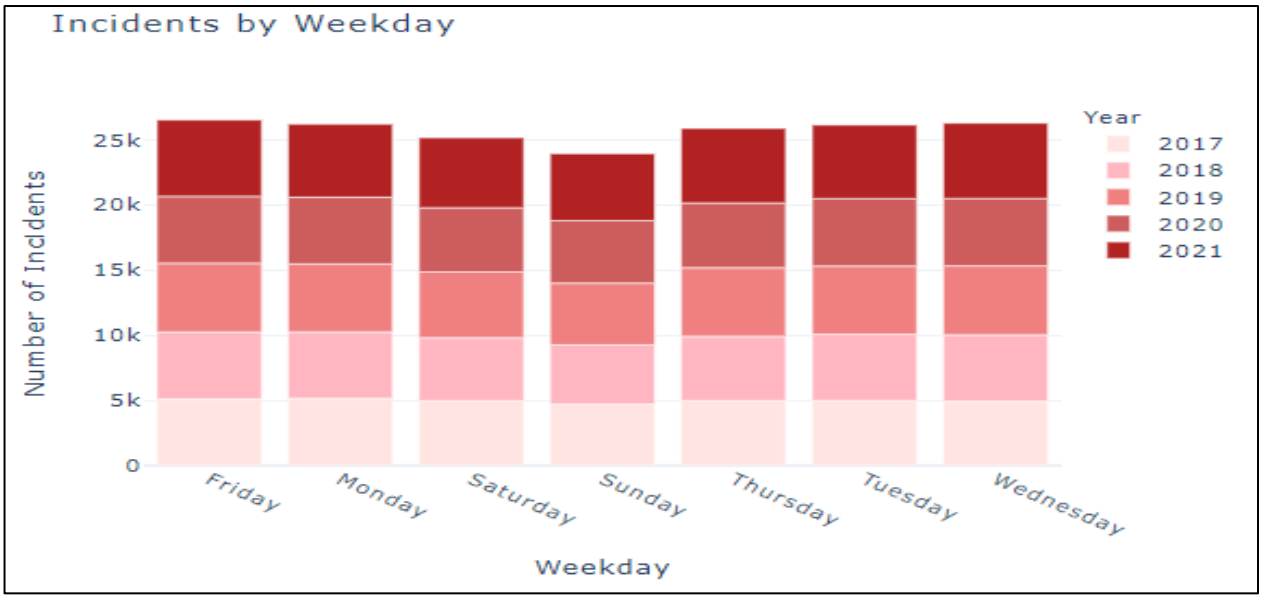


Figure 8

The incident volume by month for 2021 is 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.

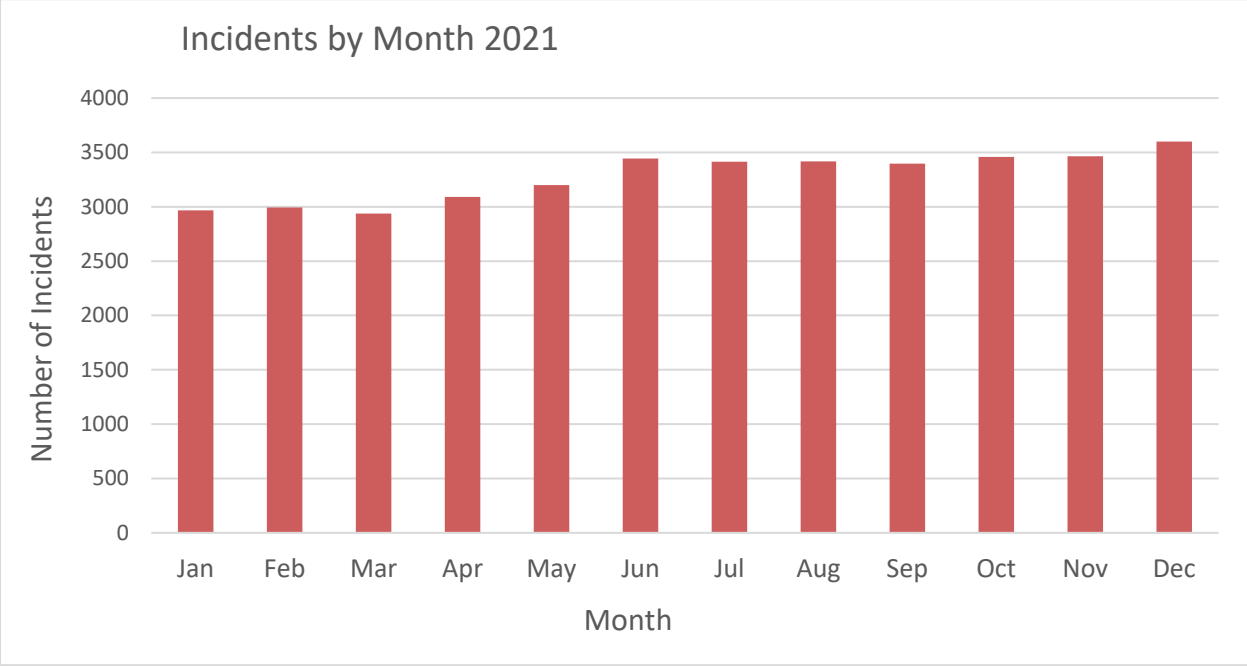
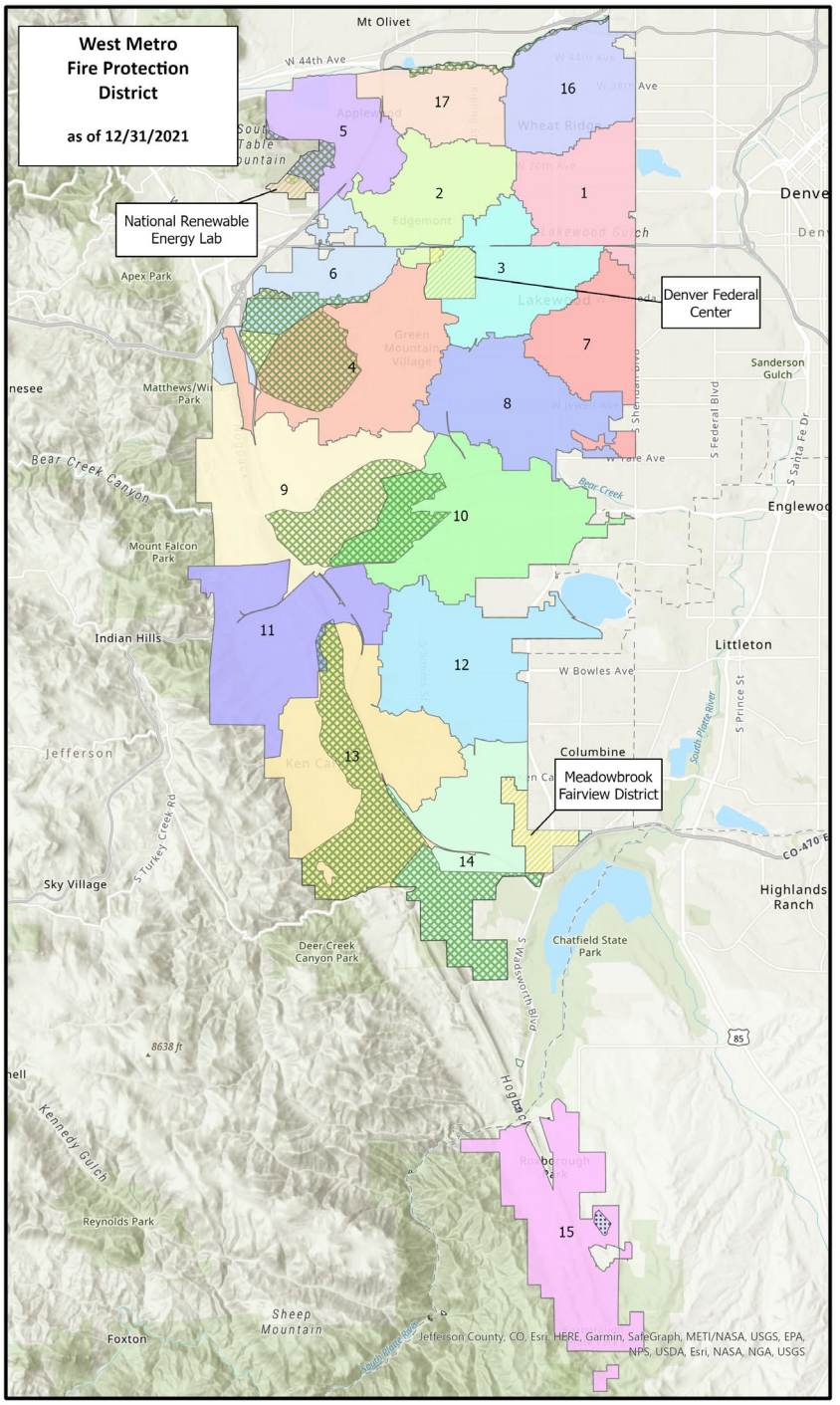


Figure 9

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 profile, 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.

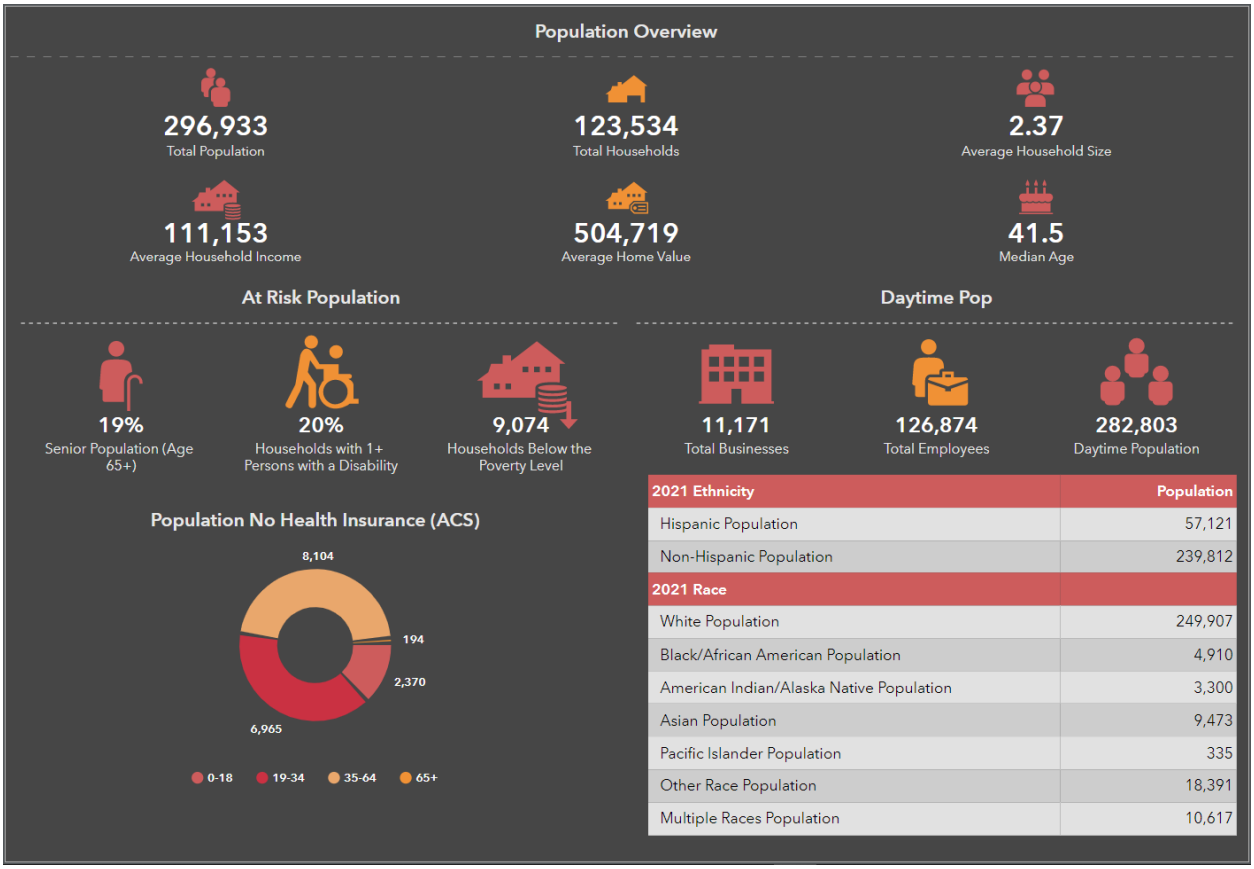
The remaining five special planning zone descriptions (South Table Mountain, Clear Creek, Green Mountain, Bear Creek Lake Park, and Hogback) are grouped as 'open space planning zones' and are presented following the Station Planning Zone 17. These zones represent open space or recreational areas with 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 upon 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 incudes 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:

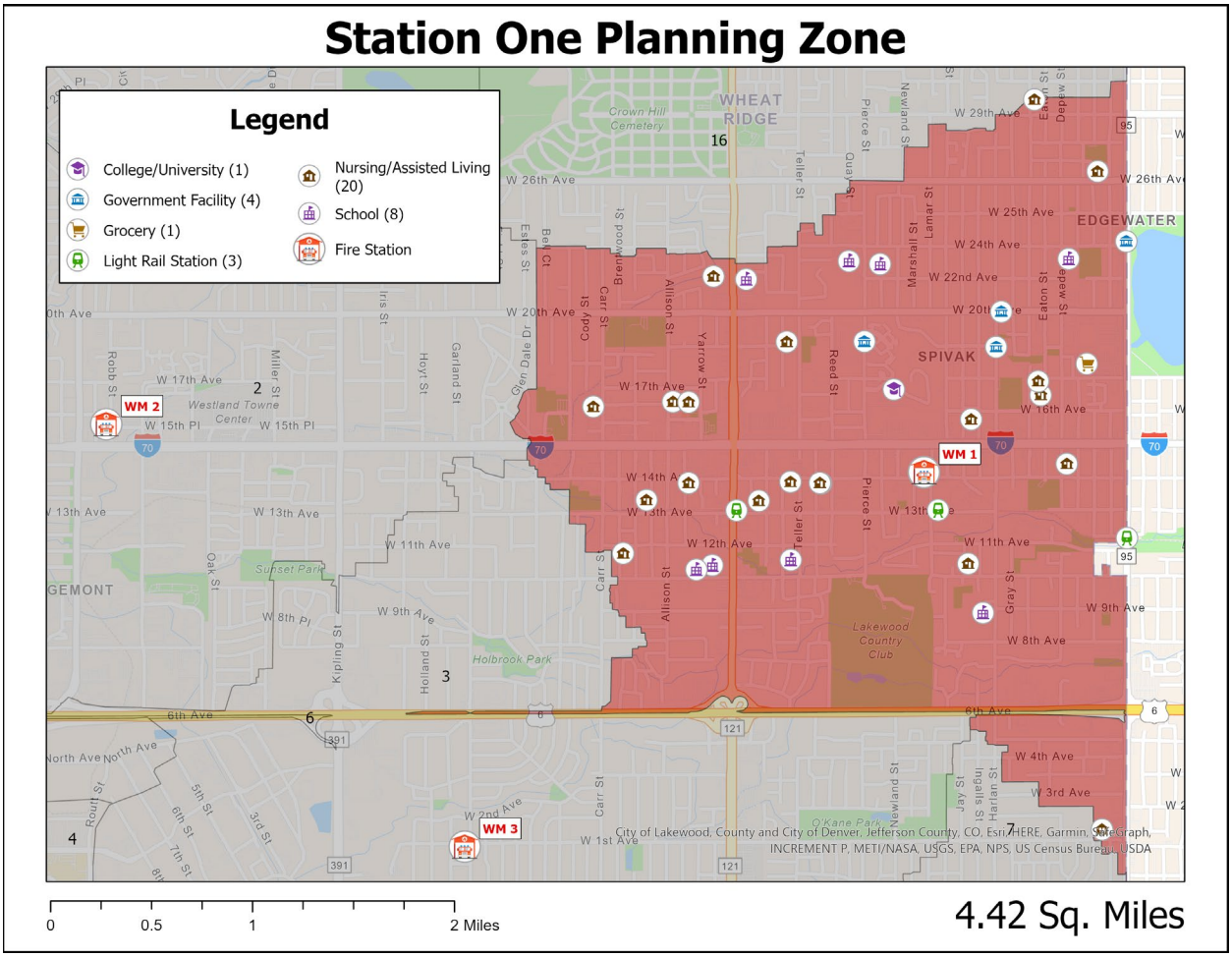


2021 Ethnicity	Population
Hispanic Population	57,121
Non-Hispanic Population	239,812
2021 Race	
White Population	249,907
Black/African American Population	4,910
American Indian/Alaska Native Population	3,300
Asian Population	9,473
Pacific Islander Population	335
Other Race Population	18,391
Multiple Races Population	10,617

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 is the oldest section of the District with 16% of residents 65 years or older. This station planning zone has the highest number of incidents. There is a mix of commercial buildings, mostly along major streets that includes 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:

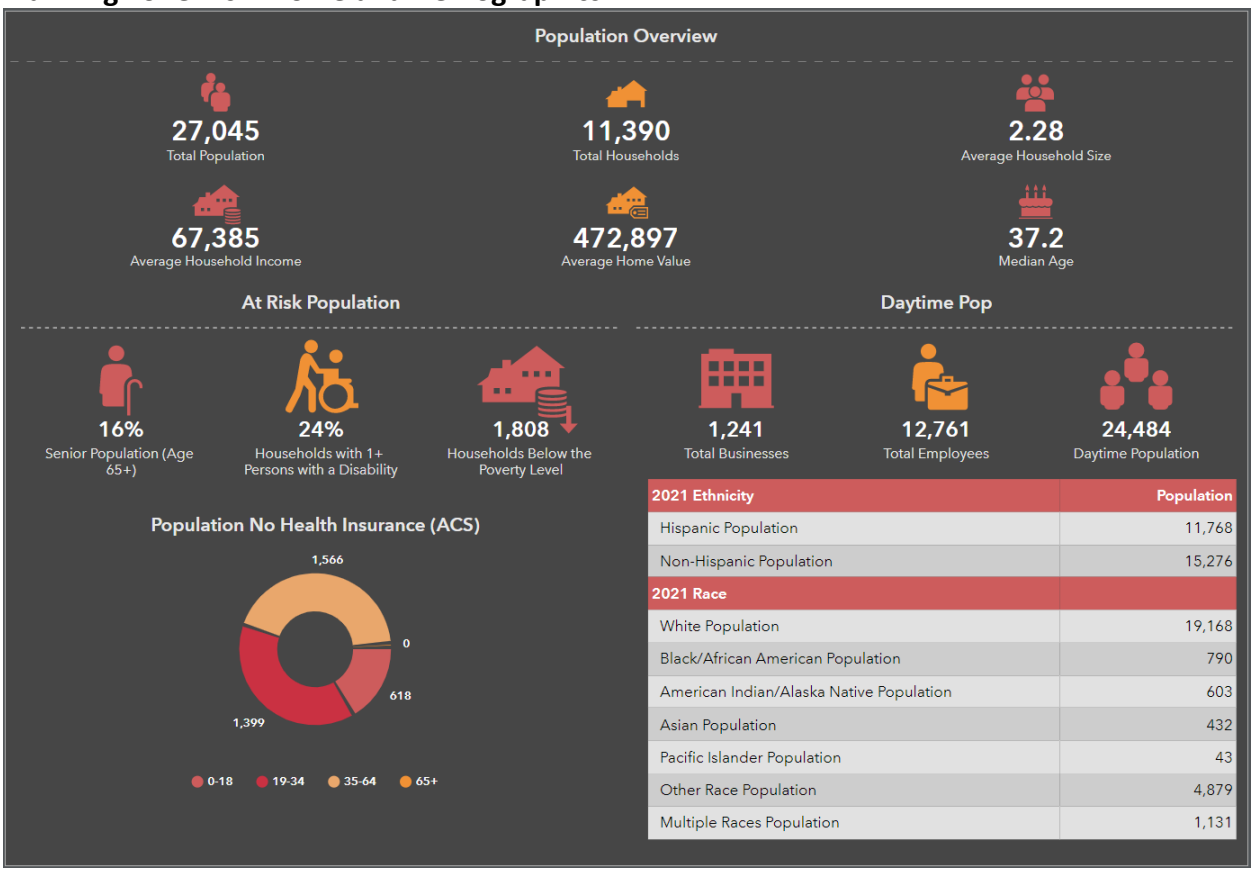
Name	Address
Rocky Mountain College of Art and Design	1600 Pierce Street
City of Edgewater Public Works	5990 West 20th Avenue
City of Edgewater	1810 Harlan Street
Colorado Department of Revenue	1881 Pierce Street
City Hall	2401 Sheridan Boulevard
King Soopers	1725 Sheridan Boulevard

Sheridan Station	13th and Sheridan
Lamar Station	13th and Lamar
Wadsworth Station	13th and Wadsworth
Molholm Elementary School	6000 West 9th Avenue
Jefferson County Open Secondary	7655 West 10th Avenue
Edgewater Elementary School	5570 West 24th Avenue
Lumberg Elementary School	6705 West 22nd Avenue
Jefferson County Open Elementary School	7655 West 10th Avenue
Jefferson Junior/Senior High School	2305 Pierce Street
Bethlehem Lutheran School	2100 North Wadsworth Boulevard
St Bernadette Catholic School	1100 Upham Street
Applewood Our House Asst Living Facilities, LLC	1900 Upham Street
Distinctive Care, LLC	1370 Saulsbury Street
Ashley Manor - Saulsbury	1370 Saulsbury Street
Allison Care Center	1660 Allison Street
Sierra Rehabilitation and Care Community	1432 Depew Street
Granville Assisted Living Center	1325 Vance Street
Aspen Hills Assisted Living, LLC	1030 Jay Street
Harmony Pointe Nursing Center	1655 Yarrow Street
Homestead at Lakewood	2121 Wadsworth Boulevard
Western Hills Health Care Center	1625 Carr Street
Westlake Care Community	1655 Eaton Street
Spring Ridge Park Assisted Living	5361 West 26th Avenue
Fountainhead Care Homes	1398 Zephyr 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
Just For Seniors Living Center	1170-1180 Brentwood Street
Harmony Assisted Living Inc.	1355 Ammons Street
Teller Place	7290 West 14th Avenue

Special Risks:

- Casa Bonita – Restaurant assembly exposure (currently under remodel)
- Suburban Propane - 5725 West 11th Avenue
- El Chaparral - 5255 West 6th Avenue (nightclub)
- V-Forge Manufacturing - 5567 West 6th Avenue
- Colorado Sewer (bow string truss) - 6000 West 13th Avenue
- Light Rail – bisects the station planning zone at 13th Avenue
- Senior Independent Living:
    - Courtyard at Lakewood - 7100 West 13th Avenue
    - Residences at Creekside – 1700 Pierce Street
    - Creekside West – 1710 Pierce Street

Planning Zone Risk Profile and Demographics:



2021 Ethnicity	Population
Hispanic Population	11,768
Non-Hispanic Population	15,276
2021 Race	
White Population	19,168
Black/African American Population	790
American Indian/Alaska Native Population	603
Asian Population	432
Pacific Islander Population	43
Other Race Population	4,879
Multiple Races Population	1,131

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, non-sprinklered caves, and big box type construction.

Light rail, which, was completed in 2013, runs along 13th 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 extended 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 26th Avenue on the north, Wadsworth Street on the east, 20th 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 10th Avenue and west of Wadsworth Boulevard with very limited hydrant coverage. The remainder of the planning zone has adequate water supply.

Response History:

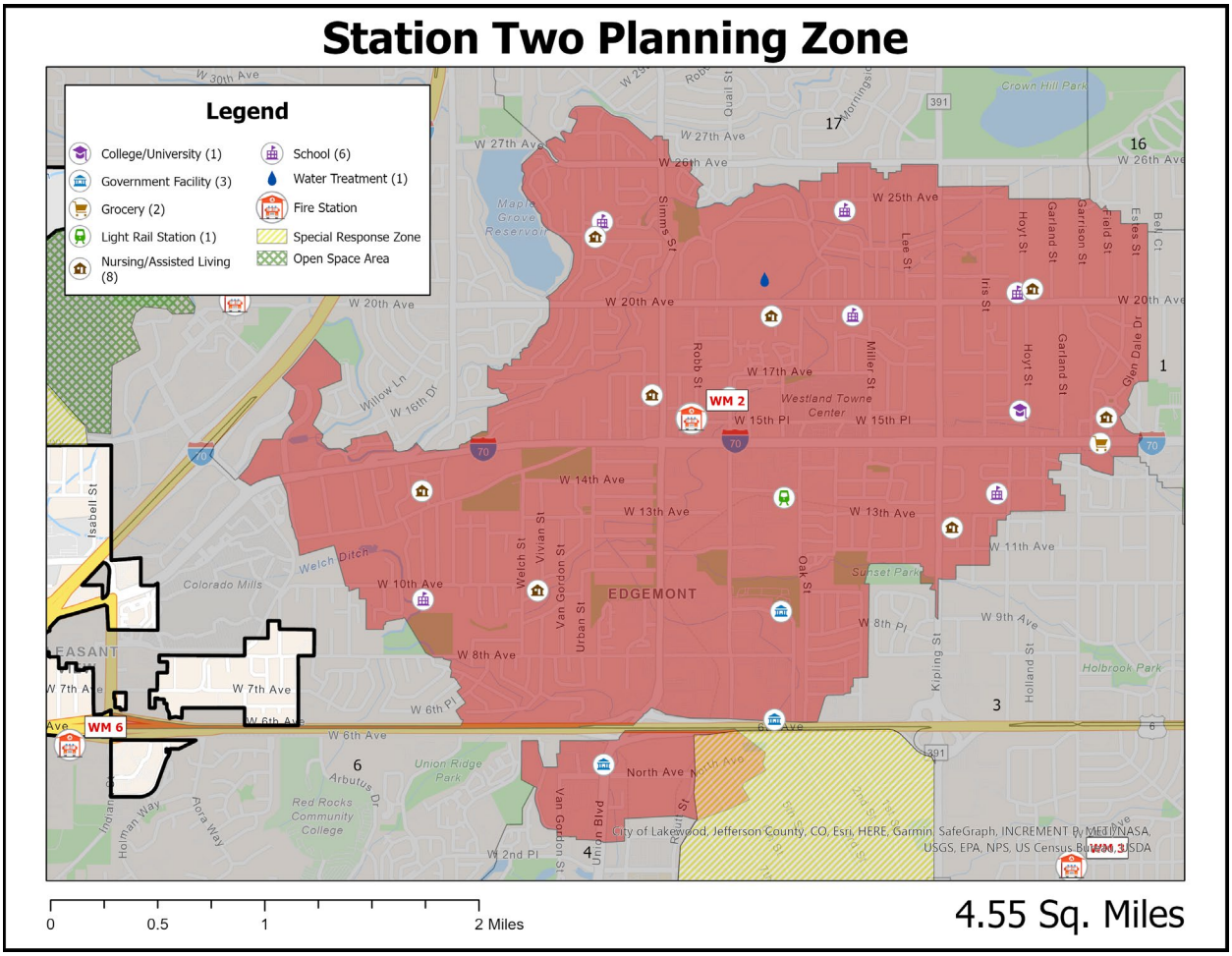
Station-1																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E1	2017	651	11.32%	100	1.74%	3972	69.08%	322	5.60%	15	0.26%	42	0.73%	638	11.10%	5750
E1	2018	627	13.81%	139	3.06%	2799	61.67%	255	5.62%	14	0.31%	43	0.95%	648	14.28%	4539
E1	2019	449	12.89%	94	2.70%	2002	57.50%	259	7.44%	16	0.46%	55	1.58%	598	17.17%	3482
E1	2020	396	11.70%	128	3.78%	1996	58.95%	242	7.15%	15	0.44%	38	1.12%	559	16.51%	3386
E1	2021	503	13.11%	190	4.95%	2080	54.22%	267	6.96%	23	0.60%	42	1.09%	719	18.74%	3836
E1	Total	2626	12.51%	651	3.10%	12849	61.21%	1345	6.41%	83	0.40%	220	1.05%	3162	15.06%	20993
M1	2017	71	2.11%	50	1.49%	2770	82.27%	111	3.30%	9	0.27%	0	0.00%	356	10.57%	3367
M1	2018	28	0.88%	46	1.44%	2575	80.75%	92	2.88%	2	0.06%	4	0.13%	440	13.80%	3189
M1	2019	35	1.16%	43	1.42%	2280	75.42%	134	4.43%	5	0.17%	4	0.13%	521	17.23%	3023
M1	2020	32	1.12%	27	0.95%	2242	78.50%	86	3.01%	2	0.07%	1	0.04%	464	16.25%	2856
M1	2021	32	1.02%	33	1.06%	2354	75.30%	99	3.17%	2	0.06%	2	0.06%	600	19.19%	3126
M1	Total	198	1.27%	199	1.28%	12221	78.54%	522	3.35%	20	0.13%	11	0.07%	2381	15.30%	15561
M11	2017	71	2.19%	44	1.36%	2735	84.26%	84	2.59%	9	0.28%	1	0.03%	301	9.27%	3246
M11	2018	27	0.86%	44	1.40%	2528	80.56%	91	2.90%	10	0.32%	5	0.16%	429	13.67%	3138
M11	2019	43	1.43%	37	1.23%	2343	77.79%	118	3.92%	5	0.17%	2	0.07%	463	15.37%	3012
M11	2020	41	1.45%	21	0.74%	2284	80.76%	81	2.86%	2	0.07%	3	0.11%	394	13.93%	2828
M11	2021	32	1.02%	37	1.18%	2400	76.68%	96	3.07%	3	0.10%	2	0.06%	557	17.80%	3130
M11	Total	214	1.39%	183	1.19%	12290	80.04%	470	3.06%	29	0.19%	13	0.08%	2144	13.96%	15354
SAM1	2017	47	5.76%	148	18.14%	341	41.79%	28	3.43%	79	9.68%	7	0.86%	144	17.65%	816
SAM1	2018	41	1.73%	117	4.94%	1714	72.38%	56	2.36%	34	1.44%	16	0.68%	383	16.17%	2368
SAM1	2019	64	1.90%	99	2.94%	2374	70.47%	155	4.60%	11	0.33%	14	0.42%	647	19.20%	3369
SAM1	2020	60	1.58%	80	2.11%	2847	75.06%	165	4.35%	9	0.24%	5	0.13%	622	16.40%	3793
SAM1	2021	45	1.16%	82	2.11%	2794	71.73%	155	3.98%	8	0.21%	7	0.18%	800	20.54%	3895
SAM1	Total	257	1.80%	526	3.69%	10070	70.71%	559	3.93%	141	0.99%	49	0.34%	2596	18.23%	14241
St -1	Total	3295	4.99%	1559	2.36%	47430	71.83%	2896	4.39%	273	0.41%	293	0.44%	10283	15.57%	66029

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:

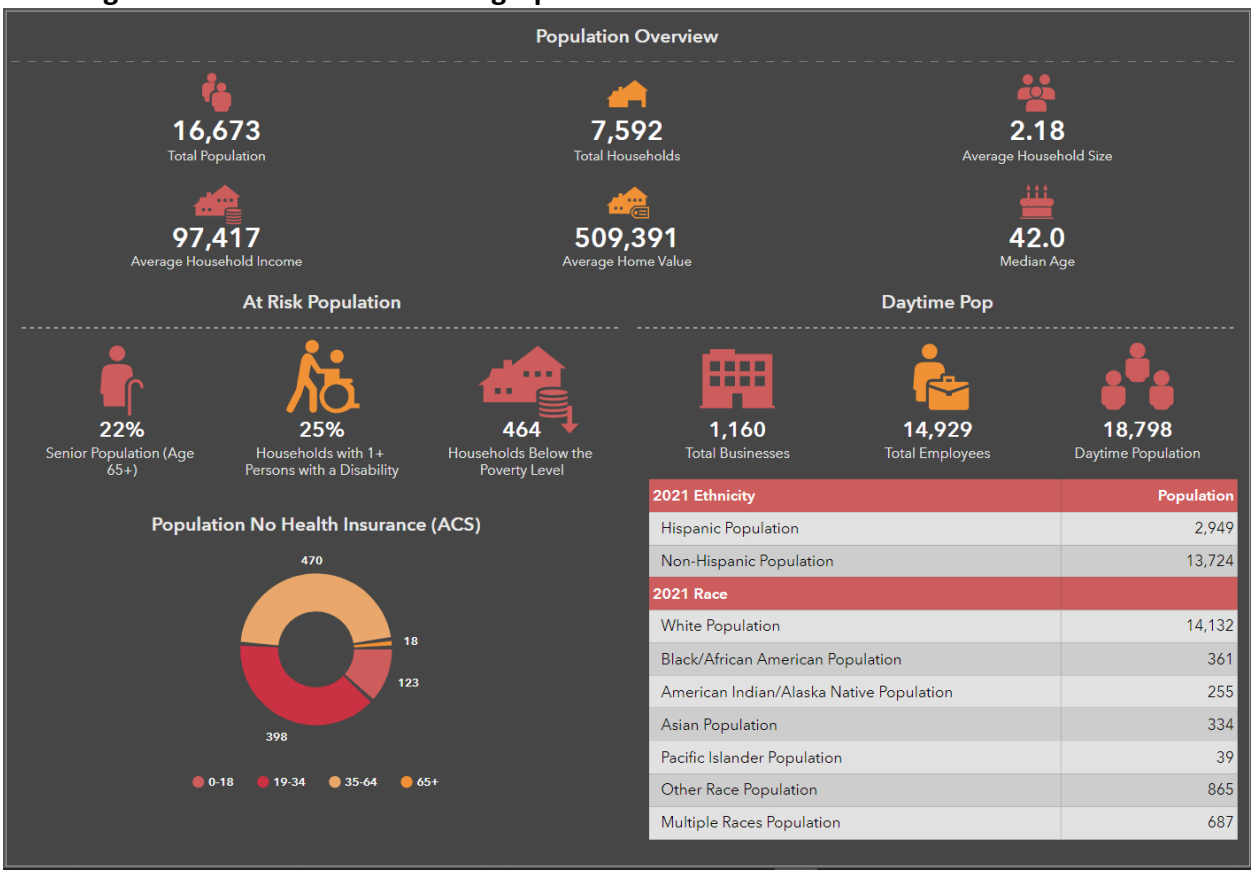
Name	Address
Colorado School of Trades	1575 Hoyt Street
Jefferson County	11011 West 6th Avenue
Lakewood Street Department	850 Parfet Street
445 Union Business Center	445 Union Boulevard
King Soopers	1555 Quail Street
Safeway #344	9160 West Colfax Avenue
Oak Street Station	1420 Oak Street
Vivian Elementary School	10500 West 25th Avenue
Sobesky Academy	2001 Hoyt Street
Welchester Elementary School	13000 West 10th Avenue

Eiber Elementary School	1385 Independence Street
Stober Elementary School	2300 Urban Street
Our Lady of Fatima Catholic School	10530 W 20th Avenue
Moffat Water Treatment Plant	10901 West 20th Avenue
Jaxpointe at Holland Street Assisted Living	2013 Holland Street
Glen Dee Learning Services	1555 Glen Dee Drive
Applewood Our House Assisted Living, LLC	1365 Yank Street
Sevens Residential Memory Care	1085 Vivian Street
Serenity House Assisted Living Applewood	11975 W 22nd Place
Catharines Quality of Life Homes 4	1975 Owens Court
Our Family Care Home Assisted Living, LLC	1169 Johnson Street
Lakewood Villa	1625 Simms Street

Special Risks:

Terumo Blood and Cell Technologies (BCT) - 10811 West Collins Avenue
Ridgemoor Apartment Homes – 693 Urban Court
Jeffco Schools Building 8 - 809 Quail Street
Terumo BCT - 10811 West Collins Avenue
Terumo BCT - 1211 Quail Street
Terumo BCT - 11158 West Collins Avenue
Mesa Labs - 12100 West 6th Avenue Service Road

Planning Zone Risk Profile and Demographics:



2021 Ethnicity	Population
Hispanic Population	2,949
Non-Hispanic Population	13,724
2021 Race	
White Population	14,132
Black/African American Population	361
American Indian/Alaska Native Population	255
Asian Population	334
Pacific Islander Population	39
Other Race Population	865
Multiple Races Population	687

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 13th Avenue until reaching Quail then the line veers south to cross 6th Avenue into the Denver Federal Center. The line then crosses Simms Street and parallels 6th Avenue into Golden. The line has flyovers on Kipling and 6th 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 6th 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 26th Avenue on the north, Wadsworth Street on the east, 20th 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:

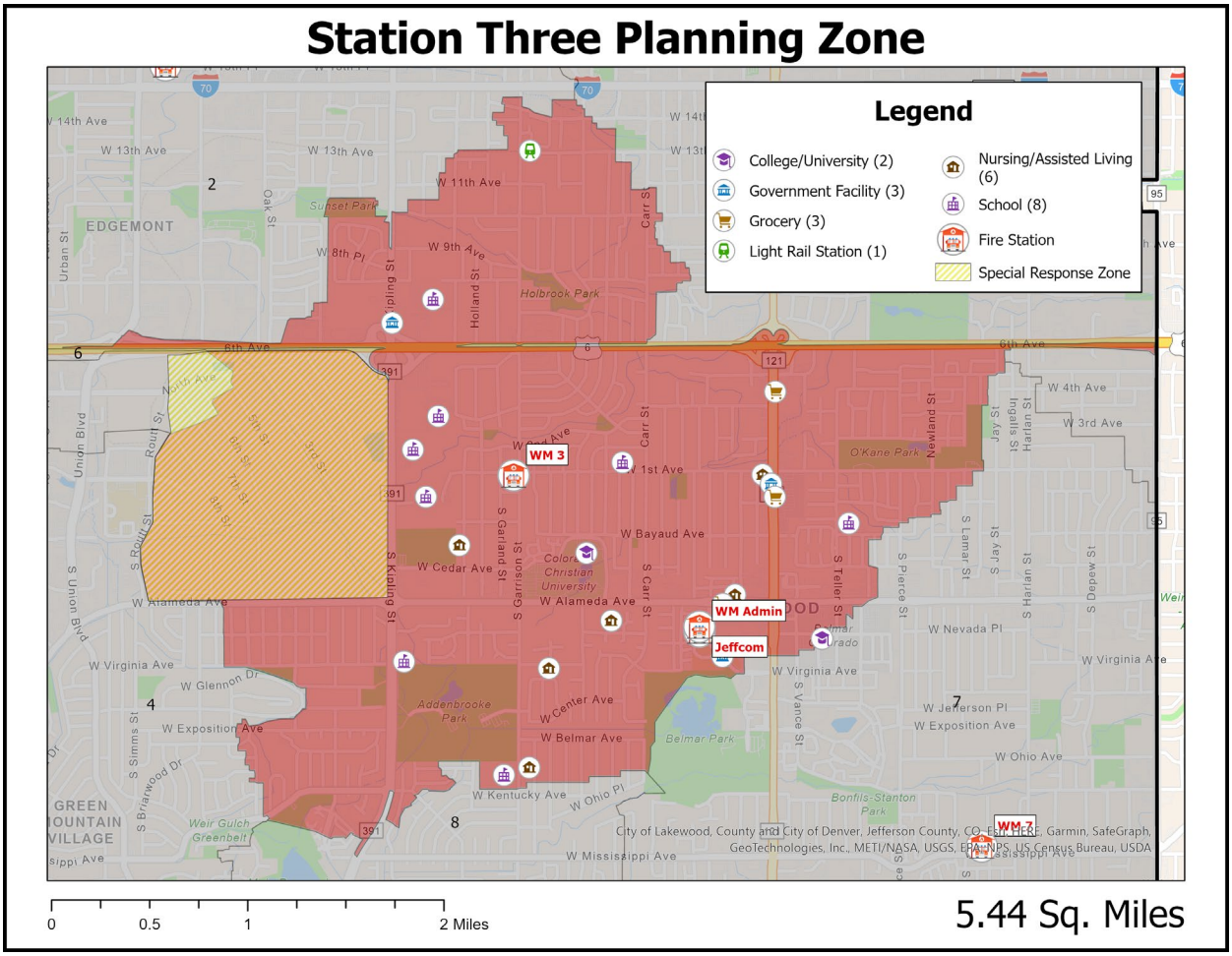
Station-2																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
AJHZ1	2017	0	0.00%	0	0.00%	0	0.00%	1	8.33%	0	0.00%	5	41.67%	6	50.00%	12
AJHZ1	2018	0	0.00%	0	0.00%	0	0.00%	1	8.33%	0	0.00%	6	50.00%	5	41.67%	12
AJHZ1	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	Total	0	0.00%	3	13.04%	1	4.35%	2	0.00%	0	0.00%	24	56.52%	17	26.09%	47
E2	2017	610	19.84%	89	2.89%	1783	57.98%	208	6.76%	17	0.55%	45	1.46%	315	10.24%	3075
E2	2018	534	17.70%	94	3.12%	1754	58.14%	165	5.47%	17	0.56%	50	1.66%	394	13.06%	3017
E2	2019	322	11.56%	100	3.59%	1673	60.05%	193	6.93%	15	0.54%	44	1.58%	431	15.47%	2786
E2	2020	343	11.65%	66	2.24%	1897	64.44%	247	8.39%	9	0.31%	30	1.02%	342	11.62%	2944
E2	2021	351	11.24%	106	3.40%	1927	61.72%	273	8.74%	20	0.64%	31	0.99%	404	12.94%	3122
E2	Total	2160	14.45%	455	3.04%	9034	60.45%	1086	7.27%	78	0.52%	200	1.34%	1886	12.62%	14944
T2/TW2	2017	310	24.20%	125	9.76%	486	37.94%	59	4.61%	29	2.26%	45	3.51%	223	17.41%	1281
T2/TW2	2018	283	22.13%	107	8.37%	498	38.94%	57	4.46%	29	2.27%	54	4.22%	245	19.16%	1279
T2/TW2	2019	89	8.44%	99	9.38%	453	42.94%	90	8.53%	12	1.14%	55	5.21%	250	23.70%	1055
T2/TW2	2020	87	10.77%	72	8.91%	430	53.22%	64	7.92%	10	1.24%	16	1.98%	124	15.35%	808
T2/TW2	2021	115	10.27%	98	8.75%	570	50.89%	92	8.21%	10	0.89%	17	1.52%	212	18.93%	1120
T2/TW2	Total	884	15.95%	501	9.04%	2437	43.97%	362	6.53%	90	1.62%	187	3.37%	1054	19.01%	5543
St -2	Total	3044	14.88%	959	4.69%	11472	56.07%	1450	7.09%	168	0.82%	411	2.01%	2957	14.45%	20461

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 6th Avenue, Wadsworth, Kipling, and Garrison.



Critical Infrastructure and Key Resources:

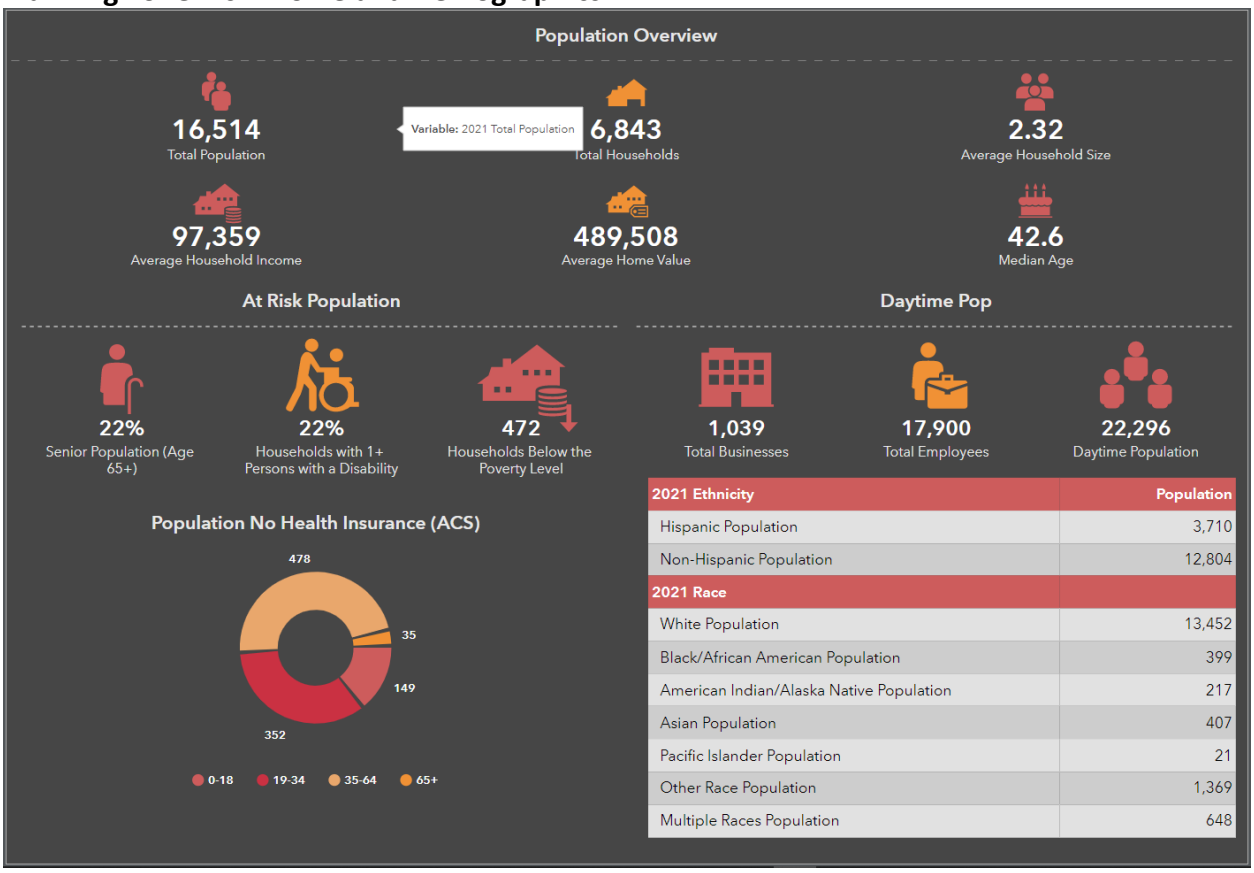
Name	Address
Colorado Media School	404 South Upham Street
Colorado Christian University	8787 West Alameda Avenue
City of Lakewood	480 South Allison Parkway
Colorado State Patrol	700 Kipling Street
Colorado State Patrol Family Foundation	55 Wadsworth Boulevard
West Metro Fire Rescue Administration	433 South Allison Parkway
Jeffcom911	433 South Allison Parkway
King Soopers	7984 West Alameda Avenue
Sprouts Farmers Market	98 Wadsworth Boulevard
Whole Foods	444 South Wadsworth Boulevard

Garrison Station	13th 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 1st Avenue
Rose Stein International Elementary	80 South Teller Street
Dennison Elementary School	401 Independence Street
Lakewood High School	9700 West 8th Avenue
Augustine Classical Academy	480 South Kipling Street
Rising Sun Senior Home At Belmar Inc The	835 South Flower Street
Ashley Manor Yukon	80 Yukon Street
Village at Belmar	7825 West Alameda Avenue
Rocky Mountain Assisted Living	9000 West Virginia Avenue
Serenity House Assisted Living	155 South Hoyt Street
Lakewood Estates	8585 West Dakota Avenue

Special Risks:

- Denver Federal Center Special Planning Zone (see below)
- RTD Light Rail with at grade crossings
- Colorado Christian University – poor access and multi-family apartment complexes
- Belmar – poor access and mix of commercial with residential living spaces above
- Walmart – big box store
- Village at Belmar – large multi-family senior living center
- Crossland Denver Motel – extended stay motel

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 7th Avenue to 12th Avenue.

Response History:

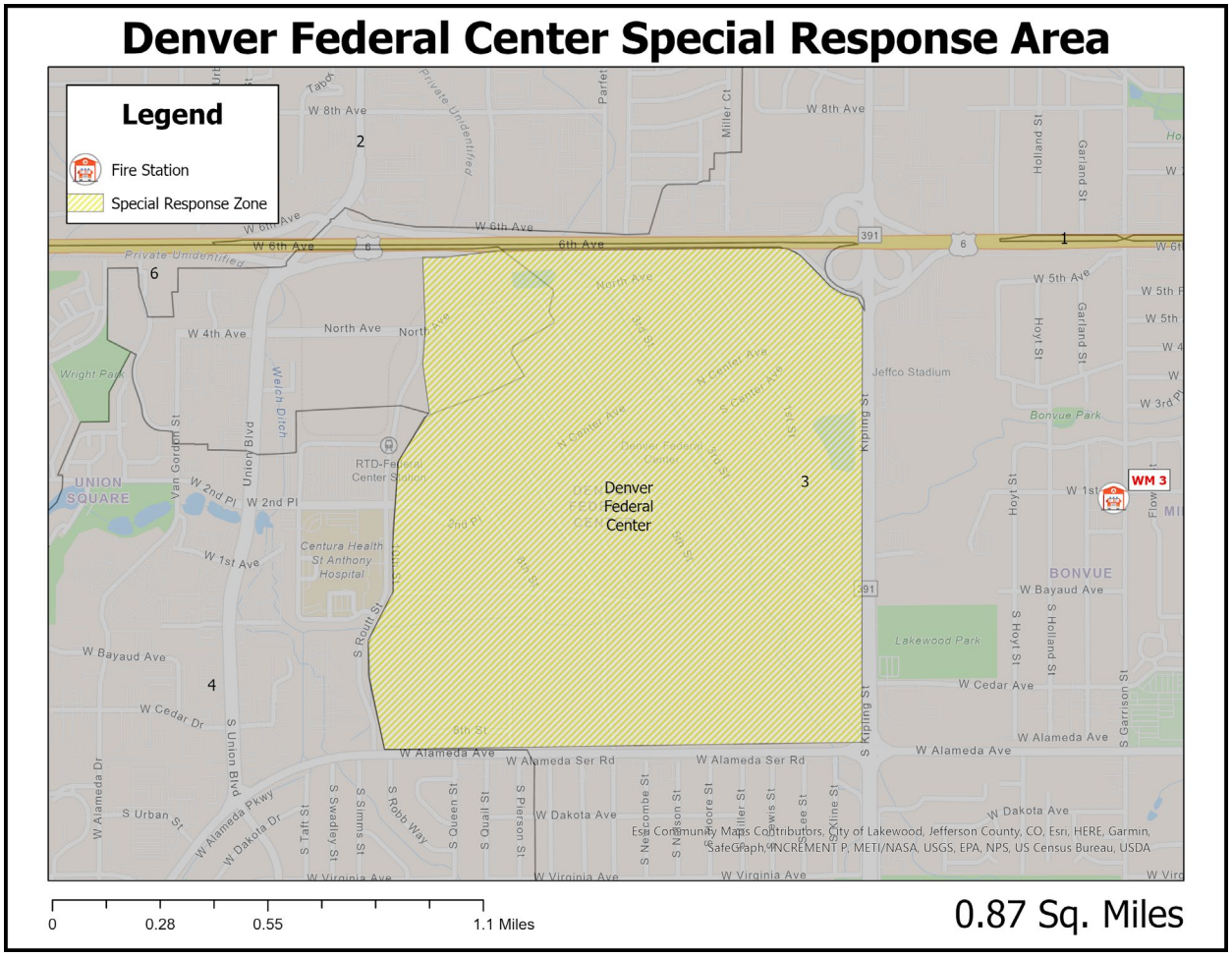
Station-3																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E3	2017	682	19.14%	112	3.14%	2112	59.28%	211	5.92%	25	0.70%	42	1.18%	364	10.22%	3563
E3	2018	691	18.54%	132	3.54%	2108	56.55%	225	6.04%	24	0.64%	33	0.89%	508	13.63%	3728
E3	2019	301	9.09%	96	2.90%	2067	62.41%	260	7.85%	18	0.54%	44	1.33%	519	15.67%	3312
E3	2020	354	11.00%	99	3.08%	2015	62.62%	274	8.51%	12	0.37%	32	0.99%	423	13.14%	3218
E3	2021	395	10.57%	117	3.13%	2250	60.21%	374	10.01%	14	0.37%	31	0.83%	545	14.58%	3737
E3	Total	2423	13.80%	556	3.17%	10552	60.10%	1344	7.65%	93	0.53%	182	1.04%	2359	13.44%	17558
M2	2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
M2	2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
M2	2019	28	1.53%	27	1.47%	1502	81.81%	79	4.30%	6	0.33%	1	0.05%	189	10.29%	1836
M2	2020	36	1.43%	31	1.23%	2133	84.48%	80	3.17%	3	0.12%	2	0.08%	239	9.47%	2525
M2	2021	38	1.30%	34	1.16%	2354	80.64%	119	4.08%	9	0.31%	0	0.00%	363	12.44%	2919
M2	Total	102	1.40%	92	1.26%	5989	82.27%	278	3.82%	18	0.25%	3	0.04%	791	10.87%	7280
M3	2017	77	2.09%	55	1.50%	3159	85.91%	103	2.80%	20	0.54%	2	0.05%	259	7.04%	3677
M3	2018	72	1.85%	59	1.52%	3181	81.90%	142	3.66%	10	0.26%	3	0.08%	415	10.68%	3884
M3	2019	41	1.28%	50	1.57%	2603	81.50%	137	4.29%	10	0.31%	6	0.19%	344	10.77%	3194
M3	2020	40	1.60%	30	1.20%	2096	83.91%	71	2.84%	5	0.20%	2	0.08%	253	10.13%	2498
M3	2021	43	1.45%	38	1.28%	2386	80.64%	118	3.99%	5	0.17%	2	0.07%	365	12.34%	2959
M3	Total	273	1.68%	232	1.43%	13425	82.81%	571	3.52%	50	0.31%	15	0.09%	1636	10.09%	16212
St -3	Total	2798	6.83%	880	2.15%	29966	73.12%	2193	5.35%	161	0.39%	200	0.49%	4786	11.68%	40984

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 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 nighttime population is limited to security personnel.

Because there are no full-time residents, demographics are not included for 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.

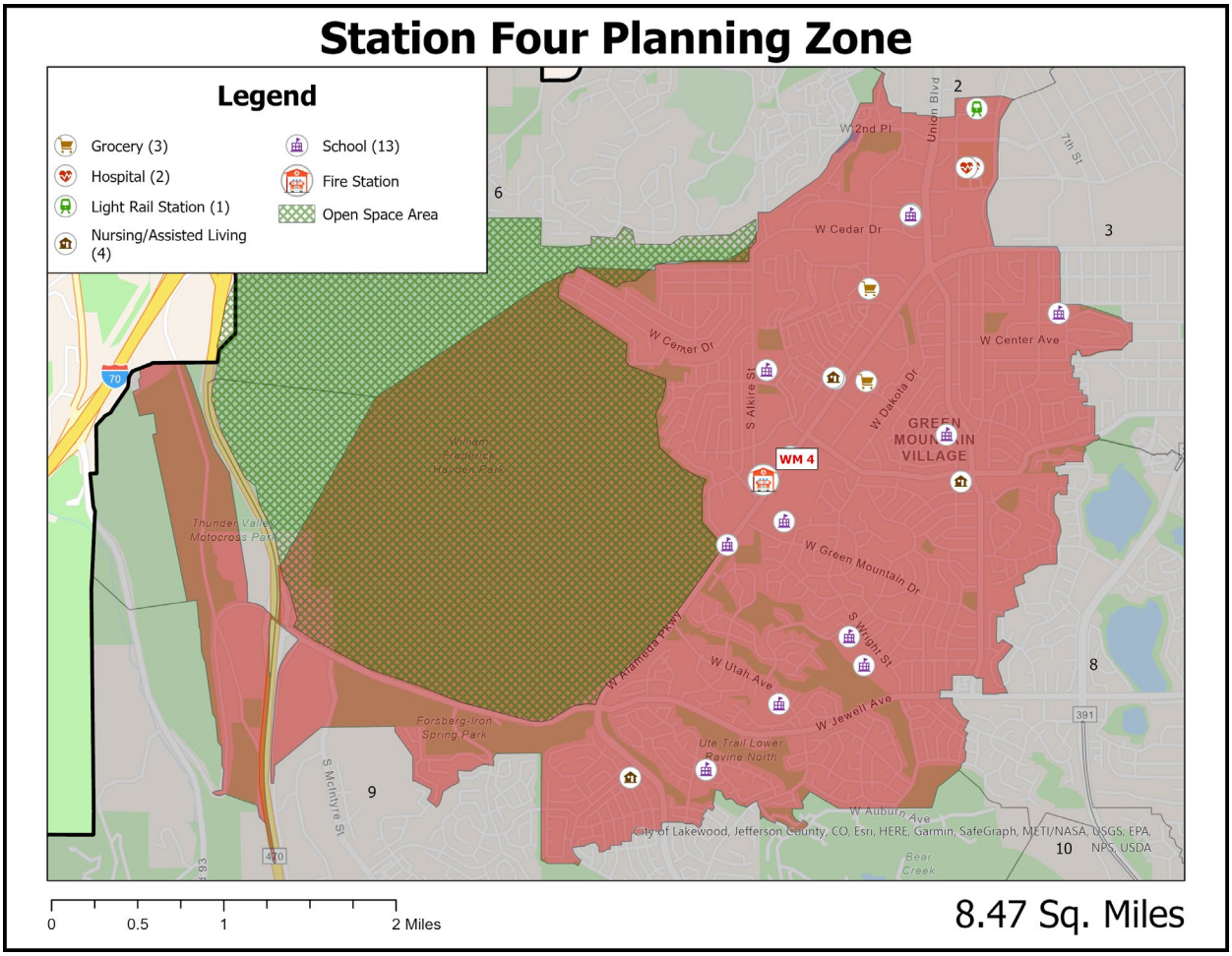
Response History:

Denver Federal Center															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2017	14	37.84%	0	0.00%	17	45.95%	1	2.70%	1	2.70%	0	0.00%	4	10.81%	37
2018	22	38.60%	1	1.75%	20	35.09%	0	0.00%	7	12.28%	2	3.51%	5	8.77%	57
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
Total	72	37.31%	1	0.52%	83	43.01%	3	1.55%	10	5.18%	5	2.59%	19	9.84%	193

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:

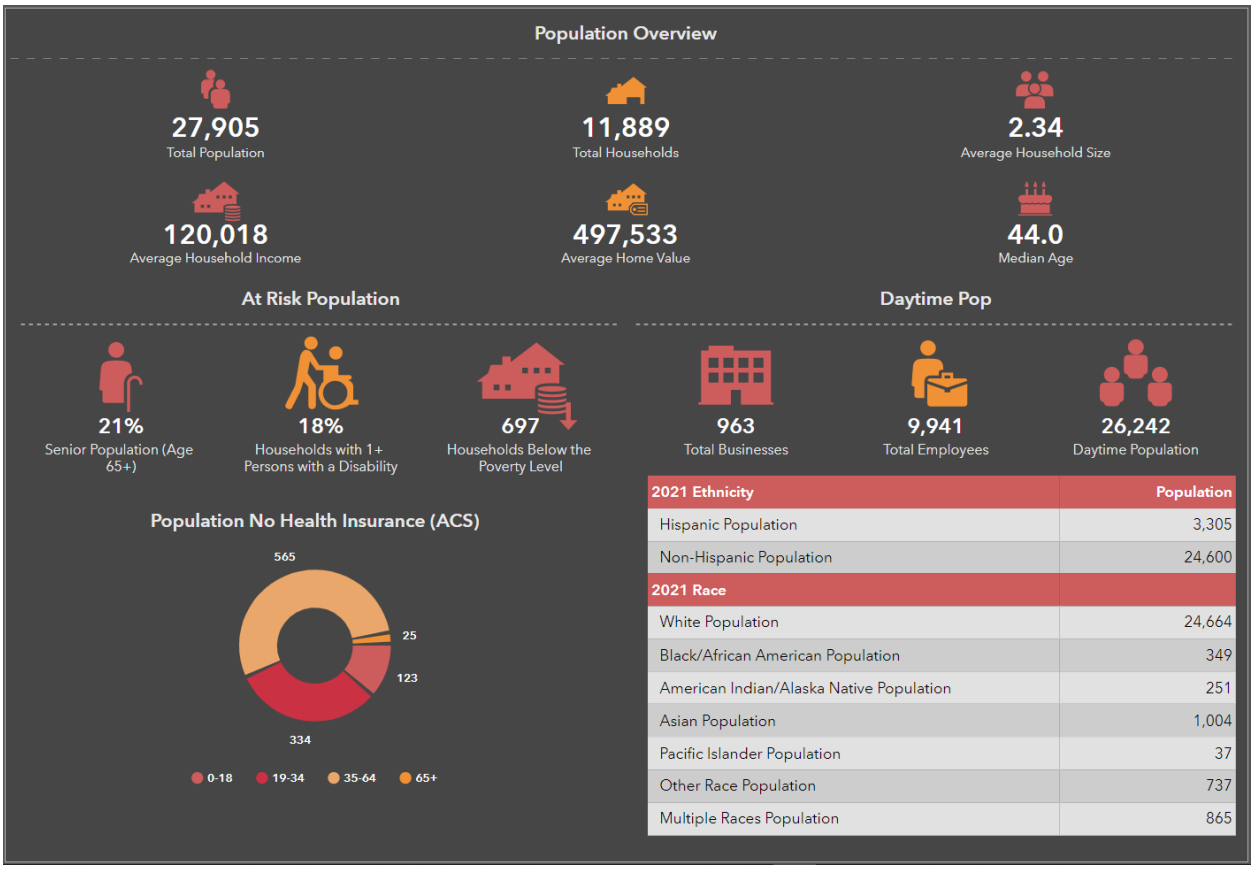
Name	Address
King Soopers	12043 West Alameda Parkway
Safeway #41	13111 West Alameda Parkway
Natural Grocers	12612 West Alameda Parkway
Saint Anthony Hospital	11600 West 2nd Place
Ortho Colorado Hospital at Saint Anthony	11650 W 2nd Place
Federal Center Station	11601 W 2nd Place
Colorado Digital Academy - Elementary	165 S. Union Boulevard
Elevate Academy	165 S. Union Boulevard

Rooney Ranch Elementary School	2200 South Coors Street
Glennon Heights Elementary School	11025 West Glennon Drive
Devinny Elementary School	1725 South Wright Street
Colorado Virtual Academy (Cova)	165 South Union Boulevard
Colorado Digital Academy - Middle	165 South Union Boulevard
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
Concordia Lutheran Preschool	13371 West Alameda Parkway
Montage Senior Living	12791 West Alameda Parkway
Lakewood Terrace Affordable Assisted Living	13969 West Warren Avenue
Applewood Our House 4, LLC	1182 South Van Gordon Court

Special Risks:

- Multiple Multi-Family Structures that include past multiple alarm structure fires:
    - Maplewood Apartments - 856 South Van Gordon
    - West Hills Apartments - 453 Van Gordon Street
    - The Pines Apartments - 12977 West Cedar Drive
    - Union West Apartments - 13050 West Cedar Drive
    - Americana Lakewood – 12598 West Dakota Avenue
    - Union West Apartments – 35 Van Gordon Street
- Beacon 85 – 85 South Union Boulevard
- Alameda and Union Intersection – frequent auto accidents
- 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 – wildfire

Planning Zone Risk Profile and Demographics:



2021 Ethnicity	Population
Hispanic Population	3,305
Non-Hispanic Population	24,600
2021 Race	
White Population	24,664
Black/African American Population	349
American Indian/Alaska Native Population	251
Asian Population	1,004
Pacific Islander Population	37
Other Race Population	737
Multiple Races Population	865

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 is adequate for the exposures.

Response History:

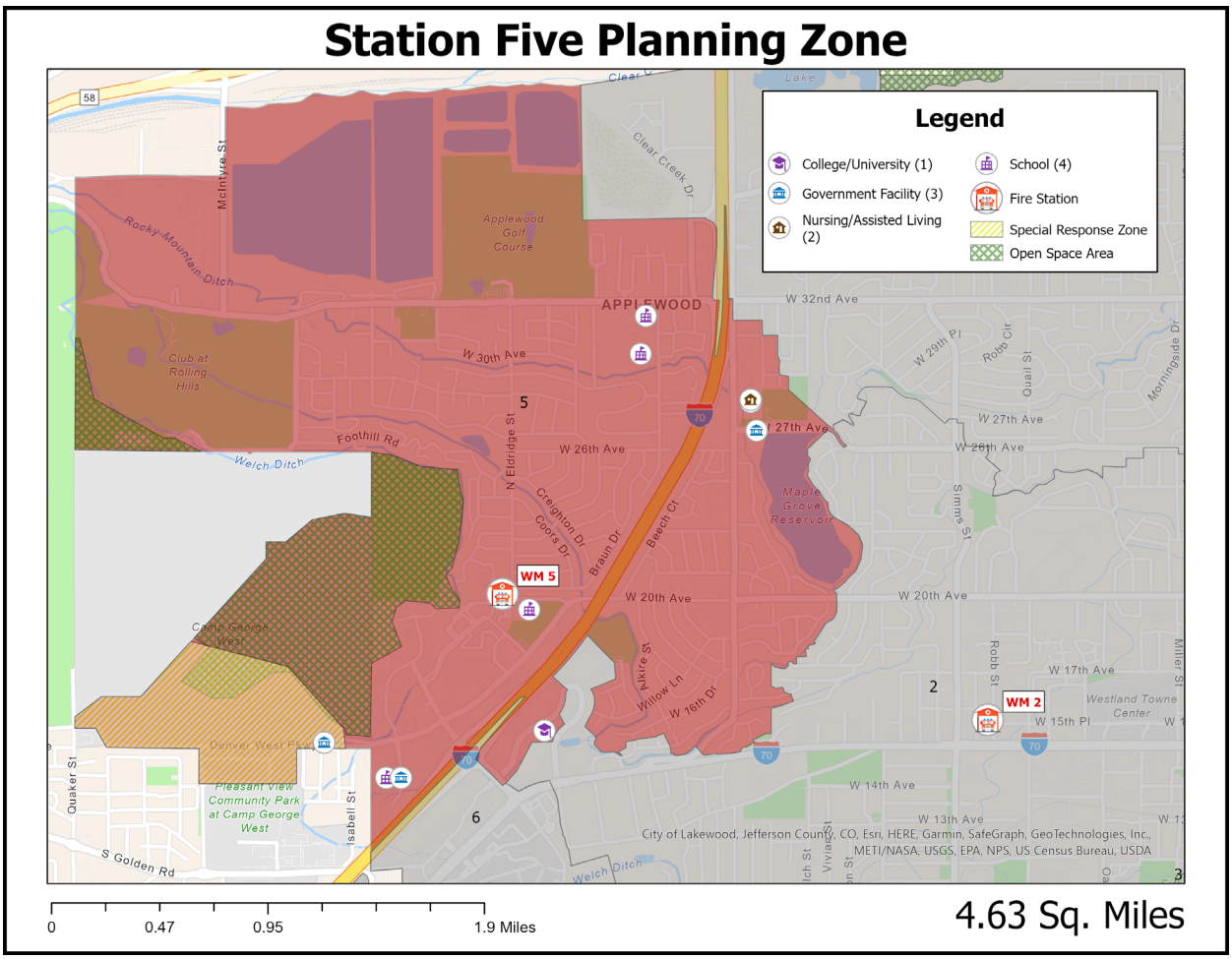
Station-4																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E4	2017	370	15.83%	50	2.14%	1461	62.52%	159	6.80%	11	0.47%	31	1.33%	239	10.23%	2337
E4	2018	343	13.91%	64	2.60%	1530	62.07%	166	6.73%	27	1.10%	34	1.38%	288	11.68%	2465
E4	2019	258	11.30%	58	2.54%	1474	64.54%	206	9.02%	11	0.48%	26	1.14%	244	10.68%	2284
E4	2020	245	11.40%	47	2.19%	1383	64.36%	186	8.66%	15	0.70%	31	1.44%	227	10.56%	2149
E4	2021	280	11.25%	50	2.01%	1616	64.93%	189	7.59%	14	0.56%	33	1.33%	299	12.01%	2489
E4	Total	1496	12.76%	269	2.29%	7464	63.66%	906	7.73%	78	0.67%	155	1.32%	1297	11.06%	11724
M4	2017	54	2.16%	34	1.36%	2138	85.59%	62	2.48%	11	0.44%	3	0.12%	196	7.85%	2498
M4	2018	48	1.77%	34	1.25%	2299	84.80%	76	2.80%	13	0.48%	6	0.22%	234	8.63%	2711
M4	2019	39	1.60%	25	1.02%	2045	83.71%	132	5.40%	7	0.29%	4	0.16%	190	7.78%	2443
M4	2020	34	1.67%	21	1.03%	1773	87.08%	61	3.00%	5	0.25%	3	0.15%	136	6.68%	2036
M4	2021	52	2.15%	29	1.20%	2045	84.61%	61	2.52%	3	0.12%	2	0.08%	223	9.23%	2417
M4	Total	227	1.88%	143	1.18%	10300	85.09%	392	3.24%	39	0.32%	18	0.15%	979	8.09%	12105
B4	2017	0	0.00%	1	11.11%	1	11.11%	0	0.00%	0	0.00%	0	0.00%	7	77.78%	9
B4	2018	0	0.00%	1	7.14%	3	21.43%	0	0.00%	0	0.00%	0	0.00%	10	71.43%	14
B4	2019	0	0.00%	4	28.57%	2	14.29%	1	7.14%	0	0.00%	0	0.00%	7	50.00%	14
B4/BR4	2020	0	0.00%	0	0.00%	5	45.45%	3	27.27%	0	0.00%	0	0.00%	3	27.27%	11
B4/BR4	2021	0	0.00%	0	0.00%	3	23.08%	0	0.00%	0	0.00%	0	0.00%	10	76.92%	13
B4/BR4	Total	0	0.00%	6	9.84%	14	22.95%	4	6.56%	0	0.00%	0	0.00%	37	60.66%	61
St -4	Total	1723	7.23%	418	1.75%	17778	74.62%	1302	5.47%	117	0.49%	173	0.73%	2313	9.71%	23824

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:

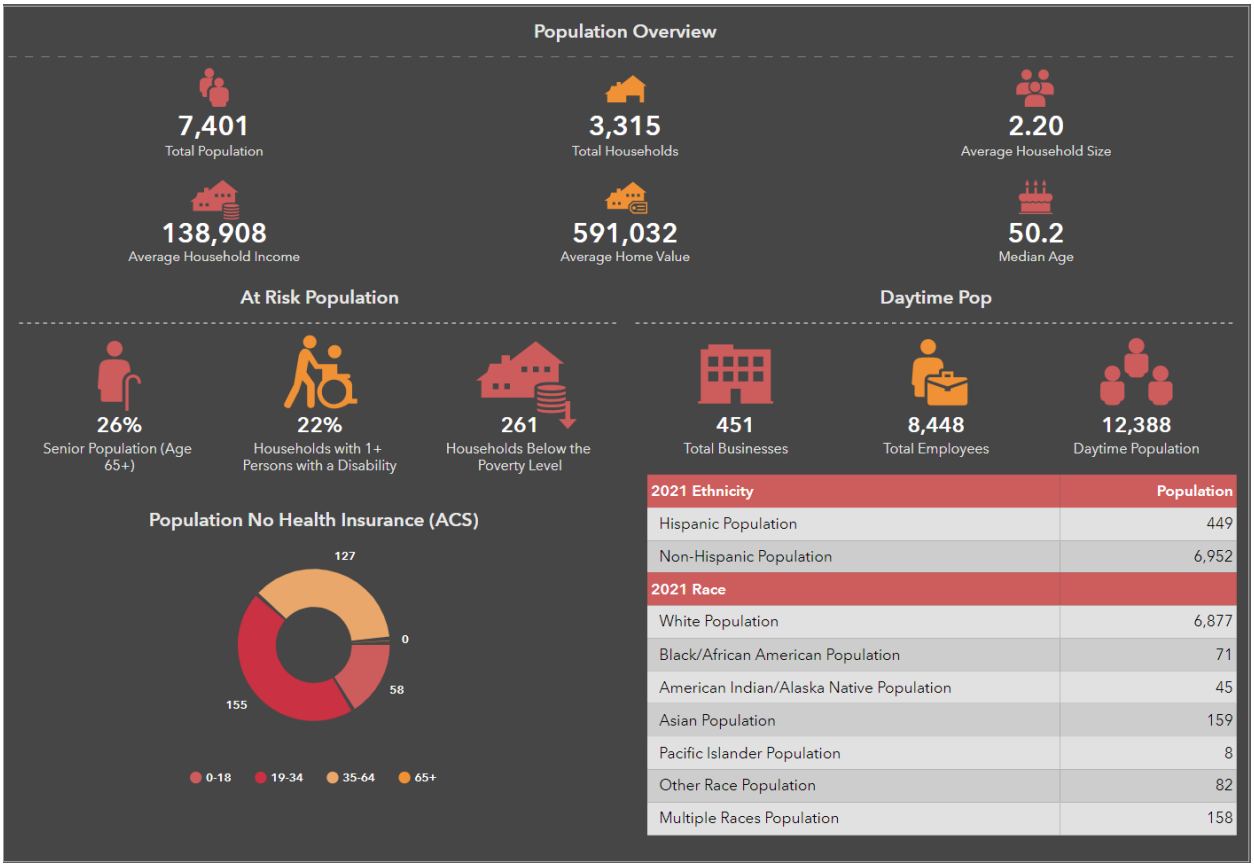
Name	Address
National Personal Training Institute Of Colorado	1658 Cole Boulevard, Suite 50
Consolidated Mutual Water Company	12700 West 27th Avenue
Jefferson County Public Schools (JCPS)	1829 Denver West Drive
National Renewable Energy Laboratory	15003 Denver West Parkway
Maple Grove Elementary School	3085 Alkire Street
Manning Options School	13200 West 32nd Place
John And Karen Litz Preschool	13950 West 20th Avenue
JCPS 21St Century Virtual Academy	1829 Denver West Drive Building 27
Atria Applewood	2800 Youngfield Street

Applewood Place	2800 Youngfield Street

Special Risks:

- Table Mountain – see the Table Mountain Special Response Zone
- Molson Coors Brewery Water Treatment Plant - 17755 West 32nd Avenue
- NREL – see the National Renewable Energy Laboratory Special Response Zone

Planning Zone Risk Profile and Demographics:



2021 Ethnicity	Population
Hispanic Population	449
Non-Hispanic Population	6,952
2021 Race	
White Population	6,877
Black/African American Population	71
American Indian/Alaska Native Population	45
Asian Population	159
Pacific Islander Population	8
Other Race Population	82
Multiple Races Population	158

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:

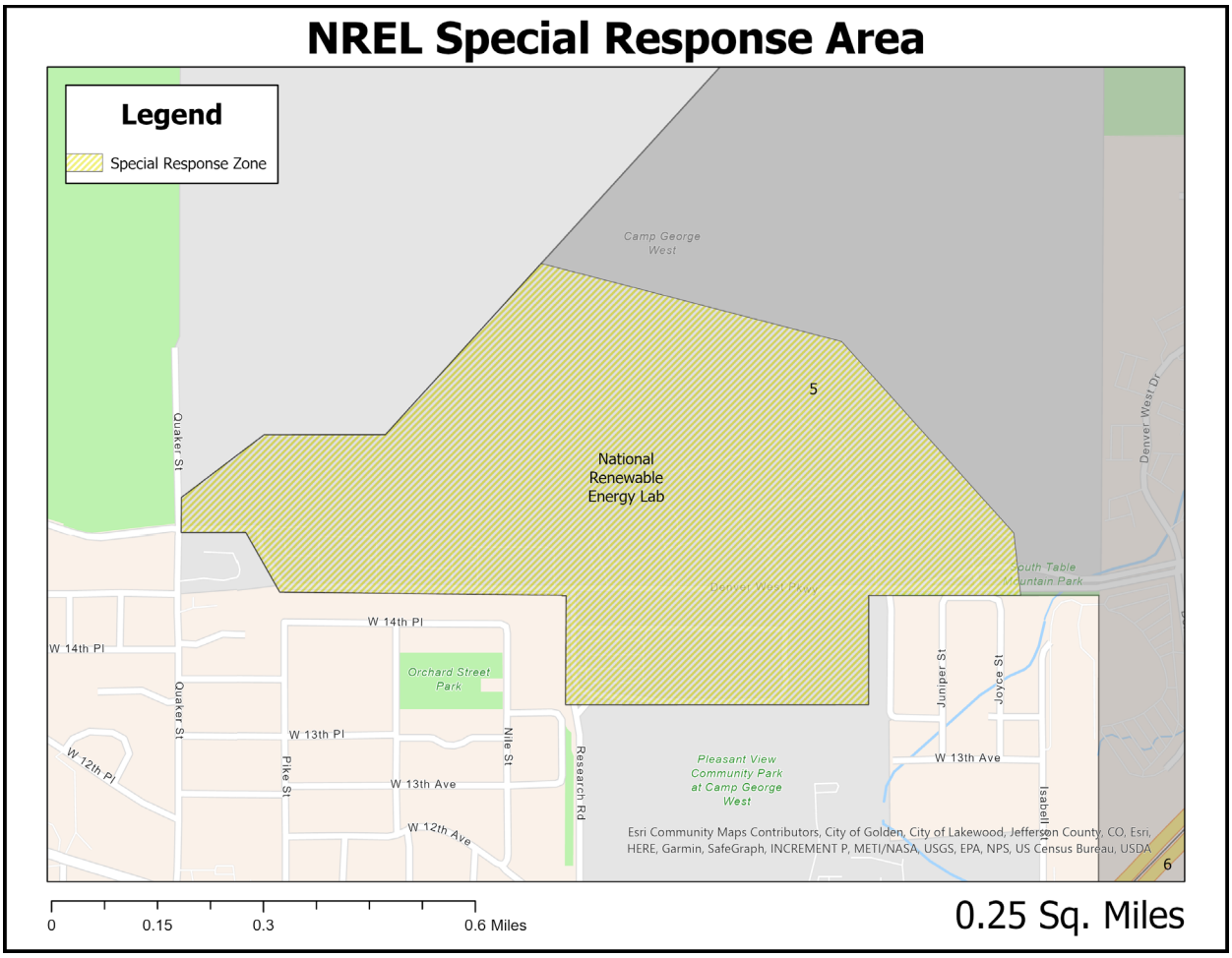
Station-5																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E5	2017	252	18.34%	47	3.42%	789	57.42%	127	9.24%	9	0.66%	15	1.09%	132	9.61%	1374
E5	2018	278	20.58%	44	3.26%	675	49.96%	109	8.07%	18	1.33%	25	1.85%	196	14.51%	1351
E5	2019	120	9.84%	30	2.46%	722	59.23%	98	8.04%	9	0.74%	33	2.71%	203	16.65%	1219
E5	2020	125	13.03%	22	2.29%	598	62.36%	78	8.13%	3	0.31%	11	1.15%	121	12.62%	959
E5	2021	135	12.43%	36	3.31%	660	60.77%	89	8.20%	4	0.37%	12	1.10%	143	13.17%	1086
E5	Total	910	15.19%	179	2.99%	3444	57.51%	501	8.37%	43	0.72%	96	1.60%	795	13.27%	5989
M5	2017	40	1.75%	18	0.79%	1882	82.54%	111	4.87%	7	0.31%	2	0.09%	218	9.56%	2280
M5	2018	35	1.57%	23	1.03%	1786	79.91%	118	5.28%	8	0.36%	9	0.40%	255	11.41%	2235
M5	2019	28	1.25%	22	0.98%	1850	82.74%	95	4.25%	2	0.09%	12	0.54%	227	10.15%	2236
M5	2020	33	1.78%	5	0.27%	1540	83.24%	82	4.43%	0	0.00%	1	0.05%	188	10.16%	1850
M5	2021	26	1.28%	16	0.79%	1697	83.55%	76	3.74%	2	0.10%	4	0.20%	209	10.29%	2031
M5	Total	162	1.52%	84	0.79%	8755	82.35%	482	4.53%	19	0.18%	28	0.26%	1097	10.32%	10632
HZ5	2017	0	0.00%	0	0.00%	2	12.50%	1	6.25%	0	0.00%	6	37.50%	7	43.75%	16
HZ5	2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	4	100.00%	0	0.00%	4
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	Total	0	0.00%	5	11.36%	8	13.64%	5	9.09%	2	4.55%	29	43.18%	15	18.18%	64
St -5	Total	1072	6.43%	268	1.61%	12207	73.28%	988	5.93%	64	0.38%	153	0.92%	1907	11.45%	16659

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

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 for 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.

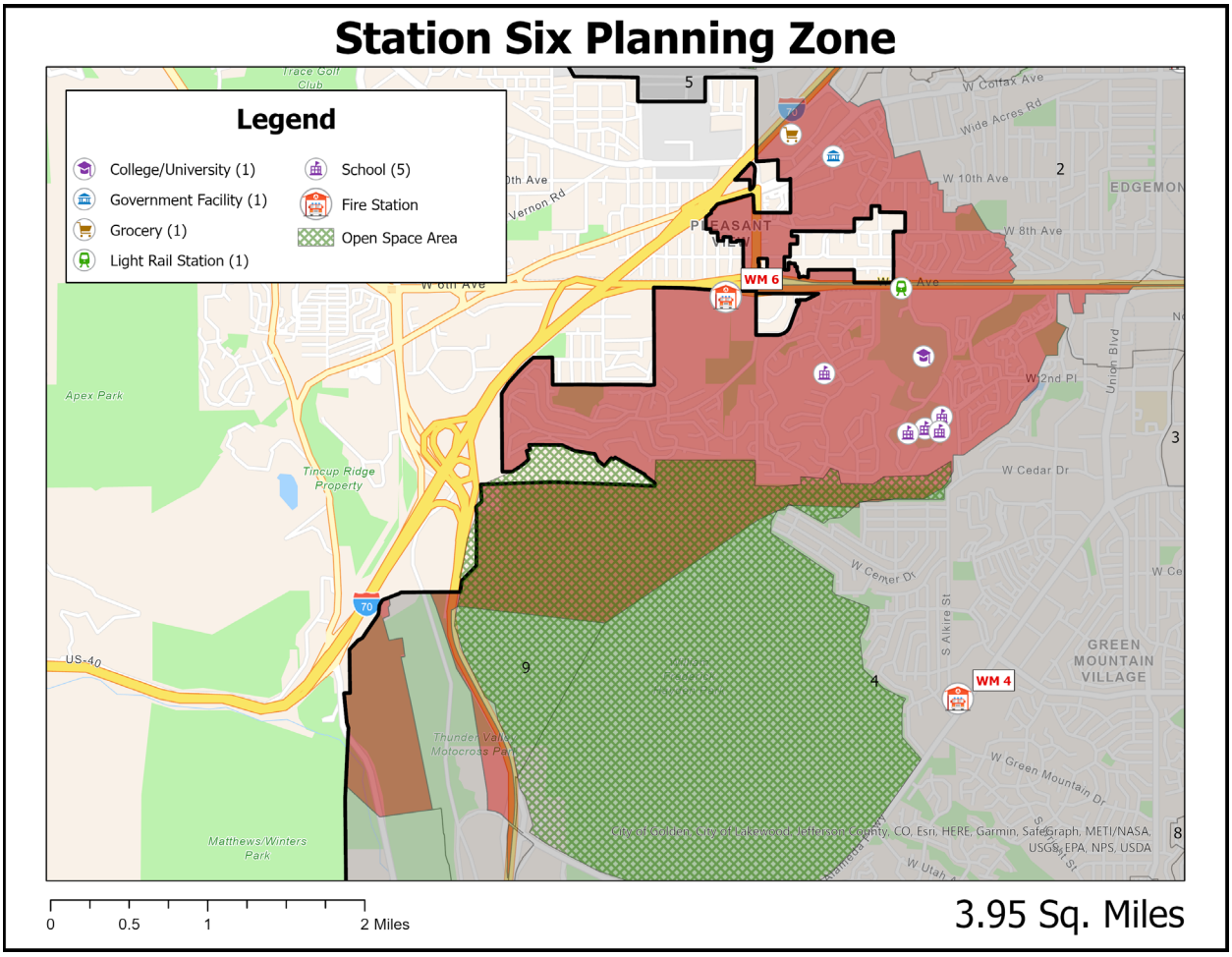
Response History:

National Renewable Energy Lab															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2017	5	20.00%	3	12.00%	12	48.00%	0	0.00%	1	4.00%	1	4.00%	3	12.00%	25
2018	9	34.62%	2	7.69%	10	38.46%	0	0.00%	2	7.69%	0	0.00%	3	11.54%	26
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
Total	47	38.52%	8	6.56%	49	40.16%	0	0.00%	3	2.46%	5	4.10%	10	8.20%	122

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.



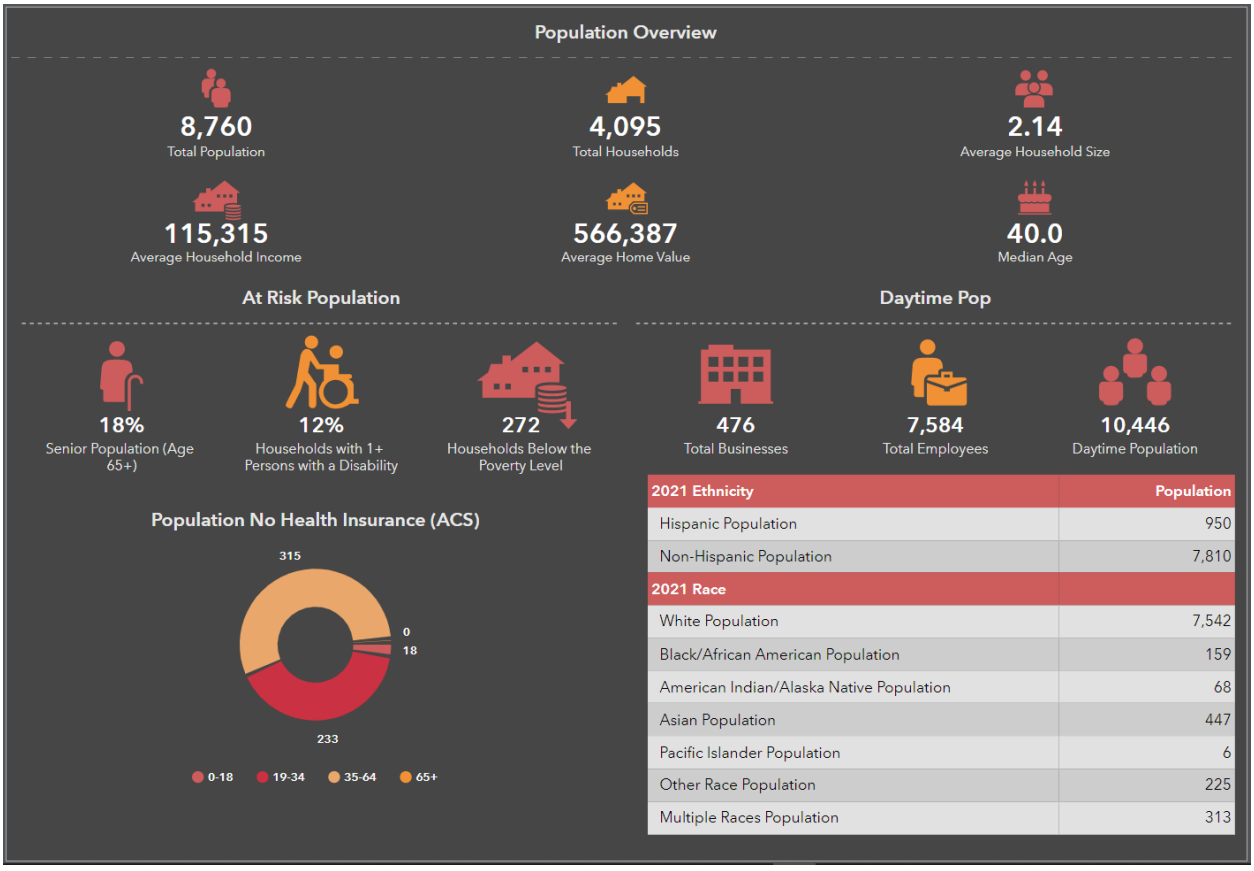
Critical Infrastructure and Key Resources:

Name	Address
Red Rocks Community College	13300 West Sixth Avenue
Lakewood Police Substation	14500 West Colfax Avenue
Whole Foods	14357 West Colfax Avenue
Red Rocks Community College Station	6th Avenue and Arbutus Drive
Kyffin Elementary School	205 North Flora Way
McLain High School	13600 West 2nd Place
Warren Tech	13300 West 2nd Place
Longview High School	13301 West 2nd Place

Special Risks:

- Multi-family residential – several structure fires (Holman Way)
- Colorado Mills Mall - 14500 West Colfax
- Jefferson County Fairgrounds - 15200-15400 West 6th Avenue
- Thunder Valley Motocross Park – special events

Planning Zone Risk Profile and Demographics:



2021 Ethnicity	Population
Hispanic Population	950
Non-Hispanic Population	7,810
2021 Race	
White Population	7,542
Black/African American Population	159
American Indian/Alaska Native Population	68
Asian Population	447
Pacific Islander Population	6
Other Race Population	225
Multiple Races Population	313

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.

6th 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 6th 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:

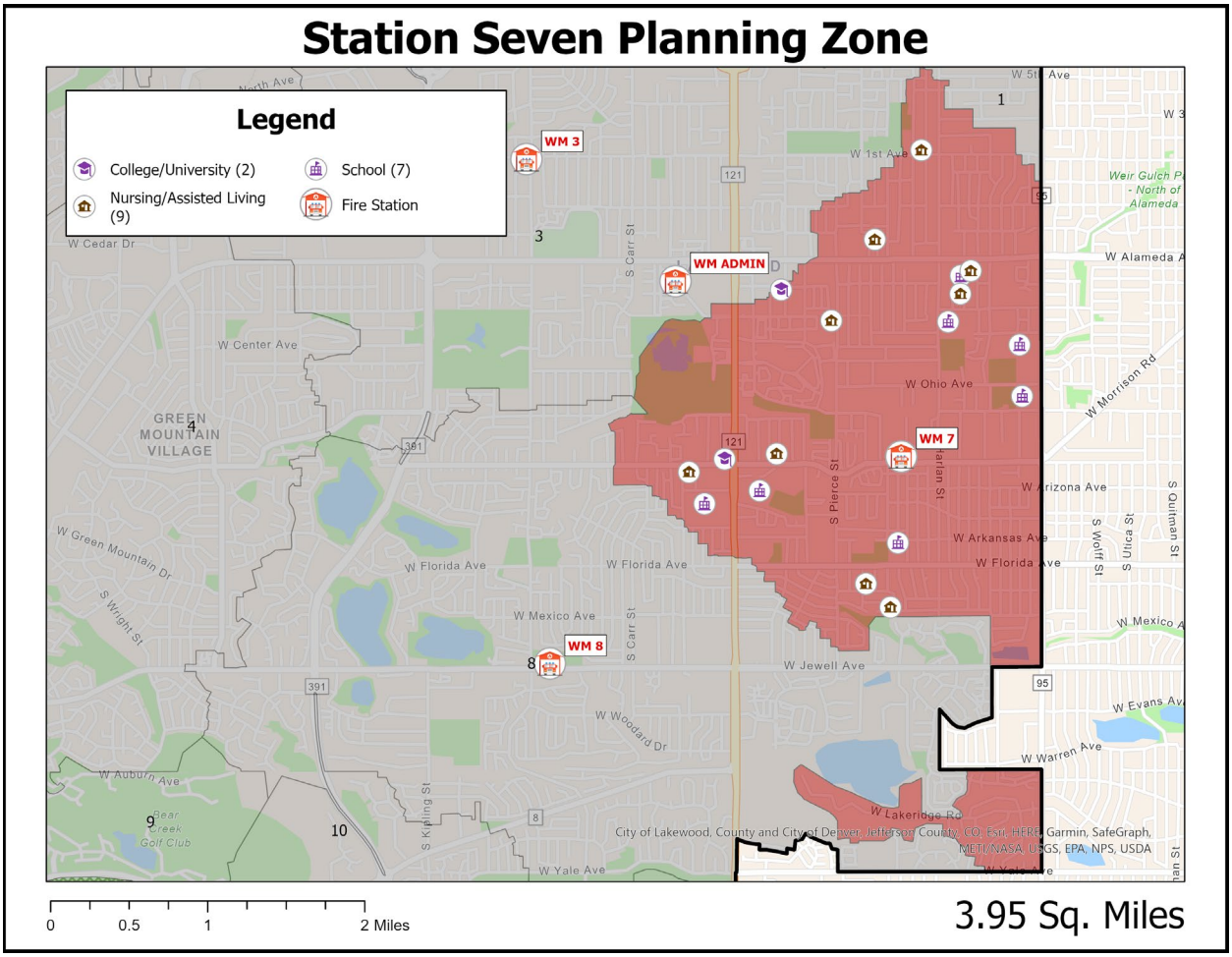
Station-6																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E6	2017	259	21.76%	42	3.53%	675	56.72%	50	4.20%	6	0.50%	9	0.76%	149	12.52%	1190
E6	2018	305	24.78%	41	3.33%	628	51.02%	46	3.74%	7	0.57%	23	1.87%	181	14.70%	1231
E6	2019	187	17.02%	41	3.73%	624	56.78%	48	4.37%	5	0.45%	12	1.09%	182	16.56%	1099
E6	2020	159	17.93%	32	3.61%	510	57.50%	45	5.07%	2	0.23%	10	1.13%	129	14.54%	887
E6	2021	159	15.90%	50	5.00%	576	57.60%	45	4.50%	5	0.50%	13	1.30%	152	15.20%	1000
E6	Total	1069	19.77%	206	3.81%	3013	55.72%	234	4.33%	25	0.46%	67	1.24%	793	14.67%	5407
B6	2017	0	0.00%	1	16.67%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	5	83.33%	6
B6	2018	0	0.00%	1	16.67%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	5	83.33%	6
B6	2019	0	0.00%	1	14.29%	1	14.29%	1	14.29%	0	0.00%	0	0.00%	4	57.14%	7
B6/BR6	2020	1	10.00%	1	10.00%	1	10.00%	2	20.00%	0	0.00%	0	0.00%	5	50.00%	10
B6/BR6	2021	0	0.00%	5	25.00%	3	15.00%	3	15.00%	1	5.00%	0	0.00%	8	40.00%	20
B6/BR6	Total	1	2.04%	9	18.37%	5	10.20%	6	12.24%	1	2.04%	0	0.00%	27	55.10%	49
St-06	Total	1070	19.61%	215	3.94%	3018	55.32%	240	4.40%	26	0.48%	67	1.23%	820	15.03%	5456

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:

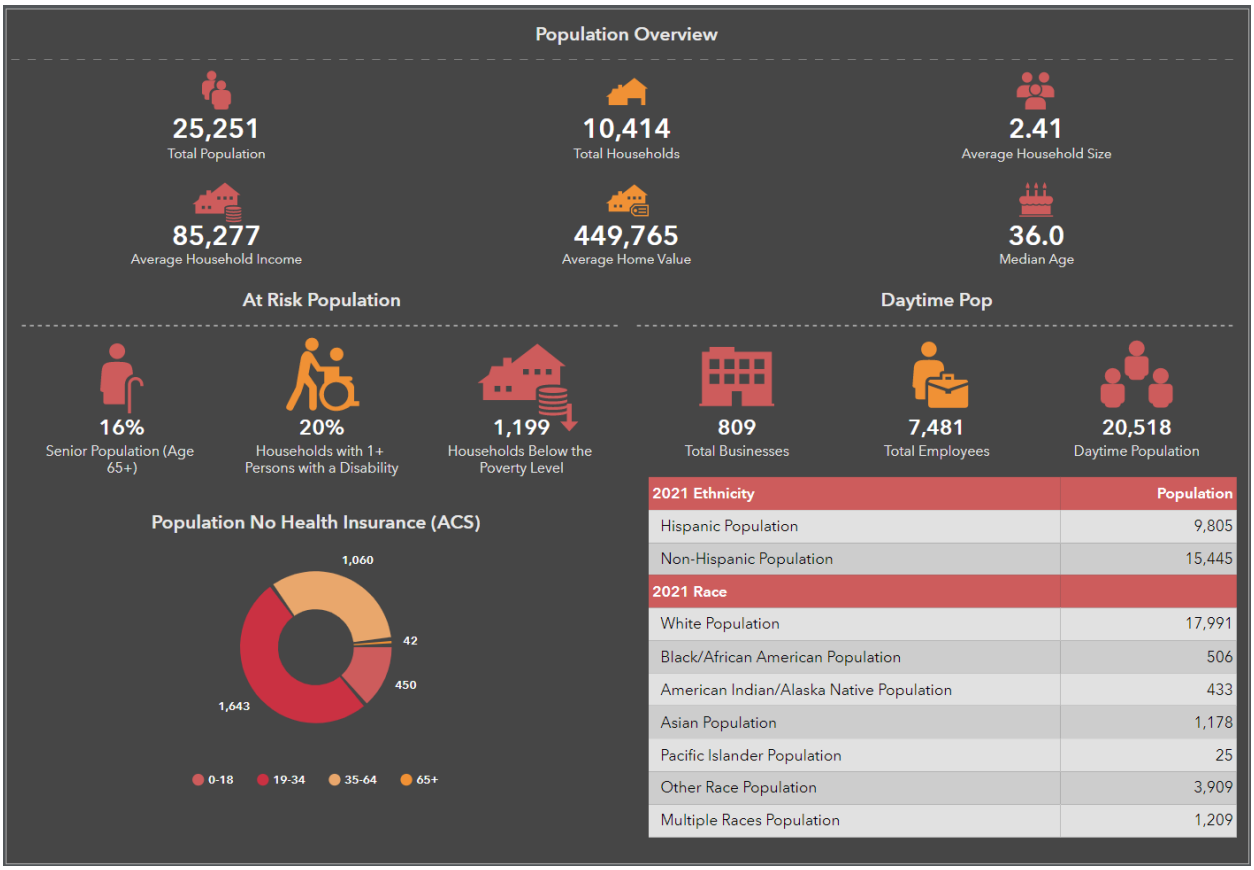
Name	Address
Paul Mitchell School	405 South Teller Street
Colorado School of Healing Arts	7655 West Mississippi Suite 100
Great Work Montessori	5300 West Center Avenue
Alameda Junior/Senior High School	1255 South Wadsworth Boulevard
Lasley Elementary School	1401 South Kendall Street
Emory Elementary School	1275 South Teller Street
New America School	5806 West Alameda Avenue
Deane Elementary School	580 South Harlan Street
Brady Exploration School	5220 West Ohio Avenue
Acacia Assisted Living, LLC	1069 South Teller Street

Rocky Mountain Solstice	225 South Marshall Street
Acacia Assisted Living, LLC	6419 West Mexico Avenue
Mapleton Care Center	115 Ingalls Street
Assisted Living At Eaton Senior Communities	323 & 333 South Eaton Street
Rising Sun Senior Home	421 & 431 South Fenton Street
Rocky Mountain Assisted Living	1570 South Newland Street
Villa Manor Care Center	7950 West Mississippi Avenue
Lakewood Reserve	555 South Pierce Street

Special Risks:

- Belmar Development – a large mixed use quasi city center area
- Belmar District - Alaska Drive and Teller Street (large mixed commercial and multi-family residential)
- Elevation Motors - 5480 West Alameda (bowstring truss)
- The Shores Apartments - 7301 West Ohio Avenue (multi-family residential facility)
- The Ridge Apartments - 658 and 788 South Reed Street (multi-family residential facility)
- Lakeview Towers Apartments – 679 South Reed Street (multi-family residential facility)
- Green Gables Condos – 2515-2595 South Sheridan Boulevard (multi-family residential facility)
- Martischang Plaza – 5800 West Alameda (large multi-family with church and school)
- Electrical Sub Station - Kentucky Avenue and South Wadsworth Boulevard

Planning Zone Risk Profile and Demographics:



2021 Ethnicity	Population
Hispanic Population	9,805
Non-Hispanic Population	15,445
2021 Race	
White Population	17,991
Black/African American Population	506
American Indian/Alaska Native Population	433
Asian Population	1,178
Pacific Islander Population	25
Other Race Population	3,909
Multiple Races Population	1,209

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:

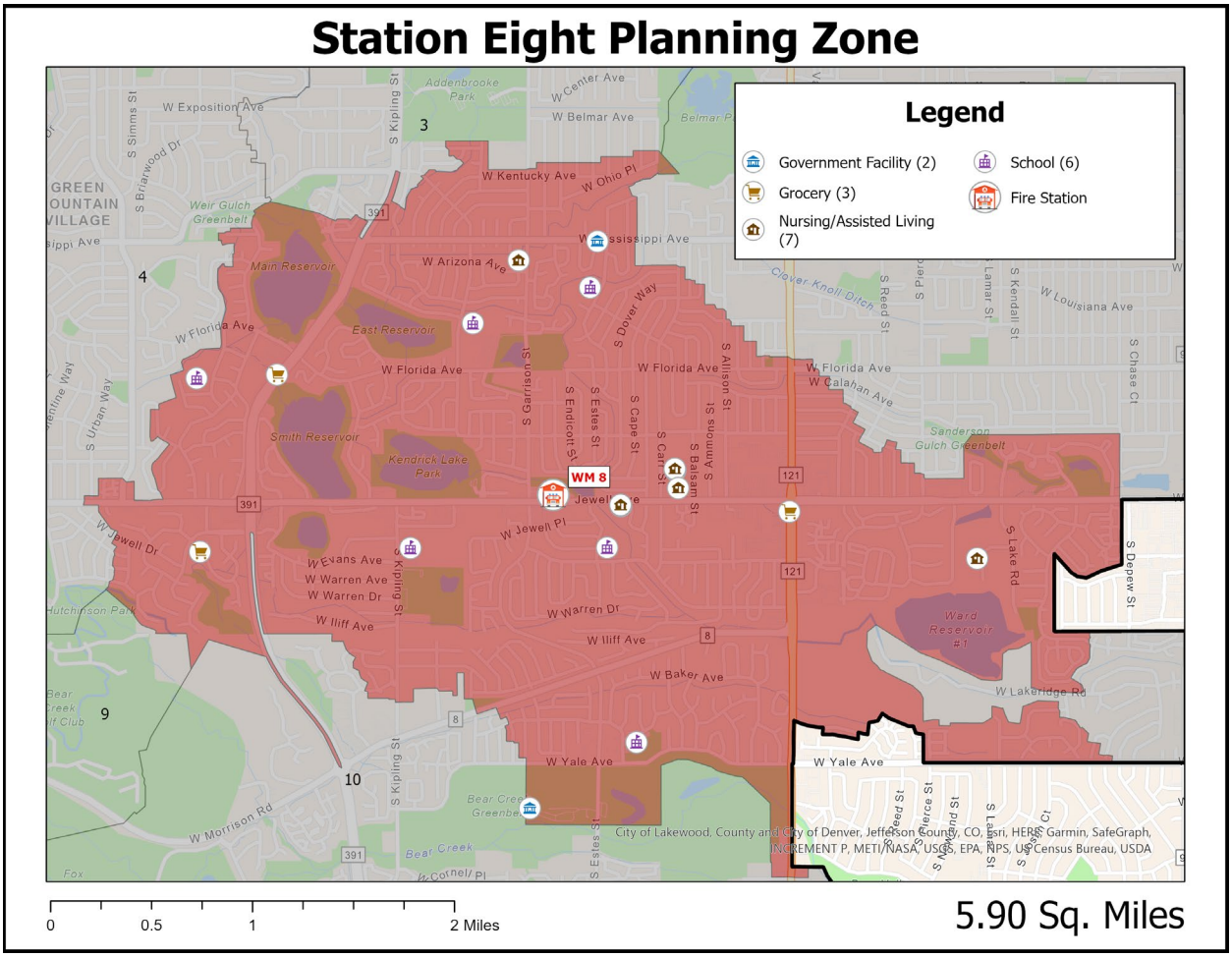
Station-7																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
ARM1	2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
ARM1	2018	0	0.00%	0	0.00%	433	0.00%	13	0.00%	0	0.00%	0	0.00%	20	0.00%	466
ARM1	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%	859	90.71%	49	5.17%	0	0.00%	0	0.00%	33	3.48%	947
ARM1	Total	5	0.19%	3	0.11%	2448	90.83%	148	5.49%	1	0.04%	0	0.00%	90	3.34%	2695
E7	2017	506	14.48%	74	2.12%	2338	66.91%	273	7.81%	11	0.31%	37	1.06%	255	7.30%	3494
E7	2018	555	16.50%	75	2.23%	2145	63.78%	187	5.56%	20	0.59%	27	0.80%	354	10.53%	3363
E7	2019	379	11.65%	58	1.78%	2145	65.92%	297	9.13%	10	0.31%	35	1.08%	330	10.14%	3254
E7	2020	338	11.58%	66	2.26%	1893	64.85%	254	8.70%	14	0.48%	21	0.72%	333	11.41%	2919
E7	2021	360	10.95%	54	1.64%	2189	66.56%	293	8.91%	14	0.43%	22	0.67%	357	10.85%	3289
E7	Total	2138	13.10%	327	2.00%	10710	65.63%	1304	7.99%	69	0.42%	142	0.87%	1629	9.98%	16319
M7	2017	63	1.95%	28	0.87%	2813	86.96%	100	3.09%	11	0.34%	1	0.03%	219	6.77%	3235
M7	2018	51	1.57%	39	1.20%	2748	84.42%	126	3.87%	7	0.22%	5	0.15%	279	8.57%	3255
M7	2019	51	1.66%	28	0.91%	2615	85.21%	171	5.57%	5	0.16%	4	0.13%	195	6.35%	3069
M7	2020	47	1.88%	22	0.88%	2141	85.47%	82	3.27%	8	0.32%	0	0.00%	205	8.18%	2505
M7	2021	39	1.29%	23	0.76%	2605	86.06%	104	3.44%	4	0.13%	1	0.03%	251	8.29%	3027
M7	Total	251	1.66%	140	0.93%	12922	85.63%	583	3.86%	35	0.23%	11	0.07%	1149	7.61%	15091
St-07	Total	2394	7.02%	470	1.38%	26080	76.47%	2035	5.97%	105	0.31%	153	0.45%	2868	8.41%	34105

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:

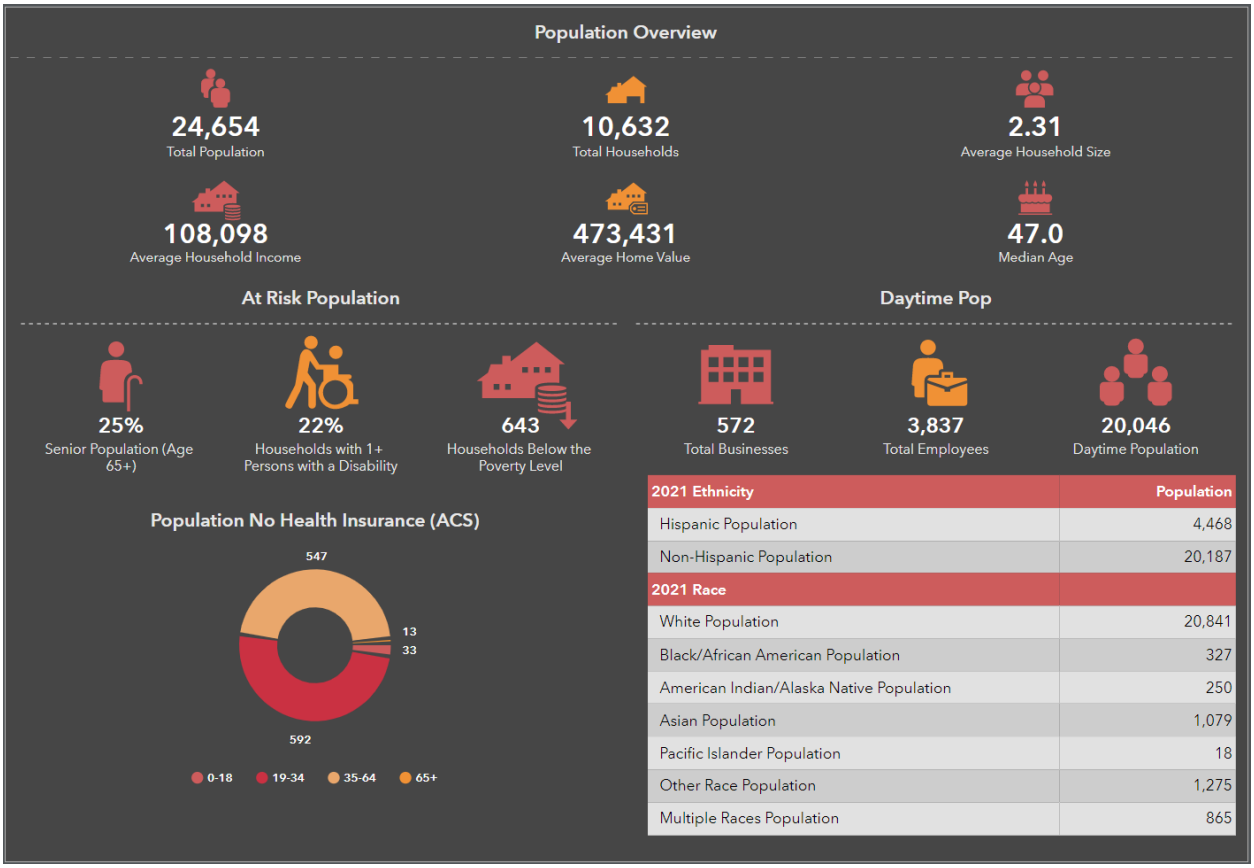
Name	Address
Lakewood Urban Parks - Maintenance	2805 South Estes Street
King Soopers	1545 South Kipling Parkway
King Soopers	1927 South Wadsworth Boulevard
Safeway #2342	11088 West Jewell Avenue
Irwin Preschool	1505 South Pierson Street
Westgate Elementary School	8550 West Vassar Drive
Kendrick Lakes 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

Brookdale Meridian Lakewood	1805 South Balsam Street
Nurturing Care Home Assisted Living	6347 Hawthorn Lane
Catharine's Quality Of Life Homes	9232 West Texas Drive
Lakewood Memory Care	8201 West Jewell Avenue
Jewell Place Rtf	8640 West Jewell Avenue

Special Risks:

- Waterside Apartments - 10555 West Jewell Avenue – multi-family residential facility
- Westridge Apartments - 1506 South Owens Street – multi-family residential facility
- Lockwood Village Apartments - 10312 West Florida Avenue – multi-family residential facility
- Village 3 Apartments - 10260 West Mississippi – multi-family residential facility
- Emich Chevrolet - 2033 South Wadsworth Boulevard – large showroom with light weight trusses
- The Mansion Office Building - 2315 South Wadsworth Boulevard – large office building
- Victory Christian Academy – 7700 West Woodard Drive – school
- Vanguard Green Gables – 7400 West Warner Circle – multi-family
- 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:



2021 Ethnicity	Population
Hispanic Population	4,468
Non-Hispanic Population	20,187
2021 Race	
White Population	20,841
Black/African American Population	327
American Indian/Alaska Native Population	250
Asian Population	1,079
Pacific Islander Population	18
Other Race Population	1,275
Multiple Races Population	865

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:

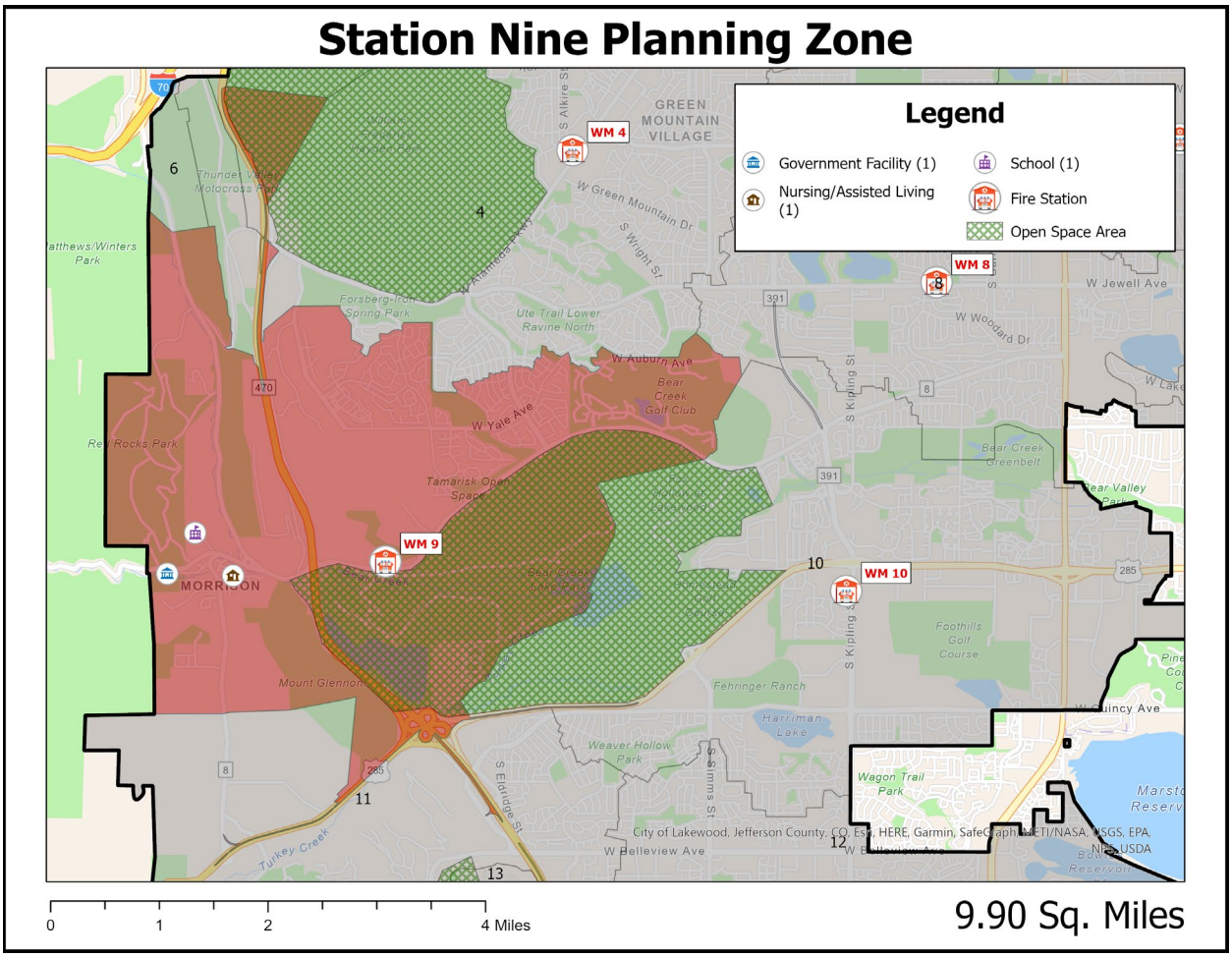
Station-8																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
BC2/D2	2017	92	10.24%	139	15.48%	456	50.78%	21	2.34%	41	4.57%	5	0.56%	144	16.04%	898
BC2/D2	2018	50	5.98%	158	18.90%	373	44.62%	28	3.35%	32	3.83%	7	0.84%	188	22.49%	836
BC2/D2	2019	32	4.14%	137	17.72%	361	46.70%	44	5.69%	18	2.33%	10	1.29%	171	22.12%	773
BC2	2020	30	4.35%	112	16.26%	367	53.27%	31	4.50%	18	2.61%	5	0.73%	126	18.29%	689
BC2	2021	33	4.33%	140	18.35%	409	53.60%	22	2.88%	8	1.05%	4	0.52%	147	19.27%	763
BC2	Total	237	5.99%	686	17.33%	1966	49.66%	146	3.69%	117	2.96%	31	0.78%	776	19.60%	3959
E8	2017	540	20.77%	65	2.50%	1523	58.58%	205	7.88%	14	0.54%	30	1.15%	223	8.58%	2600
E8	2018	534	19.33%	77	2.79%	1629	58.96%	198	7.17%	12	0.43%	39	1.41%	274	9.92%	2763
E8	2019	282	11.03%	64	2.50%	1676	65.55%	231	9.03%	13	0.51%	33	1.29%	258	10.09%	2557
E8	2020	232	9.94%	61	2.61%	1568	67.15%	191	8.18%	19	0.81%	31	1.33%	233	9.98%	2335
E8	2021	233	9.17%	65	2.56%	1725	67.89%	213	8.38%	6	0.24%	22	0.87%	277	10.90%	2541
E8	Total	1821	14.23%	332	2.59%	8121	63.47%	1038	8.11%	64	0.50%	155	1.21%	1265	9.89%	12796
TW8	2017	238	21.25%	131	11.70%	419	37.41%	77	6.88%	24	2.14%	42	3.75%	189	16.88%	1120
TW8	2018	249	20.98%	141	11.88%	448	37.74%	71	5.98%	18	1.52%	32	2.70%	228	19.21%	1187
TW8	2019	71	7.62%	103	11.05%	426	45.71%	76	8.15%	17	1.82%	32	3.43%	207	22.21%	932
TW8	2020	62	8.07%	92	11.98%	404	52.60%	52	6.77%	13	1.69%	13	1.69%	132	17.19%	768
TW8	2021	101	9.73%	105	10.12%	581	55.97%	73	7.03%	5	0.48%	2	0.19%	171	16.47%	1038
TW8	Total	721	14.29%	572	11.34%	2278	45.15%	349	6.92%	77	1.53%	121	2.40%	927	18.37%	5045
DIVE2	2017	1	4.76%	0	0.00%	3	14.29%	1	4.76%	5	23.81%	0	0.00%	11	52.38%	21
DIVE2	2018	0	0.00%	0	0.00%	2	13.33%	2	13.33%	7	46.67%	0	0.00%	4	26.67%	15
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	Total	1	1.09%	0	0.00%	8	8.70%	10	10.87%	29	31.52%	0	0.00%	44	47.83%	92
ST-8	Total	2780	12.70%	1590	7.26%	12373	56.52%	1543	7.05%	287	1.31%	307	1.40%	3012	13.76%	21892

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:

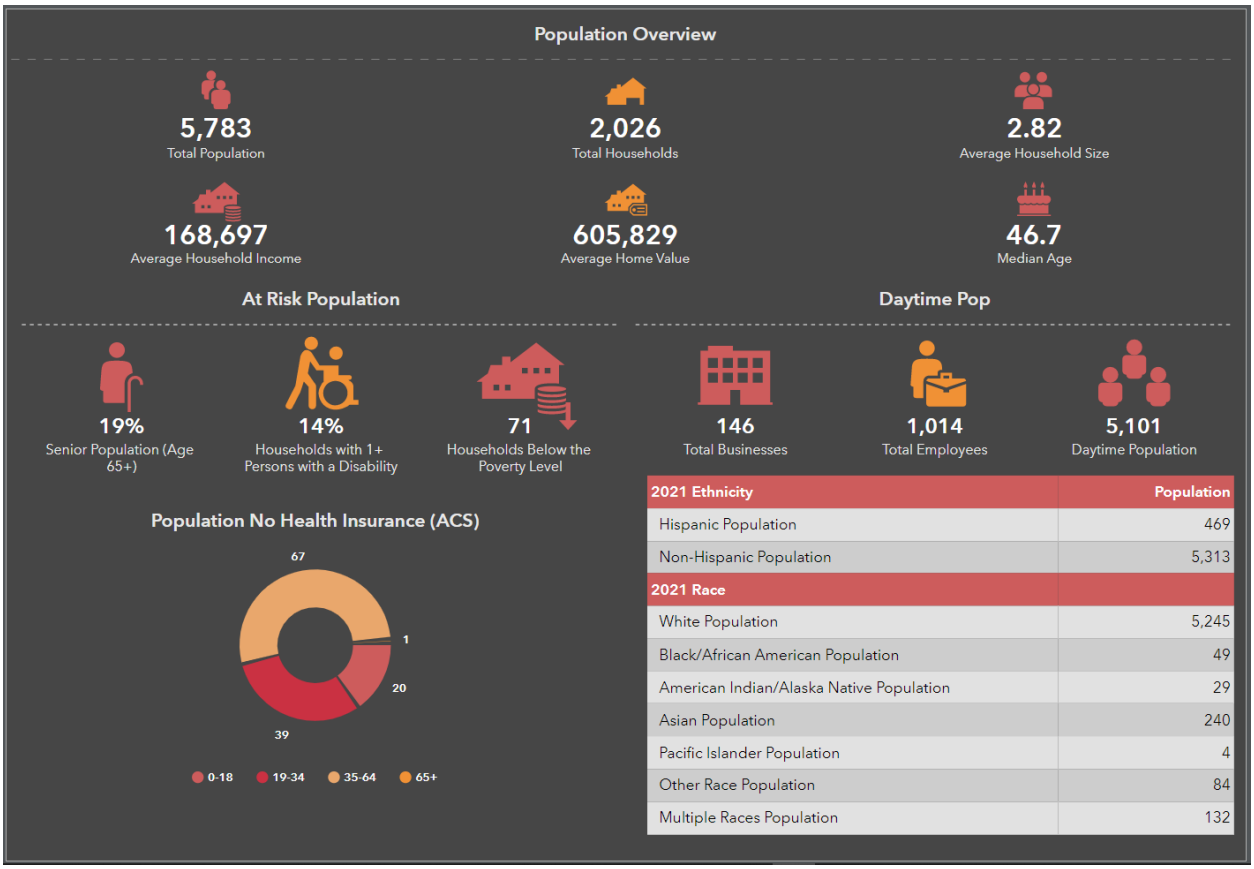
Name	Address
Mountain Parks Morrison	300 Union Avenue
Red Rocks Elementary School	17199 Highway 74
Bear Creek Center	150 Spring Street

Special Risks:

- Red Rocks Amphitheater – through a mutual aid agreement (9,500 capacity)
- Bradley Engineering - 16371 Morrison Road – hazardous materials

- Downtown Morrison – historic commercial and residential structures
- US Highway 285, CO Highway C-470 – transportation routes
- Bandimere Speedway – special events
- Multiple parks: Bear Creek Lake Park, Mt. Falcon, and Red Rocks
- Red Rocks Ranch Development – 1,000+ residential development

Planning Zone Risk Profile and Demographics:



2021 Ethnicity	Population
Hispanic Population	469
Non-Hispanic Population	5,313
2021 Race	
White Population	5,245
Black/African American Population	49
American Indian/Alaska Native Population	29
Asian Population	240
Pacific Islander Population	4
Other Race Population	84
Multiple Races Population	132

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 provide 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, 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:

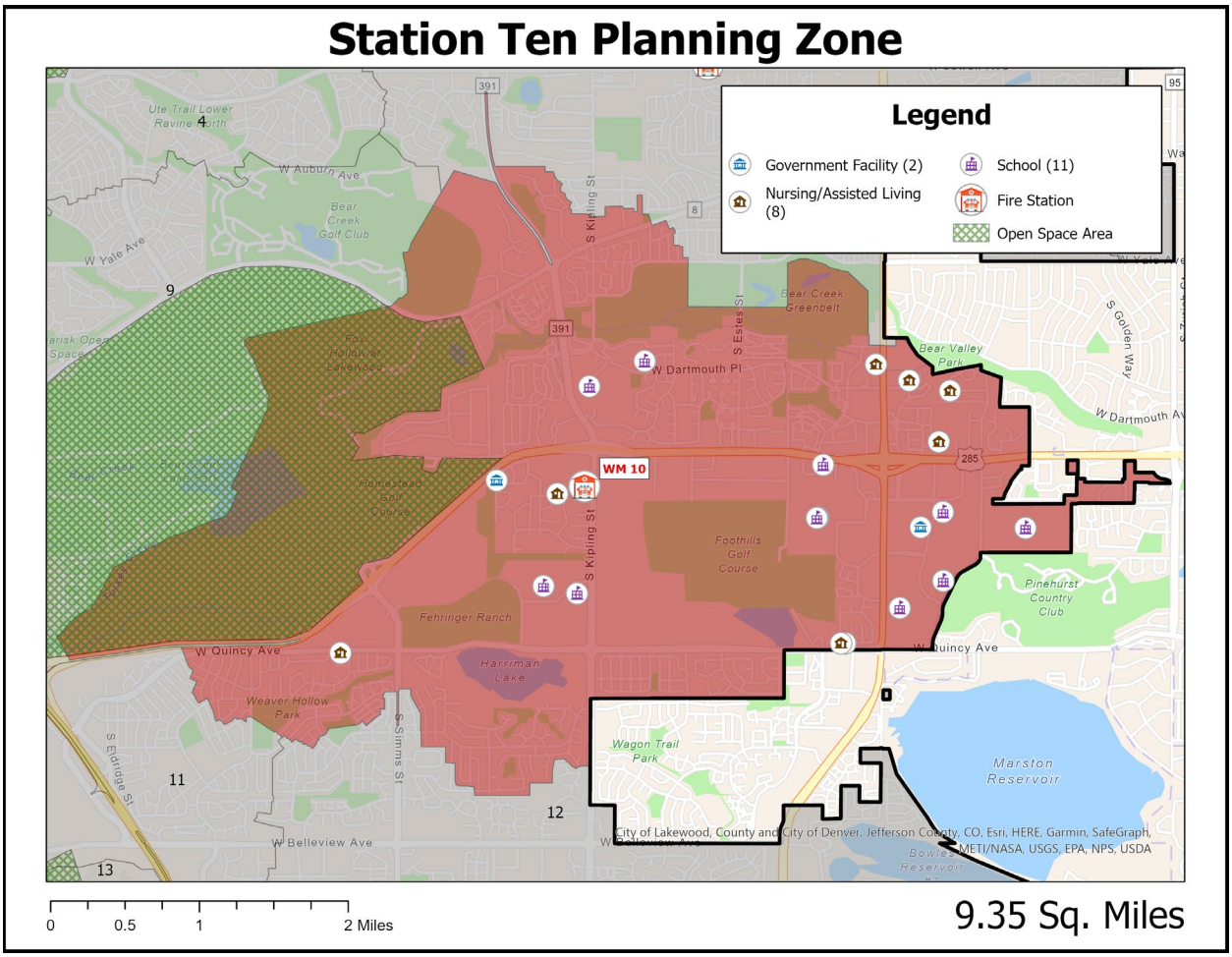
Station-9																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E9	2017	98	12.16%	28	3.47%	500	62.03%	23	2.85%	11	1.36%	19	2.36%	127	15.76%	806
E9	2018	84	8.78%	49	5.12%	602	62.90%	33	3.45%	17	1.78%	19	1.99%	153	15.99%	957
E9	2019	63	7.02%	32	3.56%	619	68.93%	42	4.68%	5	0.56%	12	1.34%	125	13.92%	898
E9	2020	65	8.32%	30	3.84%	492	63.00%	47	6.02%	6	0.77%	9	1.15%	132	16.90%	781
E9	2021	81	9.16%	45	5.09%	544	61.54%	49	5.54%	4	0.45%	16	1.81%	145	16.40%	884
E9	Total	391	9.04%	184	4.25%	2757	63.73%	194	4.48%	43	0.99%	75	1.73%	682	15.77%	4326
B9	2017	0	0.00%	4	16.67%	6	25.00%	0	0.00%	0	0.00%	0	0.00%	14	58.33%	24
B9	2018	1	2.22%	5	11.11%	16	35.56%	4	8.89%	0	0.00%	1	2.22%	18	40.00%	45
B9	2019	0	0.00%	6	12.77%	15	31.91%	6	12.77%	1	2.13%	1	2.13%	18	38.30%	47
B9/BR9	2020	2	3.17%	4	6.35%	24	38.10%	8	12.70%	2	3.17%	0	0.00%	23	36.51%	63
B9/BR9	2021	4	5.48%	8	10.96%	26	35.62%	6	8.22%	1	1.37%	0	0.00%	28	38.36%	73
B9/BR9	Total	7	2.78%	27	10.71%	87	34.52%	24	9.52%	4	1.59%	2	0.79%	101	40.08%	252
UTV9	2017	0	0.00%	1	4.76%	14	66.67%	0	0.00%	2	9.52%	0	0.00%	4	19.05%	21
UTV9	2018	0	0.00%	0	0.00%	7	46.67%	1	6.67%	1	6.67%	0	0.00%	6	40.00%	15
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	Total	0	0.00%	1	1.23%	46	56.79%	5	6.17%	6	7.41%	0	0.00%	23	28.40%	81
BR39	2017	0	0.00%	6	60.00%	1	10.00%	0	0.00%	0	0.00%	0	0.00%	3	30.00%	10
BR39	2018	0	0.00%	5	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	5
BR39	2019	0	0.00%	0	0.00%	0	0.00%	2	100.00%	0	0.00%	0	0.00%	0	0.00%	2
BR39	2020	0	0.00%	1	14.29%	0	0.00%	3	42.86%	0	0.00%	0	0.00%	3	42.86%	7
BR39	2021	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1
BR39	Total	0	0.00%	13	52.00%	1	4.00%	5	20.00%	0	0.00%	0	0.00%	6	24.00%	25
St-09	Total	398	8.50%	225	4.80%	2891	61.72%	228	4.87%	53	1.13%	77	1.64%	812	17.34%	4684

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:

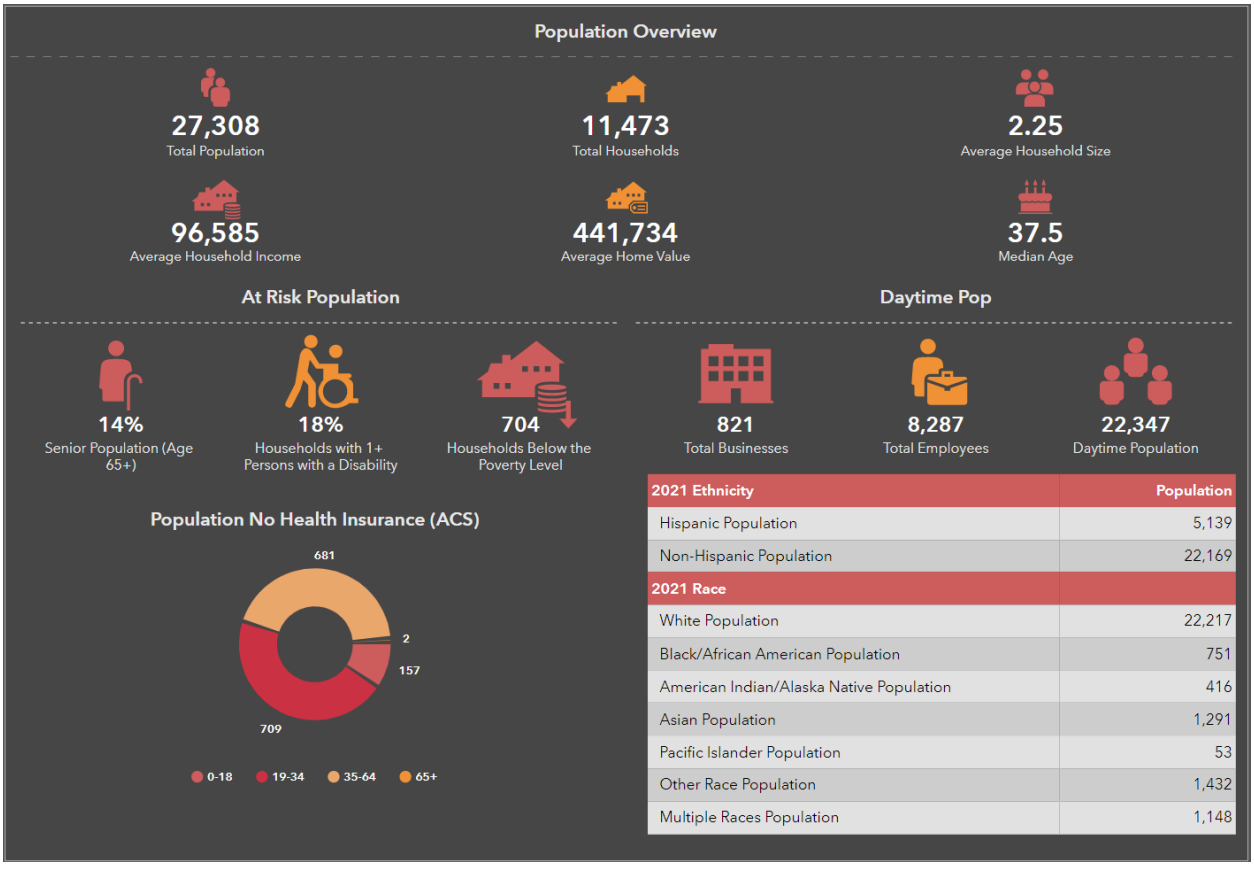
Name	Address
Business Center	7301 West Mansfield Avenue
West Metro Fire Rescue - Training Facility	3535 South Kipling Parkway
Montview Detention Center	7862 West Mansfield Parkway
Rocky Mountain Deaf School	10300 West Nassau Avenue
Bear Creek High School	9800 West Dartmouth Place
Bear Creek K-8 School	9601 West Dartmouth Place
Addenbrooke Classical Grammar School	7114 West Jefferson Avenue
D'Evelyn Junior/Senior High School	10359 West Nassau Avenue
Havern School	4000 South Wadsworth Boulevard

Mile High Baptist School	8100 West Hampden Avenue
Colorado Academy	3800 South Pierce Street
Rocky Mountain Assisted Living Quincy	7975 West Quincy Avenue
Power Back Rehabilitation	7395 West Eastman Place
Learning Services Bear Creek	7201 West Hampden
Inn Between/rtf Assisted Living	10295 West Keene Avenue
Rocky Mountain Assisted Living	7985 West Quincy Avenue
Rocky Mountain Solstice	12057 West Quincy Place
Brookdale Lakewood	3151 South Wadsworth Boulevard
Catharine's Quality Of Life Homes	3225 South Reed Court

Special Risks:

- Bear Valley Village – 9801 & 9803 West Girton Avenue – large older (common attic) multi-family residential structure
- Bear Creek Greenbelt - 2800 South Estes Street
- Silver Valley Townhomes - 8761 West Cornell Avenue
- Victory Village Townhomes - 9970 West Cornell Avenue
- Valor Point VA Care Facility – 7350 West Eastman Place
- The Ridge at Pinehurst – 7205 West Quincy Avenue
- Federal Correctional Institute - 9595 West Quincy Avenue
- Colorado Academy – 3800 South Pierce Street – large K-12 private school

Planning Zone Risk Profile and Demographics:



2021 Ethnicity	Population
Hispanic Population	5,139
Non-Hispanic Population	22,169
2021 Race	
White Population	22,217
Black/African American Population	751
American Indian/Alaska Native Population	416
Asian Population	1,291
Pacific Islander Population	53
Other Race Population	1,432
Multiple Races Population	1,148

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:

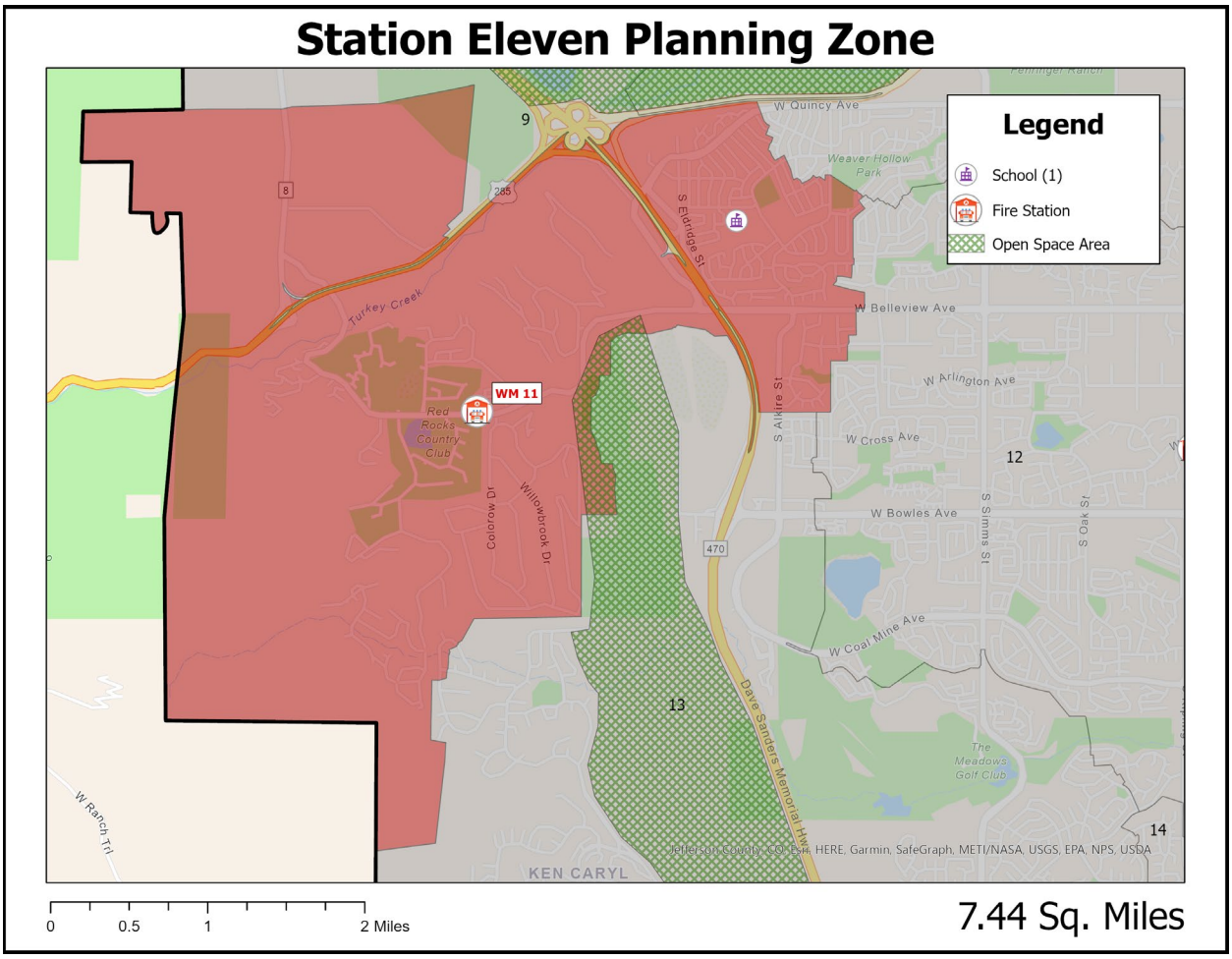
Station-10																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
M9	2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
M9	2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
M9	2019	0	0.00%	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	Total	6	1.22%	6	1.22%	433	88.37%	16	3.27%	0	0.00%	0	0.00%	29	5.92%	490
M10	2017	41	1.49%	29	1.05%	2312	83.92%	71	2.58%	25	0.91%	0	0.00%	277	10.05%	2755
M10	2018	35	1.28%	31	1.14%	2233	81.85%	111	4.07%	23	0.84%	3	0.11%	292	10.70%	2728
M10	2019	39	1.50%	33	1.27%	2216	85.10%	116	4.45%	12	0.46%	2	0.08%	186	7.14%	2604
M10	2020	32	1.38%	21	0.91%	1991	86.15%	73	3.16%	17	0.74%	3	0.13%	174	7.53%	2311
M10	2021	34	1.25%	31	1.14%	2363	86.68%	91	3.34%	8	0.29%	2	0.07%	197	7.23%	2726
M10	Total	181	1.38%	145	1.10%	11115	84.69%	462	3.52%	85	0.65%	10	0.08%	1126	8.58%	13124
M19	2017	0	0.00%	0	0.00%	1	0.58%	0	0.00%	0	0.00%	0	0.00%	171	99.42%	172
M19	2018	0	0.00%	0	0.00%	3	1.63%	0	0.00%	0	0.00%	0	0.00%	181	98.37%	184
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	Total	0	0.00%	0	0.00%	50	9.24%	2	0.37%	0	0.00%	0	0.00%	489	90.39%	541
SAM2	2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
SAM2	2018	19	0.00%	71	0.00%	304	0.00%	15	0.00%	28	0.00%	9	0.00%	104	0.00%	550
SAM2	2019	42	5.07%	75	9.05%	486	58.62%	38	4.58%	20	2.41%	15	1.81%	153	18.46%	829
SAM2	2020	24	3.46%	58	8.36%	441	63.54%	27	3.89%	17	2.45%	10	1.44%	117	16.86%	694
SAM2	2021	23	3.01%	97	12.71%	489	64.09%	28	3.67%	15	1.97%	7	0.92%	104	13.63%	763
SAM2	Total	108	3.81%	301	10.61%	1720	60.65%	108	3.81%	80	2.82%	41	1.45%	478	16.85%	2836
ATV2	2017	0	0.00%	1	0.67%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	149	99.33%	150
ATV2	2018	0	0.00%	0	0.00%	1	0.63%	1	0.63%	0	0.00%	0	0.00%	156	98.73%	158
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	Total	0	0.00%	1	0.22%	32	7.13%	1	0.22%	0	0.00%	0	0.00%	415	92.43%	449
CR10	2017	1	7.14%	1	7.14%	2	14.29%	2	14.29%	1	7.14%	0	0.00%	7	50.00%	14
CR10	2018	0	0.00%	0	0.00%	6	54.55%	0	0.00%	1	9.09%	0	0.00%	4	36.36%	11
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%	2	10.53%	8	42.11%	3	15.79%	0	0.00%	0	0.00%	6	31.58%	19
CR10	Total	1	1.19%	4	4.76%	37	44.05%	6	7.14%	4	4.76%	1	1.19%	31	36.90%	84
E10/R10	2017	523	18.55%	74	2.62%	1739	61.67%	165	5.85%	29	1.03%	49	1.74%	241	8.55%	2820
R10	2018	536	17.99%	100	3.36%	1727	57.97%	202	6.78%	34	1.14%	44	1.48%	336	11.28%	2979
R10	2019	324	12.31%	72	2.74%	1693	64.32%	226	8.59%	13	0.49%	38	1.44%	266	10.11%	2632
R10	2020	328	11.49%	71	2.49%	1907	66.82%	218	7.64%	27	0.95%	27	0.95%	276	9.67%	2854
R10	2021	366	12.51%	84	2.87%	1879	64.24%	256	8.75%	24	0.82%	25	0.85%	291	9.95%	2925
R10	Total	2077	14.62%	401	2.82%	8945	62.95%	1067	7.51%	127	0.89%	183	1.29%	1410	9.92%	14210
BUR7	2017	24	5.67%	228	53.90%	11	2.60%	27	6.38%	0	0.00%	2	0.47%	131	30.97%	423
BUR7	2018	20	5.49%	189	51.92%	3	0.82%	19	5.22%	1	0.27%	1	0.27%	131	35.99%	364
BUR7	2019	35	8.68%	183	45.41%	13	3.23%	21	5.21%	0	0.00%	3	0.74%	148	36.72%	403
BUR7	2020	22	6.92%	167	52.52%	2	0.63%	13	4.09%	0	0.00%	0	0.00%	114	35.85%	318
BUR7	2021	26	5.46%	261	54.83%	11	2.31%	30	6.30%	0	0.00%	1	0.21%	147	30.88%	476
BUR7	Total	127	6.40%	1028	51.81%	40	2.02%	110	5.54%	1	0.05%	7	0.35%	671	33.82%	1984
St-10	Total	2494	7.51%	1880	5.66%	21939	66.03%	1756	5.28%	297	0.89%	242	0.73%	4620	13.90%	33228

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 into 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 sub-division 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.



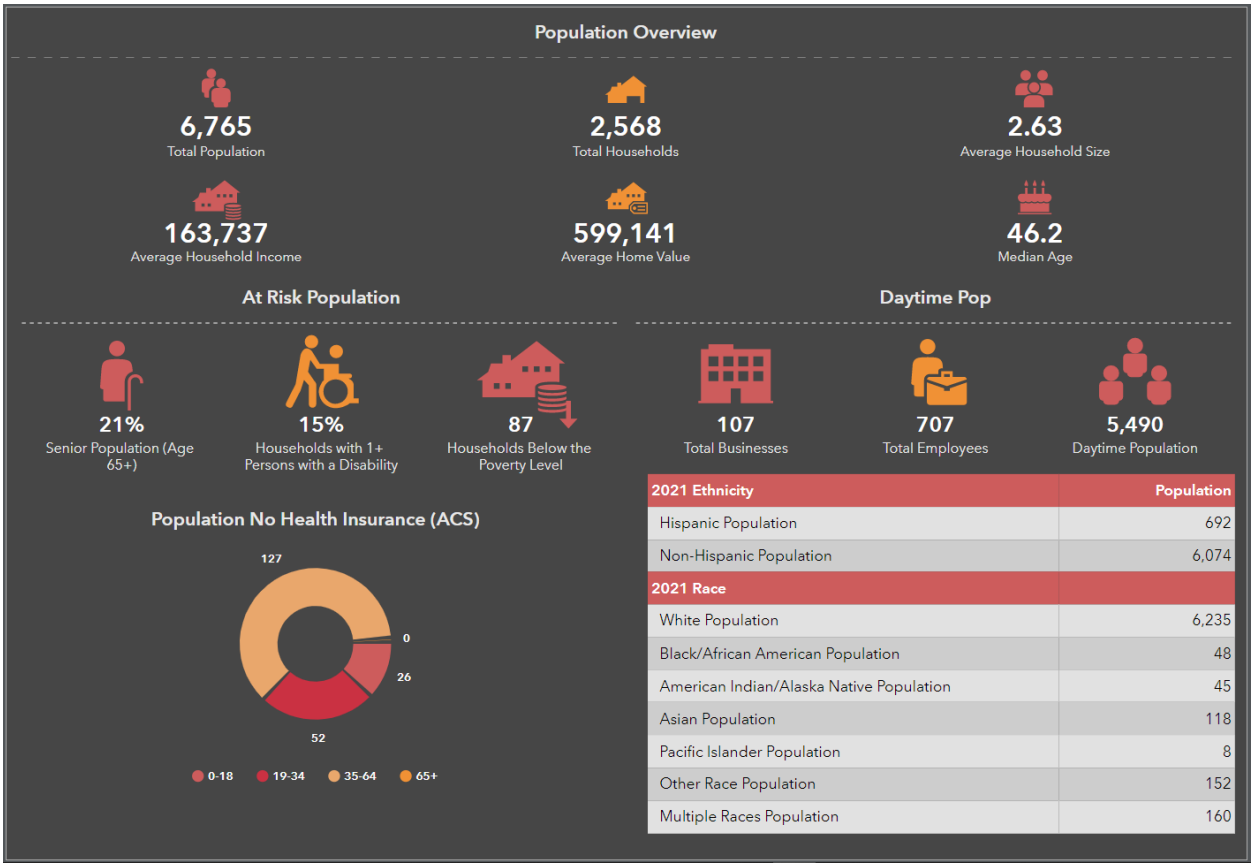
Critical Infrastructure and Key Resources:

Name	Address
Kendallvue Elementary School	13658 West Marlowe Avenue

Special Risks:

- The Fort Restaurant - 19192 Highway 8 – limited water supply
- Willow Ridge Manor - 4903 Willow Springs Road – limited water supply
- Home Depot - 4277 South Eldridge Street – big box store
- Ironwood at Red Rocks – 13195 West Progress Circle – large multi-family
- 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, that 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:



2021 Ethnicity	Population
Hispanic Population	692
Non-Hispanic Population	6,074
2021 Race	
White Population	6,235
Black/African American Population	48
American Indian/Alaska Native Population	45
Asian Population	118
Pacific Islander Population	8
Other Race Population	152
Multiple Races Population	160

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 out directly to the east of the Station 11. This area provides good access to the initial responding unit.

The District's CWPP shows as 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:

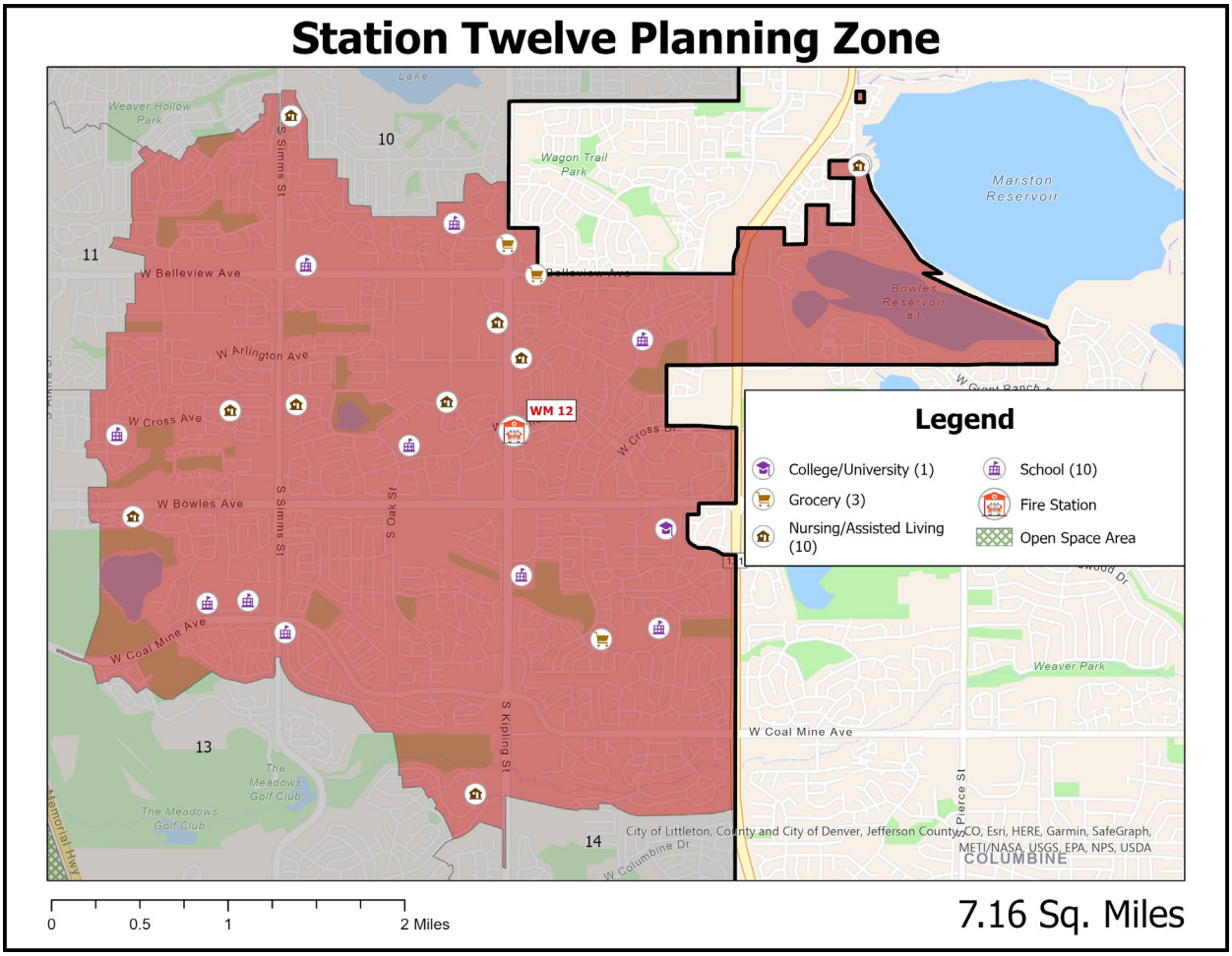
Station-11																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E11	2017	84	14.92%	28	4.97%	306	54.35%	30	5.33%	6	1.07%	15	2.66%	94	16.70%	563
E11	2018	103	15.19%	41	6.05%	360	53.10%	34	5.01%	5	0.74%	24	3.54%	111	16.37%	678
E11	2019	41	8.01%	23	4.49%	338	66.02%	23	4.49%	3	0.59%	12	2.34%	72	14.06%	512
E11	2020	37	7.37%	23	4.58%	312	62.15%	25	4.98%	2	0.40%	13	2.59%	90	17.93%	502
E11	2021	61	10.36%	25	4.24%	379	64.35%	37	6.28%	1	0.17%	7	1.19%	79	13.41%	589
E11	Total	326	11.46%	140	4.92%	1695	59.60%	149	5.24%	17	0.60%	71	2.50%	446	15.68%	2844
B11	2017	0	0.00%	9	50.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	9	50.00%	18
B11	2018	1	5.56%	9	50.00%	0	0.00%	2	11.11%	0	0.00%	0	0.00%	6	33.33%	18
B11	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	0	0.00%	7	41.18%	2	11.76%	4	23.53%	0	0.00%	1	5.88%	3	17.65%	17
BR11	2021	0	0.00%	3	33.33%	1	11.11%	0	0.00%	0	0.00%	0	0.00%	5	55.56%	9
BR11	Total	1	1.41%	32	45.07%	3	4.23%	7	9.86%	0	0.00%	1	1.41%	27	38.03%	71
St -11	Total	327	11.22%	172	5.90%	1698	58.25%	156	5.35%	17	0.58%	72	2.47%	473	16.23%	2915

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:

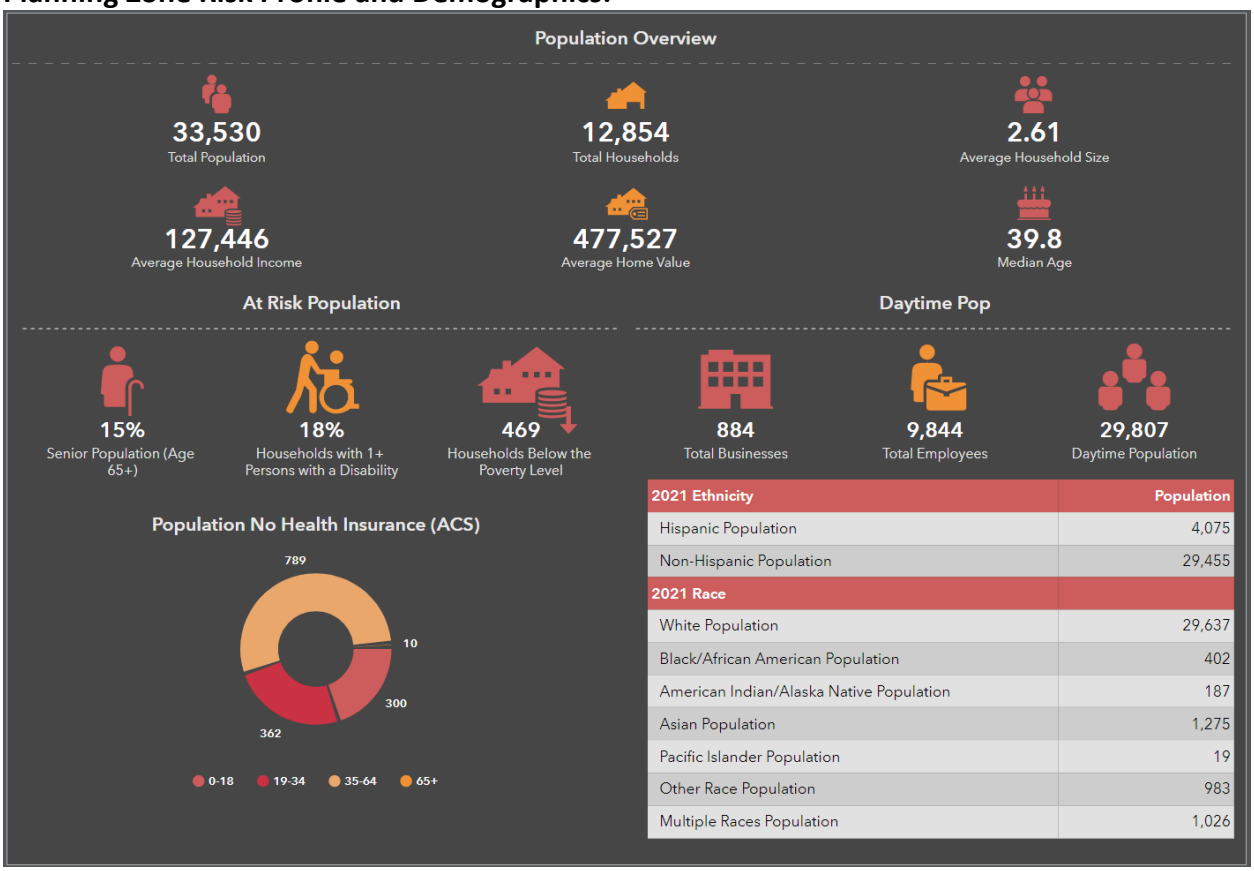
Name	Address
King Soopers	9800 West Belleview Avenue
Natural Grocers	6475 South Kipling Parkway
Safeway #27	5025 South Kipling Street
Governor's Ranch Elementary School	5354 South Field Street
Powderhorn Elementary School	12109 West Coal Mine Avenue
Summit Ridge Middle School	11809 West Coal Mine Road
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

Peiffer Elementary School	4997 South Miller Way
Hope Christian Academy	11455 West Belleview Avenue
Abiding Hope Preschool	6337 South Robb Way
Willowbrook Place	5275 South Kipling Parkway
Legacy House Elder Care	6921 South Lee Way
Colorado Assisted Living Homes	11965 West Brandt Place
Manor On Marston Lake	4800 Old South Wadsworth Boulevard
Caremeridian, LLC	5945 South Wright Street
Makarios Assisted Living, LLC	11541 West Temple Avenue
Manor On Marston Lake 2	4802 South Wadsworth Boulevard
Legacy House Elder Care	10405 West Berry Drive
Morningstar Assisted Living	5344 South Kipling Parkway
Helping Hands Homecare, LLC	11503 West Berry Place

Special Risks:

- Southwest Plaza - 8501 West Bowles – large mall
- Bowles Community Church - 12345 West Bowles – high occupancy
- Light of the World Catholic Church - 10306 West Bowles – high occupancy
- Super Target - 9390 West Cross Drive – big box store
- Lowe's – 5285 South Wadsworth Boulevard – big box store
- Relay pumping: Montgomery Avenue from Kipling to Oak and south on Miller

Planning Zone Risk Profile and Demographics:



2021 Ethnicity	Population
Hispanic Population	4,075
Non-Hispanic Population	29,455
2021 Race	
White Population	29,637
Black/African American Population	402
American Indian/Alaska Native Population	187
Asian Population	1,275
Pacific Islander Population	19
Other Race Population	983
Multiple Races Population	1,026

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 poses 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:

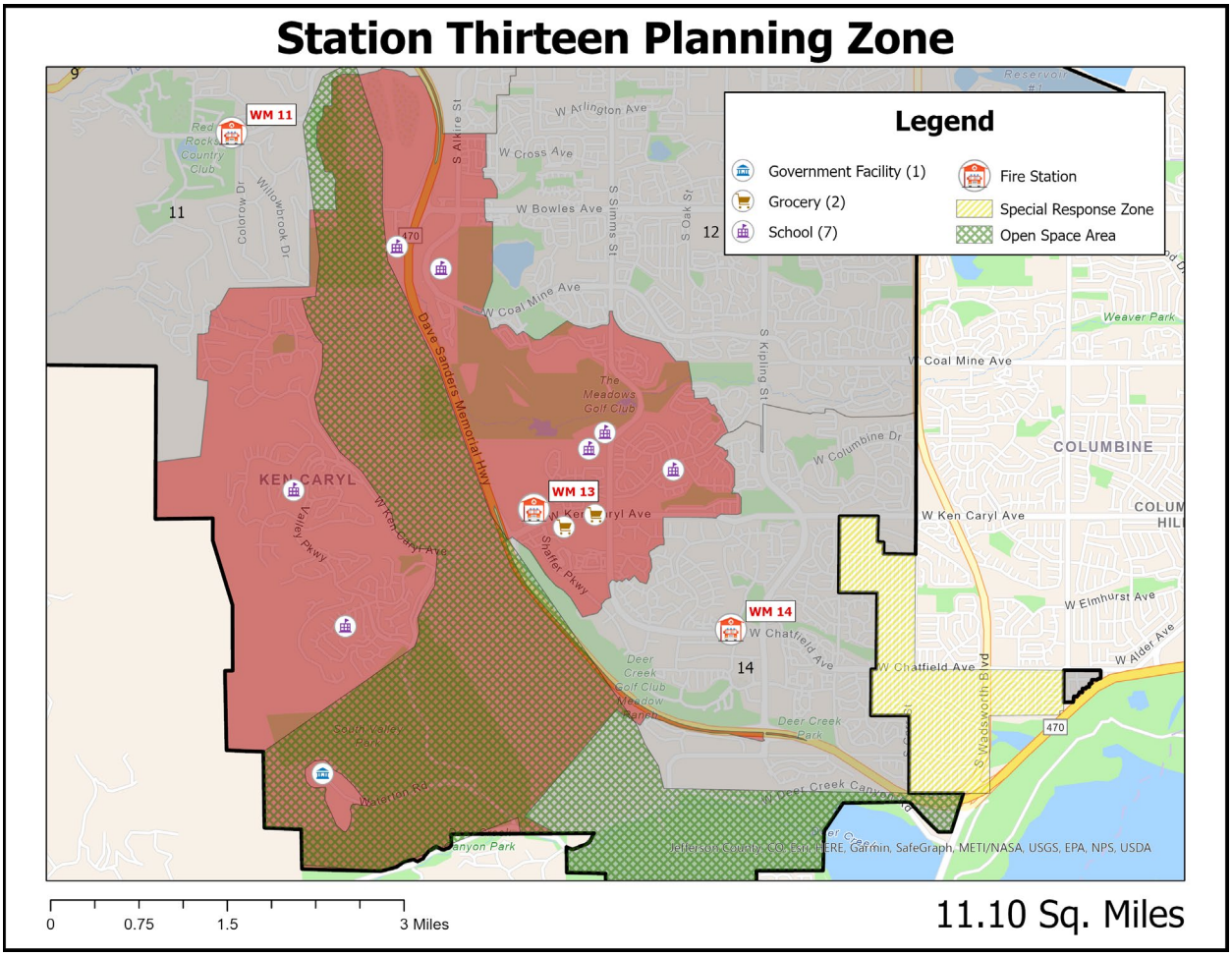
Station-12															
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E12	2017	491	19.14%	40	1.56%	1556	60.66%	152	5.93%	12	0.47%	53	2.07%	261	10.18%	2565
E12	2018	551	20.40%	58	2.15%	1538	56.94%	201	7.44%	7	0.26%	36	1.33%	310	11.48%	2701
E12	2019	275	10.80%	52	2.04%	1636	64.26%	218	8.56%	4	0.16%	29	1.14%	332	13.04%	2546
E12	2020	271	11.48%	49	2.08%	1554	65.82%	180	7.62%	8	0.34%	43	1.82%	256	10.84%	2361
E12	2021	290	11.44%	60	2.37%	1686	66.51%	184	7.26%	10	0.39%	37	1.46%	268	10.57%	2535
E12	Total	1878	14.78%	259	2.04%	7970	62.72%	935	7.36%	41	0.32%	198	1.56%	1427	11.23%	12708
M12	2017	47	2.11%	25	1.12%	1855	83.22%	58	2.60%	13	0.58%	2	0.09%	229	10.27%	2229
M12	2018	37	1.63%	37	1.63%	1868	82.51%	77	3.40%	6	0.27%	5	0.22%	234	10.34%	2264
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%	23	1.09%	1809	85.90%	51	2.42%	9	0.43%	3	0.14%	183	8.69%	2106
M12	2021	34	1.48%	35	1.52%	2002	87.01%	57	2.48%	3	0.13%	2	0.09%	168	7.30%	2301
M12	Total	164	1.47%	144	1.29%	9474	84.65%	332	2.97%	33	0.29%	14	0.13%	1031	9.21%	11192
St-12	Total	2042	8.54%	403	1.69%	17444	72.99%	1267	5.30%	74	0.31%	212	0.89%	2458	10.28%	23900

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 into 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:

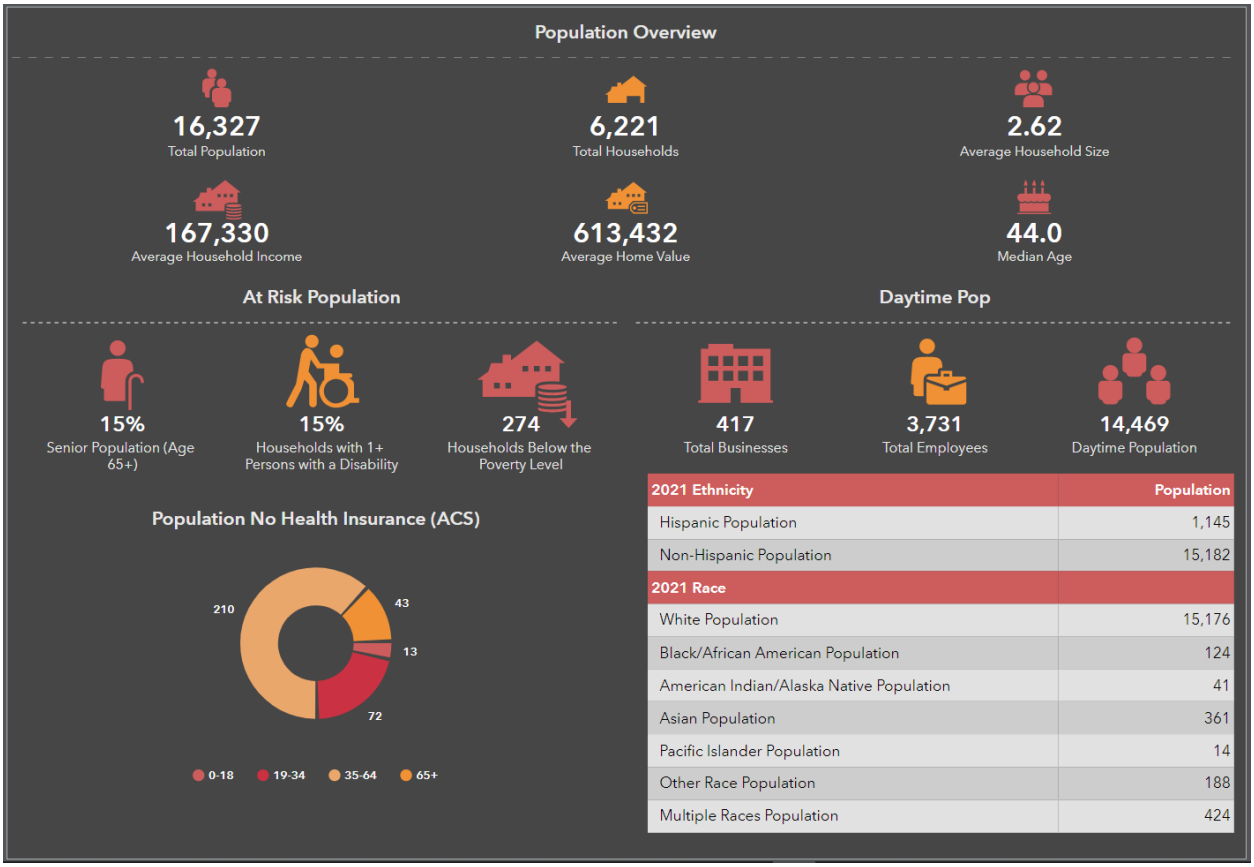
Name	Address
Lockheed Martin	12999 Deer Creek Canyon Road
King Soopers	11747 West Ken Caryl Avenue
Safeway #1599	12442 West Ken Caryl Avenue
Ute Meadows Elementary School	11050 West Meadows Drive
Bradford K8 South	1 White Oak Drive

Bradford K8 North	2 Woodruff
Dakota Ridge Senior High School	13399 West Coal Mine Avenue
Chatfield High School	7227 South Simms Street
Truth Christian Academy	9700 Old Coal Mine Avenue
Foothills Christian Preschool & Kindergarten	6100 South Devinny Way

Special Risks:

Apria Health Care - 7910 Shaffer Parkway (Hazardous materials)
Lockheed Martin Deer Creek Facility - 12999 Deer Creek Canyon Road (Large office complex and defense industrial base in a remote location)
The Ridge, Peak, and Edge Recreation Centers – 6612 South Ward Street
Open space areas – see the Hogback Special Planning Zone for additional detail

Planning Zone Risk Profile and Demographics:



2021 Ethnicity	Population
Hispanic Population	1,145
Non-Hispanic Population	15,182
2021 Race	
White Population	15,176
Black/African American Population	124
American Indian/Alaska Native Population	41
Asian Population	361
Pacific Islander Population	14
Other Race Population	188
Multiple Races Population	424

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 threated 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	2017	304	25.06%	37	3.05%	651	53.67%	59	4.86%	11	0.91%	32	2.64%	119	9.81%	1213
E13	2018	330	25.86%	41	3.21%	652	51.10%	52	4.08%	5	0.39%	32	2.51%	164	12.85%	1276
E13	2019	172	15.97%	31	2.88%	631	58.59%	78	7.24%	0	0.00%	17	1.58%	148	13.74%	1077
E13	2020	144	14.33%	35	3.48%	567	56.42%	96	9.55%	5	0.50%	17	1.69%	141	14.03%	1005
E13	2021	188	15.68%	42	3.50%	697	58.13%	107	8.92%	6	0.50%	24	2.00%	135	11.26%	1199
E13	Total	1138	19.72%	186	3.22%	3198	55.42%	392	6.79%	27	0.47%	122	2.11%	707	12.25%	5770
M13	2017	34	2.39%	24	1.69%	1235	86.73%	24	1.69%	9	0.63%	2	0.14%	96	6.74%	1424
M13	2018	26	1.70%	25	1.64%	1275	83.44%	36	2.36%	8	0.52%	4	0.26%	154	10.08%	1528
M13	2019	27	1.83%	23	1.56%	1210	81.81%	63	4.26%	5	0.34%	6	0.41%	145	9.80%	1479
M13	2020	24	1.78%	20	1.48%	1138	84.48%	33	2.45%	9	0.67%	1	0.07%	122	9.06%	1347
M13	2021	26	1.72%	33	2.18%	1291	85.33%	46	3.04%	4	0.26%	3	0.20%	110	7.27%	1513
M13	Total	137	1.88%	125	1.71%	6149	84.34%	202	2.77%	35	0.48%	16	0.22%	627	8.60%	7291
B13	2017	0	0.00%	11	73.33%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	4	26.67%	15
B13	2018	0	0.00%	7	50.00%	0	0.00%	1	7.14%	0	0.00%	0	0.00%	6	42.86%	14
B13	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%	10	58.82%	1	5.88%	3	17.65%	0	0.00%	0	0.00%	3	17.65%	17
BR13	2021	0	0.00%	13	65.00%	0	0.00%	2	10.00%	0	0.00%	0	0.00%	5	25.00%	20
BR13	Total	0	0.00%	45	53.57%	2	2.38%	8	9.52%	0	0.00%	0	0.00%	29	34.52%	84
St -13	Total	1275	9.70%	356	2.71%	9349	71.12%	602	4.58%	62	0.47%	138	1.05%	1363	10.37%	13145

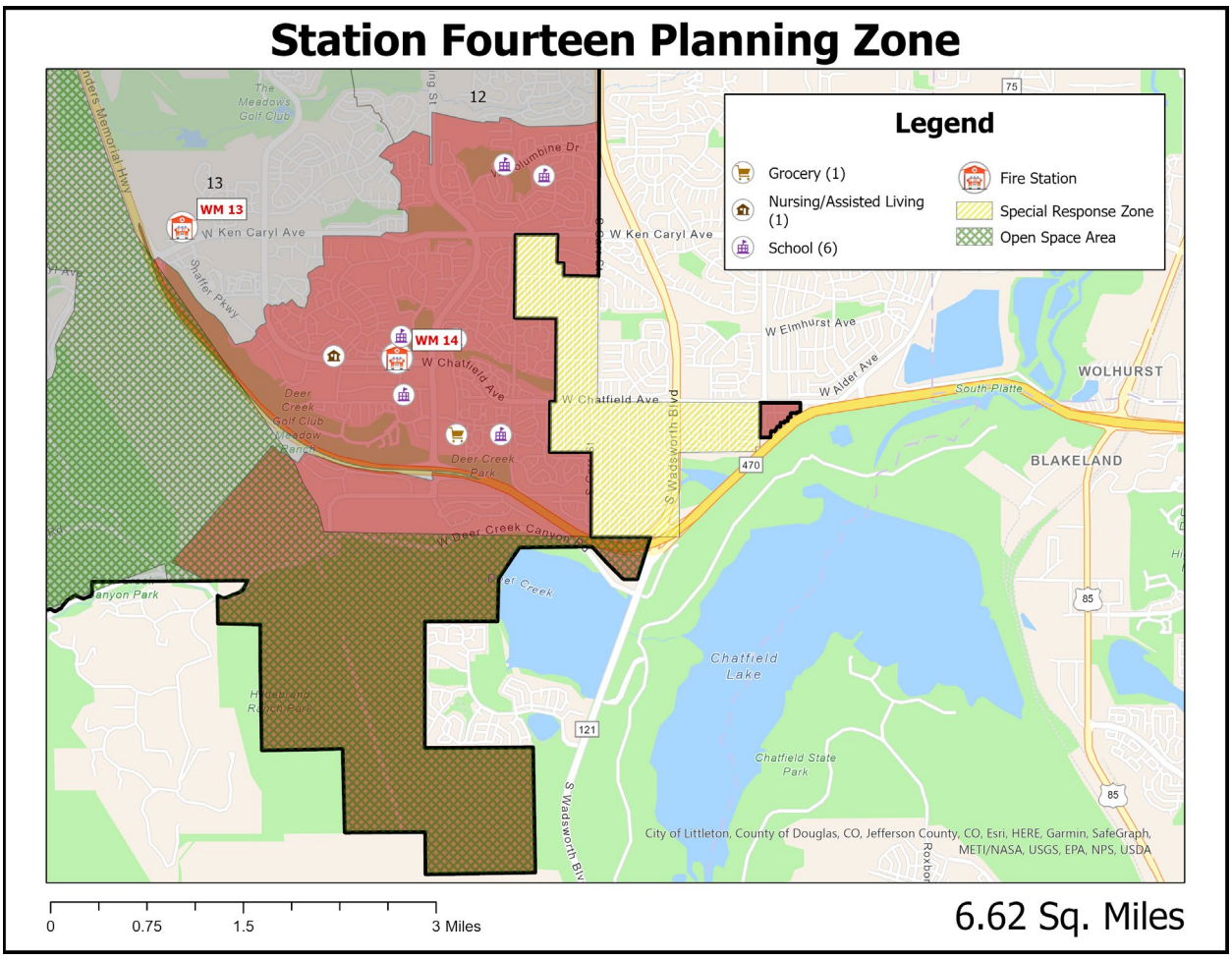
Occupancy Classification: Station 13 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	37
Educational (200 series)	11
Health Care, Detention, Correction (300 series)	11
Residential (400 series)	87
Mercantile, Business (500 series)	81
Industrial, 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 also borders the Meadowbrook Fairview Special Response Zone, which is a residential area the District provides primary emergency response service to under contract with South Metro.



Critical Infrastructure and Key Resources:

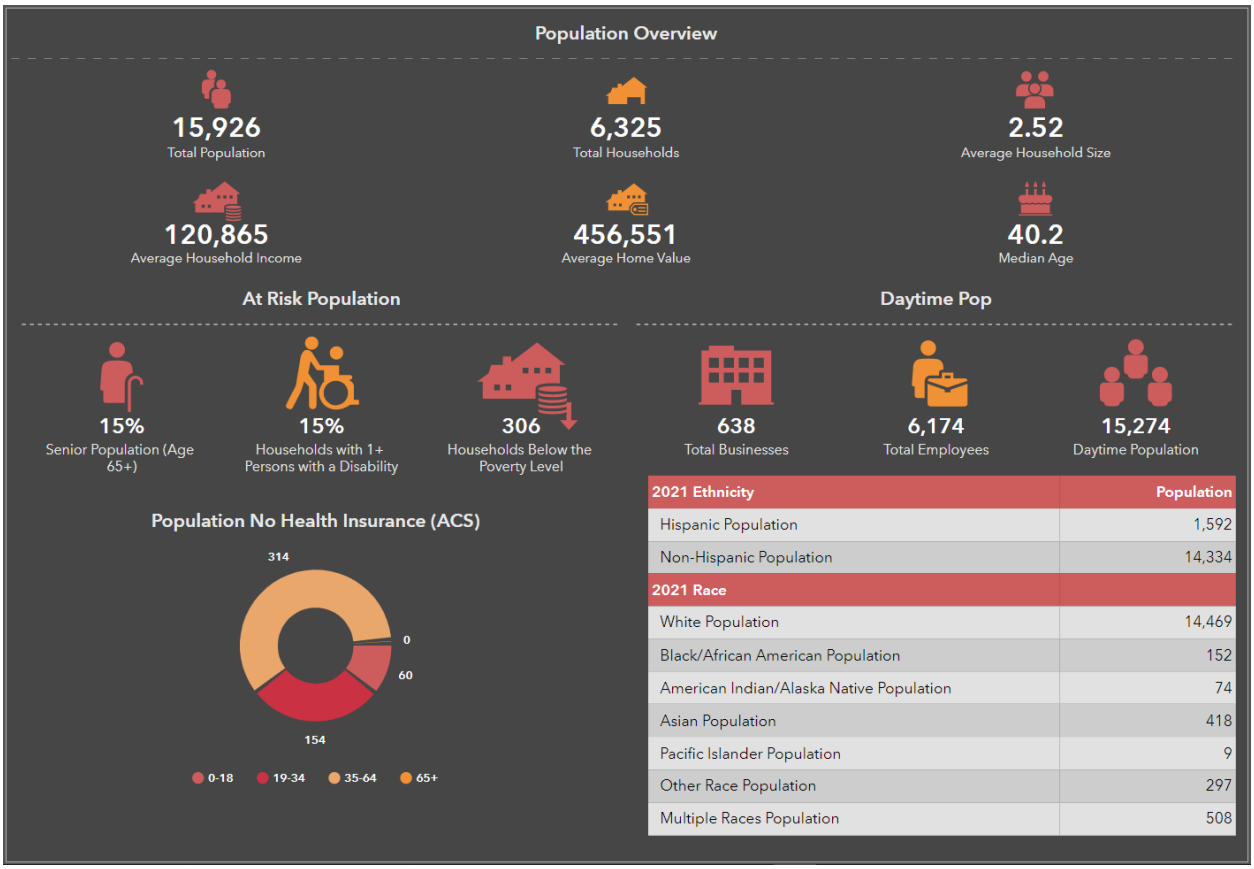
Name	Address
Safeway #839	8434 South Kipling Parkway
Collegiate Academy Of Colorado	8420 South Sangre De Cristo Road
Stony Creek Elementary School	7203 South Everett
Mortensen Elementary School	8006 South Iris

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
Brookdale Littleton	8271 South Continental Divide Road

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 for additional detail

Planning Zone Risk Profile and Demographics:



2021 Ethnicity	Population
Hispanic Population	1,592
Non-Hispanic Population	14,334
2021 Race	
White Population	14,469
Black/African American Population	152
American Indian/Alaska Native Population	74
Asian Population	418
Pacific Islander Population	9
Other Race Population	297
Multiple Races Population	508

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 Zone 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:

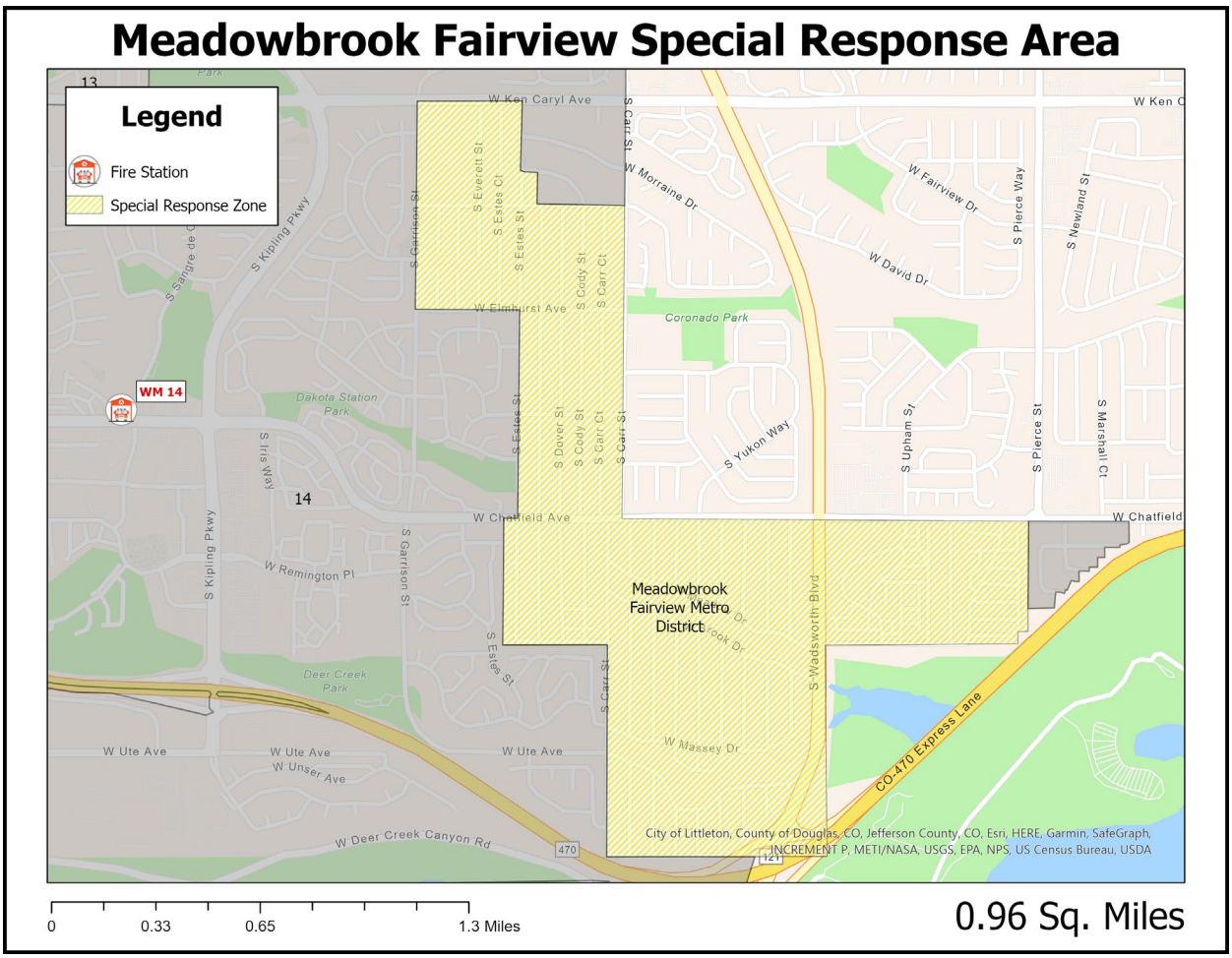
Station-14																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
AIR	2017	1	2.86%	5	14.29%	8	22.86%	0	0.00%	15	42.86%	0	0.00%	6	17.14%	35
AIR	2018	0	0.00%	5	22.73%	3	13.64%	3	13.64%	7	31.82%	0	0.00%	4	18.18%	22
AIR	2019	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1
AIR	2020	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
AIR	2021	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
AIR	Total	1	1.72%	11	18.97%	11	18.97%	3	5.17%	22	37.93%	0	0.00%	10	17.24%	58
BC3/D3	2017	60	11.11%	64	11.85%	279	51.67%	14	2.59%	26	4.81%	14	2.59%	83	15.37%	540
BC3/D3	2018	26	5.32%	65	13.29%	263	53.78%	18	3.68%	15	3.07%	7	1.43%	95	19.43%	489
BC3	2019	18	3.80%	58	12.24%	211	44.51%	40	8.44%	6	1.27%	10	2.11%	131	27.64%	474
BC3	2020	9	2.31%	52	13.33%	199	51.03%	22	5.64%	11	2.82%	4	1.03%	93	23.85%	390
BC3	2021	11	2.61%	58	13.78%	237	56.29%	30	7.13%	6	1.43%	10	2.38%	69	16.39%	421
BC3	Total	124	5.36%	297	12.83%	1189	51.38%	124	5.36%	64	2.77%	45	1.94%	471	20.35%	2314
TK14	2017	308	23.78%	65	5.02%	648	50.04%	82	6.33%	24	1.85%	44	3.40%	124	9.58%	1295
TK14	2018	310	23.20%	43	3.22%	681	50.97%	88	6.59%	11	0.82%	27	2.02%	176	13.17%	1336
TK14	2019	147	15.14%	27	2.78%	511	52.63%	84	8.65%	5	0.51%	22	2.27%	175	18.02%	971
TK14	2020	166	13.82%	46	3.83%	685	57.04%	68	5.66%	11	0.92%	30	2.50%	195	16.24%	1201
TK14	2021	143	11.74%	50	4.11%	737	60.51%	110	9.03%	6	0.49%	17	1.40%	155	12.73%	1218
TK14	Total	1074	17.84%	231	3.84%	3262	54.18%	432	7.17%	57	0.95%	140	2.33%	825	13.70%	6021
TW14	2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
TW14	2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
TW14	2019	56	15.09%	15	4.04%	202	54.45%	28	7.55%	3	0.81%	3	0.81%	64	17.25%	371
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	Total	56	15.09%	15	4.04%	202	54.45%	28	7.55%	3	0.81%	3	0.81%	64	17.25%	371
R14	2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
R14	2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
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%	7	43.75%	0	0.00%	1	6.25%	16
R14	2021	0	0.00%	0	0.00%	7	50.00%	2	14.29%	3	21.43%	0	0.00%	2	14.29%	14
R14	Total	0	0.00%	0	0.00%	13	43.33%	4	13.33%	10	33.33%	0	0.00%	3	10.00%	30
St-14	Total	1255	14.27%	554	6.30%	4677	53.18%	591	6.72%	156	1.77%	188	2.14%	1373	15.61%	8794

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

Meadowbrook Fairview Special Planning Zone

Description:

This planning zone is a residential area where the District provides primary emergency response service under contract with South Metro. The automatic aid agreement between the District and South Metro remains in place but the District has resources (assuming static deployment) closer to this area. Because this area is outside of District boundaries and services are provided by contract, the District has designated this area as a special response zone.



There are no special risks in this planning zone and the District does not track demographic information in this area.

Water Supply:

The Meadowbrook Fairview Metropolitan District is responsible for water in this planning zone. There is adequate fire flow and hydrants for the exposures.

Response History:

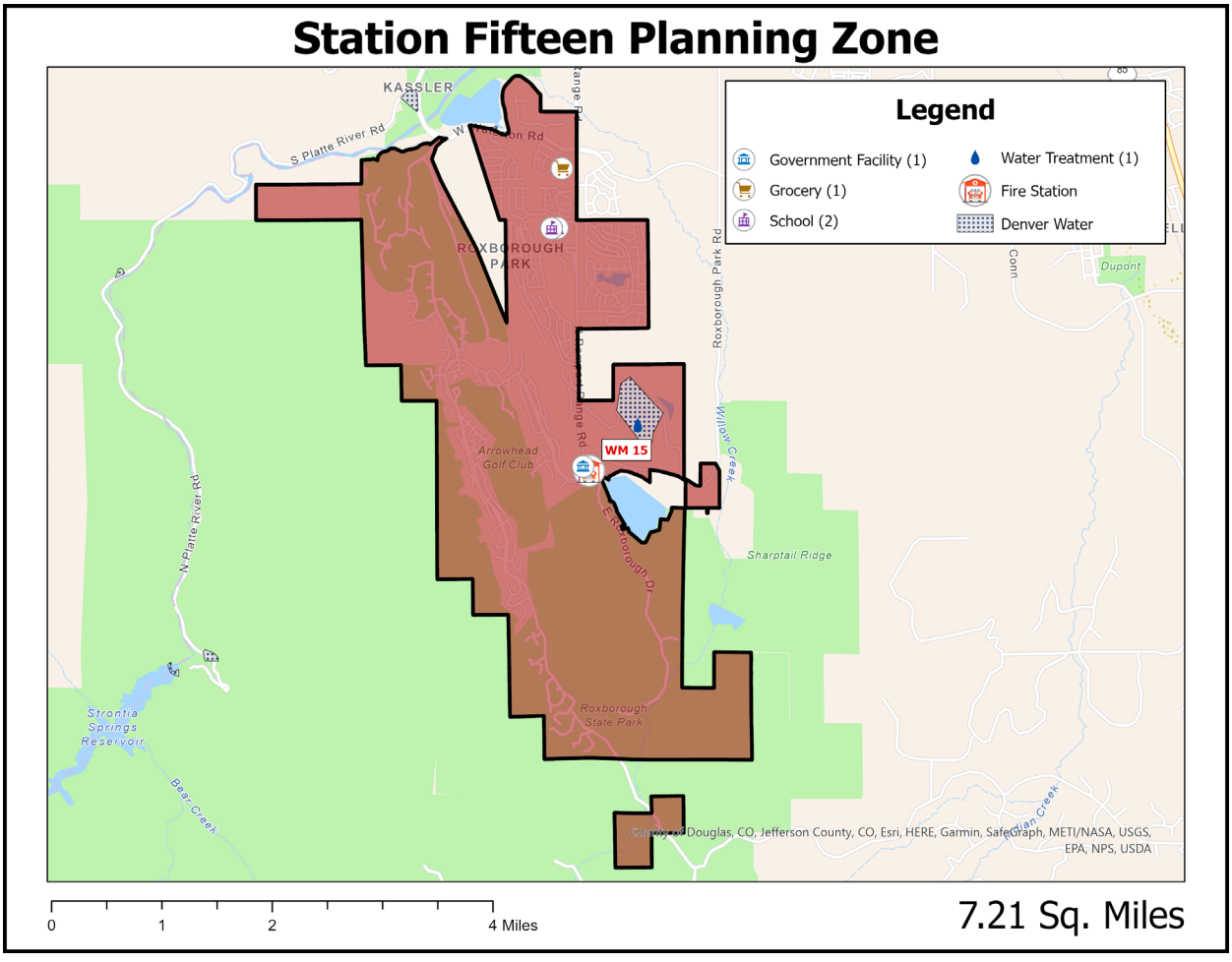
Meadowbrook Fairview District															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
2019	8	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
Total	26	11.35%	2	0.87%	105	45.85%	18	7.86%	1	0.44%	1	0.44%	76	33.19%	229

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.



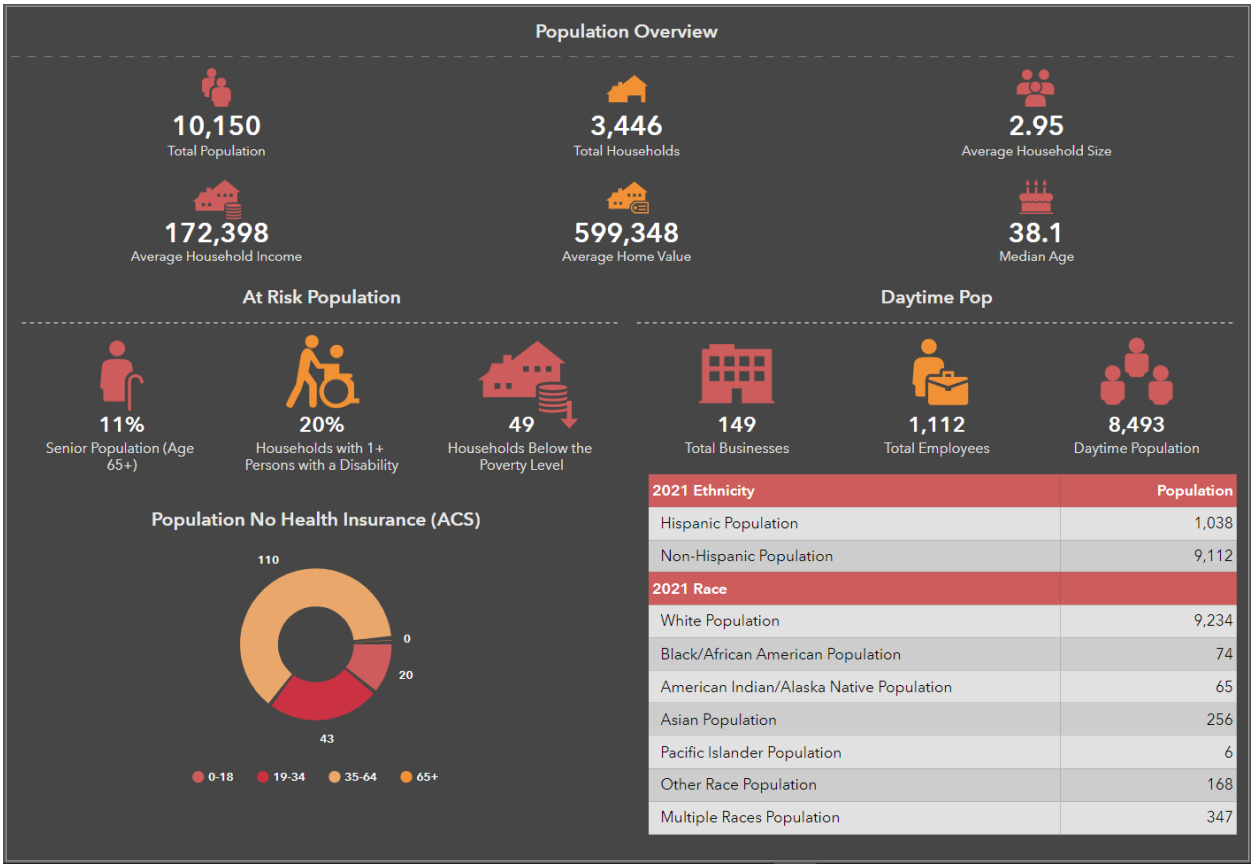
Critical Infrastructure and Key Resources:

Name	Address
Roxborough State Park - Entry Station	6016 East Roxborough Drive
Roxborough Intermediate	7370 Village Circle East
Roxborough Elementary School	8000 Village Circle West
Safeway	8351 North Rampart Range Road
Foothills Water Treatment Plant	Covered in Denver Water Special Response Zone

Special Risks:

- Sterling Ranch – New 10,000 home mixed-use community under construction
- Waterton Canyon and Trails, West of Waterton Canyon Road and CO-121
- Clay mines – hogback northwest of Station 15
- Roxborough State Park
- Open space and wildland urban interface areas – wildfire and recreation

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 flood 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 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 is 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:

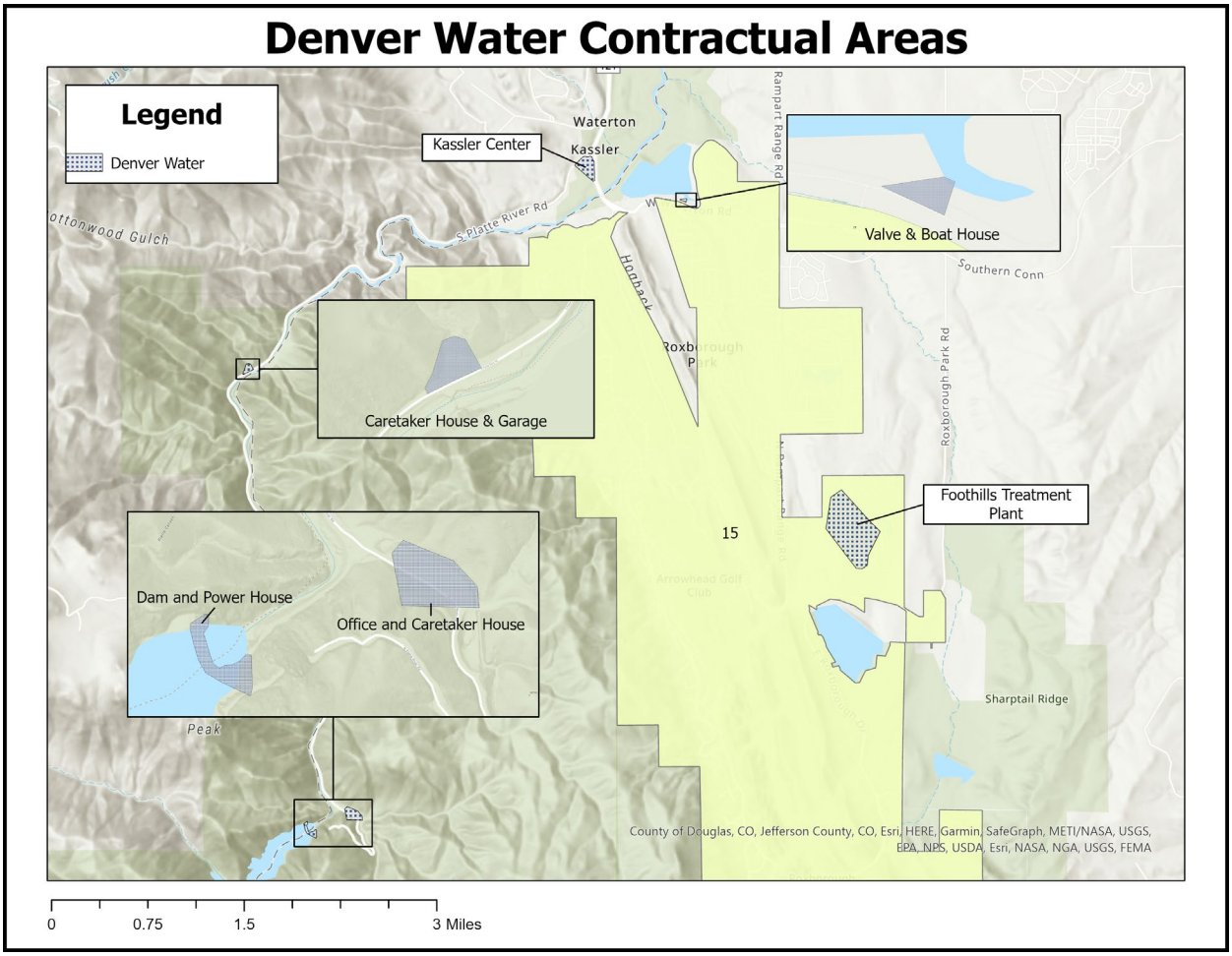
Station-15																
Unit	Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
E15	2017	44	11.92%	6	1.63%	229	62.06%	23	6.23%	3	0.81%	12	3.25%	52	14.09%	369
E15	2018	42	12.17%	9	2.61%	204	59.13%	21	6.09%	2	0.58%	12	3.48%	55	15.94%	345
E15	2019	54	13.99%	4	1.04%	209	54.15%	28	7.25%	3	0.78%	10	2.59%	78	20.21%	386
E15	2020	46	12.43%	7	1.89%	211	57.03%	25	6.76%	1	0.27%	13	3.51%	67	18.11%	370
E15	2021	47	11.11%	12	2.84%	255	60.28%	35	8.27%	0	0.00%	16	3.78%	58	13.71%	423
E15	Total	233	12.31%	38	2.01%	1108	58.53%	132	6.97%	9	0.48%	63	3.33%	310	16.38%	1893
M15	2017	39	10.96%	6	1.69%	224	62.92%	21	5.90%	3	0.84%	12	3.37%	51	14.33%	356
M15	2018	40	12.01%	7	2.10%	200	60.06%	19	5.71%	2	0.60%	11	3.30%	54	16.22%	333
M15	2019	48	11.35%	3	0.71%	258	60.99%	19	4.49%	2	0.47%	9	2.13%	84	19.86%	423
M15	2020	31	8.66%	4	1.12%	229	63.97%	18	5.03%	1	0.28%	10	2.79%	65	18.16%	358
M15	2021	43	9.41%	9	1.97%	299	65.43%	30	6.56%	0	0.00%	14	3.06%	62	13.57%	457
M15	Total	201	10.43%	29	1.50%	1210	62.79%	107	5.55%	8	0.42%	56	2.91%	316	16.40%	1927
B15	2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	6	100.00%	6
B15	2018	0	0.00%	2	33.33%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	4	66.67%	6
BR15	2019	0	0.00%	0	0.00%	1	9.09%	3	27.27%	0	0.00%	0	0.00%	7	63.64%	11
BR15	2020	0	0.00%	2	9.09%	0	0.00%	2	9.09%	0	0.00%	0	0.00%	18	81.82%	22
BR15	2021	1	4.35%	2	8.70%	2	8.70%	5	21.74%	0	0.00%	0	0.00%	13	56.52%	23
B15/BR15	Total	1	1.47%	6	8.82%	3	4.41%	10	14.71%	0	0.00%	0	0.00%	48	70.59%	68
St-15	Total	435	11.19%	73	1.88%	2321	59.70%	249	6.40%	17	0.44%	119	3.06%	674	17.34%	3888

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 3 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
2017	5	50.00%	0	0.00%	4	40.00%	0	0.00%	0	0.00%	1	10.00%	0	0.00%	10
2018	0	0.00%	1	25.00%	2	50.00%	0	0.00%	0	0.00%	0	0.00%	1	25.00%	4
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
Total	6	17.65%	2	5.88%	14	41.18%	4	11.76%	1	2.94%	1	2.94%	6	17.65%	34

Station Sixteen Planning Zone

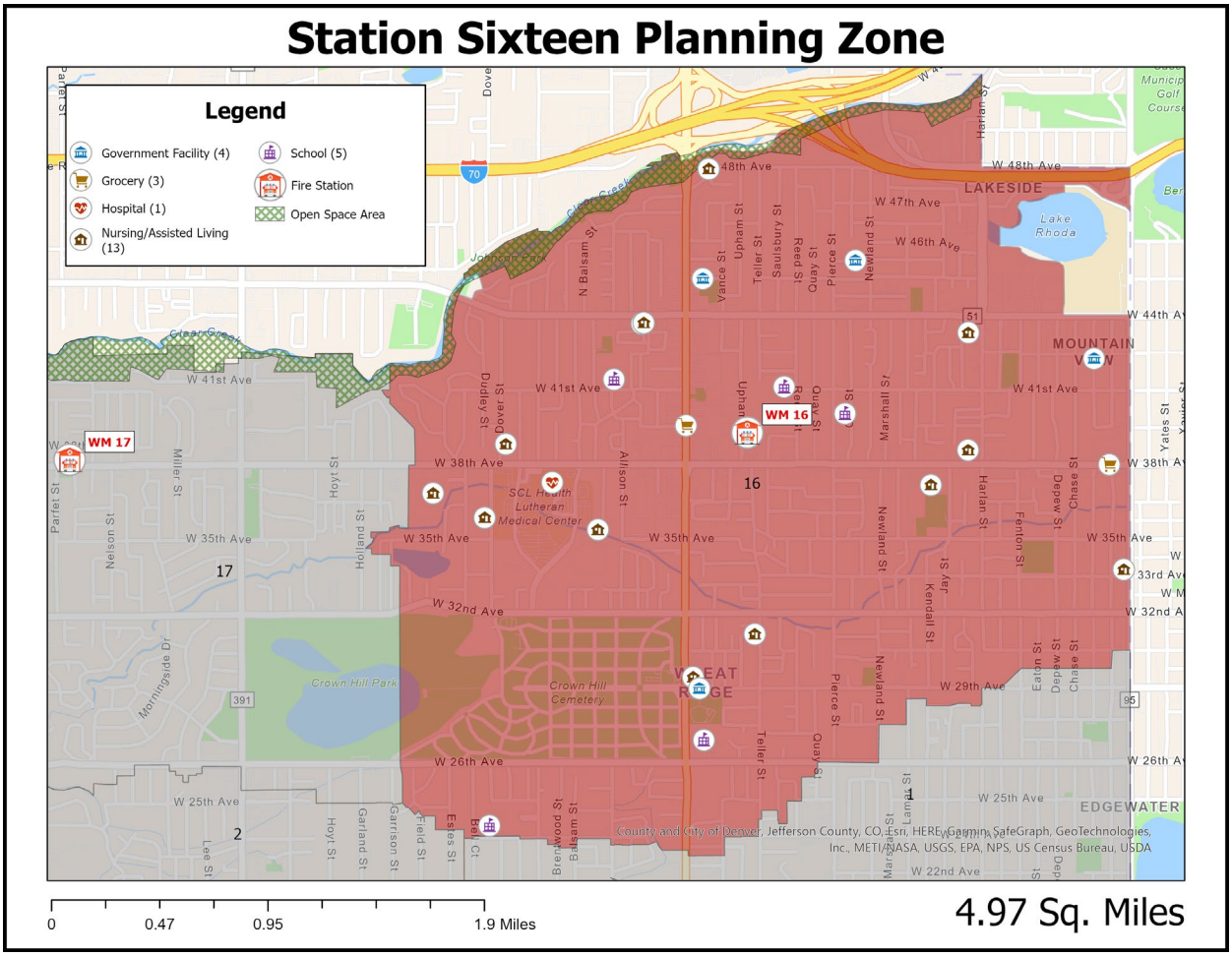
Description:

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.



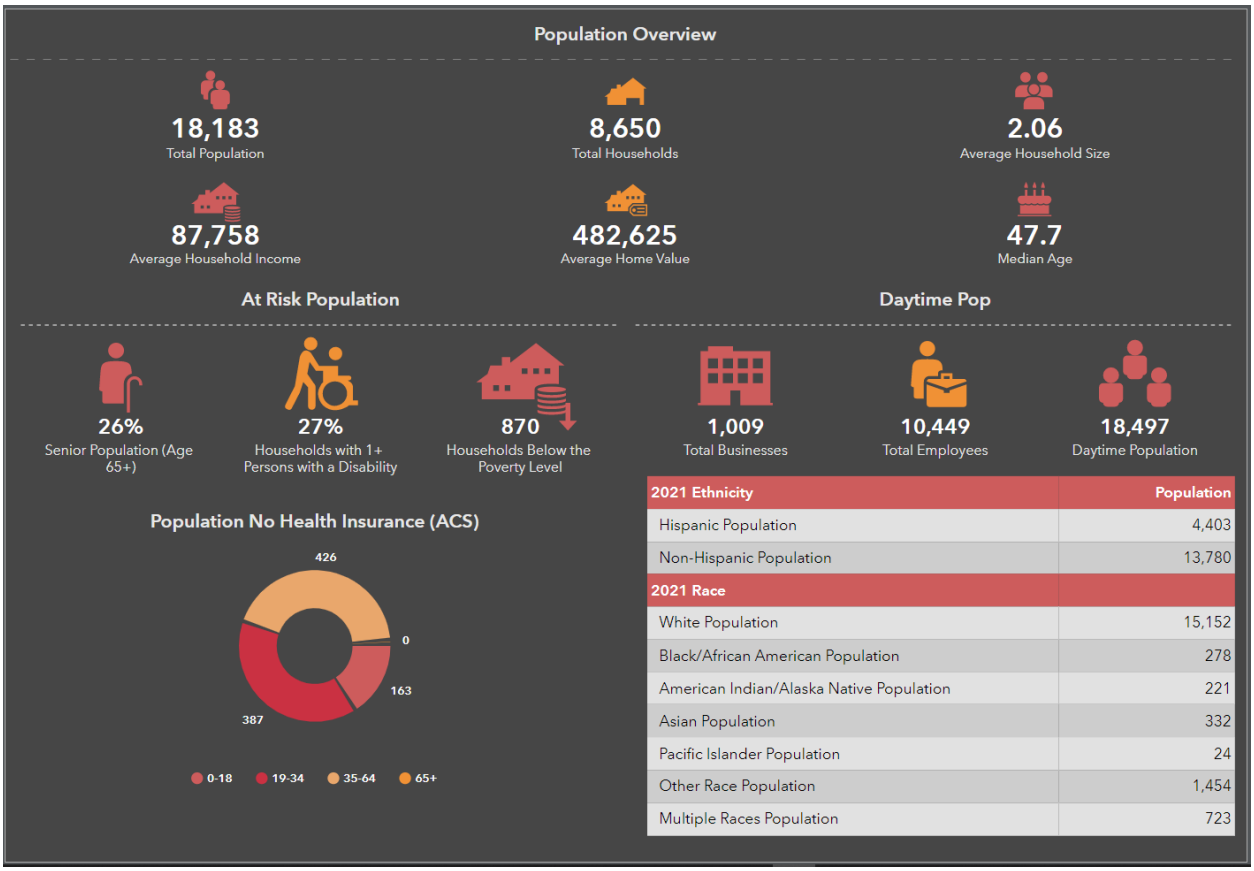
Critical Infrastructure and Key Resources:

Name	Address
Wheat Ridge City Hall	7500 West 29th Avenue
Frank Deangelis Center For Community Safety	6625 West 45th Place
Foothills Regional Housing	7490 West 45th Avenue
Mountain View Town Hall	4176 Benton Street
King Soopers #057	5301 West 38th Avenue
Safeway #1479	3900 Wadsworth Boulevard
Lutheran Medical Center	8300 West 38th Avenue
Stevens Elementary School	4001 Reed Street
Slater Elementary School	8605 West 23rd Avenue
Wilmore Davis Elementary School	7975 West 41st Avenue
Saint Peter & Paul	3920 Pierce Street
Beth Eden Baptist School	2600 Wadsworth Boulevard
Wide Horizon Inc.	8900 West 38th Avenue
Teller Place	7495 West 29th Avenue
Rehabilitation Center At Sandalwood	3835 Harlan Street
Rocky Mountain Assisted Living	7850 West 44th Avenue
Temenos Elder Care Company	3113 Teller Street
Caring Hearts Inc.	7465 West 48th Avenue
Ashley Manor	3555 Dudley Street
Your 2nd Home, LLC	3880 Dover Street
Christopher House Rehabilitation And Care	6270 West 38th Avenue
Jaxpointe at Allison Court Assisted Living	3525 Allison Court
Hearts And Hands Assisted Senior Care	4370 Ingalls Street
Retreat At Highlands	3315 Sheridan Boulevard

Special Risks:

- Highland West (12-story senior living apartments) – 6340 West 38th Avenue
    - Recreational area on the 12th floor
- Lakeside Office Park (6-story office building) – 4704 Harlan Street
- West Pines (substance abuse and mental health facility) – 3400 Lutheran Parkway
- Churches: Beth Eden Baptist, Covenant Presbyterian, St. Peter and Paul Catholic, Trinity Baptist, United Methodist, and Queen of Vietnamese Martyrs
- AAA Propane – 7405 West 44th Avenue
- Jefferson Center for Mental Health – 4643 Wadsworth Boulevard
- Wardle Feed and Action Recycling – 7610 West 42nd Avenue
- 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. 38th 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/D1	2017	56	7.18%	111	14.23%	433	55.51%	31	3.97%	26	3.33%	5	0.64%	118	15.13%	780
BC1/D1	2018	40	5.22%	125	16.30%	356	46.41%	38	4.95%	21	2.74%	10	1.30%	177	23.08%	767
BC1	2019	35	4.76%	125	16.98%	313	42.53%	39	5.30%	9	1.22%	11	1.49%	204	27.72%	736
BC1	2020	33	4.96%	100	15.04%	324	48.72%	53	7.97%	7	1.05%	3	0.45%	145	21.80%	665
BC1	2021	35	4.46%	123	15.69%	352	44.90%	49	6.25%	11	1.40%	4	0.51%	210	26.79%	784
BC1	Total	199	5.33%	584	15.65%	1778	47.64%	210	5.63%	74	1.98%	33	0.88%	854	22.88%	3732
E16	2017	533	13.22%	66	1.64%	2592	64.27%	346	8.58%	15	0.37%	37	0.92%	444	11.01%	4033
E16	2018	464	12.71%	83	2.27%	2337	63.99%	250	6.85%	9	0.25%	32	0.88%	477	13.06%	3652
E16	2019	317	8.62%	73	1.98%	2329	63.31%	376	10.22%	8	0.22%	37	1.01%	539	14.65%	3679
E16	2020	281	7.79%	61	1.69%	2161	59.93%	481	13.34%	6	0.17%	49	1.36%	567	15.72%	3606
E16	2021	341	8.49%	87	2.17%	2455	61.10%	427	10.63%	12	0.30%	36	0.90%	660	16.43%	4018
E16	Total	1936	10.20%	370	1.95%	11874	62.53%	1880	9.90%	50	0.26%	191	1.01%	2687	14.15%	18988
M16	2017	76	2.39%	22	0.69%	2660	83.78%	153	4.82%	6	0.19%	2	0.06%	256	8.06%	3175
M16	2018	57	1.85%	30	0.98%	2524	82.13%	131	4.26%	2	0.07%	2	0.07%	327	10.64%	3073
M16	2019	59	1.77%	30	0.90%	2562	76.89%	221	6.63%	4	0.12%	3	0.09%	453	13.60%	3332
M16	2020	70	2.11%	13	0.39%	2409	72.78%	141	4.26%	1	0.03%	2	0.06%	674	20.36%	3310
M16	2021	50	1.37%	21	0.58%	2801	77.01%	164	4.51%	1	0.03%	2	0.05%	598	16.44%	3637
M16	Total	312	1.89%	116	0.70%	12956	78.39%	810	4.90%	14	0.08%	11	0.07%	2308	13.97%	16527
St-16	Total	2447	6.23%	1070	2.73%	26608	67.80%	2900	7.39%	138	0.35%	235	0.60%	5849	14.90%	39247

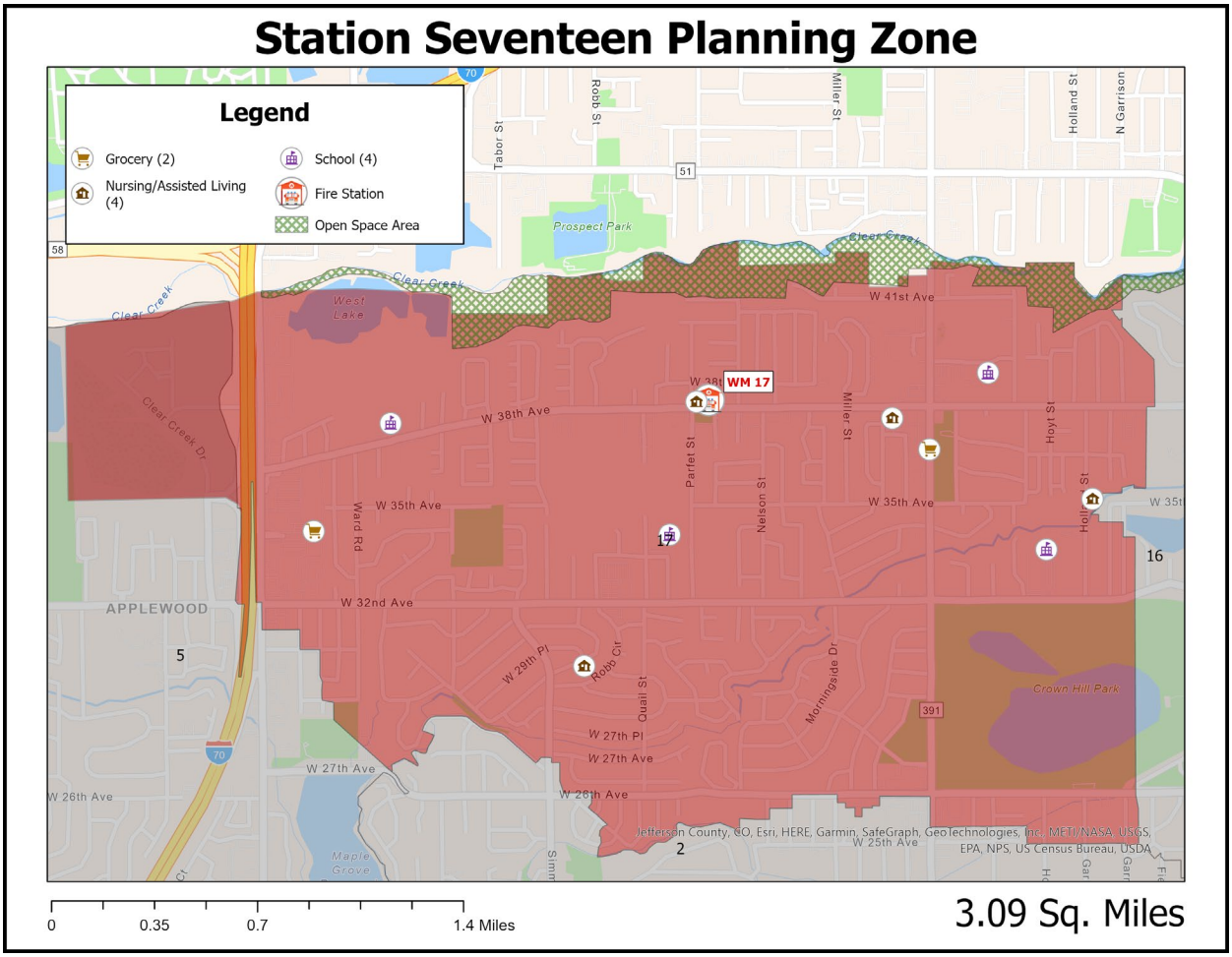
Occupancy Classification: Station 16 Planning Zone	
Classification	High, Moderate, Assisted Living High-Risk Occupancies
Assembly (100 series)	107
Educational (200 series)	18
Health Care, Detention, Correction (300 series)	50
Residential (400 series)	49
Mercantile, Business (500 series)	410
Industrial, 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.



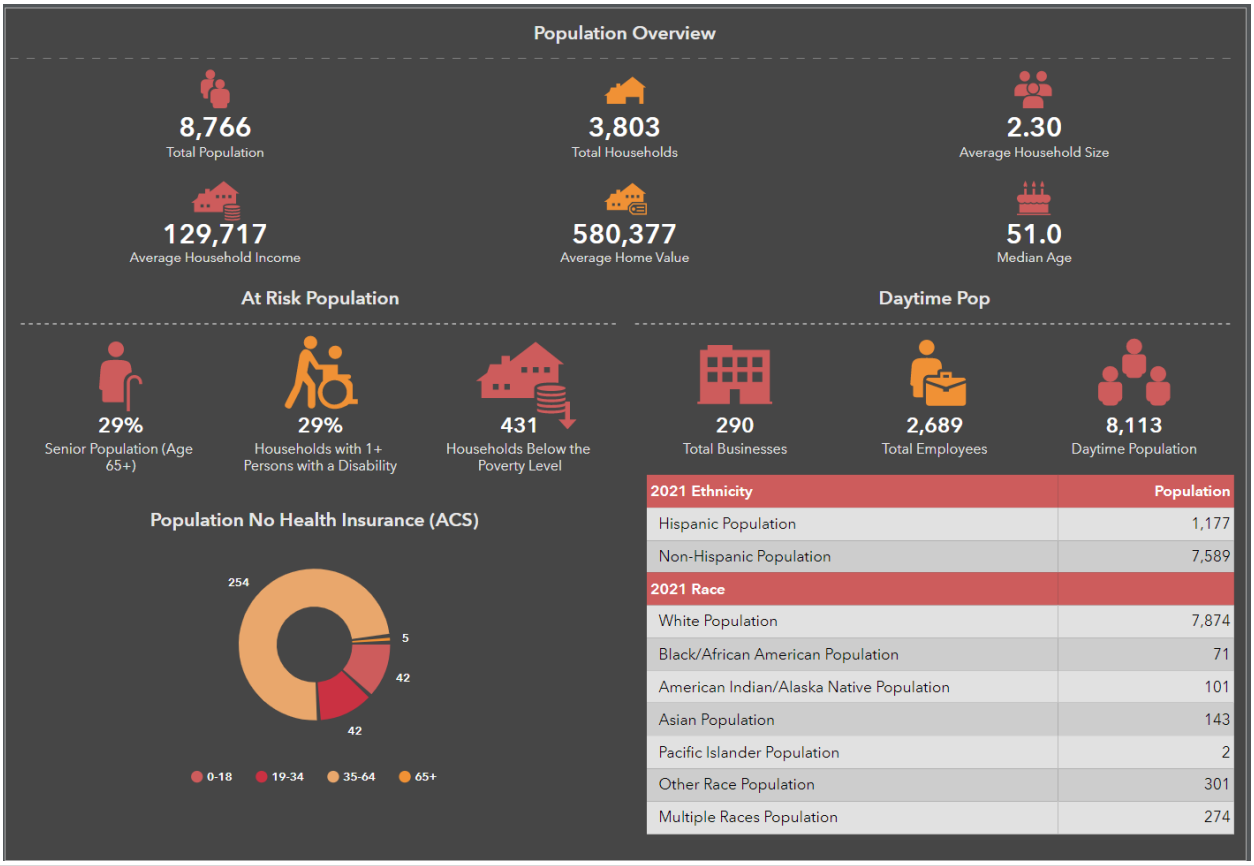
Critical Infrastructure and Key Resources:

Name	Address
King Soopers	3400 Youngfield Street
Sprouts Market	3725 Kipling Street
Prospect Valley Elementary School	3400 Pierson Street
Kullerstrand Elementary School	12225 West 38th Avenue
Wheat Ridge High School	9505 West 32nd Avenue
Everitt Middle School	3900 Kipling Street
Morningstar Assisted Living	10100 West 38th Avenue
Family Assisted Living	2948 Routt Circle
Golden Orchard Assisted Living	3510 Holland Street
Ashley Manor at Parfet	3802 North Parfet Street

Special Risks:

- Wheat Ridge Recreation Center – 4005 Kipling Street
- Industrial Laboratories – 4046 Youngfield Street
- Vintage Place Apartments – 10600/10700 West 38th Avenue
- Paramount Gardens Apartments – 2684 Paramount Parkway
- Open space and wildland urban interface areas (Crown Hill Park) – wildfire
- Construction of new Lutheran Hospital – 40th and Youngfield
- 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	2017	215	13.35%	50	3.10%	1034	64.18%	115	7.14%	5	0.31%	19	1.18%	173	10.74%	1611
E17	2018	186	12.31%	53	3.51%	910	60.23%	107	7.08%	8	0.53%	21	1.39%	226	14.96%	1511
E17	2019	100	6.23%	46	2.86%	1030	64.13%	156	9.71%	11	0.68%	26	1.62%	237	14.76%	1606
E17	2020	112	7.25%	45	2.91%	870	56.35%	175	11.33%	6	0.39%	13	0.84%	323	20.92%	1544
E17	2021	161	8.81%	51	2.79%	1085	59.39%	201	11.00%	5	0.27%	20	1.09%	304	16.64%	1827
E17	Total	774	9.56%	245	3.03%	4929	60.86%	754	9.31%	35	0.43%	99	1.22%	1263	15.59%	8099
M17	2017	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1
M17	2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
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	2.35%	7	1.17%	507	84.92%	19	3.18%	0	0.00%	0	0.00%	50	8.38%	597
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	Total	20	2.47%	9	1.11%	685	84.46%	25	3.08%	0	0.00%	0	0.00%	72	8.88%	811
B17	2017	0	0.00%	1	50.00%	0	0.00%	1	50.00%	0	0.00%	0	0.00%	0	0.00%	2
B17	2018	0	0.00%	3	33.33%	0	0.00%	2	22.22%	0	0.00%	0	0.00%	4	44.44%	9
BR17	2019	0	0.00%	4	50.00%	0	0.00%	2	25.00%	0	0.00%	0	0.00%	2	0.00%	8
BR17	2020	0	0.00%	9	39.13%	2	8.70%	8	34.78%	0	0.00%	0	0.00%	4	17.39%	23
BR17	2021	0	0.00%	16	0.00%	1	0.00%	7	0.00%	0	0.00%	0	0.00%	2	0.00%	26
BR17	Total	0	0.00%	33	48.53%	3	4.41%	20	29.41%	0	0.00%	0	0.00%	12	17.65%	68
SW17	2017	0	0.00%	0	0.00%	2	28.57%	0	0.00%	2	28.57%	0	0.00%	3	42.86%	7
SW17	2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	3	60.00%	0	0.00%	2	40.00%	5
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	Total	0	0.00%	0	0.00%	5	9.62%	1	1.92%	18	34.62%	0	0.00%	28	53.85%	52
St-17	Total	794	8.79%	287	3.18%	5622	62.26%	800	8.86%	53	0.59%	99	1.10%	1375	15.23%	9030

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 represent 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.

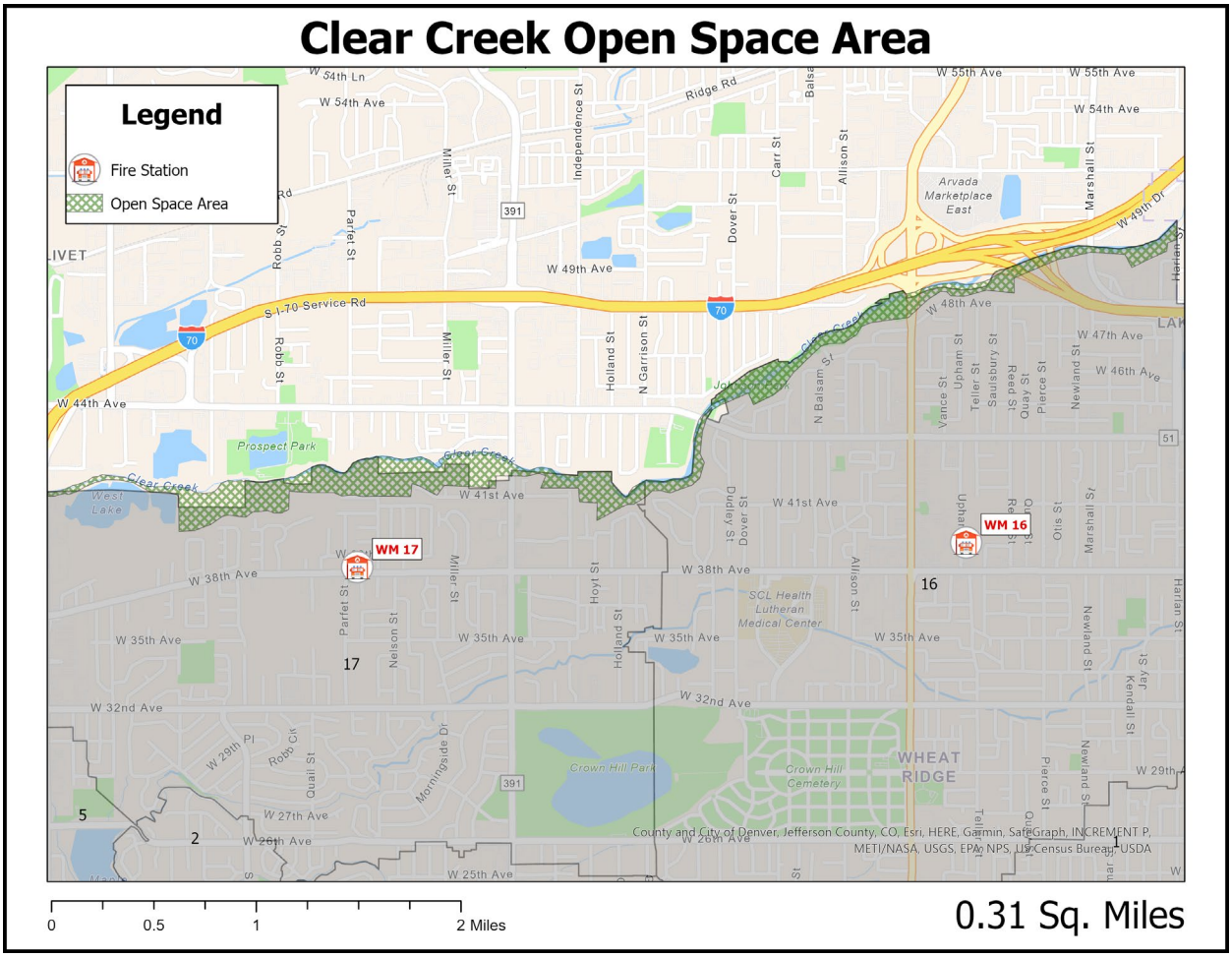
4) Limited water supply. Some areas may have hydrants or natural water resources. Ponds, creeks, or rivers (as a water resource) are usually difficult to access for firefighting operations.

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

Clear Creek Special Planning Zone

Description:

This special planning zone spans the northern border of the District and includes the area directly adjacent to Clear Creek. The special planning zone covers areas within both the Station 16 Planning Zone and the Station 17 Planning Zone. The northern border of this zone is the Arvada Fire Protection District. This zone was established to characterize the risks associated with Clear Creek and the open and park areas throughout the green belt.



Risk Analysis:

Wildfire:

The District's CWPP community risk ratings are moderate and high in this zone. The open space surrounding the creek creates a Wildland Urban Interface with natural vegetation bordering many homes that would be threatened in the event of a vegetation fire.

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 from 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 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.

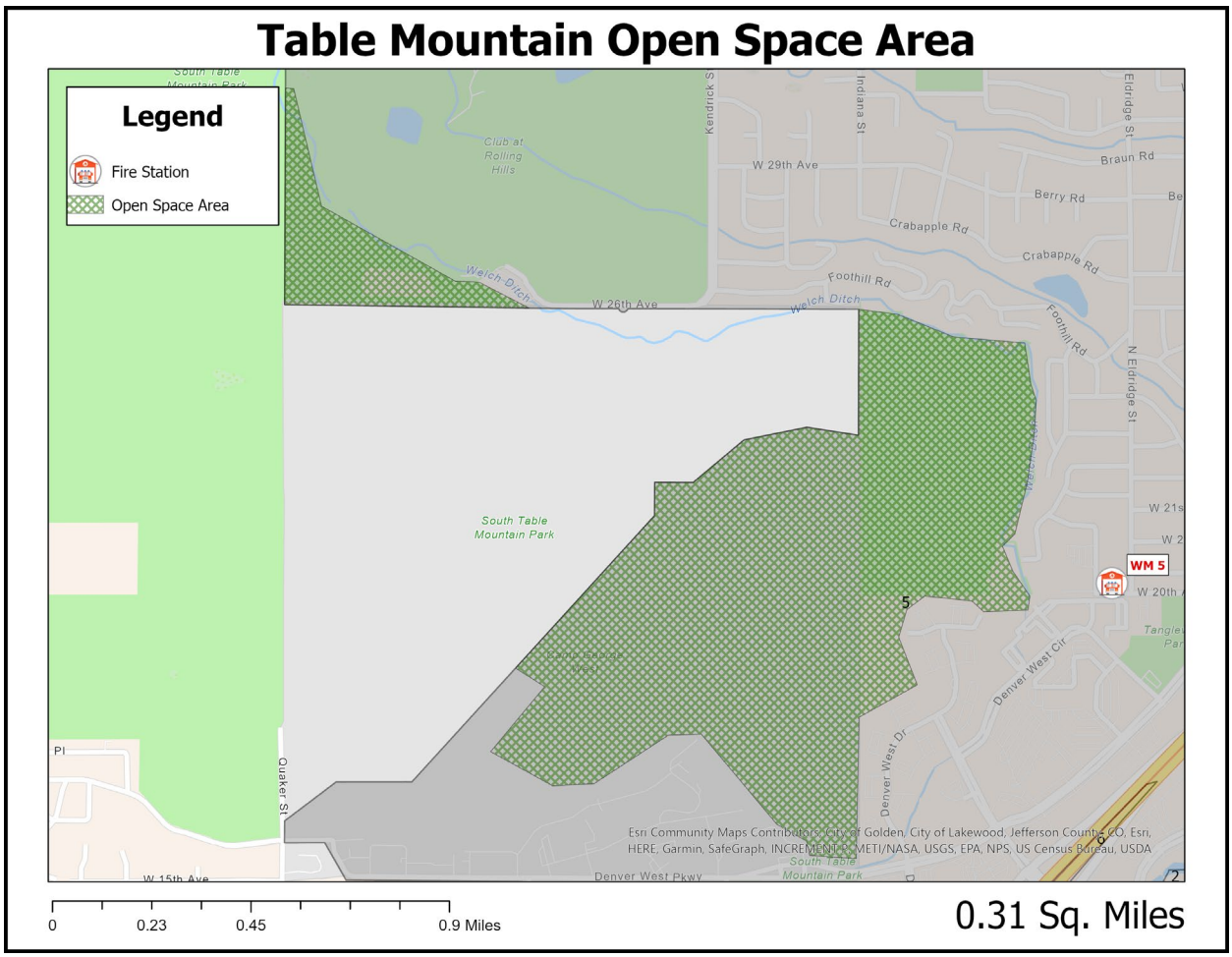
Response History:

Clear Creek															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2017	0	0.00%	0	0.00%	2	50.00%	0	0.00%	0	0.00%	0	0.00%	2	50.00%	4
2018	0	0.00%	1	25.00%	1	25.00%	1	25.00%	0	0.00%	0	0.00%	1	25.00%	4
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
Total	0	0.00%	3	13.64%	8	36.36%	1	4.55%	0	0.00%	0	0.00%	10	45.45%	22

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 Boundary so 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, mountain bikers.

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

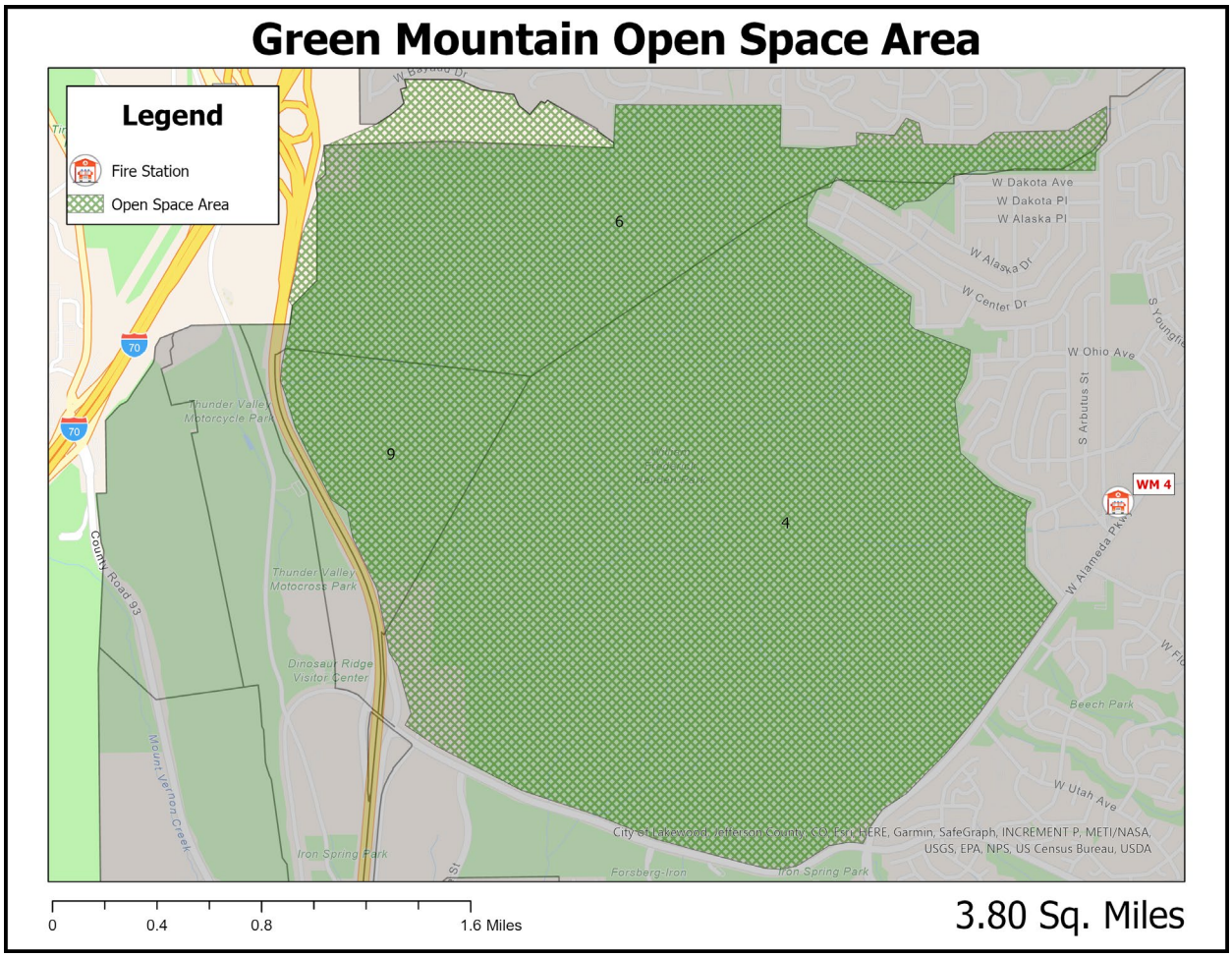
Response History:

Table Mountain															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2017	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
2018	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0
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	100.00%	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
Total	0	0.00%	0	0.00%	1	100.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1

Green Mountain Special Planning Zone

Description:

This special planning zone covers the William F. Hayden Green Mountain Park. It covers areas within the 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 neighborhood 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.

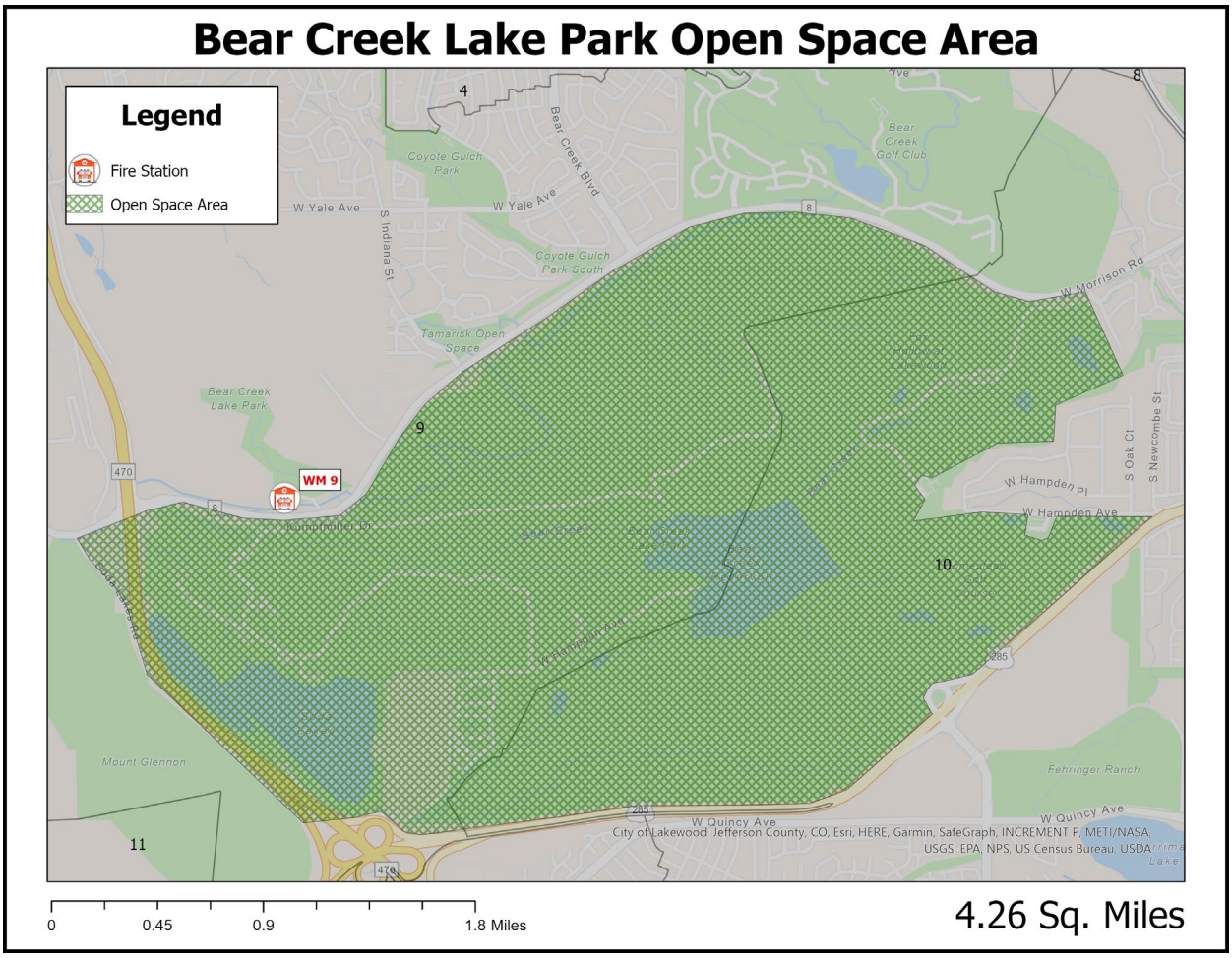
Response History:

Green Mountain															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2017	0	0.00%	2	28.57%	5	71.43%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	7
2018	0	0.00%	1	25.00%	1	25.00%	0	0.00%	0	0.00%	0	0.00%	2	50.00%	4
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
Total	0	0.00%	3	10.34%	20	68.97%	2	6.90%	1	3.45%	0	0.00%	3	10.34%	29

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 Zone 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 hook-ups.

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.

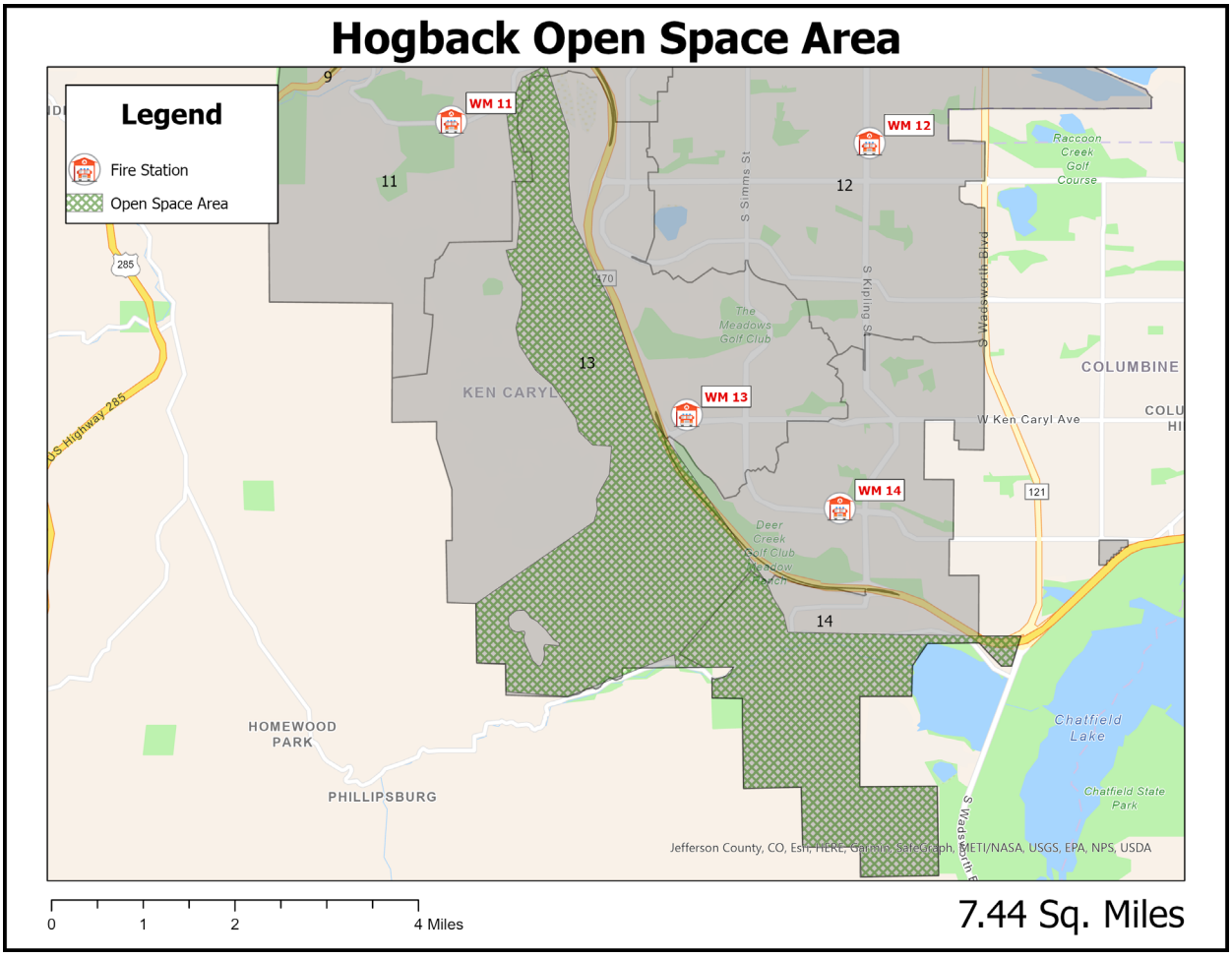
Response History:

Bear Creek Lake Park															
Year	Alarm	Alarm %	Fire	Fire %	EMS	EMS %	Public Assist	Public Assist %	Rescue	Rescue %	Hazmat	Hazmat %	Other	Other %	Total
2017	1	1.89%	2	3.77%	35	66.04%	1	1.89%	1	1.89%	0	0.00%	13	24.53%	53
2018	4	6.67%	2	3.33%	39	65.00%	1	1.67%	2	3.33%	1	1.67%	11	18.33%	60
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
Total	19	6.51%	8	2.74%	190	65.07%	10	3.42%	9	3.08%	1	0.34%	55	18.84%	292

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
2017	0	0.00%	4	11.11%	24	66.67%	0	0.00%	1	2.78%	0	0.00%	7	19.44%	36
2018	0	0.00%	2	4.55%	28	63.64%	2	4.55%	1	2.27%	0	0.00%	11	25.00%	44
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
Total	2	1.08%	14	7.53%	116	62.37%	6	3.23%	4	2.15%	2	1.08%	42	22.58%	186

West Metro Fire Protection District

Risk Assessment Signature Page

Adopted this 24th day of February 2022.

Don Lombardi, Fire Chief