



City of Kearns



Community Risk Assessment

City of Kearns

UFA has two fire stations that service the City of Kearns, one located in the municipality of Kearns and one just outside the municipal boundaries in West Jordan, covering a total of 4.63 square miles with a population of 36,037 as of 2024 and responded to 7,166 calls for service from 2022-2024.

Municipality	Population	Population Percentage of UFA	Square Miles	Population Density per Sq Mile	Classification	Value of Structures Protected
City of Kearns	36,037	7.51%	4.63	8,509	Urban	\$2.1B

The City of Kearns has decreased its population from 36,723 in 2020 to 36,037 in 2024, showing a decrease of 1.87% over a four-year timeframe.

City of Kearns Station Information

Station 109	
Owner	UFSA
Opened	1991
Address	4444 West 5415 South
Staffing and Apparatus	<ul style="list-style-type: none"> 4 Person - Medic Ladder 109 (Type 1) 2 Person - Medic Ambulance 109 Cross-Staffed - Engine 6109 (Type 6)

Station 107	
Owner	UFSA
Opened	1985
Address	6305 South 5600 West
Staffing and Apparatus	<ul style="list-style-type: none"> 4 Person - Medic Engine 107 (Type 1) 2 Person - Medic Ambulance 107

Surrounding UFA and Automatic/Mutual Aid Response Stations

Surrounding fire stations and fire departments that are within an eight-minute response to the City of Kearns are:

Station Number	City Location	Staffing
UFA Station 101	Millcreek	<ul style="list-style-type: none"> • 4 Person - Medic Engine 101 (Type 1) • 2 Person - Medic Ambulance 101 • Battalion Chief 11
UFA Station 111	Magna	<ul style="list-style-type: none"> • 4 Person - Medic Ladder 111 (Type 1) • 2 Person - Medic Ambulance 111 • Cross-Staffed - WTT 111 (Type 1) • Cross-Staffed - Engine 6111 (Type 6)
UFA Station 117	Taylorsville	<ul style="list-style-type: none"> • 4 Person - Medic Ladder 117 (Type 1) • 4 Person - Medic Engine 117 (Type 1) • 2 Person - Medic Ambulance 217 (PL 24 Hour) • Cross-Staffed - Heavy Rescue 117
UFA Station 118	Taylorsville	<ul style="list-style-type: none"> • 4 Person - Medic Engine 118 (Type 1) • 2 Person - Medic Ambulance 118 • Battalion Chief 13
Station 75	West Valley City	<ul style="list-style-type: none"> • 3 Person - Engine 75 (Type 1) • 2 Person - Medic Ambulance 75
Station 81	Murray	<ul style="list-style-type: none"> • 3 Person - Engine 81 (Type 1) • 2 Person - Medic Ambulance 81 • Cross-Staffed - Engine 681 (Type 6) • Battalion Chief 81
Station 83	Murray	<ul style="list-style-type: none"> • 3 Person - Tower 83 (Type 1) • 2 Person - Medic Ambulance 83 • Cross-Staffed - Engine 683 (Type 6)
Station 42	South Salt Lake	<ul style="list-style-type: none"> • 3 Person - Ladder 42 (Type 1) • 2 Person - Medic Ambulance 42 • Cross-Staffed - Engine 642 (Type 6)
Station 52	West Jordan	<ul style="list-style-type: none"> • 3 Person - Engine 52 (Type 1) • 2 Person - Medic Ambulance 52 • Cross-Staffed - Hazmat 52 • Cross-Staffed - Air & Light 52
Station 53	West Jordan	<ul style="list-style-type: none"> • 3 Person - Ladder 53 (Type 1) • 2 Person - Medic Ambulance 53 • Cross-Staffed - Engine 653 (Type 6) • Battalion Chief 51
Station 54	West Jordan	<ul style="list-style-type: none"> • 3 Person - Engine 54 (Type 1) • 2 Person - Medic Ambulance 54 • Cross-Staffed - Heavy Rescue 54

Station 55	West Jordan	<ul style="list-style-type: none"> • 3 Person - Engine 55 (Type 1) • 2 Person - Medic Ambulance 55 • Cross-Staffed - Engine 655 (Type 6)
Station 71	West Valley	<ul style="list-style-type: none"> • 3 Person - Engine 71 (Type 1) • 2 Person - Medic Ambulance 71 • Cross-Staffed - HazMat 71
Station 72	West Valley	<ul style="list-style-type: none"> • 3 Person - Engine 72 (Type 1) • 2 Person - Medic Ambulance 72 • Battalion Chief 71
Station 73	West Valley	<ul style="list-style-type: none"> • 3 Person - Ladder 73 (Type 1) • 2 Person - Medic Ambulance 73 • Cross-Staffed - Engine 473 (Type 4)
Station 74	West Valley	<ul style="list-style-type: none"> • 3 Person - Tower 74 (Type 1) • 2 Person - Medic Ambulance 74 • 2 Person - Medic Ambulance 744 • Cross-Staffed - Heavy Rescue 74 • Cross-Staffed - Engine 674 (Type 6)
Station 75	West Valley	<ul style="list-style-type: none"> • 3 Person - Engine 75 (Type 1) • 2 Person - Medic Ambulance 75
Station 76	West Valley	<ul style="list-style-type: none"> • 3 Person - Ladder 76 (Type 1) • Cross-Staffed - Engine 376 (Type 3) • Cross-Staffed - Engine 676 (Type 6)

City of Kearns – Incidents by Dispatch Type

	CY 2022	CY 2023	CY 2024
Fire Suppression	66 2.7%	52 2.2%	63 2.6%
EMS	1864 77%	1741 74.9%	1731 71.5%
HazMat	37 1.5%	27 1.2%	38 1.5%
Service Call	64 2.6%	75 3.2%	95 3.9%
Good Intent	270 11.2%	321 13.8%	384 15.9%
False Call	107 4.4%	101 4.3%	104 4.3%
Natural Condition	3 0.1%	3 0.1%	0 0%
Other Situation	5 0.2%	4 0.2%	2 0.1%
Unknown	4 0.2%	0 0%	3 0.1%
Total	2420 100%	2324 100%	2420 100%

Table 1 - Incidents by Dispatch Type

City of Kearns – 2022-2024 Dispatch and Response Times – Emergent First Due

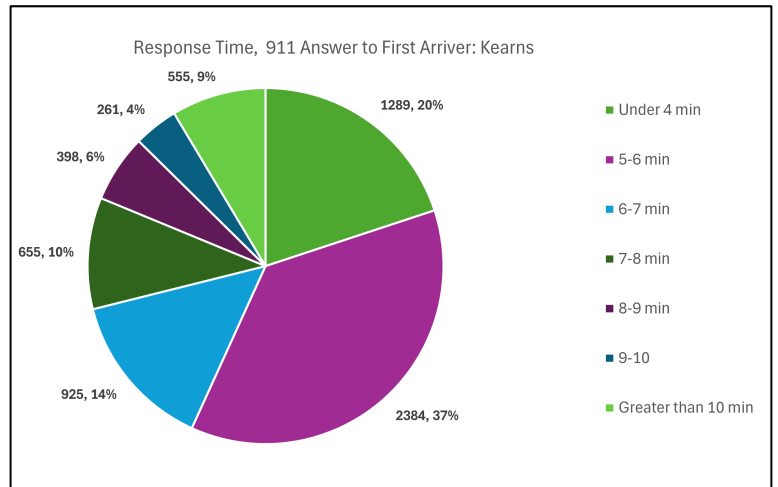
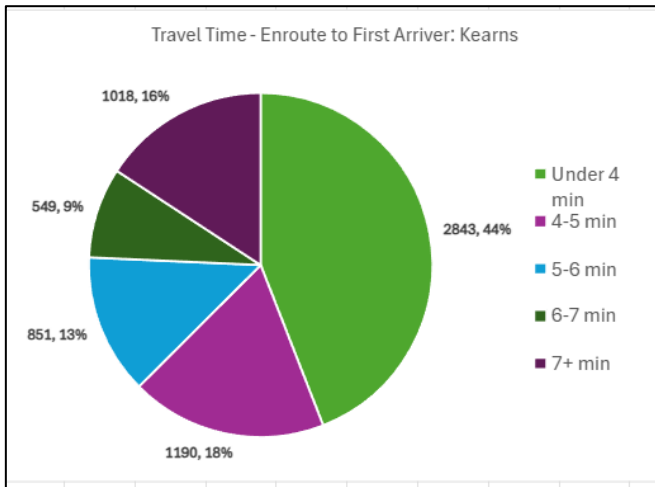
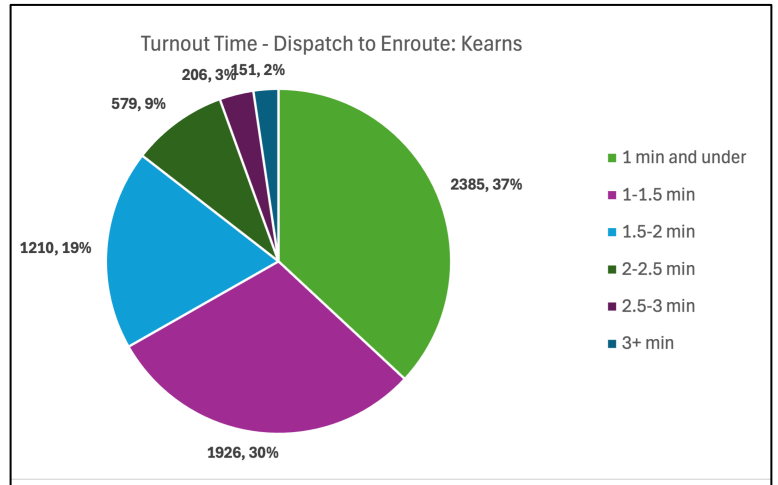
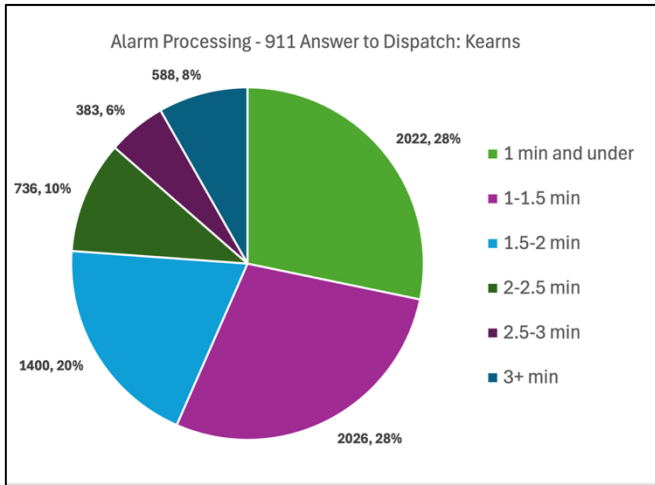


Chart 1 - Dispatch and Response Times

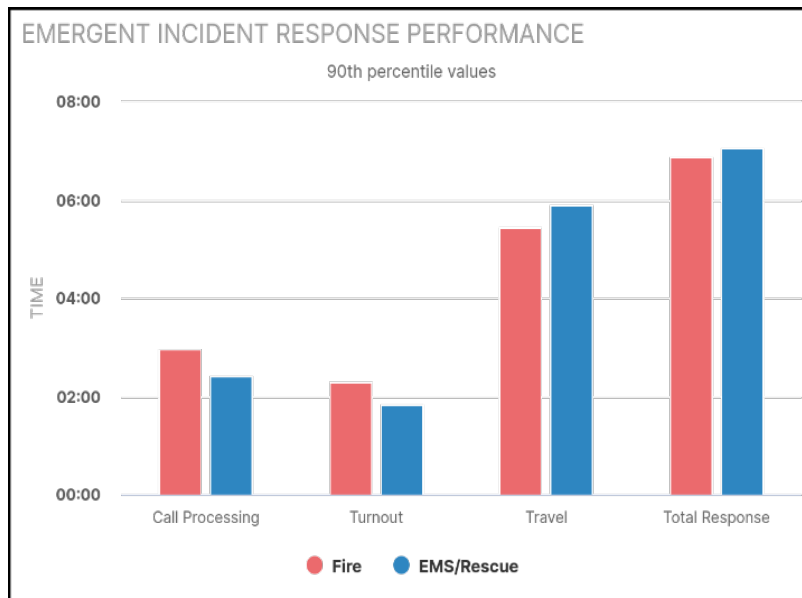


Chart 2 - Emergent Incident Response Performance

Urban	Call Processing: Fire	Turnout Time: Fire	Travel Time: Fire	Total Response: Fire	Call Processing: EMS	Turnout Time: EMS	Travel Time: EMS	Total Response: EMS
Kearns 2022	2:55	2:11	6:59	10:30	2:23	1:52	6:20	9:06
Kearns 2023	2:33	2:08	6:56	10:06	2:05	1:47	5:48	8:35
Kearns 2024	2:12	2:02	6:05	9:22	2:06	1:54	5:43	8:19
UFA Urban 2022-2024	2:43	2:20	7:17	10:51	2:15	2:06	6:11	9:11
UFA Rural 2022-2024	2:59	2:22	14:56	17:48	2:51	2:18	14:29	18:22
NFPA 1710	1:04	1:20	4:00	6:24	1:00	1:00	4:00	6:00

Table 2 - Emergent Response Times, 90th percentile values

City of Kearns – 2022-2024 Total Response Times



Chart 3 - Turnout and Travel Times

The charts above illustrate alarm processing, turnout, travel, and total response times for all units responding to service calls within the City of Kearns (90th percentile).

City of Kearns – 2022-2024 Incidents by Time of Day

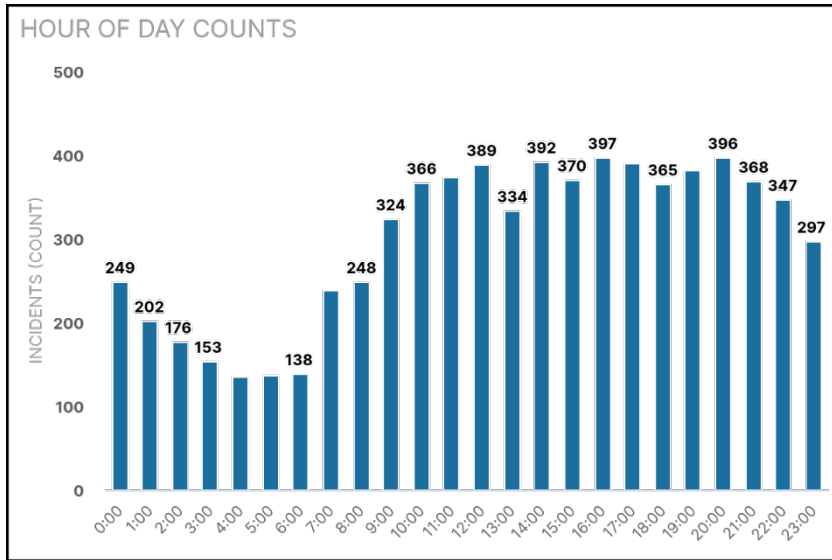


Chart 4 – Incidents by Time of Day

This table demonstrates the incidents by time of day and the time of greatest demand within Kearns for all service calls.

City of Kearns– 2022-2024 Incidents by Day of Week

This chart presents incident volume by day of the week and demonstrates that demand remains relatively consistent throughout the week, with slightly higher call volumes occurring mid- to late-week.

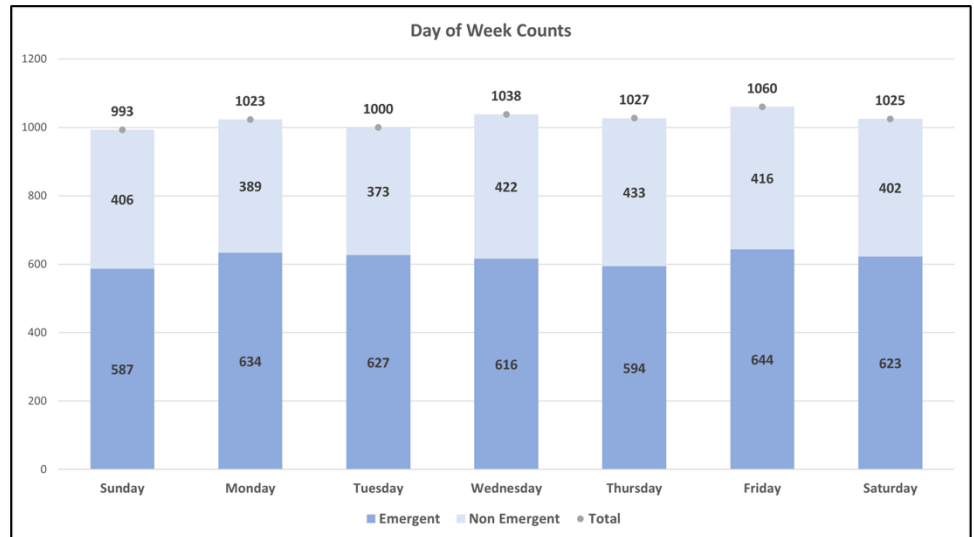


Chart 5 – Incidents by Day of Week

City of Kearns – 2022-2024 EMS Calls and Ambulance Transports

Total EMS Calls	Total Ambulance Transports	% Of EMS Calls Requiring Transport
5,336	3,194	60%

Table 3 - EMS Calls and Ambulance Transports

City of Kearns – 2022-2024 EMS Incidents by Dispatch Type

EMS Call Type	Incident Count
Sick Person	607
Fall	492
Breathing Problem	328
Seizure	273
Unconscious	153

Table 4 - Top 5 EMS Medical Calls

City of Kearns – 2022-2024 Fire Incidents by Dispatch Type

NFIRS Description	Incident Count	% of Incidents	NFIRS Description	Incident Count	% of Incidents
Structure Fire	68	37.57%	Fire, Other	16	8.84%
Natural Vegetation Fire	26	14.36%	Mobile Property Fire	1	2.0%
Outside Rubbish Fire	39	21.55%	Special Outside Fire	8	4.42%
Vehicle Fire	21	11.60%	Total	181	100%

Table 5 - Incidents by Dispatch Type

City of Kearns – Building Occupancy Classification and Risk Categories

Occupancy Classification	Low	Moderate	High	Max	Total
Agriculture	0	0	0	0	0
Assembly	14	4	18	1	37
Commercial	54	16	17	0	87
Education	58	3	8	3	72
Government	105	11	10	0	126
Hazardous	1	20	1	1	23
Healthcare	1	0	1	0	2
High Rise	0	0	0	0	0
Industrial	28	11	14	0	53
Mixed Use	0	0	0	0	0
Residential **	10641	13	4	0	10658
Single Family Residential	9719	629	1	0	10349
Multi-family Residential	40	38	19	3	100
Unclassified/Storage	11	1	1	0	13
Utility and Miscellaneous	0	0	0	0	0
Total	20672	746	94	8	21520

**** Residential includes single family and multi-family. Breakdowns for those are in a separate row.**
**** Residential includes manufactured homes and unclassified so multi-family and single family may not add up to residential.**

Building Size / Considerations

Nonresidential low: 1 - 4,999 sq ft	Residential low: 1 – 1,999 sq ft.
Nonresidential moderate: 5,000 – 9,999 sq ft	Residential moderate: 2,000 – 3,999 sq ft.
Nonresidential high: 10,000 – 99,999 sq ft	Residential high: 4,000 – 9,999
Nonresidential max: ≥ 100,000 sq ft	Residential max: ≥ 10,000

Table 6 – Building Occupancy and Risk Categories

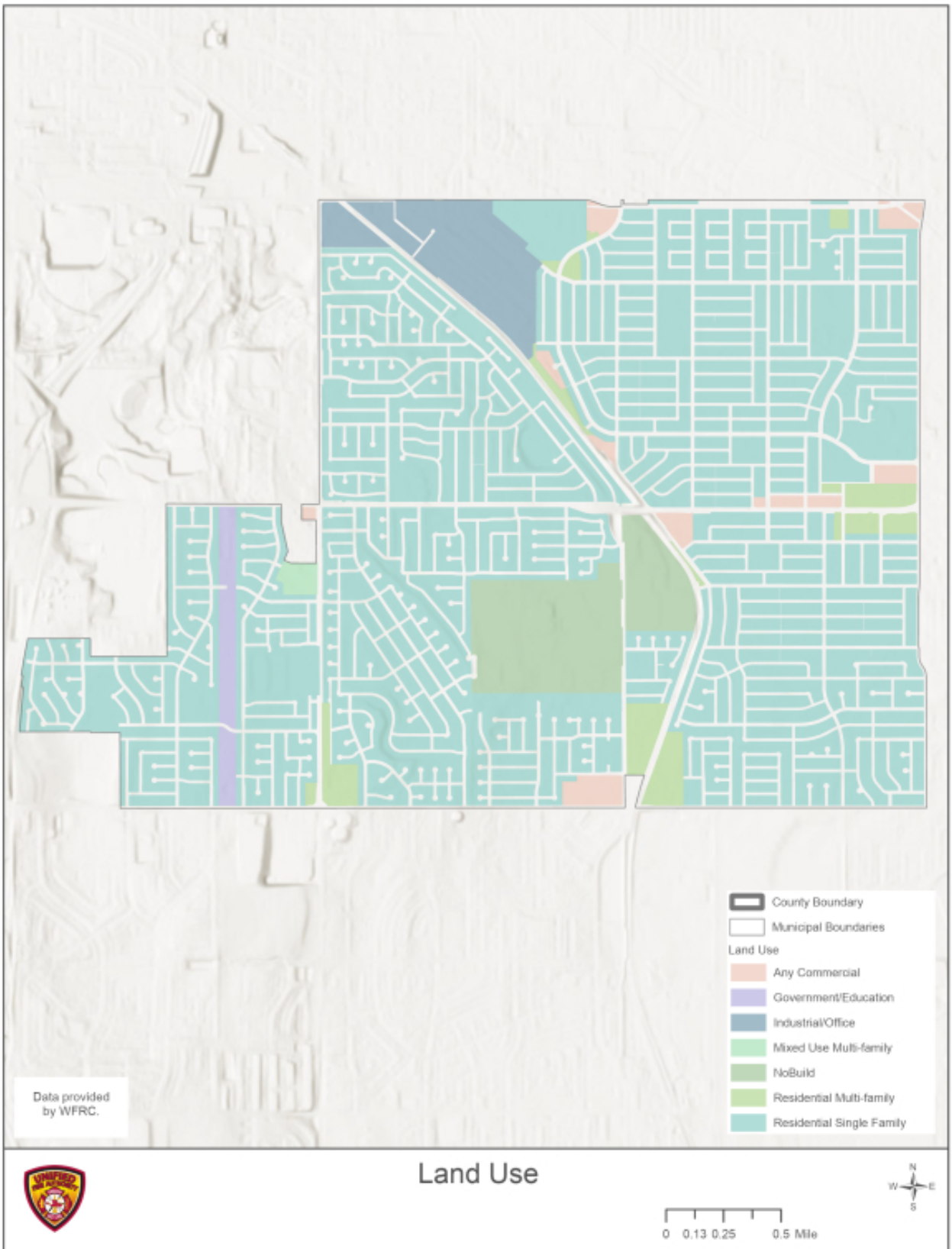
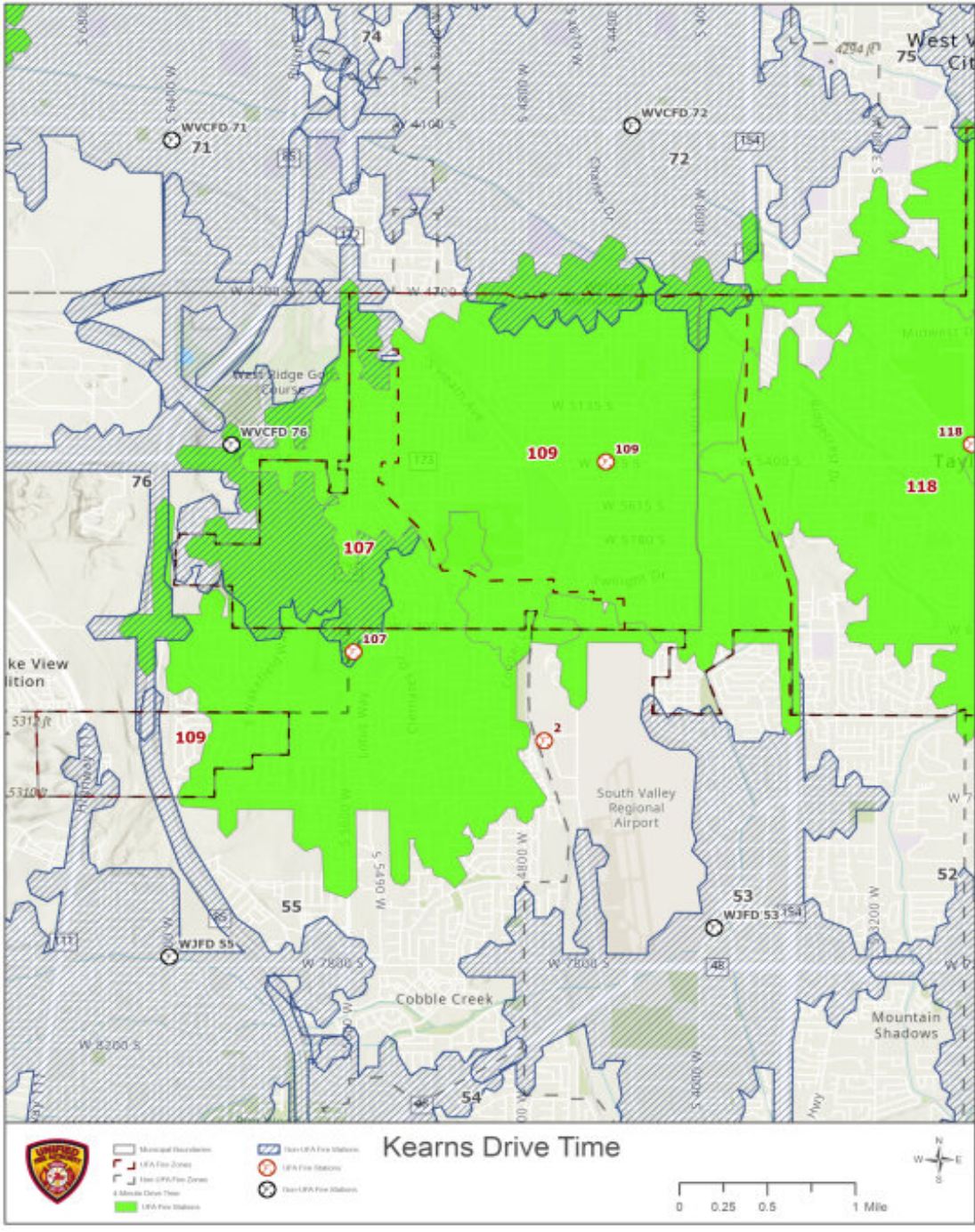


Image 1 - Land Use



Four Minute Response Times - UFA and Non-UFA Stations

September 2022




Image 2 - 4-Minute Travel Times - UFA and Aid

Kearns – First Arriver Travel Times

The following maps demonstrate the 90th percentile of travel times based off the last three years of historical data (2022-2024). The darker the color is, the more delayed the response, with the green and light colors demonstrating below or near target times. The darker colors on the bar within the key demonstrating longer travel times by apparatus. This map's drive times (or travel times) are based off the current NFPA 1710 standard of four minutes (90th percentile) from notification of the alarm to the arrival of the first arriving apparatus — not an adopted standard by UFA. In 2024, within the City of Kearns, the 90th percentile drive time is 6:56 for fire and 5:55 for EMS, or a combined 90th percentile drive time of 6:02.

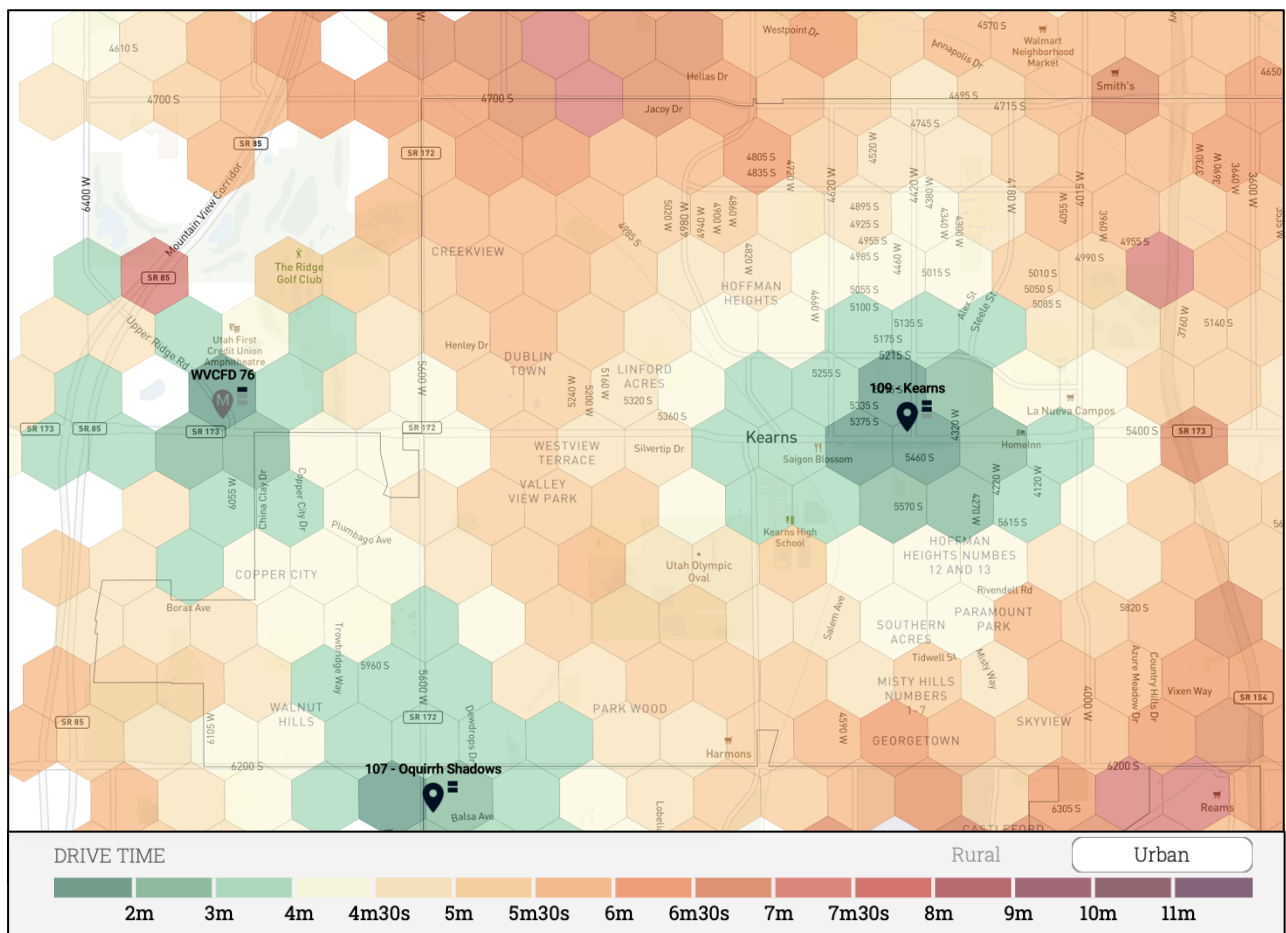


Image 3 - Emergent Response Times - All Aid

Kearns – Residential Fire Effective Response Force (17 FF)

This map demonstrates the coverage of a multi-unit response to a residential fire based off all apparatus being within their station. The green to light yellow demonstrates the ability to have seventeen firefighters (a residential fire effective response force) on scene based off a residential urban fire force response. This map's drive times (or travel times) are based off the current NFPA 1710 standard of eight minutes (90th percentile) from notification of the alarm to the arrival of the initial full alarm assignment (a minimum of 17 firefighters) for a residential, low, or medium hazard assembly — not an adopted standard by UFA. Based off predictive data, the 90th percentile for 17 firefighters to arrive on scene is 8:20.

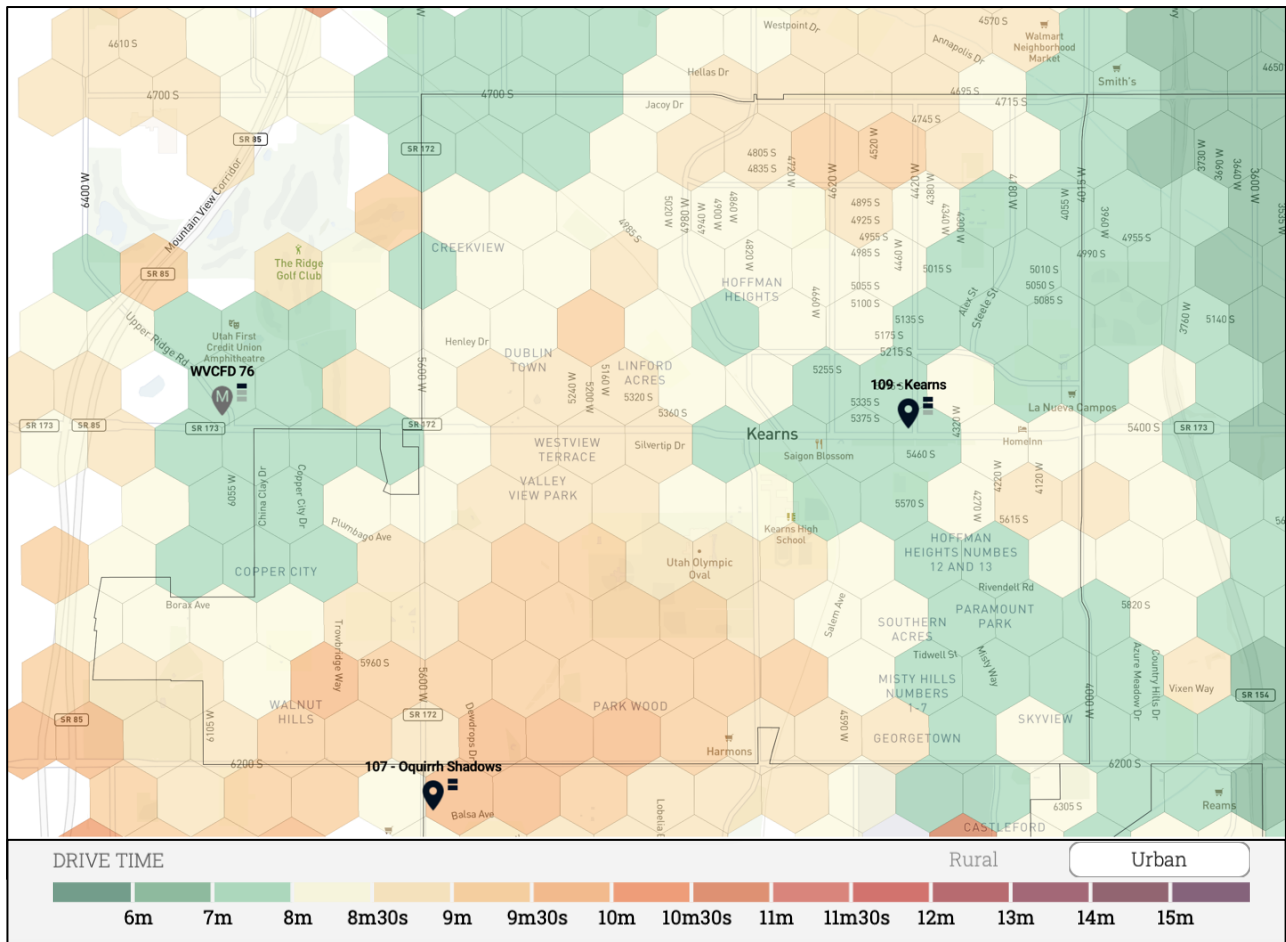


Image 4 - Response Times – Residential Fire Effective Response Force (17 ERF)

Kearns – Commercial Fire Effective Response Force (28 FF)

This map demonstrates the coverage of a multi-unit response to a commercial fire based off all apparatus being within their station. The green to light yellow demonstrates the ability to have twenty-eight firefighters (a commercial fire effective response force) on scene based off a residential urban fire park force response. This map's drive times (or travel times) are based off the current NFPA 1710 standard of ten minutes and 10 seconds (90th percentile) from notification of the alarm to the arrival of the initial full alarm assignment (a minimum of 28 firefighters) for a commercial, high hazard or high-rise assembly — not an adopted standard by UFA. Based off predictive data, the 90th percentile for 28 firefighters to arrive on scene is 9:09.

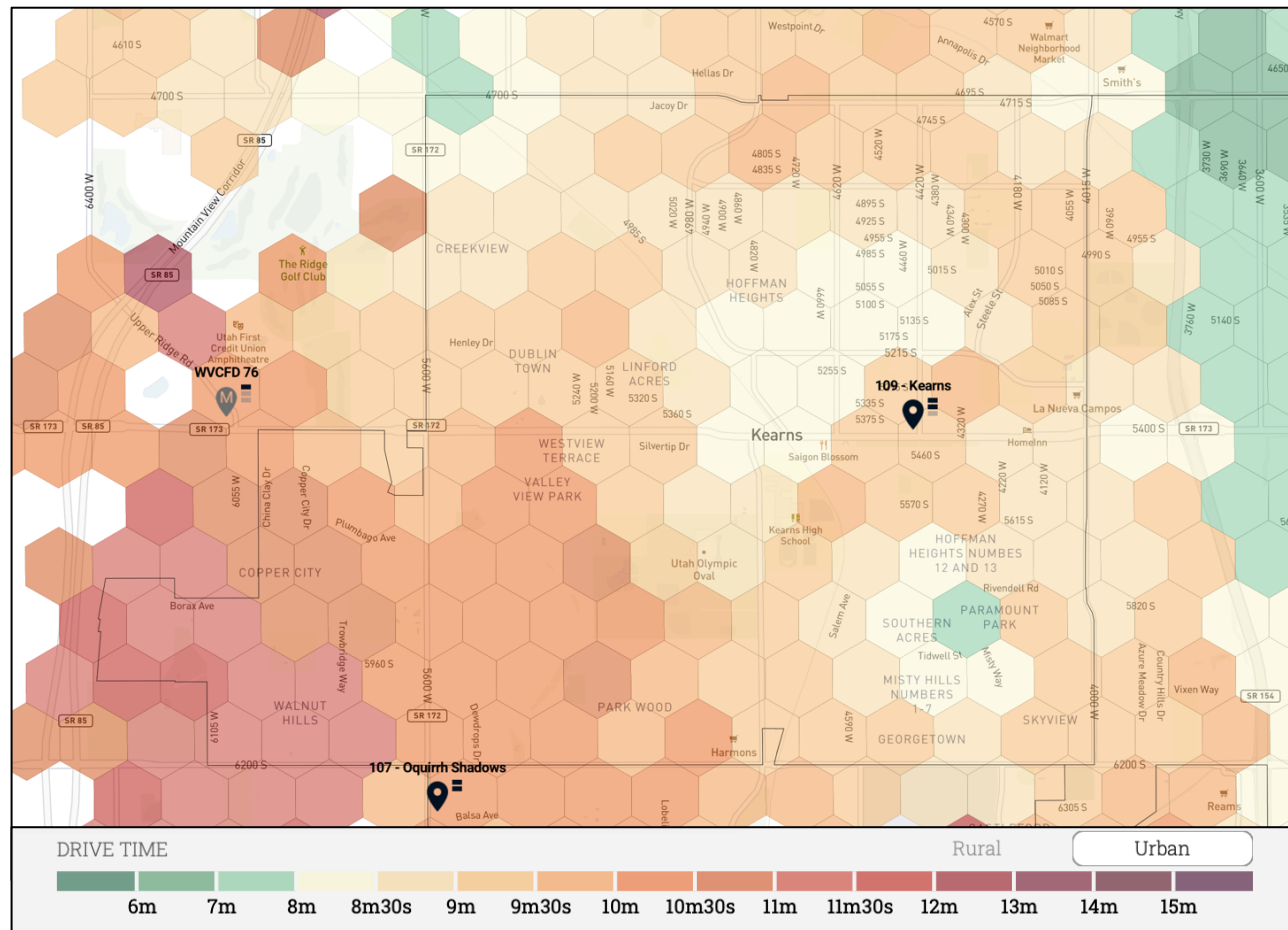


Image 5 - Response Times – Commercial Fire Effective Response Force (28 FF)

City of Kearns Risk Assessments

Infrastructure – Transportation	Infrastructure – Dams	Earthquake Liquefaction	Earthquake Faults	Avalanche	Unreinforced Masonry	Wildland Urban Interface	Tier II Sites	Hospitals	Schools	≥100,000 sq ft Structures	Residential Population
Mod	Low	Low	Low	Low	High	Low	High	Low	High	Low	Mod

Transportation: Low Risk = 0-99 Linear Miles; Moderate Risk = 100-199 Linear Miles; High Risk = >200 Linear Miles
Dams: Low Risk = 0-3; Moderate Risk = 4-6; High Risk = ≥7
Liquefaction: The areas of liquefaction vary throughout the valley, with areas of high susceptibility running South and East from the Great Salt Lake
Earthquake Faults: Low Risk = 0-30,000 LF of fault line; Moderate Risk = 30,001-60,000 LF of fault line; High Risk = ≥60,001 LF of fault line
Unreinforced Masonry: Low Risk = 0-100; Moderate Risk = 101-1,000; High Risk = ≥1,001
Wildland Urban Interface: Low Risk = 0-25% WUI; Moderate Risk = 26-50% WUI; High Risk = ≥51% WUI
Tier II Sites: Low Risk = 1-5; Moderate Risk = 6-10; High Risk = ≥11
Hospitals: Low Risk = 0; Moderate Risk = 1; High Risk = ≥2
Schools: Low Risk = 0-5; Moderate Risk = 6-10; High Risk = ≥11
100,000 sq ft Buildings: Low Risk = 0-5; Moderate Risk = 6-14; High Risk = ≥15
Population: Low Risk = 1-19,999; Moderate Risk = 20,000-39,999; High Risk = ≥40,000

Table 7 - Hazard Matrix

Infrastructure – Transportation

There are several high-level transportation routes within Kearns or directly bordering the city. Bangerter Highway runs directly on the east side of the city, and the Mountain View Corridor runs directly on the west side of the city. Several arterials and state roads also run through Kearns, with 4700 South, 5415 South, 6200 South, and 5600 West. There are 0 linear miles of Interstate/US Highway, 4.47 linear miles of State Highways, and 100 total linear miles of roadway. UTA also runs bus routes through the city, with the main bus routes running on 6200 S, 5400 S and 4700 S. There is a rail line that runs the length of the city from 4700 S to 6200 S near 4800 West. Kearns is in the moderate-risk category for road infrastructure.

Infrastructure – Water

There is one water district within Kearns, the Kearns Improvement District.

Infrastructure – Dams

There are no identified dams within Kearns. Kearns is in the low-risk category for dam infrastructure.

Natural Hazards

Within Kearns, there are no concerns with avalanche areas. Kearns is in the low-risk category for avalanche. There are no identified fault lines that run through the city, although there are several faults on either side of the city. Kearns is in the low-risk category for liquefaction and low-risk category for fault lines. One of the biggest hazards that occur within an earthquake scenario is the number of unreinforced masonry (URM) buildings within Kearns, with an estimated 1,007 URM's, which constitutes about 3.94% of the overall URM's within UFA's response areas. Kearns is in the high-risk category for unreinforced masonry.

Wildland Urban Interface

There is low risk of urban interface fires within Kearns. Kearns is in the low-risk category for Wildland Urban Interface.

Hazardous Materials / Tier II Sites

There are 23 identified HazMat/Tier II Sites within Kearns, which is in the high-risk category.

Hospitals

Kearns has no standalone hospitals, which place it in the low-risk category.

Schools

Kearns has six elementary schools, two middle schools, one high school, one public charter school K-9, and one private K-8 school within city boundaries which places it in the high-risk category.

Target Hazards – Structures

Some of the target-hazard occupancies in Kearns include:

- Apartments – 4866 West 4780 South
- Carrington Apartments – 5959 South 4800 West
- Children Center – 5242 South 4820 West
- Kearns Oquirrh Park Fitness Center – 5624 S Cougar Lane
- Kearns Warehouse District – 4950 South 5200 West
- Builder Supply – 5367 West 4700 South

- Summit Senior – 5525 West 6200 South
- Salt Lake County Recreation Center – 5600 South 4800 West
- Strip Mall – 5500 South 4015 West
- Utah Olympic Oval – 5662 Cougar Lane

Life and Property Loss

From 2022-2024, there has been one fatality attributed to fire. There has been a total estimate of \$3,376,000.00 for property loss and a total estimate of \$942,390.00 for content loss due to fire.

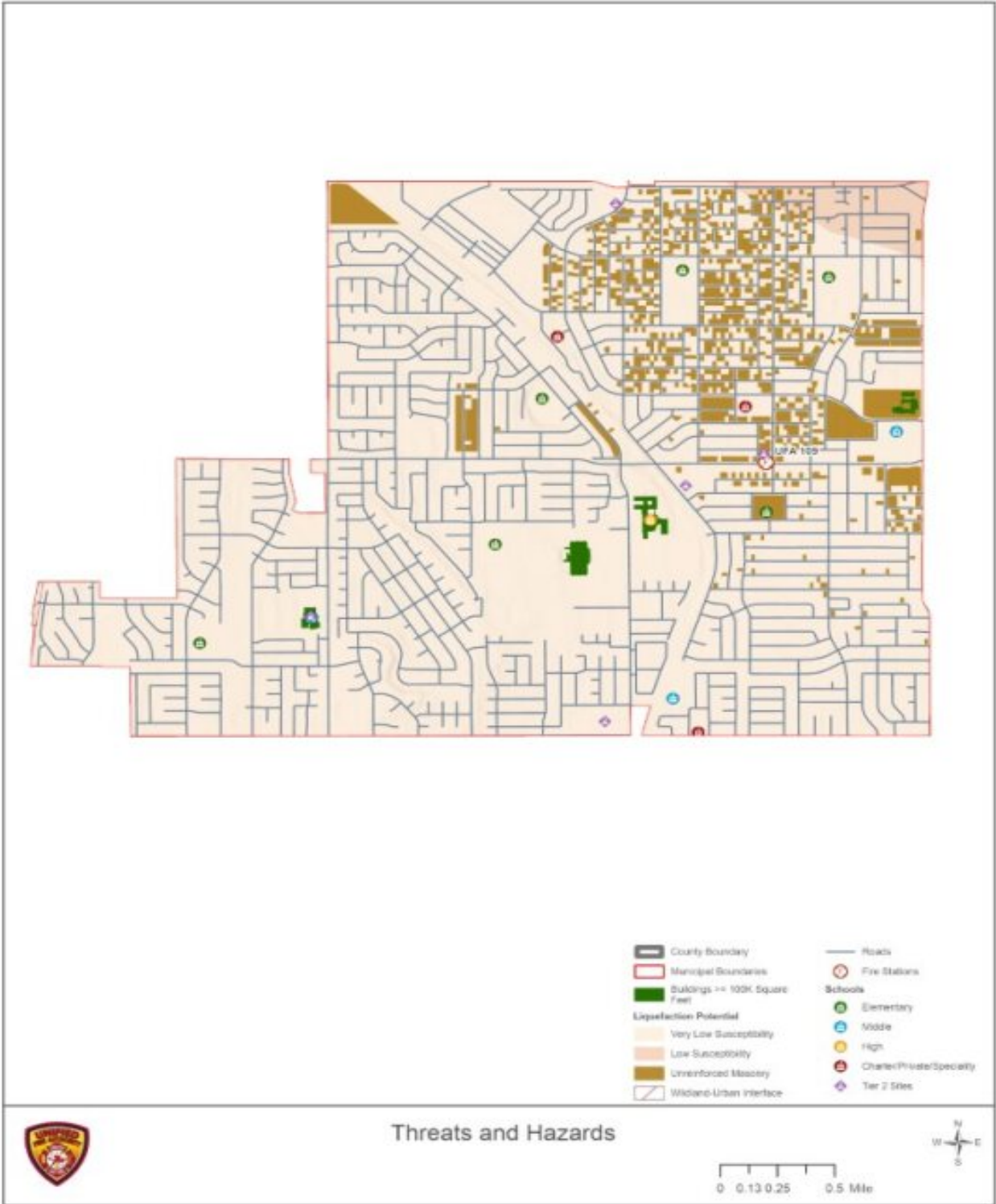


Image 6 - Threats and Hazards

