



# Emigration Canyon



EMIGRATION CANYON

## Community Risk Assessment

### Emigration Canyon

UFA has one station within Emigration Canyon covering a total of 18.98 square miles with a population of 1,438 as of 2024 and responded to 214 calls for service from 2022-2024.

Municipality	Population	Population Percentage of UFA	Square Miles	Population Density per Sq Mile	Classification	Value of Structures Protected
Emigration Canyon	1,438	0.30%	18.98	83	Rural	\$335M

Emigration Canyon has decreased its population from 1,466 in 2020 to 1,438 in 2024, showing a decrease of 1.91% over a four-year timeframe.

### Emigration Canyon Station Information

Station 119	
Owner	UFSA
Opened	2007
Address	5025 Emigration Canyon Road
Staffing and Apparatus	<ul style="list-style-type: none"> <li>3 Person - Medic Engine 119 (Type 1/3)</li> <li>Cross-Staffed - Engine 6119 (Type 6)</li> </ul>

### Surrounding UFA and Automatic/Mutual Aid Response Stations

Surrounding fire stations and fire departments that are within an eight-minute response to the Emigration Canyon are:

Station Number	City Location	Staffing
Station 3*	Salt Lake City	<ul style="list-style-type: none"> <li>4 Person - Medic Engine 3 (Type 1)</li> <li>4 Person - Truck 3</li> </ul>
Station 5*	Salt Lake City	<ul style="list-style-type: none"> <li>4 Person - Medic Engine 5 (Type 1)</li> <li>2 Person - Squad 5 (ALS Response Vehicle)</li> </ul>
Station 10*	Salt Lake City	<ul style="list-style-type: none"> <li>4 Person - Engine 10 (Type 1)</li> <li>Cross-Staffed - Hazmat 10</li> <li>Cross-Staffed - Utility 10 (Air &amp; Light)</li> </ul>

Station 13*	Salt Lake City	<ul style="list-style-type: none"> <li>• 4 Person - Engine 13 (Type 1)</li> <li>• Cross-Staffed - Engine 6131 (Type 6)</li> <li>• Cross-Staffed - Engine 30131 (Type 3)</li> </ul>
UFA Station 106	Millcreek City	<ul style="list-style-type: none"> <li>• 4 Person - Medic Ladder 106 (Type 1)</li> <li>• 2 Person - Medic Ambulance 206</li> <li>• Cross-Staffed - WTT 106 (Type 1)</li> <li>• Cross-Staffed - Engine 6106 (Type 6)</li> </ul>
UFA Station 112	Millcreek City	<ul style="list-style-type: none"> <li>• 4 Person - Medic Engine 112 (Type 1)</li> <li>• Cross-Staffed - Engine 6112 (Type 6)</li> </ul>
<p><b>*Note:</b> UFA only relies on Salt Lake City for fire response on mutual and automatic aid and does not currently have Salt Lake City units respond to medical calls.</p>		

*Emigration Canyon City – Incidents by Dispatch Type*

	CY 2022	CY 2023	CY 2024
<b>Fire Suppression</b>	2   3%	0   0%	4   6.7%
<b>EMS</b>	34   50.7%	47   54%	34   56.7%
<b>HazMat</b>	2   3%	6   6.8%	2   3.3%
<b>Service Call</b>	1   1.5%	4   4.6%	1   1.7%
<b>Good Intent</b>	13   19.4%	13   14.9%	6   10%
<b>False Call</b>	15   22.4%	15   17.2%	13   21.7%
<b>Natural Condition</b>	0   0%	2   2.3%	0   0%
<b>Other Situation</b>	0   0%	0   0%	0   0%
<b>Unknown</b>	0   0%	0   0%	0   0%
<b>Total</b>	67   100%	87   100%	60   100%

*Table 1– Emigration Canyon Call Type*

## Emigration Canyon City – 2022-2024 Dispatch and Response Times – Emergent First Due



Chart 1 - Dispatch and Response Times

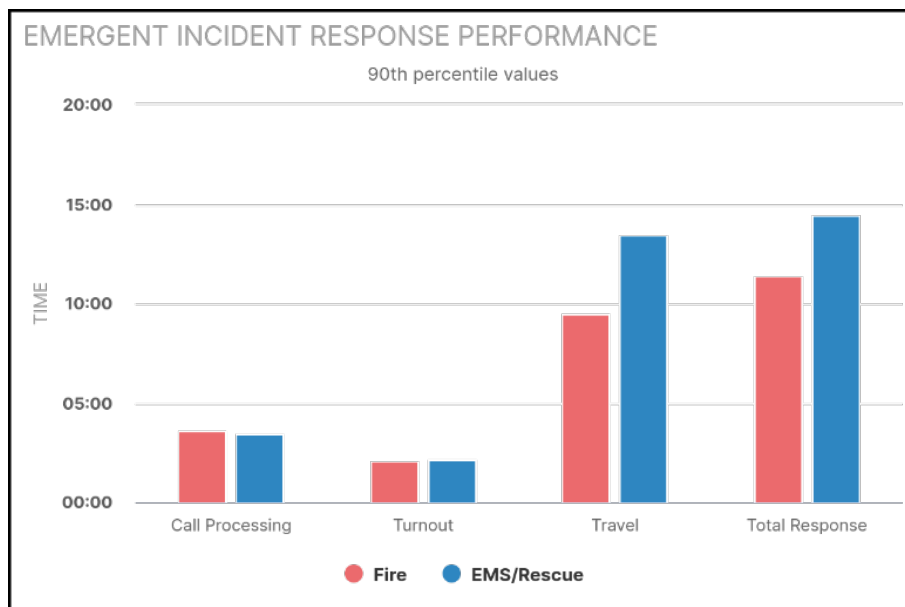


Chart 2 - Emergent Incident Response Performance

Rural	Call Processing: Fire	Turnout Time: Fire	Travel Time: Fire	Total Response: Fire	Call Processing: EMS	Turnout Time: EMS	Travel Time: EMS	Total Response: EMS
Emigration Canyon 2022	2:15	1:55	9:07	12:09	2:49	2:01	14:00	14:24
Emigration Canyon 2023	2:10	2:31	9:24	11:19	2:14	2:07	12:14	12:36
Emigration Canyon 2024	3:03	1:58	8:04	12:31	2:37	2:04	10:33	14:01
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

Emigration Canyon – 2020 Total Response Times

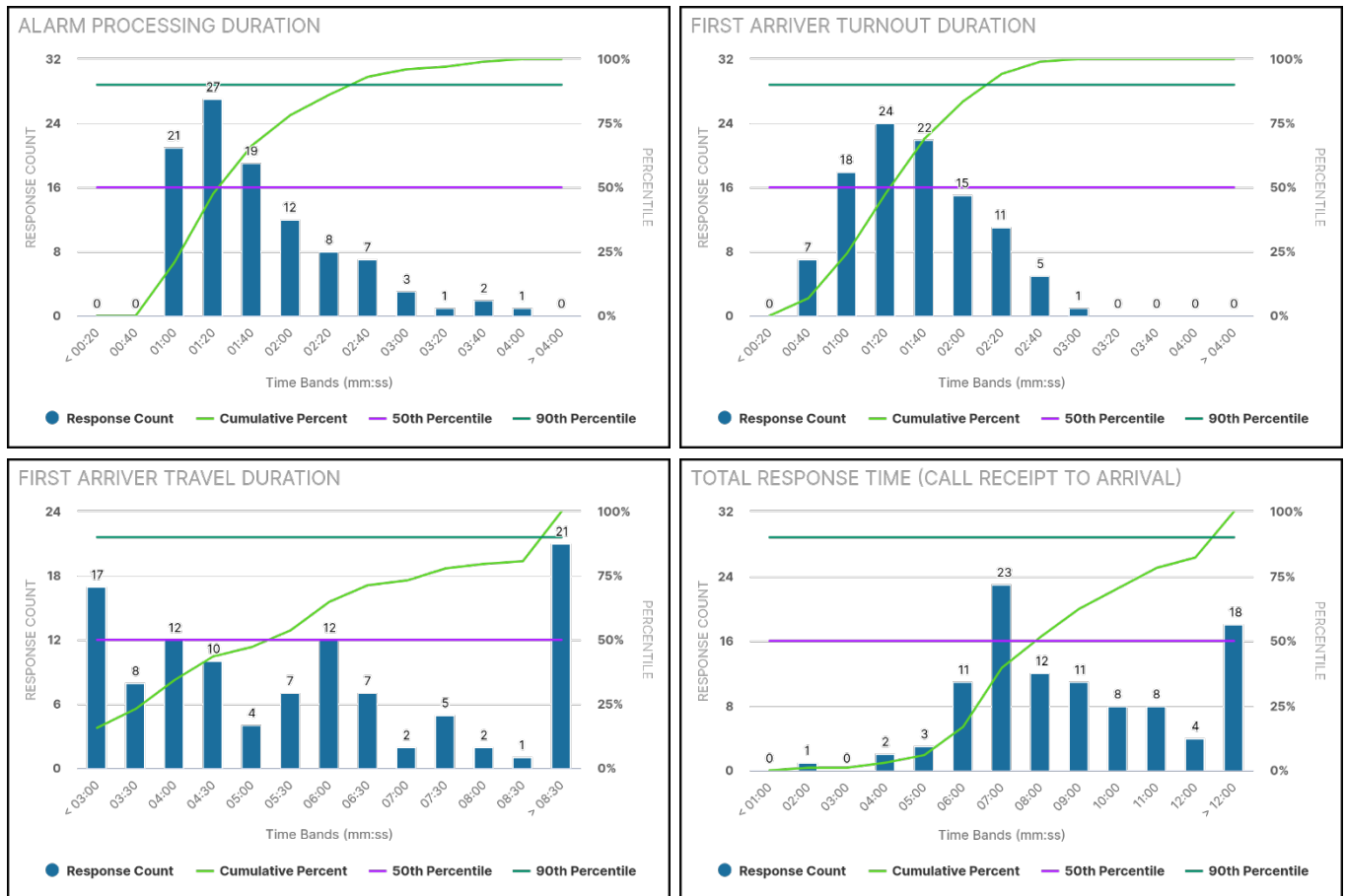


Chart 3 - Turnout and Travel Times

The charts above illustrate alarm processing, turnout, travel, and total response times for all units responding to service calls within Emigration Canyon (90<sup>th</sup> percentile).

### Emigration Canyon: 2022-2024 Incidents by Time of Day

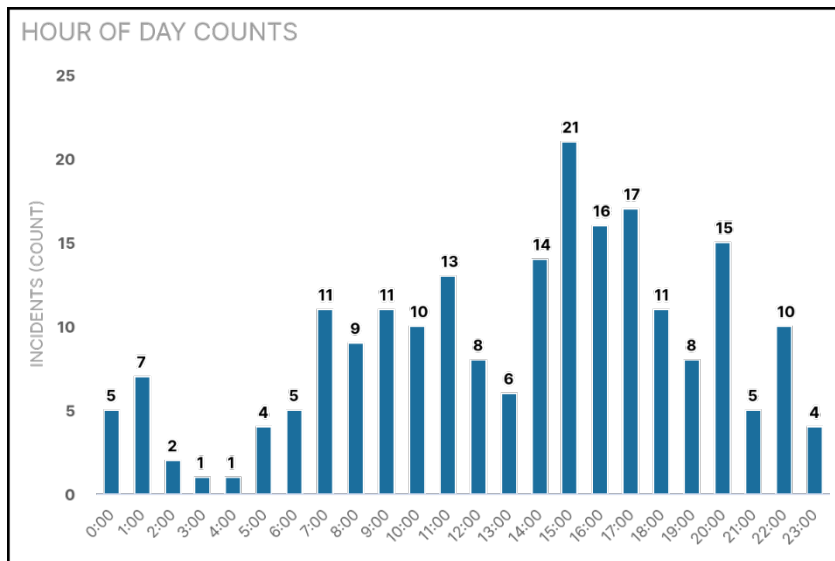


Chart 4 – Incidents by Time of Day

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

### Emigration Canyon – 2022-2024 Incidents by Day of Week

This chart presents incident volume by day of the week in Emigration Canyon and demonstrates that demand increases toward the weekend, with the highest call volumes occurring on Saturday and Sunday.

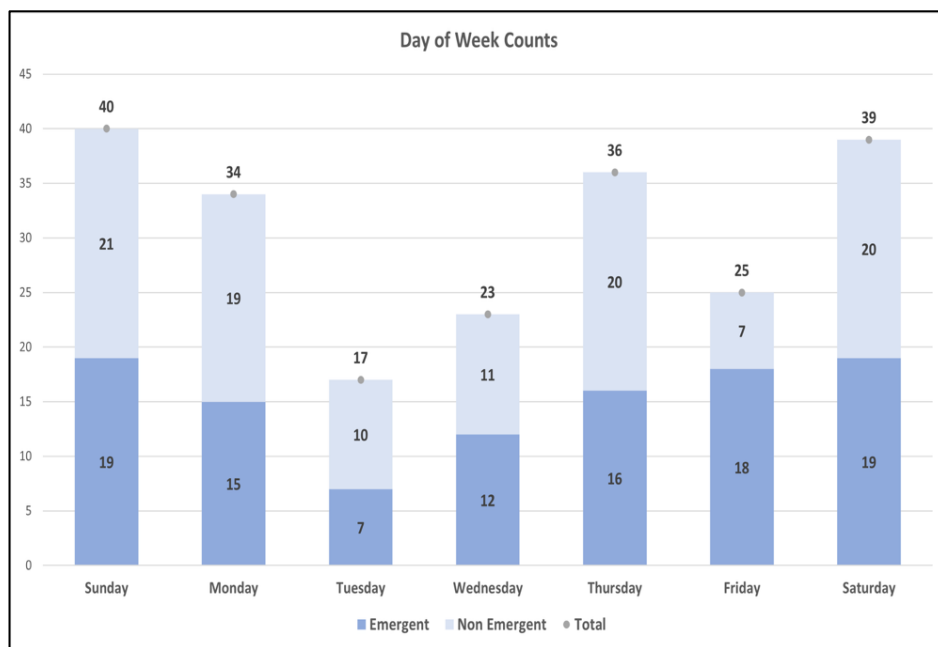


Chart 5 – Emigration Canyon Incidents by Day of Week

*Emigration Canyon – 2022-2024 EMS Calls and Ambulance Transports*

Total EMS Calls	Total Ambulance Transports	% Of EMS Calls Requiring Transport
115	57	50%

*Table 3 - EMS Calls and Ambulance Transports*

*Emigration Canyon – 2022-2024 EMS Incidents by Dispatch Type*

EMS Call Type	Incident Count
Fall	12
Unconscious	7
Seizure	6
Breathing Problem	5
Trauma	4

*Table 4 - Top 5 Medical Calls*

*Emigration Canyon – 2022-2024 Fire Incidents by Dispatch Type*

NFIRS Description	Incident Count	% of Incidents
Structure Fire	3	50.00%
Vehicle Fire	1	16.67%

NFIRS Description	Incident Count	% of Incidents
Special Outside Fire	1	16.67%
Fire, Other	1	16.67%
<b>Total</b>	6	100%

*Table 5 - Fire Incidents by Dispatch Type*

*Emigration Canyon – Building Occupancy Classification and Risk Categories*

Occupancy Classification	Low	Moderate	High	Max	Total
<b>Agriculture</b>	0	0	0	0	<b>0</b>
<b>Assembly</b>	16	0	0	0	<b>16</b>
<b>Commercial</b>	244	1	0	0	<b>245</b>
<b>Education</b>	0	0	0	0	<b>0</b>
<b>Government</b>	15	1	1	0	<b>17</b>
<b>Hazardous</b>	3	0	0	0	<b>3</b>
<b>Healthcare</b>	0	0	0	0	<b>0</b>
<b>High Rise</b>	0	0	0	0	<b>0</b>
<b>Industrial</b>	0	0	0	0	<b>0</b>
<b>Mixed Use</b>	0	0	0	0	<b>0</b>
<b>Residential **</b>	233	48	0	0	<b>281</b>
<b>Single Family Residential</b>	9	15	9	0	<b>33</b>
<b>Multi-family Residential</b>	44	99	94	0	<b>237</b>
<b>Unclassified/Storage</b>	105	3	0	0	<b>108</b>
<b>Utility and Miscellaneous</b>	0	0	0	0	<b>0</b>
<b>Total</b>	<b>669</b>	<b>167</b>	<b>104</b>	<b>0</b>	<b>940</b>

**\*\* 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*

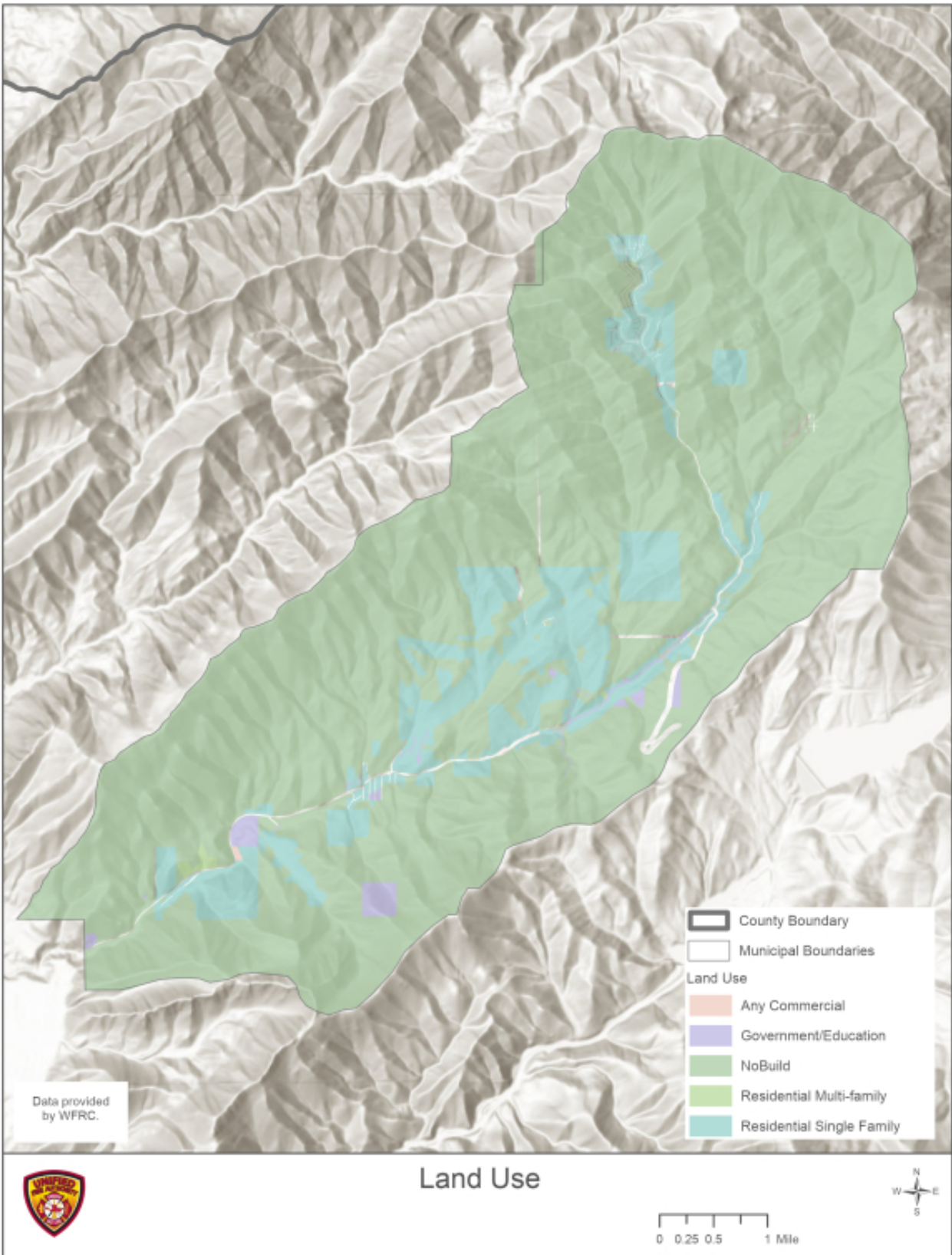
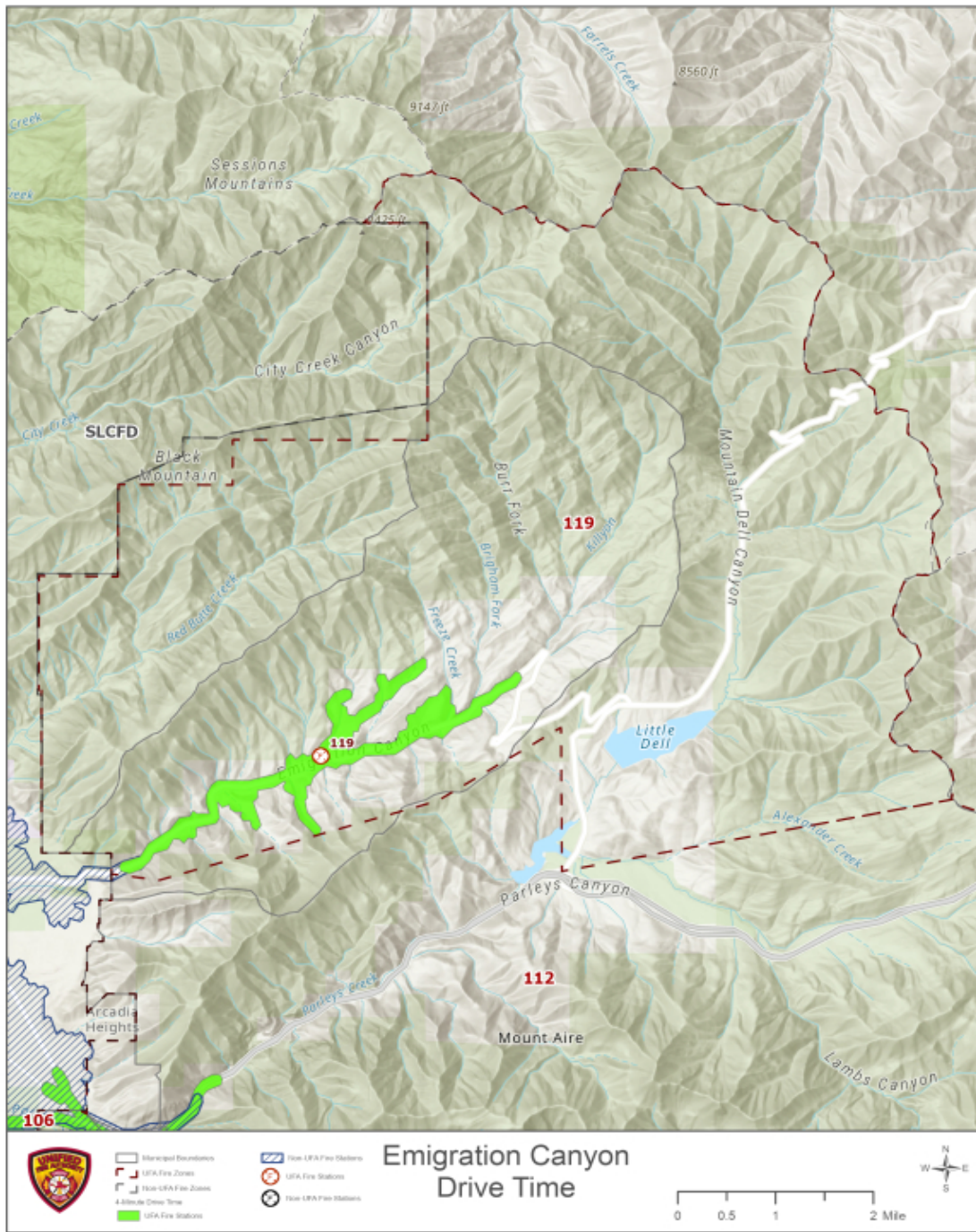


Image 1 - Land Use



**Four Minute Response Times - UFA and Non-UFA Stations**

September 2022

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

### Emigration Canyon – First Arriver Travel Times

The following maps demonstrate the 90<sup>th</sup> 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 (90<sup>th</sup> percentile) from notification of the alarm to the arrival of the first arriving apparatus — not an adopted standard by UFA. In 2024, within Emigration Canyon, the 90<sup>th</sup> percentile drive time is 9:31 for fire and 13:09 for EMS, or a combined 90<sup>th</sup> percentile drive time of 11:46.

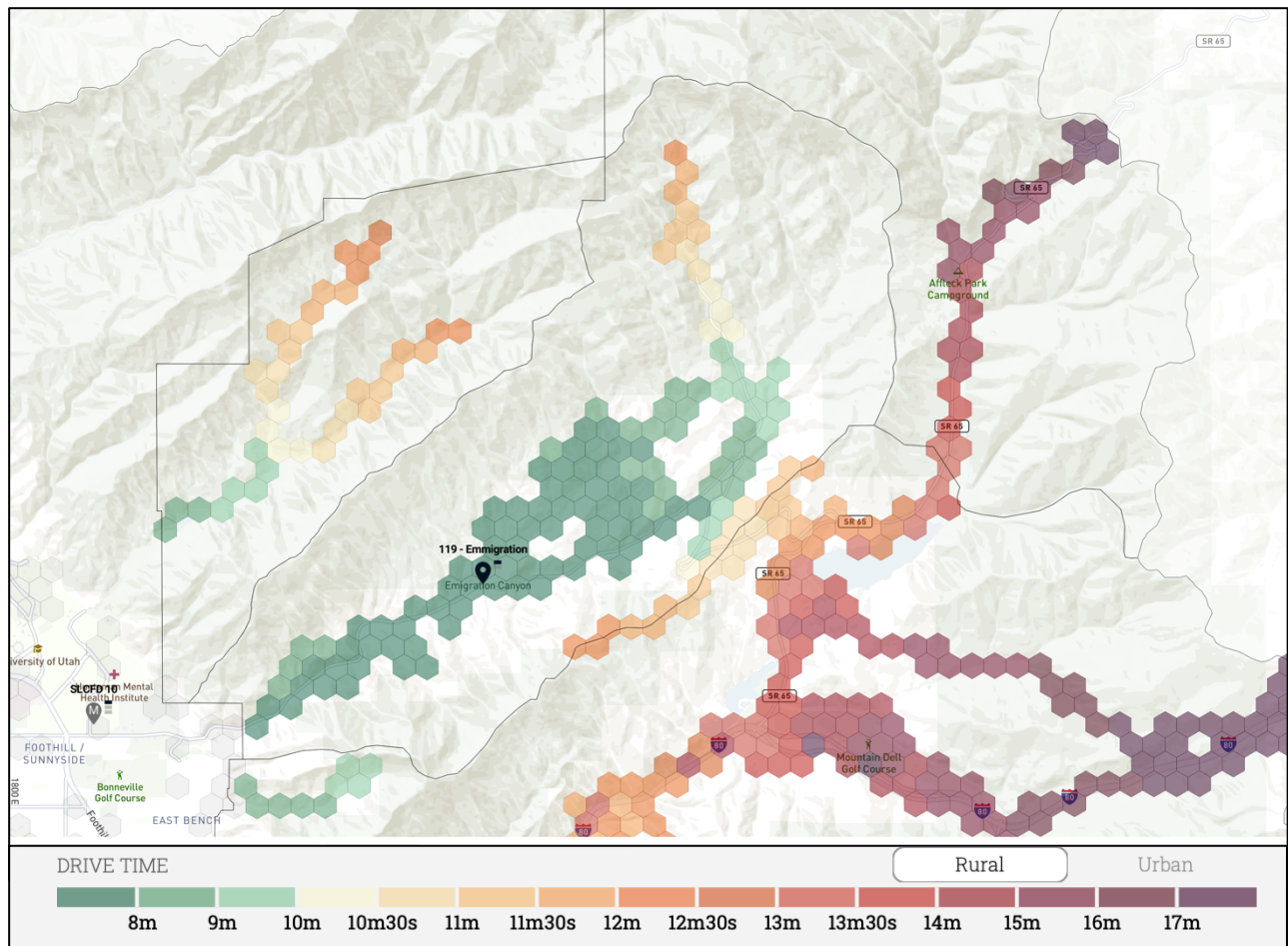
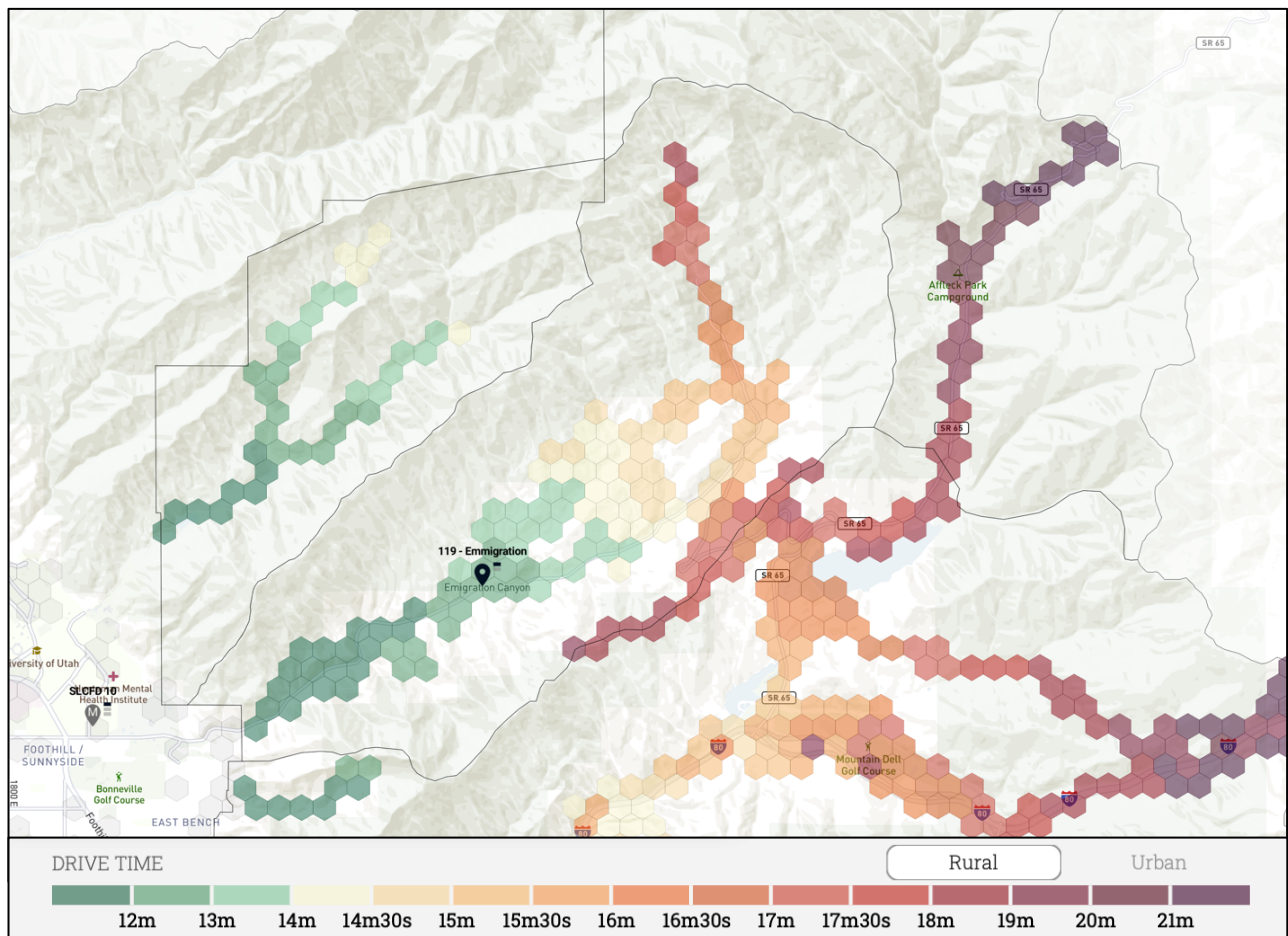


Image 3 - Emergent Response Times - All Aid

### *Emigration Canyon – 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 (90<sup>th</sup> 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 12:56.



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

### Emigration Canyon – 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 force response. This map's drive times (or travel times) are based off the current NFPA 1710 standard of ten minutes and 10 seconds (90<sup>th</sup> 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 14:16.

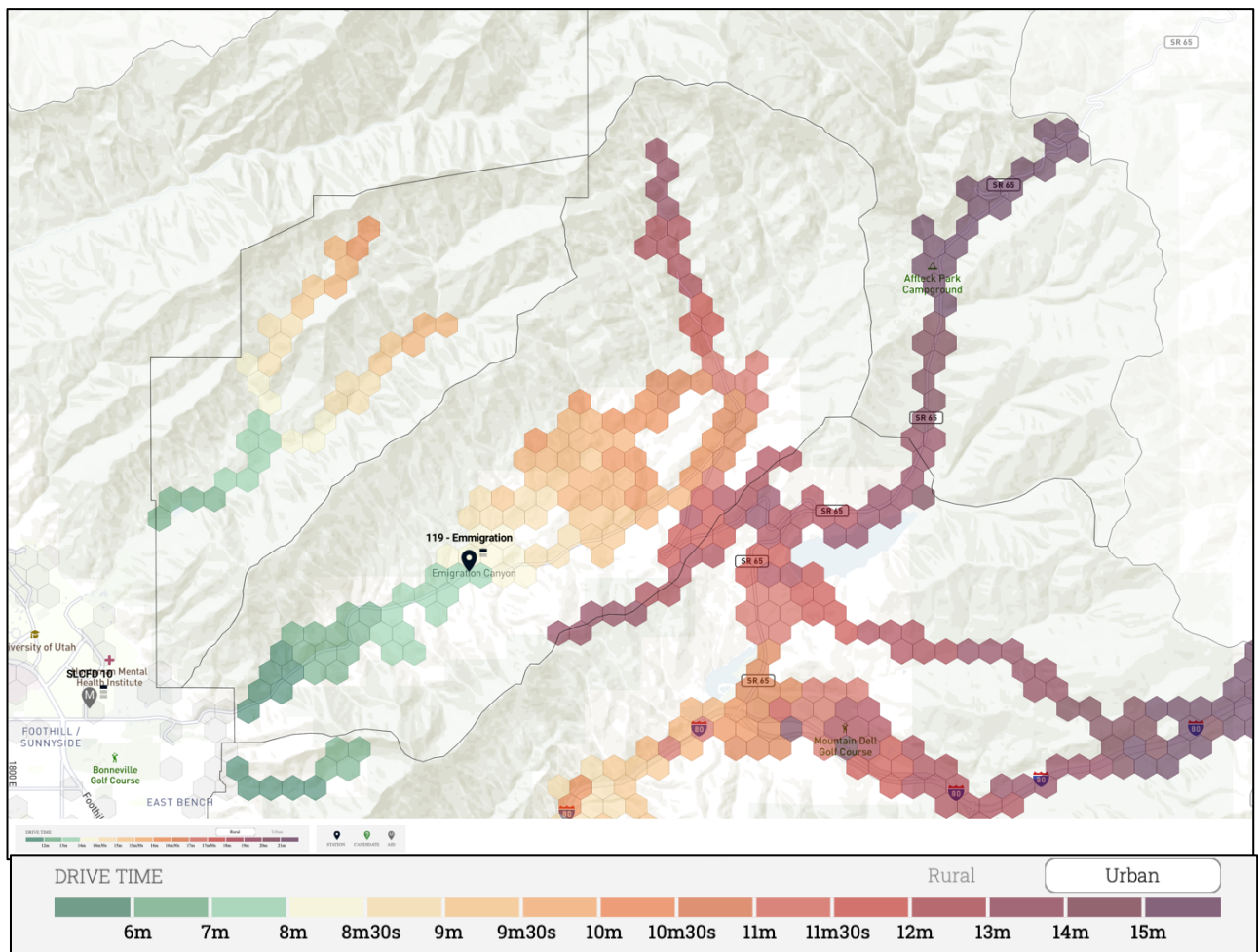


Image 5 - Commercial Fire Effective Response Force (28 FF)

## Emigration Canyon 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
Low	Low	Low	Low	Low	Mod	High	Low	Low	Low	Low	Low

Table 7 – Emigration Canyon Hazard Matrix

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

### Infrastructure – Transportation

The primary roadway that runs through Emigration Canyon Road, which runs east/west between State Road 186 and I-80. There are 0 linear miles of Interstate/US Highway, 0 linear miles of State Highways, and 24 total linear miles of roadway. Emigration Canyon is in the low-risk category for road infrastructure.

### Infrastructure – Water

There are four water districts within Emigration Township. The Emigration Improvement District, Spring Glen Water Company, Pinecrest Pipeline Operating Company, and the Salt Lake City Water Department. The Salt Lake City Water Department that covers from the west end of the canyon up to the Mary field Drive area and the Emigration Improvement District covers the rest of the canyon.

### Infrastructure – Dams

There are two identified dams within Emigration Township. Emigration is in the low-risk category for dam infrastructure.

### Natural Hazards

Within Emigration Township, there are low concerns with avalanche areas, which places it in the low-risk category for avalanches. There are no identified fault lines that run through the city. Emigration 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 Emigration Township, there are an estimated 45 URM's, which constitutes about 0.18% of the overall URM's within UFA's response areas. Emigration is in the moderate-risk category for unreinforced masonry.

### Wildland Urban Interface

There is high risk of urban interface fires within Emigration Township and within Emigration Canyon. One of the primary hazards is the lack of egress routes going out of the canyon. Emigration is in the high-risk category for Wildland Urban Interface.

### Hazardous Materials / Tier II Sites

There are 3 identified HazMat/Tier II Sites within Emigration Township, which is in the low-risk category.

### Hospitals

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

### Schools

Emigration Canyon has zero elementary schools, zero middle schools, and zero high schools within city boundaries, which places it in the low-risk category

### Target Hazards – Structures

Some of the target hazard occupancies/areas in Emigration Canyon include:

- Pinecrest Community – Access/Egress
- Killion Canyon Community – Access/Egress
- Sunnydale Community – Access/Egress
- Chevron Pipeline
- Citygate Pipeline
- Emigration Canyon Road is an alternative to I-80 when I-80 is closed for various reasons

*Life and Property Loss*

From 2022-2024, there have been zero fatalities attributed to fire. There has been a total estimate of \$40,800.00 of property loss and a total estimate of \$5,659.00 of content loss due to fire.

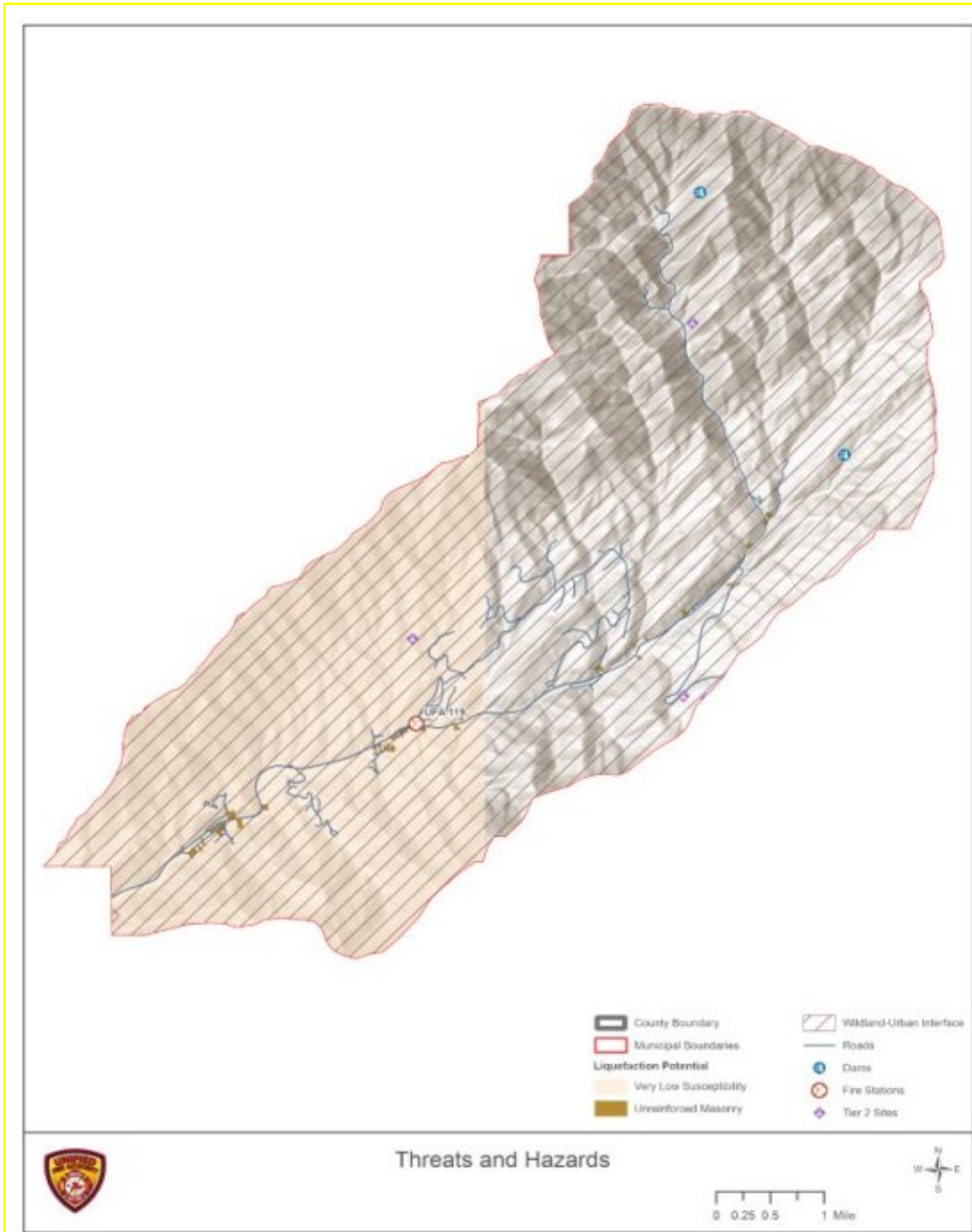


Image 6 - Threats and Hazards

