# Camp Williams

# **Risk Assessment**

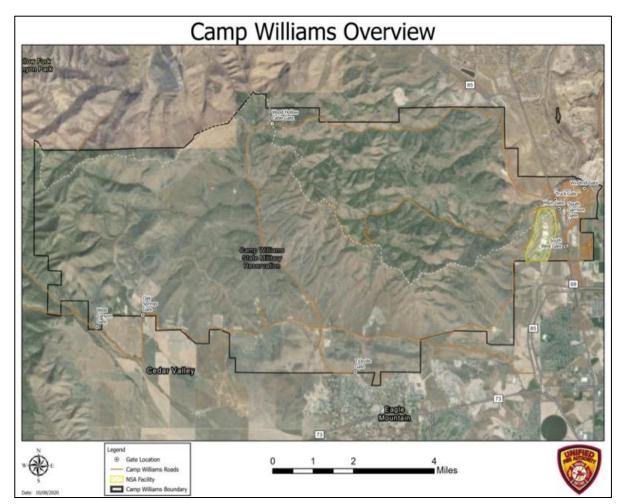






#### **Camp Williams Planning Zone**

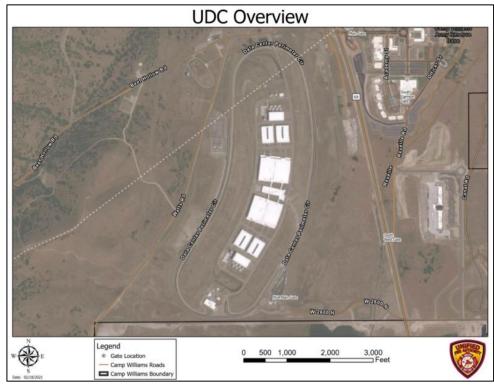
UFA has one wildland response station within Camp Williams (CW). Camp Williams is a military instillation for the Utah National Guard that splits across both Salt Lake and Utah Counties and is over 47 square miles in area. CW contracted with UFA after a large fire started on CW property and extended into the City of Herriman. Station 127 is located at 17800 Camp Williams Road, Camp Williams and houses the Camp Williams Fire Management Officer (FMO), the Assistant FMO (AFMO) and a seasonal handcrew. Camp Williams is located in Battalion 12. CW generally works closely with CW Range Control for any on-base wildland fire responses. Camp Williams also includes administration buildings, mess halls, classrooms, and a complex of warehouses, workshops, and maintenance facilities and is a national training center that hosts over 25 active munition ranges.



Map 86 - Camp Williams Overview

#### Utah Data Center Overview

The Utah Data Center is a one million squarefoot building which contains а 100,000 square foot Tier III data center. The remaining 900,000 square feet is for technical used support and administrative space. The entire complex has over 20 buildings and includes water facilities. treatment chiller plants, electric



Map 87 - Utah Data Center Overview

substation, fire pump house, warehouse, vehicle inspection facility, visitor control center, and 60 diesel-fueled emergency standby generators and fuel facility for a three-day power backup capability. This occupancy poses significant response risks and includes fire, medical, hazmat and technical rescue potential.

UFA has one station within the Camp Williams Planning Zone covering a total of 47 square miles with a transient population due to it being a military installation. UFA responded to 29 calls for service in 2020.

Planning Zone	Population	Population Percentage of UFA	Square Miles	Population Density per Sq Mile	Classification
Camp Williams	Transient (Military Installation)	0	47	N/A	Wilderness

#### Camp Williams Station Information

#### Station 127 information:

- Owner UFSA
- Address 17800 Camp Williams Road, Building 2200
- Staffing and Apparatus –
- Wildland Fire Management Officer
  (1 person, Full Time)
- Assistant Fire Management Officer
  (1 person, Full Time)
- Type 3 Engine (4 handed, seasonal)
- Type 4 Engine (4 handed, seasonal)
- Type 6 Engine (2 handed, seasonal)
- Type 1 Water Tender (crossstaffed)
- Type 1 Tactical Water Tender (cross-staffed)
- Type 6 Engine (2 handed fuels crew)
- Crew Carrier (6 handed fuels crew)



Image 5 – Camp Williams Station 127

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

Surrounding fire stations and fire departments that are within an eight-minute response to Camp Williams are:

- UFA Station 251 (Eagle Mountain), with a three-person medic engine and a jump medic ambulance
- UFA Station 252 (Eagle Mountain), with a four-person medic ladder and a twoperson peak load medic ambulance
- Bluffdale Station 91, with a two-person medic engine and a two-person medic ambulance
- Bluffdale Station 92, with a two-person medic engine and a two-person medic ambulance
- Saratoga Springs Station 261, with a two-person ladder and a two-person medic ambulance

#### Camp Williams – Incidents by Dispatch Type Found

The following data is what the initial dispatch type was. When fire companies arrive on scene, the final situation found could be different than what was originally dispatched, including a reclassification of a call type from one to another. Cancelled calls occur if the company is cancelled en route to a call and never arrives on scene, which then changes the dispatch type to an NFIRS 611 call type.

	CY 2020	CY 2019	CY 2018
Fire Suppression	3	6	1
WL Fire Suppression	6	7	5
EMS	6	0	5
Hazardous Materials	0	1	0
Service Calls	0	0	0
Good Intent	14	6	12
False Calls	0	0	1
Other (Misc., Flood, Overpressure)	0	0	0
Total	29	20	24

Cancelled	17	4	11				
Overall Total	46	24	35				

Table 61 – Camp Williams Call Types

#### NFPA 1710

The National Fire Protection Association is an international nonprofit organization that is devoted to eliminating death, injury, property, and economic loss due to fire, electrical and related hazards. The NFPA makes recommendations on over 300 codes and standards. NFPA 1710 recommendations are based off 90<sup>th</sup> percentile times.

#### **♀**– In Other Words…

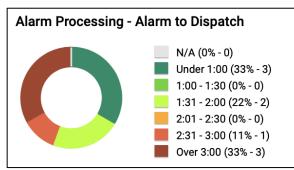
If a value is in the 90<sup>th</sup> percentile, it means the value is better than 90% of all other values in the dataset. In other words, it is within the top 10% of the values.

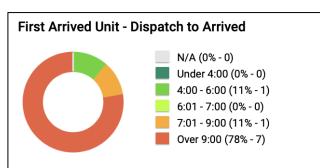
NFPA 1710 encompasses suggested standards for full-time fire departments and recommends the following times (all of which are at the 90<sup>th</sup> percentile): alarm processing – 64 seconds; turnout time for EMS responses – 60 seconds; turnout time for fire responses – 80 seconds; first arriver apparatus – 240 seconds (4 minutes); initial full-alarm assignment for low and medium hazard responses – 480 seconds (8 minutes); or initial full-alarm assignment for high hazard/high-rise responses – 610 seconds (10 minutes 10 seconds). The total response times are the cumulative totals of call processing time, turnout time, and travel time. NFPA 1710 recommends a total response time of 6:24 for the first arriving apparatus for fire and 6:00 for the first arriving apparatus for EMS.

#### ₹ – Of Note…

NFPA 1710 response times have not been adopted by the UFA Board. One of the important elements of the community risk assessment and standards of cover is to identify current 90th percentile times (current baselines) within UFA and to identify realistic benchmarks for the UFA Board to consider for adoption.

#### Camp Williams – 2020 Dispatch and Response Times



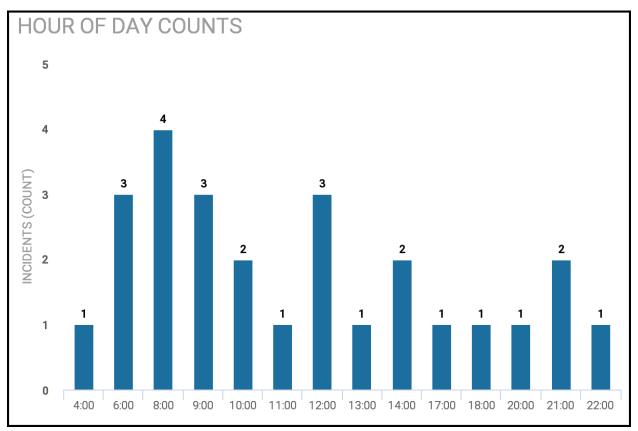


Rural	Call Processing: Fire	Turnout Time: Fire	Travel Time: Fire	Total Response: Fire	Call Processing: EMS	Turnout Time: EMS	Travel Time: EMS	Total Response: EMS
Camp Williams	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
UFA Urban 2018-2020	2:16	2:39	7:36	10:34	1:47	2:32	6:29	9:18
UFA Rural 2018-2020	2:32	3:05	15:08	19:09	1:56	2:50	14:45	17:45
NFPA 1710	1:04	1:20	4:00	6:24	1:00	1:00	4:00	6:00

#### Camp Williams – 2020 Total Response Time

Table 62 – Camp Williams 2020 Response Times, 90th percentile values

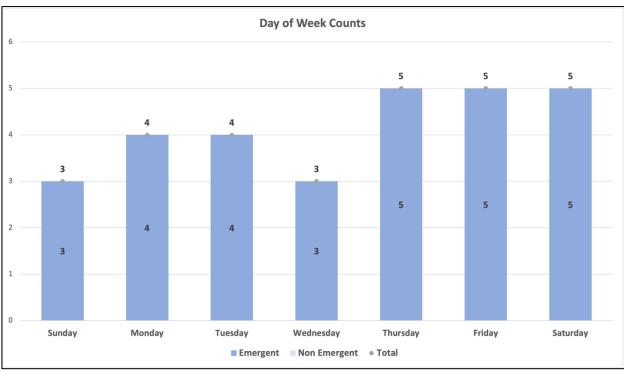
Of note: There were not enough incidents within VECC to identify 90<sup>th</sup> percentile times. Most of Camp Williams' call volumes are split between calls to the Utah Data Center and Wildland incidents out on Camp Williams property.



#### Camp Williams – 2020 Incidents by Time of Day

Chart 22 – Brighton 2020 Incidents by Time of Day

The above table demonstrates the incidents by time of day and the time of greatest demand within Camp Williams for all service calls. This chart illustrates that the greatest demand for service delivery is at 8:00 AM and is steady throughout the day.



#### Camp Williams - 2020 Incidents by Day of Week

Chart 23 - Camp Williams Incidents by Day of Week

This chart demonstrates the call volume based on the day of the week, with the peak volume for all calls in Camp Williams occurring towards the weekends.

#### Camp Williams – EMS Calls

difference.

EMS calls are filtered by final disposition codes and this data is taken from VECC and determined by the patient acuity at the time of call termination. Often times the EMS calls identified from final disposition are different than the number of EMS calls that were initially dispatched due to one being the initial call type, and one being what call type the call was closed as by responding fire crews.

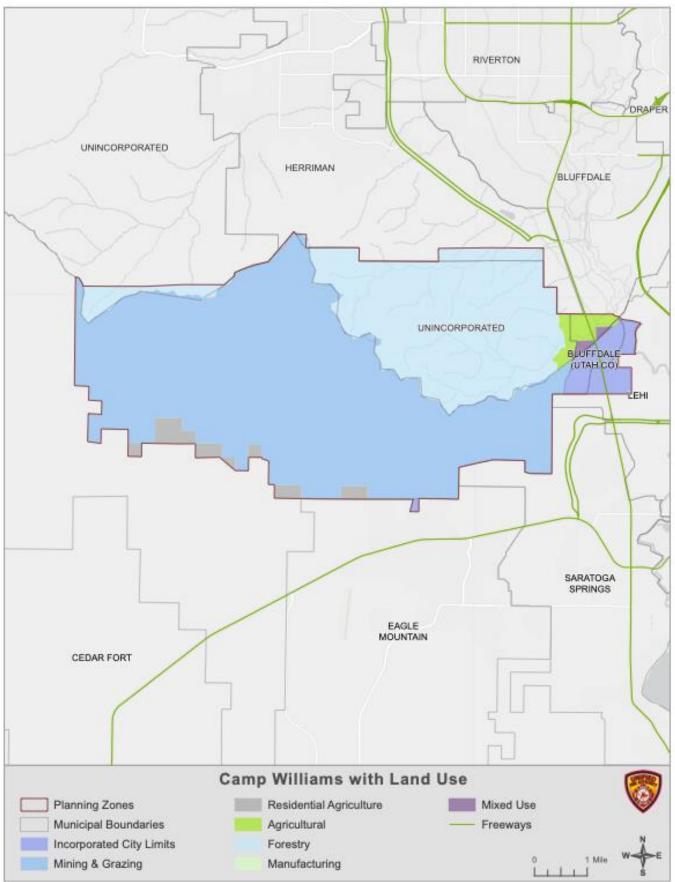
	CY 2020	CY 2019	CY 2018							
ALS Transports	4	0	0							
BLS Transports	1	0	0							
Scene Release	0	2	0							
Public Assistance	0	0	0							
EMS Total Calls	EMS Total Calls 5 2 0									
Note: There is possibly a difference if you were to add all calls due to data reporting mechanisms. Public assistance calls will sometimes get duplicated with a scene release, depending on dispatch code, but those calls do not carry across to the total calls. Also, cancelled calls go into a different final disposition so the numbers in the 'Incidents by Dispatch Type' are reflective of this										

Table 63 – Camp Williams EMS Calls

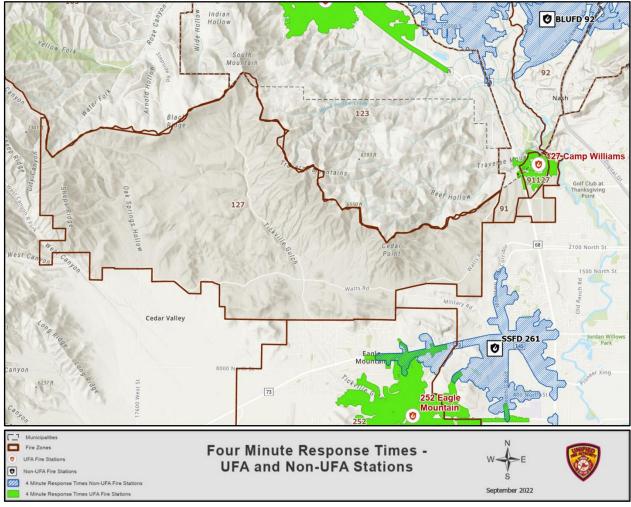
### Camp Williams – 2020 Fire Incidents by Dispatch Type

NFIRS Description	Incident Count	% of Incidents		NFIRS Description	Incident Count	% of Incidents
Structure Fire	3	33.3%		Natural Vegetation Fire	6	66.6%
	·		_	Total	7	100%

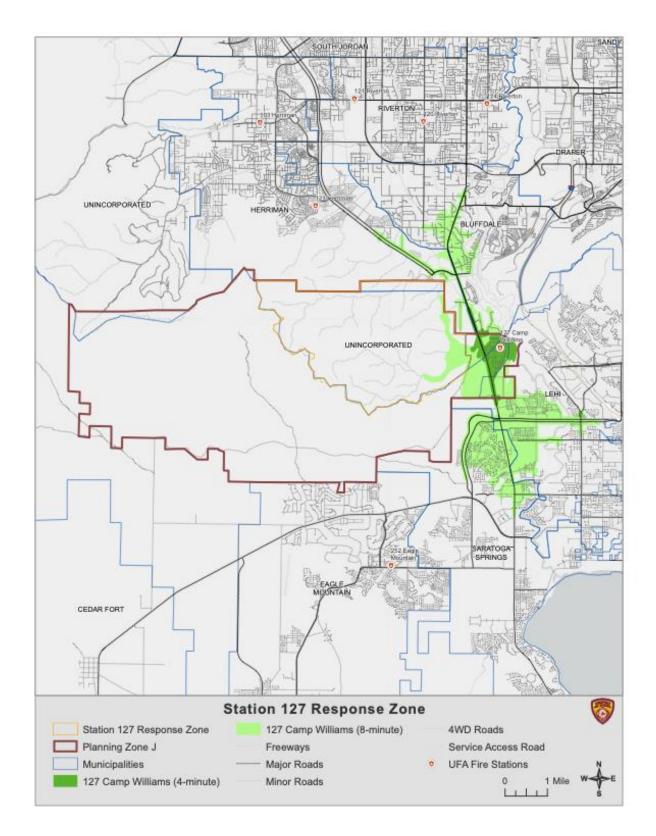
Table 64 – Camp Williams 2020 Incidents by Dispatch Type



Map 88 – Camp Williams with Land Use



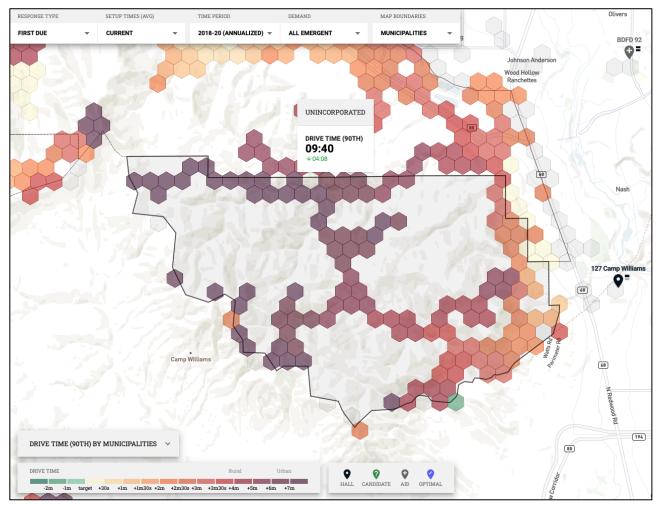
Map 89 - 4-Minute Travel Time, UFA and Aid



Map 90 - Camp Williams 4- and 8-Minute Travel Time

#### Camp Williams – First Arriver Travel Times

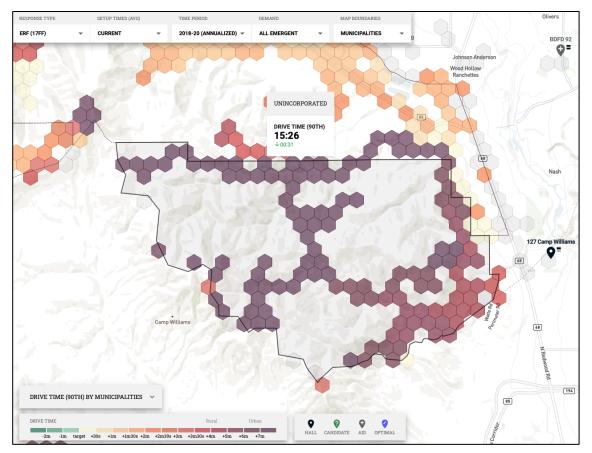
The following maps demonstrate the 90<sup>th</sup> percentile of travel times based off the last three years of historical data (2018-2020). The darker the color is, the more delayed the response, with the green and light colors demonstrating below or near target times. The darker colors on the bar within 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. UFA is currently in process of identifying benchmark and target standards to be adopted by the UFA Board of Directors. Based off predictive data, it is projected that the 90<sup>th</sup> percentile for a first arriver to arrive on scene would be 9:40.



Map 91 - Camp Williams Response Times - All Aid

#### Camp Williams – Residential Fire Effective Response Force (17 FF)

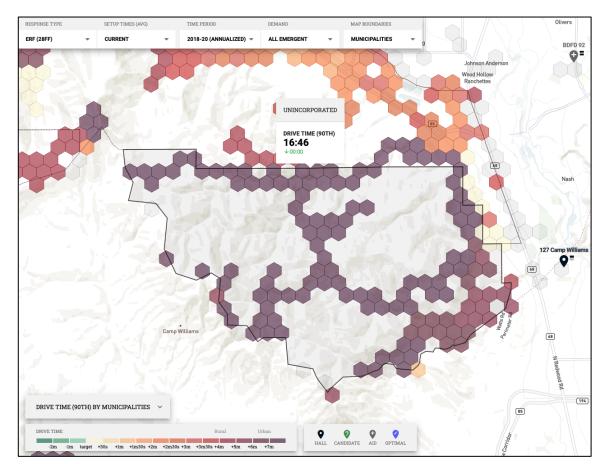
This map demonstrates the coverage of a multi-unit response to a residential fire based off all apparatus being within their station. The green to light yellow demonstrates the ability to have seventeen firefighters (a residential fire effective response force) on scene based off a residential urban 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. UFA is currently in process of identifying benchmark and target standards to be adopted by the UFA Board of Directors. Based off predictive data, it is projected that the 90th percentile for 17 firefighters to arrive on scene would be 15:26.



Map 92 – Camp Williams Response Times – Residential Fire Effective Response Force (17 ERF)

#### Camp Williams – 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. UFA is currently in process of identifying benchmark and target standards to be adopted by the UFA Board of Directors. Based off predictive data, it is projected that the 90th percentile for 28 firefighters to arrive on scene would be 16:46.



Map 93 – Camp Williams Response Times – Commercial Fire Effective Response Force (28 FF)

#### Camp Williams 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	Low	High	Low	Low	Low	Low	Low
	Table 65 – Copperton Hazard Matrix										

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

#### Infrastructure – Transportation

The primary roadway that runs through Camp Williams is State Road 68 (Redwood Road) which runs north/south from Bangerter Highway to Saratoga Springs. There are 0 linear miles of Interstate/US Highway, 1.83 linear miles of State Highways, and 55.1 total linear miles of roadway. Camp Williams is in the low-risk category for road infrastructure.

#### Infrastructure - Water

There are no water districts within Camp Williams although Camp Williams maintains its own water supply and system as well as solar and wind power generating plants.

#### Infrastructure - Dams

There are zero identified dams within Camp Williams. Camp Williams is in the low-risk category for dam infrastructure.

#### **Natural Hazards**

Within Camp Williams, there are no concerns with avalanche areas, which is in the lowrisk category for avalanche. There are no identified fault lines that run through the city (see Map 8). Camp Williams 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 Camp Williams, there are an estimated 0 URM's. Camp Williams is in the low-risk category for unreinforced masonry.

#### Wildland Urban Interface

There is high risk of urban interface fires within Camp Williams and within the surrounding Unincorporated Salt Lake County and Utah County areas directly adjacent to the municipal boundaries. One of the primary hazards is the lack of egress routes going out of Camp Williams. Camp Williams is in the high-risk category for Wildland Urban Interface.

#### Hazardous Materials / Tier II Sites

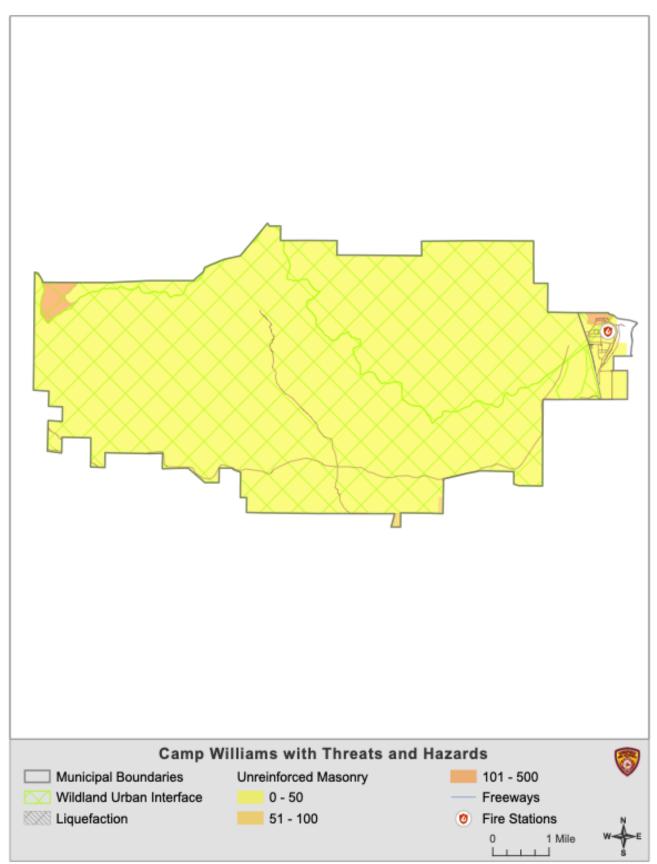
There are no identified HazMat/Tier II Sites within Camp Williams, which is in the lowrisk category.

#### Hospitals

Camp Williams has no hospitals. This places Camp Williams in the low-risk category for hospitals.

#### Schools

Camp Williams has zero elementary schools, zero middle schools, and zero high school within city boundaries, which places it in the low-risk category.



Map 94 – Camp Williams with Combined Hazards

#### Life and Property Loss

From 2015-2020, there have been zero fatalities attributed to fire. There has been a total estimate of \$0.00 of property loss and a total estimate of \$0.00 of content loss due to fire.

#### **Unified Fire Shared Services**

With a regional-response model, the Unified Fire Authority brings special services to bear when the situation calls for it, not relying on automatic or mutual aid which provides a quicker and more effective delivery of service to its residents.

#### **Battalion Chiefs**

Unified Fire Authority staffs three operational battalion chiefs (BCs) daily, in addition to a 40-hour Operations Chief (OC). These BCs and OC respond to large, complex, or expanding incidents — providing incident command, safety, and operational direction. Each BC covers an area of UFA's service area and respond to calls for service in any jurisdiction. Battalion 11 is housed out of Station 101 in Millcreek, Battalion 12 is housed out of Station 121 in Riverton, and Battalion 13 is housed out of Station 118 in Taylorsville.

#### Heavy Rescue Companies

Heavy Rescue specializes in structural collapse, confined space rescue, trench collapse rescue, vehicle extrication, machinery disentanglement, rope rescue (high angle, low angle, rigging) and rapid intervention (Firefighter Rescue). The UFA Heavy Rescue Program consists of two independent rescue companies strategically placed in UFA's jurisdiction. Station 117 in Taylorsville, and Station 121 in Riverton house our Heavy Rescue Rescue Teams.

#### Hazardous Materials (HazMat) Companies

The Hazardous Materials Teams provide an efficient, effective, and professional Hazardous Material Mitigation response. HazMat Companies respond to hazardous material releases/spills for the purpose of mitigating the release/spill. They select and use proper specialized chemical personal protective equipment dependent on the nature of the incident. The HazMat Program consists of two independent HazMat companies strategically placed in UFA's jurisdiction. Station 124 in Riverton, and Station 126 in Midvale house our HazMat Teams.

#### Water Rescue Teams

UFA has swift water and ice rescue capabilities. These companies respond to victims recreating in our swift canyon rivers and our lakes and reservoirs. Station 116 in Cottonwood Heights, Station 117 in Taylorsville, Station 121 in Riverton, and Station 123 in Herriman house companies with water rescue capabilities.

#### Wildland Division

UFA's Wildland Division provides highly trained and experienced wildland fire and allrisk response resources to local, state, and federal incidents. The Wildland Division oversees the training and certification of UFA personnel for response to wildland fires and all-hazard incidents. We also work with UFA Communities to educate residents on wildfire preparedness and provide mitigation services to reduce the risks of wildfire. UFA has a special capability where a Duty Officer is able to act as the Fire Warden within UFA's jurisdictions, allowing the ordering of resources much more quickly than having to rely on a Fire Warden that may or may not be readily accessible. Station 103 in Herriman currently houses the Duty Officer.

#### **Investigations Division**

Arson and Explosive related incidents are considered two of the most dangerous criminal activities that threaten our citizens. The need exists to protect the citizens of our jurisdiction from loss of life and property by reducing the crime of arson, arson-related crimes, improvised explosive devices (IEDS) and the prevention of future violent crimes. The Investigations Division addresses this need by establishing a sound foundation of effective enforcement, focusing on the apprehension of the offender, while in partnership with other Local, state and federal law enforcement agencies. The team utilizes highly-trained Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) certified K-9's that assist with accelerant and explosives detection.

#### Urban Search & Rescue

A FEMA Urban Search and Rescue Task Force is a team of individuals which serve as a resource for disaster response at local, state, and federal levels. It is comprised mainly of firefighters but includes structural engineers, medical professionals, canine/handler teams and emergency managers with highly specialized training in urban search and rescue environments.

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Utah Task Force 1 (UT-TF1) is one of 28 Type I, Federal Urban Search & Rescue (US&R) Task Forces in the United States. This program brings a highly trained, multihazard Task Force that is especially designed to respond to a variety of emergencies/disasters including earthquakes, hurricanes, tornadoes, floods, terrorist acts and hazardous material releases. Fire department personnel that are task force members receive specialized training and skills that directly benefit Unified Fire Authority.

#### Salt Lake County Emergency Management

The Salt Lake County Division of Emergency Management serves our citizens by directing and coordinating resources for disasters and emergencies through preparation, planning, mitigation, response, and recovery. The Salt Lake County Emergency Coordination Center is activated and manned during any event-from small-scale to large-scale occurrences-to disasters both natural and man-made that can or have exceeded the resources of any particular jurisdiction. Currently, the Salt Lake County ECC assists and obtains resources for the 22 jurisdictions located within the Salt Lake Valley. Salt Lake County EM assists these jurisdictions through the activation of 15 Emergency Support Functions (ESFs) filled by employees from a multitude of backgrounds. The ESF employees have authority throughout Salt Lake County to fill and order additional support for the operations occurring in the field until the impacted jurisdiction can return to their normal operations and functions. The Emergency Management Division is committed to keeping the public safe through community outreach, training, dissemination of important public information, training of staff and the creation of a more resilient community through mitigation, preparation, response, and recovery. The ECC has been activated for many events such as Child Abduction Response Team (CART) Deployments, wildland fires such as the Rosecrest and Machine Gun fires, flooding, severe weather events, earthquakes, civil unrest, the COVID-19 pandemic, Line of Duty Deaths (LODD), and many other events.

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## **Unified Fire Authority**

3380 South 900 West Salt Lake City, UT 84119