

## WHITEFISH SATELLITE FIRE STATION

A fire station with apparatus alone does not provide fire protection. You need firefighters. One plan is to have Resident Volunteers who live dorm style at a fire station.

Requirements for a proposed satellite fire station:

- Three Bay fire station to house a fire engine, water tender, and an ambulance.
- Six Bedrooms for a volunteer live-in program (two on-duty each day) when we can no longer get volunteers, the bedrooms would be used by career staff.
- Appropriate kitchen, laundry, bathrooms, office, and day-room spaces.
- Either a fire hydrant or a 30,000-gallon cistern for a tender refill site.

Very rough cost estimates to build and equip a satellite fire station:

Land Acquisition =	\$ 400,000.00
Building (\$200/sq ft?)	\$ 1,250,000.00
Well / Septic	\$ 25,000.00 (or hook to sewer services)
Cistern	\$ 50,000.00 (or hydrant tied to a water system)
Miscellaneous (10%)	\$ 172,500.00
Fire Engine	\$ 750,000.00 (25-year max life)
Water Tender	\$ 450,000.00 (25-year max life)
Ambulance	\$ 200,000.00 (15-year max life)
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	<b>\$ 3,297,500.00</b>

Annual satellite fire station operating cost estimates:

Electric	\$ 2,000.00
Heating	\$ 2,500.00
Insurance	\$ 2,500.00
Snow/Lawn	\$ 2,500.00
Maintenance	\$10,000.00
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	<b>\$ 19,500.00</b>

Per firefighter uniform and PPE coats:

Station Uniforms	\$ 1,500.00
Structural Fire PPE	\$ 3,400.00
Wildland Fire PPE	\$ 1,750.00
Tech Rescue PPE	\$ 350.00
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	<b>\$ 7,000.00 x 6-firefighters = \$ 42,000.00</b>

ONE career firefighter costs about \$100,000.00 per year (salary & benefits).

Whitefish firefighters work an average 53-hour work week, and at that rate, it would take 3.2 firefighter equivalents to cover one position for 24-7-365.

## ISO (Insurance Services Office)

ISO is part of Verisk Analytics, Inc., a company that evaluates risk for its customers. In this case, the customers are numerous different property insurance companies.

An area's ISO fire rating determines how well the local fire department can protect the community or a home. Most insurance companies use this score to help set insurance rates. State Farm Insurance does not use ISO's services, however, the algorithms for measuring risk and setting rates use much of the same data.

The ISO fire rating is a score from 1 to 10:

1 being the best rating.

10 means the area does not meet ISO's minimum requirements.

ISO's scoring is broken down:

50% based on the local FD's staffing, training, apparatus, and equipment.

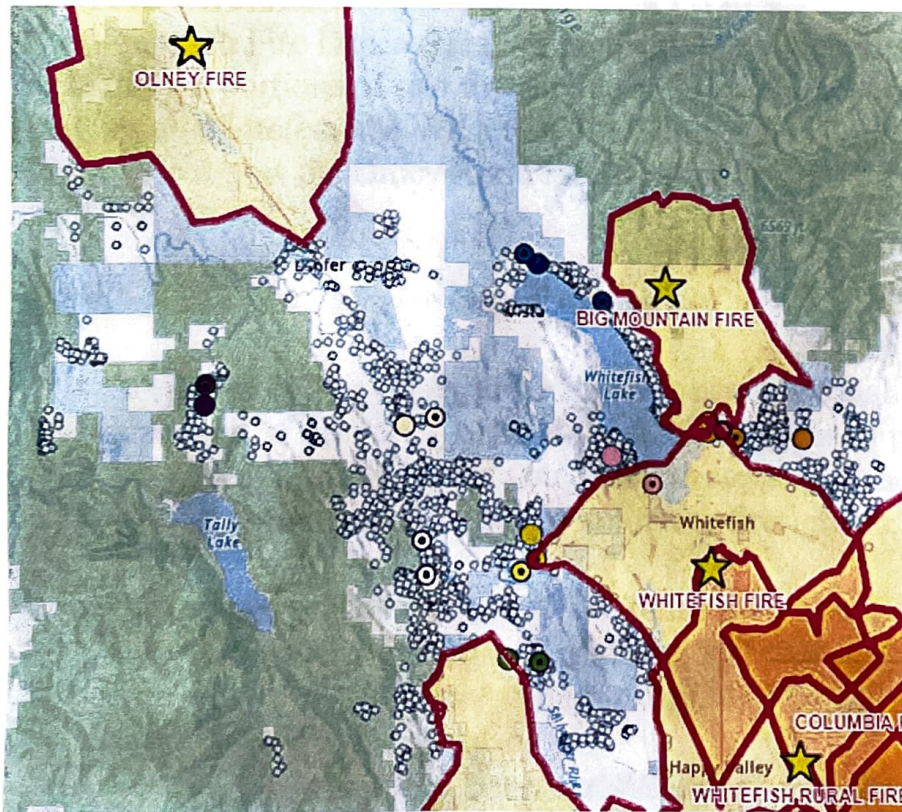
40% based on firefighting water supply.

10% based on the area's 911-system.

Any area more than five road miles from a fire station is automatically rated a 10.

Homes with an ISO score of 10 may still be able to find insurance, however, they:

- Often pay a much higher annual rate for insurance.
- Often only have one insurance company bidding for their business.
- May have a harder time securing a mortgage.



A quick look at the areas covered by the Whitefish FD shows a number of homes that are not within five road miles of any fire stations.

The map shows not only the areas covered by the two Whitefish FD stations but also the Olney, Big Mtn., and West Valley Fire Departments.

The obvious lack of coverage was the catalyst for a study completed by the Kearney Student Lab Program at Carnegie Mellon University in 2020.

## **Governance - Montana Fire Service**

### **STATE FIRE ORGANIZATION TYPES**

In the State of Montana, there are a number of different ways to organize local fire protection, and they are all described in

Montana Code Annotated – Title 7, Local Government – Chapter 33, Fire Protection:

Part 41, Municipal Fire Departments.

Part 21, Rural Fire Districts.

Part 24, Fire Service Areas.

**Municipal Fire Departments** are controlled by a city's governing body and funded as part of the city budget derived from property tax.

**Rural Fire Districts** are typically governed by an elected board of trustees and are funded based on a property tax. Rural fire districts typically form their own fire department but may contract with a municipality for fire protection.

**Fire Service Areas** are established by the board of county commissioners in unincorporated areas, typically without the needed property value base to support their own fire district. Fire service areas can be governed by the county commissioners or an elected board of trustees and funded through a fixed fee per residential structure equivalent, regardless of the overall property value.

### **WHITEFISH AREA FIRE ORGANIZATIONS**

The Whitefish Fire Department is a municipal fire department that also provides fire protection to portions of two fire service areas, and whose ambulance district encompasses the City of Whitefish, the Whitefish Fire Service Area, portions of the Flathead Fire Service Area plus the Onley Rural Fire District.

Whitefish Area Fire Service Organizations are:

**The City of Whitefish** provides governance through a City Manager. In addition to a portion of the City's general fund, the Whitefish Fire Department collects an additional 24-mils from a voted levy to support 24-hour/day coverage by career firefighter/paramedics and our volunteer firefighters.

Web pages part of the City of Whitefish's Website:

<https://www.cityofwhitefish.org/207/Fire-Ambulance>

<https://www.cityofwhitefish.org/243/Fire-Service-Area>

Whitefish FD's Facebook page:

<https://www.facebook.com/Whitefish-Fire-Department-531507033944364>

**The Whitefish Fire Service Area** (WFSA) has, since its inception, contracted for fire protection from the City of Whitefish. Ambulance service is not part of this contract. The WFSA is governed by an elected board of trustees.

WFSA website:

<https://www.whitefishfireservice.org>

**The Flathead Fire Service Area** (FFSA) receives fire protection from the closest established fire department, and the Whitefish Fire Department does provide fire protection to a portion of this area. The FFSA has no firefighters, facilities, or apparatus. The Flathead County Commissioners govern the FFSA through an appointed board.

FFSA website:

<https://flathead.mt.gov/fireservice/>

**The Olney Rural Fire District** is a small fire district northwest of Whitefish that also covers a large portion of the FFSA. Olney FD no longer provides ambulance service, so the Whitefish FD's ambulance has added this huge area to its primary response area. The Olney Rural Fire District has an elected board of trustees.

Olney FD's Facebook page:

<https://www.facebook.com/OlneyFireAmbulance/>

**The Big Mountain Rural Fire District** is a small fire district northeast of Whitefish that also covers a portion of the FFSA. Big Mtn FD does provide ambulance service. While no date has been set, the City of Whitefish's Extension of Services Plan does talk about the possible annexation of Big Mountain. The Big Mtn Rural Fire District has an elected board of trustees.

Big Mountain FD's Facebook page:

<https://www.facebook.com/Big-Mountain-Fire-and-Rescue-106431074721322/>

Within Flathead County there are:

three Municipal Fire Departments

seventeen Rural Fire Districts

two Fire Service Areas

## **WFD – Study by Carnegie Mellon Kearney Student Lab Program**

*The Whitefish Fire Department (WFD) applied for and was accepted as a real-world project for graduate students at Carnegie Mellon University.*

The project was broken down into a number of steps:

- 1- Using GIS data, identify all structures in the WFD response area that are not currently within five road miles of a fire station.
- 2- Using GIS data, determine the optimum locations (nodes) for future satellite stations with the goal of covering as many properties as possible within the WFD response area. This process did not consider the availability of suitable properties but did use the existing road network to identify possible node locations. Further work would be needed to locate available and appropriate land in each area.

Due to our existing road network and our topography, including Whitefish Lake, Stillwater River, and the railroad, more nodes were identified than originally imagined.

- 3- Determine possible insurance premium savings if an ISO score could be improved from a score of 10 to a 5 with the addition of a fire station within five-road miles of a property. While the insurance industry is very secretive about their algorithms for setting rates, the students were able to use the following information sources:
  - a. Greg Knuffke of Tamarack Insurance Group.
  - b. An insurance premium program called EzLyx.
  - c. A survey of homeowners in the area.
- 4- Combine the node locations with the possible insurance savings projected for homes that would be protected by a new fire station at the selected node location.
- 5- Calculate a very rough cost to obtain land, construct and equip a satellite fire station. For this step, four options were looked at:
  - Option 1: two bay volunteer station with an engine and a tender.
  - Option 2: three bay volunteer station with an engine, tender, and ambulance.
  - Option 3: three bay resident station with six bedrooms for a live-in program with an engine, tender, and ambulance.
  - Option 4: three bay career station with six bedrooms for career firefighter / paramedics including their salaries plus an engine, tender, and ambulance.
- 6- Compare the possible insurance savings vs. the estimated rough costs to add an appropriate satellite fire station.

*Videos of the students two public presentations can be found on the City's website.*