

# Appendix B Yakima County Fire District 12

## **CAPITAL IMPROVEMENT PLAN**

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## **Introduction:**

Yakima County Fire District 12's 2025-2029 Strategic Plan addresses four strategic priorities:  
Strategic Priority 1 Personnel Retention, Development, Recruitment, and Selection  
Strategic Priority 2 Financial Management and Accountability  
Strategic Priority 3 Infrastructure Management  
Strategic Priority 4 Community Engagement

This Capital Improvement Plan has been developed to assist the District in addressing these strategic priorities by planning to meet the goals and objectives of the Strategic Plan.

Recommendations contained in this plan for facilities, apparatus and equipment strike a balance between recognized industry standards and the needs of our community given the resources that are available. As standards change and costs rise this plan is intended to be flexible and updated on a year-to-year basis. This plan has been prepared to serve several purposes, including:

- Serve as a Capital Improvement Plan (CIP) to support future financial decisions and allocations.
- Provide the basis for budgeting capital projects as the District adapts to meet current and anticipated demands.
- Serve as a guide for the District's Board of Commissioners on future funding needs.
- Inform interested parties about the current and planned future configuration of the District's capital assets and funds.
- Provide consistent planning for major expenditures for "just in time" replacement of apparatus, equipment and facility needs.

The following sections of this CIP present the guidance used for making capital improvements, specific replacement schedules, facility use, cost estimates and the general financial strategy to accomplish the plan.

## **Guidance:**

The maximum general levy taxing authority YCFD12 has is \$1.50/\$1,000 of assessed value based on RCW 52.16.130 and RCW 52.16.140. In addition to general levy taxing the District has the availability to run levies and bonds on the ballot for approval or Commissioner approved bonds. Fire Districts with a CIP in place may also request impact fees for new development under WAC 365-196-850 where appropriate.

Recommended standards for fire protection and emergency services issued by the National Fire Protection Association (NFPA) are important considerations. Many NFPA standards are incorporated into Washington Administrative Code *296-305 Safety Standards for Firefighters*. The 305 Standard in addition to creating a safe working environment for members is used in conjunction with all NFPA standards by courts to determine industry standards.

The Washington State Survey and Ratings Bureau (WSRB) evaluate communities across the state and establishes the protection class grading for the community on a scale of 1 through 10, where 1 indicates exemplary fire protection capability, and 10 indicates the capabilities, if any, are insufficient for insurance credit. To determine a community's protection class, WSRB measures water supply, fire department, emergency communication and fire safety control. Water supplies are reviewed to determine their adequacy for fire-suppression. Fire flows for buildings are calculated and compared against available water, hydrant size, type and installation, as well as the inspection frequency and condition of hydrants. The fire department is reviewed for distribution of companies/stations, response to alarms, apparatus, equipment, pumping capacity, maintenance, reserve apparatus, personnel and training. Emergency communication is reviewed for the community's 911 system including facilities, handling and dispatching fire alarms, personnel and training. Fire safety control reviews fire prevention activities such as fire code enforcement, public education and building code enforcement.

The YCFD12 Strategic Plan strategic priority 3 Infrastructure Management specifically identifies strategies for facilities, apparatus and equipment projecting the needs of the District to continue to meet our Mission. District policies follow WAC 296-305.

For this plan a combination of the District's Strategic Plan, WSRB's grading schedule and WAC 296-305 are used as industry standards. In cases where the replacement dates differ between these documents all recommended dates are provided to assist with overall decision making and budgeting.

## **Facilities:**

**Strategic Priority:** Manage resources to ensure our staffing, facilities, apparatus, and planning keep pace with current and projected changes in the community; ensuring efficient, well-placed facilities are located to meet the service demand and community response expectations.

## **Strategic Goals:**

- *Ensure strategically located stations and well-maintained apparatus to meet response goals, while maintaining a WSRB rating of 4 or better.*
- On an annual basis YCFD12 staff tour all facilities to identify needed repairs and maintenance along with necessary capital improvements. Facility maintenance is performed on an annual schedule that covers basic upkeep of major components such as HVAC, plumbing and electrical. Major maintenance work including roofs, asphalt, concrete, remodeling and furnishings are included in this plan.

### **General Facility Recommendations:**

- Improve the safety and wellbeing of Department personnel in quarters. Install security cameras on the exterior of stations.
- It needs to be lasting, long term, and improve efficiency with the investment.
- Efficient and ethical use of available public funds that maintains and prolongs longevity of infrastructure.
- It is recommended to repair concrete, asphalt and roof damage as soon as problems arise both for safety concerns as well as keeping costs low when damage is minimal.
- Small things add up to an enjoyable experience for members, things like having adequate lighting and space are critical to retaining members in a positive way, small projects should be completed and absorbed into the regular operating budget whenever possible to streamline operations and improve working conditions.
- Appearance is important to our image as a professional all risk fire department both with the public as well as current members and future members we are recruiting.
- Major projects need to be planned around other capital purchases such as apparatus.

### **Policy 2301 FACILITIES MAINTENANCE AND SECURITY**

This policy was established to ensure facilities are maintained to instill a sense of pride in the members and the community.

The Department shall maintain and operate the facilities in a safe, healthy, and visually pleasing condition, and preserve the Department's investment. Members shall take part in the maintenance of the facilities and shall protect them from misuse, conserving gas, water, electricity, fuel, oil, phone use, and other miscellaneous Department controlled resources.

### **WAC 296-305-06501 Requirements for Fire Department Facilities:**

- Stations and administrative offices shall comply with the requirements of the general occupational health standards, WAC 296-800-210, Lighting in the workplace.
- All new fire stations and other new fire department facilities which contain sleeping quarters shall be fully protected with automatic sprinkler systems.
- All existing fire stations and existing fire department facilities with sleeping quarters that undergo a major renovation that consists of more than sixty percent of the assessed evaluation of the existing structure shall be fully protected with automatic sprinkler systems.
- New stations containing a kitchen, and station kitchens remodeled after the date of this chapter, shall have an alarm activated service disconnect of fixed cooking appliances.
- A designated cleaning area shall be provided under the fire department's exposure control plan for the cleaning and disinfecting of protective equipment, portable equipment, and other clothing.
- All sleeping areas in fire stations shall be separated from vehicle storage areas by at least one-hour fire resistive assemblies.

- All fire stations built after December 17, 1977, shall have a minimum of three feet of clearance around the apparatus, which shall be maintained free of any storage or obstruction.
- Floors shall have slip-resistant surfaces on areas where personnel would normally mount or dismount apparatus.

### **WSRB Station percentages:**

Fire resistive construction best 0%, Noncombustible construction 10%, Joisted masonry 15%, Wood frame 20%.

- Buildings equipped with automatic sprinklers reduce above % by .5.
- If the station is not large enough to house all apparatus adequately 20%.
- Fire stations not equipped with a commercial telephone 5%.
- Fire stations without means for public to report fires to dispatch 5%.
- Fire stations without a secondary power source 10%.
- Fuel should be available in sufficient quantities at fire stations.

### **Needs Assessment:**

In 2022 a review of our previous station location study found that the two locations recommended for future fire stations remain appropriate. At this time housing in the areas has not grown enough to support on-call operations, however, many parcels in these areas cannot be subdivided for more housing unless there is a fire station within 5 miles of the property. The District is working with Yakima County Planning to identify areas of the District that are ready to grow but can't be due to the closest fire station location.

### **Station 51 Background Information:**

Station 51 also houses administrative offices as well as the District's training center on a 7.5-acre parcel. Construction of Station 51 was completed in 2005 with the District taking ownership and moving in November of 2005. Phase two of the project was completed in 2021 and included a dormitory/residence side to the station with up to three dorm rooms, kitchen/dayroom, weight room, large restrooms with showers, four additional bays and an outdoor patio area. Station 51 currently houses two engines, two brush/rescue trucks, tender, aerial, air truck and rehab bus. Upstairs above the bay is used for storage of PPE and other equipment while the shed out back stores maintenance equipment and spare firefighting equipment. Projects completed at Station 51 include: finished lawn/landscaping, installed diesel generator, converted lights to LED, 2013/2014 paved the loop and training prop area, built storage shed, renovated the retention pond, updated A/V in training center and conference room, installed a new SCBA compressor, added ceiling fans in training center, built and installed training props, added LED lights west side of bays, replaced tables and chairs in training center and updated the security system. In 2017 the west apron concrete was replaced from water damage which included an RV dump for the rehab unit and east side outdoor bay lighting was installed. Asphalt cracks have been sealed

annually since 2017. The carpet and all tables in the training center were replaced in 2020, the lights in the apparatus bay and offices converted to LED and all the original asphalt was sealed in 2021. In 2022 the door access system was upgraded and replaced, training center lighting converted to LED and a portion of the storage shed set up for a drill ground classroom. 2.5 acres of land in the SW corner have been sold to Nob Hill Water for a future water tower and starting in 2022 the District began leasing a 60x60 area to US Cellular for a tower. In 2023 the A/V in the training center was upgraded and asphalt cracks sealed. AMR ambulance leases office space from the District to staff 12-hour BLS ambulances, and 24-hour ALS ambulances, additionally, the District has discussed leasing space to DNR as well as other public entities to utilize vacant office space and generate revenue. Left to complete in 2025 is the addition of a carport to house extra vehicles under and security cameras.

### **Future of Station 51:**

Station 51 is centrally located for response using major roads to get to the north, south and west, city limits have encroached on the eastern boundary of the station's response area. Due to its geographical location nearest to major housing developments the population around Station 51 is large enough to support on-call firefighters responding from home and if needed a nighttime sleeper program. Regardless of annexation or urban growth boundary changes Station 51 will remain a viable station for response for the foreseeable future and remain a central location for our administrative offices and training center through 2035 at a minimum. One objective for addressing retention in strategic priority 1 is to reduce the number of calls on-call members are answering by considering partnering with a private ambulance company to house an ambulance at Station 51 to handle minor aid calls. Currently AMR leases office space where they house a BLS ambulance and crew six days/week and an ALS crew 7 days/week. Through a county contract we plan to continue housing an ambulance and crew at Station 51 and reduce the number of low acuity EMS calls our Members respond to

### **Station 51 Needs:**

After Nob Hill Water fences their section of property continue the fence along the southern boundary of our property for security. Sewer lines are now on our east boundary, if our septic system were to fail, we would have to hook up to sewer and extend the line across our property to the west. Parking is at a premium when hosting large events, a temporary solution is to stripe the gravel parking lot west of the training center with consideration of a permanent solution of paving and striping the gravel area. Additionally, striping the asphalt along the eastern edge of the property will allow for more event parking. Concrete at the north and east doors of the station over time has frost heaved requiring the District to grind down the concrete to open the doors, additionally, the concrete entry to the training center has developed large cracks, these pads need to be torn out, the ground compacted and a deep footing poured to repair the damage.

### **Station 51 Priorities:**

1. Maintain HVAC systems throughout the building to ensure longevity and replace units as needed rather than wholesale change outs. The original HVAC on Admin side 2035 is 30 years old and plan to replace.
2. Monitor the composition roof every 5 years for planned replacement in 2030.
3. Add additional parking stalls
4. Replace concrete at doorways
5. Maintain asphalt by filling cracks annually in fall and plan to seal newer asphalt in 2028.
6. Exterior security cameras scheduled for fall 2025.

### **Station 51 Costs:**

1. Approximately \$2,000/year is spent on maintaining HVAC units, if/when a unit needs replacement this cost goes up substantially. Consideration is given to entering a maintenance contract for HVAC, at this time cost is unknown. \$100k to replace all original HVAC
2. Monitoring the roof is at no cost, replacement depending on comp or metal is estimated at \$40k-\$60k.
3. Striping in house \$100 in paint, paving west lot \$50k
4. Concrete tear out and replace at both doors \$20k
5. Seal cracks \$1500, seal asphalt \$12k

### **Station 52 Background Information:**

Station 52 was moved to its current location in 1984 and was modeled after the old station one on Tieton Drive minus the front office space, additional day room space and rear bay door and office. Station 52 houses two engines, a rescue and brush truck, an additional surplus brush truck is stored outside in the summer months under a carport constructed in 2025. The addition and remodel in 2018 added dayroom, created an office space and small workout area. Due to a high-water table and the flood plain, the station was built up several feet off ground level to prevent water from entering the station in a flood and the additional space that was left off the original build is a foundation that has been exposed to the elements for more than 30 years. The parking lot concrete that was added after the building is crumbling and broken across the whole lot, the original foundation walls not built on are crumbling and breaking down. Projects completed at Station 52 include: Station 52 was added on in 2018, a dayroom to accommodate 30 members was added and the old dayroom remodeled to include an officers office and workout space, the remodel added an extractor washer and moved the ice machine out of the apparatus bay, connecting to domestic water, added ceiling fans in the apparatus bay, landscaped the west side with retaining wall, painted exterior, re-roof in 2010 (flat roof), added PPE racking, LED lighting, installed a base station radio, capped a portion of the foundation, added hand railing around the sidewalk and replaced the heat pumps in the bay and day room area. In 2017 the crumbling concrete on the east side of the station was removed, the hand railing moved to accommodate the new sidewalk with new steps installed greatly improving the appearance of the station as well as improving parking. In 2022 ladder brackets were added to the roof line for



training, a reader board along Ahtanum was replaced and front flood lights were installed for the front apron. 2023 new heat pump old part of station.

### **Future of Station 52:**

Station 52 is located on the west end of the area generally known as Ahtanum, for response major roads allow quick access in all directions, the city limits have encroached into the Station 52 response area including across the street from the station is within the city limits. Due to its geographical location, being near most of the dense housing, the population around Station 52 is large enough to support on-call firefighters responding from home and if needed the front part of the station converted to a dormitory. Because of these factors regardless of annexation or urban growth boundary changes Station 52 will remain a viable station for response for the foreseeable future. It is believed if the city limits continue to grow in the area the city would not have interest in locating at our station due to the location of its other western stations and that the response area for Station 52 would remain a large portion of our southern boundary requiring us to respond from Station 52 where many of our on-call members live close. In the past we have had discussions of cutting the response time from Station 52 to Station 54 down by adding a station in between the two, however, due to a lack of housing amongst the 5–10-acre parcels in that area at this time it would not be feasible to staff a station west of the current Station 52.

### **Station 52 Needs:**

The concrete parking lot in several areas has crumbled beyond repair, replacing the parking lot with asphalt will require removing all concrete and establishing a base, estimated for this lot are around \$150k, an alternative is to replace the concrete in front of the north bays and seal cracks where possible. Building permits for residential homes in the western part of Station 52's area needs to be monitored to determine if/when enough development will take place to staff a station west of the current location or if a station would increase development in the area. If a large development was planned for the area consideration should be given to imposing an impact fee for a parcel of land to build a fire station. A backup emergency generator is necessary to keep the station functional during disasters that affect the power grid, funding for a generator was secured in 2025 with the project currently in the soliciting quotes phase. All HVAC and hot water are electric, as these systems age and need replacement, either rooftop solar panels to offset energy use or an LPG tank and equipment should be installed.

### **Station 52 Priorities:**

1. Maintain HVAC systems to ensure longevity and replace units as needed rather than wholesale change outs. Through 2045 will replace all HVAC \$50k
2. Monitor the roof every 5 years for planned replacement in 2040.
3. Repair parking lot where it is possible to replace concrete and filling cracks
4. Monitor the need for new station to the west.
5. Backup generator power. (2025)
6. Exterior security cameras. (2025)

**Station 52 Costs:**

1. Approximately \$300/year is spent on maintaining units, if/when a unit needs replacement this cost goes up substantially. Consideration is given to entering a maintenance contract for HVAC, currently cost is unknown.
2. Monitoring the roof is no cost, replacement is estimated at \$20k-\$30k.
3. Parking lot replacement \$150k, repair \$30k
4. No cost to monitor.

**Station 53 Background Information:**

Station 53 was moved to its current location in 1996 and was designed to fit the future needs of the growing area in the northwestern portion of our District. Station 53 has five apparatus bays that currently house two engines, brush truck, rescue SUV, and tender. Station 53 sits on a five-acre lot with adequate space for training, has a good day room as well as an Officers office. Additionally, the upstairs of the station is a storage area as well as fitness center. The dayroom is of sufficient size to hold classroom training sessions with enough space for members to spread out. Station 53 is on a septic system and well, there are no sewer or domestic water lines in the area. Projects completed at Station 53 include: landscaping, LED lighting, adding a workbench, PPE racking, retention pond renovation and ice machine. Several significant roof leaks created the need for repairs to the roof and interior of the building due to water damage; Station 53 is a flat roof. In 2017 the parking lot was completely removed and a new 4" asphalt lot paved, and in 2018 the retention pond grass was removed and covered with rock. In 2019 turnout lockers were added to the bay to accommodate 25 members as well as an awning over the west doorway. In 2020 the arbs were taken out and a 6-foot privacy fence installed, and the PPE room was converted to a drying room. In 2021 the carpet in the dayroom was removed to have a solid surface for carcinogen exposure reduction and all lights converted to LED. In 2023, more drain rock added to retention pond, asphalt cracks sealed, and an emergency diesel generator installed.

**Future of Station 53:**

Station 53 is in response to the Gromore area of our District; major roads allow quick access to the east and west with arterials allowing response to the north and south. Most of Station 53's response area is outside the urban growth boundary. Due to large parcels amongst the farmland around Station 53, members tend to live a further distance from the station because there are no large housing developments within the response area. As the area continues to develop, it is anticipated the population of citizens able to join the department will increase.

**Station 53 Needs:**

The upstairs area as needs grow can be remodeled to accommodate a safe workout area, storage and office space or possible future dorms, there is potential of extending the space out over bay number 1 depending on needs. Due to the flat roof membrane construction, the roof and drains must be continually monitored to anticipate "just in time" replacement before damages occur. The HVAC system must be monitored as it has reached 20 years of age.

### **Station 53 Priorities:**

1. Maintain HVAC systems to ensure longevity and replace units as needed rather than wholesale change outs. HVAC system replace in 2026.
2. Monitor the roof every 5 years for planned replacement in 2031
3. Remodel upstairs to accommodate current and future use.
4. Seal asphalt cracks annually in the fall, seal asphalt in 2032.
5. Exterior security cameras. (2025)

### **Station 53 Costs:**

1. Approximately \$300/year is spent on maintaining units, if/when a unit needs replacement this cost goes up substantially. Consideration is given to entering a maintenance contract for HVAC, currently the cost is unknown. Total change out in 2026 \$30k
2. Monitoring the roof is no cost, replacement is estimated at \$30k-\$60k.
3. Remodeling the upstairs area \$200,000.
4. Seal cracks \$600, seal asphalt \$10k

### **Station 54 Background Information:**

Station 54 was originally built in 1965 in a “U” shape with apparatus bays on each end of the “U” and a Community Center on the east side of the station. In 2000 the station was remodeled to its present-day design where the middle of the “U” was framed in to create an apparatus bay capable of housing an interface type engine and a tender. In addition to the middle bay Station 54 has a drive through type bay on the west end and a back in bay on the east side, turnouts are on racks in the bay. Today Station 54 meets our needs for housing personnel and apparatus. Presently a wildland interface type engine, rescue and brush truck are housed at Station 54, the configuration of the station limits the height of apparatus in two bays and the length of apparatus in the large center bay. This station has a pitched metal roof with only repairs made in recent years due to a windstorm that damaged the hose tower roof. The dayroom is of sufficient size to hold classroom training sessions with enough space for members to spread out in addition to when needed the Community Center is large enough to house larger events. Station 54 is on a septic system, the well pump and water system were replaced in 2015, and there are no sewer or domestic water lines in the area. Projects completed at Station 54 include: Well pump replacement, sinkhole in parking lot repaired, interior painting and carpet, community center paint and carpet, PPE racking, LED lighting, radio base station and a workbench were installed. In 2015 ADA access was added to the Community Center and the east side of the parking lot paved. In 2017 the lawn area west of the ADA ramp was removed with rock added in place, asphalt cracks on the older section were filled as well as windows in the station replaced. The split rail fence at the front of the station was removed. In 2018 a concrete curb was placed around the rock garden and in 2019 a retaining wall and lawn edging installed as well as parking curbs on the west side of the station and LED lighting in the rear. In 2020 all lights in the station were converted to LED and an extractor washer installed. 2021 the dayroom floor converted to a solid surface and a water softener added. In 2022 a smart TV was installed in the workout area, an elliptical machine added, and the dayroom and community center kitchens updated. In 2023 a

basketball hoop was attached to the rear of the station and rocks were added around the propane tank.

#### **Future of Station 54:**

Station 54 is in response to the Tampico area of our District; major roads allow quick access to the north and south forks with Ahtanum Road leading to the east. All of Station 54's response area is outside the urban growth boundary. Due to large parcels amongst the timber around Station 54, members tend to live further from the station because there are no large housing developments within the response area. This area tends to lend itself to more of an area for retired citizens however the citizens in the area tend to be community minded and offer a small-town neighbor helping neighbors feel. Around 2024 a moratorium on well drilling was placed in the area, without the ability for property owners to drill wells the number of houses in the response area will not increase for the foreseeable future making it difficult to recruit on-call Members.

#### **Station 54 Needs:**

When flood waters come down the North Fork as soon as the culvert plugs at the edge of our property water flows towards the station, if our drain stays clear in our parking lot the water won't reach the station however debris tends to accumulate in the bar ditch plugging our drain, a barrier may need to be added to this area to prevent water from entering our station. Presently we plow snow into a berm along North Fork Road to direct the water around the station. Water supply is an issue, our well does not support filling larger water tanks, and in the future, this may require drilling our well deeper (if allowed) or installing a water tank. A backup emergency generator is necessary to keep the station functional during disasters that affect the power grid funding secured in 2025 with the project underway.

#### **Station 54 Priorities:**

1. Maintain HVAC systems to ensure longevity and replace units as needed rather than wholesale change outs. Full replacement in 2028
2. Prevent station flooding in spring.
3. Improve water supply.
4. Maintain asphalt.
5. Backup generator power. (2025)
6. Exterior security cameras. (2025)

#### **Station 54 Costs:**

1. Approximately \$300/year is spent on maintaining units, if/when a unit needs replacement this cost goes up substantially. Consideration is given to entering a maintenance contract for HVAC, currently cost is unknown. Full replacement \$25k
2. Flooding, plow snow on this edge, if that fails to work install barrier.
3. Water Supply \$20-50k

4. Fill cracks annually, seal east in 2030

### **Apparatus:**

**Strategic Priority:** Manage resources to ensure our staffing, facilities, apparatus, and planning keep pace with current and projected changes in the community.

### **Strategic Goal:**

- *Ensure strategically located stations and well-maintained apparatus to meet response goals, while maintaining a WSRB rating of 4 or better.*

Periodic inspection, testing, preventive maintenance, replacement schedule and emergency repair systems are maintained for all emergency apparatus, including daily, weekly and monthly inspections for serviceability. The District partners with several repair shops in town to ensure the most qualified mechanic works on our fleet based on the shop's specialty.

### **General Apparatus Recommendations:**

- Enough appropriate apparatus and equipment will be maintained as necessary to meet the established response objectives of the District.
- All apparatus and equipment will be maintained according to NFPA and/or the manufacturer specifications.
- All apparatus will meet or exceed all recognized State and National standards for inspections, testing, fueling, and emergency repair of emergency vehicles.
- Emergency response apparatus will be considered for replacement or refurbishment according to the following schedule:

Fire Pumps	20 Years
Water Tenders	25 Years
Emergency Medical Vehicles	15 Years
Command Vehicles	80,000 Miles
Support Vehicles	80,000 Miles or as needed.
Brush Trucks	15 Years
- All apparatus will be equipped with adequate hose, nozzles, self-contained breathing apparatus, radios and other equipment to ensure safe operations, achieve Department performance objectives in compliance with industry standards, usually those prescribed by the National Fire Protection Association.
- Maintain sufficient engine pumping capacity within five miles driving distance from all commercial and industrial areas to provide fire flow as specified by the Washington State Survey and Rating Bureau.
- Maintain enough command vehicles based on staffing and response plans.
- Maintain a reserve fleet of at least 2 engines, 1 brush and 1 command vehicle.

## **SOG 7-1 – Apparatus, Equipment, and Station Maintenance:**

The purpose of this standard operating guideline is to provide guidelines to maintain Fire District vehicles, equipment, and facilities in a state of readiness, as well as maintaining current and reliable maintenance records.

Personnel shall endeavor to always have all apparatus and equipment ready for service. Minor maintenance procedures shall be performed by personnel with appropriate consideration given to individual skills, abilities and training. Safety problems involving apparatus shall be resolved as soon as possible. Serious problems should result in removal of the apparatus from service until repairs can be made. The decision to remove a vehicle from service is vested with the company officer.

### **WAC 296-305-04501 Automotive Fire Apparatus:**

- All new fire apparatus except for specialized equipment, shall conform to the following minimum safety standards contained in the 2016 edition of NFPA 1901, Standard for Automotive Fire Apparatus, or the 2016 Edition of NFPA 1906, Standard for Wildland Fire Apparatus.
- Used fire apparatus, purchased after the effective date of this rule, weighing 10,000 pounds or more shall conform with the following U.S. Department of Transportation standards, when applicable:
- Exhaust systems should be installed and maintained in proper condition and should be so designed as to minimize the exposure of the firefighter to exhaust gases and fumes.
- If in the driver or duty officer's determination, the apparatus cannot be used in a safe manner, it shall be taken out of service until it has been restored to a safe operating condition.
- All repairs to the suppression components of emergency vehicles of the fire department shall be done by an emergency vehicle technician, ASE certified technician or factory qualified individual. Repairs, maintenance or routine work to non-suppression systems of suppression apparatus or other fire department vehicles and their equipment shall be done by personnel qualified in the specific area of repair. Fire service pumps with a capacity of 499 gallons per minute or less and not used for interior structural firefighting operations are exempt from this requirement.
- A preventive maintenance program shall be instituted, and records maintained for each individual apparatus to record and track potential or on-going problems.

### **WSRB Apparatus Evaluations:**

- The number of pumpers in service must be sufficient to properly protect the community.
- To maintain the required number of companies in service, there must be at least one pumper in reserve for every eight pumpers required, not less than 1.

- The number of ladder trucks in service must be sufficient to properly protect the community.
- There shall be provided on the first alarm, a total pumper capacity of not less than the basic fire flow.
- All apparatus shall be maintained in good condition.
- Age of Apparatus: For apparatus more than 15 years old, apply the following percentages:
  - Pumpers where ladder truck is not provided .....20%
  - Pumpers where ladder truck is provided.....10%
  - Ladder Trucks..... 10%
  - Support vehicles.....5%
  - For pumper and ladder apparatus more than 25 years old .....10%
- If the community being evaluated has apparatus more than 15 years old and there is reserve apparatus greater in number than required by Item 1 and 2 the above percentages may not be applied. This option will apply if there are 2 reserve pumpers for every 8 pumpers in service, but not fewer than 2, if 2 or more are in service; 2 reserve ladder trucks for every 5 in service, but not fewer than 2, if 2 or more are in service and reserve support vehicles must be available including tenders, command vehicles, rescues, medics and brush trucks.
- Facilities must be adequate to properly service all apparatus. Fire department operated maintenance facility 0%, dealer or shop specializing in fire apparatus maintenance 5%, general repair shop 10%.
- Preventative maintenance: daily 0%, weekly 3%, monthly 7%.
- Apparatus inspection: quarterly 0%, annual 5%.
- Adequate testing of pumps and systems: annual 0%, 1-2 years 10%, 2-3 20%.
- Age of apparatus: 14 years and newer 0%, 15-24 years pumpers 20%, 25 years and older 30% or older apparatus so long as they pass testing can be used if the department maintains double the number of required reserves.
- Water provided by the fire department must be at a minimum flow rate of 250 gallons per minute within the first five minutes of arrival and must be maintained for 30 minutes. If the flow rate can be increased within 15 minutes of arrival and maintained for the duration of the test, the higher flow rate is credited.

#### **Needs Assessment:**

#### **Engine's Background Information:**

Since 1991 the District has purchased engines on a custom chassis except for Engine 54 in Tampico which is a 4x4 International chassis set up more for wildland urban interface firefighting. Engine 54 is a unique apparatus for a unique area, 4x4 is a must have in the Tampico area as well as the short wheelbase for narrow driveways, forest roads and fit inside the station. The purpose of going with custom chassis engines for the past 30 years has been driven by safety, when a commercial chassis rolls down the assembly line it could end up a dump truck, garbage truck or a fire truck, a custom chassis is engineered, designed and built with one purpose

and includes greater rollover safety for the occupants, more room for equipment storage and better visibility for the driver. The increase in cost for a custom chassis is overcome by quality and longevity; custom built chassis has been proven in this District to last 25 years or longer. In 2024 apparatus costs skyrocketed and the cost difference from commercial chassis to custom chassis has grown significantly, the District must consider both options for future apparatus. While in the future we will continue to compare prices of commercial vs custom when writing specifications, we will not purchase a commercial chassis that requires major modification to the cab area to seat firefighters and would look for ways to increase rollover survivability of occupants. The District maintains a fleet of four first out engines with two reserves, additionally, we maintain Tender 52 that is a pumper/tender, as another reserve. In 2025 the District ordered two Pierce Freightliner commercial 4x4 pumpers to replace the 2004 E54 and 2004 E251. These pumpers are scheduled to be complete in 2026, the new E54 due to bay length was required to be a commercial, the new E251 is a commercial chassis to provide flexibility in duty crew response to all types of fires. Both engines on order have been specified with additional rollover protection built into the engines to make them as safe as custom chassis.

### **Engine's Needs:**

The oldest engine in our fleet is Engine 2-53 a 2003 that is currently in reserve at Station 53. Engine 2-51 is a 2004 engine utilized both as a reserve and first out for our on-duty crew. In 2020 due to having both E51 and E54 due for replacement in 2024 the District chose to move E51 up to 2022 and push E54 back to 2026. The new Engine 51 arrived in the summer of 2023 approximately 2.5 years after it was ordered. The District is currently requesting grant funding to replace E-54, which was ordered in 2025 to arrive in 2026, at that time the old E54 will be available as a reserve engine and double as a wildland urban interface apparatus. In 2025 we ordered two Pierce commercial engines to replace E54 and E251. Once these engines arrive in 2026, we will ensure flexibility in refurbishing E251 and selling E253. With engine numbers 007, 0020 and 0008 all in reserve the District will have plenty of reserve engines to satisfy WSRB and be in position to send engines in for refurbishing rather than replacement if the engine is a good candidate to remain in service another 10-15 years. Moving forward with replacement dates after 2026 E54, the 20-year date will be for determining if the apparatus will be replaced or refurbished. Between 2026 and 2030 0007 and 0020 will be evaluated to determine if they should be refurbished or partially refurbished in reserve before being pressed into action while front line engines are being refurbished. Engines will be refurbished to current NFPA standards for safety, the diesel engine and pump evaluated for possible rebuild, electrical systems evaluated, cosmetic repairs like paint and upholstery and any replaceable components replaced. The cost of refurbishment should be less than 50% of the cost of a new engine and the refurbished apparatus used for 10 more years. For engines with wired FireComm systems as they are refurbished transition to wireless for all or at a minimum the drivers headset.



Appar #	Radio #	Year	Strategic Plan	If Reserve	Replace Cost est	CIP Year	Refurb	Replace
Engine			20yr	25yr	Strategic plan yr	Refurbish	Cost	
0041	Eng 51	2023	2043	2048	\$1.2mil	2043	\$600k	2053-58
0007	Eng 2-51	2004		2029	RESERVE NOW	2029	\$350k	2039-44
0020	Eng 2-53	2003		2028	RESERVE NOW	2028	\$300k	2038-43
0030	Eng 52	2016	2036	2041	\$800k	2036	\$400k	2046-51
0023	Eng 53	2010	2030	2035	\$750k	2030	\$350k	2040-45
0008	Eng 54	2004	2024	2029	\$550k 2026	TBD, pump already rebuilt		
	New E54	2027	2047	2053	\$900k	2047	\$450k	
	New E251	2027	2047	2053	\$900k	2047	\$450k	

  

Appar #	Radio #	Year	Mileage	Hours
0041	Eng 51	2023	4419	391
0007	Eng 2-51	2004	48,310	3295
0020	Eng 2-53	2003	80,630	
0030	Eng 52	2016	11,513	993
0023	Eng 53	2010	19,058	
0008	Eng 54	2004	22,351	
	New E54	2027	0	0
	New E251	2027	0	0

### Engine Priorities:

1. Maintain 20-year schedule to either refurbish or replace depending on condition.
2. Pre-plan replacement so specifications are written and out for bid greater than 365 days before an engine should move to reserve.
3. Maintain all systems and perform proper annual inspections.
4. Certify staff in Emergency Vehicle Technician to perform repairs and maintenance in house.
5. Maintain enough reserves to cover the district operationally and suffice WSRB requirements due to age of apparatus.

### Engine Costs:

1. 2026 Engine 54 estimated cost of \$550k. Refurbish to run additional 10-15 years if cost to refurbish is less than 50% cost of new.
2. Reviewing the capital fund estimate at the end of this document yearly to ensure the District has funds in capital for replacement. Take advantage of pre-pay opportunities for discounts and spread the cost of an engine over two budgets.
3. Annual service and DOT inspection per engine \$400. Annual pump testing \$150.
4. \$1500 annually for conference attendance and testing.

### Elevated Master Stream:

According to WSRB, the number of ladder trucks in service and regularly responding to alarms must be sufficient to properly protect the community. Because we have more than five buildings

in the District requiring 4000 gpm or more for fire flow, a ladder truck is required by WSRB to provide the needed fire flow.

In 2021 the District purchased a 2000 Pierce Skyboom. This single rear axle apparatus provides an elevated master stream which meets the requirements of WSRB and increases our firefighting capabilities. After purchasing the apparatus, we had a full mechanical inspection completed with minor repairs then a full UL inspection of the aerial making any necessary repairs to certify the aerial. Through auto aid the City of Yakima provides an aerial for commercial fire response. Ladder trucks from outside the community, operating under an automatic aid agreement may be credited but, the total number of such ladder trucks credited will be no more than  $\frac{1}{3}$  the number of ladder trucks required in the community being graded.

### **Brush Truck Background Information:**

In 2008 the District changed from standard cab one-ton custom-built brush trucks to crew cab two-ton flatbed style brush trucks. The change to the flatbed style allowed for better compartmentation allowing equipment to be carried inside compartments as well as sufficient space for medical equipment as a dual-purpose Rescue/Brush truck. The change out occurred from 2008 to 2014 with one brush truck replaced every two years. During this change out emission standards changed for diesel engines which due to high exhaust temperatures the final two brush trucks were purchased as V-10 gas engines rather than diesel. This change reduced the overall cost of the apparatus since gasoline engines are less expensive than diesel engines, both the vehicle engine and the pump engine were changed to gasoline. The District maintains a fleet of four first out brush trucks and three reserve brush trucks: Brush 253 a 1-1/2-ton chassis with a slip in tank and pump, Brush 251 the first flatbed we purchased in 2008, and Brush 252 the second flatbed truck we purchased. In 2023 all first out brush trucks have been outfitted with front-mount nozzles. In 2024 the plow framework was removed from Brush 253 and moved to the DNR surplus truck. This truck will remain a plow truck until maintenance costs outweigh its usefulness. In 2025 diesel and gasoline tanks were mounted on the truck for on-scene fueling as requested by WSRB.

### **Brush Truck Needs:**

In 1964 the District had an immediate need for a brush truck and built the first truck from a 1948 Dodge Power Wagon. Today the oldest brush truck in our first-out fleet is Brush 53 a 2012, in 2023 specifications were written for a new Brush 52 and chassis purchased, with the build completed in 2024. Brush 51 is new in 2025 and is our last full replacement, refurbishment of Brush 53 and 54 having their chassis and compartments replaced. Beginning in 2019 WSRB began recognizing brush trucks when evaluating fire department capabilities. Each brush truck once replaced will have another five years in reserve status. The District has always maintained one or two reserve brush trucks to backfill for a breakdown as well as being available for large fires in District and response to State Mobilization fires. With the new Brush 51 we have three reserves, B251 is used by the duty crew and a reserve for Station 51, Brush 252 in reserve at Station 52 and Brush 2-53 with a slip in pump and tank with half the water capacity of our normal brush trucks. Re-chassis of brush trucks is set to last 15 additional years of service, once

the pump and tank have reached 30 years of age the entire system will be replaced based on condition or a new chassis and pump.

Appar #	Radio #	Year	Strategic Plan	If Reserve	Refurb Cost	CIP Year	Replace
<b>Brush</b>			<b>15yr</b>	<b>20yr</b>			
0015	Bru 51	2010	2025	2030	Go to reserve	Reserve 2-52	2040
0012	Bru 2-51	2008		2028	RESERVE NOW		
0044	Bru 52	2023	2038	2043	160k	Re-Chassis 2038	2053
0020	Bru 2-53	2008		2028	RESERVE NOW		
0037	Bru 53	2012	2027	2032	\$145k	Re-chassis in 2027	2042
0054	Bru 54	2015	2030	2035	\$150k	Re-chassis 2030	2044
	New B51	2025	2040	2045	\$175k	Re-chassis 2045	
Appar #	Radio #	Year	Mileage	Pump Hours			
0015	Bru 51	2010	32,055	393			
0012	Bru 2-51	2008	19,849	387			
0044	Bru 52	2023	1,038	22			
0020	Bru 2-53	2008	80,630				
0037	Bru 53	2012	8,544				
0054	Bru 54	2015	5,314				
	New B51	2025	0	0			

#### Brush Truck Priorities:

1. Re-chassis apparatus with useable pumps and tanks, 30 year replace schedule.
2. Pre-plan replacement so specifications are written and out for bid greater than 365 days before a brush truck should move to reserve.
3. Maintain all systems and perform proper annual inspections.
4. Refurbishing Brush53 and 54 will require chassis and new boxes, current boxes are not capable of additional 15 years.

#### Brush Truck Costs:

1. Re-chassis \$145k - \$150k.
2. Reviewing the capital fund estimate at the end of this document yearly to ensure the District has funds in capital for replacement. Take advantage of pre-pay opportunities for discounts and spread the cost of a brush truck over two budgets.
3. Annual service per motor \$150. Annual pump service \$50.
4. 2023 estimate for re-chassis is \$62k plus the cost of the chassis.

## Rescue Background Information:

In 1981 the District began providing emergency medical responses out of a Dodge Power Wagon transitioning in 1987 to a transport capable ambulance type van chassis. As needs arose the District began carrying hydraulic extrication equipment. In 1995 the van style rescue was changed to a one-ton chassis with a large box compartment for personnel, patients and equipment. In 2003 this same style rescue was built on a 1-1/2-ton chassis and placed in service. Throughout the history of rescues the oldest rescue in the fleet was moved to another station until around 2010 when we surplused the 1987 and moved the 1995 to Station 54 while the 2003 remained at Station 52. The need for the hydraulic rescue tools at Station 51 did not change, however we moved the tools to Engine 2-51 and sent the Rescue to Station 54 as a transport apparatus. The District maintains a fleet of one transport capable Rescue and utilizes a brush truck for medical calls at Stations 51, a dedicated rescue unit at Station 52 and a previous command SUV at Station 53. Rescue 54 was originally a 2003 that was re-chassied and refurbished in 2017.

## Rescue Needs:

With private ambulance companies handling transport in Yakima County, we typically receive an ambulance on all EMS alarms. The County has a 911 ambulance contract with AMR designed to just about guarantee an ambulance for every call therefore we no longer have a need to be capable of transporting patients to a hospital. In 2025 a consulting firm was hired to perform an operational assessment of our District, due to a higher potential to be short a transport unit and the fact Station 52 responds with Station 54 the consultants suggested moving Rescue 54 to Station 52, additionally AMR plans to send a paramedic supervisor for fire stand by unless an injury is reported, if they enact this plan having a transport capable rescue on scene of all fires would benefit firefighters in the event of an injury, the medic could treat the firefighter in our rescue enroute to the hospital. If the transport unit is moved from Station 54 to Station 52, the current non-transport Rescue 52 will need to move, the District will need to evaluate moving it to Station 54 or replacing the SUV at Station 53 with Rescue 52 is more appropriate for call volume and equipment needs. Additionally, the District has a need to maintain one transport capable rescue to ensure an injured firefighter can be transported to a hospital as well as if drastic changes were made to the number of private ambulance companies in town, we would maintain the capability to transport patients to the hospital. Having three reserve brush trucks Brush 253 can serve as the Aid unit at Station 53 and eliminate the SUV.

Appar #	Radio #	Year	Strategic Plan	WSRB Year	If Reserve	Replace Cost est	CIP Year
Rescue			15yr		20yr		
0033	Res 54	2017	2032		2037	\$250k	2032
0034	Res 52	2018	2033		2038	\$125k	2033
0024	Res 53	2012	2027		2032	\$70k	Not planned

Appar #	Radio #	Year	Mileage	Hours
0033	Res 54	2017	4,458	353
0034	Res 52	2018	12,484	
0024	Res 53	2012	73,289	

### **Rescue Priorities:**

1. Maintain 15-year replacement schedule.
2. Pre-plan replacement so specifications are written and out for bid greater than 365 days before a rescue should move to reserve.
3. Maintain all systems and perform proper annual inspections.
4. Utilize appropriate type apparatus for rescue/EMS to fit current and future needs.
5. Design apparatus with dual purpose where possible, monitor the county ambulance contract and evaluate the need for EMS specific apparatus.
6. When possible, re-chassis units to save money.

### **Rescue Costs:**

1. EMS levy funds are saved over the course of 15 years earmarked for Rescue replacement. Take advantage of pre-pay opportunities for discounts and spread the cost of a rescue over two budgets.
2. Annual service per rescue is \$150.

### **Tender Background Information:**

In 1986 the District put in service its first water tender, a 1984 Volvo chassis with a manual transmission and 2,500-gallon water tank was purchased to provide on scene water in the rural areas of our District without hydrants. In the late 1990's the District applied for tender credit with WSRB and after successfully passing the testing procedure was given tender credit for our rating. At the time of this test, we owned both the Volvo tender and had just taken delivery of the 1998 pumper/tender. Water tenders have played a critical role in fighting both structure fires and wildland fires across our District, in 2007 in an effort to keep up with water supply demands as the Volvo aged and was later surplus, the District purchased two additional 2,000 gallon tenders, these tenders were bare bones basic "water on wheels" that have allowed us to continue receiving full tender credit with WSRB and provide vital on scene water supply everywhere in the District. In 2016 the 1998 pumper/tender was replaced as a first out engine and has become Tender 52 giving the District three water tenders with over 6,000 gallons of water available on scene in addition to our transition to 1,000-gallon fire engine tanks. In 2024 Tender 52 was specified for refurbishment and is scheduled to be completed in 2025 to run an additional 10-15 years.

Appar #	Radio #	Year	Strategic Plan	WSRB Year	If Reserve	Replace Cost est	CIP Year
<b>Tender</b>			<b>25yr</b>				
0010	Ten 53	2007	2032			\$550k	2031
0054	Ten 51	2007	2032			\$550k	2034
0021	Ten 52	1998	2023	Refurbished in 2025			2034

Appar #	Radio #	Year	Mileage
0010	Ten 53	2007	14,662
0054	Ten 51	2007	14,007
0021	Ten 52	1998	at refurb

### **Tender Needs:**

With 90 square miles of District to cover and approximately 25% of that protected by hydrants the District has a definite need to maintain a fleet of water tenders to maintain adequate fire flow. Safety while driving tenders is a big priority for the District, we have gone as far as to develop a policy for driving the smaller tenders to include only Code II response. The District at a minimum will need to maintain two water tenders capable of providing 250gpm for 30 minutes within seven road miles of any one of our stations. In 2025 Tender 53 tank began leaking due to rust, both Tender 51 and 53 are construction style water trucks with steel tanks, the 25 year replacement plan for these tenders will need to be accelerated either to full replacement of one of them, tank repairs or tank replacement. Poly tanks come with a lifetime warranty, presently for the 2026 budget we are researching how best to deal with the leaking tank(s). A new water tender fire service rated will run around \$500k plus tax.

### **Tender Priorities:**

1. Maintain 25-year replacement or refurbish schedule. Determine best course of action for T53 tank leak and eventual leak of T51.
2. Pre-plan replacement so specifications are written out for bid greater than 365 days before a tender is obsolete.
3. Maintain all systems and perform proper annual inspections.
4. Provide at a minimum 250gpm for 30 minutes within 7 road miles of a station.
5. Purchase a tender for Station 51 to move Tender 54 back to Station 54 giving back the 7-mile span from the station with a tender.

### **Tender Costs:**

1. The 2007 tenders will be 25 years old in 2032, replace both with a fire service style tender rather than the construction type we have now, possibly offset years, each. New tenders are around \$500k for basic fire service models, possibly purchase used, replace tank or repair tank and coat.
2. Look for discounts on purchasing multiples or pre-paying chassis.
3. Annual service and DOT inspection per tender \$350. Annual pump testing \$150.

4. Drill on the four types of WSRB tender tests to measure our ability annually.
5. NFPA compliant water tender could be purchased used, or the new cost is \$400k.

### Support Vehicle Background Information:

The District utilizes four support vehicles to meet our Mission, Air 50 a 1999 F-350 utility box mobile SCBA cascade filling station, Rehab 50 a 2004 Eldorado commuter bus converted into a rehab unit with kitchen, seating and restroom, Support 50 a 2013 F-150 used for personnel and supply transport at wildland incidents, and our Plow/Fuel truck. The history of air trucks in our District goes back to the early 90's when a 1978 F-250 brush truck was converted to a utility box with MAKO cascade filling station, this truck was replaced by the current 1999 F-350 with utility box however the MAKO components were taken out of the old truck and installed in the new one. In 2012 the District upgraded to high pressure SCBA and at that time upgraded Air 50 with a new NFPA compliant fill station and booster pump to fill high pressure bottles. In 2021 the air truck had less than 10k miles on it, so the District opted to keep the truck but replace all the filling equipment with an on-board compressor unit in 2022.

The concept of providing on scene firefighter rehabilitation began in the early 2000's with the District starting a program with the rehab bus in 2007. Recognizing our members are our most valuable resource and monitoring their health and well-being on scene was vital to members returning home from fires. We purchased a used 2004 airport shuttle bus and had it converted to a functional rehab unit for on scene firefighter rehab. Even as a high mileage vehicle the bus has given us little maintenance problems, early in the process of developing the rehab bus we determined after having it customized to meet our needs replacement would be far into the future and we would instead plan if needed to overhaul or replace the drive train of the current bus.

Appar #	Radio #	Year	Strategic Plan	WSRB Year	If Reserve	Replace Cost est	CIP Year
<b>Support</b>			<b>80k</b>				
0039	Air 50	1999	80k	Refurbished in 2021, monitor chassis			
0013	Reh 50	2004	80k	as needed		\$100k, monitor need	
0028	Sup 50	2013	125k	as needed			
0042	DNR	2007	Snow Plow/Fuel Truck				

Appar #	Radio #	Year	Mileage
0039	Air 50	1999	10,824
0013	Reh 50	2004	109,832
0028	Sup 50	2013	76,281
0042	UT 50	2007	100,422

### Support Vehicle Needs:

Firefighter safety is our number one priority in all operations, rehab is an integral part of firefighter safety. The District has a need to provide hygiene facilities, nourishment, protection from the elements and air support on scene. This can be accomplished with the three apparatus

currently in our fleet: Support 50, Air 50 and Rehab 50. Support 50 is utilized by the CIT group in addition to fires, the cost to insure and maintain the vehicle needs to be compared to its use, possibly a separate command vehicle could take its place for CIT and alternative ways to shuttle supplies on wildland incidents be developed if the costs outweigh the need.

### Support Vehicle Priorities:

1. Maintain and service current apparatus to ensure longevity.
2. Monitor repair bills to forecast overhaul or complete replacement needs in advance.
3. Quarterly test and inspect on board compressor including air sampling.

### Support Vehicle Costs:

1. Annual maintenance cost per support vehicle is \$150.
2. Annually review repair costs and receive estimates for any major work before completing the work.
3. \$2000

### Command Vehicle Background Information:

Since the inception of the District command cars have been provided as staff vehicles to improve the number of available responders 24/7/365. Today the District maintains a fleet of five command vehicles, two SUV's and three pickups are used both by staff and duty officers. While most of the time these vehicles are used to commute and conduct Fire Department business they also serve as mobile command posts for large scale incidents, because of the ability to provide quick response for command and backup command the District provides vehicles to exempt staff to be available to assist even when not assigned as the District Duty Chief. Of the five command vehicles in use three are assigned specifically to the Chief, Administrative Officer and Deputy Chief; the other two vehicles are used by the weekend duty officer, the Station Captains serving as the Duty Chief, as well as throughout the week used by members for District errands and travel to training classes. In 2025 we purchased a used CAFS and installed it in Duty 50.

Appar #	Radio #	Year	Strategic Plan	WSRB Year	If Reserve	Replace Cost est	CIP Year
<b>Comnd</b>			<b>80k</b>				Estimated
0050	Batt 50	2024	80k			\$90k	2040
0035	Adm 50	2018	80k			\$90k	2030
0042	Ch 50	2021	80k			\$90k	2033
0048	Ch 250	2023	80k			\$90k	2036
0049	Du 50	2023	80k			\$90k	2038
Replacement years are an estimate of when the vehicle will hit mileage.							



Appar #	Radio #	Year	Mileage
0050	Batt 50	2024	
0035	Adm 50	2018	
0042	Ch 50	2021	31,000
0048	Ch 250	2023	
0049	Du 50	2023	11,596

### **Command Vehicle Needs:**

Keeping three command vehicles staffed throughout the District 24/7/365 provides command response as well as backup command response in addition to the ability for staff to assist with District business 24 hours a day. The two “duty” vehicles are important to include our Company officers in our duty rotation for continued coverage as well as having them available throughout the week for day staff to use running errands and responding to calls. Training is conducted around the county and state frequently members use command cars to travel to and from training courses rather than use their personal vehicle and be reimbursed the costs. Changing from having a duty chief and officer we can eliminate one vehicle from the duty rotation which we can provide a command vehicle to the Training Captain in 2026.

### **Command Vehicle Priorities:**

1. Maintain and service command vehicles to ensure longevity.
2. Pre-plan replacement and take advantage of State bid where appropriate.
3. When a command vehicle is due for replacement determine trade in value, sale value vs value to the District to maintain as a reserve unit or use in a response program with stipends.
4. Replace stock tires with a 50k+ mile tire, monitor tires at 60k miles to evaluate whether they will make it to 80k trade in.

### **Command Vehicle Costs:**

1. The annual maintenance cost for all command vehicles is \$1,200.
2. Annually review mileage to determine needs.
3. Review and monitor
4. Tires \$1200 per command vehicle

### **Major Equipment:**

It is the goal of YCFD12:

*“Provide and maintain efficient and effective apparatus and equipment to safely carry out the Mission of the Department.”*

## **Personal Protective Equipment (PPE):**

### **General PPE Recommendations:**

- Replace structural PPE every 10 years.
- Staggering PPE purchases to buy 1/10<sup>th</sup> the necessary amount yearly is preferred to wholesale change out of PPE for budgeting.
- All PPE will be maintained according to NFPA and/ or the manufacturer specifications.
- Track all PPE issued and reserve for replacement dates and repairs in reporting system.
- Maintain facilities for laundering PPE at all stations.
- Every two years update specifications and go to bid for PPE to stay current with the latest safety advances in PPE.
- Reserve and 10+ year old PPE still in serviceable condition will be used as backup PPE.

### **Policy 2111 MEMBER PROTECTIVE CLOTHING:**

The Fire District shall provide protective clothing for members assigned as firefighters. Protective clothing shall be of a type approved by NIOSH, MESA, NFPA or as required by WAC 296-305. The District shall maintain a record of all protective clothing and equipment issued to each member. The following protective equipment shall be issued to each firefighter:

Turnout Clothing (helmet, coat, pants, boots, gloves, hood, suspenders, rescue rope bag, webbing, spanner wrench and hose strap)

Eye and Face Protection

Hearing Protection

Hand Protection

Foot Protection

Head Protection

Communications Device

Wildland Clothing (helmet, goggles, shirt, pants, gloves, gear bag)

Fire Shelter

SCBA Mask and Carrying Bag

The following clothing for brush and wild land fires is approved:

Full turnout clothing for the first hour of the incident or,

Nomex coveralls, leather or fire boots and helmet, gloves or,

Wildland firefighting clothing or dual compliant gear, helmet, boots and gloves.

A fire shelter must be worn until the IC decides they are not necessary.

Protective clothing shall be inspected at not less than one hundred eighty-day intervals. Inspection forms must be filed in each member's station training file.

Protective Clothing shall be washed when excessive staining or dirt/soot build up is evident. Due to known carcinogens being present in smoke and soot Members are

encouraged to wash their turnouts after each exposure to smoke and structure fires. Members shall not wash PPE at home; the District maintains wash facilities for PPE. After washing a turn out cleaning record form must be completed and placed in member's training file.

#### **WAC 296-305-02001 Personal protective equipment and protective clothing.**

- Employers shall provide and maintain at no cost to the employee the appropriate protective ensemble/protective clothing to protect from the hazards to which the member is or is likely to be exposed.
- Protective clothing and protective equipment shall be used and maintained in accordance with the manufacturer's instructions.
- The fire department shall provide for the cleaning of protective clothing and contaminated station/work uniforms at no cost to the employee.
- All SFF clothing purchased after January 1, 2014, shall meet the requirements of the 1991 edition of NFPA 1971, Standard on Protective Clothing for Structural Fire Fighting, or the 1997 edition of NFPA 1971, Standard on Protective Ensemble for Structural Fire Fighting. Firefighters shall not wear personal protective clothing manufactured prior to 1991, except for training purposes in nonhazardous areas.
- Face and eye protection shall be provided for and used by firefighters engaged in fire suppression and other operations involving hazards to the eye and face at all times when the face is not protected by the full-face piece of the SCBA. Primary face and eye protection appropriate for a given specific hazard shall be provided for.

#### **PPE Background Information:**

YCFD12 maintains approximately 100 sets of structural PPE and an equal number of wildland firefighting PPE. In 2004 the District received a FEMA Assistance to Firefighters Grant (AFG) that replaced all structural pants and coats, since this wholesale replacement would create a situation whereas all PPE would expire the same year, beginning in 2009 the District began purchasing 10-15 sets a year to stagger the replacement schedule. Today the amount of PPE needing replacement yearly is manageable within the regular operating budget due to the effort to stagger the purchasing.

#### **PPE Needs:**

Firefighter safety is our number one priority, the District needs to keep up with safety technology and provide quality personal protective equipment (PPE) to our members for all incident types we respond to. The District needs to maintain a cache of PPE to replace damaged PPE as well as provide PPE for new members.

#### **PPE Priorities:**

1. Maintain a data base of PPE including date of issue and size.

2. Stagger PPE purchases annually to replace 1/10<sup>th</sup> of the necessary PPE.
3. Provide the safest equipment possible for our members.
4. Bi-annually inspect all PPE to ensure it meets current standards.
5. Maintain PPE according to manufacturer's recommendations to ensure long life.
6. Supply spare sets of PPE at each station for use during laundering of issued set. Look for grant opportunities to provide a second set of PPE.

#### **PPE Costs:**

1. District has and uses our reporting system to track PPE already, no additional cost.
2. The District currently budgets \$5k for PPE supplies and \$29k for PPE, one set of structural PPE (coat & pants only) is approximately \$3500.
3. Updating specifications and bidding or requesting quotes every two years ensures PPE purchased meets the newest standards for safety at the best possible price, the last update and bid was 2023.
4. Members inspect and document PPE bi-annually during drill.
5. The District currently has an extractor washer for PPE cleaning at each station.
6. \$3500 per set of brand-new gear to be used as reserve or utilize serviceable gear over 10 years. If purchasing sets strictly for spare backup sets, consider basic PPE at less cost.

#### **Self-Contained Breathing Apparatus (SCBA):**

##### **General SCBA Recommendations:**

- Issue individual SCBA masks to members for safety and sanitary reasons.
- Hydro-test SCBA bottles every five years, replacement in 2027
- Flow test and inspect all SCBA and masks annually.
- Maintain enough SCBA and spare bottles to equip all response apparatus first out and reserve.
- Maintain a cache of reserve SCBA to replace damaged units.
- Inspect SCBA prior to each use and monthly.

#### **Policy 3301 RESPIRATORY PROTECTION PROGRAM**

It is the policy of YAKIMA COUNTY F.P.D. #12 [YCFD12] to provide and operate at the highest possible level of Safety and Health for all members. YCFD12 recognizes that the environments faced by its' members while fighting fires or engagements in other emergency incidents may not always have atmospheres that will sustain life. YCFD12 hereby establishes a mandatory self-contained breathing apparatus (SCBA) rule. This rule shall apply to all fire suppression activities where entry into smoke filled environments is necessary, where entry into unknown spaces could contain hazardous atmospheres, the air will be tested, if possible, if not possible the environment will be considered hostile and the mandatory SCBA rules implemented. This rule also applies where entry into a confined space is essential.

When purchasing SCBA, the District will wherever possible and reasonable attempt to purchase additional units of the same brand, type and style of existing units. When completely replacing SCBA's the District will wherever possible attempt to purchase units that are of the same brand, type and style or ensure compatibility with most fire departments in Yakima County.

It is the responsibility of the District to assure SCBA's are maintained in proper working order and within the manufacture's recommendations.

When the District makes its own breathing air or uses vendor breathing air, the District shall maintain documentation certifying breathing air quality.

#### **WAC 296-305-04001 Respiratory equipment protection.**

- Firefighter's self-contained breathing apparatus (SCBA) shall, at a minimum, meet the requirements of the 1997 edition of NFPA 1981, Standard on Open-Circuit Self-Contained Breathing Apparatus for Fire Fighters. Equipment purchased after the effective date of this rule must meet the 2007 edition of NFPA 1981, Standard on Open-Circuit Self-Contained Breathing Apparatus for Emergency Services.
- Firefighters should be issued individual face pieces.
- Self-contained respiratory equipment shall be available and used by all firefighters who enter into hazardous atmospheres during structural firefighting activities.
- SCBA cylinders shall be hydrostatically tested within the periods specified by the manufacturer and the applicable governmental agencies.

#### **SCBA Background Information:**

YCFD12 maintains 45 MSA SCBA, 125 MSA Face Pieces and 100 SCBA bottles. Our entire SCBA MSA inventory was purchased in 2012 through an AFG grant that replaced all SCBA, upgraded our mobile air supply truck and replaced our SCBA filling station at Station 51 to the current NFPA safety standards. The limitations to SCBA are the bottle lifespan, currently bottles must be destroyed after 15 years of service, the SCBA itself may continue to be used so long as it meets WAC 296-305 if a new bottle is purchased, however, over the fifteen-year life of the bottle typically advances in safety, ergonomics and overall usability have improved to the point the 15-year-old SCBA is obsolete. SCBA packs and masks get flow tested annually and SCBA bottles get hydro-tested every five years for a total of two tests over a bottles 15-year lifetime.

#### **SCBA Needs:**

Firefighter safety is our number one priority, the District needs to keep up with safety technology and provide breathing apparatus to our members for all incident types we respond to. The District needs to maintain a cache of SCBA components to repair damages as well as perform annual maintenance and testing per the manufacturer's recommendation. 2027 is the year all SCBA bottles will expire, the District needs to work with all departments in the county for a replacement plan to make a bulk purchase and maintain interoperability. Applying for grants to replace the SCBA should begin in 2025. Presently one manufacture offers a 30 year bottle,

going to 30 year bottles doesn't necessarily mean SCBA will be 30 years old, it means when the District upgrades based on safety and function as long as the same brand is purchased we would not need to purchase bottles and can do so anytime within 30 years.

#### **SCBA Priorities:**

1. Maintain a database of SCBA to track all components.
2. Provide the safest equipment possible for our members.
3. Monthly inspect all SCBA to ensure they remain in perfect working order.
4. Maintain SCBA according to manufacturer's recommendations.
5. Plan for a 15-year replacement of all components.
6. Determine funding source for SCBA replacement costs.

#### **SCBA Costs:**

1. The district has and uses a reporting system to track SCBA already, no additional cost.
2. The District SCBA met the highest standards within 5 years of manufacture.
3. Monthly inspections performed by members during drill.
4. \$4,500 annually for flow testing and inspection by a third party.
5. SCBA bottles will expire in 2027.
6. Estimated cost to replace SCBA in 2027 is \$400k.

#### **Breathing Air Compressor:**

##### **General Compressor Recommendations:**

- Maintain one base air compressor for the District
- Hydro-test storage bottles every five years, replacement in 2027
- Quarterly inspect and test compressor including air sample testing

#### **Policy 3301 RESPIRATORY PROTECTION PROGRAM**

When the District makes its own breathing air or uses vendor breathing air, the District shall maintain documentation certifying breathing air quality.

##### **WAC 296-305-04001 Respiratory equipment protection.**

- When the fire department makes its own breathing air or uses vendor supplied breathing air, they must maintain documentation certifying breathing air quality. The breathing air must:
- Be tested at least quarterly by using an air sample taken from the same outlet and in the same manner as the respirator breathing air cylinders are filled or airline respirators are connected.

- Meet the requirements of either the 2003 edition of NFPA 1989, Standard on Breathing Air Quality for Fire and Emergency Services Respiratory Protection or the 1997 edition of ANSI/CGA G6-1 - Commodity Specification for Air, with a minimum air quality of grade D.
- Meet a water vapor level of 24 ppm or less.

### **Compressor Background Information:**

YCFD12 has had an SCBA compressor going back to the early 90's to fill both SCBA bottles and our Cascade air truck. In 2012 using grant funding we replaced our compressor and installed it at Station 51, the old compressor was surplus and traded to the MAKO dealer in trade for regular testing and maintenance on our new compressor. The length of that contract carried us to mid-2022. With our new on-board compressor on Air 50 the unit is now used to refill SCBA bottles as needed during training and following incidents.

### **Compressor Needs:**

Our current compressor is sufficient for the foreseeable future, regular maintenance is all that is needed.

### **Compressor Priorities:**

1. Maintain one stationary breathing air compressor in District

### **Compressor Costs:**

1. Approximately \$2000 annually for maintenance and testing.

### **Rescue Tools:**

#### **Rescue Tool Background Information:**

In the early 1990's the District purchased a complete set of Holmatro hydraulic rescue tools, this set of tools is in service today on Engine 53. In 2003 a second set of Holmatro hydraulic rescue tools were purchased for Rescue 52 giving the District a set on the north and south side of the District, these tools are now in service on Rescue 54. In 2018 we purchased a complete set of battery-operated rescue tools in service on Rescue 52 and again the same tools were purchased in 2020 in service at Station 51 giving us a set at all four stations.

#### **Rescue Tool Needs:**

Maintenance of existing tools.

**Rescue Tools Priorities:**

1. Maintain a minimum of one set in District.

**Rescue Tool Costs:**

1. Annual maintenance for pumps \$50, battery powered tools \$780/set

**Defibrillators (Defib):****Defib Background Information:**

In 2019 all Lifepak AEDs were replaced with new technology CR2 AED's. The District surplus the Lifepak 500's and retained the Lifepak 1000's to be used in command cars.

**Defib Needs:**

The District needs a minimum of 12 defibs to meet our needs of having one on every first out engine, rescue and one each on our rehab bus and duty officer command car. In service defibs must have supplies such as pads and batteries readily available.

**Defib Priorities:**

1. Provide enough defibs to ensure one is on scene when needed.
2. Defibs must be programmable to keep up with changing CPR protocols.
3. Defibs must be lightweight and user friendly.
4. Supplies must be cost efficient and available.

**Defib Costs:**

1. Technology drives cost, our latest replacements were more expensive than standard defibs yet have better features for lifesaving capabilities. As more companies catch up on technology prices will go down. Plan to wholesale replace every 10 years at \$15-20k. (2029)
2. Yakima County EMS is developing a plan to provide AED's to fire departments at no cost.

**Fire Hose:****Fire Hose General Recommendations:**

- Test all hose annually.
- Maintain enough hose to meet WSRB minimums on apparatus and in reserve.
- Repair or replace damaged hose.



- When purchasing new engines, evaluate the need to purchase new hose.

#### **WAC 296-305-06003 Testing fire service equipment.**

- All fire suppression and supply hose must be tested annually as well as when there is reason to believe the hose has been damaged. Testing shall be in accordance with the 2003 edition of NFPA 1962, Standard for the Inspection, Care, and Use of Fire Hose, Couplings, and Nozzles and the Service Testing of Fire Hose.

#### **WSRB Hose:**

- Each pumping apparatus shall have the following amount of hose:
  - Large Diameter Hose (LDH) 3-1/2" + 800'
  - 2-1/2" + Hose 600'
  - 1-1/2" + Hose 400'
  - Pre-Connected 1-1/2" + Hose 300'
- Each pumping apparatus shall have the following amount of hose in reserve:
  - LDH 400'
  - 2-1/2" 300'
  - 1-1/2" 350'
  - Reserve hose can be carried on the apparatus and excess hose at the station can serve as reserve hose for three apparatus as needed.
- All hose must be maintained in good condition and tested annually.

#### **NFPA 1962**

- Calls for annual hose testing and allows for keeping hose as long as it passes the annual service test.
- Annex A.7.1 adds that all users should establish their own replacement schedule, fire departments should consider a 10-year maximum service life under normal operating conditions.

#### **Hose Background Information:**

In 1991 the District purchased our first 5" LDH, subsequently with each new engine purchased since then we outfitted each with LDH. Additionally, as new engines were purchased so were new 1-3/4" and 2-1/2" hose and nozzles to update the equipment. During our WSRB site visit in 2013 the age of some of our hose affected our overall score, in 2016 \$10,000 was budgeted for hose in addition to the new hose being purchased for a new engine. This hose purchase in addition to the new hose with Engine 52 purchased that year allowed us to surplus all cotton jacket hose and move older hose to reserve status. Over time the District has transitioned from rubber LDH to double jacketed LDH as well as purchase some new handline hose as needed to rotate stock.

## **Hose Needs:**

As space allows each engine needs 800' of LDH, 700' of 2-1/2" and 700' of 1-3/4" hose. Five engines are built to contain this amount of hose equating to 4000' of LDH, 3,500' of 2-1/2" and 3,500' of 1-3/4". Engine 54 does not have LDH therefore it adds an additional 800' of 2-1/2" and 600' of 1-3/4" to the total. Tender 52 carries 600' of LDH, 800' of 2-1/2" and 600' of 1-3/4" hose.

Total hose needed on engines:

- LDH 4,600'
- 2-1/2" 5,100'
- 1-3/4" 4,700'

Total hose needed in reserve:

- LDH 400'
- 2-1/2" 1200'
- 1-3/4" 1400'

## **Hose Priorities:**

1. Develop an amortization schedule for fire hose to replace every 10 years.
2. Maintain data base of hose.
3. Test hose annually.

## **Hose Costs:**

1. To outfit an engine with 800' LDH, 700' 2-1/2" and 700' 1-3/4" hose is approximately \$12,000.
2. Use our existing reporting system to track hose.
3. Each station tests hose annually with a hose tester the District owns.

## **Nozzles:**

### **Nozzle General Recommendations:**

- Flow Test nozzles annually.
- Maintain enough nozzles to meet WSRB minimums on apparatus and in reserve.
- Repair or replace damaged nozzles.
- When purchasing new engines, evaluate the need to purchase new nozzles.
- Maintain a reserve cache of used nozzles.

## WSRB Nozzles:

### STREAM DEVICES

Master stream devices, foam equipment, nozzles and, where required, elevated stream devices must be provided on pumpers and ladders. The following list will be used as guide for this item.

	Engine Number	Ladder Number	Quint Number
<b>Master Streams</b>			
Elevated stream where required	0	1	1
Turret/Deck gun w/ tips (1,000 gpm +)	1	0	1
Portable Monitor w/ tips (500 gpm +)	1	0	1
Large spray nozzle for master stream	1	1	1
<b>Foam Systems</b>			
Proportioning System/CAFS	1	0	1
Foam on engine - 10 gallons	10	0	10
Spare Foam at station - enough to refill engine, minimum of 10 gallons	10	0	10
<b>Nozzles</b>			
2 1/2" Combination spray w/ shut off	2	0	2
1 1/2" Combination spray w/ shut off	2	0	2
Extra 1 1/2" or 2 1/2" nozzles	3	0	3
Broken Stream i.e. piercing or distributing nozzle	1	0	1

### Nozzle Background Information:

Traditionally as the District grew from 1960 to 2022 as new apparatus were purchased new nozzles were purchased for the apparatus including master streams leading the District to have a mix and match bunch of nozzles some dating back as far as the 1950's. Beginning in 2003 piercing nozzles have been purchased as well. In the past several years blitz type quick attack master streams were purchased for Engines 51, 52 and 53, these portable devices can be moved to a reserve engine as needed. In 2022 the District made a wholesale change of all nozzles purchasing 32 1-1/2" Akron nozzles and 24 2-1/2" Akron nozzles, newer nozzles in the replacement were kept for reserve and all others surplus.

### Nozzle Needs:

1. Two 2-1/2", Two 1-1/2" and Three spare of per apparatus.

**Nozzle Priorities:**

1. Maintain appropriate number of nozzles per apparatus as well as a reserve cache.

**Nozzle Costs:**

1. Replaced in 2022, next replacement not until minimum of 2037

**Communication Equipment (Radios):****General Communication Equipment Recommendations:**

- Radio pagers remain the most effective way to notify members of alarms.
- The more portable radios available at a fire scene the safer it is for members.
- Major radio changes require buy-in from all agencies in the Upper Valley.
- When purchasing equipment multi-band with the ability to meet future needs is critical.

**WSRB:**

- Enough two-way radios must be available.
- Enough spare two-way radios must be available.

**Radio Background Information:**

YCFD12 maintains 110 radio pagers, 29 mobile radios, 60 portable radios and 13 portable KING radios. Each member carries a radio pager for alarm notification, each officer is assigned a portable radio, and each apparatus carries one to three portable radios. Communication is the key to successful mitigation of emergency incidents. Around 2010 the Upper Valley transitioned from wide band to narrow band which necessitated the District to upgrade pagers and radios to accommodate the narrow band channel. There are many systems in use in the US including 800 Mghz, trunk systems and digital. As wireless technology continues to grow the FCC must continue to reduce the footprint of each user, no consensus has been reached for emergency services on what the future system will be therefore the District currently continues to repair and replace our current radio system. In 2021 all three fire communication systems used in Yakima County were upgraded to remain VHF. In 2022 the District replaced all radios purchasing 60 P25 compliant Kenwood portable radios and 27 mobiles which will continue to function in the planned county radio system of digital VHF. In 2025 the county passed a sales tax increase for emergency communications, funding will begin in 2026, an RFP developed for the next system county-wide has been developed. Presently fire districts are in phase II of the plan, at this time the District will continue to use our current radios before transitioning to the new system paid for by the sales tax.

### **Radio Needs:**

The District needs to maintain a minimum of 100 functional radio pagers to notify members of alarms. Additionally, all apparatus needs a mobile radio and two portable radios, and each officer is assigned a portable radio.

### **Radio Priorities:**

1. Maintain 100 radio pagers or means of notifying members of alarms.
2. Maintain 60 P25 Compliant portable radios.
3. Maintain 29 P25 Compliant mobile radios.
4. Can program radios and pagers in-house.
5. In conjunction with partners across the county develop and implement the future system before the current system is non-functional.

### **Radio Costs:**

1. Minitor pagers are approximately \$500 each. Check used market as agencies transition to cellular.
2. Kenwood 5200 portable radios \$913 each plus set up
3. Kenwood 5700 mobiles \$860 plus remote head and install
4. The District owns the software and cables for programming current equipment.
5. Without grants the cost to upgrade our equipment could be as high as \$1 million if a completely new system is built utilizing anything other than VHF.

### **Thermal Imaging Cameras (TIC):**

#### **TIC Background Information:**

YCFD12 replaced all first out TICs in 2020, operating five new TICS and maintained one or the newer MSA's for the duty officer to utilize. The first TICs were purchased in the mid 2000's with 3 more added over the years. TIC technology has evolved since our first purchase and many models are coming down in price compared to the \$10-15k we have spent on cameras over the years. TIC's have become invaluable for performing fire ground operations such as search, attack and overhaul in addition to non-fire uses such as search and rescue and motor vehicle collisions. In 2017 small handheld TICs were added to Rescue units and Command cars as an addition to the program for rescue use, not to replace large TIC on engines.

#### **TIC Needs:**

Firefighter safety, civilian rescue and reducing property damage are aided using thermal imaging. The District has a need to maintain five TICs on our engines in addition to using new technology for lightweight in-expensive TICs for command and rescue use. As our current technology ages and units become unreliable the District needs to consider the next generation of

TIC for first out engines. Currently plan to replace TIC's every 10 years unless they become unreliable in a shorter time frame.

**TIC Priorities:**

1. Maintain five TICs for engines.
2. Replace every 10 years with new technology.

**TIC Costs:**

1. Repair when fiscally responsible.
2. \$25k for 5 TIC in 2030. \$4k for small Rescue/Command units in 2027.

**Gas Monitors:**

**Monitor Background:**

The District maintains five 4-gas monitors on first out engines and the duty crew as well as 12 sealed Carbon Monoxide monitors attached to EMS bags. One calibration unit for the gas monitors is maintained in District used for monthly calibration of the units. Additionally, in our rehab unit we carry a Massimo Rad 57 CO monitor to monitor firefighters on scene for CO exposure.

**Monitor Needs:**

State law requires carbon monoxide alarms in new construction and rentals; therefore, we receive CO alarm calls, the District needs a reliable monitor for each first out engine and the duty crew. Additionally, several unexplained medical problems on EMS calls have been discovered to be carbon monoxide poisoning via the small alarms on our EMS bags, these monitors run for 1-3 years always "on" so CO in a station bay would be discovered by them as well. Monitoring firefighters on scene for CO poisoning is critical for diagnosing and health issues.

**Monitor Priorities:**

1. Due to improved technology and serviceability gas monitors should be replaced every 10 years or as we begin having issues with current monitors. We must maintain the ability to regularly test monitors to ensure they are accurately functioning.
2. Replace CO EMS monitors as they time out.
3. Monitor the Rad-57 for any advances in technology and upgrade or replace as needed.

**Monitor Costs:**

1. \$5000 to replace five monitors, \$4k for testing equipment. 2035
2. \$100 each
3. \$5000 for new Rad-57

## **Saws:**

### **Saws Background:**

The District carries chainsaws for venting structure fires, forcible entry/rescue and wildland fuel reduction. Each first out engine carries a gas-powered vent saw and each brush truck carries a wildland saw, additionally Sawzall's are on rescues and some apparatus utilize circular saws.

### **Saw Needs:**

In 2023 the District replaced all vent saws and converted the old vent saws to wildland saws, replacement of saws is based on use, serviceability and issue. As battery operated saws continue to improve in power the District will, when needing to replace a saw review the ability to replace with a battery-operated saw.

### **Saw Priorities:**

- 1 Ensure we have sufficient saws for ventilating structure fires and use at wildland fires.
- 2 If possible, transition to battery power.

### **Saw Costs:**

1. Saws are around \$1200-\$1400 each.
2. Based on performance and cost.

## **Positive Pressure Ventilation Fans:**

### **PPV Background:**

The District carries gas powered PPV fans on first out engines for smoke removal.

### **PPV Needs:**

The current fans work well, studies have shown the exhaust from the fans can inadvertently be blown into the structure and the weight of the fans typically requires two Members to put in service. As fans develop mechanical problems, they should be transitioned to battery operated PPV fans.

### **PPV Priorities:**

- 1 Ensure we have sufficient fans for ventilation.
- 2 If possible, transition to battery power.

**PPV Costs:**

3. Monitor maintenance costs.
4. \$5000 each

**Portable Pumps:****Pumps Background:**

The District carries small portable pumps on wildland engines and large volume pumps on water tenders.

**Pump Needs:**

6 small wildland pumps and 3 volume pumps.

**Pump Priorities:**

- 1 Ensure we have sufficient pumps.
- 2 Replace as needed.

**Pump Costs:**

- 1 No cost to monitor.
- 2 Wildland pumps around \$600, volume around \$1200

**Hydrants:****Hydrants Background:**

The District maintains 26 hydrants throughout the Yakima-Tieton Irrigation District, these hydrants are critical to getting a water supply established in rural areas of the District. The water is provided by YTID, but the District owns and is responsible for the hydrants. As part of the hydrant system all air vents on each fire line are required to be heated, this is also at the expense of the District and charged a flat rate for the power. YTID has made it clear they are in the irrigation business NOT fire suppression, YTID in the past has had no interest in adding additional hydrants to the system. YTID generates electricity from hydro plants and maintains a flow of water year-round if there are no major maintenance projects for the winter. The water supply can be shut down for maintenance during the winter, or for emergencies, YTID communicates shutdowns with the District. Maintenance, repair and testing is all the responsibility of the District.



**Hydrant Needs:**

The District needs to maintain water supply in the rural areas and if additional hydrants are brought in an area remove our hydrants to lessen our liability.

**Hydrant Priorities:**

1. Maintain and inspect all hydrants annually.
2. Flow test hydrants every five years.
3. Repair hydrants when possible.
4. Replace hydrants that are unrepairable.

**Hydrant Costs:**

1. Duty crew on shift.
2. Duty crew on shift
3. We have a small supply of parts, most all our hydrants are discontinued, we scavenge parts off old hydrants and maintain an inventory of what parts are available for in-house repairs.
4. Replace a hydrant \$7500

**Lawn Equipment:**

Across four stations the District has approximately 8 acres of lawn to care for and currently utilizes 2 walk behind mowers, two 54" deck riders and one 72" deck rider as well as trimmers, blowers, aerators and various other tools. For the CIP only the three riding mowers are considered, all other equipment is purchased as needed.

0075 2008 John Deere with 72" deck original cost \$17,000. Replace 2028

0019 2020 Hustler 54" deck zero turn mower, cost \$6130. Replace 2040

0043 2022 Hustler 54" deck zero turn mower, cost \$6,900. Replace 2042

## Capital Improvement Cost Estimate:

Year	Capitla Improvements Planned	Total
2026	PPE \$35k, St 53 HVAC \$40k, Engines \$212k, Save SCBA \$100k	\$387k
2027	Brush 0037 \$145k chassis/boxes, SCBA \$450k, PPE \$40k, small TIC \$4k, Engines \$212K	\$639k
2028	PPE \$40k, Hose \$10,000, Seal south asphalt St 51 \$14k, St 54 HVAC \$30k, 51 mower \$8000, Engines \$212k	\$102k
2029	PPE \$40k, AED's \$20k, Refurb Eng 0007 \$350k, Of50 0035 \$75k, Engines \$212k	\$388k
2030	Brush 0054 \$150k chassis, PPE \$40k, Admin Roof \$75k, Seal St 54 asphalt \$8k, Refurb 0023 \$300k, 5 TICS \$25k, Engines \$212k	\$598k
2031	PPE \$40k, St 53 roof \$50k, Tender 0010 \$400k, Cmmnd Ch50 \$85k	\$575k
2032	PPE \$40k, Rescue 0033 \$250k (EMS), ST 53 asphalt seal \$12k	\$302K
2033	PPE \$41k, Hose \$12k, Rescue 0034 Chassis \$125k (EMS), Cmd Car \$75k	\$253k
2034	PPE \$42k, Tender 0054 \$400k	\$442k
2035	PPE \$42k, Admin HVAC \$100k, Cmd Car \$85k	\$227k
2036	PPE \$42k, Refurb Eng 0030 \$300k	\$342k
2037	PPE \$42k Cmd Car \$85k, Nozzles if needed \$40k	\$164k
2038	PPE \$42k, Hose \$12k, Re-chassis Brush 0043 \$150k	\$206k
2039	PPE \$45k	\$45k
2040	PPE \$45k St 52 Roof \$40k, 53 mower \$8k, Cmd Car \$80k, Brush 0015 full replace \$350k	\$523k
2041	PPE \$45k, Cmd Car \$95k	\$140k
2042	PPE \$45k, Brush 0037 Full replace \$350k, Mower \$8k	\$403k
2043	PPE \$45k, Refurbish Eng 0041 \$400k	\$445k
2044	PPE \$45k, Brush 0054 full replace \$350k	\$395k
2045	PPE \$45k, St 52 HVAC \$60k	\$105k
2046	PPE \$45k	\$45k
	Engines refurbish at 20 years, then run additional 10-15 years depending on condition and maintenance costs, reserve needs	
	E0041 replace between 2053-2058, E0007 2039-2044, E0030 2046-2051, E0023 2040-2045. E0007 & 0020 already reserve 2038-2044 replace	
	Brush re-chassis at 15 years then run additional 15 years depending on reserve needs	
	Rescues refurbish or re-chassis at 15 years	
	Support units as needed based on maintenance and functionality	
	**Station 52 and 54 generators, \$250k not included in matrix. Station 54 water supply not included in matrix	

## Financial Planning:

This capital improvement plan only addresses facilities and specific equipment, the level of staffing and infrastructure support necessary to sustain Yakima County Fire District 12 (YCFD12) at our current level of fire and emergency services requires financial management that balances funding against payroll, operating costs and capital projects. Over time, costs generally increase for the delivery of service at a faster rate than traditional funding can keep up with. Several funding options are available to the District to meet the financial need ranging from:

- 101% Lid Lift (Restoring the levy)-** When new construction and property values increase at a rate higher than 1% of the District's budget, the price per thousand the District taxes property owners drop. Fire protection districts, with voter approval, are authorized to lift the lid for either a single year or for multiple years (up to six consecutive years). A single year lid lift can be "permanent" (i.e. the amount of the levy in the year the lid is lifted is intended to serve as the levy base for calculating future tax levies) or "temporary" (lid lift does not affect a district's tax levies beyond the year the lid lift is proposed). Most fire districts in Washington have traditionally asked the voters to approve permanent lid lifts. Multiyear lid lift must follow these specifications: 1) the requirement that a levy rate only be used for the first year and a limit factor be specified

for the remaining five years; 2) the requirement that the ballot title specify the specific purpose for which the funds will be used; 3) the requirement that the proposition be run during either the primary or the general election, and 4) the ballot title state whether the lid lift is intended to be permanent (this requirement also applies to single year lid lifts). A 25 cent lift was requested in 2024 and approved by voters bringing the levy to \$1.16 starting in 2025.

- **Emergency Medical Services (EMS) Levy-** This is a voter approved levy for either a six-year, ten-year or permanent basis to fund EMS payroll, equipment and training. The County has the first right to an EMS levy, if the County does not have a levy or has a levy below the 50 cent/thousand cap the District may choose to collect their own EMS levy. Yakima County currently has a ten-year EMS levy of 25 cents/thousand that expires in 2030.
- **Excess Levy-** If property values aren't sufficient to fund the staffing, facilities and equipment of the Fire District, the Board of Commissioners may ask voters to exceed the normal limits imposed by state law. The amount collected by an excess levy is set by the Commissioners and approved or rejected by our voters.
- **Voter Approved Bonds-** Voter approved bonds can only be used for capital purchases, the voters agree to raise their taxes to pay off the bonds. Typically, the bond request is for a specific amount of money for specific capital items. Passing a voter approved bond frees up money that would otherwise have to be spent on purchasing equipment from the general fire fund.
- **Commissioner Approved Bonds-** The Board of Fire Commissioners may approve bonds that essentially are like a loan. The bond amount must be paid back from the existing property tax budget. Typically, the amount of money the District can obtain is lower than a voter approved bond.
- **Service Benefit Charge-** A service benefit charge may add up to 60% of a fire districts total budget and can be in effect for a six-year period. A benefit charge is most frequently used to maintain a stable source of funding rather than to increase taxes above the rate that would have been charged with property taxes alone.
- **Impact Fees-** Impact fees are assessed on new developments to pay for a portion of the costs of the capital facilities needed to serve the new development. RCW 82.02.090(7) provides that fire protection facilities in jurisdictions that are not part of a fire district may be funded with impact fees.
- **Grants-** The District regularly applies for grants funded through multiple agencies and companies. Grants are highly competitive and cannot be a guaranteed source of funding, however, long range planning allows the District to be more competitive in the grant selection process.

Historically YCFD12 has funded capital projects either from the general fund directly or using Commissioner approved bonds which are then paid back with general fund money. In 2024 the District successfully passed a levy lid lift of .25 cents moving the rate to \$1.14/thousand.

Several capital projects and operational positions have been funded through FEMA AFG funds, since 2002 the District has received over \$2 million dollars in grant funding from this one source

in addition to grants from the Bureau of Indian Affairs, WA Department of Natural Resources, United States Department of Agriculture and several private insurance companies.

As a Fire District we are in the business of risk management, we plan based on potential risk, probability, funding and capabilities for the following major risks:

<b>Major Risk Reduction Categories</b>		
<b>Natural Disasters</b>	<b>Low Frequency-High Risk Buildings</b>	<b>Reoccurring Accumulative Incidents</b>
Floods	Hospitals	Drowning
Wildfire	Fruit Warehouses	Accidents
Windstorm	Apartment Houses	Trauma
Blizzards	Nursing Homes	Bicycle Accidents
Earthquake	Schools	Fireworks
Terrorism	Assemblies	Home Fires

This capital improvement plan is intended to be a fluid plan that is updated on needs, available funding and new technology to meet the Districts mission. This plan should be used and modified annually when preparing the following year's budget to ensure capital projects are planned out based on need and available funding. There are many variables when making capital purchases. This plan is to provide a road map for the future that allows for detours and route changes to be made well in advance of need.