

The replacement of Engine 712 has been planned since the truck was purchased new in 2007. Regular replacement of fire apparatus is part of the Fire District's long-range budget planning that is reviewed and adjusted on a yearly basis. Regular and planned fire apparatus replacement is just one portion of the Fire District's commitment to providing high quality emergency fire and rescue services to the residents and visitors of East Bloomfield.

Engine 712 is the first responding apparatus to the following types of emergency calls:

- Structure fire
- Automatic fire alarm
- Odor of smoke/burning odor in a structure
- Natural gas or propane emergency
- Carbon monoxide (CO) incidents & alarms
- Water problems (roadway flooding, flooded basement)
- Mutual aid request to scene of a structure fire
- Water supply (filling water tanker trucks for fire suppression)

Why purchase a new fire engine now?

- The cost of new fire apparatus has risen 10-15%, or more each year for the last 4-5 years and based on industry trends looks to continue at a similar rate for the next 2-3 years.
- Delays in production time from manufacturers have also increased significantly.
- Fire apparatus manufacturers currently have production times 3-4 years for new apparatus.
- Each year the replacement of Engine 712 is delayed will add approximately \$100,000 - \$150,000, or more to the final cost.

Fire Apparatus Age:

- The current Engine 712 will be 20 years old in 3 years (2027).
- National Fire Protection Association (NFPA) Standard 1901 (Standard for Motorized Fire Apparatus). In the standard, (Annex D) it states that *"front line apparatus older than 20 years should be placed into reserve status and/or refurbished and should be removed from service at 25 years."*
- Front line apparatus older than 20 years can negatively impact a Fire District's ISO rating.
- ISO is a rating assigned to the Fire District based on the level of fire protection provided.
- A lower ISO rating can result in increased fire insurance rates for Fire District residents and business owners.

Mechanical & Reliability:

- There has been an increase in mechanical and repair issues with current Engine 712 over the last several years. Including a mechanical breakdown at a public relations event in 2022.
- These mechanical/repair issues have led to a higher cost of maintenance to keep Engine 712 in front line service.
- A mechanical breakdown at a fire scene could be catastrophic. This is a safety issue for our residents and our firefighters. Firefighters operating on the inside and outside of a structure fire rely on the water supply and pump capabilities provided by Engine 712.

Re-Sale:

- Fire apparatus over 20 years old have a much lower resale value.
- Fire departments looking for used apparatus typically do not want apparatus over 20 years old for front line use.

Long-Range Planning

- The Fire District conducts a long-range budget analysis as part of their yearly budget process. The long-range analysis looks at Fire District finances and expenditures projected over 25-30 years.
- The planned replacement of Engine 712 has been part of the long-range budget plan since the truck was purchased new in 2007. This long-range planning is the same for all fire apparatus currently in the fleet.
- The purchase of the new Engine 712 would be completed with a combination of capital reserve funds and financing as part of the long-range budget plan.
- The estimated delivery of new Engine 712 in 2027/2028 is in-line with the planned 20-year replacement schedule. Additionally, there is no impact on the planned replacement of apparatus in 2032 and 2035.
- The anticipated four-year delivery will allow the Fire District additional time to save/add funds to the equipment reserve. This could lower the overall amount to be financed.
- In addition, funds in interest bearing accounts will generate additional compound interest over the next four-years.
- Based on long-range projections and planning by the Board of Fire Commissioners, the board does not anticipate the need to exceed the property tax cap as set by the New York State Comptroller's office as a result of the purchase of a new fire apparatus. Current long-term projections indicate that interest income on District assets will be sufficient to reduce the need to exceed the property tax cap for future tax levies.

New 712 Benefits & Improvements:

- Increase of on-board water tank capacity from 1,000 gal. to 1,500 gal. provides more water for an initial fire attack.
- Pump capacity increases from 1,250 gallons per minute (GPM) to 1,500 GPM.
 - Provides the ability to pump more water in long distance pumper relay situations.
 - Service improvement for residents with long driveway access and in areas of the town with no fire hydrants.
- Similar cab and body configuration as current Engine 712 with same hose load/equipment complement.
 - Shorter in-service training time for firefighters
 - Apparatus operator familiarity
 - Majority of existing tools and equipment would be transferred to the new Engine 712
- A review of the equipment on current Engine 712 was conducted as well as exploring additional equipment that may need to be added in the future to increase capabilities.

- As specified, the new Engine 712 has the storage space for all current equipment, as well as “room to grow” should additional equipment need to be added in the future.

Custom or Commercial:

- Advantages to a custom cab/chassis:
 - Heavy duty construction specific for fire service use.
 - Longer active service life
 - Greatly increased crash/roll-over protection for occupants.
 - Maintains seating for a crew of six (6) firefighters.
 - Shorter wheelbase results in a tighter turning radius.
 - More versatility for equipment storage in both cab and exterior compartments.
 - Higher resale value at end of service life.
- Disadvantages to a commercial cab/chassis:
 - Maximum seating is five (can be configured for six but is extremely cramped).
 - Significantly less crash/roll-over protection for occupants.
 - Reduction in amount of in-cab equipment storage and mounting.
 - The overall length of the truck would be longer by 2-3 ft.
 - A longer wheelbase will result in a larger turning radius.
 - Shorter active service life as compared to custom chassis

Manufacturer Choice:

- Four different manufacturers were considered during the specification process.
- All four manufacturers were provided identical bid specifications.
- The new Engine 712 would be built by Pierce Manufacturing (Appleton, WI)
- The Fire District has a 30-year relationship with Pierce Mfg.
- Pierce Mfg. is represented regionally by Firematic (formerly Churchville Fire Equipment)
- Pierce Mfg. provided extremely close adherence to the bid specifications, including offering options to enhance safety and reliability.
- Pierce Mfg. was the only bidder to offer a diesel engine that meets the upcoming 2027 federal emissions standards on diesel engines and comes at a cost reduction compared to motors offered by other manufacturers.
- The new Engine 712 will have more horsepower and torque than the current 712. This is due to the increase in weight (water tank size) and higher pump capacity (torque).
- Firematic’s heavy truck maintenance facility is in Churchville NY (37 miles)

Summary:

Providing fire and rescue services to the residents of East Bloomfield is the top priority of the Fire District while also being good stewards of taxpayer funds. As part of the yearly budget process the Fire District allocates a portion of their budget to a reserve fund for apparatus and equipment replacement. The replacement of Engine 712 has been planned for almost 20 years and is part of the apparatus replacement schedule that has been used successfully by the Fire District for decades.