



TO: PUBLIC PROTECTION & SAFETY COMMITTEE

FROM: JACOB CARREL, FIRE CHIEF

RE: REPLACEMENT LADDER TRUCK

DATE: April 6, 2022

Current Situation

We currently are operating a 1995 Pierce 100' ladder truck. 27 years ago, this was a top-of-the-line truck and has served our community well. But a lot has changed in ladder truck technology in the last 27 years, and although it has been maintained with the highest of standards, it is getting old. It is becoming difficult and costly to maintain. With a life expectancy of 20-30 years, this does not come as a surprise.

As the truck nears the end of its useful life, maintenance decisions become more challenging. We currently have over \$20,000 of deferred maintenance on items such as a rear axle repair and radiator repair. These deferred items could require repair in the near future. Last year we spent \$4,000 on needed repairs to keep the truck in service and safe to operate.

Importance of a Ladder Truck to the Community

The number one reason for having a ladder truck serve the community is safety. It is much safer for our firefighters to work from (compared to ground ladders), and it is much safer in rescue situations for both civilians and firefighters. They are also very effective at slowing and stopping fire spread in large residential, commercial, and industrial buildings.

The most common use we think of with a ladder truck is to rescue victims from a fire. But more commonly, the truck is used to rescue people due to injury in locations that present challenges (rooftops, waterways, steep grades). It is also utilized for large fires where large volumes of water are required and allow for elevated streams to attack the fire. In cases of fires in downtown "Mainstreet USA" type of buildings, fire can quickly travel from building to building, and ladder trucks are often the best tool to extinguish the fire. In large industrial complex fires, large volumes of water from an elevated position may be the only way to prevent further spread. In these cases, the ladder truck's capabilities can potentially save tens of millions of dollars (or more) of property damage and avoid the economic impact of these fires.

We also consider the impact a ladder truck has on insurance ratings. The International Organization for Standardization (ISO) assigns Kaukauna a Public Protection Classification (PPC) based upon their Fire Suppression Rating Schedule (FSRS). This rating is like a golf score; the lower, the better. This score is what many insurance companies use when considering fire protection rates for property insurance premiums. Having a ladder truck ready to respond is essential for Kaukauna to meet the standard of two fire engines and one ladder truck for low-hazard occupancies involved in a fire, such as house fires.

Replacement Recommendation

We established a Ladder Truck Committee in 2021 led by Assistant Chief Travis Teesch. This committee is comprised of line staff, supervisory staff, and administrative staff. They've volunteered many hours of their time

exploring different options of how a replacement ladder truck can best serve and protect Kaukauna for decades to come.

The committee determined that a mid-mount platform truck would be our best option to serve Kaukauna, and I concur with their findings. The mid-mount offers capabilities that far surpass our current truck, as well as most other ladder trucks made today. The truck that we are proposing is a 100' Pierce Ascendant Mid-Mount. The highlights of this proposed mid-mount ladder truck are:

- Very short turn radius, similar to that of our regular fire engines, allowing for ease of maneuvering in tight locations and even allows us to drive a cul-de-sac without having to back up.
- Fast, one-person setup compared to slow and labor-intensive setup of most other ladder trucks.
- Allows for below-grade operation at angles traditional trucks cannot do.
- Allows for operation on most residential homes for ventilation or rescue.

The alternative to this mid-mount truck is a traditional rear-mount ladder truck. The challenges with that design are:

- Wide turn radius makes the placement of the truck difficult. This presents problems with some existing locations in the city, as well as some planned projects.
- The truck's longer length and overall height further restrict where this truck can be driven and set up. It also limits where it can be located in our fire station, as it would be too long to be parked where our current ladder truck sits at the front of our station.
- The bucket overhanging the front presents challenges when driving.
- The fly sections are 50' rather than 33', restricting the use on neighborhood streets.

Pricing

At the last meeting, I gave my estimated price of \$1,500,000. We now have a quoted price from Pierce of \$1,578,300 if we pay for the truck upon delivery in 2024. I am currently working with Asst. Chief Teesh on exploring ways to reduce this further to meet our \$1,500,000 budget without sacrificing safety items.

We have pre-payment discount options available if there is a desire and ability to do so. If the total amount were to be prepaid, we would receive a discount of \$71,000. Paying in installments could yield a discount of \$25,000.

Recommended Action

If there is support to purchase, I recommend that we place the order before the 7% price increase on May 1st.

