

<u>Department</u> :	POLICE DEPARTMENT
Project Year:	2024
Project Cost:	\$120,000.00
Project Name:	Police Patrol Vehicle Replacement
Description:	Replacement of 2 Police Patrol-Rated vehicles w/ Equipment & Set-up: 2024 Ford Explorer Hybrid – Interceptor Police Package.
<u>Justification</u> :	The department's fleet consists of 4 front-line patrol vehicles, 1 K9 squad, 1 Shift Commander vehicle, and 3 School Resource Officer (SRO) vehicles. In addition, the department maintains 2 travel vehicles, 2 investigator vehicles, and a Community Service Officer vehicle (CSO).
	Historically the department has planned and implemented a vehicle replacement program that has a three-year cycle. Each year a marked patrol vehicle is replaced, and an additional unmarked vehicle necessary to be replaced on the third year. The following three years a marked patrol vehicle would be replaced each year but on the third year another marked patrol squad would be necessary to replace. 2024 is such a year for two marked patrol vehicles to be replaced.
	All of our non-marked and non-equipped response vehicles have recently been included in the Enterprise Fleet Management leasing program. Only the CSO vehicle has yet to be replaced in the Enterprise program. This program will reduce the overall need for two vehicles in any given year, but does not change our need for two marked patrol vehicles this year.
	(Note, departments don't utilize Enterprise for marked patrol as they would need patrol rated vehicles, and also need the ability to drill, mount, and wire an excessive amount of equipment and then remove, leaving the vehicle worthless for trade in, which is contrary to how Enterprise works.)
	The fleet of vehicles is at various stages of life (mileage, condition, etc.). Unlike the average personal vehicle, or any vehicle other than maybe a cab service, a police patrol vehicle is in operation



almost all day, every day, regardless of weather. The mileage is perhaps the worst mileage for any vehicle under any circumstances. Mileage does not reflect run time or idle time which is required to keep the various electronics running and connected to the server, and ready to respond at a moment's notice for a call to service. Narcan, Preliminary Breath testers, and other expensive electronics in our squads also need to be kept in a controlled temperature at all times.

The vehicles to be replaced are 2 Ford Explorer Interceptors going on 7 and 8 years respectively. These vehicles had previously been transitioned from patrol to SRO use to prolong the serviceable life as has been the history of our marked squads. Typically, we get 3-4 years of patrol from a squad before transferring it to SRO for an additional 2-3 years. One of these squads has nearly 145,000 miles while the other has 160,000. Both squads have had extensive catalytic system issues, and one has a door panel falling apart, aside from all the other wear and tear of a vehicle operated 365/24/7 by 3 different officers per day, and with the extra corrosion winter salting provides Wisconsin vehicles.

Maintenance, reliability, and re-sale are all factors taken into consideration in determining serviceable life with consultation from our city's mechanics. Additionally, since COVID, we have gone extended periods of time receiving no replacement because of backorders which have caused extra mileage and maintenance we would have otherwise avoided. We are still awaiting our 2023 squad to replace a 13-year-old Chevy Tahoe that had been used extensively as a Shift Commander vehicle and in recent years a School Resource Officer vehicle.

Council suggested researching the option of engine/transmission replacement or rebuild to extend the life of our squads. Our city mechanics were against such an idea as any aftermarket or other provider for such a project would void all other warranty or service contracts, as well as concerns for compatibility of special computer components, drive line, and rear differential as examples. Using Ford for such a service would be far more expensive and with excessive down time, and would still not take care of the wear and tear of the rest of the vehicle.

Research was also conducted by this department across the state regarding the idea of rebuild/replace.



Former Police Chief Joe Collins noted this was brought forth by council over a decade ago and ultimately dismissed after learning of the difference between use of a personal vehicle versus the use of a patrol squad regarding the wear and tear, and the liability of an unreliable patrol squad when the response for life or property arises.

The Sheboygan Sheriff and Captain provided information that nearly 20 years ago their department tried an engine and transmission rebuild, including seat and other component replacement. That project lasted a month before consistent issues with that squad and ultimately ending the project, and they have not gone back. They currently get up to 8 years of service on their squads with 2-3 on patrol, a couple as paper service vehicles, and then finally as short travel vehicles for other county departments use.

Ashland's Police Chief has reviewed such a project and found that when they've had transmissions or engines go out, the replacement cost is higher than the value of the car so they've traded them in non-working order. They have also switched to the Enterprise Fleet Management for their unmarked squads to lessen the need for extra vehicle replacement as our department has.

Former Town of East Troy Police Chief had experience and relayed the following example: if you are able to retain the core components of a transmission, while only replacing worn parts, it can be economically advantageous, but usually that is not the case. Typically it is more involved, reliability and longevity is questionable, and lifespan is contingent on the varying degrees of workmanship, parts used, etc. He also relayed the concern for the considerable amount of down time for needed squads when entertaining such a project.

Brillion Police Chief described the same as well as concerns for the remainder of the vehicle such as drive train, condenser, radiator, corrosion of the body, and vehicle warranty versus the rebuild/replaced transmission and/or engine. His department currently also gets 7-8 years out of a squad and was surprised to hear our department did as well.



Manitowoc shared that they were forced to replace an engine on a vehicle just outside warranty, however then had to replace the transmission, and then consistently fixed other components until finally sitting it until it could be traded in. They also have unmarked vehicles in Enterprise Fleet Management.

Chilton Police Chief shared many of the same concerns and expressed the overall corrosion of vehicles in Wisconsin from salt in the winters and the needed constant run/idle time is the biggest detriment to such a project ever being worthwhile.

The purchase of two vehicles this year in addition to the 2023 squad, would also provide an opportunity for a change in an outdated design, and the opportunity to transfer half our patrol fleet to Hybrid vehicles.

Hybrids are also currently being marketed by Ford with identical body style and capabilities, but with a 100,000 mile/5-year bumper to bumper warranty and at a price approximately \$6,000 cheaper than gas models. Hybrids should save extraordinary amounts of fuel just in idle time, as well as on the road. Comparisons by other departments were double MPG for Hybrids vs Gas. In addition, that warranty is unmatched from vehicles in the past that were typically 3 year/36000 miles.

This capital request includes the vehicle purchase price, transition costs, new equipment (light bar, mounting hardware, etc.) only when needed. Existing equipment is transferred from an old squad to the new squad. New equipment is purchased with the new squad when the particular item is obsolete, faulty, or the body design and interior dimension changes require new equipment. Body design changes occur at the discretion of the vehicle manufacturer and we have learned 2024 is one of those body changes.

- Life Expectancy: 5-8 years
- **Funding Source:** Purchase through State Bid-Holder/Pricing. Internal borrowing arranged through Finance Dept.