

2025

Police Department Fleet Report



Chief M. Harden

Budget and Finance Committee Meeting

3/20/2025

Executive Summary

The police department currently operates a fleet of 18 vehicles, with many exceeding the recommended service life and mileage limits. Rising fuel and maintenance costs are placing an increased financial burden on the city, including the patrol officers that are working in ageing equipment (**remember- this is the officers office, in all weather and all times of the day**). This report presents information and a plan for current budgeting issues and transitioning to a more fuel-efficient and sustainable fleet in the future.

Current Police Vehicle Fleet Situation

The police department currently operates a fleet of 18 vehicles, which includes 5 administrative and detective vehicles, 10 patrol vehicles, 1 transport van, 1 emergency management vehicle, and 1 crime watch vehicle.

Three patrol vehicles are ready to be surplused. Of the vehicles to be surplused, one is the K9 vehicle and the other two are patrol vehicles. A fourth vehicle to be surplused would be the transport van.

Purchasing a police vehicle takes time. Once the state bid is announced, competition is fierce, and vehicles are quickly snapped up. After committing a purchase through the state bid, **delivery takes approximately 4 to 9 months**. Once the vehicle is delivered, it requires an additional **2 to 4 months for outfitting as a police unit**. In total, it can take between **6 months to a year** to have the vehicle fully operational in the fleet. Therefore, it is essential to have a replacement plan in place to ensure continuous patrol vehicle availability. **Delays in making purchasing decisions are already causing significant challenges with our current fleet.**

Patrol Vehicle Status & Replacement Needs

- Two older patrol vehicles (2015 & 2017 Explorers) are being surplused, leaving the department with 8 active patrol vehicles.
- Surplus the 2013 Explorer which is the K9 vehicle.

To maintain an effective fleet of 10 patrol vehicles, two additional vehicles were added:

- 1 Canine Unit Vehicle (donated by Northshore Police Foundation)
- 1 Traffic Vehicle (funded by the 002 Traffic Safety Fund – We added another Traffic Officer).

An effective and cost-efficient plan is to transition the current traffic car to patrol (it has lower miles) and purchase a new second traffic car out of the 002 fund. **The current traffic vehicle can be converted over to patrol.** We will then have 2 designated traffic officers for the 2 new traffic vehicles, using the (002) Traffic Safety Fund **lessening the burden on the general fund (001)**. This is the most cost-effective plan to get through this biennium.

The transport van is currently **20 years old and is nearly 100,000 miles**. Not only does it show significant signs of wear and tear, but it also hardly meets the safety standards required for inmate transport. These concerns highlight the urgent need for a replacement to ensure both the safety of inmates and the reliability of the vehicle. This vehicle should be replaced but continues to be pushed for replacement as other needs have taken priority.

While this report focuses on patrol vehicles, administrative vehicles—used by the Chief, Commanders, and Detectives—should not be overlooked. Future plans include purchasing Ford Escape Hybrid vehicles, for administrative vehicles, which have proven to be very fuel-efficient. We have one current hybrid Ford Escape for one of the detectives, which was the last purchased vehicle. The next acquisitions will be the Chief's vehicle and the next Commander's vehicle. Since these vehicles are driven by only one person, they tend to last longer, receive

better maintenance, and accumulate less mileage, reducing overall wear and tear. Additionally, outfitting these vehicles requires less equipment than a patrol vehicle, and most of the installed items can be transferred to a new vehicle, except for the lighting system.

Police Department Fleet

Current Patrol Fleet

Year	Make	Model	Use	Miles	Replacement Year	Notes
2013	Ford	Explorer	K-9	93,724	2019	Surplusing (Foundation)
2015	Ford	Explorer	Patrol	102,200	2021	Surplusing (002 Traffic)
2016	Ford	Explorer	Patrol	105,155	2022	Should be replaced
2016	Ford	Explorer	Patrol	92,636	2022	Should be replaced
2017	Ford	Explorer	Patrol	116,498	2023	Surplusing (002 Traffic)
2017	Ford	Explorer	Patrol	60,946	2023	Should be replaced
2018	Ford	Explorer	Patrol	62,364	2024	Should be replaced
2018	Ford	Explorer	Traffic	56,024	2024	Move to Patrol (002)
2023	Chevy	Tahoe	Sergeant	5,773	2029	
2023	Chevy	Tahoe	Sergeant	3,482	2029	

Current Other Fleet

Year	Make	Model	Use	Miles	Replacement Year	Notes
2005	Ford	Econoline	Transport Van	87,736	2020	20 years old
2011	Ford	Explorer	NEMCo	103,815	2021	In the NEMCo Budget
2014	Chevy	Impala	Chief	107,527	2022	Should be replaced
2017	Ford	Escape	Commander	87,126	2025	Should be replaced
2019	Ford	Escape	Detective	56,062	2027	
2019	Ford	Escape	Commander	19,932	2027	
2013	Ford	Escape	Crime Watch	114,733	2028	Should be replaced
2022	Ford	Escape	Detective	19,516	2030	

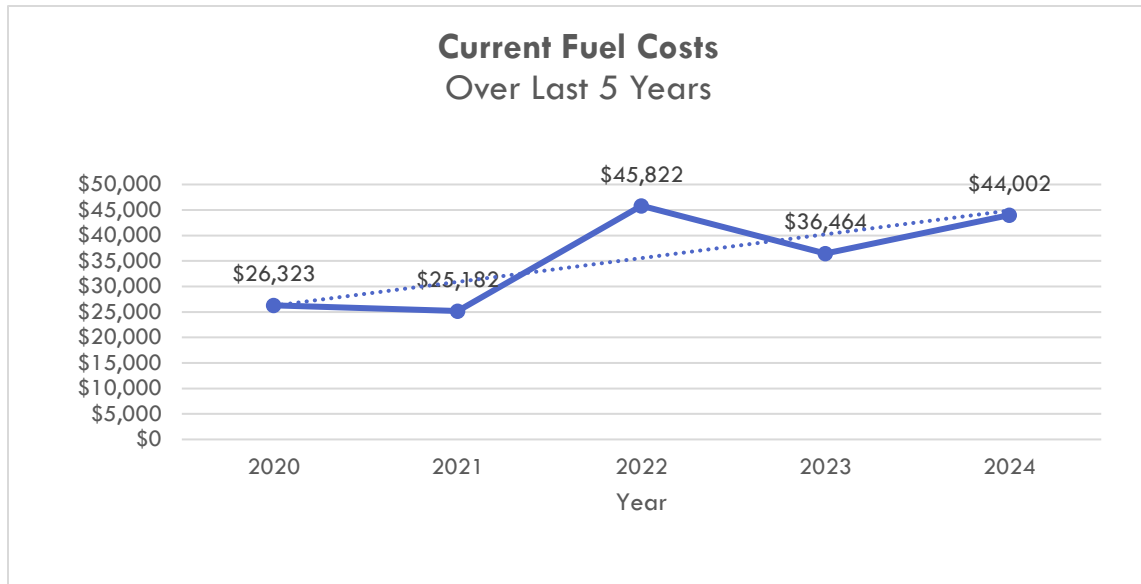


Fleet Costs & Maintenance

Fuel and maintenance costs are increasing, making alternative fuel vehicles (hybrids and EVs) a cost-saving measure.

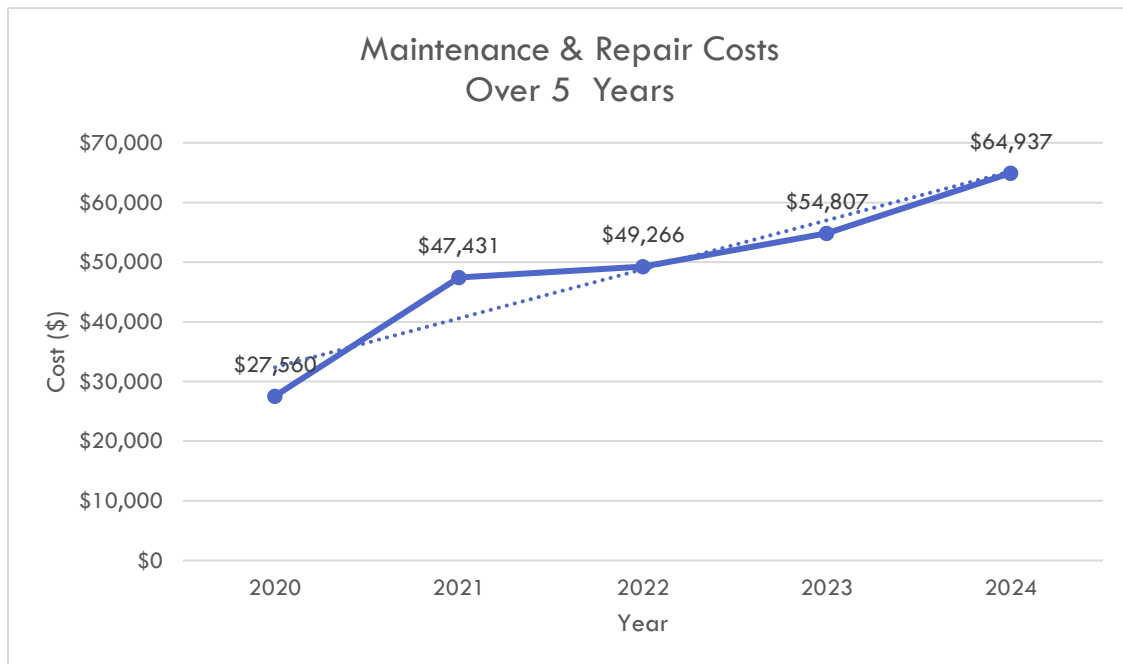
Fuel Costs Over Time

The following chart displays the annual fuel costs for the police department.



Vehicle Maintenance Costs Over Time

The following chart displays the annual maintenance costs for the department.



Lake Forest Park Police Department - Fleet Report

Year ▼	Maintenance & Repair ▼	Fuel ▼
2014	\$28,868	\$36,966
2015	\$50,303	\$29,952
2016	\$35,575	\$24,574
2017	\$29,255	\$30,484
2018	\$35,846	\$30,804
2019	\$46,805	\$33,298
2020	\$27,560	\$26,323
2021	\$47,431	\$25,182
2022	\$49,266	\$45,822
2023	\$54,807	\$36,464
2024	\$64,937	\$44,002

Repair and Maintenance for Current Patrol Vehicles (Not including Sergeant Vehicles, Admin, and Other Vehicles)

Vehicle	2020	2021	2022	2023	2024	Grand Total
POL-P1	\$ 2,178.78	\$ 2,237.88	\$ 1,495.17	\$ 2,474.30	\$ 5,856.23	\$ 14,242.36
POL-P10	\$ 3,507.12	\$ 5,823.99	\$ 4,333.67	\$ 2,901.73	\$ 4,897.95	\$ 21,464.46
POL-P12	\$ 3,835.06	\$ 2,610.46	\$ 9,227.53	\$ 8,342.70	\$ 3,971.31	\$ 27,987.06
POL-P13	\$ 793.09	\$ 1,280.49	\$ 2,474.20	\$ 3,103.06	\$ 4,127.87	\$ 11,778.71
POL-P14	\$ 688.62	\$ 11,270.35	\$ 6,926.42	\$ 7,928.74	\$ 4,255.09	\$ 31,069.22
POL-P15	\$ 1,530.66	\$ 2,485.09	\$ 1,829.77	\$ 1,585.43	\$ 2,579.24	\$ 10,010.19
POL-P16	\$ 1,802.37	\$ 3,618.53	\$ 3,041.37	\$ 12,680.69	\$ 6,647.07	\$ 27,790.03
POL-P2	\$ 2,835.05	\$ 2,750.88	\$ 5,243.86	\$ 2,842.06	\$ 1,581.98	\$ 15,253.83
	\$ 17,170.75	\$ 32,077.67	\$ 34,571.99	\$ 41,858.71	\$ 33,916.74	\$ 159,595.86

*Scheduled Surplused Vehicles: P2, P12, P14



Cost Analysis & Vehicles

Police Transport Van

Base Cost

- Ford Transit Prisoner Transport Van: \$40,000 - \$55,000
- Chevy Express Transport Van: \$38,000 - \$50,000
- Dodge Ram ProMaster: \$40,000 - \$55,000
- Mercedes-Benz Sprinter (Used in Some Departments): \$50,000 - \$70,000

Outfitting Costs (Upfitting)

- Prisoner Transport Conversion (Partitions, Seating, Safety Restraints): \$10,000 - \$30,000
- Lights, Sirens, PA System: \$2,000 - \$5,000
- Radio and Communication Equipment: \$3,000 - \$8,000
- In-Car Camera System: \$3,000 - \$6,000
- GPS and Dispatch System: \$1,500 - \$5,000
- Ballistic Paneling (If Needed for Protection): \$10,000 - \$20,000
- Custom Decals and Paint: \$1,500 - \$3,000

Total Estimated Cost

- Low-end (Basic Setup): \$50,000 - \$70,000
- Mid-range (Standard Outfitting): \$70,000 - \$100,000
- High-end (Fully Equipped with High-Security Features): \$100,000 - \$150,000+

Admin/Detective Police Vehicle

Base Cost

The Ford Escape Hybrid is commonly used for administrative and detective units where tactical outfitting are not a priority. The upfitting costs for admin vehicles are significantly lower than patrol cars.

- Ford Escape Hybrid SE: \$33,000 - \$37,000
- Ford Escape Hybrid SEL: \$36,000 - \$40,000
- Ford Escape Hybrid Titanium: \$40,000 - \$45,000

Outfitting Costs (Upfitting)

Since admin vehicles do not require heavy patrol modifications, upfitting is minimal but may include:

- Radio & Communication Equipment: \$2,000 - \$5,000
- Basic Emergency Lights (Unmarked, Interior Only or Covert Lights): \$1,500 - \$3,500
- Laptop Mount (For Reports & Dispatch Use): \$500 - \$1,500
- Tinting & Window Security Film: \$500 - \$1,500
- Storage and Incident Command solutions: \$4000

Total Estimated Cost

- Low-end (Minimal Upfitting, Basic Admin Vehicle): \$35,000 - \$40,000
- Mid-range (With Emergency Lights & Communication System): \$40,000 - \$50,000
- High-end (Fully Equipped for Covert or Detective Use): \$50,000 - \$60,000

Since this is an administrative vehicle, it does not require ballistic paneling, push bumpers, or prisoner transport partitions, keeping costs significantly lower than patrol cars or transport vans.

Patrol Vehicle

Base Cost

- Ford Police Interceptor Utility (Based on Ford Explorer): \$42,000 - \$50,000
- Chevrolet Tahoe PPV (Police Pursuit Vehicle): \$46,000 - \$55,000
- Dodge Charger Pursuit: \$38,000 - \$45,000
- Chevrolet Silverado SSV (Special Service Vehicle, Used for Rural/Utility Use): \$45,000 - \$55,000
- Ford F-150 Police Responder: \$45,000 - \$55,000

Outfitting Costs (Upfitting)

- Lights, Sirens, and PA System: \$3,000 - \$7,000
- Radio and Communication System: \$3,000 - \$8,000
- In-Car Computer (Mobile Data Terminal, MDT): \$2,500 - \$6,000
- Speed Radar System: \$1,500 - \$5,000
- Protective Partition (Between Front & Rear Seats for Transporting Detainees): \$1,500 - \$3,000
- Gun Rack and Weapon Storage (Secure Mounts for Firearms): \$1,000 - \$3,500
- Push Bumper (For Pursuit and Traffic Stops): \$1,000 - \$2,500
- Ballistic Paneling & Kevlar Door Inserts (If Needed for Protection): \$5,000 - \$15,000
- Custom Decals, Wraps, and Paint: \$1,000 - \$3,500
- StarChase System: \$1000
- PIT Pursuit System: \$5000

Total Estimated Cost

- Low-end (Basic Patrol Car): \$50,000 - \$70,000
- Mid-range (Standard Police Cruiser with Full Patrol Setup): \$70,000 - \$100,000
- High-end (Fully Outfitted for Tactical & High-Security Use): \$100,000 - \$150,000+

Fully Electric Police Vehicle

Base Cost

With the push for EV (electric vehicle) adoption in law enforcement, several models are emerging as options for patrol and administrative use. The most common electric police vehicles currently in use include:

- Ford Mustang Mach-E Police Version: \$50,000 - \$60,000
- Tesla Model Y Juniper (Long Range or Performance, Used for Patrol): \$48,000 - \$60,000
- Chevrolet Blazer EV PPV (Police Pursuit Vehicle): \$55,000 - \$65,000
- Rivian R1S (Used for Specialized Off-Road Units): \$75,000 - \$85,000
- Ford F-150 Lightning (For Special Service Use, Not Standard Patrol): \$55,000 - \$75,000

Outfitting Costs (Similar to Patrol Cars, with Some EV-Specific Needs)

Fully electric police vehicles still require essential law enforcement modifications, but they also have unique electrical and battery considerations:

- Lights, Sirens, and PA System: \$3,000 - \$7,000
- Radio & Communication Equipment: \$3,000 - \$8,000
- Mobile Data Terminal (Laptop Mount & System): \$2,500 - \$6,000
- Speed Radar System: \$1,500 - \$5,000
- In-Car Camera System (Body Cam Integration Possible): \$3,000 - \$8,000

- Protective Partition (If Used for Transporting Detainees): \$1,500 - \$3,000
- Gun Rack and Secure Weapon Storage: \$1,000 - \$3,500
- Push Bumper (For Interceptor and Traffic Use, If Needed): \$1,000 - \$2,500
- Ballistic Paneling & Kevlar Door Inserts (Optional, for Protection): \$5,000 - \$15,000
- Custom Decals, Wraps, and Paint: \$1,000 - \$3,500
- Battery Management System Integration (To Handle Law Enforcement Equipment Load on EV Battery): \$2,000 - \$5,000

Total Estimated Cost for a Fully Electric Police Vehicle

- Low-end (Basic Admin or Light Patrol EV): \$55,000 - \$75,000
- Mid-range (Standard Police Cruiser with Full Patrol Setup): \$75,000 - \$100,000
- High-end (Fully Outfitted EV Interceptor with Tactical Upgrades): \$100,000 - \$130,000+

Advantages of Fully Electric Police Vehicles

- Lower Fuel Costs – Estimated savings of \$3,000 - \$6,000 per year compared to gas-powered police cars
- Reduced Maintenance – EVs require fewer oil changes and engine repairs
- Quieter & Faster Acceleration – EVs have instant torque for pursuits
- Eco-Friendly – Supports government green initiatives

Challenges & Considerations

- Charging Infrastructure – Department needs dedicated charging stations (\$5,000 - \$20,000 installation cost)
- Equipment Power Draw – Lights, radios, and onboard systems can drain the EV faster than expected
- Cold Weather Performance – Some EVs experience reduced range in extreme temperatures

Upgrading to Hybrid and Fully Electric Police Vehicles (Including Police Outfitting)

Vehicle Type	Base Cost	Hybrid Upgrade	Police Outfitting <i>Estimated</i>	Cost Per Vehicle
Gas-Powered Explorer	\$51,868	0	\$25,000	\$76,868
Hybrid Explorer	\$51,868	\$2,284	\$25,000	\$79,152
Fully Electric F-150	\$57,462	N/A	\$25,000	\$82,462

Electric police vehicles are just coming into regular production. Tesla and Riven are the ones being used right now but are not “police” models. They are retrofitted. Fully electric Chevy Blazer and Ford Explorers “police” models are soon but we do not have costs. Only the Ford Lightning F-150 has a police package available on a regular production basis.

Outfitting a police vehicle ranges from \$20,000 to \$30,000 depending on vehicle and options. This is based on gas-powered and could be different with electric vehicles. As we hold on to police vehicles longer, the current equipment does not move to newer like models, thus more expensive. When you take an 8–10-year-old vehicle,

the equipment does not fit in a new vehicle and needs to be replaced. If we had 3–6-year vehicle changeovers, some of the existing equipment can be put in the new vehicles, saving costs.

Infrastructure Costs for EV Charging Stations

To effectively support an electric police fleet, **fast-charging stations** must be installed at the police station and possible satellite locations (public works, Lakefront Park?)

Charging Station Cost Breakdown (all approximate)

Charging Type	Cost Per Station	Number Needed	Total Estimated Cost
Level 2 Charger (Slow)	\$5,000 - \$8,000	2-4	\$10,000 - \$32,000
DC Fast Charger (Recommended)	\$50,000 - \$75,000	4-6	\$200,000 - \$450,000
Electrical Upgrades & Installation	Additional 20-50%	-	\$40,000 - \$150,000
Total Estimated EV Charging Cost	-	-	\$240,000 - \$600,000

- **Level 2 Chargers:** Cheaper but can take **6-8 hours to fully charge**—not ideal for patrol vehicles.
- **DC Fast Chargers:** Charge an EV **to 80% in 30-45 minutes**, making them essential for police operations.
- **Electrical Upgrades:** Additional costs for **electrical capacity improvements** at facilities.

Estimated 10-Year Cost with EVs

Category	Gas Fleet Costs	Hybrid Fleet Costs	EV Fleet Costs
Fuel Costs	\$440,000 (Avg)	\$260,000 (40% reduction)	\$0
Maintenance	\$600,000	\$450,000 (25% lower)	\$300,000 (50% lower)
Charging Infrastructure	0	0	600,000 (One-time investment)
Electricity Rate	-	-	\$103,733

To estimate the electricity costs for a fleet of 18 electric vehicles (EVs) over 10 years, we need to make a few assumptions: Annual electricity consumption per EV: We'll assume an average EV consumes 4,000 kWh per year (based on an estimated 12,000 miles driven per year at 3 miles per kWh).

- Fleet size: 18 EVs.
- Initial electricity rate: \$0.12 per kWh.
- Annual electricity rate increase: 4%.
- Duration: 10 years.

The estimated electricity cost for a fleet of 18 EVs over 10 years, assuming a 4% annual increase in electricity rates, is approximately \$103,733.

About \$10,373 in electricity over \$44,000 in gasoline each year.

Which would be about \$33,627.00 in savings.

Vehicle Purchase vs. Leasing

Historically, the city has purchased vehicles outright. However, many other cities have transitioned to leasing, which often provides greater efficiency, effectiveness, and budget stability, though it may lead to higher costs over time. Several cities collaborate with Enterprise Rent-A-Car, which buys police vehicles in bulk to offer better pricing. Vehicles are typically upgraded every 3 to 6 years, ensuring higher resale value for Enterprise and providing the city with newer, more reliable patrol vehicles each year, with reduced repair costs. **This approach simplifies budgeting, with predictable expenses each year.**

Pros of Leasing Police Vehicles (or Public Works vehicles):

- Lower Upfront Costs: Leasing typically requires less initial capital than purchasing, freeing up funds for other operational needs.
- Flexibility & Up-to-Date Equipment: Leasing allows for more frequent upgrades, ensuring the fleet benefits from the latest technology and safety features without long-term commitments.
- Predictable Budgeting: Fixed lease payments can simplify budgeting, avoiding the uncertainties of fluctuating maintenance and repair costs.
- Reduced Maintenance Burdens: Many leasing agreements include maintenance packages, potentially reducing downtime and administrative overhead for fleet management.
- A much higher chance the current police outfitting equipment can transition to the new patrol car which would reduce costs in purchasing new outfitting equipment.

Cons of Leasing Police Vehicles (or Public Works vehicles):

- Potentially Higher Long-Term Costs: Over many years, continuous lease payments might exceed the total cost of ownership.
- Usage Restrictions: Leases often come with mileage limits or specific usage guidelines, which may not align well with the unpredictable demands of police work. For Lake Forest Park police, we **average** our patrol vehicle drive 10,239 miles per year (853 per month, or 28 per day).
- Contractual Limitations: Early termination fees, penalties for excess wear, or inflexible contract terms can complicate adjustments in fleet strategy if needs change unexpectedly.

In summary, while leasing offers budgetary flexibility and the opportunity to regularly update the fleet, it also brings restrictions and potential long-term financial considerations that must be weighed against the benefits of outright ownership.



Strategies

Short-Term Strategy (Immediate to 3 years)

- Purchase 4 vehicles
 - 1 Transport Van, 1 Patrol Vehicle, 2 Traffic Vehicles.

Mid-Term Strategy (Next 4-6 Years)

- Replace aging patrol vehicles with hybrid models (when available) to reduce fuel and maintenance expenses.
- Monitor new EV police vehicles (such as upcoming electric SUVs).

Long-Term Strategy (6-10 Years)

- Gradually replace the fleet with fully electric models as charging stations are deployed.
- Expand EV charging infrastructure to support a fully electric fleet.
- Install DC fast chargers at police facilities to for EV transition (\$240,000 - \$600,000 investment).
- Monitor cost savings in fuel and maintenance reductions.

This approach will ensure long-term cost savings, sustainability, and operational efficiency while maintaining a fully capable police fleet.

****Key Findings: ****

1. Two patrol vehicles need replacement immediately to maintain an effective fleet of patrol cars.
2. Fuel costs increased significantly over the past decade, peaking at \$44,002.16 in 2024.
3. Maintenance costs have risen, reaching \$64,936.59 in 2024. This will continue to rise with an aging fleet.
4. Transitioning to hybrid vehicles could reduce fuel costs by 40% and maintenance costs by 30%.
5. Moving to an electric fleet would eliminate fuel costs and reduce maintenance expenses by 50%.
6. Initial investment for DC fast chargers is estimated to be between \$240,000 - \$600,000.

Recommendations

1. Transition to hybrid patrol vehicles (when available) to reduce fuel and maintenance expenses.
2. Charging infrastructure is required to support EV deployment, install DC fast chargers at police facilities to prepare for an electric transition.
3. In the long term (6-10 years), phase in fully electric vehicles as technology advances and more options become available.
4. Monitor cost savings in fuel and maintenance reductions and expand EV infrastructure as needed.

Immediate Need - Approval and immediate purchase now:

Four Vehicles - \$320,000

- 1 Transport Van \$80,000
- 3 Patrol Vehicles \$80,000 x3 = \$240,000
 - 1 Patrol Vehicle (General Fund)
 - 2 Traffic Vehicles (002 Traffic Fund)

Replace 2013 Ford Explorer K9 with new K9 vehicle. ***This has already been ordered and is purchased by the Northsound Police Foundation. It was ordered in October 2024, and delivery is expected May 2025.**

Funding

- General Fund (501) **\$160,000**
 - Transport Van
 - Patrol Vehicle
- General Fund (002 Fund Traffic Safety Fund) **\$160,000**
 - Two Traffic Vehicles

This would get us through this biennium (25/26) and would need to replace two more patrol vehicles and two admin vehicles in the next biennium (27/28). Vehicle orders must be placed months (6-8) in advance.



Future Options

Police Motorcycle for Traffic Safety

A police motorcycle is a valuable asset for enhancing traffic safety, enforcement, and community engagement. Its maneuverability allows officers to navigate congested areas, respond quickly to incidents, and enforce traffic laws more effectively. Motorcycles provide high visibility and deterrence in areas prone to speeding and other violations, such as school zones and high-traffic corridors.

Our city has a history of utilizing police motorcycles for traffic enforcement, with three different traffic motorcycle officers operating different styles of motorcycles over the years. This experience highlights the effectiveness of motorcycle patrols in addressing traffic concerns but also underscores the challenges associated with maintaining a year-round program, particularly in adverse weather conditions. Because motorcycles are highly weather-dependent, a seasonal deployment—primarily in spring, summer, and early fall—would allow the department to utilize them when conditions are safest and most practical. This ensures optimal use during peak traffic periods while avoiding the risks associated with wet, icy, or hazardous road conditions in fall and winter.

To offset costs, the Northsound Police foundation would fund the lease or purchase of a police motorcycle for seasonal use, ensuring enhanced traffic safety without placing a burden on the city's general budget. This approach provides a fiscally responsible way to improve enforcement while adapting to seasonal weather conditions.



E-Bikes for Police Patrol and Traffic Safety

Electric bicycles (e-bikes) offer an efficient, cost-effective, and environmentally friendly option for police patrols and traffic safety. E-bikes allow officers to cover more ground quickly, especially on the Burke Gilman Trail and the LFP Town Center where traditional patrol vehicles have limited access. They also promote positive community interactions by providing a quieter and more approachable presence.

Like motorcycles, e-bikes are weather-dependent and are best suited for deployment in dry, mild conditions. A seasonal approach—primarily in spring, summer, and early fall—would allow the department to take full advantage of e-bikes during periods of increased outdoor activity. In inclement weather, such as heavy rain or icy conditions, traditional patrol vehicles would remain the primary mode of enforcement.

The Northsound Police foundation or traffic safety grants would fund the acquisition of e-bikes, reducing financial strain on the city while enhancing mobility and sustainability in policing. This solution aligns with environmentally conscious policing initiatives while ensuring a strong law enforcement presence in high-traffic areas during favorable weather conditions.



2025 Police Vehicles (Electric, Hybrid, Gas)



2025 Ford Explorer (Interceptor) Fully Electric



2025 Chevy Blazer Fully Electric



2025 Ford Escape Hybrid (Admin)



2025 Ford Police (Interceptor) Utility (Hybrid)



2025 Ford Transit Prisoner Transport Vehicle



2025 Ram ProMaster Transport Vehicle