



SIERRA CLUB

DISTRICT OF COLUMBIA

Electrifying District Government Wheels

Why the District Government Should Invest in Light-Duty Vehicle Electrification

September 2026 | Matthias Paustian

At a glance:

THE PROBLEM

The DC government fleet has about 4,800 vehicles. About 95 percent are internal combustion engine vehicles, exacerbating asthma and other health conditions.

THE OPPORTUNITY

Electric light-duty vehicles are often at cost parity with combustion engine cars. On a life-cycle basis, they can save money.

THE ACTION

The DC Council should require the DC government to electrify its light-duty vehicle fleet, the least expensive part of the DC fleet to electrify.

Executive Summary

Our analysis of current light-duty EV purchase costs and data on available charging infrastructure from the [District of Columbia Strategic Fleet Electrification Plan](#) reveals that **light-duty vehicle electrification is a cost-effective strategy available to the District government to lower carbon emissions in its own operations**. The core findings supporting our thesis include:

- **Commercial market maturity:** Battery electric sedans, SUVs, minivans, Class 1–2 pickup trucks, and commercial cargo vans are in mass production. Declines in prices for light-duty EVs have substantially reduced incremental vehicle purchase costs, for some vehicles close to \$0. In other words, the price difference can be minimal.
- **Depot and grid make-ready status:** Nearly two-thirds (63.5%) of assessed municipal parking facilities possess immediate spare electrical capacity or require only minor, rapid utility hookups (2–4 month lead times), bypassing multi-year substation upgrade queues.
- **Excellent carbon return on investment:** The cost of avoiding CO₂ from light-duty vehicle electrification is often negative, meaning electrification results in net monetary savings. A recent [study \(page 28\)](#) of the costs of various carbon mitigation options found “*the technology with the lowest marginal abatement cost and largest emissions reduction is light duty EVs (\$200–\$300/tCO₂e cost savings)*.” A [study](#) on total cost of ownership of EVs across U.S. cities found that light-duty EVs in DC have a lower total cost than gasoline-powered vehicles.

Policy Implication: Proposals to pause or delay fleet procurement mandates under the premise of technical unreadiness conflate two distinct vehicle classes. While Class 7–8 refuse haulers and street sweepers carry substantial vehicle premiums and high-power fast-charging demands, light-duty vehicle electrification requires no major grid overhauls, carries negligible vehicle price deltas, and delivers immediate fiscal and environmental dividends.

More than 60% of Government Fleet Vehicles are Light-Duty

The fleet electrification plan analyzed about 3000 vehicles stationed across 85 facilities. Police and emergency vehicles were outside the scope of the study. Light-duty passenger vehicles, light pickups, and delivery vans represent more than 60% of the municipal fleet assets that were included in the study. There are many light-duty vehicles to electrify at close to zero additional cost.

Depot and Grid are Ready for Light-Duty EVs

A frequent objection to accelerating fleet electrification is the presumed necessity of multi-year Pepco utility transformer overhauls. The [report](#)'s detailed site-by-site engineering power evaluations across 54 key facilities demonstrate that light-duty fleet charging does not require major grid expansions:

- **23 immediate make-ready sites:** These depot locations feature sufficient electrical capacity to install electric vehicle supply equipment (EVSE) immediately without utility upgrades.
- **31 minor-upgrade sites:** Require only low-voltage panel work or simple service hookups, with Pepco lead times estimated at only two to four months.
- **63.5% feasible footprint:** Combined, 54 of 85 operational sites require zero or minimal utility intervention, establishing a sizable make-ready depot footprint.
- **High-capacity anchor facilities:** Major depots exhibit immense surplus capacity. For example, 3924 Minnesota Avenue NE features a 4,000A/3.3 MW service rating against a recorded baseline peak of only 142.8 kW, leaving over 3.1 MW in available headroom.

Light-Duty Vehicle Charging Infrastructure is Cheap

According to the report, light-duty vehicles record an **average daily mileage of less than 40 miles**. Because light-duty municipal vehicles dwell at depots for 12 to 16 hours overnight, they do not require expensive fast-chargers (\$51,000 to \$137,000 per stall). Standard **level 1** or **level 2 chargers** provide full overnight charging at modest cost:

- **Hardware purchase cost:** \$2,500 per level 2 charger unit
- **Installation and commissioning:** \$4,000 installation labor and materials
- **Total capital cost per port:** **\$6,000** under bulk municipal procurement contracts
- At a 3:1 ratio of vehicles per charger, the **per-vehicle-cost is \$2,000**.

The Incremental Costs of Light-Duty EVs are Near-Zero



Figure 1: Slate electric pickup truck and electric cargo van. These vehicles carry no upfront price premium compared to their combustion engine counterpart.

While heavy-duty vocational trucks, such as garbage trucks or tow trucks, face supply bottlenecks and significant price premiums, light-duty passenger and commercial vehicles have achieved mass commercial scale.

- **Some light-duty vehicles are already close to or at parity for upfront costs.** For example, the Slate light-duty electric pickup truck: \$24,950 vs regular combustion for a comparable Ford Maverick priced at \$29,990. Hence the Slate is ~\$5,040 cheaper. The 2026 Ford Transit cargo van: \$48,500 for the combustion engine vs 2026 Ford E-Transit cargo van priced at \$50,000. So the E-Transit is close to up front cost parity.
- **Purchase price parity projections:** Citing findings from the International Council on Clean Transportation, the District study highlights that 300-mile-range battery electric SUVs reach upfront purchase price parity with equivalent internal combustion engine vehicles between 2025 (with incentives) and 2028 (without incentives). Commercial electric vans reach parity with diesel equivalents by 2027.
- **Substantial fleet operating dividends:** Transitioning to electric drivetrains lowers annual District fleet operating expenditures **by \$2.6 million** in recurring net operating savings each year.
- **Maintenance outlay reductions (40% savings):** EVs require less spending for routine maintenance by approximately 40% due to regenerative braking and the absence of spark plugs, transmissions, and oil changes.

Opportunities at the Metropolitan Police Department (MPD)

The agency with the largest number of light-duty vehicles and hence the greatest potential to electrify its fleet at little cost is MPD. New York City provides the strongest large-city precedent in the United States for electrifying police vehicles. Beginning with a major 2021 purchase of 184 Ford Mustang Mach-Es for law enforcement and emergency response agencies, NYC subsequently placed Mach-Es into regular NYPD patrol service. By April 2026, NYPD reported nearly 500 plug-in vehicles in its portfolio, while NYC law enforcement agencies collectively operated more than 1,000 EVs. NYC has now begun deploying the Chevrolet Blazer EV, the city's first pursuit-rated electric police vehicle.

The DC MPD has not publicly reported any deployment of battery electric MPD patrol vehicles. MPD's 2024 fleet included approximately 930 marked cruisers and 421 unmarked cruisers, while its FY 2026 budget provides for replacement of 240 marked and unmarked cruisers.

Closer to home, [Hyattsville, Maryland recently purchased Chevy Blazer EV pursuit vehicles](#) for its police force and is evaluating their performance ahead of any wider rollout. DC should follow suit. Pursuit-rated EVs suitable for deployment in MPD are available. The total cost of ownership of the Chevy Blazer EV is [slightly lower](#) than its combustion engine counterpart (higher upfront, but lower operating costs).

Policy Recommendations

1. **Decouple light-duty requirements from heavy-duty timelines:** Maintain aggressive 2026-2030 electrification mandates for sedans, passenger SUVs, minivans, and Class 1–2 pickups. Allow heavy refuse haulers and street sweepers to follow the study's recommended 2030+ timeline without impeding passenger fleet progress.
2. **Immediately activate the 23 make-ready depot sites:** Fast-track Level 2 EVSE installation across the 23 municipal facilities identified with sufficient existing spare capacity. This step immediately unlocks charging for up to 500+ light-duty vehicles with no delay due to electricity upgrades.
3. **Adopt a standard 3:1 vehicle-to-charger procurement ratio:** Mandate a shared 3:1 vehicle-to-charger port standard for all light-duty parking facilities, integrated with charge management software (CMS) to eliminate unnecessary capital expenditure and curb peak demand.

Conclusion

The District can achieve significant CO₂ emissions reductions at low or even zero cost. But just because low-hanging fruit exists, that does not mean it will be harvested quickly or comprehensively. The DC Council should pass legislation for an EV-only policy for new purchases or leases of light-duty vehicles by the DC government. More than [350 Climate Mayors committed in 2024 to electrify 50% of their municipal light-duty vehicle fleet by 2030](#). DC is part of the Climate Mayors Coalition but is not on track to meet the 50% electrification target. The DC Council can take the lead and make a difference at little cost.

Sources

Woody, M., Adderly, S. A., Bohra, R., & Keoleian, G. A. (2024). *Electric and gasoline vehicle total cost of ownership across US cities*. *Journal of Industrial Ecology*, 28, 194–215.

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Energy and Environmental Economics (E3) (2025) [Paolo Alto Electrification Funding and Financing Study](#). December 2025.