

## Fleet Conversion

- Electrification Coalition 2024 Analysis for City of Toledo Fleet:
  - Data points: total cost of ownership (TCO), insurance, maintenance, fuel cost, depreciation.

	Original Cost per Mile	EV Cost per Mile
Delivery Truck	\$4.96	\$8.52
Freight Truck	\$7.33	\$10.46
Minivan	\$1.29	\$1.00
Motorcycle	\$0.43	\$0.31
Pickup Truck	\$1.84	\$2.83
Refuse Truck	\$16.11	\$21.55
Sedan	\$0.74	\$0.54
SUV	\$4.25	\$3.87
Vans	\$3.28	\$4.99
Work Truck	\$6.28	\$11.88

- Recommendations:
  - Begin fleet conversion for all minivans, motorcycles, sedans, and SUVs now.
  - Monitor truck and work van technology and determine feasibility as new fuel sources become commercially available. Possible fuel sources: CNG, hydrogen, biodiesel.
- See DRVE report attached for top 100 City vehicles to replace and recommended EV model for each VIN. All recommendations are US brands. Number one recommended make and model: **2022 Chevy Bolt**
- Health and Safety
  - EPA Air Quality Stakeholders Meeting on January 31, 2024:
    - Lucas County is non-compliant with new VOC and NOx standards, which cause Ozone pollution.
    - Noncompliance with Ozone negatively impacts economic development opportunities, as companies that produce VOCs and NOx via manufacturing will not be permitted to locate in Lucas County.
    - EPA confirmed it is non-point source, and the most likely contributor is **vehicles and vehicle idling**.
  - At least one City vehicle has been stolen due to being left unattended and idling.

- Fuel Wasted January-June 2024:
  - Data sourced from Samsara tracking system.
  - Idling is defined as: vehicle is **on**, in **park**, has been on and in park for over **2 minutes**, and **PTO is not engaged**.

Department	Wasted Fuel in Gallons
Code Compliance	487.36
FAFO	903.28
Leaf Pick-up & Removal	590.9
Parks Recreation and Youth Services	848.75
Road & Bridge Maintenance	13,666.43
Road & Bridge Maintenance / UB	4,616.74
Sewers and Drainage	19,772.37
Snow & Ice Control	1,375.89
Urban Beautification	16,923.98
Water Distribution	15,367.19
Water Treatment	1,462.13
<b>TOTAL</b>	<b>76,015.02</b>
Average fuel cost in 2024	\$3.37
<b>TOTAL COST</b>	<b>\$256,170.62</b>
<b>ANNUAL COST of WASTED FUEL</b>	<b>\$512,341.23</b>
<b>TOTAL EMISSIONS PRODUCED</b>	<b>676 Metric Tons of CO<sub>2</sub></b>

- Number of 2022 Chevy Bolts (priced at \$20,029 per Edmunds) that could be purchased per year if vehicles were not permitted to idle: **25**
- This **does not** account for the \$7,500 per vehicle IRA Tax Credit. With tax credit, number of vehicles that could be purchased per year: **34**