

Drive Clean Louisville

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- Cross-functional team planning for and exploring opportunities related to electric vehicles (EVs) and clean fuel transportation in Louisville Metro
- Team focuses on:
 - Policy and strategy development, grant funding, community engagement



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DCL Team Goals

- Advance Mayor's initiatives to:
 - Reduce GHG emissions by 80%
 - Reduce ozone precursors
- Advance Metro Council goals, including:
 - 100% clean energy for Metro operations by 2035
- Expand Louisville's EV charging station network and provide alternative fuel options to Louisville residents, businesses, and visitors
- Increase the public's awareness of EVs

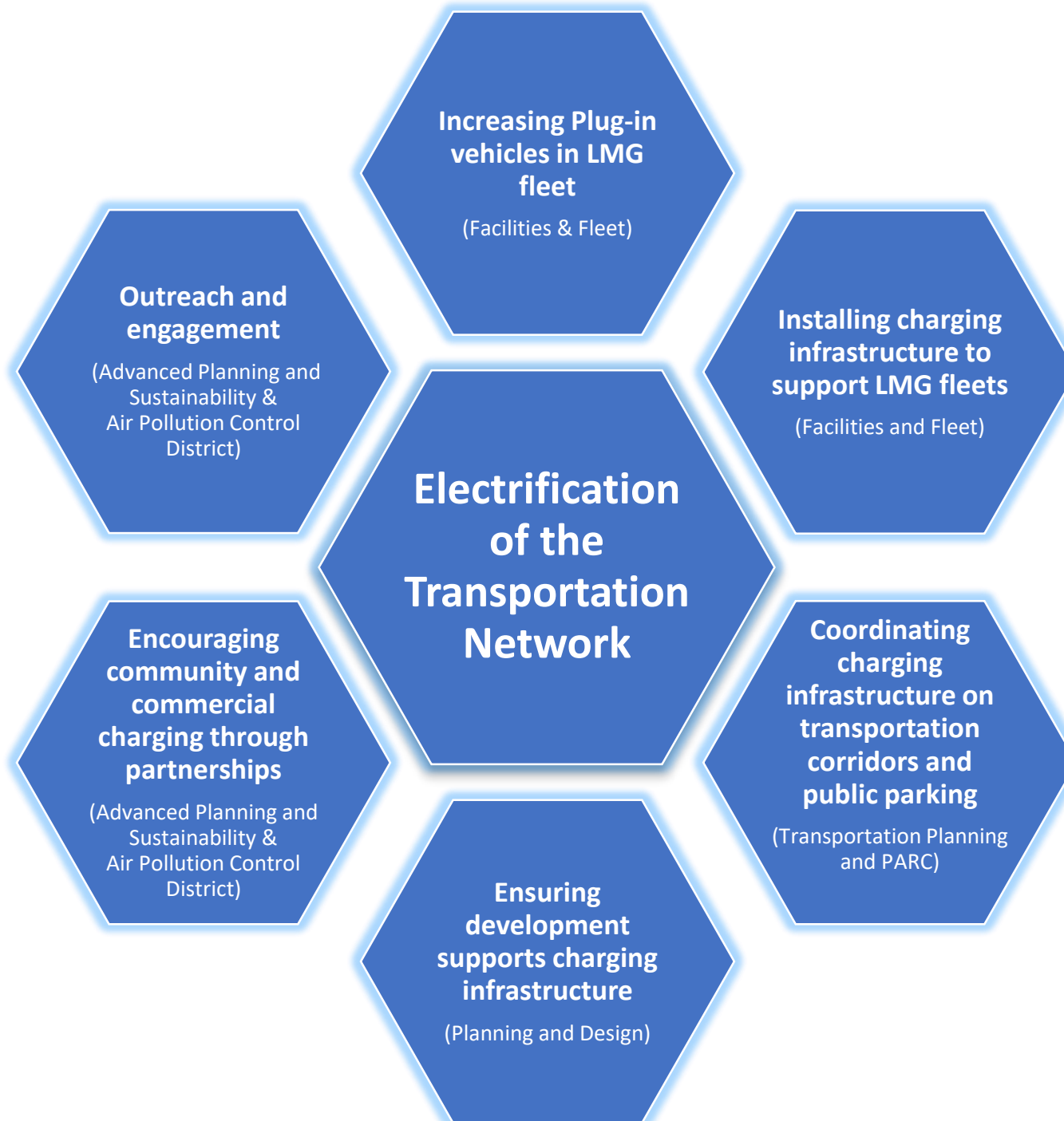


Executive Order No. 2021-005

PRIORITIZATION OF PURCHASES THAT ADVANCE LOUISVILLE METRO GOVERNMENT'S ENVIRONMENTAL SUSTAINABILITY EFFORTS

- Signed by Mayor Greg Fischer May 6, 2021
- All Louisville Metro Government agencies and departments **shall prioritize the purchasing of electric and hybrid vehicles, green equipment and necessary infrastructure** to support Metro Government's transition to electric vehicles.





Louisville Metro Government Fleet

- Total vehicles in LMG Fleet = ~ 2,400
- Current “green” vehicles in LMG fleet:
 - 1 CNG garbage truck
 - 1 BEV (Battery Electric Vehicle)
 - 2 PHEV (Plug-in Hybrid Vehicle)
 - 41 Hybrid Vehicles
- Replacement targets:
 - Light Duty – 8 years/140,000 miles
 - Heavy Duty – 8-10 years/175,000 miles



Fleet Analysis: Initial Findings

- Analysis conducted by the Electrification Coalition
- Data provided by Louisville Metro Fleets and Facilities
- Coordination by Advanced Planning and Sustainability and the Drive Clean Louisville Team



Electrification
Coalition



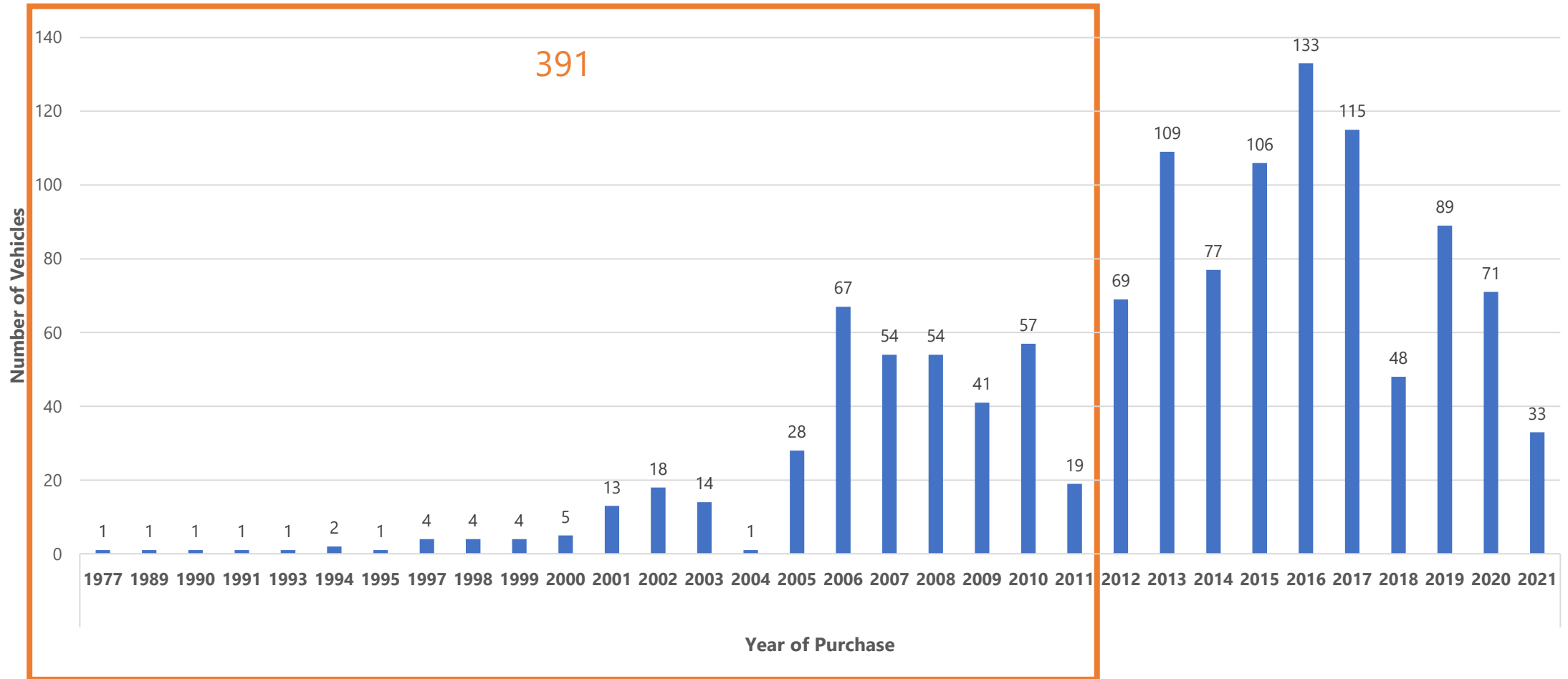
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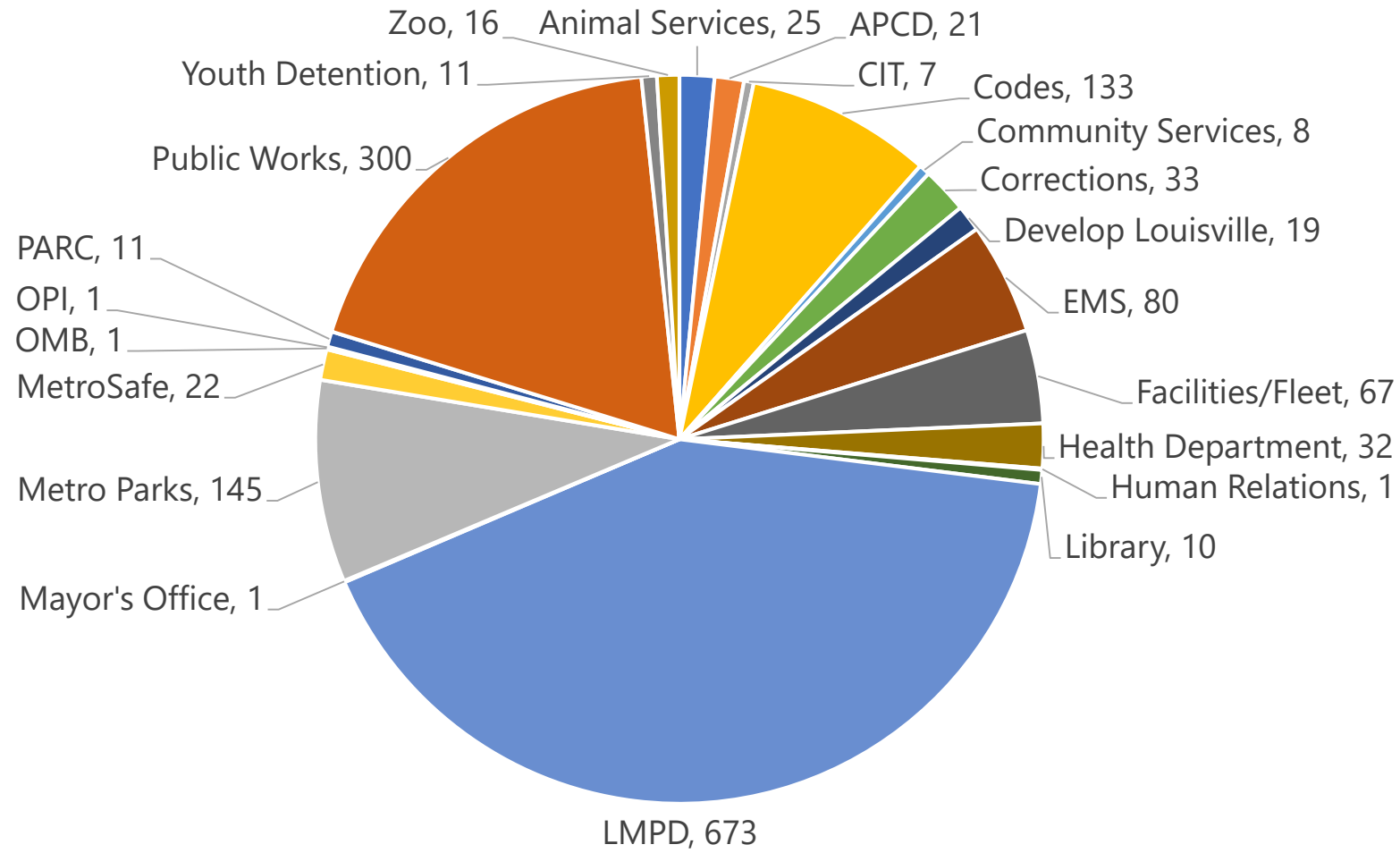
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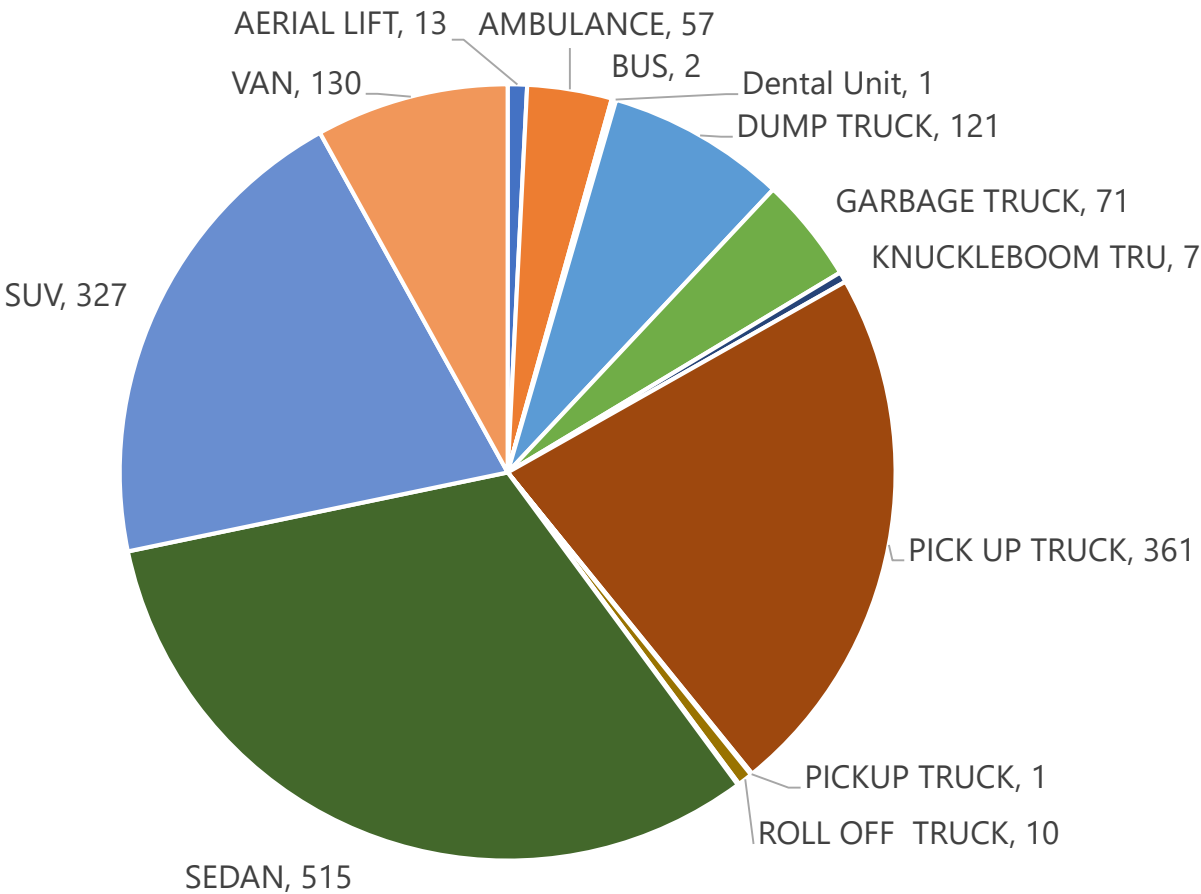
Fleet Breakdown by Age



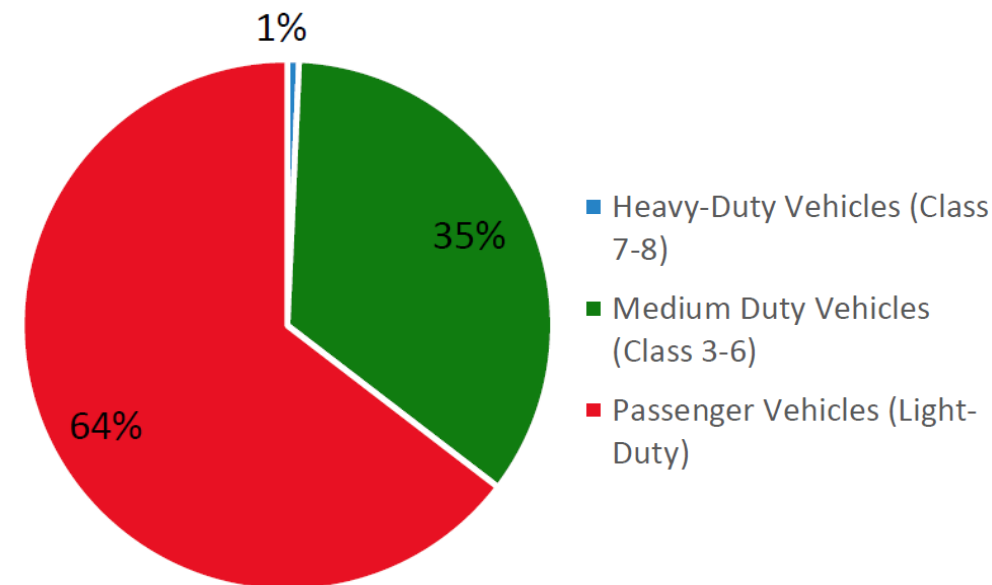
Fleet Breakdown by Department



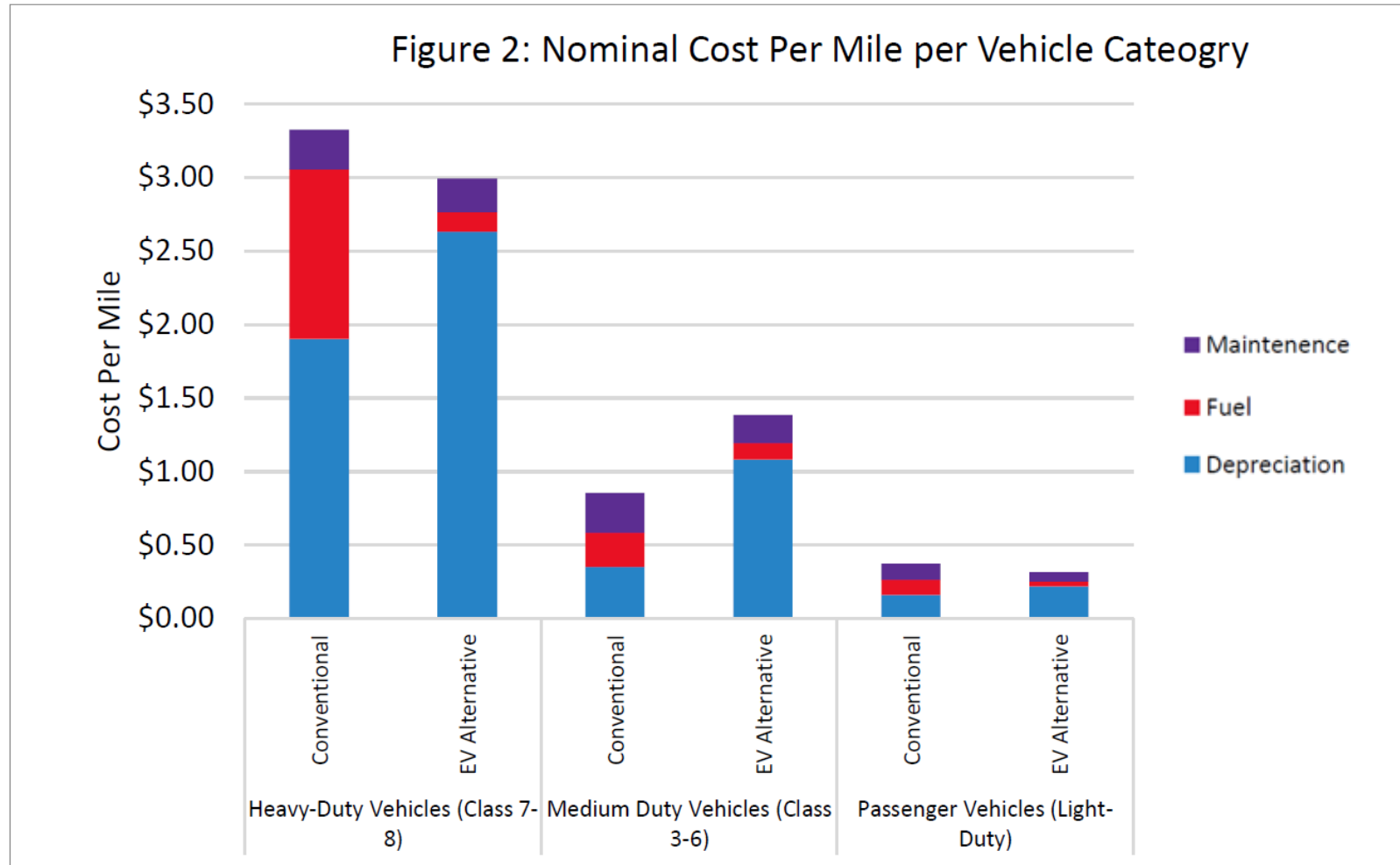
Fleet Breakdown by Vehicle Class



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Total Cost of Ownership Comparison



- Based upon an analysis of the vehicles currently in Metro's fleet and a survey of suitable EV alternatives, the following Total Ownership Cost (TOC) comparisons were calculated by the Electrification Coalition.

Top 4 Passenger Vehicles to Explore

- The following four vehicles could collectively replace the largest share of our current fleet while also maximizing TOC savings. Further analysis is underway to determine which departments may be best suited to be “first movers” and what the charging infrastructure needs would be.

Vehicle Model	Average of Percent Savings from EVs	Vehicles
2022 Ford eTransit - Cargo Van BEV	30.37%	220
2022 Ford eTransit - Passenger Van BEV	29.28%	295
2020 Chrysler Pacifica Hybrid PHEV	25.18%	70
2020 Nissan Leaf (62 kW-hr battery pack) BEV	24.37%	20

Heavy Duty Vehicle Opportunities

LOCAL NEWS

Boise welcomes first all-electric recycling truck to fleet

The truck can serve up to 120 containers per day and collect seven tons of material before it needs to dump it off local recycling centers.



Author: Shirah Matsuzawa
Published: 6:16 PM MDT August 18, 2021
Updated: 6:17 PM MDT August 18, 2021



BOISE, Idaho — On Wednesday morning, Boise Mayor Lauren McLean and officials from Republic Services formally welcomed the first all-electric recycling truck in the waste company's fleet of trash vehicles.



Photo courtesy of Volvo Group

CLEAN TRANSPORT

NYC Buying 7 Electric Garbage Trucks

By Zachary Shahan Published July 16, 2021 5 Comments

It's one of those vehicle sectors that seems tailor made for a quick electric transformation. Garbage trucks run regular, predictable routes, meaning required range is straightforward and clear. The stop-start nature of garbage trucks is almost custom-made for EVs — no burning fuel as garbage trucks sit in front of one house after another lifting up garbage cans. Some of the electricity is recovered via regen braking in the middle of the short trips from neighbor to neighbor. The noise and pollution of the trucks don't wake people up 30 minutes before their alarms. There isn't the problem of drag quickly draining the battery on the highway because, for the most part, garbage trucks don't hit the highway (even if many highways are littered with trash due to the

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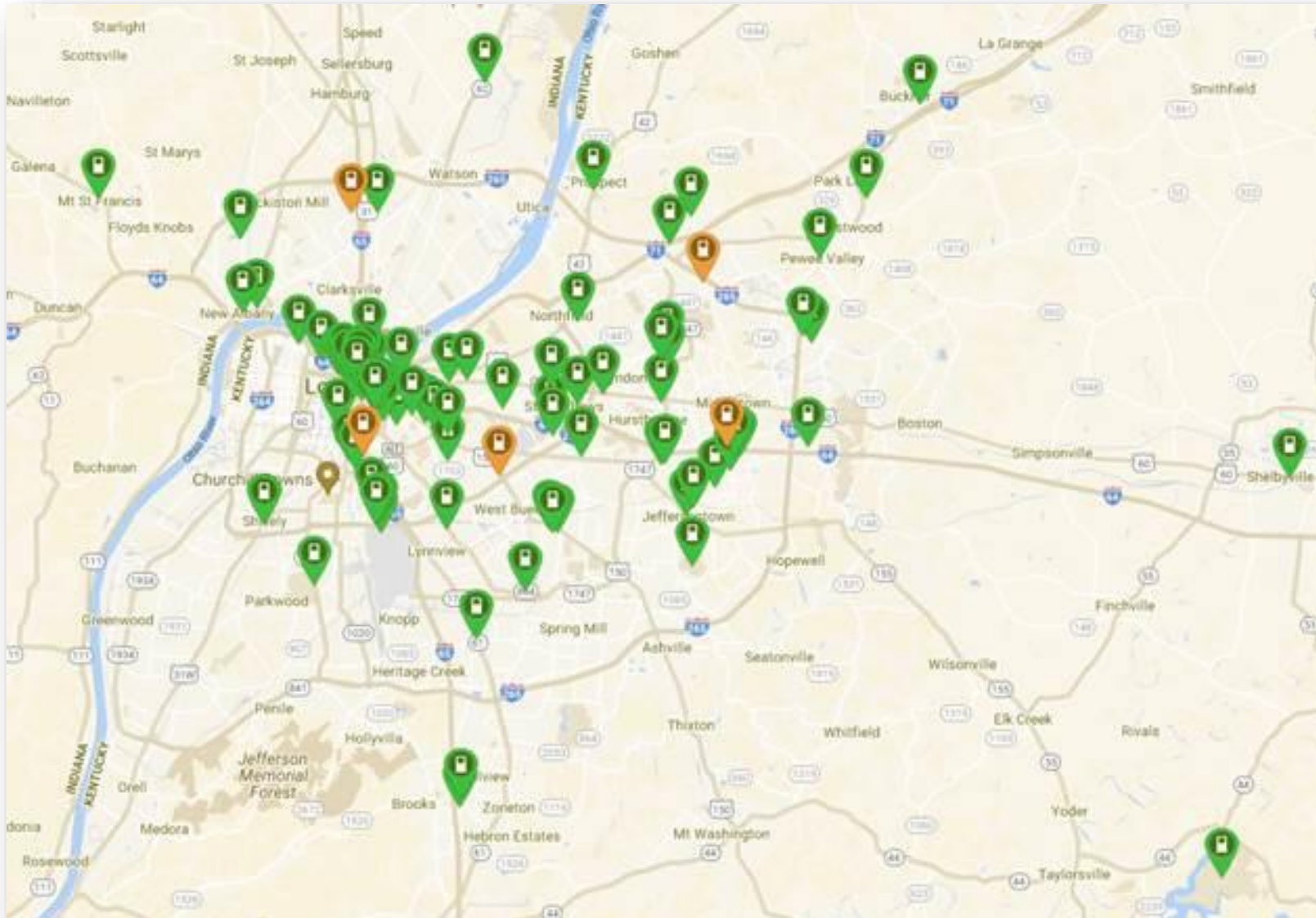
POWER
CLEANTECHNICAL
\$3/MONTH

Next Steps

- Setting targets for plug-in vehicles in LMG's fleet
- Start analyzing where replaceable vehicles are parked and what charging infrastructure is needed
- Continued Community Engagement
 - Strong community partner in Evolve KY
www.evolveky.org
 - Installed **35** EV charger locations in the Kentuckiana region, including the Jefferson Memorial Forest site currently underway
 - Community outreach and education



Existing Charging Infrastructure



- 10 Level 2 charging sites at Louisville Metro facilities, including parks and libraries
- 5 Level 2 charging sites in PARC garages
- Charging at Jefferson Memorial Forest coming soon!

Charging Map Source:
<https://www.plugshare.com/>



DRIVE ELECTRIC

National Drive Electric Week™

- September 25th – October 3rd
- Nationwide celebration to raise awareness of the benefits of all-electric and plug-in vehicles
- Opportunity to relaunch Green Fleets Challenge
 - LG&E was first to sign on and is a supporter
 - Growing LMG's Plug-in Fleet provides the challenge to our community partners



Thank you!



www.louisvilleky.gov/government/air-pollution-control-district/drive-clean-louisville