

2020 Carbon Neutral Fleet Plan



Comprehensive Planning and Transportation Committee Briefing

April 1, 2013

Fleet Composition by Annual Fuel Usage

1,730 Units



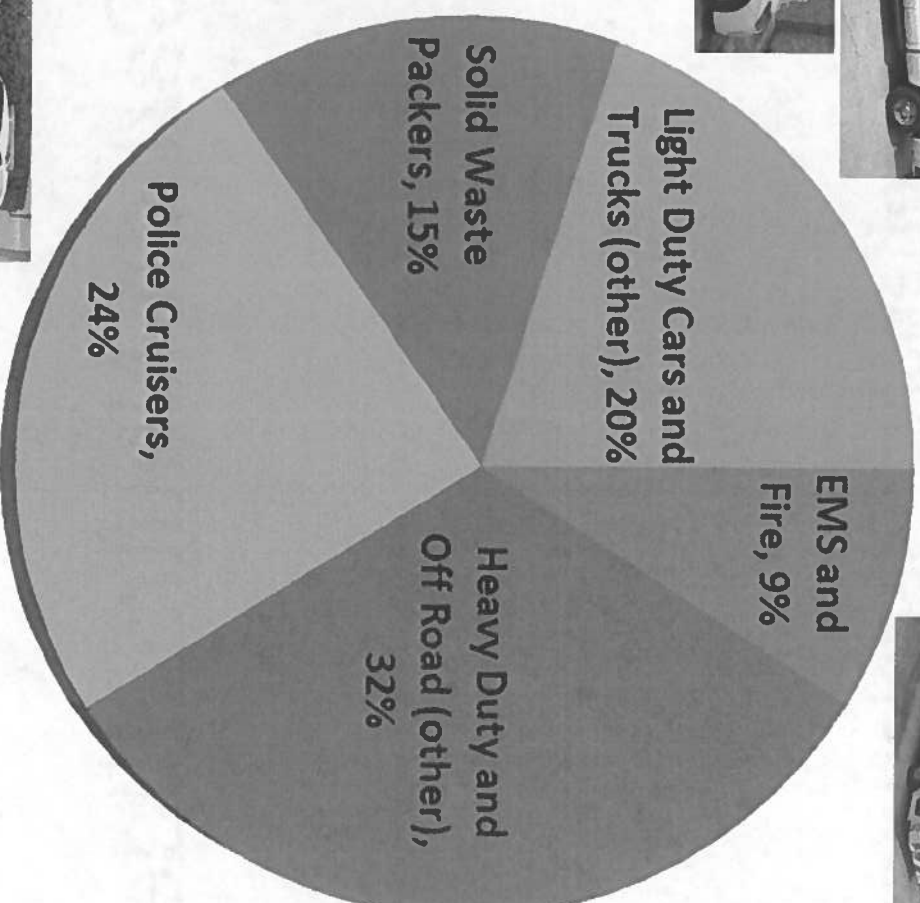
197 Units



1,658 Units



131 Units



1,079 Units

Total Gallons = 5.13 Million
Total Units = 5,600

Fleet Innovation



- 68% of the Fleet is alternative fueled or hybrid electric
 - 269 Hybrids
 - 300 Propane units
 - 894 Ethanol units
 - 50 Compressed natural gas units
 - 33 Electric vehicle charging stations and vehicles
- Auxiliary Power Units
 - 508 in Police cruisers
 - 29 Equipment and tool units
- Solar PV Arrow Boards

Resolution 20070215-023

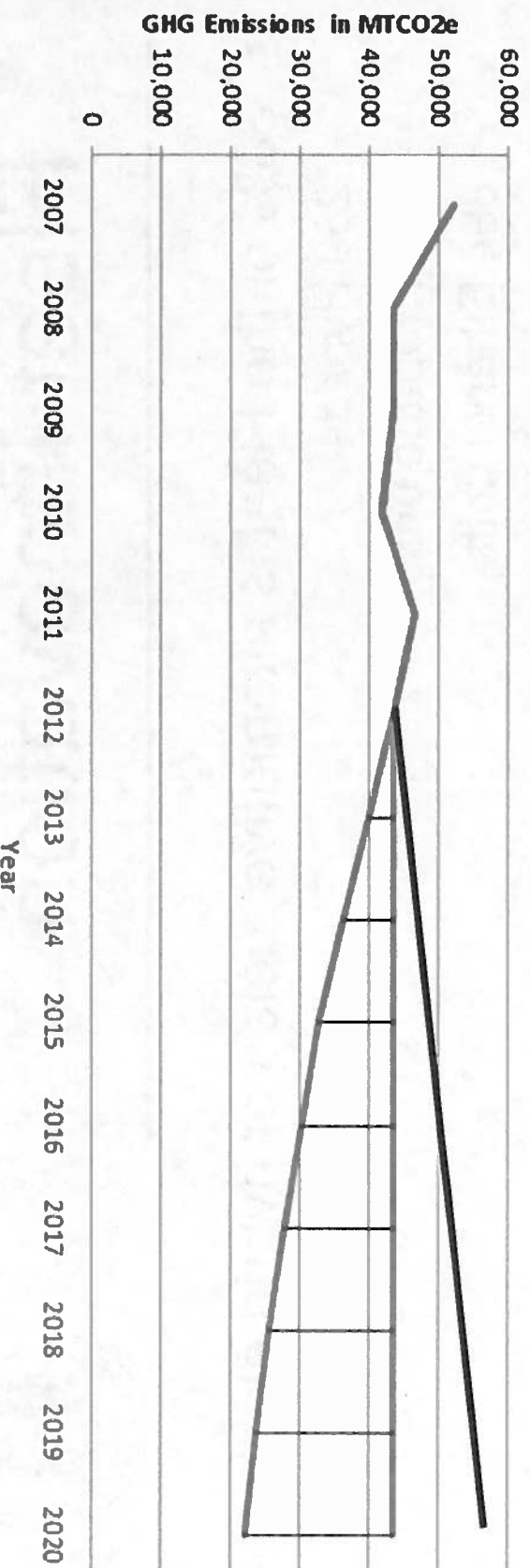


Make the City fleet carbon neutral by 2020 through:

- Electric power
- Non-petroleum fuels
- New technologies
- Mitigation and other measures as necessary

US Cities with Carbon Neutral Goals - Seattle (by 2050) and Missoula (by 2025)

No other US cities have carbon neutral fleet plans – USDN City Survey



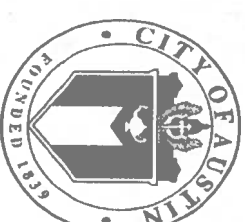
Carbon Neutral Plan



1. New Vehicle and Equipment Purchasing

- Qualitative – Departmental Needs Analysis
 - Operational needs
 - Is there an alt-fuel / hybrid available
 - Available fuel infrastructure
 - Available grant funds - \$8 million to date
- Quantitative – Cost Benefit Analysis Calculator
 - Vehicle upfront cost
 - Vehicle lifecycle fuel & Maintenance costs
 - Lifetime CO₂ and NO_x emissions

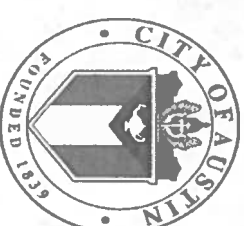
Carbon Neutral Plan



2. Fueling Infrastructure and Fuel Purchasing

- Gap analysis and long-term planning
 - Monthly analysis of usage
 - Department response
 - Training vs. Infrastructure
 - Current projects
 - » Expansion of Todd Lane Facility (CNG)
 - » Construction of new North E85 station (Grant funded)
- Minimize fuel costs through fuel consortiums and tax credits
 - Reduced cost through bulk purchases – currently evaluating bids on the new fuel contract
 - Maximizing federal tax credits – (\$100,000/annually)

Carbon Neutral Plan



3. Driver Education

- Do I need to drive?
Carpooling, teleconferencing, biking, walking, public transportation
- **Driving for Efficiency**
Anti-idling, maintenance, routing, operation of alt fuel/hybrid vehicles
- **Fueling my vehicle properly**
Location and operation of alternative fuel / plug-in fueling sites
 - 5 propane sites
 - 4 E85 sites
 - 1 CNG site (28 slow fill & 1 public fast fill)
 - 36 Biodiesel sites
 - 33 Plug-in charging stations (City access only)

Carbon Neutral Plan



Goals

New Vehicle Purchases

1a. 95% of vehicles purchased are alternatively fueled/ hybrid units

Fueling Infrastructure and Fuel Purchasing

2a. Dual Fuel Vehicles use alternative fuel 80% of the time

2b. Increase the amount of alternative fuels purchased by 10% per year

Driver Education

3a. Train 100% of City staff who utilize fleet vehicles

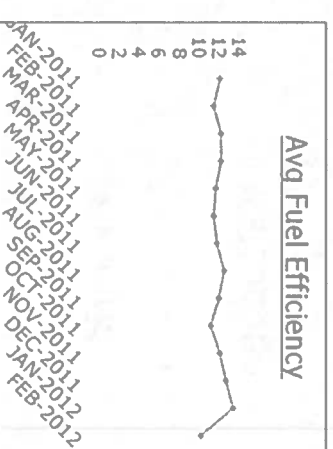
3b. Decrease greenhouse gas emissions per mile by 5% per year

3c. Increase citywide mpg by 5% per year

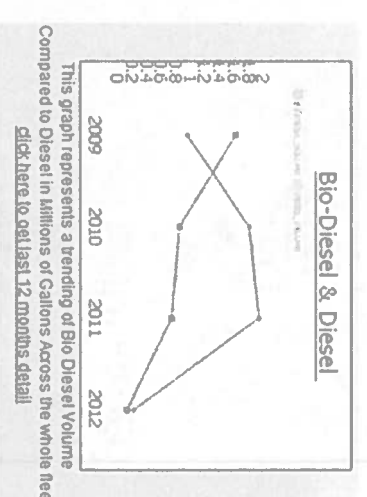
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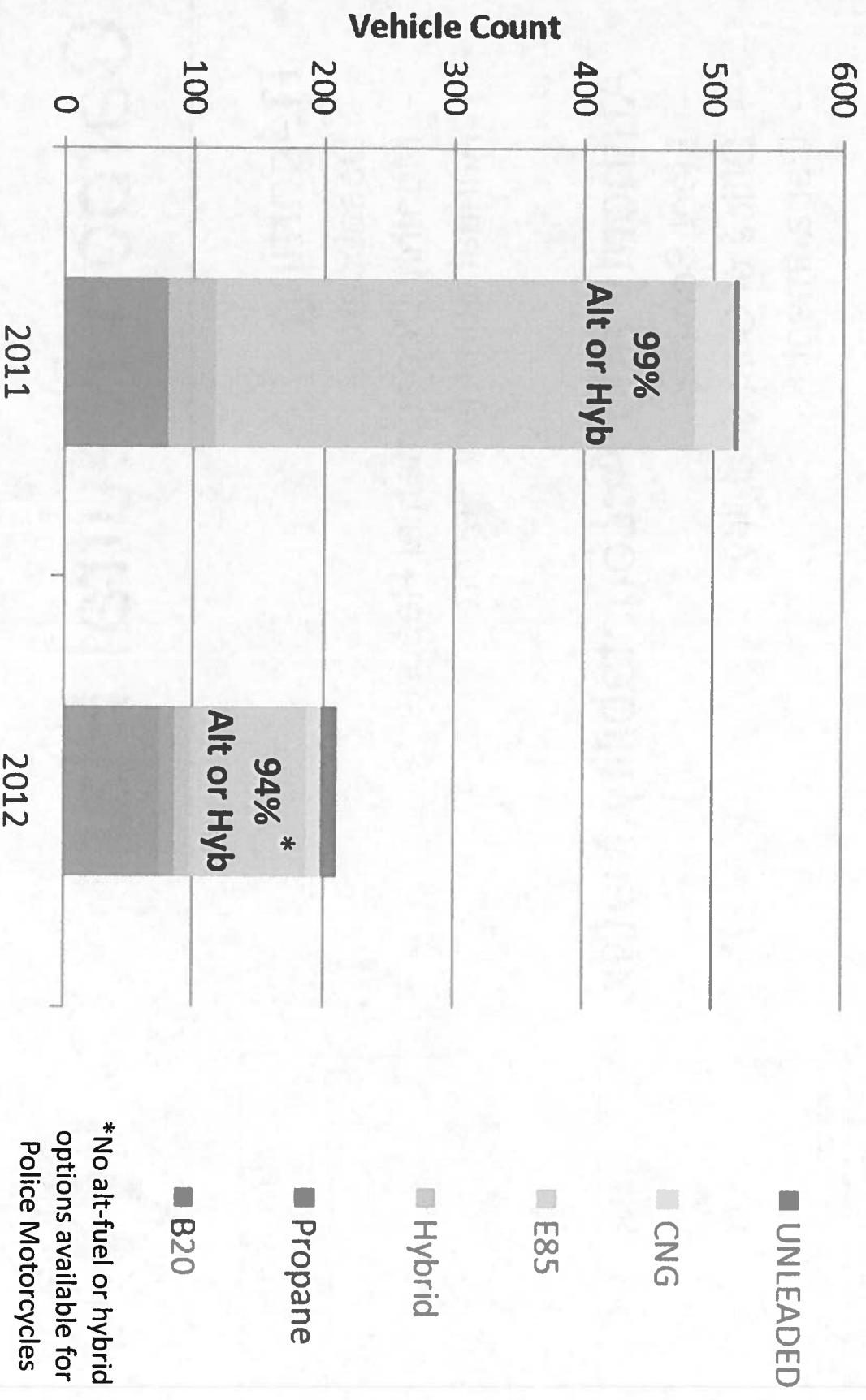
- Reporting
 - Dashboard
 - Monthly Departmental Reports
 - Annual Summary Report



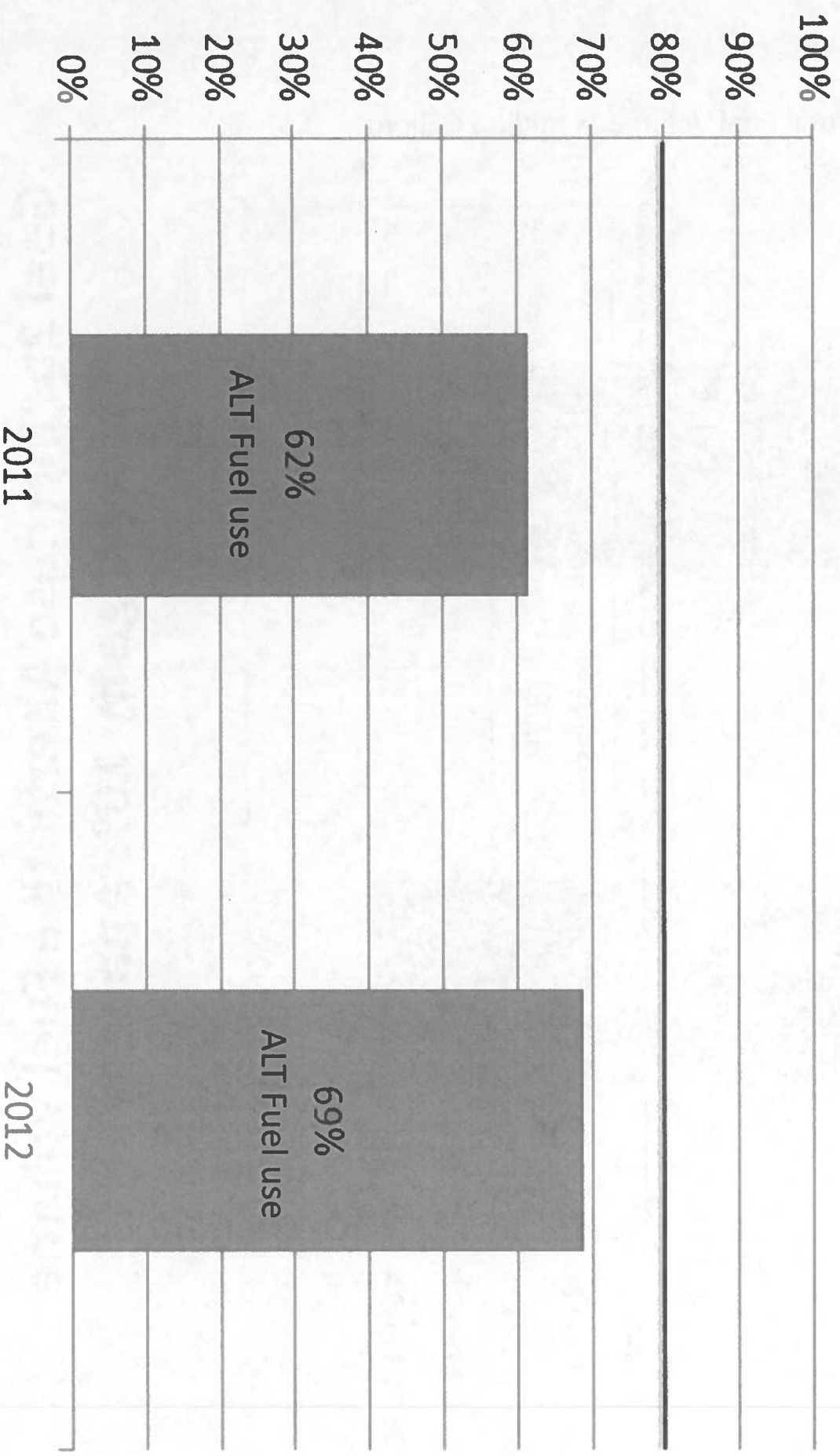
- Authority and Accountability Matrix
 - Fleet Services
 - Office of Sustainability
 - Departments



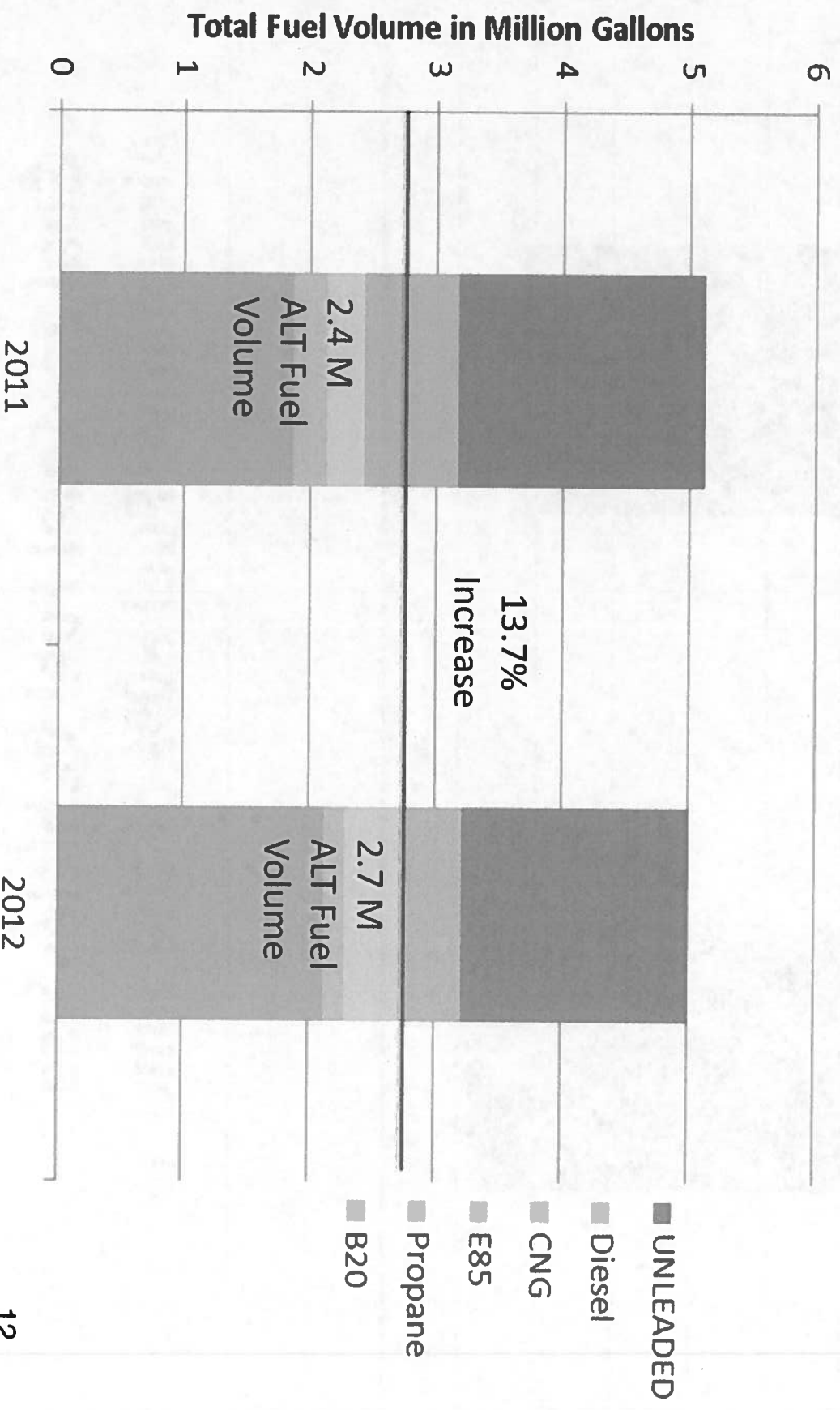
Goal 1. 95% of New Vehicles Purchased are Alternative Fuel or Hybrid

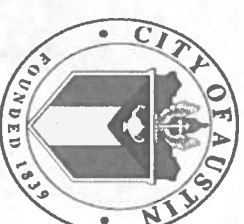


Goal 2a. Dual Fuel Vehicles use Alternative Fuel 80% of the time



Goal 2b. Increase Alternative Fuel Volume Percentage by 10% Annually



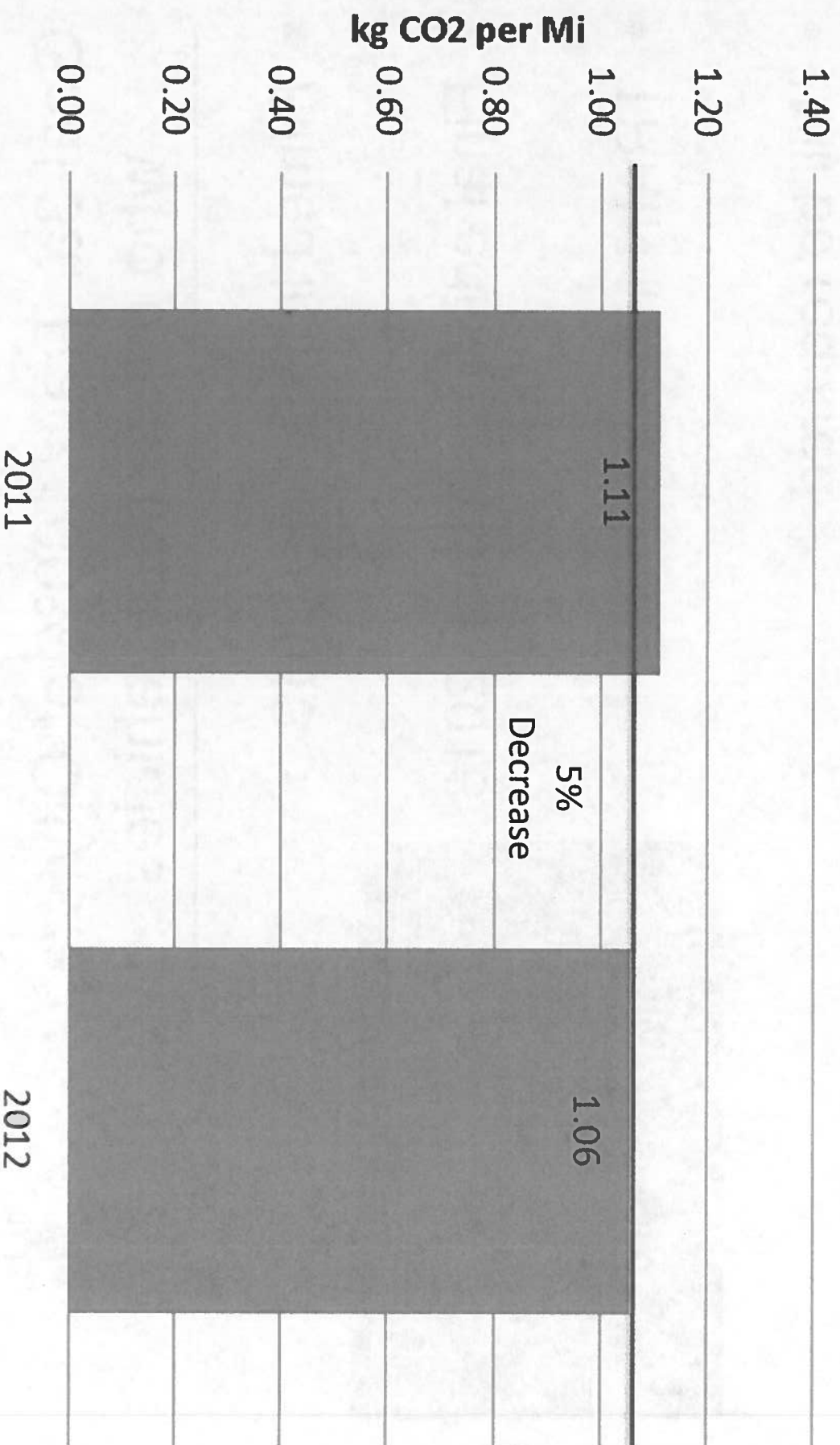


Goal 3a. Train 100% of City staff who utilize fleet vehicles

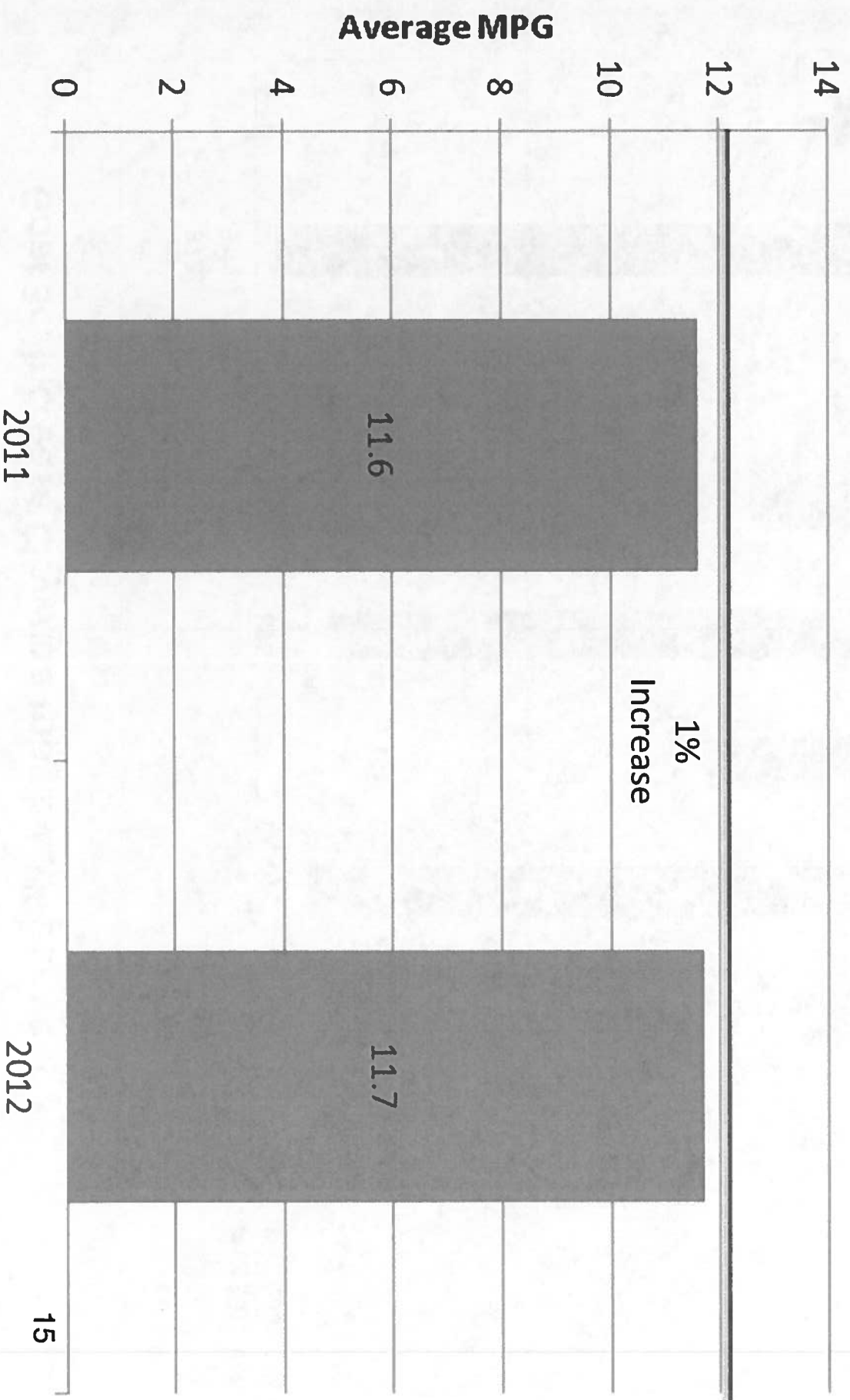
- Filmed in February 2013
- Final editing in March 2013
- TRAIN in May 2013
- Will be required



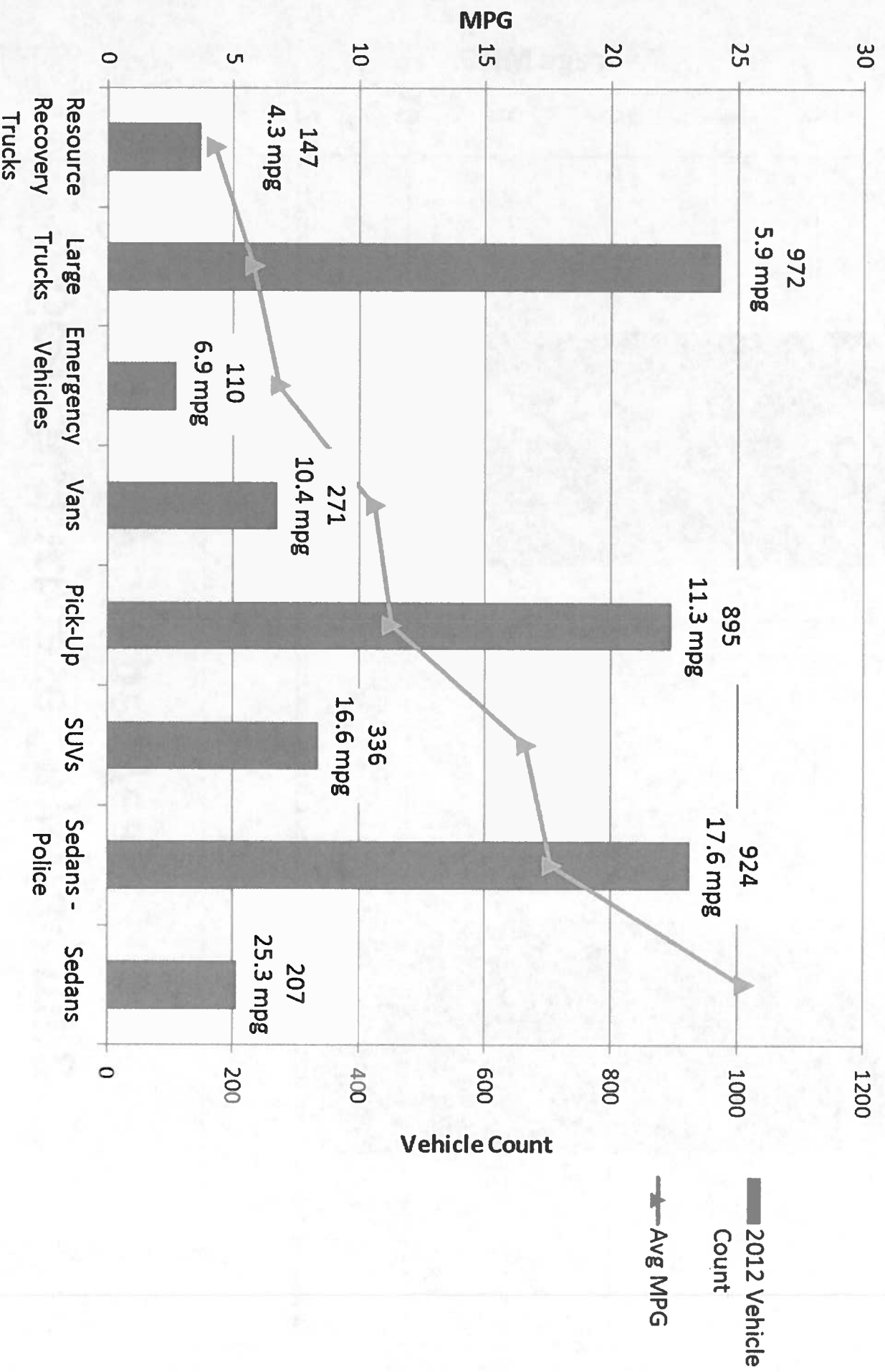
Goal 3b. Decrease Greenhouse Gas emissions per mile by 5% per year



Goal 3c. Increase Citywide mpg by 5% per year



Goal 3c. Increase Citywide mpg by 5% per year



Next Steps



- **Continue purchasing the most efficient vehicles**
 - Re-evaluating departments operational needs to identify efficiencies
- **Maximize alt-fuel infrastructure availability and use**
 - Diversify fuel infrastructure
 - Explore shared infrastructure with other local governments and industries including AISD, CapMetro, UT, and Travis County
- **Train 100% of City staff**
 - Follow up with a mpg and alt-fuel competition
- **Increase reporting and departmental communication**
 - Dashboard and departmental goal achievement

