GREENING CITYFLEET: TAKING ON EMISSION AND TOXICS REDUCTION STRATEGIES
Policy Backdrop

- **Climate Action Plan**
  - Specific requirement to purchase electric, plug-in hybrids
  - Use low-carbon fuels

- **Goals**
  - Reduce fleet vehicle carbon emissions 10 percent from FY 06-07 levels by 2030
  - 20% of City fleet be electric by 2030

- **Toxics**
  - Eliminate use of lead wheel weights
  - Use alternative fuels
  - Reduce diesel particulate matter emissions
About CityFleet

- Maintains the general motor pool and department-specific fleets - over 2,950 vehicles and equipment
  - Includes parking patrol vehicles, sedans, pick-ups, vans, police sedans, dump trucks, back hoes, and heavy construction equipment
- Operates seven repair shops
Mixing it Up: Vehicles & Equipment

- All Electric
- Plug-in Hybrids
- Hybrid
  - Sedans
  - Utility Vehicles: step-vans, fueling truck, aerial bucket truck
- Propane (equipment – e.g. forklift)
- Diesel vehicles running on B20 biodiesel
Vehicles & Equipment: Benefits

- **Electric Vehicles**
  - Higher upfront cost, but lower operating cost: $0.06/mile vs $0.28
  - Reduction in fleet emissions

- **Hybrid Utility Vehicles**
  - Fuel savings
  - Better work site air quality
  - Reduction in fleet emissions
Vehicles & Equipment: Challenges

- Lack of options for many vehicle or equipment types
- Higher upfront cost
- No department-specific mandates (getting end-user buy-in)
- Lack of infrastructure for some technologies
  - Charging network for longer drives
  - CNG
Toxics & Emissions Reduction

- Monitoring
- Idling policy
- Diesel particulate filters
- Diesel coolant heaters
  - Reduce fuel use
  - Improve worker safety
- Lead-free wheel balancing tape
Toxics & Emissions Reduction: Challenges

- End-user education
- Up front costs
  - Seek out grants
Current Status

- Still a long way to go!
  - In the past 10 years the vehicle fleet has grown by 357 vehicles. In that same 10 years CO2 has been reduced by 1%.
  - 1% of the fleet runs on propane
  - 2% of the fleet runs on electricity
  - 30% of the fleet runs on biodiesel
  - In 2011 the City used 605,255 gallons of diesel at its City owned fuel stations. In 2014 the City used 588,229 gallons of diesel at its City owned fuel stations. That is almost a 3% reduction in diesel usage over 3 years.
Thank you

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