



Update of Metro Sustainability Efforts

A Report to the Ad Hoc Sustainability and Climate Change Committee

March 19, 2009

Outline

- **Legislative, Planning, and Policy Efforts**
- **Climate Change Management**
- **Renewable Energy and Energy Audits**
- **Environmental Management Systems**
- **Sustainability-Related Capital Projects**
- **Other Related Efforts**
- **Questions/Discussions**

Legislative, Planning, and Policy Efforts

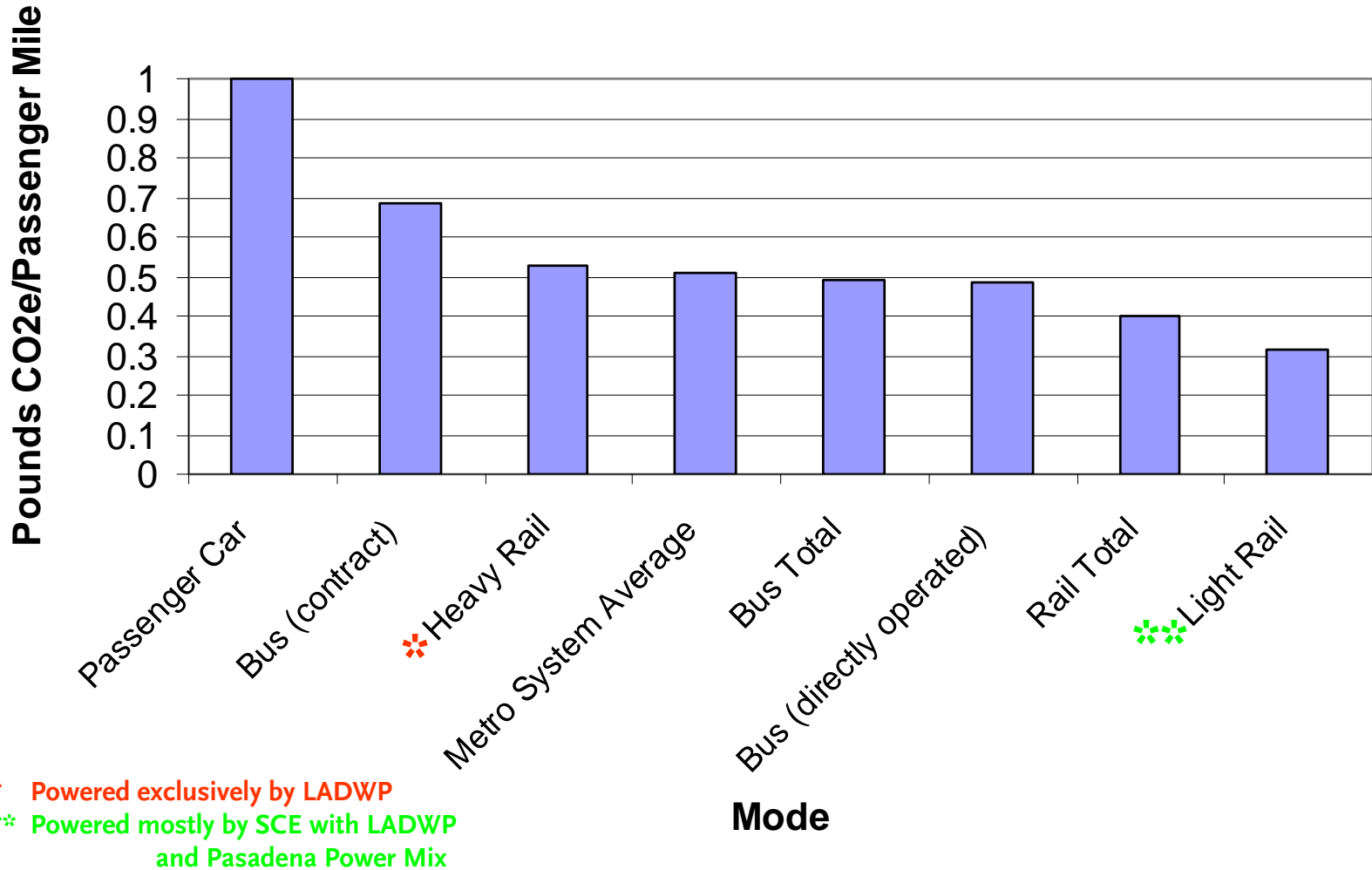
- **AB 32 Scoping Plan adopted by ARB**
 - Early implementation plan activities should be in place on January 1, 2010
- **Attended SB 375 SCAG Regional Workshops**
 - Began collaboration with SCAG to ensure transportation projects are consistent with Sustainability Communities Strategies
 - Provided technical support to Regional Targets Advisory Committee
- **Participation as a member of the LA Regional Collaborative for Climate Action and Sustainability as a Vision Team member**
 - Contribute \$15,000 for initiation of regional Collaborative projects
- **Began outreach process to Councils of Government regarding SB 375 sub-regional implementation**
- **All modal Call for Project applications have been updated to incorporate a sustainability criteria to encourage “Green” principles and strategies**
- **Initiated collaboration with LAUSD and the County of LA on joint energy initiatives**

Climate Change Management

- **Emissions Reduction Initiatives**
 - Reducing bus idling time/emissions
 - Upgrading Detroit Series 50 engines to Cummins 8.9 ISLG (2010 emission certified)
 - Transition of Non-revenue Fleet to Hybrid powered
 - Introduced six NABI hybrid 42 foot buses into service
 - Upgrading non-revenue tow trucks with Emission After-Treatment Devices as part of CARB emission reduction program for government fleets
- **Metro Greenhouse Gas Inventory Report**
 - Completed in December 2008
 - Methods
 - Used 2007 as the baseline year
 - Used The Climate Registry General Protocol
 - Inventory was conducted on the basis of operational control
 - Report on carbon dioxide, methane, and nitrous oxide
 - Hydrofluorocarbons (HFCs) and Perfluorocarbons (PFCs) will be reported in the future

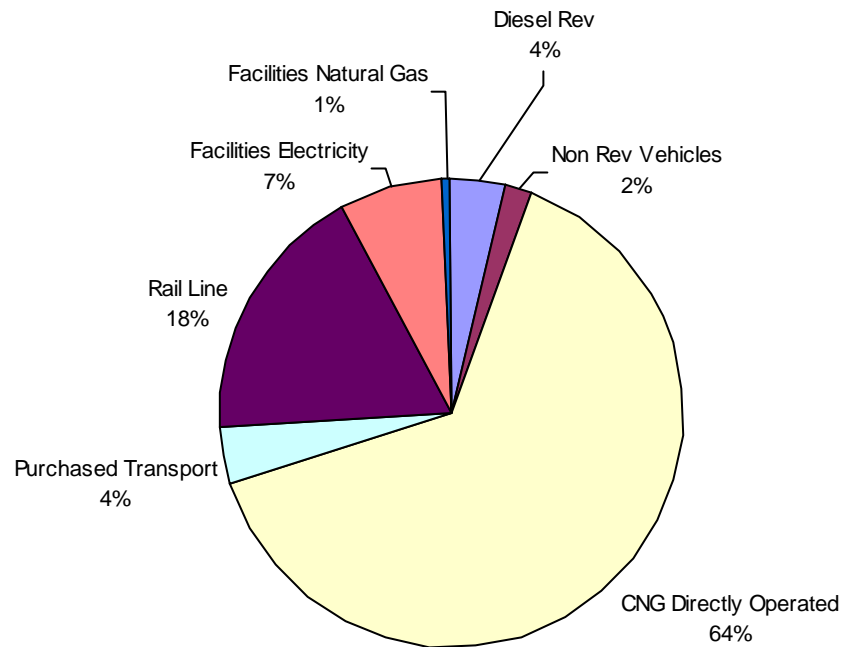
Greenhouse Gas Inventory

Metro Carbon Efficiency by Mode



Greenhouse Gas Inventory

Metro 2007 Greenhouse Gas Emissions



Renewable Energy Update (February 2009)



MSSC Solar/Conservation Project

- Solar Panels 100% Installed (6,720 panels)
- Inverters and meters scheduled for late February 2009 (i.e., power is generated)
- Lighting retrofit is 85% complete
- HVAC installation is 100% complete
- Compressed Air System retrofit is 90% complete
- Energy Management System is 70%
- Forecasted completion date is July 2009 (one month ahead of schedule)

Renewable Energy Update (February 2009)



Energy Audits

- **LADWP Energy Audits at Divisions 1, 8, and 15 completed**
 - Upgrade of existing lighting to modern high efficiency equipment
 - Install lighting controls
 - Prevent blowers from operating during peak hours
 - Develop an energy control strategy
- **Additional Energy Audits being conducted at Divisions 10 and 20**

Environmental Management Systems

- **Environmental Management System (EMS) Pilot at Division 10**
 - **Bus Wash/Surface Water Diversion Project**
 - Study to improve water efficiency and effectiveness of bus cleaning process
 - **Environmental Management Information System**
 - Prototype being developed initially for underground storage tanks
 - Prototype completion date: April 2009

Environmental Management Systems

- **FTA Assisted EMS Development at Red Line Yard**
 - Fenceline study completed in November 2008
 - FTA had determined that Metro has a robust and commendable environmental program but opportunities exist
 - Staff commenced participation in Quarterly EMS sponsored workshops last January 2009
 - Representatives from bus, rail, and construction have attended
 - Final EMS assessment in end of 2009
 - **Goals**
 - Further improve worker environment
 - Consolidation of environmental best practices
 - ISO 14001 Certification

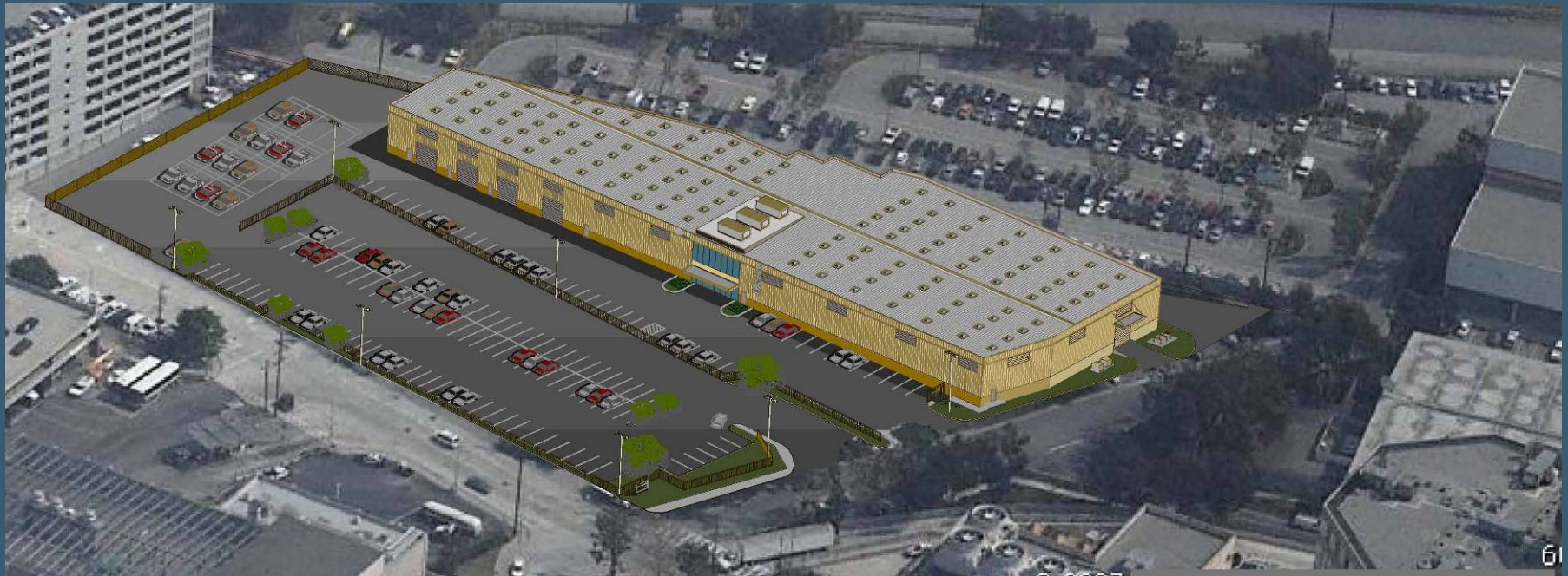
Sustainable Capital Projects

- **Division 3 Maintenance Annex**
 - Goal of LEED Silver
 - Project is 35% complete
 - Completion scheduled for May 2009



Sustainable Capital Projects

- **Bauchet Street Warehouse and Facilities Maintenance Shop**
 - Bids for Design/Build Contract expected March 2009
 - Start construction July 2009
 - Complete Project July 2010
 - LEED Silver Contractual requirement



Sustainable Capital Projects

- **Metro Orange Line Extension**
 - Implementation of sustainability principles during preliminary engineering phase
 - Explore the feasibility of renewable energy along the alignment
- **Commitment in the Measure R Implementation to Incorporate Sustainability Environmental Elements**

Other Related Efforts

- Green Chemicals Procurement Procedures
- Water Efficiency and Conservation Policy
- Document Summarizing Results of Sustainability Survey
 - Completed and distributed on December 2008
- Partnership with Local Educational and Other Institutions
 - Sustainability awareness training roll-out in February 2009
- Hiring of *Transportation Sustainability Energy Manager* completed
- Hiring of *Transportation Sustainability Policy Manager* is pending Board approval in March 2009
- Sustainability hotline: 213/922-1100 or sustainability@metro.net
- Planning for 2nd Annual Sustainability Survey
- Planning for the 2nd Annual Sustainability Summit

Questions/Discussions