

Energy and Environmental Considerations in Highway Projects: Metro Case Study

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Streets and Freeways Sub-Committee
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Outline

- Metro Energy Program
- Biomethane Plan
- Low Impact Development and Sustainable Design
- Sustainable Construction Efforts
- Climate Change Management
- Electric Vehicle Charger Program
- Other Efforts
- Questions/Comments



Metro's Energy Management Program

- Metro Energy Conservation and Management Plan
- Metro Renewable Energy Policy
- Energy Corridors
 - Renewable Energy Installation and Transmission
- Energy Blue Ribbon Collaborative



Potential For Biomethane

- Climate Change Driver
 - Upstream and Downstream Considerations
- Metro Biomethane Plan: Path 1 and Path 2
- Carbon Credits and the Carbon Market





Low Impact Development/Sustainable Design

- Stormwater Control/Water Reuse
- Connectivity and Mode Integration





Other Construction Innovations

- > 300,000 tons of demolition material were recycled in I-405 project





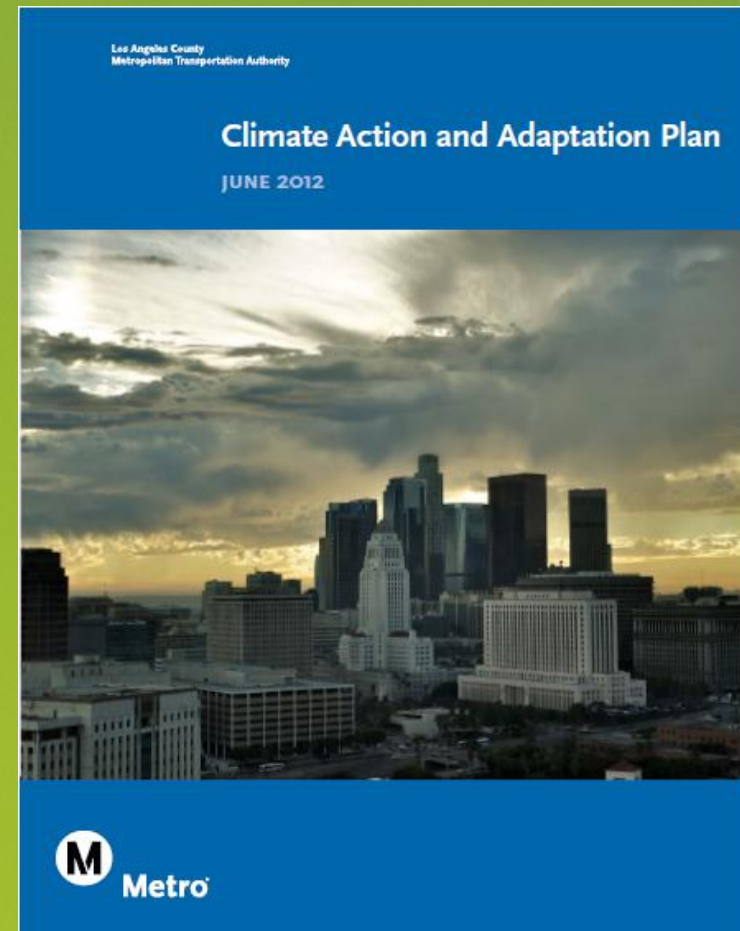
Other Construction Innovations

- > Gold Line Foothill Extension I-210 Iconic Bridge, 92% locally sourced



Climate Mitigation and Adaptation

- > Combining weather/climate information with infrastructure monitoring and maintenance?
- > Revise Design Criteria and Specifications
- > Planning and Construction Options
Examples: siting, alignment alternatives, labor schedules
- > Integration of transit and highway vulnerability and criticality issues and solutions



Ventura County

Los Angeles County

San Bernardino County



Gold Line Foothill Extension

Expo Phase 2



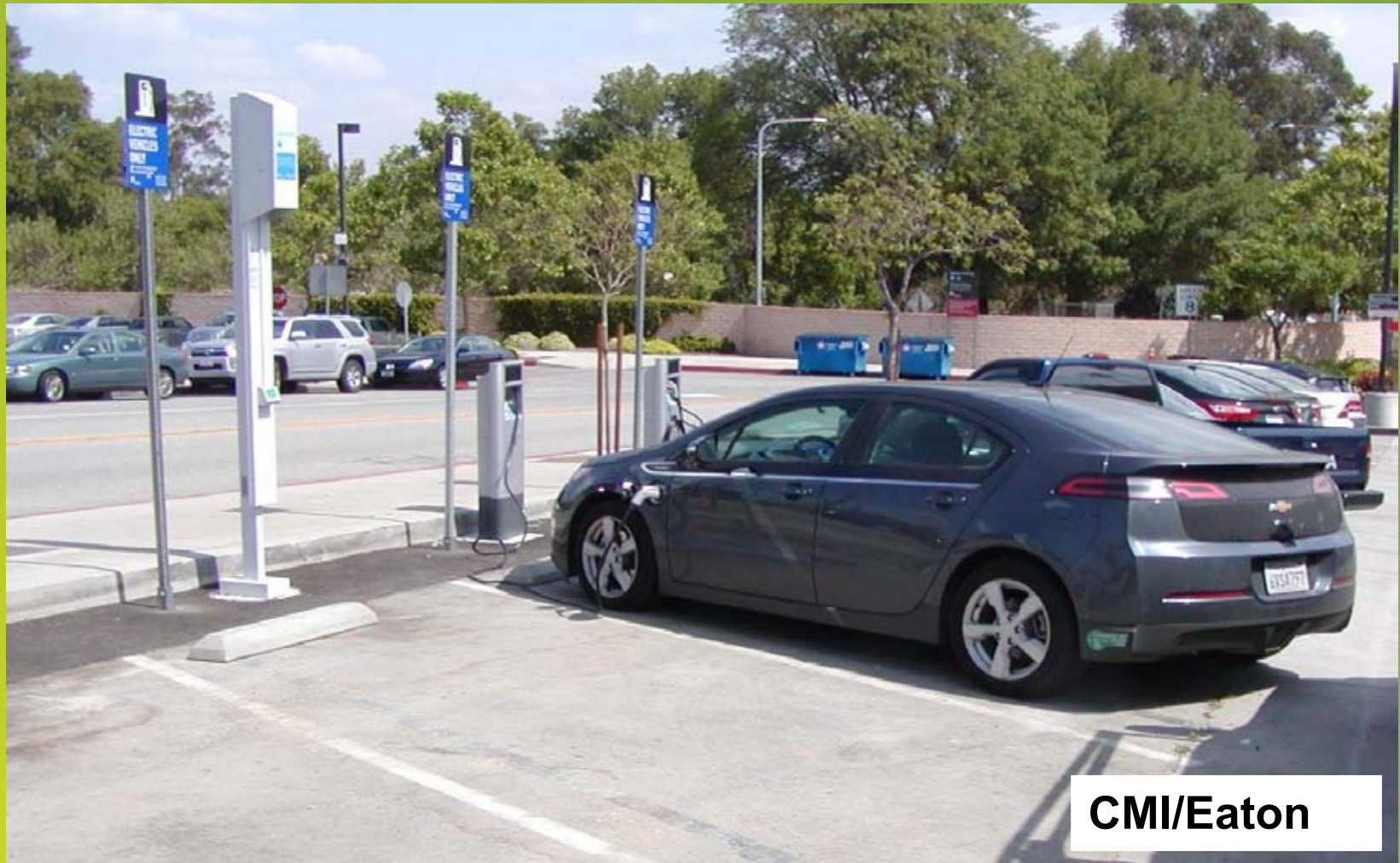
EV Charger Network and Expansion



Los Angeles County Metropolitan Transportation Authority

Orange County

Example Installation: Universal City Station



CMI/Eaton



Other Activities

- Temporary Parking and “Green” Showcase: Five Locations
- FTA Climate Change Adaptation Pilot
- Green Construction Equipment Initiative Outreach and Toolbox
- Low Carbon Fuel Standards Program
- Tracking Congressional, Legislature and Local Ordinance Activities

Questions/Discussion

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