

**Union Pacific Railroad
Community Meeting
Air Resources Board Health Risk Assessment
Mira Loma Auto Facility**

Mira Loma, CA

May 24, 2007

Lanny Schmid, *Director – Environmental Operations*

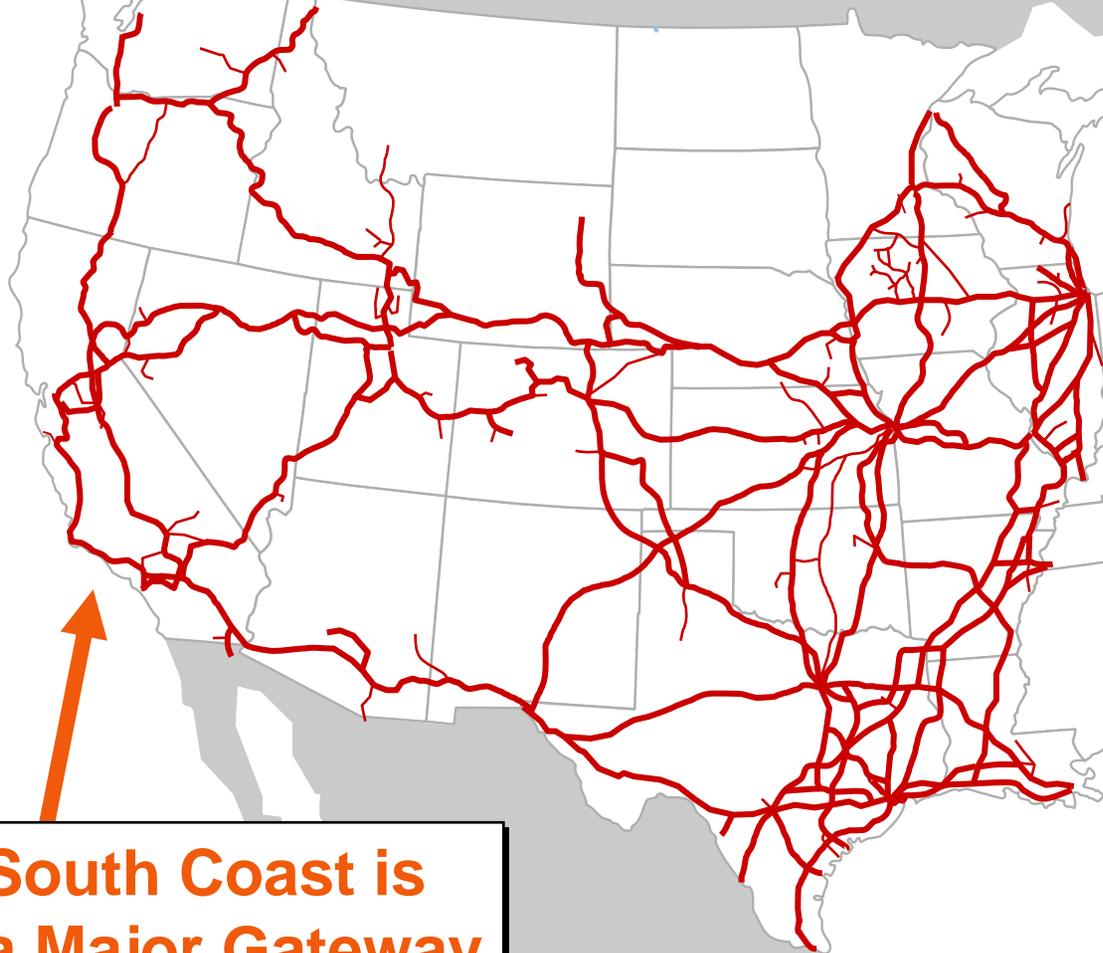
BUILDING AMERICA®



UPRR Mira Loma Auto Facility

- **Facility Overview**
- **Sources of Emissions**
- **Comparison with Air Basin and Other Area Emissions**
- **Emission Reduction Measures**
- **Emission Trends – Past and Future**

Union Pacific System Overview



**South Coast is
a Major Gateway**

Fast Facts

- **Miles of Track**
 - 32,300 in 23 States
 - 3,455 in California
 - 1,272 in Los Angeles area
- **Employees**
 - 50,000+ in US
 - 5,900 in California
 - 1,900 in Los Angeles area

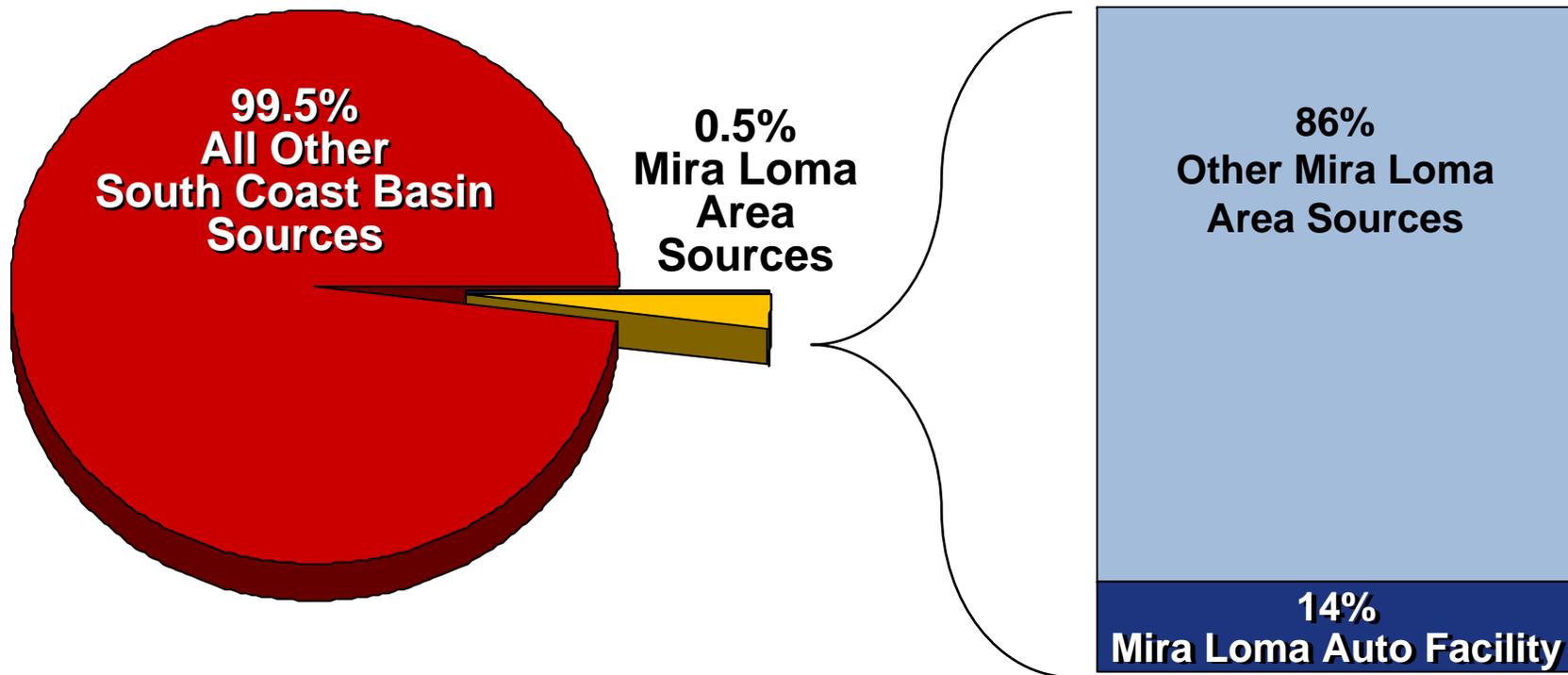
UPRR Mira Loma Auto Facility

Facility Overview

- **256-acre Automobile Distribution Center**
- **Facility Includes:**
 - **2 Receiving / Departing Tracks**
 - **12 Tracks Used to Unload Vehicles From Rail Cars**
 - **10 Support Tracks to Hold Rail Cars**
 - **Tracks for Rail Car Maintenance**
- **Facility Operates 24 Hours a Day, 365 Days a Year**
- **About 8 Trains a Day Originate or Terminate at UP's Mira Loma Yard**

Mira Loma Auto Facility

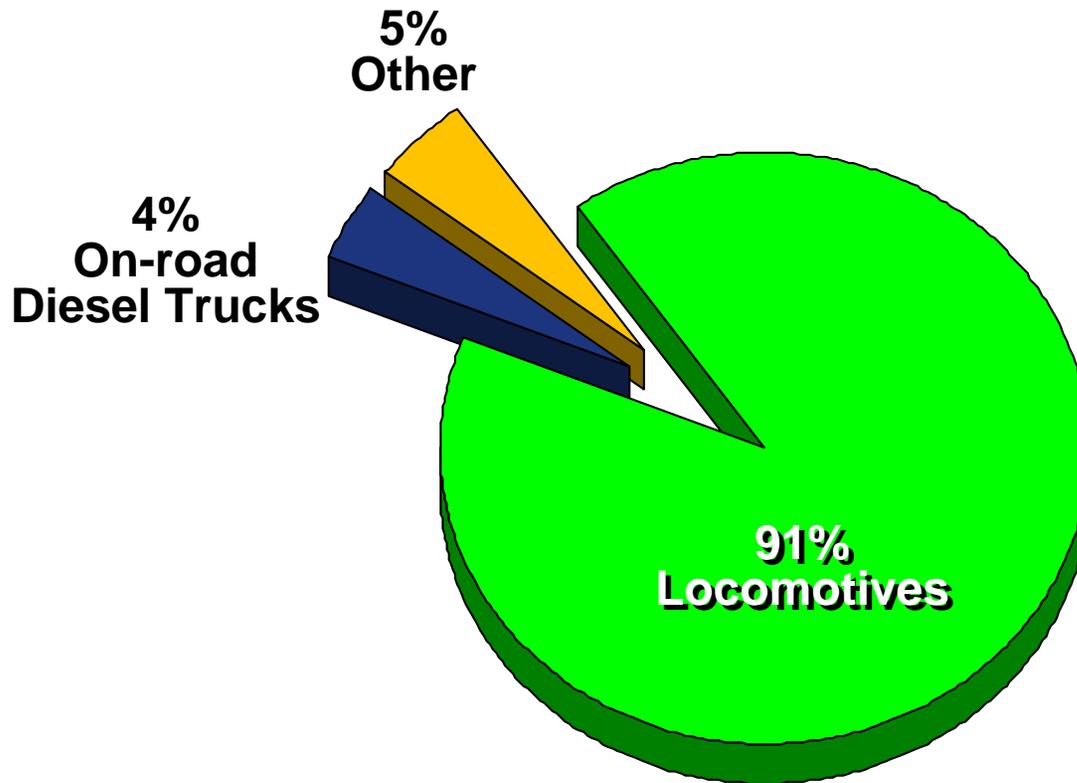
Comparison with Other Sources of DPM Emissions



Total DPM Emissions – All South Coast Sources: 7750 tons per year

UPRR Mira Loma Auto Facility

Sources of Diesel Particulate Matter (DPM) Emissions



Total DPM Emissions – UPRR Mira Loma Facility: 4.9 tons per year

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UP Emission Reduction Measures

- Increased Use of Idle Control Devices (ICDs) for Auto Start-Stop of Locomotives
 - 76% of L.A. Area Intrastate Fleet Equipped Now
 - 100% of CA Intrastate Units Equipped by June 2008
 - 35% of UPRR Total Fleet
 - All New Locomotives Since 2001 Have Factory ICDs
- Aggressive Fuel Conservation Efforts – Since 1995
 - 12% Improvement in Fuel Efficiency

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UP Emission Reduction Measures

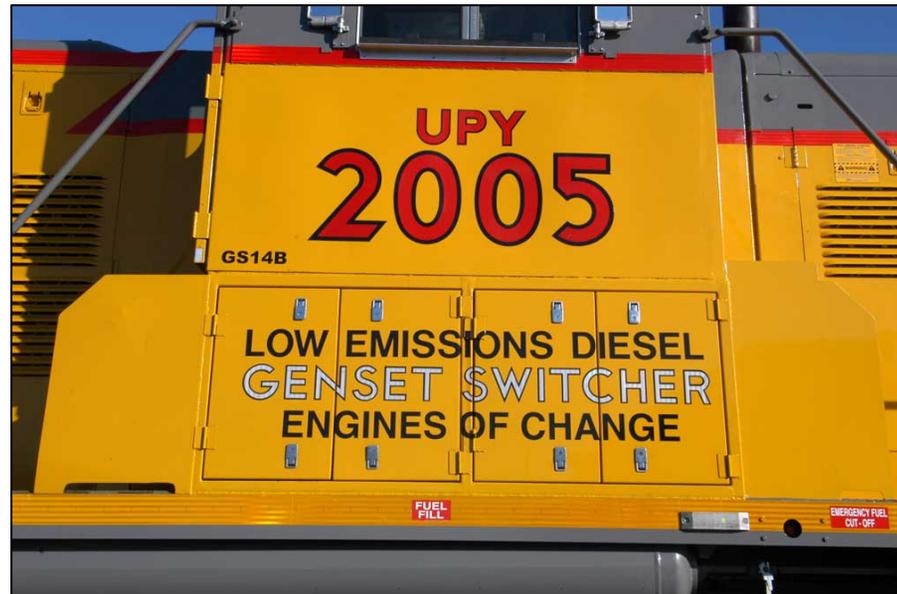
- **Continued Aggressive Acquisition & Use of Tier 2 Road Locomotives With Advanced Emission Controls**
 - 820+ Tier 2 Locomotives by December, 2007
 - 2,600+ Tier 0, 1, or 2 From 2000 Thru 2006
- **Continued Remanufacture of Older Locomotives With New, Lower Emitting Components**
 - 1,800 Units Since 2000
- **On Target for Tier 2 Fleet Average in SoCal by 2010**



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UP Emission Reduction Measures

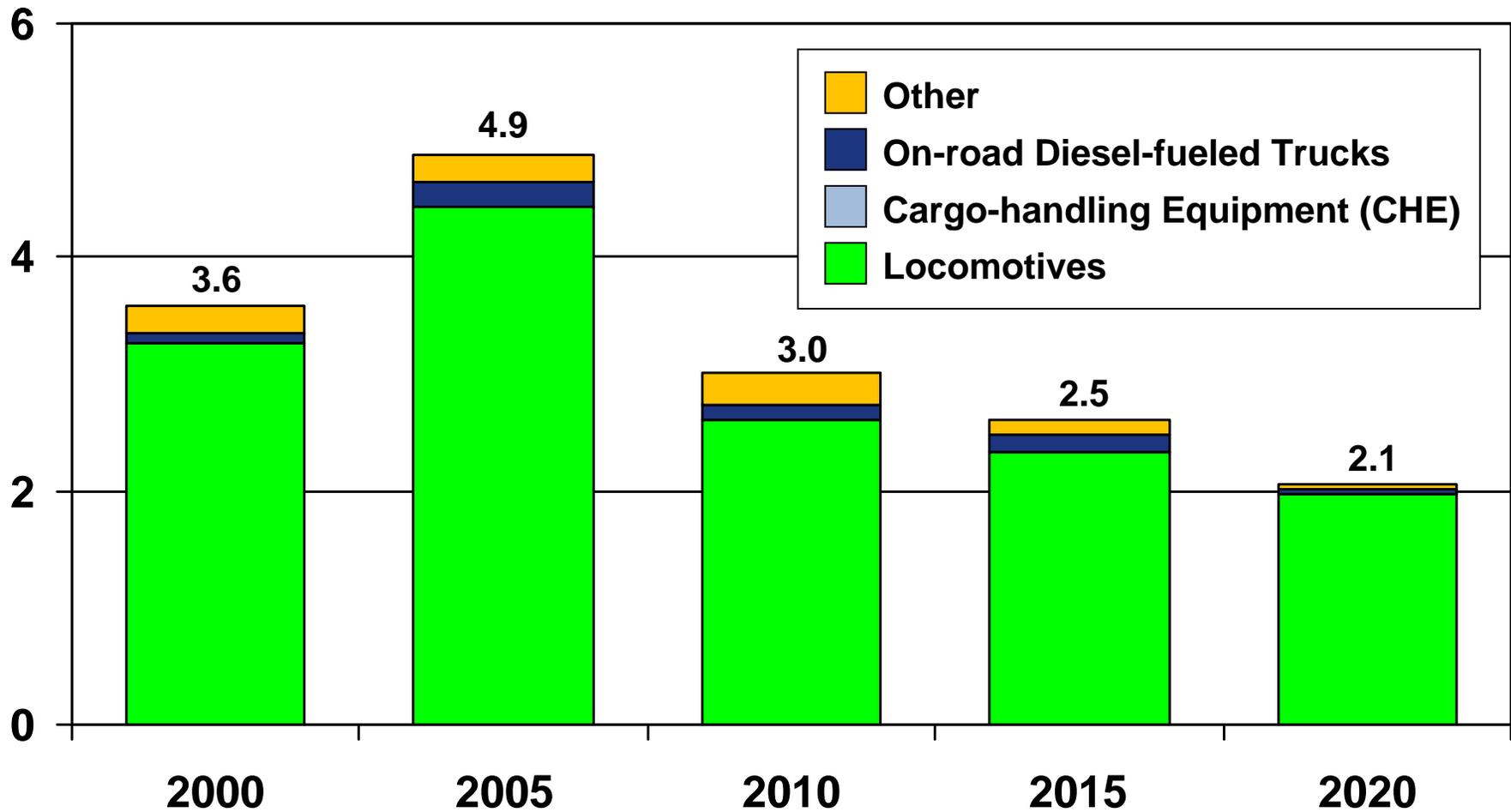
- **Ultra Low Emitting Locomotives (ULELs)**
 - Reduce NOx & PM Emissions by +/- 85%
 - Reduce Fuel Consumption by Over 16 %
- **Expanded Use of Technologically Advanced Switch Locomotives**
 - Green Goats - 6
in Mira Loma NOW
 - Green Goats - 12
in South Coast NOW
 - Gensets - 61
in South Coast by July



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DPM Emissions by Source (Calendar Years 2000-2020)

Emissions (Tons / Year)



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Emission Trends

- **57% Reduction From 2005 to 2020**
- **Overall 42% Reduction From 2000 to 2020, Including Growth**
- **76% Reduction in DPM Emissions From 2005 to 2020 Per Vehicle Handled**

THE ROAD TO THE FUTURE ISN'T A ROAD AT ALL.

