Goods Movement & Distribution Centers

South Coast Air Quality Management District
Presentation to the
Moreno Valley Legislative Action Committee
March 8, 2013
Overview of Goods Movement

Goods Leave Region
Location of Goods Movement
Growth in Distribution Centers

<table>
<thead>
<tr>
<th>Year</th>
<th>Warehouse Space (MSF)</th>
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<tbody>
<tr>
<td>2009</td>
<td>838</td>
</tr>
<tr>
<td>2035</td>
<td>1,250</td>
</tr>
<tr>
<td><strong>Net growth in 25 years</strong></td>
<td><strong>412</strong></td>
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</tbody>
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Pre-recession forecast
Post-recession forecast
Air Quality Concerns Related to Goods Movement

- Pollutants
  - Local
    - Diesel PM, NO$_2$, PM$_{10}$, PM$_{2.5}$
  - Regional
    - NOx, PM$_{2.5}$, Ozone

- Health Impacts
  - Cancer risk
  - Premature death
  - Asthma aggravation and other respiratory illness
  - Increased hospitalizations
Air Quality Standards

- Need 2/3 reduction in NOx by 2023
- Need 3/4 reduction in NOx by 2032

- What if we don’t get there?
  - Health impacts
  - Transportation funds
  - Permit costs
SCAQMD Role in Warehouse Development Process

- Review and comment on EIR
  - Purpose is to minimize air quality impacts and protect public health
  - Comments are recommendations
  - Technical adequacy of air quality analysis
- Conduct equivalent reviews on other goods movement projects
- Conduct studies to analyze warehouse impacts
Typical Comments

- Construction
  - Dust controls
  - Cleanest available equipment

- Operations
  - Maintain buffers between sensitive land uses and trucks
  - Encourage clean truck fleets
  - Infrastructure for zero and near-zero emission technologies
  - Other measures to reduce emissions or exposures
Warehouse Types

- Trend in development is towards larger (>500,000 sf) buildings
- Number of truck trips poorly correlated with building size
  - Automation
  - Warehouse purpose