2030 Target Scoping Plan Update
Economic Modeling—REMI

January 15, 2016
REMI

- Regional Economic Models, Inc.
- Regional Model of the California Economy
- REMI is made available for economic impact analysis through a contract with the California Department of Finance
- Information at http://www.remi.com/
REMI is a structural economic forecasting and policy analysis model.

REMI integrates input-output, computable general equilibrium, econometric and economic geography methodologies.

The model is dynamic: firms and individuals alter their behavior in response to changing economic conditions.
Baseline economic conditions for REMI are supplied by the California Department of Finance

- California Gross Domestic Product
- California Population by Age group
REMI Outputs

- Employment Impacts
- Business Impacts
- Investment Impacts
- Impacts to individuals
- Impacts on Gross State product
How REMI will be used
## Inputs to REMI from Pathways

### Sectors and Sector Cost Categories

<table>
<thead>
<tr>
<th>Industrial</th>
<th>Commercial</th>
<th>Household</th>
<th>Trucking</th>
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<tbody>
<tr>
<td>Energy Efficiency</td>
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<tr>
<td>Natural Gas</td>
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<tr>
<td>Electricity</td>
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<tr>
<td>Vehicle Capital</td>
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<tr>
<td>Fossil vehicle fuel</td>
<td>Fossil vehicle fuel</td>
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<td>Non-fossil vehicle fuel</td>
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</tbody>
</table>
Example 1: Household Energy Efficiency

- Adjust spending in Household Appliances Category
  - Household appliance manufacturing
  - Retail trade
- Adjust spending in Household Electricity Category
  - Electric power generation, transmission, and distribution
- Adjust spending in Household Natural Gas Category
  - Natural gas distribution
- Run REMI and assess change from baseline model solution
Example 2: Cap-and-Trade Carbon Price

- Increase electricity, natural gas and fossil transportation fuel prices in across all model sectors to reflect CO₂ costs
  - Petroleum products manufacturing
  - Electric power generation, transmission, and distribution
  - Natural gas distribution
- Redistribute the value in a manner that is consistent with regulation
  - Electric power generation, transmission, and distribution
  - Natural gas distribution
  - Industry
  - Greenhouse Gas Reduction Fund (Roughly)
- Run REMI and assess change from baseline model solution
Collaboration

- REMI provides continuing support and advice on how to best portray policies in the model.

- Working with the REMI experts at Department of Finance to ensure we are adhering to the State regulatory requirements for economic analysis.
Questions and Comments

- Economic Analysis using REMI