

TPB SCENARIO STUDY

Development of “CLRP Aspirations”

Ronald F. Kirby
Director of Transportation Planning

Presentation to the Transportation Planning Board

April 16, 2008

Starting Point

Baseline:

- Round 7.1 Cooperative Forecast
- 2008 CLRP

To Frame Goals and Development:

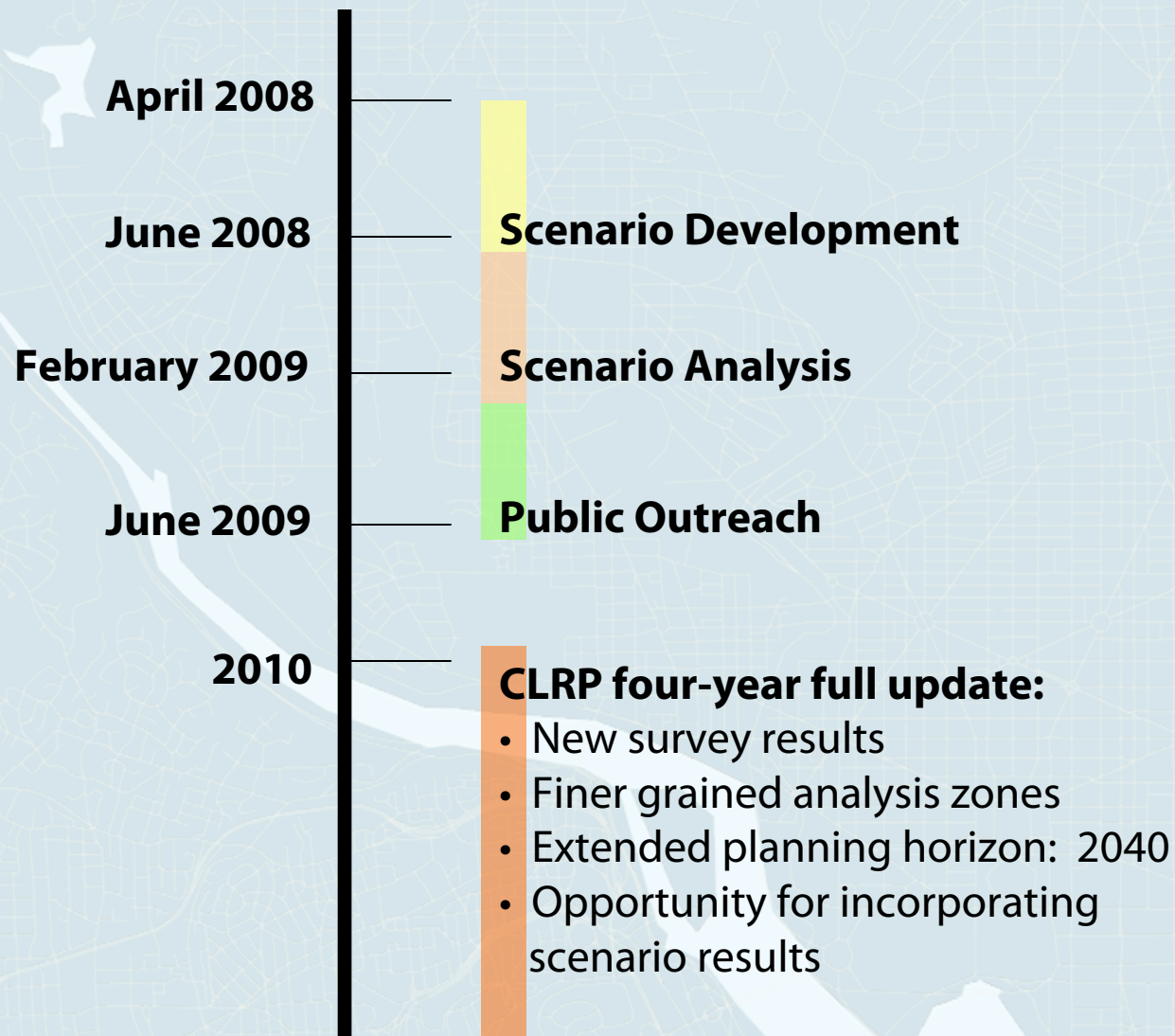
- 2007 CLRP Performance Analysis

Scenario Criteria

Two primary criteria:

- Land use shifts “within reach” for inclusion in the COG Cooperative Forecast
- Transportation projects “within reach” financially through tax revenues, developer contributions, or pricing.

The Schedule



Measures of Effectiveness

Travel Patterns:

Congestion, Alternative Mode Use

Environmental:

Air Quality, Environmental Mapping

Accessibility:

Access to jobs by auto and transit

Equity:

Access by demographic groups

Menu of Options

5 Previous Land Use/Transportation Scenarios

More Households Scenario

Households In Scenario

Jobs Out Scenario

Region Undivided Scenario

Transit-Oriented Development Scenario

2 Previous Value Pricing Scenarios

DC Restrained

DC and Parkways Restrained

Public Outreach/Feedback on Previous Scenarios

Input from TPB Committees

Building the Scenario

Goal: To Move Jobs and Housing Closer Together to Create Highly Accessible and Developed Areas, and Achieve More Efficient Transportation Systems

Land Use Decisions

- “Strawman” scenario using previous scenarios to determine what receiving zones can absorb
- Seek review and refinement by planning directors



Supportive Transit

- Use menu of transit options from past scenarios
- Connect activity centers



Pricing Options

- Address congestion through pricing of new and/or existing lanes
- Provide alternatives through enhanced transit

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Development of “What Would it Take?” Scenario

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Starting Point: The Goal

COG Climate Change Steering Committee Proposed Goals:

- By 2012: 10% reduction in CO₂ below 2012 business as usual levels
- By 2020: 20% reduction in CO₂ below 2005 levels
- By 2050: 80% reduction in CO₂ below 2005 levels

Implementation Strategies

How to Reduce Mobile Carbon Emissions:

Fuel Efficiency

Beyond CAFE standards (currently 35 mpg by 2020)

Fuel Carbon Intensity

Alternative fuels (biofuels)

Vehicle technology (electric, fuel cell)

Reducing Vehicle Travel

Changes in land use development (TOD, infill)

Changes in travel behavior (education campaigns)

Changes in prices for travel

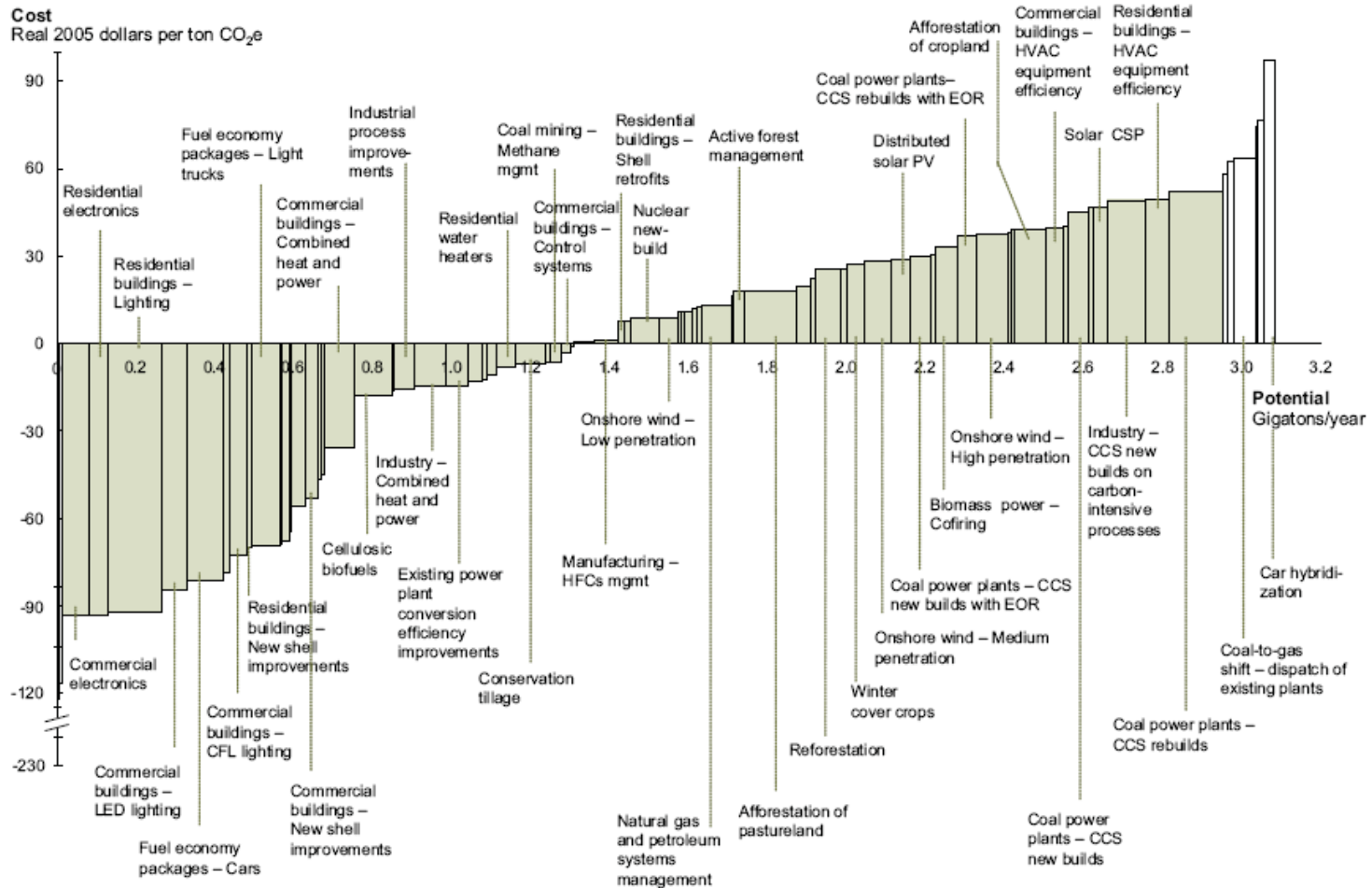
Prioritizing Strategies

- A **cap and trade program for CO2** will provide a cost-effectiveness benchmark via a price for CO2 abatement
- McKinsey report ranks strategies based on cost-effectiveness
- Initial estimates show **Commuter Connections** with a cost-effectiveness of \$17 per ton, which falls in the center of the McKinsey ranking
- Cost-effectiveness of other TDM measures should be assessed

Prioritizing Strategies, cont

Exhibit B

U.S. MID-RANGE ABATEMENT CURVE – 2030



Prioritizing Strategies, cont

In addition to cost-effectiveness, interventions can be organized by timeframe for implementation and realization of benefits

**Short
Term**



**Medium
Term**



**Long
Term**

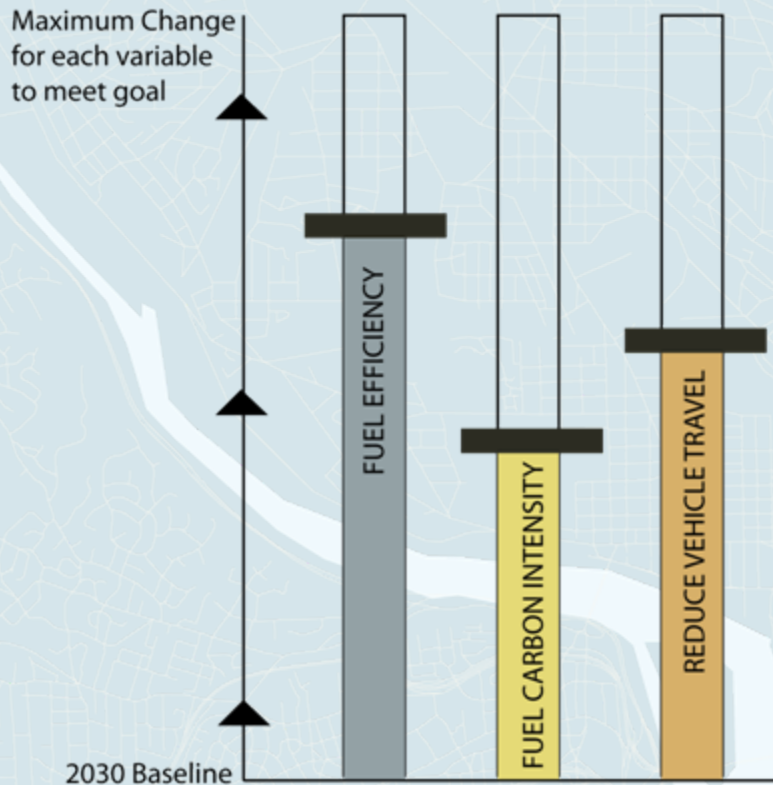
Major Transit Investments

“Low-hanging fruit” that are relatively fast and cost-effective (fuel economy packages)

Major changes to current land use patterns

Products

“Sliders” metaphor



Different combinations of interventions can be assessed for cost-effectiveness and feasibility.



Next Task Force Meeting:

- Wednesday June 18, 2008
- Review “Strawman” Aspirations Scenario
- Review “Sliders” for What Would it Take? Scenario