Climate Change and Energy Planning for MPOs

A five-part webinar series to build MPO capacity for energy and climate change planning
5-Part Webinar Series on Climate Change and Energy (CC&E) Planning

1. The Context for CC&E Planning (November 29, 2011)
2. CC&E Partners and Collaboration (January 10, 2012)
3. CC&E Communications (March 6, 2012)
4. Linking CC&E Solutions to Other Goals (May 2012)
5. Effective CC&E Implementation – Traffic Operations/Management (June 2012)

Goal: To build MPO capacity for CC&E planning – and identify common MPO concerns, needs, and opportunities

Sponsored by: FHWA
Performed by: AMPO in partnership with Parsons Brinckerhoff
AICP credits: Pending
Steering Committee

Charlie Howard, Puget Sound (WA) Regional Council
Todd Ashby, Des Moines (IA) Area Metropolitan Planning Organization
Rich Perrin, Genesee (NY) Transportation Council
Cynthia Copeland, Strafford (NH) Regional Planning Commission
Jacob Snow, Regional Transportation Commission of Southern Nevada
Walter Brooks and Jeffrey Roesel, New Orleans (LA) Regional Planning Council
Ron Kirby, Metropolitan Washington (DC) Council of Governments
Andrea Riner, Lane (OR) Council of Governments
Ann Flemer, San Francisco Bay Area (CA) Metropolitan Transportation Commission

Sponsor: Diane Turchetta, FHWA
Project Planning: AMPO: DeLania Hardy and Rich Denbow
Parsons Brinckerhoff: Cindy Burbank, Tara Weidner, Gary McVoy, and Tiffany Batac
Climate Change and Energy Planning for MPOs

Webinar #3
Climate Change Communication
QUESTION FOR PARTICIPANTS

Would you be willing to share your insights, observations, or recommendations about climate change/energy communications?

If so, please send them to us via the “Chat Box” for this webinar (at any time during the webinar).

Or you can email them, after the webinar, to:  burbank@pbworld.com

We will use your input during the webinar and afterwards, in preparing the final report for U.S. DOT on this AMPO project.
The Importance of Framing in Telling the Climate Change Story

Susan Hassol
Climate Communication
Susan Hassol’s presentation is not available at this time, but will be part of the webinar on March 6.
Discussing Climate Change – An MPO Approach

Richard Perrin, AICP
Genesee Transportation Council
Discussing Climate Change
An MPO Approach

FHWA and AMPO Climate Change & Energy Planning for MPOs
March 6, 2012
Richard Perrin, AICP
GENESEE TRANSPORTATION COUNCIL
Genesee-Finger Lakes Region
History of GHG and Energy in GTC Planning

- New York State adopts Energy Plan in 2002
- Methodology developed for quantifying energy and CO$_2$ emissions from on-road sources
- First energy and GHG analysis included in 2003-2008 TIP
- First GHG discussion in LRTP 2025 (adopted in 2004)
- Climate change one of six major opportunities and issues in LRTP 2035 (adopted in 2011)
Keys to Effective Climate Change Communication

- Find your pace and pick your spots
- Incorporate into broader goals and objectives
- Emphasize existing and planned initiatives
- Proactively address issues and manage expectations
- Be consistent but tailor your message

GENESEE TRANSPORTATION COUNCIL
Find Your Pace and Pick Your Spots

- Don’t get ahead of your elected officials
- Recognize the role of your MPO
- Don’t ignore energy considerations
- Increase the frequency and intensity of discussion as appropriate
- Be prepared for different reactions than you anticipate
Incorporate into Broader Goals & Objectives

- Impossible to put all your eggs in one basket
- Breaking down silos is crucial; don’t create one for climate change
- Other priorities still need to be addressed
- Integrate with other important regional issues such as:
  - Reducing delay
  - Increasing mobility
  - System preservation
Emphasize Existing and Planned Initiatives

- Expand bicycle and pedestrian networks
- Provide increased funding for public transportation
- Increase management and operations capabilities
- Support cleaner vehicle technologies and fuels
- Strengthen connection with land use planning
Address Issues and Manage Expectations

- Openly and honestly discuss MPO abilities and the expected impacts:
  - Vehicle technologies and alternative fuels represent most cost-effective means for reducing GHG emissions but MPO has extremely limited role
  - Development of these technologies, fuels, and land use driven primarily by private sector
  - Providing increased travel options is not enough to alter behavior
Be Consistent but Tailor Your Message

- Recognize upfront the polarizing nature of the issue
- Stay true to your actions
- Have a flexible but constant message
- Be prepared for impassioned critics…

from both sides

GENESEE TRANSPORTATION COUNCIL
Moving Forward Update
2035 Long Range Transportation Plan

Craig Casper
Pikes Peak Area Council of Governments
Historically Conservative
No democrat has won an election here since 1964.

5 Military Bases
Ft Carson
Air Force Academy
Cheyenne Mountain
Peterson AFB
Schriever AFB
Operational Energy Strategy

- DOD National Interest Report

“Energy security is important to national security…The cost of America’s national energy consumption, particularly of oil, is too high, both in the billions of dollars the Nation sends overseas, and in the geostrategic consequences of this relationship.”

“The volatility of oil prices will continue…The realities of the global oil market means a disruption of oil supplies is plausible and increasingly likely in the coming decades.”
Department of Defense Initiatives

DOD Net-Zero Designation

- 2 Bases Ft Carson CO and Ft Bliss TX
- Air Force Academy must be 15% renewable by 2015.
“The process must actively reach out and be accessible to all potentially affected interests. The process should not allow those who voice their concerns most loudly, most often, or most articulately to wield disproportionate influence.”

Pikes Peak Public Involvement Plan
PUBLIC COMMUNICATIONS – OPEN HOUSES
PUBLIC COMMUNICATIONS – COMMUNITY FAIRS / FARMERS MARKETS
PUBLIC COMMUNICATIONS – 3RD PARTY FACILITATION
### Focus Group Individual Rankings 32 Participants

|     | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
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### Phone Survey Rankings 500 Respondents

|     | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
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## Plan Goals

### Reduce absolute regional transportation-related greenhouse gas emissions.

**Objectives**
- By 2015
  - Establish baseline for comparison
  - Reduce regional transportation-related greenhouse gas emissions by 4% below 2005 levels
- By 2025
  - Reduce regional transportation-related greenhouse gas emissions by 20% below 2005 levels
- By 2035
  - Reduce regional transportation-related greenhouse gas emissions by 30% below 2005 levels

**Performance Measures**
- Transportation-related greenhouse gas emissions

### Attain existing and future national air quality health standards.

**Objectives**
- By 2015
  - Establish baseline for comparison
  - Attain national air quality health standards
- By 2025
  - Attain national air quality health standards
- By 2035
  - 2035: Attain national air quality health standards

**Performance Measures**
- Monitored air quality pollutant levels
## weights of goals

<table>
<thead>
<tr>
<th>Goal (by number and name)</th>
<th>Combined Weight</th>
<th></th>
<th></th>
<th></th>
<th>Avg. of three efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TAC Results</td>
<td>CAC Results</td>
<td>Phone Survey Results</td>
<td>Avg. of three efforts</td>
<td></td>
</tr>
<tr>
<td>1 Transportation System Condition Preservation and Rehabilitation</td>
<td>10.4</td>
<td>10.5</td>
<td>7.7</td>
<td>9.5</td>
<td></td>
</tr>
<tr>
<td>2 System Connectivity</td>
<td>7.8</td>
<td>9.8</td>
<td>6.7</td>
<td>8.1</td>
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</tr>
<tr>
<td>3 Regional Mobility Improvement or Regional Congestion Reduction</td>
<td>6.8</td>
<td>9.7</td>
<td>6.8</td>
<td>7.8</td>
<td></td>
</tr>
<tr>
<td>4 Safety</td>
<td>9.9</td>
<td>6.2</td>
<td>6.6</td>
<td>7.6</td>
<td></td>
</tr>
<tr>
<td>5 Cost Effectiveness</td>
<td>7.5</td>
<td>7.6</td>
<td>6.6</td>
<td>7.2</td>
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</tr>
<tr>
<td>6 Multimodal Use</td>
<td>6.4</td>
<td>5.6</td>
<td>6.5</td>
<td>6.2</td>
<td></td>
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<tr>
<td>7 Regional Collaboration</td>
<td>6.9</td>
<td>5.0</td>
<td>6.2</td>
<td>6.0</td>
<td></td>
</tr>
<tr>
<td>8 Economic Vitality</td>
<td>5.5</td>
<td>6.6</td>
<td>5.0</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td>9 Protect Streams and Reduce Stormwater</td>
<td>4.0</td>
<td>5.0</td>
<td>6.6</td>
<td>5.2</td>
<td></td>
</tr>
<tr>
<td>10 Environmental Justice</td>
<td>4.8</td>
<td>4.5</td>
<td>5.9</td>
<td>5.1</td>
<td></td>
</tr>
<tr>
<td>11 Private Partnership</td>
<td>6.0</td>
<td>2.8</td>
<td>6.2</td>
<td>5.0</td>
<td></td>
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<tr>
<td>12 Protect Wildlife Habitat</td>
<td>3.2</td>
<td>4.1</td>
<td>7.5</td>
<td>4.9</td>
<td></td>
</tr>
<tr>
<td>13 Carbon Monoxide (CO) Reduction</td>
<td>4.4</td>
<td>3.9</td>
<td>6.4</td>
<td>4.9</td>
<td></td>
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<tr>
<td>14 Adverse Transportation Impact Reduction</td>
<td>4.5</td>
<td>5.4</td>
<td>3.9</td>
<td>4.6</td>
<td></td>
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<tr>
<td>15 Infill/Redevelopment</td>
<td>4.4</td>
<td>5.9</td>
<td>2.9</td>
<td>4.4</td>
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<tr>
<td>16 Security</td>
<td>4.2</td>
<td>4.0</td>
<td>4.7</td>
<td>4.3</td>
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<tr>
<td>17 Greenhouse Gas Emissions</td>
<td>3.5</td>
<td>3.3</td>
<td>3.8</td>
<td>3.5</td>
<td></td>
</tr>
</tbody>
</table>
Left GHG goal at face value.

When some problem with the goal was expressed we had information at hand to communicate (not talk down to them) other reasons for having the goal that most can agree with, such as National Security, or reducing costs to motorists and that reduction in GHG is just a way of measuring attainment of these objectives since 19 pounds of CO2 is generated per gallon of gasoline.
<table>
<thead>
<tr>
<th>Vehicle Types</th>
<th>2005</th>
<th>2010</th>
<th>2035 Maintenance Only</th>
<th>2035 Build</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorcycles</td>
<td>34,820,144</td>
<td>36,725,934</td>
<td>51,858,037</td>
<td>53,921,444</td>
</tr>
<tr>
<td>Passenger Cars</td>
<td>3,197,395,233</td>
<td>3,276,854,856</td>
<td>3,702,576,339</td>
<td>3,769,897,136</td>
</tr>
<tr>
<td>Light Trucks</td>
<td>4,338,393,399</td>
<td>4,494,129,221</td>
<td>4,655,580,723</td>
<td>4,753,243,437</td>
</tr>
<tr>
<td>Bus</td>
<td>32,223,524</td>
<td>33,642,963</td>
<td>47,587,412</td>
<td>48,553,928</td>
</tr>
<tr>
<td>Single Unit Truck</td>
<td>132,571,813</td>
<td>136,803,076</td>
<td>198,726,238</td>
<td>198,714,697</td>
</tr>
<tr>
<td>Combination Truck</td>
<td>934,214,995</td>
<td>969,203,525</td>
<td>1,393,687,676</td>
<td>1,420,213,452</td>
</tr>
<tr>
<td>Grand Total</td>
<td>8,669,619,107</td>
<td>8,947,359,574</td>
<td>10,050,016,425</td>
<td>10,244,544,094</td>
</tr>
</tbody>
</table>
• In February 2010, Vision, Mission, and Principles.
• In May 2010, Population and Job Control Totals.
• In May 2010, Funding Level Control Totals.
• In July 2010, Congestion Management Corridors.
• In February 2011, Goals and Performance Measures.
• In March 2011, Congestion Management Process Toolbox.
• In April 2011, Project Evaluation Criteria.
• In July 2011, Project Evaluation Criteria Weighting.
• In September 2011, Small Area Forecast.
• In October 2011, Fiscally-Constrained Project List.
• On January 11, 2012, the Moving Forward Update.
Climate Change Communication

Rob Graff
Delaware Valley Regional Planning Commission
Climate Change Communications

AMPO Climate Change and Energy Planning webinar series
March 6, 2012

Rob Graff
Manager, Office of Energy and Climate Change Initiatives
Delaware Valley Regional Planning Commission, Philadelphia, PA
The Delaware Valley Regional Planning Commission (DVRPC)

- Metropolitan Planning Organization (MPO) for the Philadelphia region, created in 1965
- Bi-state (PA/NJ), nine counties
- Board made up of representatives of the counties, major cities, key state agencies, Governors’ representatives
- Staff of over 120
Overview of DVRPC’s work

- Transportation Planning
- Air Quality
- Smart Growth Planning
- Environmental Planning
- Housing and Economic Development
- Population and Employment forecasts
- Energy and Climate Change
- Connections: The Plan for a Sustainable Delaware Valley
Planning Context

- 2 states, 9 counties and 352 local governments
- Over 5.5 million residents
- Strong “Home-Rule” control of land use
- Declining cities and older suburbs with suburban sprawl
- Small local governments with limited capacity and strong property rights
- Traditional divide between land use and transportation planning
Climate Change Change at DVRPC

Emerged from DVRPC’s Economic Development program area –

- Prepare region to be more competitive in an era where low energy use, land use patterns and transportation infrastructure and availability of low carbon energy are likely to be benefits.
- Make the region ready for changes in the climate that appear to be inevitable, regardless of emissions reduction efforts.

FY 2009: “Climate Change Initiatives”
FY 2010: “Climate Change and Energy Initiatives”
FY 2011: “Energy and Climate Change Initiatives”

Primary focus on energy use, with climate change as a driver and co-benefit
Overview of OECCI Work

Local Government Technical Assistance
- Regional Circuit Rider Program for Municipalities
- Tools and Guidance for Municipal Operations

Community-wide
- GHG/Energy Inventory and Allocation to Municipalities
- Alternative Energy Ordinance Working Group

Regional Planning
- Regional GHG Emissions and Energy Inventory (2010)
- Alternative Fuel Vehicles Report “Ready to Roll”
- Profiles in Energy Efficiency
- Electric Vehicle Infrastructure Planning
- Climate Change Vulnerability Analysis Tool Pilot Projects:
  - FHWA and transportation
  - FTA and transit
Cautions on Climate Change Communications

Don’t overpromise effectiveness

Local energy reduction action has local benefits in energy costs and energy vulnerability, but the benefits of GHG emissions reductions are global, far in the future, and not readily quantifiable.

Distinguish carefully between GHG emissions reduction and climate change reduction, especially as you move into adaptation work.

Note that many in the emergency management world use the word “mitigation” where climate change planners have used “adaptation”.
More Than Emissions . . . .

- **Energy use**
  - The more we spend on energy, the less we have for everything else.
- **Household budgets**
  - Increasing portion as incomes stagnate and energy prices increase.
- **Viability of place**
  - Areas with high energy requirements are most vulnerable
Lower the focus on GHG reduction

Flip co-benefits: GHG reduction is a co-benefit of energy efficiency, effective land use, healthy communities, and well-designed transportation systems.
Sound Planning Reduces Energy/GHG

Access to transit
Jobs near homes
Walkability, density
11 year old can walk to buy milk
Implementation:
Things We All Can Do

- Live, work, shop and play in the region’s centers.
- Take transit, walk or bike to work, and for any short trip.
- Link automobile trips together and travel during off-peak times.
- Purchase energy efficient light bulbs, appliances and cars; turn off lights and appliances when not in use.
- Make sure your home is properly insulated and turn your thermostat to 75° in the summer months and 68° in the winter months.
- Reduce polluting activities such as driving, mowing your lawn or filling your car’s gas tank on days with poor air quality.
- Support local food production by purchasing fresh food from local sources.
- Plant a tree.
- Vote for open space or transportation funding referendums.
- Participate in the planning process at DVRPC by attending public meetings, monitoring our website, or joining the Regional Citizens Committee.
Audience Polling Question #1

What are your views on this statement:  “Climate change and energy communications should come directly from the Federal government. MPOs have little or no responsibility.”

a) Strongly agree
b) Agree
c) Disagree
d) Strongly disagree
e) Uncertain
Audience Polling Question #2

Which of the following would you find most valuable?*

a) Samples of informational materials MPOs could use in climate change/energy communications.

b) Case studies of climate change communications efforts by MPOs.

c) Workshops or peer exchanges on climate change/energy communications.

d) None of the above now – but might be interested in the future if public support for climate change/energy goals increases.

* Could be provided by US DOT, through NCHRP, etc.
Audience Polling Question #3

Would your MPO use print and media materials on energy and climate change, if developed by the Federal government?

a) Yes, we would definitely make use of these materials, if they are high quality.

b) We would seriously consider using these materials.

c) We probably would make little or no use of these materials.

d) Uncertain, depends on the materials, the circumstances, etc..
Audience Discussion

Please use the webinar question tool to submit questions – and also to provide your own insights, information and suggestions.
Upcoming Webinar:

Linking Climate Change Solutions to Other Planning Goals

Tuesday, May 1
2:00-3:30 PM Eastern
AICP credits approved

Register at: https://www3.gotomeeting.com/register/718759862
Thank you!

Webinar slides available at: www.ampo.org

Contacts for further info:
AMPO: Rich Denbow  rdenbow@ampo.org
FHWA: Diane Turchetta  diane.turchetta@dot.gov
PB: Tara Weidner  weidner@pbworld.com
Cindy Burbank  burbank@pbworld.com