

Federal Highway Administration

Educating the Public on Climate Change Issues: DOT and MPO Best Practices

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1. Introduction

This document summarizes outreach activities and public education initiatives used around the country by State Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs) to educate the public on transportation-related climate change issues. Best practices were gathered from a review of online documents, outreach materials, and telephone interviews. The purpose of this document is to highlight outreach approaches that FHWA Division staff can use to engage the public and other stakeholders such as elected officials on climate change issues. The following table summarizes the range of transportation-related outreach activities that are highlighted in this document that DOTs and MPOs have recently implemented.

DOT	State	Activity
Caltrans	California	<ul style="list-style-type: none"> ▪ Internal Teleconferences ▪ Internal Climate Change Listserv
Iowa DOT	Iowa	<ul style="list-style-type: none"> ▪ Transportation and Climate Change Presentation
Kentucky Transportation Cabinet	Kentucky	<ul style="list-style-type: none"> ▪ Climate Change /Livability/Air Quality Conference
NYS DOT	New York	<ul style="list-style-type: none"> ▪ IntraDOT Climate Change /Energy Website ▪ Public Climate Change Website ▪ Earth Day Fair Outreach
Oregon DOT	Oregon	<ul style="list-style-type: none"> ▪ ODOT Climate Change Technical Advisory Committee ▪ Efforts on Climate Change Factsheet ▪ Briefing Paper: ODOT's Efforts on Climate Change
MPO	Region	Activity
Delaware Valley Regional Planning Commission	Philadelphia Region	<ul style="list-style-type: none"> ▪ Climate Change Initiatives Program ▪ Energy and GHG Reduction Toolkit
Metropolitan Transportation Commission	San Francisco Bay Area	<ul style="list-style-type: none"> ▪ Climate Initiatives Public Outreach Program ▪ K-12 Schools Climate Change Workshop ▪ Public Meeting: GHG Reduction Target
Puget Sound Regional Council	Seattle Area	<ul style="list-style-type: none"> ▪ Climate Change Adaptation White Paper ▪ Climate Change Website ▪ Project-Level Transportation GHG Evaluation Protocol
Mobile Metropolitan Planning Organization	Mobile Area	<ul style="list-style-type: none"> ▪ MPO Climate Change Work Group
Capitol Region Council of Governments	Hartford, CT Area	<ul style="list-style-type: none"> ▪ Municipal Summit on Climate Change
Mid-America Regional Council	Bi-state Kansas City Region	<ul style="list-style-type: none"> ▪ Climate Change Courses ▪ New Climate Change & Energy Use Policy Goal – Interactive Webpage for Public Rating
North Jersey Transportation Planning Authority	Northern New Jersey Region	<ul style="list-style-type: none"> ▪ Climate Change Working Group ▪ Climate Change Roundtable

2. State Departments of Transportation Efforts

California Department of Transportation

The Climate Action Program

The Climate Action Program at Caltrans is an interdisciplinary effort intended to promote, facilitate, and coordinate implementation of climate change strategies and related activities within the Department and with partner agencies, including the California Environmental Protection Agency, the California Air Resources Board, and the California Energy Commission. The Climate Action Program serves as a resource for technical assistance, training, information exchange, and partnership-building opportunities.

■ Internal Statewide Teleconferences

Caltrans is providing a series of statewide teleconferences for its 12 District offices to educate staff about climate change and how it is relevant to the work conducted by Caltrans staff. The teleconferences began in April 2009 and are conducted monthly. The goals of the meetings include improving communication between various Caltrans Headquarters (HQ) Divisions and District staff regarding climate change activities. The teleconferences are lead by the HQ Division of Transportation Planning.

The teleconference topics are selected by Caltrans HQ staff and cover climate change subjects that are relevant to Caltrans staff statewide. Prior teleconference topics have included climate change adaptation and mitigation; the development of Caltrans' climate change workplan; pavement technologies to reduce GHG emissions; and updates on climate change legislation within the State and at the Federal level. To date, teleconferences have been well-attended by representatives in Districts throughout the state.

■ Internal Listserv Dedicated to Climate Change Materials and Updates

Caltrans has established an internal statewide email list that includes operations and management staff that are directly responsible for promoting climate change activities within the agency. Caltrans uses this distribution list to keep staff up-to-date on key climate change issues. Types of information distributed through this email listserv include climate change research and updates distributed by the American Association of State Highway and Transportation Officials and the U.S. DOT. The listserv has proved to be an effective method for distributing information across headquarters and the agency district offices.

For More Information

- ◆ <http://www.dot.ca.gov/climateaction.html>
- ◆ Garth Hopkins
Division of Transportation Planning
garth.hopkins@dot.ca.gov
(916) 654-8175

Iowa Department of Transportation

Transportation and Climate Change Presentation

At the 2008 Midwest Transportation Planning Conference, Nancy Richardson, Iowa DOT Director, presented general facts about climate change impacts on the transportation sector. Transportation planning professionals from across the Midwest participated in the conference to examine transportation issues from a Midwest perspective. Other attendees included urban planners, civil engineers, and agency representatives from the Midwest and Washington, D.C.

For more information

- ◆ <http://www.iowadot.gov/2008transconf/speakers.html>

Kentucky Transportation Cabinet and FHWA Kentucky Division Office

2010 Kentucky Climate Change/Livability/Air Quality Conference

On April 13-14, 2010, a Climate Change/Livability/Air Quality conference was held in Florence, Kentucky. The conference was co-hosted by the Kentucky Transportation Cabinet (KTC), the Northern Kentucky Area Development District (RPO) and the Kentucky Division of the Federal Highway Administration.

This conference attracted over 80 participants from Kentucky, Ohio, Indiana and Tennessee. Representatives from federal, state, and local governments, as well as practitioners from private organizations, consultants, and several members of the public attended. Participants included:

Federal

- ◆ USDOT (FHWA-HQ, FHWA-TN, FHWA-KY, FHWA Resource Center)
- ◆ USEPA (USEPA-Office of Policy, Economics and Innovation and Region 4)

State

- ◆ Kentucky Energy and Environment Cabinet (Division for Air Quality)
- ◆ Kentucky Transportation Cabinet (Central Office Division of Planning, Central Office Division of Environmental Analysis, Highway Districts 5, 6, 7, & 9)

Local

- ◆ Area Development Districts (RPO)
- ◆ Lexington Fayette Urban County Government
- ◆ Local Transit Agency
- ◆ Louisville Metro Government
- ◆ Metropolitan Planning Organizations

Public

- ◆ Consultants
- ◆ Bluegrass Pride
- ◆ Home Builders Association of Northern Kentucky
- ◆ TEA Party

- ◆ Several interested retirees

The following State and local agencies collaborated on the event to make it a success:

- ◆ **State DOT Planning**—Provided welcome speaker and Master of Ceremonies, printed materials, provided vans for tours, made directional signs, sent out conference invitations to staff and MPOs distribution list.
- ◆ **State DOT Division of Environmental Analysis**—Distributed conference invitations to consultant lists.
- ◆ **State DOT Office of Local Programs**—Provided a “Safe Routes to School” booth.
- ◆ **State Air Agency**—Provided session speaker, set up booth, provided participants with cloth shopping bags and air gauges.
- ◆ **Local MPO**—Helped identify conference location; set up a booth that promoted bicycle and pedestrian activities.
- ◆ **KY-FHWA**—Provided welcome speaker, set up agenda (including speakers, booths, tours), provided hotel information, designed invitations, sent conference invitations to State for distribution, sent out conference invitation to regional AQ distribution list, put together participant handbook (included speaker bios, agenda, participant list, and presentations)..

For more information

- ◆ <http://www.kentuckycleanfuels.org/events/2010kyairqualityconf.pdf>
- ◆ Bernadette Dupont
U.S. Department of Transportation
Federal Highway Administration – Kentucky Division
(502) 223-6729
bernadette.dupont@dot.gov

New York State Department of Transportation

The Climate Change/Energy Efficiency (CC/EE) Initiative

The CC/EE initiative was launched by the New York State Department of Transportation (NYSDOT) in 2007 with a mission to help the agency and New York State's transportation sector reduce GHG emissions. This initiative includes collaborating with other agencies and departments, including the New York State Department of Environmental Conservation; New York State Energy Research and Development Authority; FHWA; MPOs; construction industry groups; and environmental organizations, among others.

NYSDOT has developed six Workgroups to help the CC/EE initiative meet its goals. Workgroup #5, in coordination with the CC/ EE Steering Committee, is charged with developing an internal and external outreach plan. Specific outreach efforts include the following:

- **“Cleaner than Before” IntraDOT Website**

The CC/EE IntraDOT webpage, launched in 2009, provides agency staff with easy access to educational and informative climate change and energy efficiency material. The “Cleaner than Before” tab offers tips for saving energy, news about upcoming events, and information about climate change and energy efficiency initiatives in the US and across New York.

■ **Climate Change Website for the Public**

In collaboration with the CC/EE Steering Committee, the Workgroup is helping to create a public NYSDOT.gov webpage to share the agency’s goals, performance measures, milestones and accomplishments of the CC/EE initiative. The Office of Communications developed the site and the Office of the Environment provided the content. The public site was launched on Earth Day 2010 and is available here at: <https://www.nysdot.gov/programs/climate-change>. The site includes a “Kids Only” tab providing educational materials about climate change and sustainability as well as a summary of NYSDOT’s current sustainable activities and achievements.

■ **Earth Day Fair Outreach**

The Workgroup also played a significant role in the planning and delivery of the Main Office’s Earth Day Fair. Several booths were available for NYSDOT staff to learn about the many ways that agency staff help reduce GHG emissions.

For More Information

- ◆ http://www.wtsinternational.org/uploadedFiles/Chapters_-_Community/CT_Valley/Document_Library/2009%20TMS%202b_Transportation%20and%20Climate%20Change_John%20Zamurs.pdf
- ◆ <https://www.nysdot.gov/programs/climate-change>
- ◆ Darrin Moret, Environmental Specialist 2, Climate Change & Energy Efficiency Initiative Coordinator
NYS Dept. of Transportation, Environmental Science Bureau
50 Wolf Road, Pod 41 Albany, NY 12232
(518) 485-5329
ClimateAndEnergy@dot.state.ny.us

Oregon Department of Transportation

ODOT Climate Change Technical Advisory Committee

The Technical Advisory Committee is a group of representatives from various departments within ODOT that respond to GHG emission-reduction interest from a variety of Commissions, ODOT staff groups, ODOT specialists, citizens, and public interest groups. Efforts include finalizing the existing “ODOT Efforts on Climate Change” document for executive staff; and a “Guidance for ODOT Project Leaders,” a document to aid ODOT project leaders on how projects should address climate change and how to respond to citizen inquiries.

For more information

- ◆ <http://www.oregon.gov/ODOT/SUS/docs/ClimateChangeRolesResponsibilities.pdf>

Efforts on Climate Change Factsheet

This factsheet, dated March 2008, lists the steps the agency must take in order to meet the greenhouse gas reduction goals established by the Governor.

For more information

- ◆ <http://www.oregon.gov/ODOT/SUS/docs/EffortsOnClimateChange2008.pdf>

Briefing Paper: ODOT's Efforts on Climate Change

This paper highlights current climate change efforts being led by the DOT and is intended for both internal parties (managers and staff groups) for different state agencies, as well as the public interested in what the DOT is doing to address climate change.

For more information

- ◆ <http://www.oregon.gov/ODOT/SUS/docs/BriefingPaperEffortsClimateChange.pdf>

3. Metropolitan Planning Organization Efforts

Delaware Valley Regional Planning Commission (Philadelphia Region)

Climate Change Initiatives

The Delaware Valley Regional Planning Commission (DVRPC) leads a Climate Change Initiatives program that supports and coordinates efforts in the region to reduce GHG emissions and to prepare for climate change. The program has four major tasks: conduct a regional GHG inventory and forecast; evaluate GHG reduction options and develop a regional Climate Change Action Plan through stakeholder engagement; integrate climate change and energy concerns throughout DVRPC activities; and, assist member governments with GHG emissions inventories and forecasts for their operations. The toolkit stems from this program and includes a Fleet Energy component to assist municipal managers in developing a comprehensive baseline and energy analysis for department fleets.

■ Energy and Greenhouse Gas Reduction Toolkit

DVRPC's Energy and Greenhouse Gas Reduction Toolkit, with expected release in late 2010, will provide step-by-step guidance for identifying, prioritizing and implementing cost-effective strategies to reduce energy demand and curb GHG emissions in municipal operations. The Toolkit will help municipal managers develop a baseline energy analysis to answer the question, "Where should I start?" A key element of this tool will support efforts to compare costs and benefits of specific strategies and programs for reducing GHG emissions from municipal fleets. The Toolkit will draw on analysis carried out by the City of Philadelphia in developing and implementing *Greenworks Philadelphia*, the City's sustainability framework, released in spring 2009. The fleet tool will be a flow-based Excel spreadsheet that includes guidance, calculators and links to external resources, and is structurally similar to EPA's Office Carbon Footprint Tool (<http://www.epa.gov/waste/partnerships/wastewise/carboncalc.htm>).

For more information

- ◆ www.dvrpc.org/EnergyClimate
- ◆ Rob Graff, Manager
Office of Energy and Climate Change Initiatives
Delaware Valley Regional Planning Commission
215-238-2826
rgraff@dvrpc.org

Metropolitan Transportation Commission (San Francisco Bay Area)

Transportation Climate Action Campaign

MTC's \$400 million campaign focuses on public outreach and education efforts geared towards reducing the Bay Area's carbon footprint, and laying the groundwork for future climate change initiatives. The campaign also supports a suite of action-oriented programs, including workshops geared toward youth and public educational meetings co-hosted with local agencies, as well as

supporting a region wide outreach and branding campaign aimed at reducing transportation-related greenhouse gas emissions.

Climate Initiatives Public Outreach Program

In late 2009, MTC programmed \$80 million over a three-year period to implement the Climate Initiatives Program. In partnership with the Bay Area Air Quality Management District, MTC is developing a region-wide campaign for the Climate Initiatives Public Outreach Program to reduce transportation-related GHG emissions through a public education and branding campaign that will educate and encourage the public to make transportation choices that reduce GHG emissions. Specific campaign efforts are scheduled to be defined in mid-2010.

For more information

- ◆ <http://www.mtc.ca.gov/planning/climate/>

■ K-12 Schools Climate Change Workshop

On May 29, 2009, participants in the Climate Change Workshop exchanged lessons learned on how best to “green” the Bay Area’s schools, share resources centered on climate change education, and reach out to teachers, students and their families. Goals of the workshop were to identify ways to help promote climate change programs in schools and how to overcome barriers to educational efforts geared toward reducing GHG emissions in grades K-12.

About two dozen organizations and schools participated in the workshop in Oakland, California which was hosted by the Joint Policy Committee (comprised of the Association of Bay Area Governments, Bay Area Air Quality Management District, Bay Conservation and Development Commission and MTC). Each organization shared information on how their program works, their funding sources, target audience, number of schools served, and upcoming plans to promote climate change education.

For more information

- ◆ http://www.mtc.ca.gov/planning/climate/k-12_workshop.htm

Public Meeting: Bay Area Greenhouse Gas Reduction Target

On March 10, 2010, MTC and the Association of Bay Area Governments co-hosted a two-hour public meeting together with the California Air Resources Board (CARB), the Bay Area Air Quality Management District and the San Francisco Bay Conservation and Development Commission. The meeting provided the community with an opportunity to learn about and comment on options for setting a "target" or goal for reducing GHG emissions from cars and light trucks for the San Francisco Bay Area.

To reduce GHGs, a major goal set by state legislation, regions will be given specific targets by CARB to meet for reducing vehicle-related emissions. Senate Bill 375, signed by Governor Schwarzenegger in 2008, requires that CARB set such a target by September 30, 2010. The meeting agenda included the following topics:

- ◆ Overview of SB 375 Requirements for Setting Greenhouse Gas Targets

- ◆ Making the Land Use/Transportation Connection
- ◆ The Bay Area's Experience Setting Greenhouse Gas Targets and Possible Approach

For more information

- ◆ <http://www.mtc.ca.gov/meetings/events/target.htm>

Puget Sound Regional Council (Seattle Area)

Climate Change Technical Working Group

The Puget Sound Regional Council (PSRC) created a Climate Change Technical Working Group (TWG) in 2007 to discuss the analysis and technical needs of both PSRC and the participating agencies. The working group stemmed from the Council's efforts to incorporate the issues of climate change into its planning and project development processes. A major objective of the working group is to ensure regional consistency for the technical work and analytic methodologies being used, as well as coordination and collaboration among the Council's agencies. Over time, the objective of the committee has expanded to further assist and advise PSRC in its climate change work, including the preparation of a **white paper on adaptation** to climate change for long-range transportation planning. PSRC's **climate change website** is in process of being developed and will be the venue that houses the products developed by the working group.

The agencies represented on the committee include the Council's air-quality consultation partners such as the Environmental Protection Agency, the State Department of Transportation, and the Puget Sound Clean Air Agency, as well as other jurisdictions in the region who have been actively working on climate change. Jurisdictions include King County and the City of Seattle, as well as Sound Transit, the Puget Sound Regional Transit Authority.

■ Project-Level Transportation GHG Evaluation Protocol

The first product developed by the working group was a "Project-Level Transportation Greenhouse Gas Evaluation Protocol." This tool aims to assist project sponsors in determining when and how to conduct GHG emissions analyses at the project level, in the current absence of federal legislation and guidance.

For more information

- ◆ <http://www.kingcounty.gov/exec/cleanvehiclesnow.aspx>
- ◆ Kelly McGourty, Principal Planner in the Transportation Planning Department
Puget Sound Regional Council
(206) 971-3601
KMcGourty@psrc.org

Mobile Metropolitan Planning Organization (Mobile Area)

■ MPO Climate Change Work Group

The Mobile MPO has established a Climate Change Work Group to work with FHWA on a project called “Impacts of Climate Change and Variability on Transportation Systems and Infrastructure: Gulf Coast Study, Phase 2,” which will run from approximately 2009 to 2012. This project is assessing the impact that climate change could have on critical transportation assets, and will determine how the MPO could begin addressing those impacts.

The Work Group is comprised of representatives from agencies overseeing various transportation modes, local environmental groups, and related stakeholders. The multidisciplinary group will provide vital input to the FHWA project, but will themselves also be educated on the study’s findings related to likely climate change effects on Mobile; the impacts that those effects could have on local transportation; and how transportation decision makers can start weighing adaptation options. Research will assist in identifying critical transportation assets as well as the impacts that climate change could have on those assets. The Work Group is serving an important role in “ground-truthing” the project to make sure that the findings are specific to the Mobile area. The Work Group will also help ensure that the risk assessment and risk management tools developed under this project meet the needs of local transportation decision makers. The local participation of the Work Group will help ensure that the research approach and tools are replicable to other MPOs.

For more information

- ◆ http://www.mobilempo.org/Climate_Change_Study/Climate_Change_Study.htm

Capitol Region Council of Governments (Hartford, CT Area)

Sustainable Capitol Region Initiative

The Capitol Region’s Council of Governments (CRCOG) Sustainable Capitol Region initiative seeks to tie together work that is already being done within the CRCOG Community Development, Transportation and Public Safety and Homeland Security Departments toward creating more sustainable communities. The aim is to position the agency to take advantage of new federal programs, now under development, that would support sustainable community development and preservation activities, and climate change goals. Under this initiative, panels and conferences are given by the MPO for practitioners and the public which focus on the topic of sustainability, including climate change issues.

■ Municipal Summit on Climate Change

This summit took place on March 13, 2010 in New Haven, CT. The conference was organized by the Commissioner of Connecticut’s Department of Environmental Studies. Those in attendance included chief elected local officials, other municipal employees and members of local sustainability and clean energy task forces. A series of workshops were provided on a variety of topics such as financing energy efficiency improvements; greener schools; and, reducing transportation emissions.

Regional planners from the CRCOG participated in the panel discussion, **Regional Planning in an Era of Climate Change**, which highlighted the MPO's current process of promoting sustainable communities. Regional planners discussed their efforts and their visions for the future. Panelists outlined new federal partnerships and opportunities supporting sustainable communities, showcased new efforts at the regional level toward reaching climate change goals, highlighted the products of regional partnerships toward promoting sustainability and provided a glimpse of what a comprehensive approach to sustainable development could look like on the ground in Connecticut's municipalities. For more summit details and information on climate change efforts in Connecticut, visit www.ctclimatechange.com

For more information

- ◆ Mary Ellen Kowalewski
mkowalewski@crcog.org
522-2217 ext. 222

Mid-America Regional Council (Bi-state Kansas City Region)

■ Academy for Sustainable Communities – Climate Change Courses

The Academy for Sustainable Communities is a training program offered by the Mid-America Regional Council (MARC) that offers educational outreach programs (seminars, workshops, roundtable discussions, and speakers) to show how the Kansas City region can serve as a model of sustainability. Each program includes a strong educational component based on the concepts of smart growth and sustainability, with messages directed at a variety of groups and audiences, including local government and area communities. Interested agencies and citizens are invited to participate in MARC's climate change programs.

For more information

- ◆ <http://www.marc.org/Sustain/about.asp>
- ◆ Georgia Nesselrode, Government Training Institute
gnessel@marc.org

■ Climate Change & Energy Use Policy Goal – Interactive Webpage for Public Rating

In order to encourage broad input from the community about the draft Transportation Outlook 2040 long-range plan, this webpage highlights the draft plan's new Climate Change & Energy Use goal and allows the public to rate the policy goal with a "thumbs-up" or "thumbs-down." There is also a comments sidebar where users can post comments regarding the Climate Change and Energy Use issue. The goal includes climate change strategies and challenges as outlined in the long-range plan. The objective of the policy is to decrease the use of fossil fuels through reduced travel demand, technology advancements, and a transition to renewable energy. MARC will use the policy goals to help select which transportation projects should be funded in the future.

For more information

- ◆ http://www.marc.org/2040/Plan/Policy_Goals/climateandenergy.aspx

North Jersey Transportation Planning Authority (Northern New Jersey Region)

■ Climate Change Working Group

This forum for concerned stakeholders allows participants to identify, support, and coordinate efforts in North Jersey to reduce greenhouse gas emissions and prepare the transportation system for climate change impacts on the environment. Participants share ideas, collaborate, and provide input to the transportation planning process. The Working Group's meetings are posted on a calendar on the Working Group's webpage.

For more information

- ◆ <http://www.njtpa.org/Plan/Element/Climate/default.aspx>

■ Climate Change Roundtable

Sponsored by the NJTPA, the event held on November 17, 2008 featured speakers from the federal government, transportation agencies, the tri-state area MPOs, universities, and non-profit advocacy groups to discuss how to 1) adapt infrastructure to deal with climate change impacts and 2) how to develop transportation policies to reduce or mitigate greenhouse gas emissions. A presentation was given, including a discussion of the elements of the Plan 2035, the NJTPA's long range plan, and then had a chance to ask questions of the panel of experts.

For more information

- ◆ <http://www.njtpa.org/Pub/Newsletter/Dec2008Communique.aspx#Section2>