**Center for
Clean Air Policy**
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CCAP Travel Data and Modeling Recommendations
to Support Climate Policy and Performance-Based Transportation Policy

Informed by stakeholder discussions in the
CCAP VMT & Climate Policy Dialogue

In an era of shrinking budgets and transportation systems falling short of meeting community needs, there is a growing call for a performance-based approach to transportation policy. The new emphasis on addressing climate change and reducing petroleum dependence reinforces this point. However, current data, models and planning capacity are not up to the task.

Accurate, timely and geographically-specific travel data and planning capacity are critically needed to effectively plan, manage and evaluate transportation system performance across a range of issues including economic efficiency, metropolitan accessibility, greenhouse gas (GHG) emissions, safety and system preservation. Transportation researchers and policy analysts have identified deficiencies in the quality, resolution and timeliness of travel data. State and local governments recognize the need, but are concerned about their ability to pay for travel data improvements. Key travel data collection efforts have been defunded or terminated in recent years.

That is why members of the Center for Clean Air Policy's VMT & Climate Policy Dialogue,[1] a diverse group of governments, advocacy groups and industry, have identified improvements in travel data as a high priority to support policy design, implementation and evaluation. The group discussed at length options for improving travel data to support climate policy and a performance-based approach to transportation policy. The recommendations below reflect the group's general consensus of policies that, if followed, would be of great value to climate and transportation policy design, implementation and evaluation.[2]

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[1] CCAP has convened a unique dialogue of top thinkers and decision makers with expertise in transportation policy, climate policy, smart growth planning and air quality regulation to explore, debate and develop effective and tenable policy packages for reducing GHG emissions associated with travel demand or vehicle miles traveled (VMT) in upcoming climate and transportation legislation. CCAP is carrying out the VMT and Climate Policy Dialogue using its well-tested approach of bringing diverse interests together to share lessons learned, consider diverse view points and develop a common understanding of potential policy options. The premise of the dialogue is that slowing VMT growth and increasing system efficiency are needed to complement vehicle efficiency improvements mandated in the 2007 Energy Bill, a potential CO_2 cap on petroleum refiners and any low carbon fuels standard in meeting long-term climate protection goals.

[2] CCAP is preparing a supplemental memo listing some specific recommendations to make the overarching recommendations more actionable (e.g., re-establish VIUS survey).

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FINAL: January 30, 2009

General Observations

1. High quality data are essential for performance-based transportation policy with implications across a broad range of national priorities including climate change, system efficiency, metropolitan accessibility, economic development, safety, system preservation and petroleum use.

2. Developing, implementing and evaluating GHG reduction policies will require improved travel data and modeling capacity.

3. The required precision, resolution and quality of data and modeling will vary by application (planning, policy evaluation, financing, regulation).

Key Recommendations for Improving Travel Data and Modeling

1. **Substantially Increase Funding for Travel Data Improvement:**

   a. Travel, fuel use and land use data collection and improvement

   b. Research and analysis

   c. Travel modeling improvements

   d. Fuel economy measurement

   e. Cross-agency coordination at the federal, state, MPO and local levels

2. **Improve Quality and Utility of Travel Data**

   a. Conduct a study and develop recommendations on the highest priority data and modeling improvements with recommendations for, and participation from, federal, state, MPO and local governments, as well as experts from the private sector, academia and NGOs.

      i. Assess the costs and benefits of collecting and integrating travel and fuel use data from multiple sources to fill holes, corroborate data and assess interactions among policy variables.

      ii. Assess the appropriate level and rigor of data for different uses and users.

   b. Assess the costs and benefits for states to process, collect and analyze odometer data to track local travel behavior and determine land use influence on travel to aid policy evaluation and improve predictive capabilities of travel models.

   c. Enhance collection and analysis of freight data

3. **Enhance Travel and Emissions Modeling Capacity**

   a. Improve travel and emission modeling capability to address GHG concerns: CO_2 vs. speed and traffic flow, induced demand, land use, geographic and temporal resolution, transit, non-motorized travel, freight, fuel price sensitivity, and macro system efficiency. This will require improved travel data.

   b. Provide resources to help states, MPOs and local governments to enhance modeling capacity and shift towards advanced travel models while maintaining and improving current models.

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4. **Improve Accuracy and Reliability of Fuel Economy Measurements**
   Provide resources to expand testing of real-world vehicle fuel economy, continue to develop better driving cycle tests, and conduct research to develop better ways to predict the fuel economy any individual will get.

5. **Coordinate and Collaborate Across Government Agencies and Levels of Government** to support data corroboration, quality assurance, policy design and evaluation.

   a. Share, compare, and integrate complementary data sets (travel, fuel sales, fuel economy, GHGs, demographics, land use) and establish procedures for data corroboration.

   b. Analyze data and conduct research to understand relationships among policy variables and inform policy design.

   c. Provide guidance, technical support, tools and information on: data collection, data integration, model improvement, planning, scenario analyses, best practices, policy design, implementation and evaluation.

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Representatives from the following organizations participated in the VMT & Climate Policy Dialogue Meetings:

AASHTO
ACEEE
APTA
Arlington County, VA
AMPO
Bay Area Rapid Transit
BBG Group
Bi-Partisan Policy Institute/NTPP
BP
Brookings Institution
California Air Resources Board
Clean Air Task Force
East-West Gateway COG
Entergy
Environmental Defense Fund
Exxon Mobil
Federal Highway Administration
Ford Motor Company
American Honda Motor Company
Kansas DOT
Maryland DOT
Metropolitan Transportation Commission

National Governors Association
New York City DOT
New York State Department of Environmental
   Conservation
North Carolina Division of Air Quality
North Central Texas Council of Governments
NRDC
Pennsylvania DOT
Rails to Trails
Sacramento Air Quality Management District
Sacramento Area Council of Governments
Serafix
Smart Growth America
STPP
Transportation for America
UC Berkeley
US EPA
Utah DOT
Van Ness Feldman
Veolia Transportation North America
Virginia DOT
WRI

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About the Center for Clean Air Policy
Since 1985, CCAP has been a recognized world leader in climate and air quality policy and is the only independent, nonprofit think-tank working exclusively on those issues at the local, national and international levels. Headquartered in Washington, D.C., CCAP helps policymakers around the world to develop, promote and implement innovative, market-based solutions to major climate, air quality and energy problems that balance both environmental and economic interests.
For more information about CCAP, please visit www.ccap.org.

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