

# Communicating Transportation, Energy, and Climate Change Concepts to the Public

## *TRB Contest Identifies Exemplary Efforts*

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The contest-winning entry, Transportation-Town.com, features an interactive game that facilitates collaborative development of a vision for transportation, land use, and growth in Whatcom County, Washington.

Transportation professionals often find that communicating critical transportation concepts to a nontechnical audience is a challenge. Some have assembled tools, graphics, or the right words to convey their message, but opinion research indicates that transportation professionals face a largely uninformed public.

Communicating and building relationships with the people who rely on a variety of transportation modes to live, work, and play is a relatively new task. The Roman builders of the famous roads and aqueducts may not have spent a lot of time communicating with senators, nobility, or common citizens to determine a project's need, location, or design. When the Wright brothers took their first flight, the concepts of a Part 150 noise study or of airspace minimums did not yet exist.

Today, expectations are different. The transportation system is a complex network of roads, bridges, railroads, airports, services, ports, and more, affecting everything from the economy to the environment.

Federal transportation law and regulations require state departments of transportation (DOTs), metropolitan planning organizations, and transit agencies to consult with and involve a variety of

stakeholders in decision making. Federal decision making about transportation is littered with laws and regulations that affect technical decisions about the delivery of transportation improvements and services. Successfully engaging stakeholders requires the effective communication of a myriad of issues and relationships throughout the entire decision-making process—from the initiation of a long-range system plan to project construction to system operations and maintenance.

Not only have the rules become more complex, but the public's levels of education, sophistication, and engagement with the world have increased. The public expects the effective communication of the concepts, principles, and purposes of transportation—communication is critical for the community's understanding and acceptance of transportation decisions.

### Seeking Successful Methods

In 2007, the Planning and Environment Group of the Transportation Research Board (TRB) launched a competition to stimulate fresh and creative methods of communicating technical transportation issues and concepts to John and Jane Q. Public and to share the methods that have proved successful. The target audiences for the communications range from elementary school children to adults living in retirement communities, as well as elected officials, business owners, and commuters. To ensure that entries meet the ambitious objective of communicating with all possible audiences, the competition judges are drawn from a range of professional backgrounds, including school teachers, journalists, administrative assistants, and transportation professionals.

The contest has proved a great success. More than 70 entries were submitted to TRB in a range of communication media. TRB Executive Director Robert E. Skinner, Jr., presented awards to 11 entries in a special poster session at the 2008 TRB Annual Meeting in Washington, D.C. With the overwhelming response from contest participants and the interest





Melissa Miller, Whatcom Council of Governments, Bellingham, Washington, with the poster display of TransportationTown.com, which included a computer demonstration.

shown by attendees, TRB has made the contest an annual event, addressing a different transportation issue or theme each year to provide variety for the contest and to appeal to different groups within the transportation industry.

This past year's competition focused on energy and climate change in transportation, the spotlight themes of the TRB 2009 Annual Meeting. The selection of a hot topic within the transportation industry yielded a small, but focused, set of entries, ranging from a book to multimedia presentations and interactive online games.

The quality of the entries demonstrates the talent within the industry for communicating complex technical concepts to the layperson. The entries epitomized the goal of communicating complex information in an uncomplicated manner. TRB designated one winner and four finalists.

## Contest Winner

**TransportationTown.com: A Regional Transportation Website**, the winning entry, aims to engage and educate visitors about transportation in Whatcom County, Washington. The site targets citizens seeking information about various modes of transportation, with links provided for each mode. The home page presents regionally relevant information about land use, transportation, and multimodal planning.

An interactive game invites visitors to build a city by placing icons on a map. Within a set amount of time—representing 1 year—players make decisions about relationships between land use and transportation; the results are then displayed. The game visually demonstrates how the player's decisions affect air quality, mobility, and city appeal; the relative values of investment in transportation modes also are shown.

The goal of the game is to build a prosperous city through land use and transportation decisions that keep mobility high, pollution low, and the citizens happy. Dials track pollution, mobility, and the hap-

piness of the citizens and allow players to monitor their progress and see the effects of their decisions. The entry was developed by the Whatcom County Community Advisory Group, represented at the Annual Meeting poster session by Melissa Miller, Whatcom Council of Governments, Bellingham, Washington. The website is located at [www.transportationtown.com](http://www.transportationtown.com).

## Finalists

### ***Transport Revolutions: Moving People and Freight Without Oil***

*Transport Revolutions: Moving People and Freight Without Oil*, a 2008 book by Richard Gilbert and Anthony Perl, traces out several revolutions—defined as major changes in how people and freight move—in the coming decades in transportation. These changes will be the result of declines in world oil production and rises in the prices of oil products.

The authors, who are with the Urban Studies Program at Simon Fraser University, Vancouver, British Columbia, Canada, examine past revolutions and describe transportation and its impacts today. They note that the United States and China can accommodate oil depletion without reducing mobility. For example, by 2025 electric traction of various kinds could propel more than 30 percent of surface transportation in the United States. The book also describes the coming revolutions in aviation and marine transportation.

### ***Drive Smarter Challenge***

The Drive Smarter Challenge, an interactive website of the Alliance to Save Energy, Washington, D.C., served as a call to action as part of a multimedia campaign to promote fuel efficiency. The website, assembled by Ronnie Kweller and Rozanne Weissman at [www.drivesmarterchallenge.org](http://www.drivesmarterchallenge.org), shows how human actions have a ripple effect on fuel consumption and emissions.

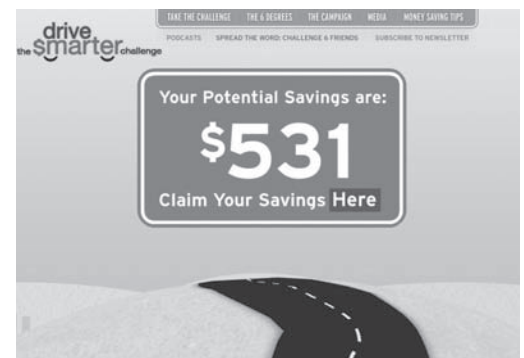
Drivers can find out immediately how much money they can save—often hundreds of dollars—through six driving and maintenance actions on their own vehicles, by specific make, model, and year. Drivers then can decide whether to take the challenge and commit to any one of six actions, and they can challenge others to make the commitment as well.

Individual savings—dollars, gallons, and carbon dioxide emissions—are added to the running total, recorded on



Cover of the paperback edition; the book explores the worldwide transition from oil-based fuels.

The Drive Smarter Challenge website allows participants to enter information about their car make, model, and year, obtain an annual savings total by applying six maintenance actions, and receive energy-saving tips on driving and automobile maintenance.



the home page, of all who have taken the challenge. The website also offers money-saving gas tips in English and Spanish, related resources, and myth busters—objective information that contradicts popular misconceptions.

**Your Community—  
Smart Growth Versus Suburban Sprawl**

New Jersey DOT and Parsons Brinckerhoff developed the interactive CD-ROM demonstration, Your Community—Smart Growth Versus Suburban Sprawl, to support the agency’s educational efforts to integrate transportation and land use. Part of New Jersey DOT’s Long-Range Plan 2030 outreach program, the demonstration consists of a series of trips through two hypothetical communities. One community reflects smart growth approaches, with integrated land use and a multimodal transportation system; the other reflects suburban sprawl, with isolated land uses that require travel by private automobile.

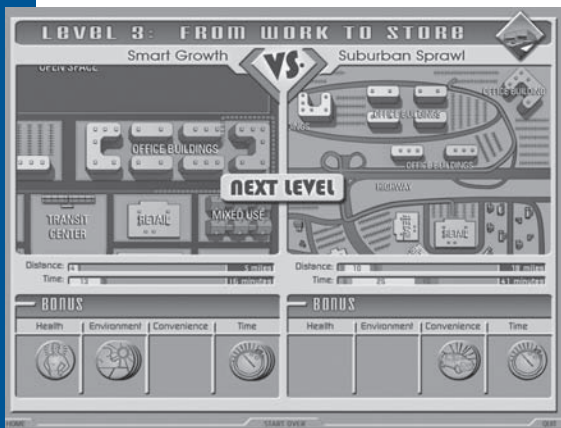
Trips to school, work, and other destinations are shown graphically, with a summary of miles traveled by automobile, transit, or walking, plus a comparison of time spent for each commute. Points are awarded for efficiency and qualitative health and environmental benefits. The interactive program demonstrates the potential environmental, health, convenience, and time advantages of smart growth, educating people to make choices that reduce their carbon footprint.

The project team included James B. Lewis and Danielle Graves, New Jersey DOT; Jerome Lutin, formerly of New Jersey Transit; and Pamela M. Lebeau and Marc Steuben, Parsons Brinckerhoff.

**BWC and Climate Change:  
Making the Connection**

The Best Workplaces for Commuters (BWC) designation is the national emblem representing outstanding commuter benefits. Millions of commuters who work at BWC-designated worksites leave their cars at home, easing congestion and air pollution and reducing greenhouse gas (GHG) emissions.

The interactive program, BWC and Climate Change: Making the Connection, assembled by Ian Todreas of ERG, Boston, Massachusetts, aims to help employers make and broadcast the connection between transportation demand management



A screen from the CD-ROM developed by New Jersey DOT and Parsons Brinckerhoff depicts options and outcomes for work-to-store travel under smart growth and sprawl; the demonstration illustrates the complex relationships between land use and transportation.



The Best Workplaces for Commuters (BWC) campaign shows employers how commuter benefits can play a significant role in mitigating some of the causes of climate change. Ian Todreas, ERG, Boston, Massachusetts, provided a review of the BWC website and its features at the TRB 2009 Annual Meeting.

(TDM) and climate change. Users leverage new opportunities to position BWC—and more generally, commuter benefits—as a near-term, cost-effective solution to climate change.

The website features national and state-specific information about climate change; state-specific information on climate and TDM policies, players, and funding sources; local, state, regional, and national climate and transportation organizations; and funding sources that might be available to support TDM as a climate change solution. The website contains messages and talking points on how to promote local and regional BWC programs as a climate-friendly TDM solutions and how the climate benefits of BWC compare with those from other transportation strategies. The website also has links to tools to measure the impact of climate change strategies.

**What’s on Tap for 2010**

The contest to be featured at the TRB 89th Annual Meeting, January 10–14, 2010, focuses on communicating about issues related to providing and operating public transportation. The purpose is to tackle the challenges of communicating the role of transit in the larger transportation system, as well as unique technical issues such as transit operations and maintenance, costs and financing, and transit project delivery, including the Federal Transit Administration’s complex New Starts process. The entries should help agencies remove the mystery from public transit for everyone from elected officials to the traveling public.