Transportation Enhancements
2010 Professional Seminar
Chattanooga, TN

Proceedings

Seminar Theme: “Develop - Invest - Yield”
About the National Transportation Enhancements Clearinghouse

Founded in 1998, NTEC provides transparency to a complex program, promotes best practices, and provides citizens and policy-makers with sound, nonpartisan information for decision-making and evaluation. NTEC is funded through a cooperative agreement between the Rails-to-Trails Conservancy and the Federal Highway Administration through the Office of Planning, Environment, and Realty’s Surface Transportation Environment and Planning Cooperative Research Program (STEP).
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## 2010 Transportation Enhancements Professional Seminar

**Development – Investment – Yield • Chattanooga, TN**

### FINAL AGENDA

#### Thursday, September 16

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>8:00 am – 9:00 am</td>
<td>Registration and buffet breakfast&lt;br&gt;Welcome Session</td>
<td>The Chattanoogan</td>
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<tr>
<td>9:00 am – 11:30 am</td>
<td>Chattanooga Waterfront Site Visit</td>
<td>Guided Tour</td>
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<td>11:30 am – 12:00 pm</td>
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<td>12:00 pm – 1:00 pm</td>
<td>Lunch</td>
<td>Niko's Southside Grill</td>
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<td>1:00 pm – 2:00 pm</td>
<td>Plenary Presentation&lt;br&gt;<strong>ARRA by the Numbers: From Policy to Reality</strong>&lt;br&gt;Randy Lane (Ohio DOT)</td>
<td>Convention Center&lt;br&gt;Ballroom E</td>
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<td>2:00 pm – 3:00 pm</td>
<td>Keynote Presentation&lt;br&gt;<strong>Moving TE from Politics to Performance</strong>&lt;br&gt;Susan Binder (Cambridge Systematics)</td>
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<td>3:00 pm – 3:15 pm</td>
<td>Break</td>
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<td>3:15 pm – 4:30 pm</td>
<td>Workshop:&lt;br&gt;<strong>Performance Measures and TE</strong>&lt;br&gt;Susan Binder (Cambridge Systematics)</td>
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<td>4:30 pm – 5:00 pm</td>
<td><strong>FHWA Q&amp;A Session</strong> – Christopher Douwes (FHWA)&lt;br&gt;<strong>Guiding Principles, Eligibility Q&amp;A, Open Discussion</strong></td>
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<td>5:00 pm – 7:00 pm</td>
<td>Reception &amp; New Project Showcase Table</td>
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* Dinner is on your own - you'll find a list of restaurants in your packet.

#### Friday, September 17

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<tr>
<td>8:00 am – 9:15 am</td>
<td>Seated Breakfast&lt;br&gt;Joint Meeting with Bicycle &amp; Pedestrian Coordinators&lt;br&gt;<strong>Federal Transportation Reauthorization Update</strong>&lt;br&gt;Marianne Fowler (RTC) and Kevin Mills (RTC)</td>
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<td>9:30 am – 10:45 am</td>
<td><strong>Breakout A (Choose One)</strong>&lt;br&gt;<strong>The ABC's of Economic Impact Assessment for TE</strong>&lt;br&gt;Todd Litman (Victoria Transport Policy Institute)&lt;br&gt;<strong>What's New in Category 2</strong>&lt;br&gt;David Levinger (NTEC)&lt;br&gt;Wendy Allsen (California Walks)</td>
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<td>10:45 am – 12:00 pm</td>
<td><strong>FHWA Q&amp;A – Christopher Douwes</strong>&lt;br&gt;<strong>Guiding Principles, Eligibility Q&amp;A, Open Discussion</strong></td>
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<td>Lunch</td>
<td>Table 2 Restaurant</td>
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<td>1:00 pm – 2:15 pm</td>
<td><strong>Breakout B (Choose One)</strong>&lt;br&gt;<strong>Big Money, Bad Projects?</strong>&lt;br&gt;Communicating the Role of TE in the Highway Program&lt;br&gt;Todd Hadden Loh (NTEC)&lt;br&gt;<strong>The ABC's of Economic Impact Assessment for TE</strong>&lt;br&gt;Todd Litman (Victoria Transport Policy Institute)</td>
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<tr>
<td>2:15 pm – 3:00 pm</td>
<td>Closing Reception</td>
<td>Chattanooga Moon Pie&lt;br&gt;General Store</td>
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2010 PROFESSIONAL SEMINAR OVERVIEW

Transportation Enhancement (TE) Activities are projects that expand travel choices and enhance the transportation experience for diverse users. Eligible activities were defined in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA), expanded upon with the Transportation Equity Act for the 21st Century of 1998 (TEA-21), and continued with the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users of 2005 (SAFETEA-LU). These Acts amended Title 23, United States Code (23 U.S.C.), the section of Federal law that codifies Federal highway legislation. Through these Acts, the Congress set aside a minimum of 10 percent of funds from the Surface Transportation Program category of Federal-aid highway program funds for TE activities. These projects include building bicycle and pedestrian facilities, scenic and historic highway programs, landscaping and scenic beautification, preserving historic transportation infrastructure, and mitigation of negative environmental impacts of highways. Congress intended the TE program to encourage partnerships between local and State officials and public interest groups in the development and implementation of TE-funded projects.

The diversity in the types of eligible TE projects and flexibility in program administration has generated a need for State TE managers to receive regular workforce development training from Federal Highway Administration (FHWA) staff. To facilitate this exchange, the National Transportation Enhancements Clearinghouse (NTEC) organizes two-day seminars for State TE managers, FHWA division staff, and FHWA headquarters staff. Seminar participants have the opportunity to voice problems and successes with the implementation of the TE program; ask questions of FHWA headquarters staff; and identify the areas where more guidance is needed.

The 2010 seminar was held in Chattanooga, TN on September 16-17, 2010. Thirty-seven people attended the seminar: 22 from State Departments of Transportation (DOTs), 9 from FHWA Division Offices, 2 from FHWA headquarters, 2 from the National Transportation Enhancements Clearinghouse (NTEC)/Rails-to-Trails Conservancy (RTC); and 2 from other organizations. The seminar focused on the TE program’s unique role in implementing the new livability agenda, and how to quantify and communicate that role.

The two-day seminar consisted of several large group presentations and interactive sessions, and three smaller breakouts. The seminar kickoff was a site visit to several components of Chattanooga’s 21st Century Waterfront master plan that were implemented using TE funds, including the Tennessee Riverpark, Ross’s Landing, and the Walnut Street Bridge. The mobile workshop was led by Jim Bowen, the founding director of the RiverCity Company (downtown Chattanooga’s nonprofit economic development company). Following the site visit, the afternoon was devoted to presentations from Randy Lane (Ohio DOT) and Tracy Hadden Loh (NTEC) on implementation of the American Recovery and Reinvestment Act, and from Susan Binder (Cambridge Systematics) on performance measures. Day 2 began with a joint session with the State Bicycle and Pedestrian Coordinators on the topic of reauthorization, with remarks by Kevin Mills and Marianne Fowler of the Rails-to-Trails Conservancy. The morning also included an hour-long open question-and-answer session with Christopher Douwes of the Federal Highway Administration. The bulk of the day was devoted to two breakout sessions, with the following topic choices: implementation of bicycle and pedestrian safety and education programs, introduction to economic impact assessment, and communicating the role of TE in the highway program.
INTRODUCTION

The 2010 Transportation Enhancements (TE) Professional Seminar was planned and organized by the National Transportation Enhancements Clearinghouse (NTEC), an information service operated by the Rails-to-Trails Conservancy (RTC), under a cooperative agreement with the Federal Highway Administration (FHWA), with funding provided in part through the Office of Planning, Environment, and Realty’s Surface Transportation Environment and Planning Cooperative Research Program (STEP).

When the TE program was created in 1991, it required State Departments of Transportation (DOTs) to adapt to a new role and new types of transportation projects. The FHWA, along with RTC and other partners, recognized that State staff needed adequate workforce development training and support to take on the challenges of the TE program, and organized the first National Transportation Enhancements Workshop in 1994. The approximately biannual TE training seminar provided an opportunity for TE professionals to share their knowledge and experience and to receive direction from FHWA headquarters. The seminar has contributed to major improvements in the implementation of the TE program. Since 2009, the seminar has become an annual event.

The seminar was held in conjunction with the National Center for Bicycling and Walking’s annual ProWalk/ProBike conference. Co-locating with this meeting produced multiple synergies for the TE Seminar, including shared meeting space, a joint session with the State Bicycle and Pedestrian Coordinators, and the opportunity for attendees to participate in both meetings. Forty people attended the seminar: 22 from State Departments of Transportation (DOTs), 9 from FHWA Division Offices, 2 from FHWA headquarters, 5 from the National Transportation Enhancements Clearinghouse (NTEC)/Rails-to-Trails Conservancy (RTC); and 2 from other organizations.

Previous Transportation Enhancement Professional Conferences and Seminars:

- August 13-14, 2009, Washington, DC
- August 7-8, 2007, Portland, OR
- July 26-27, 2005, Minneapolis, MN
- June 25-26, 2003, Providence, RI
- September 25-26, 2001, St Louis, MO
- June 22-23, 1999, Pittsburgh, PA
- June 9-11, 1996, Washington, DC
- June 1994, Arlington, VA
NTEC SEMINAR - DAY 1

NTEC Welcome
Tracy Hadden Loh, National Transportation Enhancements Clearinghouse
Dr. David Levinger, Director, National Transportation Enhancements Clearinghouse

Tracy Hadden Loh

Dr. David Levinger (right, pictured with Noel Mehlo) is Rails-to-Trails Conservancy’s (RTC) new Director of Research, and thus replaces Dr. Thomas Gotschi as NTEC’s Director as well. He comes to RTC from Washington State, where was active as an advocate and consultant for multimodal, pedestrian-friendly transportation planning. In addition to serving on the state DOT’s Transportation Enhancements Advisory Committee, Dr. Levinger was an affiliate associate professor in Urban Design and Planning at the University of Washington, founder of Mobility Education Foundation, a researcher and consultant, and the president and executive director of Feet First. He has also served on the board of America Walks, and is currently a member of the Pedestrians Transportation Research Board committee and the Transportation Safety Planning working group. He holds a Ph.D. in science and technology studies from Rensselaer Polytechnic Institute and a B.A. in mechanical engineering from the University of Massachusetts at Amherst. To round out his truly multimodal career experience, Dr. Levinger is a licensed professional engineer who began his career at Boeing conducting flight tests of automatic flight systems, and while writing his doctoral dissertation he drove a bus part-time for the King County, WA transit system.

David Levinger

Transportation Enhancements is a truly special program. In many ways, NTEC has been on the leading edge, anticipating and embodying the now broadly espoused values of livability and open government. These days, US DOT Secretary Ray LaHood regularly speaks about the importance of Livability and Sustainable Communities, which were more at the margins when TE was established in 1991.

The professionals responsible for implementing the TE program--both within State DOTs and at the FHWA--are also a special group of people. Rather than having a focus on transportation infrastructure, or even the operation of a part of the system, your jobs provide you with a privileged view of our transportation system from the outside-in. That means that each of you has been forced to develop a more sophisticated understanding of how our transportation systems fit into the communities that they are surrounded by. There is no one else in your agencies who can boast as diverse a portfolio as you. Nor is it likely that they work with as many passionate people as your project sponsors and champions are likely to be.

To do the work of making TE programs successful is a challenge, because you must juggle the complex requirements of many projects--and because these projects are sometimes not the highest priorities or largest dollar projects within transportation agencies. It is precisely this nature of work that makes the TE Professional Seminar a unique opportunity to learn from and get to know more about each of you.

The TE Professional Seminar this year is chock full of content intended to help with those challenges. It also has intentionally-crafted time and space for you all to get to learn from each other and exchange your stories. It is an honor to be here among you and again, welcome to the 2010 Seminar.
21st Century Waterfront Site Visit
Jim Bowen, CARTA Special Projects Director

The site visit to Chattanooga’s 21st Century Waterfront was led by Jim Bowen, the founding executive director of the RiverCity Company. The 21st Century Waterfront is a master plan for downtown Chattanooga’s Tennessee River waterfront that was developed under the leadership of then-Mayor Bob Corker starting in 2002. The master plan development process included extensive public participation in envisioning ideas for reconnecting the city to the river. Implementing the resulting comprehensive plan has taken the remainder of the decade, drawing on funds from a new hospitality tax, millions in private sector contributions, and diverse public sector sources including Transportation Enhancement funds. Excerpts from the city’s first application to the Tennessee Department of Transportation for TE funds are included in this proceedings in Appendix A.

The 21st Century Waterfront includes the world famous Tennessee River Aquarium and the Hunter Art Museum. However, the centerpiece of the plan from a Transportation Enhancements perspective is the Tennessee Riverpark Trail, which when complete will provide 21 miles of pedestrian and bicycle access to the riverfront. The city also obtained TE funds to improve pedestrian connections between the rest of downtown and the 21st Century Waterfront, including the Walnut Street Pedestrian Bridge. The before and after pictures on the pages below show the impact not only of the new aquarium development, but of the surrounding pedestrian connections and amenities, including Ross’s Landing.
PLENARY PRESENTATION

ARRA by the Numbers: From Policy to Reality
Tracy Hadden Loh, NTEC and Randy Lane, Ohio DOT

The project in the background is the Rehoboth Beach boardwalk in Delaware. This project is described in detail in the Summer 2010 issue of NTEC’s newsletter, TE Corner.

The American Recovery and Reinvestment Act (ARRA) is a special opportunity to learn about TE program implementation because some of the barriers that typically exist have been removed. In particular removing the local match requirement and structuring in competition between states creates an interesting new environment for TE implementation.
The ARRA is a unique opportunity to identify states that are leaders in implementing the TE program, because the unique structure of ARRA greatly reduced the ordinary variations in how different states go about implementing their programs. With no limitation on obligations, there was no need for state DOTs to prioritize one program over another, so other variables that impact TE program delivery come to the fore. Without advance construction, and with a one-year deadline, all state's selection cycles are synchronized and everyone is obligating on the same timeline.

WHAT was ARRA?

- 120 days to obligate 50% of Surface Transportation Program funds; One year to obligate 100%; unobligated funds distributed to successful states
- 100% of eligible costs can be paid with Federal funds; no limitation on obligations
- Advance construction conversions not allowed

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WHEN was this?

- Those ARRA funds administered by FHWA were apportioned to the states on March 2, 2009
- The 120-day deadline was June 30, 2009
- The one-year deadline was March 2, 2010
- Deobligated funds may be reobligated until September 30, 2010
Everyone obligated all of their funds. But some states moved far more quickly than others, and states selected very different types of projects.

WHERE did TE succeed biggest?

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A month-by-month examination of obligation rates under ARRA reveals that some state TE programs were better positioned than others to respond to the ARRA opportunity: for example, 16 states were able
to obligate at least 50% of their TE funds by June 30, 2009, a mere three months after the funds were apportioned. Of these states, 6 selected projects that consisted of resurfacing, road widening, landscaping, and/or constructing ADA-compliant sidewalks. While technically eligible under the ARRA rules, many of these projects would not be eligible or competitive in a less time-constrained TE selection process. Another 4 states converted old projects that had originally been obligated with regular TE funds into ARRA projects. These projects were stalled because of cost escalation or lack of matching funds. Activating these stalled projects creates jobs, fulfilling the purpose of the Recovery Act, but ideally we would look to states with the fewest stalled projects for best practices in TE implementation.

The remaining 5 states (Delaware, Florida, Maine, Oregon, and Washington) that obligated 50% of their TE funds by June 30 did so mostly by selecting new projects in addition to their existing program. This indicates a robust program with a well-developed project pipeline and streamlined administrative practices that allow the rapid advancement of new, high-quality projects as funds become available. In other words, these states are the promise of TE made real – strong local demand for projects combined with DOT administrative capacity means a long list of potential TE projects, and that administrative capacity combined with leadership priority means rapid implementation.

WHERE did TE succeed biggest?

![ARRA TE Funding Statistics by State](image)

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FAHP overall = 29%

The best measure of implementation is the reimbursement rate, as funds are only reimbursed after work has already been completed. As of April 2010, the reimbursement rate for the FAHP under ARRA as a whole was 29%. The nationwide reimbursement rate at the same point was only 15%, as shown in Table 2. However, TE programs in twelve states, including Michigan, Delaware, Oregon, and Maine, outperformed the national FAHP reimbursement rate. Experience has taught that some TE projects can be complicated, slow, and risky. These states found ways to avoid those outcomes.
The TE activities were established in 1992. However, the Federal-aid highway funding and construction lifecycle has been established for decades longer, and integrating the TE activities into this lifecycle involves an institutional learning curve. Each state has had a different experience in learning how to select and implement successful TE projects on a predictable timeline. Some states have made significantly more progress than others in streamlining their administrative processes for implementing TE. The ARRA outcome shows that every state was able to overcome whatever administrative obstacles exist internally, at least in the short term. However, a closer look at the data reveals that despite the final outcome, not all states performed equally. States that were able to rapidly obligate new, high-quality TE projects and achieve high reimbursement rates have best practices to offer.

The political and public pressure created by ARRA is unlikely to continue unabated in the future. However, other conditions could boost leadership interest in the program to promote implementation. In the case of obligation limitation, states have discretion over how this limitation is applied across the programs within the FAHP. In general, state discretion over how the FAHP is implemented is a key legal underpinning of the program, and should not be undermined. Without doing so, increased interstate competition for TE funds could promote higher obligation rates, as it would provide additional motivation for state DOT leadership in states that currently do not prioritize or balance TE in the obligation limitation equation. Increased public awareness of the program could have the same effect.

It should be noted that one reason that leadership interest in TE funds has at times been lacking is because the non-traditional nature of TE projects can result in long, technically and politically unpredictable implementation timelines. As one TE program manager remarked during an interview, “TE takes you places as a transportation planning professional that you would ordinarily rather not go.” Increasing competition for TE funds within a state could have the effect of helping the best-prepared projects rise to the top, which would increase the predictability of TE projects and make them more attractive to the decision-makers. In Michigan, the state DOT has established a policy for “conditional commitment” of TE funds. Potential TE project sponsors apply to the DOT for funds, and then have two years to raise matching funds, complete design, and acquire ROW. The funds are redistributed to other projects if sponsors cannot deliver these requirements. There are important policy implications for this best practice. It relies on control of TE funds remaining at the state level. This type of intra-state competition will not be possible if TE funds are required in the future to be suballocated by population within the state (as described in one proposal for the next transportation authorization).
Finding even 20% of a project’s cost from local funds can be a challenge for states, counties, and municipalities. However, there are several compelling reasons for requiring a local match. A match requirement ensures that funds will only be used on projects that there is local support for. A local match contribution means that more total funds are available for projects. The “innovative financing” option, which allows matching funds to be contributed in the form of land, easements, or labor leverages additional private resources for public projects. For all these reasons, while the Recovery Act made up to 100% of eligible project costs reimbursable with federal funds, not every state took advantage of this option for TE. However, the ARRA outcome suggests that matching funds are a barrier to rapid implementation. All of the states that obligated at least 50% of their funds by July 30 did so at 100% federal share.

Outside of ARRA, several states, including Florida and Washington, have already eliminated local match for their TE programs by using toll credits to meet the matching requirement, an option available to the states by FHWA policy. Other states have adopted innovative financing as a way to reduce the cash burden on project sponsors, or have taken advantage of FHWA policy to allow the 20% match requirement to be met by STP projects as a pool, rather than individually. If more states took advantage of these options, the onus of the matching requirement for TE on individual projects would be greatly reduced.

Worthy TE projects do not materialize out of thin air. The top five states for TE project delivery under ARRA (Delaware, Florida, Maine, Oregon, and Washington) all have well-developed administrative systems in place to solicit and select TE project ideas. These states conduct regular TE project solicitations, with the exception of Maine, using a grassroots approach to generating TE project ideas. In the larger states, Florida and Washington, the MPOs play a leadership role in this process. The criteria for selecting TE projects are transparent, especially in the case of Oregon, where the public participates in the selection process through an online survey. While some states used their ordinary project...
selection processes to implement ARRA, others used alternative processes in order to accommodate the ARRA timeline and political pressures. For states that used alternative processes, it is possible that there are potential lessons to learn about barriers in the traditional project selection process. However, there are probably tradeoffs between rapid project selection and other goals that each state will prefer to weigh individually.

Project selection is just the beginning of TE project administration. A majority of states administer at least some portion of their TE funds as a form of local aid, where the local project sponsors take the lead on project implementation. In some states, there is a well-developed community of local project sponsors who have experience working with federally-funded projects and the administrative requirements that accompany those funds, such as compliance with the Uniform Act and the National Environmental Policy Act. However, especially in larger states where many local areas may still be receiving their first TE funds, or in local areas with frequent leadership turnover in local elections, there are significant capacity issues in administering Federal-aid highway funds. These capacity issues increase the amount of time required to develop a project to the point of being “shovel-ready.” This explains why states like Delaware and Florida, where the DOT is the lead for most projects, can deliver more quickly. However, Maine, Oregon, and Washington, and many other TE programs, have achieved success through extensive training and technical assistance to locals.

One important outcome to note is that the types of projects that were implemented under ARRA clearly differ from typical TE program. The pie on the left shows the distribution of TE funds between the twelve eligible activities from ISTEA through SAFETEA-LU, while the pie below shows ARRA. Under ARRA, over 30% more funds went to pedestrian and bicycle facilities and streetscapes than is typical, while states entirely avoided scenic acquisitions and outdoor advertising control. Education/safety programs, archaeology, historic preservation, and museums all received roughly 40% - 80% less than usual. Given the heavy emphasis under ARRA on “shovel-readiness,” this outcome is highly suggestive of the idea that these TE activities may be more time-consuming or challenging to implement. This is an opportunity to direct special attention to best practices for delivering these types of projects under the regular TE program. However, perhaps this finding also shows that these types of projects, while worthy, cannot be held to standard delivery schedules and require additional flexibility.
TRANSPORTATION ENHANCEMENTS
AND THE ARRA: WHAT HAPPENED?

RANDY LANE
LOCAL PROGRAMS MANAGER
OHIO DOT

AMERICAN REINVESTMENT & RECOVERY ACT
ARRA FUNDING TO OHIO

This pie chart shows the transportation funding that Ohio received through the ARRA.
The structure of the funding flow includes significant restrictions on where it can be spent.

In Ohio, these funds were directed to new projects that were in addition to the regular program. This decision created very challenging timelines for the DOT to identify and select projects to receive the funding. On February 17, the governor launched a website to collect project ideas. By March 23rd, projects were announced.
Shifting from programmatic to executive-level decision-making meant that there was very little time for educating decision makers in the governor’s office and non-traditional partners like private railroad and ports. These actors were not intimately familiar with the details and structure of the different components of the Federal-aid highway program, so it was a struggle to bring them up to speed on what Transportation Enhancements are and how Federal highway aid works.

Challenges for DOTs:
- Political and media scrutiny
- Shift from programmatic to executive level decision making.
- Educating decision makers
  - “Spread the wealth”
    - 436 projects funded under ARRA
      - 255 ODOT Allocation Projects
      - 181 MPO Allocation Projects
    - 272 of 436 sponsored by Local Public Agencies
- Nontraditional projects
  - ARRA Flexibility to consider maritime, rail, and intermodal projects in addition to traditional highway projects.

An additional challenge was the negative attention attracted by recent criticism of the TE program and the stimulus from Senators McCain and Coburn and others.
In the regular TE program, Ohio voluntarily suballocates TE funds along with the mandatory suballocation of other STP funds by population to the MPOs. Some funds are retained in a statewide pool for areas that are not covered by an MPO, and for MPOs that choose not to administer their own TE programs.

**Statewide Rural Program**
- $11 M
- Local governments outside MPO boundaries

**MPO Urban Programs**
- $11.2 M
- Local governments within MPO boundary
- 14 Large and Small MPOs.
- 10% of STP Allocation

The regular Ohio TE program prioritizes projects that represent completion of missing link, or extension of an existing Statewide, Regional, or Local facility. The program also emphasizes economic benefits tied to other investment in the area, local / regional business, new development, etc. For historic projects, being on or eligible for the National Register, or located within a historic district, is key.

**Traditional Program Solicitation Process**
- Funding Application Workshops
- STW Rural Program - Two-step application process
  - Letter of Interest
  - Invitation to submit full application
- MPO Program - Request for applications
  - Varies between urban areas
  - Selection criteria based primarily on STW program

For ARRA, localities were sent an invitation to apply for funding through a Web-based project request form established through Governor’s Office. This process was for all of the ARRA transportation funding, not just TE. These applications were subject to ordinary Title 23 eligibility guidelines, and those that met FHWA guidelines were sent a 49 question application to gauge economic impact and ability to meet ARRA timeframes.
One goal of this selection process was to identify at least one project in each of the 88 counties. The process also prioritized modal diversity – emphasis on freight and passenger rail, in order to take advantage of the additional flexibility provided only under ARRA. The selection criteria did not include any specific criteria relating to TE.

**Traditional Program Selection Criteria**

- User/benefit base
- Economic benefits
- Accessibility
- Visual environment
- Uniqueness to area identity
- Historical significance
- Support & interpret historic and/or scenic site
- Educational benefits

**ODOT ARRA Project Solicitation:**

- Solicitation through Governors Website
- 4,600 projects submitted to Recovery.Ohio.gov
- 2,222 Project met FHWA eligibility guidelines
- Application to determine projects that could meet timeframes & criteria

**ODOT ARRA Selection Criteria**

- Economically Distressed Areas
- Job preservation & creation
- Economic development potential
- Regional equity based on population
- Modal diversity
- Risk of project delivery – “shovel ready”
- Local priorities (MPO’s and District’s)
- No criteria specific to Enhancement program goals
The result was that stand-alone TE-eligible projects did not do well under those criteria. The process did select a number of traditional highway projects that could include additional streetscape and accessibility improvements, so corridor improvements dominate the final ARRA TE project list for Ohio. However, there were 3 stand-alone bike projects.

This TE project is a streetscape. In June 2010, President Obama visited the project site to commemorate the 10,000th ARRA project to break ground.

In conjunction with a planned widening, the project will support a major private investment in infrastructure and new jobs for Columbus.
American Reinvestment & Recovery Act

- Nationwide Children’s Hospital, is considered one of the country’s best pediatrics hospitals.

- A new $740 million pediatric care and research facility project includes an expansion of the main hospital, opening in 2012.

- Will create the second largest pediatric hospital and research center in the United States.

American Reinvestment & Recovery Act

- ARRA STP - $11 M
  - Widening of Parsons and Livingston Avenues, new turn lanes & traffic signals

- ARRA TE - $4 M
  - Dedicated bicycle lanes
  - Widen sidewalks for improved shared movement.
  - ADA compliance
  - Streetscape features
  - Ties bicyclists and pedestrians to the bus routes and park along the gateway.
This project demonstrates that TE is highly successful when combined with additional initiatives. In this case, in addition to the private sector investment there was $2.4 M awarded through City Community Development to renovate 94 homes in the area is combined with $1.5 M for a Rent to Own program through the city of Columbus. While challenging, coordinating federal, state, local, and private investment in a neighborhood can achieve efficiencies and magnify impacts.

**American Reinvestment & Recovery Act**

Parsons / Livingston Economic Development Outcomes:
- Infrastructure required for $800 M expansion
- Create / support 325 stimulus construction jobs
- Builds on other community initiatives
  - City / non-profit groups renovation of 100+ area homes
  - $1.5 M for construction of 40 new rent-to own homes
- Attract future business location
- Increased property values
- Increased community activity and health
- Encourages additional investment
Programmatic lessons .......
- Significant economic development impacts
- Success when implemented with a combination of initiatives
- Leverage funding for complete projects

Administrative lessons .......
- Education of decision makers and stakeholders
- Embrace ‘livability’ concepts - what the people want
Ms. Binder is a Senior Associate in the Transportation Planning and Management Group of Cambridge Systematics, Inc. She has more than 34 years of experience in the transportation industry.

Ms. Binder’s expertise includes transportation programs, management, policy, finance, economics, and legislation. Ms. Binder had a distinguished career with the U.S. Department of Transportation (DOT) before joining the majority staff of the Senate Committee on Environment and Public Works in 2008. There she assisted in the development of the successor to the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).

Prior to joining the Senate Committee on Environment and Public Works, Ms. Binder served as the Federal Highway Administration (FHWA) Deputy Associate Administrator for Policy and Governmental Affairs from 2005 to 2008. Concurrently, she served as the Executive Director of the National Surface Transportation Policy and Revenue Study Commission, which culminated in its 2008 Report to Congress.

Earlier, Ms. Binder served as Director, FHWA Office of Legislative and Governmental Affairs where she directed a multi-disciplinary staff in the development and analysis of Federal-aid highway programs, policies, and legislative proposals. She also managed the development of the FHWA’s national strategic planning initiative and conducted Congressional and government relations activities. Contributing to her understanding of transportation issues is her experience as FHWA’s Maryland Division Administrator from 1994 through 1998. She was responsible for leading the Federal-aid highway program there, as the first woman to hold such a post for FHWA.

Over the course of her career, Ms. Binder has received numerous awards, including the Presidential Meritorious Executive Rank Award, the Secretary’s Award for Meritorious Achievement, the Senior Executive Service Special Achievement Award, the Lester P. Lamm Award for outstanding public servants, and the Administrator’s Awards for Special Achievement and Unusually Outstanding Performance.
Performance is an attractive concept but it means different things to different people. I like to use the term “performance management” because that connotes both why and how this shift in thinking about transportation programs can refocus our attention to better outcomes.

The public sector was late to adopt a performance orientation – this approach has been in use widely in the business community for some time now. In our field, it means a shift in how transportation programs are executed.

“The best way to predict the future is to invent it.”

For a mature system, where we are working at the margins of a completed highway network, an eligibility-based categorical program is not a good fit - it doesn’t give enough guidance and isn’t effective.

Goals are outcome-based – they are the reason we undertake the transportation improvement or operate the transportation system. In economist lingo, transportation is a derived demand. Transportation is a means to another end in the vast majority of situations. Therefore, we need to keep that end in mind. Very contextual and could be different from a local, State, national perspective.
We can think of objectives in terms of the outputs – the means or characteristics of actions to achieve the goals.

I’d like to elaborate a bit more on the term “performance.” For many of us in the transportation business, we can think about applying the framework at many levels. For a generation in the surface transportation business, the policy consensus and direction has been clear – to build the “backbone” of transportation infrastructure that has brought the country together and provided access and mobility across long distances – and so the focus of performance is on the outputs. How well has an agency (Federal, State, local) performed in putting the facilities in place. I recognize that in the 2nd bullet but want to go further – am teasing out the system level and looking at how well the transportation system is performing from the point of view of users of the transportation service.

Thinking about moving to a management framework based on performance measures that hit on broader economic, environmental, and social objectives can be alarming, because this means being measured by things that one doesn’t control. In confronting this alarm, we have to remind ourselves that this is the nature of the transportation system itself - it only exists to enable other things.

However, this isn’t about setting goals like motherhood and apple pie that make everyone feel good and are simply rhetorical - first, those goals are not measurable, and second off, what about tradeoffs? Our role as planners is often to facilitate, and we don’t have the power to move mountains. Rather, performance measures are a way to help address externalities. In a mature system, these rear their heads in an ugly way, and we need a system that empowers planners to address them. Though from one angle TE is just another eligibility-based categorical program, the spirit of the program is clearly about addressing externalities.

One of the challenges of working transportation is that everyone has skin in the game, but is it a bad thing that we have a lot of customers? We should embrace the challenge of making them happy. The TE program is in a good position to take on that challenge.

Uses of the performance perspective... doesn’t this sound like familiar aspects of good planning practice? We have examples throughout the country and I suspect many of you in the audience can relate. Many of those “pieces” are in evidence but there are few at this time to have a truly integrated adoption. Working at the “front end” where values and priorities are discussed is tough work when done realistically and well. It is the underpinning for the rest. We get weak and throw everything in the pot – give lip service – and then back off the hard decisions. Thus, one of the most challenging parts of bringing the performance perspective to our mature system is the need for mature leadership.
What is performance-based planning? A systematic and ongoing process that uses data and information to assess the extent to which transportation plans, programs and projects assist in meeting overall statewide (or regional) goals and objectives.

Integration into the Planning Process

- Planning factors linked to performance goals
- Performance-based state and MPO long-range plans
  - Explicitly link expected performance results to an investment strategy and other policy and regulatory actions
  - Consistent with state/MPO performance targets
- Performance-based project selection in TIP/STIP
- Some goal areas may need a stronger, interdisciplinary planning process
  - Similar to existing SHSP and CMP processes
  - Address the appropriate range of stakeholders and issues
MAJOR FEATURES

Process stems from a unifying vision that is described through a set of strategic goals that are linked to a set of quantifiable objectives. In essence, what are we trying to achieve through our transportation system investment and management. At a system level, this vision frequently relates to some larger regional/statewide objective such as quality of life or support of economic development/job growth.

Broader goals are made specific to transportation through the objectives and more specific performance measures. Data is analyzed through a series of analytical tools to produce information that is used by planners to evaluate alternative strategies in terms of the performance measure, objectives and goals. All of this information is then used to support decision makers as they select plans, programs and individual projects.

We then periodically monitor the system and implemented projects to assess effectiveness of both:

- particular projects and strategies;
- the process itself as a decision-support tool.

Thinking positively, the goal is to turn a head-in-the-sand attitude into a feedback loop where we learn from the process: outcome vs. output. However, there is a legitimate fear of abuse or lunacy when you deviate from a formula when giving out dollars, especially in large amounts.

**Typical System Measurement Areas**

- Physical condition of infrastructure, vehicles, and equipment
- System usage
- System service levels
- System operations
- Safety
- Environment
- Customer satisfaction
What Are Some of the Risks/Challenges?

- Setting performance targets
  - Can’t do in the abstract must relate to resources available
  - Easiest when agency controls the performance factor

- Benchmarking and peer comparisons
  - Historically a sensitive area
  - Every agency perceives they are “unique”
  - Can’t avoid peer comparisons and it’s better to control agenda

Risks/Challenges (continued)

- Accounting for external influences on measures/performance
  - Behavioral factors in safety
  - Growth and development in mobility

- Unintended consequences: “what gets measured….?”
  - Surface roughness as pavement condition measure
  - No “re do’s” in design as project delivery measure

- Decision makers may choose to ignore or misuse performance information
Types of Measures

- Output measures: amount of activity accomplished
  - Number of lane miles resurfaced in a 5 year period

- Outcome measure: impact of actions and activities on actual system conditions/performance
  - Congestion reduced as reflected by improved reliability (consistent average duration of trip) at the end of 5 years

- Most agencies need and use both output and outcome measures

- Focus of performance management is on outcomes

Key Performance Measure Characteristics

- Clear link to agency goals
- Relevant to policy-makers and the public
- Intuitive and easy to understand
- Outcome influenced by agency program and policy decisions
- Reliable data available
  - Clear definition and source(s)
  - Consistently collected over time
- Manageable number of measures
When you are selecting measures, what are some attributes you want to think about... Have a clear and intuitive meaning.

The enemy of good is better when it comes to data. It’s time to “just do it” and plan to improve as we go, rather than get trapped in “paralysis by analysis.”

THINK: What kind of outcomes, objectives, and measures suit the bike/ped and TE constituency?

Think about this through the lens of the types of projects and concerns of the various TE communities.

TE needs something that measures the “soft side” to get at the unique value that TE provides. Traditional measures for system preservation and safety are relevant to TE, but we also need measures of quality of life, access, mobility, choice, and economic development.

In general performance measures are much better defined and used in the tangible condition areas – pavement, bridge, safety. Fallback when causality easier in these arenas. Less in performance in terms of delay (lots of debate as to many ways to measure congestion such as reliability, and relative to past levels of congestion). An expectations game. Intermodal left out. Non-traditional modes left out.
There will always be a strong federal role in a national transportation system. The essence of the federal program must address national needs.

How can we ask the public to pay more if the performance isn’t improved?? Yet we know it is a vicious cycle – insufficient investment in even the existing assets alone result in deterioration and poorer performance.

Standards based programs are in place in areas like water quality where performance is judged and required based on the outcomes, not “how” one “gets there.”

Reform is needed at the program level – traditional categories of eligibilities don’t work. Resources need to be increased but there will never be “enough.” When resources are scarce, investments must be targeted and Federal resources must be used wisely in terms of system outcomes.

Hand-in-hand with reducing the number of categories was the concept that each of the proposed programs were selected to correlate with agreed upon NATIONAL GOALS. Each of these goals/programs would be administered on a performance-basis, understanding that this might mean different degrees
National Commission Recommendations for a New Federal Compact for Surface Transportation

- Strong Federal role
- Increased expenditures from all levels
- More effective use of taxpayer funds
- Performance-based funding
- Program reform

Refocusing the Federal Program Structure

<table>
<thead>
<tr>
<th>Proposed Federal Surface Transportation Programs</th>
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<tbody>
<tr>
<td>1. Rebuilding America: A National Asset Management Program</td>
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<tr>
<td>2. Freight Transportation: A Program to Enhance U.S. Global Competitiveness</td>
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<tr>
<td>3. Congestion Relief: A Program to Improve Metropolitan Mobility</td>
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<td>4. Saving Lives: A National Safety Mobility Program</td>
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<tr>
<td>5. Connecting America: A National Access Program for Smaller Cities and Rural Areas</td>
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<tr>
<td>6. Intercity Passenger Rail: A Program to Serve High-Growth Corridors by Rail</td>
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<tr>
<td>7. Environmental Stewardship: A Transportation Investment Program to Support a Healthy Environment</td>
</tr>
<tr>
<td>10. Research, Development, and Technology: A Coherent Transportation Research Program for the Nation</td>
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Current Federal Surface Transportation Programs

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<th>Administration</th>
<th>Programs</th>
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<tbody>
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<td>Federal Highway Administration</td>
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<tr>
<td>Federal Transit Administration</td>
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<td>Federal Railroad Administration</td>
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<td>National Highway</td>
<td></td>
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<tr>
<td>Traffic Safety Administration</td>
<td>12</td>
</tr>
<tr>
<td>Federal Motor Carrier Safety Admin</td>
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<tr>
<td>Safety Administration</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
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of decentralization. The test would be whether performance would be achieved – the outcome, not the “how.” Results driven.

Transparency.

No engineering by statute - only specifying what the measures are and how to collect them.

The idea is to put the carrot before the stick by offering rewards for performance.

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**Recommended New Program Requirements**

- Federal performance “standards” would act as guide
- National plans to accomplish national goals
- Funds apportioned on cost to complete basis to meet national goals
- Use of cost/benefit analysis to select projects
- State and MPO performance-based plans
- Progress measured towards meeting performance measure targets

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**Reactions to Commission Recommendations**

- Unlike many Commissions this report received a lot of visibility and support from key Congressional Leaders
- Many groups issued reports supporting many of the Commission’s recommendations, all embraced a performance-based program (U.S. DOT, AASHTO, AMPO, APTA, GAO, and more)
- Very likely that the next authorization legislation will have some performance management requirements
- Our industry can play a critical role in establishing a workable performance-based Federal program
Fear that $ will flow based on accomplishment set in these terms. Does one size have to fit all while we are learning? Goals can reflect progress toward the goals (at least in the interim). Working only (as economists have a saying) “where the light is good,” in other words where we have data available.

Performance can be good for TE by creating a platform for those types of improvements to be valued. Right now TE assets are smaller and less visible than other transportation investments. The challenge is to make them more visible without over-promising/asserting. More work is needed to establish causality between TE improvements and the anecdotal benefits we’ve all witnessed.

PM is not going to be a grinder or a cookie-cutter. It is a mechanism for decision-makers to weigh tradeoffs. It is difficult to get our money’s worth from projects when they are hard to measure and compare, but the first step is doing the front-end mental work of setting goals, rather than just cranking out output.
Conclusions – Opportunity Ahead

- Defining, tracking, and reporting a broad range of transportation performance measures is state of the practice.

- Premature statutory mandates and standardization could stifle innovation and “early adopters” working toward a more comprehensive approach.

- Transportation Enhancement activities could be reflected as assets or approaches but are small compared in typical systems and thus invisible in many mainstream planning activities.

Conclusions – Opportunity Ahead

- Too many goals, objectives, and measures at the Federal level will be counterproductive for many reasons.

- Gold standard: valuing the contribution of individual options to system performance

- Don’t feel “left” out – for now, that could be better than an untenable statutory mandate.

- Policy direction should be sensitive to the “work in progress.”
  
  » Active learning as to how to include the full range of transportation activities

  » “Just do it” – reflect TE contribution to performance
Performance Management Workshop Session

These notes are a synthesis of comments exchanged by seminar participants in the second half of the afternoon workshop on performance measures and TE.

Performance measures address a key issue that is familiar to those working in the TE program, which the tradeoff between quantity and quality. However, there is deep skepticism at the ability of a performance measure framework to adequately measure quality, especially given that “everything is a custom product in transportation,” and TE especially. There is a danger that transportation planning will become about what data is easiest to collect. The TE program’s 12 diverse activities are particularly challenging to evaluate and measure, even as opposed to other nontraditional or nonmotorized-oriented programs like SRTS, because it amounts to comparing apples and oranges.

That said, performance measures represent an opportunity for planners and project sponsors to be entrepreneurial and adapt, rather than just mechanically apply standards. Some questions we should start asking about TE projects: how many people are being served directly and indirectly? What are the service levels? One important point that was raised is that it’s very important to have standards about when to measure. It’s not a good idea to measure right afterwards, because the goal needs to be measuring actual results and not emotions. And perhaps our first step really needs to be establishing a baseline by thinking about how and what to measure before.

What performance measures means for the design and preliminary engineering phases is also still unclear.

Several participants raised a current issue that relates to many of the themes that come up through performance management, which is how to decide when a project has failed and cancel it. Multiple participants from different states that administer the TE program in different ways emphasized the importance of enforcing STIP guidelines for expiration and raising the prospect of jeopardizing future funding opportunities through the DOT with project sponsors that don’t have their ducks in a row.

Looking critically at the performance measures concept, is this merely a framework that allows us to “rob Peter to pay Paul?” Is it just a way to manipulate the system because there is never enough money for
everything? This may be a harsh way of looking at it, but at a fundamental level performance measures is about creating a transparent process for making tradeoffs. Ideally it would not be “robbing,” but rather openly trading.

In some states, the general trend for the TE activities has been from a boutique program to greater integration with the rest of the STP. However, this is not the case everywhere. One special characteristic of the program has been its grassroots nature, which has many positive implications: promoting participation, finding innovative or “fringe” ideas, and responding to customers. Is that model paradoxically opposed to the top-down approach of performance measures? The key to resolving the conflict between the alternative process and project types of the TE program and the performance measures framework is the adoption of livability as a federal goal/issue.

Are performance measures a bureaucratic replacement for sound planning as a tool? Or an expression of national priorities and values? The test of this will be whether the framework ends up measuring real things that matter. For TE, “sense of place” is a huge contribution of many of the projects funded through the program, but is it measurable? Are intangibles like enjoyment and beauty quantifiable? Anecdotally, we know that many people want more from their transportation system than just pavement and interchanges, but the room had few ideas for how to get beyond stories.

If measures are set at the federal level, this would cut a lot of the politics out of project selection that have plagued the TE program in some states. Both decision-makers and the engineering community need requirements, not encouragement or guidelines, which is what they currently get from FHWA a lot of the time. However, with TE there is a balancing act - too many standards will kill the creative and grassroots nature of TE. Seminar participants expressed concern and regret that the one-of-a-kind, unclassifiable, or less commonly funded parts of the TE program, like archaeology projects and wildlife crossings, would disappear under performance measures.

Is TE just not ready for performance measures? In the larger context of needing to make tradeoff decisions, is TE more like an incubator than a program ripe for competing against everything else? Is continuing the TE set-aside dedicating a sensible, small piece of the pie to valued intangibles like quality of life, or just dodging the issue?

Clearly much if this discussion hinges on what performance measures would be applied to TE projects. One participant raised the idea of building up NTEC as a clearinghouse for developing these measures, or just generally involving neutral third parties (research-oriented) to help identify measures and bring FHWA and state DOT staff together to pre-stage performance measure TE scenarios collaboratively.

Participants expressed a need for more guidance generally on many aspects of TE that current NTEC and FHWA capacity has not been able to keep up with. The TE program is reaching a critical point in its development, and there are several different potential directions the program could go in. There is a need for leadership from both Congress and the DOT in order to shape the future program.
Federal Transportation Reauthorization Update

Joint Meeting with State Bicycle & Pedestrian Coordinators

Kevin Mills, Vice President of Policy, Rails-to-Trails Conservancy
Marianne Fowler, Senior Vice President for Federal Relations, Rails-to-Trails Conservancy

This freewheeling discussion covered the current trends in transportation policy in Washington from both the executive and legislative angles.

Kevin Mills emphasized the importance of NTEC as a bridge that allows political actors in Washington like the advocates at RTC and the legislators on Capitol Hill to solicit data and input from the TE professional community nationwide during the reauthorization period. The current extension will only last until December, and additional extensions, potentially lengthy, are likely. In the current political discussion, even organizations like AASHTO have supported TE, but other quarters are calling for a new philosophical discussion of the gas tax as a user fee.

Marianne Fowler began her remarks by saying that one estimate places the need at a $450 - $500 billion multi-year bill to meet our surface transportation needs. This would be double the size of SAFETEA-LU, even with the built-in rescissions that were in that bill. Finding this kind of money is the seemingly insurmountable challenge that has held up reauthorization so far. The handout in Appendix B details President Obama’s proposal for an infrastructure “bank” to fund some transportation improvements, which is one way of beginning to climb the $500 billion mountain.

An extension until after the next presidential election is a possible scenario because of the current political situation in Washington. However, regardless of the outcome of the November elections, we should anticipate that this reauthorization debate will be framed as a re-debate over ISTEA, even though that was 19 years ago. The “pundits” say that the most likely scenario for November is that the Republicans take the house and the Democrats keep the Senate. When the Republicans take control of the House Transportation and Infrastructure Committee, they may produce their own transportation bill, and this may shake loose some dialogue.

At the state level, there is curiosity about the livability initiative of USDOT, and how that will relate to TE. Other movements like Safe Routes to School and Complete Streets have a lot of positive energy. In that sense, TE has already changed what agencies and people think transportation is, can be, and should be. When Washington tries to turn back the clock on that awakening, this is out of touch with sentiments at the state level. It seems to be an issue that DC leaders are surrounded by staff that don’t appreciate the nuances and quality-of-life aspects of TE. However, clearly the administration at USDOT is aware and appreciative of these popular subtleties. Gabe Rousseau of FHWA spoke about the Partnership for Sustainable Communities that is a joint project of USDOT, EPA, and HUD staffed in part by his livability team.
BREAKOUT SESSIONS

SESSION 1 - The ABC’s of Economic Impact Assessment for TE
Todd Litman, Victoria Transport Policy Institute

Todd Litman is founder and executive director of the Victoria Transport Policy Institute, an independent research organization dedicated to developing innovative solutions to transport problems. His work helps expand the range of impacts and options considered in transportation decision-making, improve evaluation methods, and make specialized technical concepts accessible to a larger audience. His research is used worldwide in transport planning and policy analysis.

Mr. Litman has worked on numerous studies that evaluate transportation costs, benefits and innovations. He authored the Online TDM Encyclopedia, a comprehensive Internet resource for identifying and evaluating mobility management strategies; Transportation Cost and Benefit Analysis: Techniques, Estimates and Implications, a comprehensive study which provides cost and benefit information in an easy-to-apply format; and Parking Management Best Practices, the most comprehensive book available on management solutions to parking problems.

Mr. Litman has worked as a research and planning consultant for a diverse range of clients, including government agencies, professional organizations, developers and nongovernment organizations. He has worked in more than two dozen countries, on every continent except Antarctica.

Mr. Litman is a frequent speaker at conferences and workshops. His presentations range from technical and practical to humorous and inspirational. He regularly blogs on the Planetizen website. He is active in several professional organizations including the Institute of Transportation Engineers and the Transportation Research Board (TRB, a section of U.S. National Academy of Sciences). He currently chairs the TRB Sustainable Transportation Indicators Subcommittee.

In addition to technical writing, Todd has co-authored two travel books (Washington; Off the Beaten Path and Best Bike Rides in the Pacific Northwest) with his wife, Shoshana Litman. They reside with their two children in Victoria, British Columbia.
The work involved in implementing the TE program is often mundane and thankless, but it is important. It is about something as simple as creating paradise at home in our own communities.

Sustainability acknowledges that overlapping systems have both negative and positive interactions, and it is about resolving negative conflicts and magnifying positive feedback loops.
This is not to say that sustainability has to be complicated. Rather, sustainable solutions can be small and elegant - they address key points in the web of overlapping systems and produce multiple solutions to many problems from a single change. Beginning the search for sustainable solutions means re-framing the problem, the goals: instead of trying to get bigger, trying to get better. In transportation specifically, instead of focusing on the act of travel itself (mobility), looking at whether people are able to obtain their desired goods, services, and activities (accessibility). Travelers are not simply moving, they are getting. We consider the quality of the experience in addition to the quantity.
The future of transportation has been re-imagined many times. Anyone remember how the Segway was supposed to completely change our cities and the way we get around? In the 20th century, the technology revolution has naturally led to an emphasis on the next revolutionary vehicle that will finally free us to travel graciously. However, while we wait for our flying cars to arrive, it is worth noting that sometimes really important improvements are so simple that nobody notices them.

Supersonic jets affect nobody. Curb cuts affect everybody. It is the advent of ADA complaint sidewalks that has allowed us all to enjoy a revolution in pedestrian freight movement, also known as wheeled luggage, while trans-Atlantic service on the Concorde has been terminated. While this example is clearly humorous, it illustrates the elegance and simplicity of a sustainable solution, and reminds us how profoundly our lives are changed when we improve the quality of our existing transportation system.
Major demographic trends indicate that retrofitting existing urban and suburban infrastructure to be more efficient and livable should become a high priority. The population is aging, and older people need transit- and pedestrian-friendly living and mobility options. And while at the turn of the century most of the US population lived in more rural areas, today the distribution is completely reversed - most Americans live in cities, with over 50% of the population living in suburban settings.

The current auto-dependent mode split means that even a small shift from cars to alternatives produces a huge relative increase in demand for alternatives. We need to be ready with capacity. Trends in preferences among younger people in particular signal that there will be big increases in walking and bicycling.

**What is “The” Transportation Problem?**

- Traffic congestion?
- Road construction costs?
- Parking congestion or costs?
- Excessive costs to consumers?
- Traffic crashes?
- Lack of mobility for non-drivers?
- Poor freight services?
- Environmental impacts?
- Inadequate physical activity?
- Others?
Applying a process that forces us into silos that we have to make tradeoffs between denies us the opportunity to implement elegant and efficient solutions because they appear marginal.

**Reductionist Decision-Making**

Reductionist planning can result in public agencies implementing solutions to one problem that exacerbate other problems facing society, and tends to undervalue strategies that provide multiple but modest benefits.

**Win-Win Solutions**

Put another way, more comprehensive planning helps identify “Win-Win” strategies: solutions to one problem that also help solve other problems facing society.

**Comparing Benefits**

<table>
<thead>
<tr>
<th>Planning Objectives</th>
<th>Expand Roadways</th>
<th>Efficient and Alt. Fuel Vehicles</th>
<th>Shifts from Auto Alternative Modes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Travel Impacts</td>
<td>Increased VMT</td>
<td>Increased VMT</td>
<td>Reduced VMT</td>
</tr>
<tr>
<td>Reduce traffic congestion</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Roadway cost savings</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Parking cost savings</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Consumer cost savings</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Improve mobility options</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Improve traffic safety</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Energy conservation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pollution reduction</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Land use objectives</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Public fitness &amp; health</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Economic Analysis**

Economics is not about money, it is concerned with human values – what people care about.

Money is simply a way to measure values.
## Steps From Decisions to Economic Impacts

**Public Policy And Planning Decisions**
- (infrastructure funding and pricing, facility design, facility management, land use, encouragement programs, etc.)

**Change in Travel Conditions**
- (better footpaths, shared paths and bike lanes, higher fees for driving, slower vehicle traffic, closer destination, etc.)

**Changes In Travel Activity**
- (less driving, more walking and cycling, more ridesharing, more public transit travel, more reliance on local services which reduces average trip distances, etc.)

**Transport Impacts**
- (changes in traffic congestion, consumer time and money costs, road and parking facility costs, accident rates, pollution emissions, physical activity and health, mobility for non-drivers, etc.)

**Economic Valuation**
- (financial costs to consumers, businesses and governments, monetized value of changes in health and travel time, sum of all monetised values)

## Walking & Cycling Benefit Categories

<table>
<thead>
<tr>
<th>Improved Active Transport Conditions</th>
<th>Increased Active Transport Activity</th>
<th>Walkable Community Design</th>
<th>Reduced Automobile Travel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved user convenience and comfort</td>
<td>Improved public fitness and health</td>
<td>More livable communities.</td>
<td>Reduced traffic congestion</td>
</tr>
<tr>
<td>Improved travel options, particularly for non-drivers</td>
<td>User enjoyment</td>
<td>Reduced sprawl (more compact, mixed development) reduces land consumption, reduces costs of providing public services, preserves open space.</td>
<td>Road and parking cost savings</td>
</tr>
<tr>
<td>Improved local property values</td>
<td>Increased community cohesion (positive interactions among neighbors)</td>
<td>Improved accessibility, particularly for non-drivers</td>
<td>Consumer cost savings</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Reduced vehicle ownership</td>
<td>Reduced crash risk to others</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Air and noise pollution reductions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Energy conservation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Economic development benefits</td>
</tr>
</tbody>
</table>
When doing an impact assessment of a pedestrian or bicycle facility, one helpful way to think about the impact of these types of facilities is in units of time rather than distance. While people's walking and biking trips are not helping them travel great distances (the blue bars in the graph at left), a more significant portion of travelers' time is spent on these facilities. Spending money on facilities that cover only 2% of the distances that people travel doesn’t seem like a high priority. But what about the facilities that people spend 20% of their travel time on?
The imminent 2010 Highway Capacity Manual will be a multimodal edition that provides tools for measuring multimodal LOS.

**Conventional Transport Indicators**

- Roadway Level-of-Service (LOS)
- Average traffic speeds.
- Per capita congestion delay.
- Parking occupancy rates.
- Traffic fatalities per billion vehicle-miles.
- Traffic fatalities per 100,000 population.

**Multi-Modal Level-Of-Service (LOS)**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Level of Service Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking</td>
<td>Sidewalk/path quality, street crossing conditions, land use conditions, security, prestige.</td>
</tr>
<tr>
<td>Cycling</td>
<td>Path quality, street riding conditions, parking conditions, security.</td>
</tr>
<tr>
<td>Ridesharing</td>
<td>Ridematching services, chances of finding matches, HOV priority.</td>
</tr>
<tr>
<td>Public transit</td>
<td>Service coverage, frequency, speed (relative to driving), vehicle and waiting area comfort, user information, price, security, prestige.</td>
</tr>
<tr>
<td>Automobile</td>
<td>Speed, congestion delay, roadway conditions, parking convenience, safety.</td>
</tr>
<tr>
<td>Telework</td>
<td>Employer acceptance/support of telecommuting, Internet access.</td>
</tr>
<tr>
<td>Delivery services</td>
<td>Coverage, speed, convenience, affordability.</td>
</tr>
</tbody>
</table>

**Conventional Evaluation**

**Generally Considered**
- Congestion impacts
- Vehicle operating costs
- Per-mile crash impacts
- Per-mile pollution emissions.

**Often Overlooked**
- Parking costs
- Total consumer costs
- Downstream congestion
- Crash, energy & pollution impacts of changes in mileage
- Land use impacts
- Impacts on mobility options for non-drivers/equity impacts
- Changes in active transport and related health impacts

The imminent 2010 Highway Capacity Manual will be a multimodal edition that provides tools for measuring multimodal LOS.
Comparing Costs

Transportation Costs

Automobile
Bicycling
**Congestion and Road Savings**

Shifts from automobile to alternative modes helps reduce congestion, roadway costs to governments, and parking costs for businesses.

---

**Multi-Modal Transportation**

<table>
<thead>
<tr>
<th>Trip Purpose</th>
<th>Automobile Dependent</th>
<th>Transit Oriented Development</th>
<th>Carfree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work commuting</td>
<td>🚗🚗🚗🚗🚗</td>
<td>🚗🚗🚗🚗🚗🚗</td>
<td>🚗🚗🚗🚗🚗</td>
</tr>
<tr>
<td>School commuting</td>
<td>🚗🚗🚗🚗🚗</td>
<td>🚗🚗🚗🚗🚗🚗</td>
<td>🚗🚗🚗🚗🚗</td>
</tr>
<tr>
<td>Work-related business</td>
<td>🚗🚗🚗🚗🚗</td>
<td>🚗🚗🚗🚗🚗🚗</td>
<td>🚗🚗🚗🚗🚗</td>
</tr>
<tr>
<td>Personal travel (errands)</td>
<td>🚗🚗🚗🚗🚗</td>
<td>🚗🚗🚗🚗🚗🚗</td>
<td>🚗🚗🚗🚗🚗</td>
</tr>
<tr>
<td>Social and recreation</td>
<td>🚗🚗🚗🚗🚗</td>
<td>🚗🚗🚗🚗🚗🚗</td>
<td>🚗🚗🚗🚗🚗</td>
</tr>
</tbody>
</table>

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total car trips</strong></td>
<td>21</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total transit trips</strong></td>
<td>1</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total non-motorized trips</strong></td>
<td>3</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td><strong>Total trips</strong></td>
<td><strong>25</strong></td>
<td><strong>25</strong></td>
<td><strong>25</strong></td>
</tr>
</tbody>
</table>
The table at left demonstrates two different scenarios for what a shift away from auto-dependence might look like. The total number of trips remains the same, but the distribution of trips between modes changes as other modes become more affordable and convenient.

In thinking about this shift, it’s also helpful to play with expressing transit subsidies in per capita units, rather than per mile.

High quality public transit typically requires about $268 in additional subsidies and $104 in additional fares annually per capita, but provides vehicle, parking and road cost savings averaging $1,040 per capita, plus other benefits:

- Congestion reductions
- Accident reductions
- Pollution reductions
- Improved mobility for non-drivers,
- Improved fitness and health
In assessing the economic impact of investing in infrastructure for multiple modes, some other costs that are frequently overlooked include vehicle and parking costs. There are also secondary costs in impacts to the real estate market, which raises serious questions about whether we are really recovering the cost of building transportation infrastructure through taxes if building gas-tax funded highways distorts the real estate market and produces harms property taxes.
This is a picture of two men riding an escalator up the stairs to a gym. It illustrates the fact that we in particular as a culture have some serious thinking to do about what it means to be active, and how and why we go about it. We’ve all heard about the obesity epidemic, and that walking and bicycling for transportation purposes are ways to incorporate activity into one’s routine. Measuring those benefits can reveal economic impacts beyond the health impact (see table below).
While obesity is a hot issue, the primary health benefits of building better infrastructure for pedestrians and cyclists are actually in the realm of safety. The graph above shows a linear relationship between per capita vehicle mileage and traffic fatalities per population unit - when people spend less time driving, there are fewer fatalities per capita, which makes intuitive sense. The data shown in the graph below make the same point even more powerfully from the transit perspective. In this figure we see that in cities with high annual per capita transit usage, there are exponentially fewer traffic fatalities per population unit.
Community Economic Impacts

- Project employment impacts.
- Reducing business transport costs (congestion, parking, taxes) increases productivity and competitiveness.
- Reducing vehicle expenditures and expanding transit service increases regional employment and business activity.
- Agglomeration efficiencies.
- Supports strategic land use development objectives.
- Increases affordability, allowing businesses to attract employees in areas with high living costs.
- Changes in household expenditures on vehicles and fuel.

Smart Growth Benefits

**Economic**
- Increased resource efficiency
- Lower development costs
- Lower public service costs
- Road and parking cost savings
- Economies of agglomeration
- More efficient transportation

**Social**
- Improved transport options, particularly for nondrivers
- Improved housing options
- Community cohesion
- Preserves unique cultural resources
- More opportunities to exercise

**Environmental**
- Greenspace & habitat preservation
- Reduced air pollution
- Increased energy efficiency
- Reduced water pollution
- Reduced “heat island” effect
Location-Efficient Development

- Locate affordable housing in accessible areas (near services and jobs, walkable, public transit).
- Diverse, affordable housing options (secondary suites, rooms over shops, loft apartments).
- Reduced parking requirements.
- Reduces property taxes and utility fees for clustered and infill housing.

Social Equity

Equity objectives:

- An equal share of public resources for people with equal needs.
- Savings and benefits to lower-income people.
- Increased opportunity to people who are physically, socially or economically disadvantaged.
- Basic mobility.
Community Livability & Cohesion

Community Livability refers to the environmental and social quality of an area as perceived by residents, employees, customers and visitors.

Community Cohesion refers to the quantity and quality of positive interactions among people in a community.

Streets that are attractive, safe and suitable for walking and cycling increase community livability and cohesion.

Motorists Benefit Too

More balanced transport policy is no more “anti-car” than a healthy diet is anti-food. Motorists have every reason to support these reforms:

- Reduced traffic and parking congestion.
- Improved safety.
- Improved travel options.
- Reduced chauffeuring burden.
- Often the quickest and most cost effective way to improve driving conditions.
To summarize, there are six parts to measuring the impact of non-motorized transportation (NMT) investments:

1) Multimodal Level-of-Service (LOS): measuring the quality of the service that all users are getting from the transportation system, rather than just motor vehicles.

2) Real estate impacts: Accounting for the impact that transportation infrastructure has on the housing market and indirectly property tax revenue.

3) Health impacts: Measuring benefits to individuals and society from active transportation and improved traffic safety, which has both direct health and indirect economic impacts.

4) Social equity: Tracking benefits to those who are physically, socially, or economically disadvantaged.

5) Community cohesion: The less measurable, but highly valued “quality of life” experience that is impacted by what types and kinds of transportation options are available.

6) Benefits to motorists!
SESSION 2 - What’s New in Category 2
David Levinger, Rails-to-Trails Conservancy and NTEC

Category 2 – A Nation-wide View

Pedestrian & Bicycle Safety & Education
David Levinger, Director of NTEC

TE Professional Seminar
Chattanooga, TN
September 14-17, 2010

Outline of Presentation
1. Definition & Purpose
2. Category 2 Case Studies
3. National Use of Category 2 Funding
4. Importance & Value
5. Guidance for Coordinators

I. Definition of Category 2

Working within Federal Highway Administration (FHWA) guidelines, each state DOT determines the eligibility of TE projects for funding. Examples of projects that may be considered eligible include:

- Non-construction safety-related activities, such as a safety promotional campaigns;
- Bicycle and pedestrian safety training;
- Training materials such as videotapes, brochures, and maps;
- Rent for leased space and limited short-term staff salaries.

DISCUSSION

- How do definitions in your states align or differ from this?

II. Exemplary Projects

- MI: Safe Routes
- NY: Chautauqua Safety Village
- WA: Safe Routes, Spokane education
- FL: WalkSafe
- CA: Healthy Transportation Network

These are just a few. Do you have any?

Michigan – SR2S Center

- Federal Award: $332,832.00
- Local Match: $83,208.00
- Total Cost: $416,040.00
- Year Programmed: 2003
- Develop community training and toolkit to assess and map safe routes to school.

Provided valuable experience and guidance nationally to SAFETEA-LU funded programs.
Michigan - SR2S Center

Utah – Commuter Education

- Statewide
- Federal Award: $200,000.00
  Local Match: $50,000.00
  Total Cost: $250,000.00
- Year Programmed: 2008
- Establish a statewide education program for commuter population targeting cyclists

New York – Safety Village

- Chautauqua County, NY
- Federal Award/Total Cost: $1,760,750.00
- Year Programmed: 2009
- The activity will provide targeted pedestrian or bicycle safety training not addressed by local schools or law enforcement in the community. It would fill this gap in education to meet the goals set forth by the Enhanced Program to provide safe transportation systems by construction of a traffic safety education facility for children ages 5 thru 10. The facility will include a 2,000 sq. ft. classroom building, and a 1.4 acre outdoor, child-size town. Hands on pedestrian and bicycle safety training will be provided. The facility will accommodate 20,000 visits per year.

DISCUSSION

- How many of you here have a project you’d like to mention?

III. National Use of Category 2

- 33 States of 50 fund Cat 2 projects
- 190 projects nationally since 1992
- Only 0.5% of cumulative TE funding
- Increasing trend from 90s to 2000s
## Trends in Category 2 Projects:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
<th>Project Count</th>
<th>Average Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total '93-'10</td>
<td>$37,002,833</td>
<td>190</td>
<td>194,752</td>
</tr>
<tr>
<td>2010</td>
<td>$1,442,099</td>
<td>6</td>
<td>240,350</td>
</tr>
<tr>
<td>2009</td>
<td>$957,080</td>
<td>6</td>
<td>159,513</td>
</tr>
<tr>
<td>2008</td>
<td>$2,926,333</td>
<td>16</td>
<td>182,896</td>
</tr>
<tr>
<td>2007</td>
<td>$7,139,993</td>
<td>18</td>
<td>396,666</td>
</tr>
<tr>
<td>2006</td>
<td>$7,973,415</td>
<td>35</td>
<td>227,812</td>
</tr>
<tr>
<td>2005</td>
<td>$1,159,090</td>
<td>12</td>
<td>96,591</td>
</tr>
<tr>
<td>2004</td>
<td>$1,578,949</td>
<td>13</td>
<td>121,458</td>
</tr>
<tr>
<td>2003</td>
<td>$2,247,970</td>
<td>11</td>
<td>204,361</td>
</tr>
<tr>
<td>2002</td>
<td>$4,597,398</td>
<td>27</td>
<td>170,274</td>
</tr>
<tr>
<td>2001</td>
<td>$2,880,597</td>
<td>15</td>
<td>192,040</td>
</tr>
<tr>
<td>2000</td>
<td>$1,520,974</td>
<td>13</td>
<td>116,998</td>
</tr>
<tr>
<td>1999</td>
<td>$1,327,000</td>
<td>4</td>
<td>331,750</td>
</tr>
<tr>
<td>1998</td>
<td>$316,168</td>
<td>5</td>
<td>63,234</td>
</tr>
<tr>
<td>1997</td>
<td>$123,426</td>
<td>2</td>
<td>61,713</td>
</tr>
<tr>
<td>1996</td>
<td>$31,964</td>
<td>1</td>
<td>31,964</td>
</tr>
<tr>
<td>1995</td>
<td>$136,376</td>
<td>2</td>
<td>68,188</td>
</tr>
<tr>
<td>1994</td>
<td>$0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1993</td>
<td>$580,000</td>
<td>2</td>
<td>290,000</td>
</tr>
</tbody>
</table>

## Discussion:

- Ought there be different metrics for this category than others?
- What are some of the reasons why a state would choose *not* to fund Category 2 projects?
IV. “Importance & Value”

Category 2 projects are often high-value and very important at advancing state-of-the-art. Reasons to fund Category 2 projects.

Smaller Projects

- Sometimes it is harder to get smaller projects funded than it is to get large-dollar projects funded.
- State DOT can serve as sponsor for nonprofits that would not otherwise have certification authority to make them eligible for federal funding.

Livability Agenda

- Education and Safety are critical aspects
- Biking & Walking are neglected modes and need soft programs that compliment infrastructure investments.
- Livability-relevant educational content may not appeal to those providing 402 funding.

Innovation

- TE has funded many notable innovations
- Can fund projects that are nascent ideas
- Low risk due to the nature of sponsorship
- Projects cut new ground and serve an important long-term function for new needs in the transportation system.

Large Constituency

- Unusual and powerful constituency for a DOT to have mobilized in their support
- Enables devolved decision-making, with selection of projects at regional level
- Delivers directly to constituents in a very visible and personal level.
SESSION 2 - What’s New in Category 2
Wendy Alfsen, California Walks

The Healthy Transportation Network is a project of the University of California at San Francisco Injury Center and the Safe and Active Communities Branch within the California Department of Public Health, with funding from the California Department of Transportation through TE. California WALKS and the Rails-to-Trails Conservancy deliver portions of the project through sub-contracts.

Healthy Transportation Network
- UCSF Injury Center – fiscal & other oversight
- CDPH Safe & Active Communities Branch – project management
- California WALKS – pedestrian safety
- Rails-to-Trails Conservancy – path B/P safety
- Local Government Commission – ped safety
- California Bicycle Coalition – bike safety

Healthy Transportation Network Projects
- Assessment of & Recommendations for CA DOT Employee B&P Safety Educational Opportunities
- Regional and Local Bicycle & Pedestrian Safety Education for Professionals & Residents
- Announce Opportunities for B&P Safety Education (CBC & California WALKS)
- B/P Safety Education Sustainability (post-HTN)
  (e.g., DOT employees: Training Delivery an element in adopted DOT Complete Streets Implementation Plan)

DOT Bicycle/Pedestrian Employee Education Assessment
- Review & Assess B/P Ed Opportunities
  Available to Caltrans (CA DOT) staff
- Interview mgt sample: HQ & District
- Employee Survey DOT Issued to 1000 Random s & HTN analyzed results
- Issue Report on DOT B/P safety training delivery – Successes and Challenges
- Review Findings w/ ATLC - DOT Advisory Committee
- Make Recommendations to DOT re Staff
  Bicycle & Pedestrian Safety Education

Major Function of HTN - B/P Safety EDUCATION Workshops
42 workshops/classes in 09-10 alone (6 year project)
Outcomes: Increased safety knowledge by residents and transportation professionals
- New Bicycle & Pedestrian Safety Improvement Projects
- Statewide growth in bicycle & pedestrian safety education (governmental and community)
  programming (over and above project efforts)
- Both safety workshops & subsequent B/P safety improvements (1-4 yrs not 5-10) frequently US
  DOT, CA DOT, Regional/Local decision-maker ribbon-cutting, greet residents/staff, media events

Basics of Pedestrian Safety – 8 E’s
- Engineering: Ingeniería
- Education - Educación
- Enforcement
  Aplicación de la ley
- Evaluation – Evaluación
- Emergency Response – Respuesta a emergencias
  (Strategic Highway Safety Plan’s 5 E’s)
- Environment: Safe, Healthy-Areas de Seguridad y Salud
- Encouragement - Motivación
- Engagement & Empowerment - Participación
EDUCATION for Pedestrian Safety

Street Banners: one idea

SLOW DOWN!
FOR OUR KIDS

Education for our Children
Learning Rules for Safe Crossing

- LOOK LEFT, RIGHT!
- Watch - Carefully!
- LISTEN
- LOOK behind, again
- LEFT!
- Walk carefully, catching driver's eye

ENGINEERING Basics for Pedestrian Safety

Sidewalk/Shoulder/Path Width

<table>
<thead>
<tr>
<th>Minimum</th>
<th>Desired</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2 m (4 ft) (AASHTO)</td>
<td>1.8+ m (6+ ft) (varies by use)</td>
</tr>
</tbody>
</table>

Source: RID, www.publicimages.org

ADA recommendation: 5' clear path of travel

Engineering

Traffic signals don’t ensure protection. When crossing with the light, Pedestrians are in greatest danger from Right & Left-turn movements of drivers

Crosswalk Visibility

Engineering — Pedestrian Countdown Signals

Pedestrians get more information about crossing safely

Signals can be set to give pedestrians a longer time to cross

Pedestrian Countdown Signals tell time left to cross
Healthy Transportation Network
Walk Safely Project

- Enforcement
- Emergency Response
- Evaluation

Community Enforcement and Reporting

Law Enforcement
Ticketing when there is no respect for pedestrians' rights to cross streets safely

Emergency Response
The difference between severe injury or death is often time and quality of emergency response

A little extra speed makes a big impact.

- Hit by a vehicle traveling at 20 MPH: 9 out of 10 pedestrians survive.
- Hit by a vehicle traveling at 30 MPH: 5 out of 10 pedestrians survive.
- Hit by a vehicle traveling at 40 MPH: only 1 out of 10 pedestrians survives.
WALKABILITY ASSESSMENTS
Evaluation -- Create a Baseline for Measuring Walking Safety Improvements

Healthy Transportation Network
Walk Safety Project

- Environment: Safe & Healthy
- Encouragement
- Engagement & Empowerment

Sidewalks/Marked shoulder: Walk Safety needed along the roadway

IN FRONT OF HOMES
AT THE PARK

No hay Banquetas todo el calle

Sidewalk Clear Path of Travel Safe For Daily Use

No Obstacles, Smooth, Shade, Shoveled, Level = SAFE

Safe & Healthy Environment -- Complete Streets

- One of our main community public spaces — streets — designed for people, not just for vehicles
- Streets safe for all users: Drivers, transit riders, bicyclists & pedestrians of all ages and abilities

Safe Environment -- Complete Roads
Where pedestrians & bicyclists travel: marked, wide, paved shoulders & safe crossings complete rural roads
Encouragement - Ánimo

Walking maps showing:
- Destinations: Farmers’ markets, parks, schools, health clinics
- Transit/Safety resources:
  - Transit Service & Steps
  - Traffic signs & countdown signals
- High visibility crosswalks
- Suitable speeds
- Safe crossing education

Encouragement - Ánimo
Delano City Walk 2007 ($500)

ENCOURAGEMENT — Events
Walk to School

Santa Ana, CA

Safety Education includes Walkability Assessment: WHY?

Shared experience of walking together creates agreement on safety changes that are necessary to increase walking.

Learning by doing (practical vs. academic)

Walkability Assessments: WHAT?

- Walk, noticing what we like and don’t like about where we’re walking: how safe is it?
- Share our safety experiences, opinions & ideas
- Identify issues and prioritize options for change improving safety
- Develop Consensus for a safety action plan

Engagement — Public Officials and City Staff

Many already working on pedestrian safety:
- Elected Officials
- Law Enforcement
- Public Works, Transit
- Public Health, Planning
- Community & Housing Development, Schools & Emergency Responders, Researchers
**Engagement: Reaching Consensus on Next Steps for Improving Community Pedestrian Safety**

- Keep Walking: Walking forges bonds, reclaims public spaces, improves safety
- Collaborative Plan for Continuing Safety Education
- Community Engagement
- Walk Safety Assessments with Community groups (youth, seniors, PTA, neighborhood, church, anti-graffiti, cultural)

**Empowerment: Next Safety Action Steps?**

- Develop Safe Routes or Pedestrian Safety Action Plans: Use 8 E’s
- Identify next steps and partner with Public Health, Schools, Law Enforcement, & Traffic Engineering for safety
- Seek funding for priorities
- Champion Needed Changes w/City, County &/or Region

**Empowerment: Community Voice deciding on pedestrian safety action plan**

**Info on Funding for Walk Safety**

- Safe Routes to School - improvements to streets within a mile of K-12 schools (City or County sub-applicant: School District, Hospital, NGO)
- DOT TE, EJ, CBTP & Strategic Growth (NGP 379) Planning grants, OTS
- Regional Transportation Plan Grants or Programs
- City or County Public Works paving, striping, sidewalk & signs budget
- Public Health, NGO (Real estate) & Non-Profit (AARP) grant funding
- Support funding campaigns: sugar beverage tax to fund anti-obesity and pedestrian safety programs in government budget; local transportation sales tax or user fee initiatives
- Plans: Pedestrian Safety Action Plans ($55k) or Master ($500k+/

**Expansion of TE Cat. 2 Safety Funding**

- B/P safety enhancement of Vehicle safety
- Job Creation: $40k increased one job to FT and created part time jobs for 6 people
- Safety education is opportunity for ribbon cutting (new B/P project outcomes 1-4 yrs to complete), meet/greet constituents, interact w/ US DOT, state DOT, regional MPO, locals and media and advance safety education

**Future Solutions to Contracting Barriers:**

- Change Federal Contracting Requirements: If program not large capital one, use more streamlined contracting process both federal and state government compliant and definition inclusive of typical education providers (e.g., DBE when NOT OWNED, could count employees + subcontractor/ suppliers in meeting req’t or categorical exemption where public contractor + not capital project
- State DOT Empowered to swap state matching $/use state contracting requirements, empowered to fund typical education providers without typical federal master agreements for such programs at TE Category 2 Safety and federal Safe Routes to School (e.g., SHOPP, CMAC, etc)
- Include in funding eligibility/preference NGO/NPO & public entities as well as private contractors

Presenter contact information:
Wendy Alfsen - California WALKS
www.californiawalks.org
wendyalfsen@californiawalks.org
510-684-5705
SESSION 3 - Big Money, Bad Projects? Communicating the Role of TE in the Highway Program
Tracy Hadden Loh, National Transportation Enhancements Clearinghouse

This session opened the floor to TE coordinators and FHWA division staff to discuss the role of the TE program in their state, and to share successes and struggles in defining and communicating that role.

Some ideas about the role of TE in the highway program are listed above. One idea not listed that was mentioned by a participant was that the program plays a special role in building transportation infrastructure in small towns that are otherwise bypassed by the highway system. Another idea was empowering grassroots participation in transportation. This led to a robust discussion in which participants shared the joys and frustrations of working on a program where projects are community-oriented, rather than oriented towards more objective targets like mobility. The program allows planners and sponsors to “think outside the box” and focus on quality of life, but sometimes can be like choosing peanut butter - there are emotions behind every project that are impossible to measure and weigh, just like some people prefer chunky or smooth peanut butter. Building a TE project is about implementing a vision, which can be a heavy burden. And on the down side, making these federal monies available for local projects leads many to perceive the program as a source of “free” money, or for politicians to treat the program as a slush fund. And because the focus of the program is on quality of life, it is sometimes perceived as an amenity or a frill.

Another common misperception that participants mentioned not listed here is that TE is for undergrounding utilities. While TE funds have been used for this in the past, it is not legal in every state, and it is extremely expensive on a per-mile basis.

One of the issues with the program is that there isn’t a great deal of documentation from Congress or the executive branch specifying a vision and goals for the program. Whatever the role of the program is, clearly it is a small one, as illustrated in the bar chart on the following page - TE is roughly 2% of the Federal-aid Highway Program as a whole.

Would cutting TE save the Highway Trust Fund, balance the budget, or reduce the deficit? While every small program can make this argument, the fact of the matter is that the HTF’s problem is not simply spending. The second graph on the following page shows the balance of the HTF annually, and beginning in 2008, falling revenues bankrupted the account. Without new revenue, even the most drastic spending cuts will not balance the account.
Highway Account Balance

Ending balance for FY 2008 includes $8.017 billion transferred from the General Fund in September 2008 pursuant to Public Law 110-318.
The discussion next turned to addressing why the question of whether there are better uses for dollars than TE is so often raised. We looked at a case study of two wildlife crossings, one of which was built, and one of which was canceled after a media firestorm.

In the Arizona case, the slide above quotes a media interview with a local resident suggesting that money should be used for local schools rather than the squirrels. ADOT responded to this critique by arguing that they would have to return the money to the federal government if they did not use it on the squirrels. This exchange is a very typical mis-communication about TE. On the one hand, the basic fiscal principle that transportation funds are for transportation uses is not understood or agreed upon by the citizen quoted. On the other side, ADOT focused on emphasizing the mandatory nature of the TE set-aside rather than the merit of the project. In discussion, participants identified some key problems with the Arizona case. First, the public involvement, TE, and ADOT environmental people did not have ‘one message.’ Second, and this applies specifically to wildlife crossings, there did not appear to be any participation from US Fish and Wildlife, even though the squirrels are an endangered species. ADOT should not have proceeded with this project without the strategic support of that agency. Finally, the project was selected by ADOT for stimulus funds, rather than by the local area that is home to the squirrels. Local buy-in is critical to any TE-type project.

This assertion was borne out in the second case study, a turtle crossing in Florida made famous by Senator Coburn. In this case, the passionate local advocates who advanced the project effectively communicated the relationship to surface transportation and reached out to a broad variety of constituents to win their support for the project. FDOT was able to proceed with the project and complete it despite national negative media attention, to the great satisfaction of the real stakeholders involved.
During our discussion about communication, and what NTEC can do to help, participants raised the idea of creating an awards program or excellence certificate to recognize TE projects that get it “right.” Some potential criteria that were suggested included: local support, transformation, visibility/impact, justice, popularity/lots of users, educational, positive health impact. We are actively pursuing this idea.

Presenter contact information:

Tracy Hadden Loh
Program Coordinator
National Transportation Enhancements Clearinghouse
www.enhancements.org
202-974-5155
tracy@enhancements.org
Q: For ADA compliance on rural greenways, are grades of 4.99% or less required?

A: When talking about a building, there are standards. However, outdoor public rights-of-way are different. It is not a federal requirement that recreation facilities meet that grade standard - there are exemptions. However, when the path is for transport (shared-use), we have questions about what is appropriate. The Guidance covers a number of accessibility issues at [http://www.fhwa.dot.gov/environment/te/guidance.htm#access](http://www.fhwa.dot.gov/environment/te/guidance.htm#access). For a public ROW, the first question to ask is “is it located on federal lands?” If so, then the Access Board’s Public ROW Guidelines, available online at [http://www.access-board.gov/prowac/index.htm](http://www.access-board.gov/prowac/index.htm), apply. Otherwise, the Access Board’s Outdoor Areas Guidelines apply, available online at [http://www.access-board.gov/outdoor/index.htm](http://www.access-board.gov/outdoor/index.htm). This latter document describes exceptions that allow going up to 8% or even 12% grade.

Q: A major trail project had a feasibility study in 1999. The study area was 60 miles of an abandoned rail line owned by a utility. The group working on the project has got easements in place, but now the ROW office says that they need to prove that at the time they started negotiations the utility was notified that they were entitled to fair market value and that they were giving up that value. Is that true?

A: 23 CFR 710.511 ([http://www.fhwa.dot.gov/environment/te/gmemo_rightofway.htm](http://www.fhwa.dot.gov/environment/te/gmemo_rightofway.htm)). If the qualified conservation organization was not acting on behalf of a Federal-aid funded agency and there was no Federal approval of property acquisition prior to the involvement of the conservation organization, then the Uniform Act does not apply.

Q: Developing a good Purpose & Needs Statement for NEPA, especially for ones that need quality categorical exemption documents, can be challenging and time-consuming. Can we create a library of these documents, or develop guidance on how to write these documents for local sponsors?

A: Great question, but this is outside the scope of what FHWA can handle for TE right now. A potential work item for NTEC in the future.

Q: The owner of a farm property under a scenic easement acquired with TE funds wants to install solar panel trackers. The easement allows changes to the property that are necessary to maintain its agricultural function. Does it pass the “laugh test” to argue that this change is a “solar orchard”?

A: This should be decided by a landscape architect or other professional who can do an expert visual impact assessment and get more detail about the property and proposed changes in question.

Q: Are historic vehicles eligible for restoration?

A: It has already been done for rail cars, canal boats, and cars. The usual issues of maintenance, public access, and historic-ness apply.

Q: How do other states incorporate TE projects into bigger projects?

A: Segregated estimates.

Q: Can prison labor be used for construction on TE projects?

A: If the project is located in a Federal-aid Right of Way, the answer is NO. If off-system, and the project is not a highway construction project, then wage rates do not apply to convicts.
Appendix A: Site Visit Handout

21st Century Waterfront:
Phase I Pedestrian Connections

Tennessee Department of Transportation
Transportation Enhancement Program

City of Chattanooga

Application for Fiscal Year 2003
Submitted: July 1, 2002
TENNESSEE DEPARTMENT OF TRANSPORTATION 
ENHANCEMENT PROGRAM APPLICATION

Project Title: 21st Century Waterfront Phase I Pedestrian Connections

FEDERAL FUNDING:

<table>
<thead>
<tr>
<th>Total Project Cost</th>
<th>Federal Funds Requested (80%)</th>
<th>Local Match (minimum of 20% Total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 5,800,000</td>
<td>$ 4,640,000</td>
<td>$ 1,160,000</td>
</tr>
</tbody>
</table>

APPLICANT:

Name of City/County or State Agency:
City of Chattanooga
Address:

Contact Person, Phone Number and E-mail Address:
Jeff Pfitzer (423) 757-5123 pfitzer_j@mail.chattanooga.gov

OTHER PARTICIPANTS:
If the local government expects to subcontract any work, other than by competitive bidding, or if the project facilities are to be owned, operated or maintained by other than the local government, please provide the following information. (If more than one organization, please attach a separate sheet.)

Organization Name:
Address:

Contact Person, Phone Number and E-mail Address:

Summary of Organization's Role in Project: (Please provide details in Section 1)

I hereby certify that, to the best of my knowledge, the information submitted with this application is accurate and that funds are available for the local share of the project as described herein.

Signature: [Signature]  
(Mayor or County Executive)  
Date ____________________________

Title ____________________________

NOTE: LOCAL AGENCY DEPARTMENT HEADS MAY NOT SIGN THE APPLICATION.  
THE HIGHEST ELECTED OFFICIAL OF A LOCAL AGENCY MUST SIGN.
SECTION 1. ENHANCEMENT ACTIVITIES

The 21st Century Waterfront Phase I Pedestrian Connections includes the following Enhancement activities:

1. Facilities for pedestrians.
   a. This is a sidewalk/step/bridge project that is comprised of 5 major components described in Section 2.

5. All segments of this project will include landscaping, lighting and other components that will beautify the area in keeping with or exceeding the beauty of other high-quality pedestrian facilities in the downtown and riverfront area.
SECTION 2. PROJECT DESCRIPTION

Project Name: 21st Century Waterfront Phase I Pedestrian Connections.

Context: This proposal is a direct result of our 21st Century Waterfront Plan, which comprises 129 acres on both sides of the river stretching from Veteran’s Bridge on the east to Moccasin Bend and M.L. King Boulevard on the west. Pedestrian connections are a key element that weaves throughout the six districts of the plan and ties the entire plan together, connecting the pieces—and connecting the riverfront to downtown. This proposal concerns the easternmost of those six districts: the First Street Steps district.

Project Location: (See following map and photos.) This project is comprised of multiple elements in the northern blocks of downtown Chattanooga - where the Central Business District meets the south shore of the Tennessee River. These elements join together at the Hunter Art Museum on the bluff at the end of High Street. The individual components of the project are as follows (listed north to south and west to east):

1. First Street Pedestrian Path. The western terminus of this path is the Tennessee Aquarium on the west side of Market Street where the Aquarium will soon be building their main entrance as a part of their new expansion project. The path crosses Market Street and continues east along First Street up a hill with a series of paths and steps to terminate at the turn-around on Walnut Street at the south end of the Walnut Street Bridge where it will provide access to the Walnut Street Bridge and the First to Walnut Pedestrian Bridge (below) for a total length of approximately 950 feet.

2. First to Walnut Pedestrian Bridge is a pedestrian bridge that will serve to connect from the Hunter Museum of American Art and Bluff View Arts District, across Riverside Drive, to the north end of Walnut Street at the Walnut Street Pedestrian Bridge. The bridge will be approximately 230 feet in length.

3. Second Street Pedestrian Path begins at the intersection of Market Street and Second Street and travels east along Second Street to a new intersection at Second Street and Riverside Drive (TDOT project STP-M-9202(80)) where it crosses Riverside Drive and meets the base of the Second Street Stairs (below) for a length of approximately 950 feet.

4. Second Street Stairs is a pedestrian facility that will serve to connect the Bluff View Arts District and the Hunter Museum of American Art to the intersection of Second Street and Riverside Drive where a new crosswalk will link the Arts District to the rest of the downtown area via Second Street.
PROJECT DESCRIPTION

Project Name: 21st Century Waterfront Phase I Pedestrian Connections.

Context: This project is comprised of a variety of pedestrian connections serving to connect the riverfront and downtown to the Bluff View Arts District and the Tennessee River Walk.

Project Location and Description: This project is comprised of multiple elements in the northern blocks of downtown Chattanooga. The individual components of the project are as follows (listed north to south and west to east):

1. Ross's Landing marina to First Street Pedestrian Path. This pedestrian path begins south of Riverside Drive opposite the Ross's Landing marina, and generally follows a realigned Riverside Drive along the south of the roadway to the new Chattanooga Green park. Traveling through the park and the Tennessee Aquarium Plaza, this path connects to the base of First Street at the Aquarium Plaza.

2. First Street Pedestrian Path. The western terminus of this path is the Tennessee Aquarium plaza on the west side of Market Street. The path crosses Market Street and continues east along First Street up a hill with a series of paths and steps to terminate at the turn-around on Walnut Street at the south end of the Walnut Street Bridge where it will provide access to the Walnut Street Bridge and the First to Walnut Pedestrian Bridge (below) for a total length of approximately 950 feet.

3. Funicular. The First Street segment includes a mechanized pedestrian transport to facilitate pedestrian access up the steep grade of First Street to the Riverwalk trail at the end of Walnut Street Bridge.

4. Second Street Stairs is a pedestrian facility that will serve to connect the Riverwalk trail, Bluff View Arts District and the Hunter Museum of American Art to the rest of the downtown area including an improved pedestrian crosswalk at the intersection of Second Street and Riverside Drive.
Project Location

The Project is located in Hamilton County, in the City of Chattanooga, Tennessee.

Hamilton County. See details of inset on next page.
21st Century Waterfront:  
Phase I Pedestrian Connections

The 21st Century Waterfront Phase I Pedestrian Connections includes the following Enhancement activities:

Facilities for pedestrians including sidewalks, steps, crosswalks, and a mechanized pedestrian transport (Funicular). All segments of this project will include landscaping, lighting and other components that will beautify the area in keeping with or exceeding the beauty of other high-quality pedestrian facilities in the downtown and riverfront area.

Project Location

The Project is located in Chattanooga, Tennessee (Hamilton County). See area maps following.
**PROJECT BUDGET**

**Estimated Cost**

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
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<tbody>
<tr>
<td>Marina to First Street Pedestrian Path</td>
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<tr>
<td>First Street Pedestrian Path</td>
<td>$1,900,000</td>
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<tr>
<td>Funicular</td>
<td>$800,000</td>
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<tr>
<td>Second Street Stairs</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>$4,700,000</td>
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</table>

**Revenue**

| Enhancement Request                       | $2,500,000 |
| Local Match (21st Century Waterfront Trust) | $625,000   |
| Additional Local Funds                    | $1,575,000  |
| **TOTAL**                                  | $4,700,000  |
First Street Pedestrian Path. Looking west along First Street with the Tennessee Aquarium in the background and new townhouse development on the left. The path will continue past the viewer through a plaza (below) to the south end of the Walnut Street Bridge and the First Street Pedestrian Bridge.

Artist's conceptual rendering of the First Street Pedestrian Path between Market Street and Walnut Street.
“How do you get there from here?” The First Street Bridge will cross Riverside Drive providing a connection from the Walnut Street turnaround (foreground) at the west end of the First Street Pedestrian Path to the Hunter Museum of American Art.

Artist’s conceptual rendering of the First Street Pedestrian Bridge.
The current east end of Second Street awaiting realignment, a new intersection with Riverside Drive, and Second Street Pedestrian Path improvements.

Looking across Riverside Drive from the end of Second Street where TDOT project STP-M-9202(80) will create a new intersection near the base of the Second Street Stairs. This is also the eastern terminus of the Second Street Pedestrian Path.
Artists rendering plan view of the project area.
SECTION 3. PROJECT BUDGET

Estimated Cost

<table>
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<th>Item</th>
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<tr>
<td>First Street Pedestrian Path</td>
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<td>Second Street Stairs</td>
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**TOTAL**

$5,800,000

Revenue

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<td>Enhancement Request</td>
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<tr>
<td>Local Match (21st Century Waterfront Trust)</td>
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**TOTAL**

$5,800,000

These estimates are based on our 21st Century Waterfront Plan consultants' implementation budget. They have been confirmed as appropriate by Engineers and Architects with the City of Chattanooga and the Chattanooga Design Studio. Costs include site preparation and construction of the facilities, including landscaping, irrigation, lighting, street furniture, hand rails, bike racks, signage, trash receptacles, public art, and other elements necessary to create a standard of facilities that will compliment or exceed our other high-quality pedestrian facilities in this area.
SECTION 4. OPERATION AND MAINTENANCE COST

The City of Chattanooga will maintain all aspects of this facility through the operating budget of Parks Recreation Arts and Culture. Their budget is set by City Council and is funded from the City of Chattanooga's general fund.

Past experience with similar facilities at the Tennessee Riverpark, Coolidge Park, and Walnut Street Bridge tells us that maintenance costs, including security, runs approximately 6% of construction cost annually. With a construction cost of $5,800,000, maintenance and security is anticipated to cost approximately $290,000 annually. The City of Chattanooga is fully committed to fund maintenance and security for the life of these facilities.
SECTION 5. SUPPORT AND COMMITMENT

The MPO endorsed this proposal at their June board meeting. Their resolution is included with letters of support at the end of this document. The project is in the 10th Senate District, the 28th House District, and the County of Hamilton. Letters from Senator Ward Crutchfield, County Executive Claude Ramsey, and our Mayor Bob Corker are included. A letter from Representative Tommie Brown was not available at the time printing due to her schedule in Nashville dealing with the state budget crisis.

This project is the result of an extensive public planning process. Such planning processes have become second nature for Chattanooga and are responsible for much of our Downtown revitalization and continuing redevelopment. Guided by a waterfront planning consultant team lead by Hargreaves & Associates, hundreds of Chattanoogans participated in a series of meetings that culminated in a three day planning charrette.

Recurring themes emerged from the meetings: fully connect the community to and along the river; provide a unique and authentic Chattanooga experience; create a 24-hour riverfront; get the key projects started right away. The projects identified in this proposal are derived directly from the 21st Century Waterfront Plan, and serve to aggressively begin implementation of the Plan.

The full Executive Summary of the 21st Century Waterfront Plan is attached as an addendum to this application. As you can tell from the language of the summary, we are excited about the future of Chattanooga and the possibilities contained within this plan. Mayor Bob Corker has initiated a 21st Century Waterfront Trust Fund to bring $100,000,000 of investment to the table to implement the Plan.

At the end of this application you will find letters of support from many of those who work hard to make Chattanooga a great place to live, visit, and do business. The Tennessee Aquarium tells how the elements in this proposal will support their upcoming expansion and serve to connect their patrons to other local attractions. Our Chamber of Commerce describes the importance of these connections to local tourism and related industries. Chattanooga Land Company writes of their commitment to continued investment in this area and the excitement of the development and investment community for this Plan. Hunter Museum is excited to be once again connected to Downtown Chattanooga via the street grid and these new pedestrian connections.

Our enthusiasm in genuine and contagious because Chattanooga has demonstrated an ability to realize its downtown plans. As with the initial Tennessee Riverpark vision, Tennessee Department of Transportation’s assistance is once again a critical piece of our future.
SECTION 6. ENHANCEMENT OF THE TRANSPORTATION SYSTEM

The 21st Century Waterfront Plan Phase I Pedestrian Connections serve multiple functions in the transportation system. To First of all, these connections solve a problem of “you can’t get there from here.” Currently the only access to Hunter Museum and the Bluffview Arts District from the north end of the CBD requires a circuitous route either down to the river and back up or around several blocks via Third and High Streets. In effect, where you can see the Hunter Museum less than a block away from the north end of Walnut Street – a frequently traveled location for area residents and tourists alike – “getting there” requires a six block walk. This has effectively disconnected the Hunter Museum and Bluffview Arts District from much of downtown for many years.

Not only does this project connect these important areas within the Waterfront District, it also connects east to the Chickamauga Dam via the soon to be completed final segment of the Tennessee Riverpark. Linkage to the Riverpark provides access to 22 miles of greenway and parks along the south shore of the Tennessee River.

Pedestrian Connections

Ongoing improvements to the south on Third and Fourth Streets and along Market Street complete the north CBD downtown pedestrian grid, providing access to the redevelopment currently underway in the Southside. Sidewalks continue that connection south to Jefferson Heights, Fort Negley, and Rustville, neighborhoods and beyond; east to the M.L. King and Fortwood
neighborhoods and the University of Tennessee at Chattanooga campus; and west to the Westside neighborhood.

This project also enhances opportunities for pedestrians to travel from downtown Chattanooga north across the Walnut Street Pedestrian Bridge to the North Shore district – where Coolidge Park provides a fun-filled backdrop to shopping and dining opportunities along Frazier Avenue. The neighborhoods of North Chattanooga, Riverview, and Hill City will also enjoy increased access to culture, entertainment, dining and retail on the southside of the river. This project effectively provides missing links to bring the North Shore district, the Central Business District, the UTC, and the Southside into a cohesive walkable environment.

Public Transportation Connections

Free Downtown Shuttles and CARTA bus lines provide additional access to the areas served by this Project for the entire ridership of our public transportation system.

Bicycle Connections

Bicycle racks will be included in these facilities. The facilities will link to downtown projects outlined in our recently adopted Bicycle Master Plan. Funding for the downtown portion of that plan has been allocated and some improvements are already in place.

Intermodal Nature of Facilities

These facilities will serve to enhance the intermodal transportation system in function by creating critical connections, by proximity and connection to other pedestrian and bicycle facilities, and have an impact of reducing automobile traffic in the area. This Project is “where it all comes together” in Downtown Chattanooga for our intermodal transportation system.
SECTION 7. ECONOMIC DEVELOPMENT

During the years that The Hunter Museum has been disconnected from the CBD, not only has the Tennessee Aquarium brought millions of visitors annually to the Waterfront area, but the Arts district has bloomed into an idyllic destination for shopping, eating, and lodging, culture, and relaxation. Several blocks of prime downtown real estate lie between these two destinations. Much of this land has been used for many years by a prominent local employer as surface parking. With the construction of their new parking deck, much of that land will be available for new development. With the local street grid reestablished – which is happening at Riverside Drive and Second and Lookout Streets thanks to TDOT project STP-M-9202(80) – several other blocks of property also become available as prime development locations. The pedestrian connections in this project serve to tie all of this land and these two established anchors together and to the rest of downtown Chattanooga. Then with connections to the Riverpark and down Riverside Drive to the Ross’s Landing Marina the whole south shore of the Tennessee River becomes a pedestrian friendly community with tremendous opportunity for economic growth and development.

The foreground of this artists rendering shows new restaurant site at Ross’s Landing Marina and a new mixed-use housing development along Riverside Drive. New housing and retail development can be seen on the right, behind the baseball field. And in the distance beyond the Aquarium is new housing and retail along First and Second Streets. The pedestrian links in this proposal tie it all together.

Just east of the Project, the revitalization of the Ross’s Landing Park is a cornerstone of the 21st Century Waterfront Plan. Here at the birthplace of the city, the vision includes a reconfigured Riverfront Parkway allowing for an enlarged and enhanced
riverside park. The trailhead of the Trail of Tears is honored here, and much-needed docking facilitates accommodates transient boaters. An expanded marina, water taxis, riverfront cafés and residential units and commercial development bring a new vitality to the area known as the “front porch” of the city. The crown jewel is the expansion of the Tennessee Aquarium—the finest freshwater aquarium in the world.

Further west the 21st Century Waterfront Plan calls for the extension of M.L. King Boulevard to the river and the development of Cameron Harbor. Cameron Harbor is proposed as a waterfront mixed-use district with housing, offices, restaurants and shops. Taken together the impacts of these proposed developments are tremendous—not only on all of Chattanooga, but on the surrounding region as well. Increased quality of life makes Chattanooga a more attractive place for families and businesses to locate and emphasize Chattanooga’s place in the region as a great place to visit or live with a wide range of quality amenities for everyone from residents or tourists looking for a fun way to spend a week or a day to investors looking for an exciting place to do business.

The past three years have been the best years in the recent history of downtown for economic growth and development. We are a regional city with world class attractions. Our Aquarium, Coolidge Park, and Riverpark are exemplary amenities not usually seen in a city this size. Frazier Avenue, across the Tennessee River from the CBD via the Walnut Street Pedestrian Bridge, has seen unprecedented growth and development in recent years. And surrounding neighborhoods have seen a boom in redevelopment and steady rise in property value. Connecting these new development opportunities to one another, to the North Shore successes, and to the rapidly emerging CBD and Southside redevelopment creates unprecedented opportunities for growth and development of Chattanooga’s Waterfront as the premier location to live, work or play in our region.

So, not only is this project central to $100,000,000 of new development being aggressively pursued by the City of Chattanooga and the River City Company, but the direct economic impact to area businesses and attractions is expected to be exceptional.
SECTION 8. DIRECT AND INDIRECT BENEFITS

Direct Benefits

Direct benefits have been detailed in sections 6 and 7.

People Served Annually

This Project will serve approximately 3-4 million people per year simply by connecting existing uses. In addition, this project is central to the execution of the overall plan which is part of the Mayor’s challenge to private development interests to build 750 housing units in downtown Chattanooga within the next three years. Adding these residents to the area will create a 24-hour presence in the Waterfront District and significant additional uses.

Fees or Charges

There will be no fees or charges associated with use of the facilities.

Indirect Benefits

As mentioned in above section, Frazier Avenue, Coolidge Park, Bluffview Arts District, and Tennessee Aquarium are all major traffic generators that will see increased ease in attracting each other’s patrons. The quality of the environment in this area will increase greatly – residents and visitors alike will be enticed to stay longer, do more, and generally stimulate the economic environment of the entire Waterfront District on the north and south shores of the river. Annual visitation to downtown should continue to increase with the improvements that these facilities will provide, ensuring increased bookings for local hotels, tickets to ballgames, meals, and patronization of attractions, gift shops, museums and galleries in the area.

In summation, the impacts of the 21st Century Waterfront Plan, spinning off of these pedestrian connections, should insure the continuation of our past years of record economic growth in this area.
SECTION 9. PROPERTY OWNERSHIP / ACQUISITION

Land Ownership

All of the land necessary for the project falls within public ownership or lease with the exception of one block of the First Street Pedestrian Path. Hunter Museum of American Art is committed to purchase this property and deed the necessary public space to the City of Chattanooga.

State Highway Right-of-Way

One portion of the project crosses a state highway right-of-way. The beginning of the First Street Pedestrian Path will include a pedestrian crossing across Market Street (SR 8).
SECTION 10. IMPLEMENTATION

The 21st Century Waterfront Plan represents the unfinished business that was begun with the Tennessee Riverpark Master Plan and stands as another testament to Chattanooga’s ability to forge bold new visions punctuated by aggressive implementation.

Matching funds for this project will come from the Mayor’s 21st Century Waterfront Trust, and are guaranteed to be available for this project by the River City Company.

Implementation Plan

River City Company has already hired consultants to do preliminary field work and schematic design for the overall plan. This work should be completed in 4-5 months, at which time design and development can proceed – assuming that we have a commitment for Enhancement funds in place. Construction of the Project should be completed within 30 months from beginning of design.

Anticipated “holdups”

There are no anticipated holdups once Enhancement funds are awarded.
SECTION 11. ENVIRONMENTAL CHECKLIST

There has been no documentation prepared for the proposed project. There are no anticipated impacts in any of the listed categories: Social Environment, Natural Environment, Cultural Environment, and Physical Environment. There are no permits required to complete this project.
SECTION 12. ANTICIPATED IMPACTS

There are no anticipated impacts.
A City Disconnected From Its River
September 6, 2010

Obama Offers a Transit Plan to Create Jobs

By SHERYL GAY STOLBERG and MARY WILLIAMS WALSH

MILWAUKEE — President Obama, looking to stimulate a sluggish economy and create jobs, called Monday for Congress to approve major upgrades to the nation’s roads, rail lines and runways — part of a six-year plan that would cost tens of billions of dollars and create a government-run bank to finance innovative transportation projects.

With Democrats facing an increasingly bleak midterm election season, Mr. Obama used a speech at a union gathering on Labor Day, the traditional start of the campaign season, to outline his plan. It calls for a quick infusion of $50 billion in government spending that White House officials said could spur job growth as early as next year — if Congress approves.

That is a big if. Though transportation bills usually win bipartisan support, hasty passage of Mr. Obama’s plan seems unlikely, given that Congress has only a few weeks of work left before lawmakers return to their districts to campaign and that Republicans are showing little interest in giving Democrats any pre-election victories.

Central to the plan is the president’s call for an “infrastructure bank,” which would be run by the government but would pool tax dollars with private investment, the White House says. Mr. Obama embraced the idea as a senator; with unemployment still high despite an array of government efforts, the concept has lately been gaining traction in policy circles and on Capitol Hill.

Indeed, some leading proponents of such a bank — including Gov. Arnold Schwarzenegger, Republican of California; Gov. Ed Rendell, Democrat of Pennsylvania; and Michael R. Bloomberg, the independent mayor of New York — would like to see it finance a broader range of projects, including water and clean-energy projects. They say such a bank would spur innovation by allowing a panel of experts to approve projects on merit, rather than having lawmakers simply steer transportation money back home.

“It will change the way Washington spends your tax dollars,” Mr. Obama said here, “reforming the haphazard and patchwork way we fund and maintain our infrastructure to focus less on wasteful earmarks and outdated formulas, and more on competition and innovation that gives us the best bang for the buck.”
But the notion of a government-run bank — indeed, a government-run anything — is bound to prove contentious during an election year in which voters are furious over bank bailouts and over what many perceive as Mr. Obama pursuing a big government agenda. Even before the announcement Monday, Republicans were expressing caution.

“It’s important to keep in mind that increased spending — no matter the method of delivery — is not free,” said Representative Pat Tiberi, an Ohio Republican who is on a Ways and Means subcommittee that held hearings on the bank this year. He warned that “federally guaranteed borrowing and lending could place taxpayers on the hook should the proposed bank fail.”

The announcement comes after weeks of scrambling by a White House desperate to give a jolt to the lackluster recovery, and is part of a broader package of proposals that Mr. Obama intends to introduce on Wednesday during a speech in Cleveland. The transportation initiative would revise and extend legislation that has lapsed.

Specifically, the president wants to rebuild 150,000 miles of road, lay and maintain 4,000 miles of rail track, restore 150 miles of runways and advance a next-generation air-traffic control system.

The White House did not offer a price tag for the full measure or say how many jobs it would create. If Congress simply reauthorized the expired transportation bill and accounted for inflation, the new measure would cost about $350 billion over the next six years. But Mr. Obama wants to “frontload” the new bill with an additional $50 billion in initial investment to generate jobs, and vowed it would be “fully paid for.” The White House is proposing to offset the $50 billion by eliminating tax breaks and subsidies for the oil and gas industry.

After months of campaigning on the theme that the president’s $787 billion stimulus package was wasteful, Republicans sought Monday to tag the new plan with the stimulus label. The Republican National Committee called it “stimulus déjà vu,” and Representative Eric Cantor of Virginia, the House Republican whip, characterized it as “yet another government stimulus effort.”

But Governors Rendell and Schwarzenegger, and Mayor Bloomberg, who in 2008 founded a bipartisan coalition to promote transportation upgrades, praised Mr. Obama. And in policy circles, the plan, especially the call for the infrastructure bank, is generating serious debate.

“This is a very ripe policy question now,” said Robert Puentes, a senior fellow at the Brookings Institution’s Metropolitan Policy Program, who has been working for several years on blueprints for a bank.

On Capitol Hill, Representatives James L. Oberstar, Democrat of Minnesota and chairman of the House Transportation and Infrastructure Committee, has been developing his own bill, as has Representative Rosa DeLauro, Democrat of Connecticut.
Ms. DeLauro’s plan would create an infrastructure bank that would be part of the United States Treasury, where it would attract money from institutional investors, then channel the funds to projects selected by a panel. The program, which would make loans much like the World Bank, would finance projects with the potential to transform whole regions, or even the national economy, the way the interstate highway system and the first transcontinental railway once did.

The outside investors would expect a competitive return on their money, so many of the completed projects would have to charge fees, taxes or tolls. In an interview, Ms. DeLauro said she would be “looking at a broader base,” meaning the bank would finance not just roads and rails, but also telecommunications, water, drainage, green energy and other large-scale works.

But if the projects did not raise enough money, the Treasury might get stuck paying back the investors, a prospect that gave pause to so-called deficit hawks like Mr. Tiberi. In an e-mail last week, he said he agreed the nation’s road and communications networks needed to be improved but was concerned about creating another company like Fannie Mae that might need a bailout.

Inside the White House, the idea for a transportation initiative, and in particular an infrastructure bank, is one that the White House chief of staff, Rahm Emanuel, has been promoting. It was not included in the original $787 billion stimulus program because the administration and Congressional Democratic leaders wanted to pass that package as quickly as possible.

There is no shortage of projects in search of money. The problem, analysts say, is that Congress, which would create the bank, is not known for its ability to single out strategic priorities for growth. Instead, it traditionally builds broad support by giving a little something to everybody — Montana, for instance, would get a small amount of Amtrak money in return for its support for improvements along the Northeast corridor.

“We don’t prioritize,” Mr. Puentes said. “We take this kind of peanut butter approach of spreading investment dollars around very thinly, without targeting them.”

Samuel Staley, director of urban growth and land-use policy for the Reason Foundation, a libertarian research group, said the best way to spend money efficiently would be to establish the bank as a revolving loan fund so that money for new projects would not become available until money for previous projects had been repaid.

Mr. Staley expressed concern that in their zeal to spur growth and create jobs, Congress and the Obama administration would not impose such limits.

“With the $800 billion stimulus program, they were literally just dumping money into the economy,” he said. “There was little legitimate cost-benefit analysis.”

Sheryl Gay Stolberg reported from Milwaukee and Mary Williams Walsh from New York.
Renewing and Expanding America’s Roads, Railways, and Runways

The President today laid out a bold vision for renewing and expanding our transportation infrastructure – in a plan that combines a long-term vision for the future with new investments. A significant portion of the new investments would be front-loaded in the first year.

This plan would build on the investments we have already made under the Recovery Act, create jobs for American workers to strengthen our economy now, and increase our nation’s growth and productivity in the future. At the same time, the plan would reform the way America currently invests in transportation, changing our focus to enhancing competition, innovation, performance, and real analysis that gets taxpayers the best bang for the buck, while moving away from the earmarks and formula debates of the past. In prior years, transportation infrastructure was an issue that both parties worked on together, and the Administration hopes the same can be true now.

Some of the tangible accomplishments of the President’s plan over the next six years include:

- **ROADS:** Rebuild 150,000 miles of roads – renewing our commitment to the backbone of our transportation system;

- **RAILWAYS:** Construct and maintain 4,000 miles of rail – enough to go coast-to-coast;

- **RUNWAYS:** Rehabilitate or reconstruct 150 miles of runway – while putting in place a NextGen system that will reduce travel time and delays.

The President’s plan would accomplish this through:

- **An up-front investment.** The President will work with Congress to enact a new up-front investment in our nation’s infrastructure – an investment that would help jump-start additional job creation, while also laying the foundation for future growth. This initial investment would fund improvements in the nation’s surface transportation, as well as our airports and air traffic control system.

- **A vision for the future.** The President proposes to pair this with a long-term framework to reform and expand our nation’s investment in transportation infrastructure. Since the end of last year, when the last long-term surface transportation legislation expired, these investments have been continued on a temporary basis, even as the trust fund to finance them has fallen into insolvency. If we are to enjoy the benefits that come from a world-class transportation system, Congress must enact a long-term reauthorization that expands and reforms our infrastructure investments and returns the transportation trust fund to solvency. To jumpstart job creation, this long-run policy front-loads – through a $50 billion up-front investment – a significant share of the new infrastructure resources. As with other long-run policies, the Administration is committed to working with Congress to fully pay for the plan.

The long-term framework includes meaningful reforms:
➢ The establishment of an **Infrastructure Bank** to leverage federal dollars and focus on investments of national and regional significance that often fall through the cracks in the current siloed transportation programs;

➢ The integration of **high-speed rail** on an equal footing into the surface transportation program to ensure a sustained and effective commitment to a national high speed rail system over the next generation;

➢ **Streamlining, modernizing, and prioritizing** surface transportation investments, consolidating more than 100 different programs and focusing on using performance measurement and “race-to-the-top” style competitive pressures to drive investment toward better policy outcomes.

➢ Expanding investments in areas like **safety, environmental sustainability, economic competitiveness, and livability** – helping to build communities where people have choices about how to travel, including options that reduce oil consumption, lower greenhouse gas emissions, and expand access to job opportunities and housing that’s affordable.

Specifically, the President proposes to make the initial up-front investment in the following areas:

- **Roads.** The nation’s highways serve as the backbone of our transportation system. Many roads and bridges are in need of repair and expansion and many of the Americans who want to do this work face high unemployment right now. Our investments would be focused on modernizing the highway system’s critical assets while providing much-needed jobs.

- **Rail.** Many parts of transit systems have been allowed to fall into a state of ill-repair. The President’s plan would help address this by making a major new investment in the nation’s bus and rail transit system. The Administration is also committed to expanding public transit systems and would dedicate significant new funding to the “New Starts” program – which supports locally planned, implemented, and operated major transit projects. In addition, the Administration is committed to building on its investments so far in high-speed rail – constructing a system that will increase convenience and productivity, while also reducing our nation’s dependence on oil and cutting down on pollution. The President’s plan would also invest in a long-overdue overhaul of Amtrak’s fleet.

- **Runways & NextGen.** The Administration proposes to invest in our nation’s airports by improving their runways and other equipment and facilities. We also propose a robust investment in our effort to modernize the nation’s air traffic control system (NextGen). This investment will help both the FAA and airlines to install new technologies and, among other improvements, move from a national ground-based radar surveillance system to a more accurate satellite-based surveillance system – the backbone of a broader
effort to reduce delays for passengers, increase fuel efficiency for carriers, and cut airport noise for those who live and work near airports.

- **Infrastructure Bank.** The President proposes to fund a permanent infrastructure bank. This bank would leverage private and state and local capital to invest in projects that are most critical to our economic progress. This marks an important departure from the federal government’s traditional way of spending on infrastructure through earmarks and formula-based grants that are allocated more by geography and politics than demonstrated value. Instead, the Bank will base its investment decisions on clear analytical measures of performance, competing projects against each other to determine which will produce the greatest return for American taxpayers.