



MINETA
TRANSPORTATION INSTITUTE

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SPRING 2010

Volume 16, No. 2



Board Profile:

Joseph Boardman
*President, CEO
National Railroad
Passenger Corp.
(Amtrak)*

MTI is very pleased and proud to have Joseph Boardman serving as a Trustee, representing the passenger railroad industry, especially now that rail is experiencing renewed popularity. In fact, Amtrak now operates about 300 passenger trains each day, serving more than 500 stations in 46 states with a 21,000-mile system. In FY08, Amtrak carried 28.7 million passengers – an all-time record.

Mr. Boardman has served in his current position since 2008, after having been the Administrator for the U.S. Federal Railroad (FRA), part of the U.S. Department of Transportation. In that role, he had oversight for every aspect of the organization, including comprehensive safety programs, regulatory initiatives, FRA safety regulation enforcement, national freight and passenger rail policy development and implementation, and diverse research and development activities to support improved rail safety.

He was a logical choice for the FRA position, having developed his knowledge and professional experience as Commissioner of the New York State Department of Transportation. These positions are just two facets of his 30 years'

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experience in transportation for city, county, state, and federal governments. He also owned a transportation management company, and he is former chair of the Executive Committee of the Transportation Research Board (TRB) and the American Association of State Highway and Transportation Officials' (AASHTO) Standing Committee on Rail Transportation (SCORT).

The second of eight children, Mr. Boardman grew up on a dairy farm in Oneida County, NY, volunteered for service in the US Air Force, and served in Vietnam. Subsequently, he earned his BS in agriculture economics from Cornell University and an MS in management science from the State University of New York at Binghamton. He now lives in Washington DC with his wife Joanne.

"Given the renewed interest in passenger rail service across the US, it is especially important for MTI to have a rail transport leader serving on the Board of Trustees," said Rod Diridon, Sr., MTI's executive director. "Joe is a fine representative of the railroad industry. We are very proud to have someone of his caliber serving with our other fine trustees, all of whom are high-profile transportation leaders in their own rights."



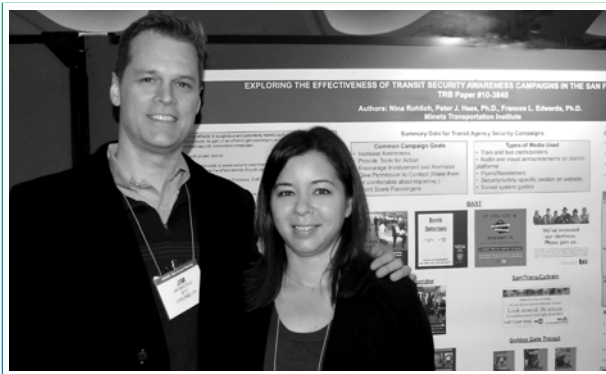
Education Update

by Peter Haas, Ph.D.
Education Director



Herman Seeley, far right, Dr Peter Haas, second from right, and Neville Parker, second from left.

Two Master of Science in Transportation Management (MSTM) alumni received national recognition for their research during January's annual meeting of the Transportation Research Board (TRB) in Washington DC. **Darren Grilley** ('09) won the Neville A. Parker Award for his capstone project, "Local Transportation Agency Cost Estimating Practices: A Case for Improvement." It analyzed factors that lead local agencies to make inaccurate cost estimates. It also identified improvements the agencies could make. The Council of University Transportation Centers gives the award annually for the two best non-thesis transportation papers/projects submitted for the MS degree in lieu of a thesis. It's the first time an MSTM student won the prestigious award, which included \$1,500 cash.



Nina Rohlich, right, and associate Jim Macrae.

Nina Rohlich ('09) presented research based on her capstone project at TRB. The paper, "Exploring the Effectiveness of Transit Security Awareness Campaigns in the San Francisco Bay Area," described local transit agencies' security awareness campaigns, the campaign goals, how agencies plan for effective campaigns, and whether and how they measure and determine campaign effectiveness. The paper, co-authored by MSTM faculty **Frances Edwards** and **Peter Haas**, was also accepted for inclusion in Transportation Research Record, the peer-reviewed TRB publication.

MSTM student **Herman Sealey** was honored as MTI's "Student of the Year" at CUTC's January awards banquet in Washington DC. The US DOT co-sponsors the award. He

also received \$1000 to honor his academic and professional achievements. A native of Guyana, Herman was involved in projects that purified drinking water for regions of that country. He is a Transportation Engineer with Caltrans District 4 (Oakland).

The American Public Transportation Association Foundation awarded scholarships to two MSTM students at a December ceremony in Orlando FL. **Ernesto Chavez** received the Donald C. Hyde Memorial Essay Award, plus a \$1500 scholarship, and **Kenneth Johansson** received a \$1000 renewal of his 2008 APTA "Hall of Fame" scholarship.

Matt Sandstrom ('09) is leaving California for a position with a clean energy non-profit near Ann Arbor MI. As a Clean Energy Transportation Project Manager, he will help to broaden statewide adoption of clean transportation technologies. The program goals include reducing vehicle emissions and creating healthier, energy-independent communities.

David Dias ('09) is a Human Services Supervisor for San Mateo County's Office of Workforce Development, where he uses project management and leadership skills acquired in the MSTM program. He developed an outreach program that offers career counseling to laid-off workers. This effort, along with another workforce development program, caught the attention of Congresswoman Jackie Speier's office. Subsequently, her staff coordinated with David and a coworker to hold a "Job Hunters' Boot Camp" for more than 700 job seekers. Spiers made a presentation, industry experts spoke, and David and his team of more than 30 volunteers gave resume and interview advice.



Research Update

by Dr. Karen Philbrick
Research Director

MTI published research continues to reach worldwide audiences. Recently, MTI published Report 09-01, *How to Ease Women's Fear of Transportation Environments: Case Studies and Best Practices*. It examined women's safety on transit, with a literature review, in-depth interviews with representatives of national interest groups, a survey of US transit operators, and case studies and best practices from the US and abroad.

Principal investigator Anastasia Loukaitou-Sideris, PhD said that most survey respondents believe that women have distinct safety and security needs, but only one-third of them believe that transit agencies should implement specific programs to address these needs. The survey also suggested that there is a significant mismatch between the women's safety and security needs, and the types and locations of strategies that transit agencies use. However, the survey of transit operators found that only a handful of agencies in the US have programs targeting women's safety and security needs.

Other research has shown that women feel unsafe in many public spaces, such as desolate bus stops and train cars, dimly lit park-and-ride lots, and parking structures. Overcrowded

transit also stresses many women, who often avoid it. This is especially true for particular groups of women, such as those of a certain age, income, sexual orientation, and residence. The women who were interviewed offered design, policing, security technology, education, and outreach strategies that would make women riders feel safer. Some of these already are used outside the US.

The study recommends including women's opinions in transit planning, collaboration between transit agencies and non-profits, prioritizing transportation safety/security needs, and more.

To download this free report, visit www.transweb.sjsu.edu. Click "Research," then "Publications." Scroll to the report.



National Transportation Finance Center

**by Asha Weinstein Agrawal, Ph.D.
Director**

MTI's National Transportation Finance Center (NTFC) continues to be active in its core missions – sponsoring research on cutting-edge practices in surface transportation finance, and educating decision-makers, planners, and the public about transportation finance debates and opportunities.

The NTFC has nine finance research projects underway, all to be completed by this summer. They cover a wide variety of topics. For example, Jae-Ho Pyeon and Taeho Park have two studies looking at how to develop effective incentive/disincentive contracts for transportation construction projects, Hiroyuki Iseki and Charles Rivasplata are investigating the financial and service quality impacts of contracting out regional transit service in New Orleans, and Wenbin Wei and Richard Lee are exploring how airports can form multi-agency partnerships to fund ground-access improvements.

A highlight of the NTFC's recent educational activity was an October forum on transportation finance held at the Commonwealth Club of San Francisco. The forum, "The Next 50 Years: Addressing California's Mobility in a Time of Financial Challenge," featured panelists Therese McMillan of the Federal Transit Agency, Steve Heminger of the Metropolitan Transportation Commission, and Norma Ortega of Caltrans. The panelists engaged in a lively give-and-take with the audience, discussing the causes and consequences of scarce transportation revenues. A recording was broadcast on NPR Radio affiliate KLIV on November 19, 2009.

The NTFC will be hosting a second Commonwealth Club forum on finance later this year; this time to discuss politically feasible ways to increase transportation revenues.

Introducing Students to Transportation Through Research

One advantage of university-based research is that it connects students with the transportation field, sparking in some an interest that leads to a transportation career. Recognizing this value, all MTI research projects involve at least one San José

State University student. For one of the finance projects that I am working on, we've expanded that connection to more than 40 students!

The project, *Getting Around When You're Just Getting By*, explores how transportation costs, including taxes and fees, impact transportation options and choices for very low-income adults. At the heart of the project are 74 in-depth interviews, more than half of which were conducted by students in an anthropology class teaching students about qualitative methods. The students were introduced to the transportation field, most for the first time, as they conducted and analyzed their interviews.



MTI RAs Participate in Emergency Exercise

**by Frances Edwards, Ph.D.
Deputy Director**

Dr. Frances Edwards, MTI Research Associate and faculty for the Master of Science in Transportation Management program, wrote the following article for the American Society for Public Administration's Section on Emergency and Crisis Management's professional newsletter, *Emergency Management Dispatch*.



"San Jose's two commuter railroads - ACE Train (Altamont Commuter Express) and Caltrain (serving San Jose to San Francisco corridor) - worked with San Jose Fire Department and the local ambulance provider to hold an emergency preparedness exercise on Saturday, December 12, 2009. The exercise was supported by the DHS Transportation Security Grant program.

"The scenario was a train collision, necessitating gaining emergency access to the cars using the emergency windows, and then triaging and treating patients in the cars, then extricating them through the windows and doors. The interior of the cars have narrow walkways, and some cars are two levels, creating rescue challenges. Patients then had to be transported using rolling carts and skeds to the treatment and transportation area at street level, above the railroad embankment.

"Mineta Transportation Institute Research Associate Dan Go-drich provided consultation services during exercise development, and he and Frannie Edwards, MTI's Deputy Director for

DHS' National Transportation Security Center of Excellence, served as observers during the exercise. Over 100 public safety personnel from San Jose Fire Department and several mutual aid departments participated. Volunteer victims came from the Fire Explorer program of San Jose Fire Department."



Transportation Security by Brian Michael Jenkins Director

MTI's National Transportation Security Center of Excellence (NTSCOE) has published a report, *Potential Terrorist Uses of Highway-Borne Hazardous Materials*, which evaluates security risks created by truck-borne hazardous materials, particularly gasoline tankers. The Department of Homeland Security requested the report, authored by Bruce R. Butterworth, Douglas Reeves, Billy Poe, Karl S. Shrum, and myself.

MTI has also issued a companion report, *Implementation and Development of Vehicle Tracking and Immobilization Technologies*, a study that Mr. Butterworth and I authored with Dr. Frances Edwards. It details specific developments in tracking and immobilization technology that can increase motor carrier security.

The first report considers gasoline tankers and propane tankers to be the most attractive options for terrorists seeking to use highway-borne hazmat, which can create intense fires in public assemblies and neighborhoods. It also urges that DHS, state governments and the industry take a renewed look at flammable liquids and gases as a weapon of opportunity, and at a strategy to improve security measures and technology.

Both peer-reviewed reports came from a review of terrorist objectives, hazardous materials, and potential targets. They conclude that terrorists often seek soft targets that yield significant casualties. They also prefer attacking public buildings and assemblies. Terrorists often choose simple operations promising modest consequences rather than complex and uncertain operations promising catastrophic ones. Terrorists have also discussed substituting fire for harder-to-acquire explosives. Gasoline tankers have greater appeal because they can easily produce intense fires, operate in target-rich environments with predictable routes, and pose few security challenges.

The report also urges that the government, which has focused more on hazmat that can cause catastrophic losses, also focus – as terrorists tend to – on the most readily available, least protected hazmat. The report calls for a strategy to increase and sustain security, and for resolving significant jurisdictional issues between federal and state authorities; strengthening hazmat security measures in the field; and implementing vehicle tracking technologies, panic alarms, and immobilization capabilities for vehicles carrying specific hazardous materials. These measures also offer safety and anti-crime benefits.

The free reports can be downloaded from www.transweb.sjsu.edu. Click "Research," then "Publications." Scroll to the reports.



Communications and Special Projects by Donna Maurillo Director

MTI's Communications and Special Projects finished an excellent year. The Institute pushed record numbers for press releases, web site visits, research report downloads, forums and summits, and people who attended. The bar has been set high for 2010, but MTI is already off to a great start.

A year ago, the web site saw about 160,000 hits per month. Then we created a new web site with better graphics and user-friendly features. Now the site draws around 100,000 additional hits per month. Previously, the site was showing about 5,000 downloads per month for research reports. Now the metrics have exceeded that by ten-fold. Sometimes a single report will clock in at 15,000 downloads.

MTI has hit its stride, generating many more news releases. Most often, it's to publicize yet another completed research report, but MTI also has promoted its increasing number of forums and summits, along with anything else newsworthy.



Peter Appel, Genevieve Giuliano, Rod Diridon, and Maryann Veneris.

The forums, which are public meetings with a local or regional focus, and the summits, those with a national focus, will top out at about 11 this fiscal year. Not long ago, MTI was organizing only three or four each year.

These have included a gathering to discuss developing a transportation workforce to address 21st Century needs. It was organized in Long Beach, Calif. with the METRANS Transportation Center. MTI's annual Garrett Morgan Symposium and Competition for middle school students helps young people create their vision for mobility. MTI also held a meeting to discuss the crisis in transportation funding. A follow-up will be held in June. Later this year, MTI will co-sponsor an international podcar conference in San Jose, Calif. Those are just a few of the events.

The Institute is into social media, as well, with a blog at <http://mtisjsu.blogspot.com> and a Facebook fan page. When you're in Facebook, search for Mineta Transportation Institute. And of course, there's the MTI web site at www.transweb.sjsu.edu.

Mineta Transportation Institute Photo Gallery



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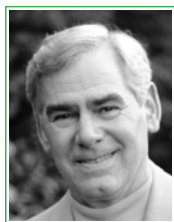


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1. Rod Diridon, Chair Bill Millar, and Congressman James Oberstar at MTI's winter board meeting in Washington DC. **2.** Trustees Bill Dorey and John Horsley at the MTI Board meeting. **3.** Trustees Nuria Fernandez and Stephanie Pinson at the MTI Board meeting. **4.** Board Chair Bill Millar and Trustee Mort Downey at the CUTC banquet in Washington. **5.** Caltrans Director Randell Iwasaki and MTI Research Director Karen Philbrick at the CUTC banquet. **6.** Trustees Paul Toliver and John Horsley at the CUTC banquet.



Directions:
Rod Diridon, Sr.
Executive Director

MTI Outreach:

Communications and Special Projects Director **Donna Maurillo** is proof that you can't have too much of a good thing. She's increased the number of Norma Y. Mineta National Policy Summits from the usual two a year to six this year, with an additional three California Hot Spots Forums this year. The national programs focus on crisis issues such as transportation funding, high speed rail, transportation workforce development, rail systems security and others. Top national experts as well as US DOT and DHS leaders are featured at these forums that are often co-sponsored by our national partners including AASHTO, APTA, and others. This year's MTI Garrett Morgan National Sustainable Transportation Competition was greeted on March 23 by **Secretary Ray LaHood** and former **Secretary Mineta**. These transportation oracles encouraged

the participating middle school students to take math and science in high school, then the technical degrees in college that prepare them for transportation careers.

MTI's National Transportation Security Center of Excellence:

MTI's National Transportation Security Center, supporting US DOT, was inaugurated in 1998. It has published 17 detailed, peer-reviewed case studies covering every major terrorist attack in the world since 1990, along with developing a computer-coded chronology of every reported terrorist attack against any surface transportation target since 1920. In 2007 then-**Secretary Michael Chertoff** designated MTI as a National Transportation Security Center of Excellence for the US Department of Homeland Security. That support sustains the ongoing program, plus several special projects for the Port Authority of New York, California Department of Transportation, Mumbai Transit Agency in India, several universities, and others. The program has seven projects in process, is supported by a dozen dedicated Research Associates, and is led by **Director Brian Michael Jenkins** and **Deputy Director Dr. Francis Edwards**.

Summer 2010 Annual MTI Board of Trustees Meeting and Awards Dinner:

The 20th annual MTI Trustees meeting will be held in San Jose on Saturday, June 26, followed by the traditional awards and graduation banquet. This year the national winners of the annual Garrett Morgan National Sustainable Transportation Competition will be honored, along with more than 20 students receiving Masters of Science in Transportation Management degrees and several professional Certificates in Transportation Management, Transportation Security Management, and High Speed Rail Management. MTI **Education Director Dr. Peter Haas** notes that the program is nearing capacity. So interested individuals should contact **Education Support Manager Vivian Ferea** soon at ferea@mti.sjsu.edu.

Sponsors of this annual banquet, who are also honored at the event, have funded the scholarship program for this next generation of transportation leaders. Those interested in supporting the program should contact **Donna Maurillo** at maurillo@mti.sjsu.edu.

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