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Edward J. Bloustein School
of Planning and Public Policy

ANNUAL REPORT OF THE

ALAN M. VOORHEES TRANSPORTATION CENTER

2010

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TABLE OF CONTENTS

The Alan M. Voorhees Transportation Center

was established in 1998 through a generous gift from the Voorhees family. Since that time, the Center has expanded its research portfolio to focus on solutions to the many problems faced by the transportation sector and how these obstacles affect communities at the local, national, and international levels. Situated in the Edward J. Bloustein School of Planning and Public Policy, the Center's focus is on solving real-world policy problems through rigorous research and education.

As we move forward into the second decade of the 21st century, these issues continue to be daunting. This includes the role that transportation has in contributing to global climate change, as well as the effect that changes in climate will have on transportation infrastructure. New Jersey is particularly vulnerable to these changes, with many shore communities potentially threatened by rising sea levels. One growing area of research is planning for evacuations in the face of natural disasters, which are expected to become more frequent.

The direction that national transportation policy will take in the future remains unclear, pending reauthorization of transportation legislation. The Obama administration has been promoting efforts at increasing the livability of urban areas through transportation funding and via various grant programs as part of the American Recovery and Reinvestment Act. Activities at the Voorhees Transportation Center have long focused on analysis of transit-oriented development, pedestrian and bicycle programs, and more recently the Safe Routes to School program. We continue to lead efforts for the New Jersey Department of Transportation in these areas. Our work program is also committed to promoting transportation equity and improving access to, and the quality of, transportation for the state's transportation-disadvantaged populations, which includes our growing population of older adults, as well as people with disabilities and those who struggle financially.

Recent directions have seen the Center moving toward more intensive academic research. This includes analysis of pedestrian safety in New Jersey, the climate effects associated with infrastructure construction, examination of how those convicted of driving offenses respond to different sanctions, and analysis of economic impacts of providing transit in urban areas. These are all areas of national importance and provide a high level of visibility to the research being conducted at the Voorhees Transportation Center.

Training future transportation professionals is a key part of our activities. The Bloustein School's Master's program in Urban Planning and Policy Development offers a concentration in transportation, one of the most popular options chosen by our students. The Voorhees Transportation Center provides students with research experience on the many projects with which both faculty and staff are involved. With a record number of students enrolled in the Master's program and a growing PhD program, the School is recognized as a national leader in producing skilled professionals in planning and transportation.

The gifts of support we receive are integral to growing our research program and supporting the students we are educating to become future leaders in the transportation planning and policy arenas. In the next year we hope to expand our efforts at attracting funding for high-quality research work, while continuing to support our core service mission to the state.

Sincerely,

Robert B. Noland
Professor of Transportation Planning and Policy and
Director, Alan M. Voorhees Transportation Center
Edward J. Bloustein School of Planning and Public Policy, Rutgers University

ABOUT THE VOORHEES TRANSPORTATION CENTER

The Alan M. Voorhees Transportation Center (VTC) at Rutgers, The State University of New Jersey, is a national leader in the research and development of innovative transportation policy. Established in 1998, VTC is one of 17 research centers within the Edward J. Bloustein School of Planning and Public Policy.

In the context of New Jersey as a living laboratory, VTC seeks to lead an informed public discussion of transportation policy issues and is committed to conducting research and finding innovative approaches to transportation problem solving. Through its research, VTC identifies and explores transportation linkages to other public policy areas, such as economic development, social policy, land use, political governance, and finance. VTC participates in educational activities, both in professional training for the transit industry through the National Transit Institute, and through the transportation curriculum of the Bloustein School.

Research

VTC conducts interdisciplinary applied and academic research on aspects of transportation policy and planning that are of a critical nature and that are not otherwise addressed by conventional sponsors.

Specific areas of concentration include but are not limited to:

- Transportation planning, analysis, and training
- Transportation equity and options for transportation-disadvantaged populations
- Interrelationship between land use and transportation, including transit-oriented development and design
- Interrelationship between transportation and the environment
- Transportation security and evacuation planning
- Transportation finance and economics
- Multimodal transportation planning and policy
- Freight planning and policy
- Transportation institutional analyses
- Pedestrian and bicycle mobility and safety
- Workforce development and training for the transit industry
- Economic impacts of transportation

Service

VTC provides transportation expertise to citizens and policy makers on a range of transportation issues. This includes convening forums, conferences, and seminars on critical issues involving transportation with a focus on the complex interrelationship with other sectors of society and the long-term implications of policy choices. VTC is committed to disseminating information on critical transportation issues, as well as simplifying and clarifying transportation data and information for public understanding, which leads to improved quality of choices made by voters and public officials.

Education and Training

In collaboration with the Federal Transit Administration and other transportation agencies at all levels, the National Transit Institute (NTI), an integral part of VTC, develops and delivers training and education programs for the transit industry, government officials, and the general public.

VTC provides educational opportunities to undergraduate and graduate students through participation in "hands-on" research projects and transportation planning studio courses.

As part of the Bloustein School, faculty provide courses as part of the Master of City and Regional Planning and the undergraduate program in Planning and Public Policy, and by collaboration with, and supervision of, PhD scholars.

OUR NAMESAKE: ALAN M. VOORHEES

Alan M. Voorhees was one of this nation's pivotal figures in city planning and transportation concerns. From Atlanta to Zurich, Alan M. Voorhees set the pace in initiating a myriad of ventures related to planning and transportation.

Alan M. Voorhees, 1922-2005. Photo by Nancy Voorhees.

A list of the many projects piloted by Mr. Voorhees reflects the visionary role he took in creating blueprints for change, including development of planned cities such as Columbia, Maryland, and Canberra, Australia, and metropolitan transit systems such as the Washington Metro.

In 1961, he founded the transportation consulting firm of Alan M. Voorhees & Associates, Inc., which grew to include ten offices in the United States, as well as offices in Caracas, London, Melbourne, São Paulo, Toronto, and Zurich.

With Mr. Voorhees steering the course, the firm planned many of the metropolitan transit systems built in the free world in the 1960s and 1970s, including those in Washington, DC, and Atlanta, Georgia. In 1967, his firm merged with Planning Research Corporation, where he continued to work in transportation planning.

In the late 1970s, Mr. Voorhees moved his career into a new area to become dean of the College of Architecture, Art, and Urban Sciences at the University of Illinois-Chicago.

In 1980, Mr. Voorhees' multifaceted interests took him in new directions. He founded Atlantic Southeast Airlines (ASA), which has become one of the most successful commuter airlines in the country. ASA, now a subsidiary of Delta Air Lines, Inc., is part of the Delta Connection with hubs in Atlanta and Dallas-Fort Worth.

Throughout his prolific career, Mr. Voorhees contributed extensively to the field of planning, serving as president of the American Institute of Planners and chairman of the Transportation Research Board, the largest unit of the National Academy of Sciences. He was the recipient of numerous awards and received honorary doctoral degrees from Rensselaer Polytechnic Institute and Voorhees College.

Mr. Voorhees was born in New Brunswick, New Jersey, and was a veteran of World War II. He received both silver and bronze stars for his distinguished service in the Pacific as a Navy Frogman, the predecessor to today's U.S. Navy SEAL.

FACULTY AND STAFF

as of May 1, 2011

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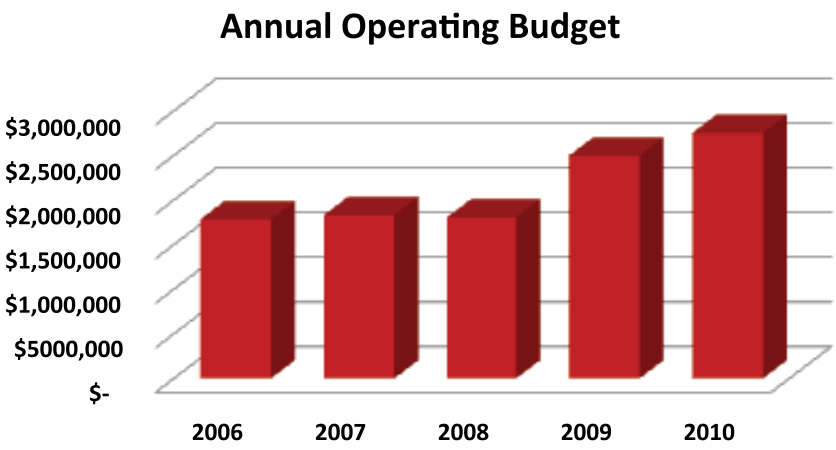
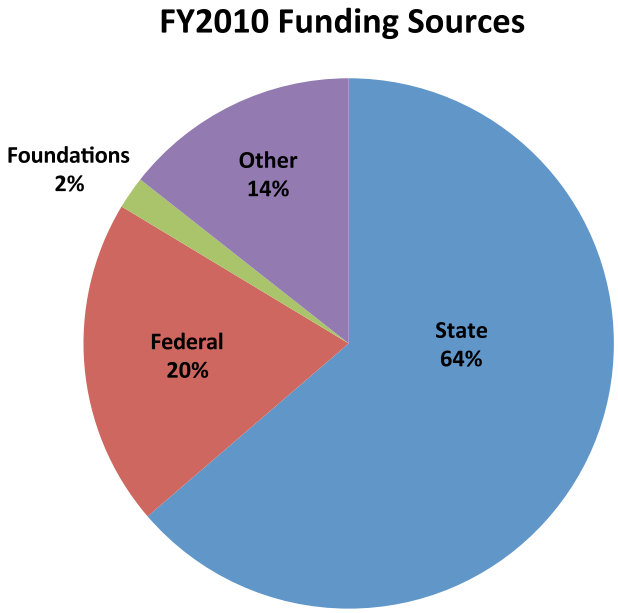




Project Sponsors

The following is a partial list of project sponsors who currently support or have previously supported VTC research efforts:

- American Association of Motor Vehicle Administrators
- Citi®
- Federal Highway Administration
- Federal Transit Administration
- Henry H. Kessler Foundation
- National Academies, Transportation Research Board
- National Highway Traffic Safety Administration
- New Jersey Association of REALTORS® Governmental Research Foundation
- New Jersey Department of Human Services – Division of Disability Services
- New Jersey Department of Transportation
- The New Jersey Foundation for Aging
- New Jersey Motor Vehicle Commission
- New Jersey Office of Emergency Management
- New Jersey Office of Homeland Security and Preparedness
- NJ TRANSIT
- North Jersey Transportation Planning Authority
- Somerset County, NJ
- U.S. Department of Health and Human Services – Centers for Medicare & Medicaid Services

RESEARCH HIGHLIGHTS

Since its inception in 1998, VTC has focused its research activities on a blend of applied and academic research. The Center receives funding from a variety of federal, state, and local government agencies, private foundations, individuals, and other entities involved in transportation policy and research. VTC maintains a strong history of partnering with numerous stakeholders and peers both within and beyond the Rutgers University community to accomplish its research work. Highlights of VTC research studies undertaken in the period September 2009 through December 2010 are as follows:

Transportation Planning

Off-Peak Rail Transit Service Study – Importance for Auto Reduction and Peak Ridership Growth

The objective of this research study is to identify and estimate the effects of off-peak service enhancements on selected NJ TRANSIT commuter rail lines, with special emphasis on their impact on revenue generation, vehicle miles traveled (VMT), and Greenhouse Gas (GHG) emissions. The research involves primary data collection through focus groups and an onboard survey of passengers on the Pascack Valley line, and analysis of secondary data from various sources. The study will assess how passengers changed their travel behavior in response to off-peak service enhancements, including diversion from automobile to transit. In addition, the study will examine the effects of station parking constraints on ridership. *(Client: NJ TRANSIT)*

Patron Needs at Intermodal Facilities

New Jersey has a rich and diverse network of transit services – public and private buses, light rail lines, commuter rail lines, subways, ferries, community shuttles, and shuttles for the elderly and people with disabilities. Making it easy to connect these services has great potential to extend the utility of transit for

all types of trips and to all areas of the state. VTC is conducting a study to determine the best strategies for making transfers between different transit services seamless and comfortable for both current and future riders. This study involves interviews, field research, focus groups, and a passenger survey. *(Client: NJ TRANSIT)*

Economic Development Benefits of New Transit Service: RiverLINE

This study documented baseline conditions of the RiverLINE, a recently built 34-mile interurban light rail line connecting Trenton and Camden, NJ, to determine the economic development and community benefits accrued during the first several years of its operation. Households living near the RiverLINE generally viewed it very positively. About half of businesses surveyed reported that the RiverLINE played a role in their location decisions. Firms near stations were more likely to have employees and

customers who arrived at the firm by the light rail line than firms located farther away. Some municipalities have amended their zoning regulations or redevelopment zones in response to the RiverLINE; however, most of these changes have been modest. The study also found that RiverLINE access was not strongly associated with property value increases for most owned homes, suggesting that the economic impacts have been limited so far. Smaller homes and homes in lower-income Census tracts benefit most.
(Client: New Jersey Department of Transportation)

Transportation Equity

Expanding Resources Available for New Jersey's County Paratransit Provider Community

This study is examining how to expand the resources available to improve and enhance community transportation services for people with disabilities in New Jersey. This was a key recommendation included in a five-year plan VTC prepared for the New Jersey Division of Disability Services in 2005. The plan's recommendations are intended to increase employment opportunities for New Jersey's population with disabilities by addressing work-related transportation barriers. Significant study tasks include reviewing potential funding opportunities; convening stakeholder listening sessions; implementing a nationwide community transportation provider

ANDREA LUBIN

Improving transportation for those most in need

VTC is committed to examining transportation equity concerns and improving mobility options available to all. Along with my VTC colleagues, I have worked on initiatives over the past decade with partners including the New Jersey Department of Human Services, the New Jersey Foundation for Aging, NJ TRANSIT, and the Kessler Foundation to better understand the travel needs and issues of people with disabilities, senior citizens, and others who are transportation disadvantaged so we can contribute to the development of improved transportation solutions.

With specific regard to people with disabilities seeking employment, I have been working for the past several years with Jon Carnegie to pursue many of the recommendations included in a five-year transportation action plan we developed for the New Jersey Department of Human Services. The plan, entitled "Meeting the Employment Transportation Needs of People with Disabilities in New Jersey," is considered a living document and is intended to increase employment opportunities for New Jersey's population with disabilities by addressing work-related transportation barriers.

In the recent past we developed *NJ Find a Ride*, a one-stop online information resource on community transportation options targeted to the transportation disadvantaged that presents current transportation information.

Currently, we are exploring how to expand the resources available to improve and enhance community transportation services for people with disabilities in New Jersey seeking employment. I am also working on a study focused on collecting survey data directly from consumers with disabilities seeking employment, in an effort to learn the specific transportation obstacles they are encountering in their quest for a job.

There is no single simple means by which to improve the transportation environment for New Jersey's transportation disadvantaged. However, by steadfastly pursuing a multitude of strategies developed on sound research and in collaboration with the consumers we are trying to assist, successes have been and will continue to be achieved.

survey; and convening several consumer focus groups. *(Client: New Jersey Department of Human Services, Division of Disability Services, and Centers for Medicare & Medicaid Services)*

TCC/FTA Disability Employment Study

This study is focused on identifying transportation barriers hindering job search and employment for persons with disabilities actively seeking employment. It involves the research team working closely with partners, including the New Jersey Division of Vocational Rehabilitation and New Jersey Independent Living Centers, to conduct a survey of active job seekers.
(Client: Rutgers University Transportation Coordinating Council/Federal Transit Administration)

NJ Find a Ride: One-stop "Web Portal" for Transportation Information Update & Roll-Out

In 2008, VTC researchers created an Internet-based one-stop information resource (www.njfindaride.org) to provide information on community transportation options available for transportation-disadvantaged New Jerseyans. This study focused on updating and improving the NJ Find a Ride website by keeping current and enhancing the site's provider database and functionality, as well as by developing the protocols to ensure that the website information remains current and accurate. In addition, VTC helped to secure a permanent home and management structure for the site with the state's human services information service, NJ211.
(Client: NJ TRANSIT)

Transit Security and Evacuation Planning

Northern New Jersey Urban Areas Security Initiative (UASI) Regional Evacuation Planning Study

VTC is managing a multidisciplinary team of researchers and consultants working with the New Jersey Office of Homeland Security and Preparedness, New Jersey Office of Emergency Management, and seven northern New Jersey counties to develop an all-hazards, multijurisdictional mass evacuation plan for the UASI region. The study involves extensive public outreach and agency coordination, scenario planning, behavioral studies, and the development of a regional transportation evacuation planning model to inform the development of the plan. Through this project, VTC has developed extensive knowledge related to transportation resources and services available statewide to support multimodal evacuation.
(Client: New Jersey Office of Homeland Security and Preparedness)

Non-UASI County Evacuation Planning Study

VTC is managing a multidisciplinary team of researchers and consultants working with the New Jersey Office of Emergency Management to enhance the evacuation planning capacity of the state's 14 non-UASI counties. The project involves outreach to county offices of emergency management, review of Emergency Operations Plans (EOPs), resident surveys, transportation modeling scenario planning, and development of regional evacuation plans for each of the three non-UASI planning regions.
(Client: New Jersey Office of Emergency Management)

JON CARNEGIE

Enhancing emergency management capabilities statewide

Since Hurricane Katrina devastated the Gulf Coast of the United States in 2005, there has been a concerted effort nationwide to ensure emergency management plans adequately address catastrophic disaster response and that states, counties, and local governments are prepared to successfully implement regional mass evacuation operations if disaster strikes. In 2007, the New Jersey Office of Homeland Security and Preparedness hired VTC to help develop a plan to safely and efficiently return New Jersey commuters working in Manhattan to New Jersey in the event that cross-Hudson River rail services were rendered inoperable. That planning effort resulted in the Trans-Hudson Emergency Transportation Plan which was eventually adopted by the State of New Jersey and New York City as a supplement to existing emergency operations plans.

Based on this successful collaboration, in 2008, VTC was hired to develop a regional mass evacuation plan for the seven counties that make up the Northern New Jersey Urban Areas Security Initiative Region and to conduct evacuation planning studies in the 14 remaining counties in the state. To conduct these studies, VTC brought together a multidisciplinary team of researchers from within the broader Rutgers University community. Our team includes experts in transportation planning and policy, transportation engineering and travel demand modeling, transit security and emergency management, and survey research.

The overall approach to these studies has been to develop capability-based plans built upon a foundational understanding of the true capacity of the region's transportation infrastructure to support mass evacuations under a variety of operational conditions and various planning scenarios. We have used behavioral studies and a variety of evacuation, transportation, and traffic-modeling tools to inform the plan development process. We have also worked closely with our planning partners at the New Jersey Office of Homeland Security and Preparedness, New Jersey Office of Emergency Management, and County Offices of Emergency Management throughout the state to ensure the policies and procedures being developed are well-grounded and acceptable to the emergency managers and first-responders who will be called upon to implement them.

Customer Perceptions of Transit Security

Nationally, transit agencies employ a range of safety/security strategies to address the threats and vulnerabilities unique to each public transit system. The strategies vary widely by agency and are associated strongly with mode. Since the terrorist attacks of September 11, 2001, the Northeast blackout of 2003, and the Madrid (2004) and London (2005) subway bombings, NJ TRANSIT (NJT) has invested significant operating and capital resources to improve the security of its transit system. This study examined which NJT security measures enhance customer perceptions of safety and which elements of a transit security awareness campaign would be the most successful. The study found that NJT customers understand that transit riders play an important role in keeping NJT secure. However, there is significant confusion about what to look for as well as when and how to report suspicious activity or objects. The study also

found that NJT customers were very familiar with the security awareness slogan, "If You See Something, Say Something." As many NJT customers use other transit systems, it would benefit NJT to work closely with the other transit agencies in the region to ensure that security initiatives are well coordinated. The study recommended that NJT should explore the potential for implementing joint public awareness campaigns with shared slogans, imagery, and media strategies. Cooperating agencies should consider creating a universal reporting procedure and phone number.
(Client: NJ TRANSIT and New Jersey Department of Transportation)

Transportation and Environment

Lifecycle Carbon Footprint Analysis of Transportation Capital Projects

The objective of the project is to provide a management tool that will calculate greenhouse gas emissions from material inputs, construction activity (equipment), and maintenance inputs over the lifetime of a project. VTC is developing a spreadsheet tool that will allow for the evaluation of greenhouse gas emissions associated with transportation capital construction projects. The Greenhouse Gas Assessment Spreadsheet for Transportation Capital Projects (GASCAP) will allow NJDOT personnel and potential contractors to input project data from bid sheets and specify a maintenance plan for the life of the facility.
(Client: New Jersey Department of Transportation, Lifecycle Carbon Footprint Analysis of Transportation Capital Projects)

Assessing and Comparing Environmental Performance of Major Transit Investments

VTC is a subcontractor to Cambridge Systematics on this project, which is developing new methods for the Federal Transit Administration's New Starts program. The objective is to develop techniques for assessing the environmental performance of major transit investments. VTC has surveyed international practice on how projects are assessed using Strategic Environmental Assessment procedures. We are currently entering phase II of this project, which will involve applying the methods to selected case studies throughout the country.
(Client: National Academies, Transportation Research Board)

Transportation's Role in Energy Policy, Planning and Climate Change

As part of this study VTC researchers provided support and technical assistance to the New Jersey Department of Transportation related to the development of the State Energy Master Plan and Greenhouse Gas Initiative. Research conducted helped DOT policy makers understand better the role transportation plays in energy planning, policy and climate change. As part of this project VTC researchers documented how the transport sector in New Jersey contributes to energy use and greenhouse gas emissions and explored the range of policy actions/solutions that could be implemented to help achieve long-term reductions in transportation-related energy use and greenhouse gas emissions.
(Client: New Jersey Department of Transportation)

Transportation Finance and Economics

Methodology for Determining the Economic Development Impacts of Transit Improvements

This project is developing a methodology that will allow transit agencies to evaluate what are known as the "wider economic benefits" of transit investments. These benefits are associated with agglomeration externalities; that is, productivity increases that accrue from the clustering of economic

STEPHANIE DiPETRILLO:

Exploring the links between land use and transportation

Research on "transit-oriented development" (TOD) is one part of exploring the relationship between transportation and land use. TOD is an old concept, born anew—the creation of dense, mixed-use development near transit facilities. New TOD can expand the diversity and intensity of uses near transit and allow more people to live and work without needing a car. Our work explores the benefits and difficulties encountered in TOD. We have evaluated New Jersey's groundbreaking Transit Village Initiative and, with NJ TRANSIT, we produce the *Transit-Friendly Development Newsletter*, an e-publication that keeps nearly 6,000 subscribers from across the country up-to-date on the potential for TOD.

Recently, past director Dan Chatman and I explored barriers to TOD. We examined the three most intractable community concerns encountered when developing near transit—that it will raise taxes by increasing school enrollments, increase traffic, and increase parking demand. Our research demonstrated the impacts of TOD on schools, local auto traffic, and parking were not nearly as significant as some believe. We found robust evidence that the per-household impacts on school districts were much lower from development near stations—debunking the myth that new housing near transit increases property taxes. We also found that residence size and parking availability directly affect commute mode and auto ownership. Smaller households seek smaller housing and drive less.

Soon, current director Robert Noland and I will do complementary work and measure the benefits of TOD. We will take a holistic look at the transportation as well as the economic, health, environmental, and community impacts. I am excited about our new work.

activity. The approach to analyzing this issue has three components. First is the development of a nationwide model based on metropolitan-level data to confirm how transit capacity affects employment density and how this in turn affects productivity. The second phase is analyzing firm-level data in Dallas, Texas and Portland, Oregon to better understand how the introduction of new transit lines has shaped the spatial clustering of firms. Finally, this work is further being informed by detailed case studies of three metropolitan areas to both test the quantitative method being developed and to examine any barriers to agglomeration.

(Client: National Academies, Transportation Research Board)

Transit, Land Use, and Transit-Oriented Development

The Appeal of Transit-supportive Residential Development in a Challenging Housing Market: Evidence from the Hudson-Bergen Light Rail Line

The Hudson "Gold Coast" has experienced a period of intensive development, due in large part to recently completed transit investments, including the Hudson-Bergen Light Rail (HBLR). This study is documenting recent residential development associated with select HBLR stations and investigating the value that new residents place on transit accessibility. In addition, the study will assess the degree to which land development in transit-supportive locations has

continued, despite downturns in the real estate market. *(Client: Rutgers University Transportation Coordinating Council/Federal Transit Administration)*

An Evaluation of Property Values in New Jersey Transit Villages

Since 1999, New Jersey has designated 22 Transit Villages in municipalities across the state. The purpose of the designation is to foster transit-oriented development around rail stations and bus hubs. This study investigated the extent to which residential properties appreciated in value and price more quickly within municipalities that have been designated Transit Villages over the last decade compared with those that were not so designated. The study found limited evidence of a value and price premium associated with proximity to transit stations; however, whether this premium was associated with Transit Village designation was less clear. It could be true that benefits are derived from the forethought, commitment, and political will required to apply for Transit Village status rather than the actual designation itself.
(Client: New Jersey Association of REALTORS® Governmental Research Foundation)

The Impact of Demographic Changes on Transit Patterns in New Jersey

This study investigated the reasons for higher transit use by immigrants living in New Jersey and for the decline in their use of transit over time. Higher transit use by immigrants seems to be driven primarily by the employment and educational focus that motivates immigration. This results in an initial choice of home and workplace that is based on optimizing work or school proximity and access to home-country social networks that are concentrated in areas with high transit accessibility. Higher rail commuting among immigrants is largely explained by their demographic and spatial characteristics, but higher bus commuting is correlated with immigrant status even when controlling for income and citizenship. There are significant differences among region-of-origin groups analyzed in this study (India, Latin America, and the Philippines). Possible policies to encourage and retain transit ridership by immigrants include deregulation of land-use controls to encourage higher work and residential density, subsidies and better regulation of employer vanpools to serve dispersed workplaces of Latin American immigrants, and attempts to integrate existing public transit services with new forms of private transit, such as jitneys.
(Client: New Jersey Department of Transportation, NJ TRANSIT)

The Impacts of Low-Cost Buses on the Transit Industry

This project examined the impacts of the emerging low-cost intercity bus industry on other private and public transportation providers. Using a literature review, focus groups, and surveys, this study addressed the following research questions: (1) who uses low-cost buses, (2) for what purpose, (3) why do they choose these services over other options, (4) how satisfied are they with low-cost buses, and (5) whether these buses are reducing ridership on competing transit options, particularly intercity public transit service.
(Client: Rutgers University Transportation Coordinating Council/Federal Transit Administration)

Strategies to Improve Immigrants' Access to the Planning of Public Transportation

This project will examine the barriers faced by immigrant communities that limit their participation in the planning of public transit. The research team will use focus groups in immigrant communities and interviews with stakeholders to ascertain means through which the public sector can more effectively engage immigrants in public participation processes. The project will develop a better understanding of the travel needs of immigrants, their involvement in transit planning, as well as develop a toolkit for use by public transit agencies for more fully engaging immigrant communities.
(Client: FTA Transportation Participation Program)

Bicycle and Pedestrian Mobility and Safety

A Mode Choice Analysis of School Trips in New Jersey

This study examines the mode choice behavior of children traveling to school using a sample of schools in New Jersey. Our main focus is on a variety of network design, land use, and infrastructure variables that have typically been associated with walking activity. Using a multinomial logit model we generally confirm that good connectivity, more intense residential land use, and better sidewalk infrastructure are associated with increased walking to school. We do not find that various sidewalk aesthetic and safety buffers, such as planting strips, are associated with walking. The information used for this analysis was gathered through Safe Routes to School (SRTS) travel pattern surveys that collected information from parents on travel mode choice and barriers to their child walking and bicycling to school.
(Client: New Jersey Department of Transportation)

Safe Routes to School (SRTS) Urban Demonstration Program

To be sure that SRTS funds are getting to New Jersey's disadvantaged and lower-income communities, the New Jersey Department of Transportation (NJDOT), working with the RBA Group and the SRTS Resource Center, implemented the NJ SRTS Urban Demonstration Program in Trenton, Newark, and Camden, New Jersey. The main goals of this pilot effort were to help determine the obstacles to SRTS in New Jersey's cities, to verify how they are different from the challenges faced in other areas of the state, to identify how NJDOT and the SRTS program can help overcome those obstacles, and to develop a good SRTS Action Plan for six urban schools that can be replicated elsewhere.
(Client: New Jersey Department of Transportation)

LEIGH ANN VON HAGEN

Making access to schools safe for bicycling and walking

We know that walking and bicycling are good for exercise and health. We also know that by replacing a car trip with a walk or a bike ride, we are doing something good for the environment. So why do parents still drive their children to school? The answer isn't because people don't believe in healthy habits or a clean environment—it's because people are not comfortable with the situation. Sometimes, it's about lack of sidewalks or bicycle facilities; sometimes it's because of concerns over crime or stranger danger. It may be that parents are thinking about safety, speeding cars, and busy street crossings; it may be about getting kids out the door in time. Sometimes, it's all of the above.

Safe Routes to School is a national initiative designed to encourage and enable children to walk and bicycle to school safely through an approach that combines encouragement, education, engineering, enforcement, and evaluation. Through the New Jersey SRTS Resource Center, our research addresses barriers to students walking and bicycling to and from school while focusing on improving health, environmental, and safety awareness. In the coming year, the work and staff of the SRTS Resource Center will grow as the program embarks on a new pilot program that will oversee regional SRTS coordinators located at each Transportation Management Association and offer additional training and technical support to communities. With more direct contact with New Jersey communities, researchers can now work toward better decisions to ensure that cheaper and healthier transportation options, such as walking and bicycling, are safe and convenient for everyone.

School Walking and Bicycling Policies

Many schools throughout the country are actively discouraging or banning students from walking and bicycling to school. There is a great variety in what school walking and bicycling policies do and do not cover, ranging from having no formal policy to having a policy that includes a complete ban on walking and bicycling with no explanation as to why the ban is in place. Often, only general liability concerns are cited as a reason for prohibiting walking and or bicycling. Based on a review of the existing walking and bicycling to school policies available from New Jersey and throughout the nation, and working with legal experts from the National Policy Legal Analysis Network to Prevent Childhood Obesity (NPLAN) and policy experts from the School Nurses Association, VTC researchers developed model walking and bicycling to school policies that can be replicated throughout New Jersey. The research staff has also developed a "Why Adopt Walk and Bike to School Policies?" fact sheet to serve as a companion document to the sample walk and bike to school policies.

(Client: New Jersey Department of Transportation)

Collection of Bicycle and Pedestrian Survey Data

Over the past three years, VTC researchers have implemented three surveys to collect statewide data on bicycle and pedestrian behavior, including a cell phone-based sample that will provide a unique analysis of how this sample may differ from those surveyed by landline. These data are being used to develop policies and interventions to improve bicycle and pedestrian mobility and safety in New Jersey.
(Client: New Jersey Department of Transportation)

Annual Pedestrian Crash Data Tracking

In 2009 and 2010 VTC developed a baseline crash data report for 2003–2009 using pedestrian crash data. The report provides summary information on relevant variables contained within crash data (i.e., demographic variables, time of day, location). The report will be updated and used to track safety improvements associated with pedestrian infrastructure investments made by NJ DOT.
(Client: New Jersey Department of Transportation)

Pedestrian Safety Data Enhancement and Analysis

Despite the availability of police-reported crash information, state road data available from the NJDOT Straight Line Diagrams, and GIS-based land-use data, not enough is known about the factors that contribute to accidents between pedestrians and motor vehicle drivers in New Jersey. Most pedestrian safety analysis focuses on pedestrian crash data, which does not allow for robust analysis of the built environment and its relationship to pedestrian travel and safety. Other variables (such as volumes, speeds, number of lanes, presence or absence of facilities, marked and unmarked crosswalks, land uses in the area, population density, distance to next available crossing, and so on) are needed to conduct a robust analysis of which variables are associated with pedestrian safety under various conditions. VTC has developed an enhanced data set from which to analyze pedestrian safety and the built environment using Google Streetview®. This data will allow further analysis to examine how the severity of crashes may vary based on different infrastructure conditions.
(Client: New Jersey Department of Transportation)

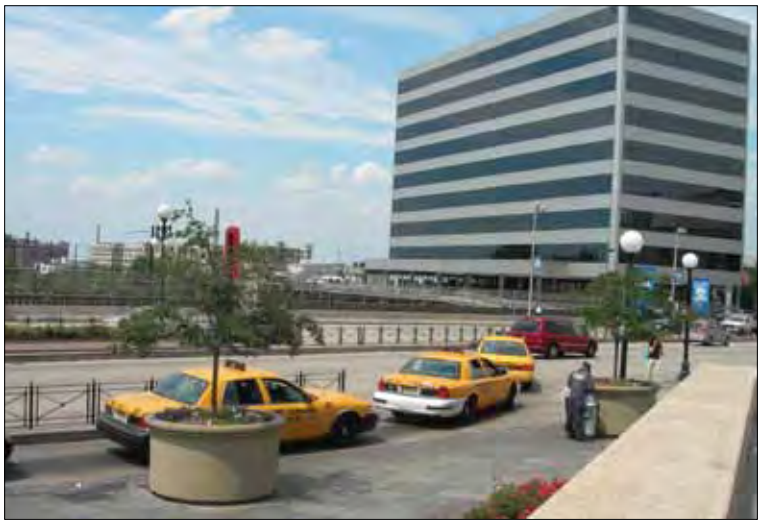
Pedestrian Safety at Bus Stops

Pedestrian safety is a major concern in New Jersey. Many crashes occur at or near bus stops on congested urban street systems and along highway corridors. VTC, in partnership with Michael Baker Jr., Inc., initiated a study in 2010 to provide information on factors that contribute to pedestrian safety at bus stops. The facets associated with pedestrian safety are a complex interplay between human factors such as

individual and group behavior and built-environment features such as land use, roadway design, and transit system operations. In 2010 VTC conducted a literature review and analyzed crashes and a variety of variables to look for trends in crashes around bus stops and to create a pool of locations that can be analyzed in later phases of the project. In addition, a series of stakeholder interviews was conducted to provide information and add context to the problem. *(Client: New Jersey Department of Transportation)*

Pedestrian Behavior in New Jersey

To explain walking propensity or frequency, empirical studies have generally used two sets of explanatory variables, namely, sociodemographic variables and built-environment variables. They have generally shown that both sociodemographic characteristics and built-environment characteristics are associated with walking propensity. Using data from a statewide survey of pedestrian behavior and attitudes, VTC researchers are examining how the traditional walkability variables such as density, mix of uses, and network connectivity influence walking behavior in New Jersey. The analysis shows that built environment variables have some small effects, mainly associated with better network connectivity linked to increased walking frequency. One of the key findings is that built-environment features also work indirectly in how they influence car ownership. In general, the study found sufficient evidence to suggest fewer cars are owned in areas with more walkable built-environment features. Another key variable was found to be whether a household owns a dog, which was strongly associated with walking. This suggests that when conducting pedestrian behavior analysis it is necessary to control for dog ownership to understand the frequency of walking.
(Client: Federal Highway Administration, Region II, University Transportation Research Center, Pedestrian Behavior in New Jersey)



Driver's License Policy

Study of the Effects of Plea Bargaining Motor Vehicle Offenses

In July 2000, the New Jersey Legislature passed legislation creating a new traffic violation for which no motor vehicle penalty points are assessed for first and second offenses. The law change made it simpler to enter into plea agreements that downgrade point-carrying violations to zero-point offenses. This study examined the impact of plea bargaining point-carrying traffic violations on roadway safety in New Jersey and the ability of the New Jersey Motor Vehicle Commission (MVC) to apply sanctions against negligent drivers to improve driving behavior. The study found that since July 2000, the number of zero-point traffic convictions as a percentage of total convictions increased by 250 percent. However, the overall number of convictions has not changed significantly since 2000, nor has the nature of the violations being committed changed significantly. In addition, the study documented that over the same period the number of drivers subjected to MVC negligent-driver countermeasures declined by 36 percent. The study recommended that the MVC work with key stakeholders to develop more explicit guidelines regarding the use of plea bargaining to reduce point-carrying traffic violations. Further, the

study recommended that MVC examine the efficacy of transitioning from a point-based system of driver monitoring and control to an event-based system. *(Client: New Jersey Motor Vehicle Commission and New Jersey Department of Transportation)*

Study of Recidivism Rates among Drivers Administratively Sanctioned by the New Jersey Motor Vehicle Commission

Research has consistently shown that drivers who repeatedly violate motor vehicle laws pose higher public safety risks. This study examined the current state of practice related to driver improvement countermeasures in the United States and assessed the effectiveness of New Jersey's negligent driver interventions. The study provided important evidence that New Jersey's program of negligent driver countermeasures is effective at reducing violation and crash recidivism among most negligent driver subgroups in the two-year period after MVC intervention. Several policy recommendations were derived from the research. First, with regard to teen drivers, license suspension combined with one-year probation is the most effective countermeasure that consistently reduces violation and crash recidivism among teen drivers. Given this finding, the research team recommended that future consideration should be given to whether or not a "zero-tolerance" policy for motor vehicle violations and at-fault crashes should be applied to teen drivers. Second, MVC should consider streamlining the suspension program to make it more straightforward and easier to administer. Finally, consideration should be given to reviewing and reforming, as necessary, New Jersey's driver monitoring system and/or plea bargaining practices to ensure that repeat traffic offenders are not able to use zero-point plea bargaining to avoid corrective actions that improve safety outcomes. *(Client: New Jersey Motor Vehicle Commission and New Jersey Department of Transportation)*

Review of New Jersey's Point System

The New Jersey Motor Vehicle Commission (MVC) currently monitors driving behavior by means of a "demerit" point system. Since 2000, a significant number of negligent drivers have been diverted out of the driver monitoring and control program by plea bargaining traffic violations to zero-point offenses. This research study is exploring alternatives to the current point system to determine if changes to the point system can restore the MVC's ability to address negligent driving behavior despite the widespread practice of plea bargaining. *(Client: New Jersey Motor Vehicle Commission and New Jersey Department of Transportation)*

PUBLICATIONS AND SPEAKING ENGAGEMENTS

PUBLICATIONS

September 2009 – Fall 2010

Crôtte, A., **Noland, R.B.** & Graham, D.J. 2010, "An Analysis of Gasoline Demand Elasticities at the National and Local Levels in Mexico," *Energy Policy*, vol. 38, pp. 4445-4456.

Crôtte, A., **Noland, R.B.**& Graham, D.J. 2009, "Is the Mexico City Metro an Inferior Good?" *Transport Policy*, vol. 16, no. 1, pp. 40-45.

Crôtte, A., **Noland, R.B.**& Graham, D.J. 2009, "Estimation of Road Traffic Demand Elasticities for Mexico City, Mexico," *Transportation Research Record: Journal of the Transportation Research Board*, vol. 2134, pp. 99-105.

Deka, D., Carnegie, J., and Bilton, P. 2010, "What Does it Take for Shuttles to Succeed? Comparison of Stated Preference and Reality of Shuttle's Success in New Jersey?" *Transportation Research Record*, vol. 2144, pp. 102-110.

Ishaque, M.M. & **Noland, R.B.** 2009, "Pedestrian and Vehicle Flow Calibration in Multimodal Traffic Microsimulation," *Journal of Transportation Engineering*, vol. 135, pp. 338-348.

Jiwattanakulpaisarn, P., **Noland, R.B.** and Graham, D.J. 2010, "Causal Linkages Between Highways and Sector-Level Employment," *Transportation Research Part A: Policy and Practice*, vol. 44, pp. 265-280.

Jiwattanakulpaisarn, P., **Noland, R.B.**, Graham, D.J. and Polak, J.W. 2009, "Highway Infrastructure Investment and County Employment Growth: A Dynamic Panel Regression Analysis," *Journal of Regional Science*, vol. 49, no. 2, pp. 263-286.

Karathodorou, N., Graham, D.J. and **Noland, R.B.** 2010, "Estimating the Effect of Urban Density on Fuel Demand," *Energy Economics*, vol. 32, no. 1, pp. 86-92.

Lachapelle, U. 2009, "Reconciling the Construct of Walking in Physical Activity and Transportation Research," *American Journal of Preventive Medicine*, vol. 37, no. 4, pp. 372-373.

Noland, Robert B. 2010, "Legislative and Regulatory Moves to Reduce Transportation's Greenhouse Gas Emissions," *TR News*, no. 268, pp. 12.

Ochieng, W.Y., Quddus, M.A., North, R.J. and **Noland, R.B.** 2010, "Technologies to Measure Indicators for Road User Charging," *Transport, Proceedings of the Institution of Civil Engineers*, vol. 163, no. 2, pp. 63-72.

Pucher, J. , Buehler, R., Bassett, D., and Dannenberg, A. 2010, "Walking and Cycling to Health: Recent Evidence from City, State, and International Comparisons," *American Journal of Public Health*, vol. 100, no. 10, pp. 1992-1996.

Pucher, J. , Thorwaldson, L., Buehler, R., and Klein, N. 2010, "Cycling in New York: Innovative Policies at the Urban Frontier," *World Transport Policy and Practice*, vol. 16, no. 1, pp. 7-50.

Pucher, J. , Dill, J., Handy, S. 2010, "Infrastructure, Programs and Policies to Increase Bicycling: An International Review," *Preventive Medicine*, vol. 50, no. S1, pp. S106-S125. Prepared for the Active Living Research Program of the Robert Wood Johnson Foundation.

Pucher, J. and Buehler, R. 2009, "Cycling to Sustainability in Amsterdam," *Sustain*, no. 21, pp. 36-40.

Pucher, J. and Buehler, R. 2010, "Walking and Cycling for Healthy Cities," *Built Environment*, vol. 36, no. 5, pp. 391-414.

Rubin, Jonathan D., and **Noland R.B.** 2010, "Transportation and Climate Change: Developing Technologies, Policies and Strategies," *TR News*, no. 268, pp. 3-5.

Schmöcker, J.D., Su, F. and **Noland, R.B.** 2010, "An Analysis of Trip Chaining among Older London Residents," *Transportation*, vol. 37, no. 1, pp. 105-123.

Wadud, Z., Graham, D.J. and **Noland, R.B.** 2010, "Gasoline Demand with Heterogeneity in Household Responses," *The Energy Journal*, vol. 31, no. 1, pp. 47-74.

Wadud, Z., **Noland, R.B.** and Graham, D.J. 2010, "A Semiparametric Model of Household Gasoline Demand," *Energy Economics*, vol. 32, no. 1, pp. 93-101.

New and/or Forthcoming Publications

Lachapelle, U., Frank, L. Saelens, B.E. Sallis, J.F. and Conway, T.L. 2011, "Commuting by Public Transit and Physical Activity: Where You Live, Where You Work, and How You Get There," *Journal of Physical Activity and Health*, 8 (Suppl 1), pp. S72-S82.

VonHagen, LA and **Meehan, S.** (forthcoming) "Riding Right: Teaching Bicycle Safety Education in Schools," *NJ Association for Health, Physical Education, Recreation & Dance*.

SPEAKING ENGAGEMENTS

American Planning Association – New Jersey Chapter Conference, New Brunswick, NJ – November 2009 and 2010.

- **DiPetrillo, Stephanie**. Access to the Region's Core: Community Planning Starts Now.
- **Walia, Ranjit**. Complete Streets in New Jersey.

Association of Collegiate Schools of Planning, 50th Annual Meeting, Crystal City, VA – October 2009

- **Klein, Nicholas.** The Appeal of Curbside Buses: Lessons from Intercity Private Transportation Track: Transportation and Infrastructure.
- **Noland, Robert B.,** Patrick P. Brennan, **Nicholas J. Klein**. A Spatial Analysis of Pedestrian Fatalities and Injuries in New Jersey.

Association of Collegiate Schools of Planning, 51st Annual Meeting, Minneapolis, MN – October 2010

- **Chatman, Daniel G.** and **Robert B. Noland**. Estimating the Impacts of Public Transit Projects on Agglomeration Economies.
- **Klein, Nicholas.** Get on the (Curbside) Bus: The New Intercity Bus Passengers.
- **Lachapelle, Ugo**, Terry L. Conway, Lawrence D. Frank, Brian E. Saelens, James F. Sallis. Retrospective Housing Choices, Public Transit Service and Transit Use.

- **Noland, Robert B., Stephanie DiPetrillo**, and **Michael L. Lahr**. New Jersey Transit Villages and Real Estate Prices.

DiscoverAbility 2009 Employment Conference, New Brunswick, NJ – October 2009

- **Lubin, Andrea** (moderator). Expanding Mobility Opportunities in NJ for People with Disabilities.

Moving Children Safely Conference, San Francisco, CA – March 2010

- **VonHagen, Leigh Ann**. Walk and Bike to School Policies.

National Evacuation Conference, New Orleans, LA - February 2010

- **Carnegie, Jon**. Special Needs Evacuation: The Problem of Multiple Facility Evacuation During Disaster.
- **Carnegie, Jon**. Evacuation vs. Shelter-in-Place: How Will Residents Respond?

New Jersey Associations of Counties Conference, Atlantic City, NJ – March 2010

- **Meehan, Sean**. Funding for Safe Routes to School Projects.

New Jersey Bike Summit, Denville, NJ – February 2010

- **VonHagen, Leigh Ann**. NJ Bike School Program.

New Jersey Office of Homeland Security and Preparedness Planning Summit, Sayreville, NJ – December 2009 and June 2010

- **Carnegie, Jon**. Update on the UASI Regional Evacuation Planning Study (December 2009).
- **Carnegie, Jon**. Analysis of UASI Resident Survey: People with Specific Care Needs (June 2010).

New Jersey Recreation and Park Association Conference, Atlantic City, NJ – March 2010

- **Meehan, Sean**. NJ Bike School Program.

North American Meetings of the Regional Science Council, 56th Annual Meeting, San Francisco, CA – 2009

- **Chatman, Daniel G.** and **Robert B. Noland**. Challenges in Estimating the Economic Impacts of Transit Investments Beyond Cost and Travel Time Savings.

North American Meetings of the Regional Science Council, 57th Annual Meeting, Denver, CO – 2010

- **Noland, Robert B,. Stephanie DiPetrillo**, and **Michael L. Lahr**. Residential Property Values and the New Jersey Transit Village Program.

Pro Walk Pro Bike Conference, Chattanooga, TN – September 2010

- **Meehan, Sean**. Adult School Crossing Guards: An Assessment of Working Conditions. *(poster)*
- **Von Hagen, Leigh Ann**. Addressing Barriers to Walking and Bicycling to School Policies. *(poster)*
- **Walia, Ranjit**. Affecting Change: Lessons Learned in Changing the Bicycle Pedestrian Framework. *(poster)*
- **Walia, Ranjit**. How to Conduct High Visibility Pedestrian Right of Way Enforcement.

TransAction Transportation Conference, Atlantic City, NJ – April 2009 and April 2010

- **Bilton, Peter**. Sidewalks: Identifying and Overcoming Problems for a Successful Program.
- **Lubin, Andrea** and **Ryan Whytlaw**. Analysis of UASI Resident Survey - People with Specific Care Needs.

- **Walia, Ranjit**. Senior Walkability – Planning for Mobility and Health for Our Senior Population.
- VTC staff also moderated several TransAction sessions in both 2009 and 2010.

Transportation Research Board 89th Annual Meeting, Washington, D.C. – January 2010

- Crôtte, Amado; **Robert B. Noland**, and Daniel J. Graham. An application of distance-based road user charges in the Mexico City Metropolitan Area. *(poster)*
- **Carnegie, Jon**, and **Devajyoti Deka**. Using Hypothetical Disaster Scenarios to Predict Evacuation Behavioral Response.
- **Deka, Devajyoti, Jon Carnegie, and Peter Bilton**. What Does It Take For Shuttles To Succeed? A Comparison of Stated Preferences and the Reality of Shuttles' Success in New Jersey. *(poster)*
- **Deka, Devajyoti**, and **Jon Carnegie**. Analyzing Evacuation Behavior of Transportation-Disadvantaged Populations in Northern New Jersey.
- **DiPetrillo, Stephanie**. Public Involvement in Transportation: Transit Friendly Development Newsletter. *(poster)*
- **Klein, Nicholas**. Journey to Work Mode Choice among the Foreign-Born in New Jersey: Country of Origin Specific Differences. *(poster)*
- Jiwattanakulpaisarn, Piyapong, **Robert B. Noland**, and Daniel J. Graham. Highway Infrastructure and Private Output: Evidence from Static and Dynamic Production Function Models. *(poster)*
- Melo, Patricia C., Daniel J. Graham, and **Robert B. Noland**. Impact of Transport Infrastructure on Firm Formation: Evidence from the Portuguese Municipalities. *(poster)*
- **Noland, Robert B.**, **Devajyoti Deka,** and **Ranjit Walia.** A Statewide Analysis of Bicycling in New Jersey. *(poster)*
- **Pucher, John**. Bike-Transit Integration in North America.

Walk 21 Conference, New York City, NY – October 2009

- **Von Hagen, Leigh Ann**. NJDOT's Urban Demonstration Program.

Other Presentations by VTC Staff and Affiliates over the Past Year Include:

- **Carnegie, Jon.** Land Use Trends Affecting Transportation in New Jersey. New Jersey Department of Transportation TDM Strategic Plan – May 26, 2011.
- **Carnegie, Jon.** Evacuation Planning in Transportation. New Jersey Department of Transportation Infrastructure Security Workshop, New Brunswick, NJ – October 13, 2009.
- **Carnegie, Jon.** Statewide Regional Evacuation Planning Studies. New Jersey County Emergency Management Coordinator's Association Meeting, Woodbridge, NJ – July 22, 2010.

- **Carnegie, Jon.** Hazard Mitigation Planning: Newark/Jersey City UASI Regional Evacuation Planning Study. NJTPA Transportation and Technology Symposium, Newark, NJ – October 21, 2010.
- **Carnegie, Jon.** Transportation Investment as an Economic Generator. Annual Meeting of the Somerset County Regional Center Partnership, Bridgewater, NJ – November 5, 2010.
- **Carnegie, Jon.** Newark/Jersey City UASI Regional Evacuation Planning Study. Rutgers DIMACS Workshop: Modeling and Mitigation of the Impacts of Extreme Weather Events to Human Health Risks, New Brunswick, New Jersey – June 4, 2010.
- **Lubin, Andrea**. Creating a Regional Travel Concierge Pilot Program: Process Highlights & Outcome Challenges. Medicaid Infrastructure Grant Transportation Webinar – September 2010.
- **Noland, Robert.** Spatial Factors Associated with Pedestrian Injuries and Fatalities. Hong Kong Polytechnic University Colloquium – December 2009.
- **Noland, Robert.** Moderator. Climate Change and Transport in Europe. Conference on Climate Change Policy: Lessons from the European Experience, The Eagleton Institute of Politics, Rutgers University – March 2010.
- **Noland, Robert.** Economic and behavioral effects of transportation infrastructure. Testimony before the New Jersey Clean Air Council – April 2010.
- **Noland, Robert.** Appointed as Visiting Professor, Department of Civil and Building Engineering, Loughborough University, United Kingdom – April 2010.
- **Pucher, John**. Walking and Cycling for Healthy Cities. Public presentation for the San Diego Association of Governments (SANDAG) and the Active Living Research Program of the Robert Wood Johnson Foundation and San Diego State University, San Diego, California – August 23, 2010.
- **Pucher, John**. Biking for All Texans: For Health, for Fun, for Transportation. Keynote address for the Texas Trails and Active Transportation Conference, organized by Bike Texas, Texas Trails Network, and the Texas Active Living Network, Austin, Texas – February 3-6, 2010.
- **VonHagen, Leigh Ann**. Walking and Biking to School Policies. NY State Safe Routes to School Partnership Webinar – September 2009.
- **VonHagen, Leigh Ann**. Walk and Bike to School Policies. Safe Routes to School Coaching Action Network Webinar – January 2010.
- **Walia, Ranjit**. Senior Walkability. NJ Public Health Administrators meeting – March 31, 2009.
- **Walia, Ranjit**. Pedestrian Safety Enforcement Program. Regional Safe Passage Task Force for Hunterdon, Somerset, and Warren Counties at the Somerset Emergency Services Academy – May 21, 2009.
- **Walia, Ranjit**. NJ Pedestrian Laws. DVRPC Regional Bicycle and Pedestrian Advisory Forum – July 21, 2009.

SERVICE

VTC staff and faculty are committed to sharing their expertise and research findings with both the private and public sectors and do so throughout the year by a variety of means, including those described in this section.

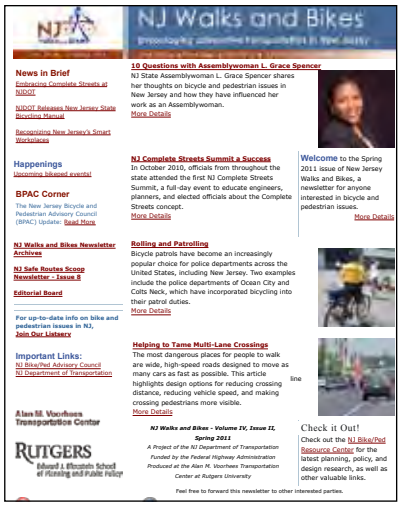
VTC Newsletters

VTC publishes four online newsletters that are disseminated to a broad national readership. The overarching goal of each is to service the community by providing pertinent, interesting and timely information on a specific transportation policy area VTC studies.

NJ Walks and Bikes

The *NJ Walks and Bikes* newsletter is a semiannual publication designed to provide up-to-date information on bicycle and pedestrian issues, as well as best practices related to a host of bicycling and pedestrian concerns. In each issue, communities and/or individuals making positive contributions to efforts to increase safe bicycling and walking in the state are typically profiled and upcoming events are highlighted.

To view past issues of this newsletter or to subscribe, visit: *http://policy.rutgers.edu/vtc/newsletters/njbikeped.php*

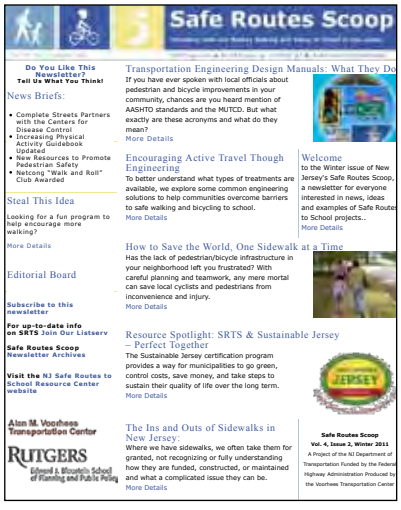


Safe Routes Scoop

The *Safe Routes Scoop* newsletter is a semiannual publication designed to inform and educate municipalities, schools, students and parents about SRTS school news, issues, and resources as well as the New Jersey Statewide SRTS program.

In each issue, Safe Routes to School best practices are highlighted, interesting health news related to childhood physical activity is discussed, and upcoming Safe Routes events are noted.

To view past issues of this newsletter or to subscribe, visit: *http://policy.rutgers.edu/vtc/newsletters/saferoutes.php*



Transit Friendly Development

The *Transit-Friendly Development* e-newsletter highlights transit-oriented development (TOD) activities in New Jersey and around the country – projects, best practices, problems solved, legislation, interviews with expert planners, developers, and transit officials, as well as current research. Specific topics have included interviews with leading practitioners, accounts of New Jersey's Transit Villages and other communities that have reinvigorated downtown areas around transit, essays on issues affecting TOD, and reviews of new literature. The newsletter reaches an audience of nearly 6,000 policy and decision makers, as well as practitioners and the public, both in New Jersey and across the country. The newsletter has been well received by Smart Growth advocates, since it highlights efforts to intensify land uses near existing or planned transit facilities.

To review past issues of this newsletter publication, go to: *http://policy.rutgers.edu/vtc/tod/newsletter.php*


Transit-Friendly Development

Winter 2010-11
Volume 6, Number 2

What's New

Transit Village Update

Rockaway and Somerville Designated as New Transit Villages

New Mixed-Use Project: The Avenue at South Orange

New Brunswick Rising: The Gateway & Wellness Plaza

Union County College Completes Elizabeth Campus Building

NJ TOD News

Hunterdon Waterfront Community

Newark TOD: Capitalizing on Historic Assets

Research News

VTC to Begin Project: Measuring Benefits of TOD

Editorial Board

Who Lives Near Transit?

Q&A with Rahway's Former Mayor James Kennedy

Recommended Reading

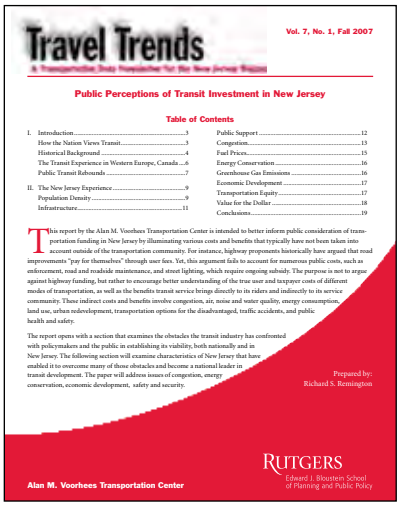
Tell Us What You Think!

Subscribe | Unsubscribe

Feel free to forward this newsletter to other interested parties!

Travel Trends

Travel Trends is a VTC publication that focuses on publicizing cogent analyses of data related to travel issues impacting the greater New Jersey region's transportation system. Past issues of *Travel Trends* have focused on a myriad of topics, including the role of AMTRAK's intercity passenger rail services in New Jersey, impacts of the 9/11 terrorist attack on the trans-Hudson transportation system, and public perceptions of transit investment in New Jersey.


Travel Trends

Vol. 7, No. 1, Fall 2007

Public Perceptions of Transit Investment in New Jersey

Table of Contents

Prepared by:
Richard S. Remington

Alan M. Voorhees Transportation Center

RUTGERS
Edward J. Bloustein School of Planning and Public Policy

Resource Centers

New Jersey Bicycle & Pedestrian Resource Center

The New Jersey Bicycle & Pedestrian Resource Center (BPRC) was established by the New Jersey Department of Transportation at VTC in 2001. The BPRC was created to assist public officials, transportation and health professionals, and the public to create a safer and more accessible walking and bicycling environment in New Jersey. Since its inception, the BPRC annual work program has included a combination of primary research, applied studies and analysis, outreach and training activities, information dissemination, and technical assistance. Core elements of the work program undertaken each year include serving as an information clearinghouse, providing leadership and support to the New Jersey Bicycle and Pedestrian Advisory Council (BPAC), and providing on-call technical expertise to NJDOT, local government officials, and other stakeholders.

New Jersey Safe Routes to School Resource Center

The New Jersey Safe Routes to School (SRTS) Resource Center was established by the New Jersey Department of Transportation within the Voorhees Transportation Center in 2007. The resource center was created to support the development of sound Safe Routes to School policies and procedures statewide; provide education, outreach, and training to those who are charged with implementing Safe Routes to School program objectives; and to undertake project and program evaluation and research activities designed to promote the implementation of the most effective practices for Safe Routes to School in New Jersey.

Both resource centers are supported by the New Jersey Department of Transportation through funds provided by the Federal Highway Administration.

Community Advisory Groups

New Jersey Bicycle and Pedestrian Advisory Council

The New Jersey Bicycle and Pedestrian Advisory Council (BPAC) is coordinated by VTC in conjunction with the New Jersey Department of Transportation. The goal of the BPAC is to promote policies, practices, and attitudes that increase bicycling and walking for transportation and recreation, in order to enhance the state's quality of life and improve public health and the environment. Council members include advocates, professionals, and staff members from local, county, and state agencies from the transportation, health, environment, and enforcement fields.

Safe Routes to School Coalition

The SRTS Resource Center organizes the Safe Routes to School Coalition, an advisory group to the New Jersey Department of Transportation for the statewide SRTS program. The Coalition meets twice a year to discuss issues, share resources, and provide general assessments of statewide SRTS needs. Members include representatives from the fields of transportation, education, law enforcement, and health. Membership is open to anyone who seeks to promote walking and bicycling to school and make walking and bicycling safer for students.

VTC Distinguished Lecture Series

VTC has a rich history of convening lecture series open to the public, featuring a diverse body of transportation professionals and leaders. Past lectures have included presentations on topics related to privatization and public interest; federal transportation policy, bicycling, and public health; the Surface Transportation Act; and land-use and transportation concerns. Among the notable speakers who have shared their work through the Distinguished Lecture Series are former U.S. Congressman James Oberstar; former Assistant U.S. Secretary of Transportation Emil Frankel; Anne Canby, President of the Surface Transportation Policy Project; former New Jersey Department of Transportation Commissioner Jack Lettiere; and authors Jill Jonnes and Joseph Giglio.

Recently convened VTC Distinguished Lecture Series events include:

2011 - Building on Success - Strategies for Managing and Improving the Northeast Corridor

President and Chief Executive Officer of AMTRAK, Joseph H. Boardman, discussed timely issues related to AMTRAK service and the potential for the "Gateway Project," which would follow a similar footprint to the abandoned Access to the Region's Core (ARC) tunnel initiative.

2009 - The Obama Administration and the Future of U.S. Transportation Policy

The U.S. Department of Transportation's Under Secretary for Policy, Roy Kienitz, discussed the Obama administration's priorities for transportation policy.

Joseph H. Boardman, President and Chief Executive Officer of AMTRAK, presented the 2011 Alan M. Voorhees Distinguished Lecture.

External Committees and Councils

VTC staff members dedicate time and service to a variety of transportation-related external committees and councils that include or have included:

Transportation Research Board committees

- Transportation and Air Quality
- Transportation Energy
- School Transportation Committee
- Bicycle Transportation Committee
- Pedestrian Committee
- Paratransit Committee
- Traffic Law Enforcement Committee
- Emergency Evacuation Subcommittee
- Robert B. Noland appointed co-chair, Special Task Force on Global Climate Change of the Transportation Research Board, June 2010
- TCRP Project B-34 Panel: Resource Guide for Commingling ADA and Non-ADA Paratransit Riders

Caminos Seguros Advisory Committee

Center for Workers with Disabilities – Medicaid Infrastructure Grant Transportation Committee

Get Moving, Get Healthy NJ

Middlesex County Traffic Safety Task Force

New Jersey Council on Access and Mobility

NJ TRANSIT ADA Task Force

New Jersey Travel Independence Program (NJTIP) Board of Trustees

Partnership for Healthy Kids

Pedestrian and Bicycle Information Center International Review Committee

Pedestrian Injury Prevention Partnership

ShapingNJ Committee

Sustainable Jersey Land Use and Transportation Committee

EDUCATION AND TRAINING

VTC Courses at the Edward J. Bloustein School of Planning and Public Policy

Professor Robert B. Noland, PhD

- Transportation and Land Use, graduate course: Fall 2010

  VTC staff guest lecture: Stephanie DiPetrillo on the topic of Transit-Oriented Development in New Jersey

- Research Methods, undergraduate course: Fall 2010
- Transportation and the Environment, graduate and undergraduate course: Spring 2010

Jon A. Carnegie, AICP/PP

- Sustainable Transportation Planning, undergraduate course: Fall 2010

Professor John Pucher, PhD

- Urban Transportation Policy, undergraduate course: Spring 2010
- Urban Economics and Spatial Patterns, graduate course: Fall 2009
- International Transport Policy and Planning, graduate course: Spring 2010
- Urban Transport Policy, graduate course: Fall 2010

Transportation Studies Certificate

The Bloustein School, in partnership with Rutgers School of Engineering, offers a cross-disciplinary program leading to the graduate Certificate in Transportation Studies. The certificate is open to matriculated graduate students in the Urban Planning and Policy Development and the Public Policy graduate programs at the Bloustein School and in the Department of Civil and Environmental Engineering. It is offered with two concentrations: technology and design, and policy and planning. The technology and design concentration focuses on analysis and design issues and is directed to students with an interest in transportation and traffic engineering and facility design. The policy and planning concentration focuses on the policy and planning process and is directed to students with these interests. In general, the student enrolls in one of the programs at the master's level and, upon graduating, receives a transportation studies certificate signifying completion of the program at the same time the student receives his or her master's degree. Under some circumstances, doctoral students may be admitted to the certificate program.

Training and Workshops

VTC Complete Streets Summit

More than 170 planners, engineers, officials, and advocates attended the Complete Streets Summit that VTC organized on behalf of the New Jersey Department of Transportation in October 2010, with funding from the Federal Highway Administration. The RBA Group provided valuable staff support, and the New Jersey Chapter of the American Planning Association and the Metropolitan Section of the Institute of Transportation Engineers were event cosponsors.

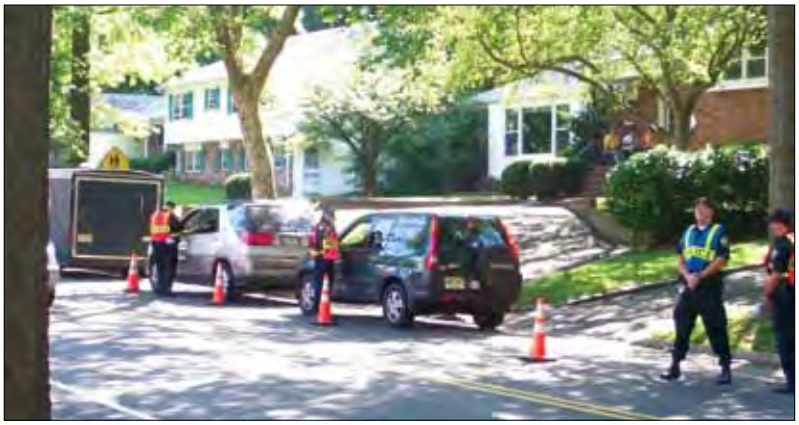
Complete Streets are designed and operated to enable safe access for all users – pedestrians, bicyclists, motorists, and transit riders of all ages and abilities. The New Jersey Department of Transportation recently adopted a Complete Streets Policy and would like to spread the word about this program, encouraging more counties and municipalities to adopt their own policies. Instituting a Complete Streets Policy ensures that agencies routinely design and maintain the entire right-of-way to enable safe access for anyone who may use it. The summit educated participants about Complete Streets, its benefits and costs, and how to overcome barriers to implementing a Complete Streets Policy. Michael Ronkin, an internationally recognized consultant and speaker on innovative, practical street design, was the keynote speaker.

New Jersey Bike School Statewide Bicycle Education Program

This comprehensive bicycle safety pilot program brings a detailed curriculum and program equipment including 24 bicycles to locations throughout the state to teach New Jersey's youth in grades 4-6 about safely navigating streets. It provides information about obeying traffic laws and sharing the road with both pedestrians and motorists.

Walking School Bus Training

"A Walking School Bus" is a safe way of traveling to school in which one or two parents or volunteers escorts a group of children as they walk to school. This training program, which has so far been offered four times in communities throughout New Jersey, provides participants with the tools and skills to plan and organize an effective Walking School Bus Program in their own communities. One event in Perth Amboy attracted more than 30 parents, advocates, and educators looking to change the way children get to school in their communities.



Pedestrian Safety Enforcement (PSE)

The goal of this training is to educate law enforcement officers on procedures for conducting a safe and effective crosswalk "sting" enforcement action while increasing officer awareness of failure-to-yield issues and relevant statutory provisions relating to pedestrian rights. VTC conducted two workshops in 2010, building on training that VTC has conducted over the previous three years. VTC coordinated this effort with PSE training and enforcement efforts being conducted by the Division of Highway Traffic Safety (DHTS).

Partners in Education

The National Transit Institute

VTC's commitment to achieving the education component of our mission is realized through our relationship with the National Transit Institute (NTI).

NTI was established in 1992 at Rutgers University under the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) to develop, promote, and deliver training and education programs for the public transit industry. In 1999, NTI became part of the Voorhees Transportation Center. NTI is funded by a grant from the Federal Transit Administration.

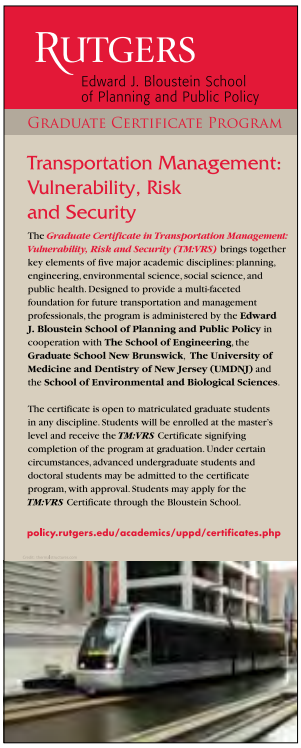
NTI's mission is to provide training, education, and clearinghouse services in support of public transportation and quality of life in the United States as the premier clearinghouse resource for information and assistance in the area of public transportation. NTI is a valued partner with industry, public transportation service providers, Rutgers University, and trade associations.

NTI offers a robust and diverse course catalog, as well as a variety of education products and tools. For more information on NTI, visit their website at *www.ntionline.com*. The NTI annual report can also be found online at *policy.rutgers.edu/news/reports/NTIAnnualReportFY2010Final.pdf*.

The Center for Transportation Safety, Security and Risk

The Center for Transportation Safety, Security and Risk combines the strengths of faculty and staff with complementary expertise in risk analysis and transportation. Organizationally, the Center is part of the Bloustein School and works cooperatively with its sister organizations, the National Transit Institute and the Voorhees Transportation Center. Through NTI, the Center operates as a U.S. Department of Homeland Security designated National Transportation Security Center of Excellence. The Center also works with other Rutgers University faculty and staff in the School of Engineering, Center for Advanced Infrastructure and Transportation, School of Environmental and Biological Sciences, School of Public Health, and with university staff involved in disaster preparedness and emergency response. Together, these organizations provide outstanding and unmatched expertise in risk analysis and transportation security and safety.

Certificate in Transportation Management: Vulnerability, Risk, and Security (TM:VRS)



The graduate certificate in Transportation Management: Vulnerability, Risk and Security brings together key elements of five major academic disciplines: planning, engineering, environmental science, social science, and public health. Designed to provide a multifaceted foundation for future transportation and management professionals, the program is administered by the Bloustein School in cooperation with the School of Engineering, the School of Environmental and Biological Sciences, and the Graduate School New Brunswick, all at Rutgers University, and the University of Medicine and Dentistry of New Jersey.

The certificate is open to matriculated graduate students in any discipline. Students enroll at the master's level and receive the TM:VRS Certificate at graduation, signifying completion of the program. The fifteen-credit program is designed to provide students with a risk-analysis approach to transportation policy. Participants develop expertise through a multidisciplinary approach, providing them with skills that will apply to future work sites and enrich their research in the fields of transportation planning and management. The research and training associated with this certificate will enable certified students to apply their classroom experience in a comprehensive approach to reducing risk exposures and developing efficient interdisciplinary networks in response to complex problems related to system vulnerabilities.

Our Students

Mentoring the upcoming generation of transportation planners and policy professionals is a core goal of the Voorhees Transportation Center.

Each year, VTC provides several graduate assistantships to Bloustein students, as well as offers part-time work opportunities to the broader Rutgers student community. Many of our students serve an integral role on the projects to which they are assigned and contribute fresh perspectives to our work efforts. Some highlights of student contributions and achievements over the past year as described below:

Post-VTC Employment

Following their work experiences at VTC, our students are successful in securing employment at a diverse array of both public and private sector entities, including:

- American Association of Motor Vehicle Administrators
- Cross County Connection TMA
- Heyer, Gruel and Associates
- Hudson County, New Jersey Division of Planning
- New Jersey Office of Legislative Services
- NJ TRANSIT
- North Jersey Transportation Planning Authority
- NYC Department of City Planning
- NYC Department of Transportation
- Phillips Preiss Grygiel LLC
- South Jersey Transportation Authority
- The Louis Berger Group
- The RBA Group
- University of New Orleans
- Virginia Tech

Nicholas Klein, doctoral candidate, taught a Rutgers Bicycle Sharing Studio in fall 2010 for graduate students in Urban Planning and Policy Development. Nicholas also received the 2009 New Jersey Department of Transportation Research Award. Nicholas is conducting cutting-edge research examining how curbside buses have gained a large share of the intercity travel market in the Northeast Corridor.

Bahareh Sehatzadeh, doctoral candidate, worked on research projects focusing on pedestrians in New Jersey. She was involved in processing and analyzing the results of a 2009 survey on pedestrian behavior in New Jersey to study the relationship between travel behavior, built-environment features, and sociodemographic attributes of the respondents. Bahareh has also been working on developing a framework to study pedestrian safety at and near bus stops, and identifying the high-crash locations at New Jersey bus stops for further analysis.

Nicholas Tulach, doctoral candidate, worked on two major research projects in 2010, both funded through the Transit Cooperative Research Program. The first was a series of case studies of international best practices for environmental assessment of transit facilities. The second involved both data support and case study research for a new methodology to evaluate the agglomeration effects of new transit investments in the United States. Nicholas also received a 2010 Transportation Coordinating Council/Federal Transit Administration Graduate Fellowship and the 2009 Donald A. Krueckeberg Memorial Scholarship.

RUTGERS
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