

# NTC Today

Morgan State University National Transportation Center

Volume 4 Spring/Summer 2002

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NTC has a great  
Educational Opportunity  
For Your Teenager!

See page 3  
for details about  
Summer  
Transportation  
Institute  
2002

## NTC Partners with the Maryland Dept. of Transportation and Civic Works

**T**hursday March 14, 2002 marked a unique experience in the lives of 10 students who are participants in Maryland's Civic Works program. With help from the National Transportation Center, MDOT, Morgan State University, the Federal Highway Administration and the National Highway Traffic Safety Administration, a transportation seminar was developed in hopes to make a difference in their lives and future careers.

With a full agenda, NTC Student Coordinator Joyce Trussell planned a day of activities meant to expose and enlighten students about the limitless possibilities available in the field of transportation. Students introduced themselves and were asked to share their views and experiences relating to transportation. After a brief history and overview of the the mission of the NTC, each staff member took time to share their roles and responsibilities, and gave insight on a typical work day. Further information was provided by Murray Piper, FHWA; Roland Wilson, NHTSA; Fred Banks, Morgan State Admissions Office; and Linda Trusty, Morgan State Financial Aid Office. Students also took a tour of the Institute of Architecture and Planning as well as the Design and Construction Management Offices.



Students discussed transportation legislation, steps involved in investigating highway accidents and career options, based upon the experience and training they are receiving through Civic Works. The organization is categorized as an "urban Peace Corps" whose members work year round to improve communities throughout Baltimore by responding to a wide variety of community services. The mission set forth by Executive Director Dana Stein is to provide critical community services and enhance the work, education and citizenship of young people.

A special thanks to all participants, especially Helen Dale and Tere Howard, from MDOT's Office of Community Affairs and NTC's Tawanda Carter, for helping to coordinate this effort. Most importantly, we extend thanks to the students and their organizational leader and teacher, Ms. Dianne Wheaton for a partnership that NTC hopes to continue in years to come.



# Calendar

## MAY 2002

May 15 - 17 2002

Women's Transportation Seminar  
National Conference  
Minneapolis

For more information, e-mail KellyAnne  
Gallagher at kgallagher@wtsnational.org  
or call 202/496-4340.  
www.wtsnational.org

## JUNE 2002

June 5 - 10

APTA International Rail Rodeo  
Renaissance Harborplace Hotel  
Baltimore, Maryland

For more information, contact  
Cara Reeve at 202/496-4874

June 7

GBC Business Education Seminar  
Special Guest Speaker: Brian Billick,  
Baltimore Ravens

Hyatt Regency Hotel

For more information, contact  
Jay Stewart at 410/727-2820, x35

June 8-13

APTA Commuter Rail/Rail Transit  
Conference

Renaissance Harborplace Hotel  
& Hyatt Regency Baltimore  
Baltimore, Maryland

For more information, contact  
202/496-4838

## JULY 2002

July 9-13

COMTO Annual Conference  
Hyatt Regency  
San Antonio, Texas

For more information, contact  
202/289-1214

## DIRECTOR'S COMMENTARY

Later this year the National Center for Transportation Management, Research and Development or National Transportation Center (NTC) will have been in existence for 10 years. First established by ISTEA and then re-authorized by TEA-21, the NTC has experienced the vagaries of transportation funding, but thrived along with the emphasis on intermodalism, investment flexibility and equity in the nation's surface transportation programs. The NTC has been guided through this entire period by its theme: *Transportation: A Key to Human and Economic Development*.

When the NTC was established, Morgan had only one highly regarded graduate program in transportation, the interdisciplinary M.S. in Transportation, a program that predates the engineering disciplines at Morgan. NTC played a major role over the years in supporting faculty and student research in that program, but NTC always saw its responsibilities under the University Transportation Centers Program as truly interdisciplinary. NTC worked with academic units throughout the university, raising the visibility of transportation and informing students that there are many career opportunities in transportation.

During the TEA-21 authorization period, Morgan established a transportation engineering program within the Doctor and Master of Engineering, and NTC designated existing academic programs as transportation-related: Master of City and Regional Planning, Master of Landscape Architecture and Master of Architecture. These designations came about because faculty engaged in NTC-funded research then introduced transportation issues and case studies into their curricula. Also, students, assisting these faculty with research or enrolling in these programs, received financial support from the NTC that required individual projects in transportation. Certain courses in business and geography were also designated through scholarships for deserving students and support of adjunct faculty teaching transportation concepts. In addition, internships have become plentiful over the years. The result has been that courses and students enrolled in transportation programs at Morgan have proliferated.

Those individuals that have been associated with the NTC during the last 10 years have much to be proud of. Along with the university and our partners, NTC will continue to provide as many opportunities as possible for transportation research and education and encourage students to pursue careers in transportation.

Dr. Z. Andrew Farkas  
NTC Director

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## NTC OUTREACH

### Oliver Page Sheds Light on Crime and Crime Prevention on Public Transport

Recently, the National Transportation Center was honored to host Transport Specialist Oliver Page from Pretoria, South Africa. Currently employed at CSIR, Africa's largest applied research institution, Page was visiting the United States with hopes to promote his most recent research report, *Crime and Crime Prevention on Public Transport*, as well as visit universities where he may pursue a doctoral degree.

NTC Director Andrew Farkas spent time with Page discussing the need for more in-depth transportation research. Page also spent a better part of the morning briefing the NTC staff of what his organization is doing to bring more awareness to the crime-related phenomena pertaining to the public transport industry and the modes it represents in South Africa. Aside from discussion sur-



NTC Director Dr. Andrew Farkas (left) and Transportation Specialist Oliver Page take a break from their morning meetings.

rounding political and sociological issues, Page provided an overview to staff and faculty researchers of the extent and types of crimes that are committed on various modes in the emerging market economy of South Africa. His research describes the "underlying causes of crime and the factors that contribute to it." The report also provides recommenda-

tions and measures in which criminal activities can be addressed.

After additional meetings with members of the faculty in the School of Engineering, Page headed to Washington, D.C. to meet with other officials who have an interest in his extensive research. He had been called as an expert witness in a case where commuter railway crime and crime prevention was to be debated and he also sought ideas for further research partnerships.

To obtain a copy of Page's report, visit <http://www.unisa.ac.za/dept/press/upre-book/upressnu.html> or feel free to e-mail him direct at [OPage@csir.co.za](mailto:OPage@csir.co.za)

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### Do You Know a 9th or 10th Grader? Call Today to Obtain an Application for STI 2002

NTC and Morgan State are proud to be a host site for the sixth year of the National Summer Transportation Institute (NSTI). This five-week, non-residential summer program focuses on awareness and opportunity within the transportation industry.

NTC has actively supported the ongoing efforts of this program, which is sponsored by the Federal Highway Administration. This year's planned activities are no exception. You don't want your ninth or tenth grader to miss out on the exploration of transportation of people and cargo, laws and regulations, career opportunities, academic enhancement activities, field trips and student projects, highway design, and on-campus educational and recreational activities.

Students with a strong interest in math are encouraged to apply. This year's program will run from July 9 - August 9, 2002, Monday-Friday from 8:30 a.m. to 4:00 p.m. Lunch is provided daily and students receive a stipend and certificate upon completion. A closing banquet is held at the end of the program allowing students to showcase what they've learned to parents and industry professionals.

If you'd like to obtain an application, contact the NTC at 443-885-3666. Or, visit the education link at [www.eng.morgan.edu/~ntc](http://www.eng.morgan.edu/~ntc) for more information.



#### Real Estate Week 2002

On April 1, 2002, students and faculty kicked off Real Estate Week 2002. Howard University's Real Estate Club, the African American Real Estate Professionals (AAREP) and the Real Estate Apprenticeship Program (REAP) sponsored the conference addressing *Minorities in Real Estate: Issues and Opportunities*.

NTC's Charles Carter was a guest panelist for the Housing Finance, Retailing and Minorities in Real Estate panel. We thank him for representing NTC and encourage our readers to call him for more information about our right-of-way and real estate programs. Dr. Carter can be reached at 443/885-1047.

## NTC OUTREACH

### Groundhog Job Shadow Day 2002 Yields Success for Students and Participants

**A**nother fun-filled Groundhog Job Shadow Day gave young people the opportunity to work with and learn from transportation professionals who want to get our future leaders prepared. For the fourth year in a row, NTC supported the ongoing effort of the USDOT's Annual Groundhog Job Shadow Day.

On February 27, 2002, students from Lombard Middle School, Harlem Park Middle School, Dunbar Middle School and Patterson Park High School, participated in a myriad of activities that showed them what everyday decisions are made by transportation officials. The event was held in conjunction with MSU's School of Engineering.

Job shadowing is an academically motivating activity designed to give kids an up-close look at the world of work and to answer the question, "Why do I have to learn this?" Beginning with a nationwide kickoff on February 1, 2002, and continuing throughout the school year, students across America are given this opportunity to develop relationships with workplace mentors as they go through a normal day of work.

FHWA's Esther Strawder-Payton facilitated the day's activities. The event began with introductions and a mock trial that focused on civil rights and right-of-way programs concerning the Woodrow Wilson Bridge Project. Led by Murray Piper, FHWA, and Thomas Kretzschmar, Terra Company, Inc., students came up with viable solutions for transportation-related problems.

Next, Trooper First Class Derrick Bernard talked about his responsibilities as an employee with the Maryland State Police Canine Unit. He then gave a demonstration with his partner, a ger-



1. MDOT Display.
2. Tom Kretzschmar helps students solve the Woodrow Wilson Bridge dilemma.
3. Students work on mock trial exercise.
4. Canine demonstration.
5. Students listen to presenters.
6. Students network and discuss what was learned with program participants.

man shepherd by the name of Kwan. Together, they displayed the skills and training necessary to find explosives and controlled substances.

More real-life scenarios were brought to the attention of students when Richard Chen and Joseph Bressi of the Baltimore City Department of Public Works gave an overview of the CSX Train Derailment. Many students were very familiar with this event and actively participated in a question/answer discussion about what was involved with this particular incident. Students were also given time to talk with representatives from UPS, the National Highway

Traffic Safety Administration, Maryland State Highway Administration and the Federal Railroad Administration at vendor displays.

This partnership continues to grow with one goal in mind: educating students about opportunities in transportation. NTC hopes to be a supporter of the event in 2003 and plans are underway to market the event to schools across the Baltimore area. If you'd like to participate, contact Sandra Talbert-Jackson at 410.962.4440.

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## NEWS TO USE

### The NTC Names New Advisory Committee Members: Foxx, Smith and White

**N**TC is proud to welcome three new members to our Advisory Committee. With various backgrounds, a commitment to excellence and strong leadership skills, we know that each of these representatives will continue to influence and enhance the mission of the Center.



**Alfred Foxx** was appointed Director of the Baltimore City Office of Transportation by Mayor Martin O' Malley in September 2001. He joins city government after 26 years of military service. In his current position, Mr. Foxx is responsible for a workforce of more than 1500 administrative, managerial and technical employees. He manages the operations of Transportation Maintenance, Engineering, Safety and Construction Management. He is working to develop a strategic transportation plan and establish working partnerships.

The Advisory Committee is made up of 15 members who are comprised from various transportation modal agencies, and public and private industry. They are key to helping NTC make strategic decisions in meeting its theme and program objectives



**Ricky Dorell Smith Sr.** is the Maryland Department of Transportation's (MDOT) State Highway Administration (SHA) Deputy Administrator for Finance, Information Technology and Administration. Prior to working with SHA, Mr. Smith was employed with the Maryland Aviation Administration (MAA), where he served the State as Assistant Deputy Executive Director for Development and Administration.

Alfred Foxx, Ricky Smith and Virginia White, are names that are well known in transportation circles across Maryland. We extend our sincere thanks and appreciation for their acceptance of these positions and we look forward to working with them.



**Virginia L. White** currently is serving as the Acting Administrator of the Maryland Transit Administration (MTA). She is a 17-year veteran employee of the MTA and has previously served as the MTA Deputy Administrator, Transit Operations. With numerous leadership positions, she has overseen many activities within MTA. During her tenure, Ms. White has overseen all aspects of the agency's delivery of rail, bus and mobility transportation services.

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### NTC Hosts Transportation Planning Course

**N**TC, in cooperation with the Baltimore Metropolitan Council, hosted a three-day training course on Metropolitan Transportation Planning (MTP) from March 26 - 28, 2002.

MTP is a training course targeted to both new and experienced planners, working in federal, state and local agencies. The MTP course provides a comprehensive overview of the metropolitan transportation planning process; the context in which it occurs; governing laws and regulations; roles and responsibilities of the "players"; and various approaches to planning, as well as a "hands-on" case studies.

The MTP course marked the first collaborative effort among the National

Transit Institute (NTI), the National Highway Institute (NHI), the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). Planners from both FHWA and FTA, representatives from various Metropolitan Planning Organizations (MPOs), urban stakeholders and adult learning specialists were part of the course development team.

NTI is located within Rutgers, State University of New Jersey. NTI provides a comprehensive program of training and education related to public transit and other forms of transportation.

NTC and the Baltimore Metropolitan Council staff participated in the training course and provided local perspectives on transportation planning.



#### CONGRATULATIONS!

The NTC staff would like to extend congratulations to Project Planner Cyril Peebles and Fiscal Coordinator Tawanda Carter for completion of the National Transit Institute's Metropolitan Transportation Planning Course. Both were recipients of certificates recognizing their accomplishments. Morgan State University hosted the three-day course.

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## TRANSPORTATION EDUCATION NEWS

### Congratulations to Coray Davis Who Was Selected as NTC's Student of the Year

Annually, NTC selects its esteemed Student of the Year. This award honors a student's commitment to excellence and hard work, and their potential to be a future transportation leader. This year, Coray Quentin Davis, a candidate for the Master of Science degree in Transportation at Morgan State University was given such distinction among his peers. A further example of UTC's partnering to achieve success, Coray received his Bachelor of Science degree in Mechanical Engineering Technology from South Carolina State University (SCSU) in May 2000.

This past January, Coray was honored at TRB's 80th Annual Meeting by modal administrators Mary Peters, FHWA; Jennifer Dorn, FTA; and Ellen Engleman, RSPA; during the University Transportation Centers Award Ceremony.

Coray was a member of SCSU's Division I Men's Basketball Team and

lettered four years, receiving the Most Improved Award in his sophomore year. He was also a member of the National Society for Black Engineers and interned in the SCSU School-To-Work Program at Holnam, Incorporated, in the summer of 2000. While there, Coray learned the important aspects of logistics and freight forwarding.

He was awarded an NTC scholarship and has worked as a graduate assistant at the Institute for Transportation. Currently in his second year at Morgan, Coray interned at the Maryland Department of Transportation's Maryland Aviation Administration in the Airport Operations Sector. During this time, Coray learned the critical procedures that are taken to maintain airport security and certification standards. He is now employed as a Traffic Engineer for STV, Incorporated, a transportation consulting firm in Baltimore. He serves as President of the



Coray poses with Mary Peters, FHWA; Jennifer Dorn, FTA; and Ellen Engleman, RSPA; during the University Transportation Centers Award Ceremony.

Institute for Transportation Engineers Chapter at Morgan.

A native South Carolinian, Coray plans to further his education in traffic engineering as well as logistics planning once his master's degree work has been completed.

### Institute for Transportation Seminar Series Features PB's Gloria Jeff

On April 26, 2002, students in the transportation program at Morgan State University were provided with a guest lecture and seminar conducted by Gloria J. Jeff, Vice President, Transportation Programs--Atlanta District, with Parsons Brinckerhoff, Quade & Douglas. The seminar was entitled *Transportation in the 21st Century: Opportunities and Survival Skills. . . Where Do You Fit?*

Jeff, a civil engineer and urban planner with more than 26 years of transportation experience, is the former Deputy Federal Highway Administrator of the United States Department of Transportation. After a brief welcome and introduction session which Jeff asked attendees to participate in an exercise where they would need to imagine their roles and accom-



plishments as if in the year 2007, students and professors alike were faced with deciding what role they would like to play in the future of transportation. They also shared what they hoped to learn from the seminar and how that knowledge can be garnered into career success.

Jeff's blueprint for success was matched with a list of survival skills and an overview of transportation. She stressed transportation and the four I's, Integration in character, Intelligent in nature,

International in scope and Inclusive of service as well as other key aspects that will help students and professionals meet and exceed the needs of a 21st Century transportation system. The half day session, which also included discussions, a question and answer period and feedback, was meant to encourage the participants to examine their future in the industry. The workshop proved beneficial to all participants.

*If you'd like more information on the Seminar Series, or other events sponsored by the Institute for Transportation, contact Ms. Alice Williams at 443.885-3348.*

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## RESEARCH PROJECT NEWS

### PennDOT Holds Strategic Research Initiatives Meeting

**D**r. Andrew Farkas, NTC Director, attended the Pennsylvania DOT Strategic Research Initiatives meeting at the Hershey Lodge and Convention Center in Hershey, PA on March 8, 2002. PennDOT invited Morgan's NTC to participate as part of its outreach to area colleges and universities. Bob Garrett, PennDOT Research Division Manager and a member of NTC's Advisory Committee, is seeking involvement of university researchers, faculty and students in the department's research program initiatives. The meeting consisted of presentation of PennDOT's research

areas of focus, university representatives' presentations of research capabilities, and development of a matrix of mutual interest. PennDOT's Strategic Research Focus Areas are in Traffic Safety, Data Management, Durable/Intelligent Infrastructure and Systems Operations.

Dr. Farkas described for PennDOT and university representatives the USDOT's University Transportation Centers program, the history of the NTC and the capabilities and experiences of NTC affiliated faculty, staff, and students in transportation research. At the end of the meeting there was an opportunity to

network among the department and university representatives. Resulting from this networking was an invitation from Lehigh University's Center for Advanced Technology for Large Structural Systems to Morgan civil engineering undergraduates to apply for summer research internships at Lehigh.

### Research Project Update

**D**r. Anthony Saka, associate professor and graduate program coordinator of the Institute for transportation, recently completed his research on the Assessment of Electronic Toll Collection on Mobile Emissions in the Baltimore Metropolitan Area. He and co-author, Dr. Dennis K. Agboh, Associate professor with the Department of Information Systems, completed the study after being granted funds through the NTC's 2000-01 Academic Research Grant Program.

The professors were assisted by Morgan students Eunice Omayá, Andreane Johnson, Maola Masafu and Gbolahan Afonja. They were also provided with throughput and M-Tag market penetration data from Keith Duerling, Howard Moore and Robert Alter of the Maryland Transportation Authority. Mohamed Khan, Maryland Department of the Environment, and Richard Glassco of Mitretek Systems, Inc. also provides assistance with in using the Westa simulation model. For a copy of the report contact NTC at 443.885.3666 or [ntc@eng.morgan.edu](mailto:ntc@eng.morgan.edu)

#### Assessment of Electronic Toll Collection on Mobile Emissions in the Baltimore Metropolitan Area Abstract

Research conducted by Dr. Anthony Saka and Dr. Dennis Agboh describes a recent study, which was conducted to assess the aggregated impact of the electronic toll collection system (locally called M-Tag) deployment at the three major toll plazas in the Baltimore Metropolitan Area. The study focused on the reduction in mobile emissions, including hydrocarbon, carbon monoxide, and nitrogen oxide, for peak hour periods. The analysis involved two major stages: (1) development of simulation and deterministic models used to generate traffic flow parameters, including speed and driving cycles for the study areas; and (2) employment of the traffic flow parameters from stage 1 to quantify the hourly emissions. Three scenarios were analyzed to quantify the air-quality associated with M-Tag deployment. The first scenario involved the pre-M-Tag deployment condition. The second scenario was based on the initial condition following the deployment of M-Tag, and involved market penetration levels ranging from 21 percent to 28 percent at the three toll plazas. The third scenario represented the current condition involving approximately 50 percent M-Tag market penetration level. A comparative analysis of the pre-M-Tag and post-M-Tag deployment scenarios showed 40 to 63 percent reduction of hydrocarbon and carbon monoxide, and approximately 16 percent reduction of nitrogen oxide in the study area. The results were similar for the simulation and deterministic models. It was also observed from the study that the performance of M-Tag system has improved significantly, because motorists are increasingly familiar with the system, resulting in fewer incidents of weaving-related problems at the toll plazas.

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## Advisory Committee Notes

**O**n March 7, 2002, the NTC Advisory Committee met to discuss the Center's progress and plans since its last meeting. Committee members had been hopeful that the results of the UTC competition would be available, however, even as of this printing, no formal announcement has been made by the United States Department of Transportation.

Discussions regarding alternate means of funding were acknowledged and the Center will, in large part, seek future partnership projects outside of the University setting. MSU School of Engineering Dean Eugene DeLoatch noted that the NTC should eventually strive to make this a primary effort, regardless of the RSPA results.

Attendees were also given an overview of the partnership of FHWA, NTC and the Morgan State University School of Business's Real Estate and Right-of-Way initiative. A spring semester appraisal class within the proposed curriculum included students from Morgan and the State Highway Administration.

After an update on technology transfer activities by Karron Davis and discussion on research initiatives, committee members were advised on the procedure for peer review of research grant proposals. This process will move forward until word of funding has been received.

## NTC Today

Dr. Z. Andrew Farkas  
NTC Director

Karron Davis  
Communication Manager/Editor

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