



The NTC Today

The Biannual Newsletter for the Morgan State University National Center for Transportation Management, Research & Development

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"Study hard, work hard, get a good education because when you get out of school there's going to be a lot of opportunities in transportation because of the president's big, bold vision," LaHood said. Photo by Morgan State University Digital Media Center.



A student gets personal advice from RITA administrator Peter Appel (center).



Sec. Chu is the co-winner of the 1997 Nobel Prize in Physics.

Federal Officials Visit Morgan

On Feb. 17, Ray LaHood, the secretary of the U.S. Department of Transportation (USDOT), visited Morgan for a town hall meeting on innovation, careers, and the Obama administration's efforts in transportation. Three weeks later, U.S. Secretary of Energy Steven Chu came to see Morgan's initiatives in science, technology, engineering, and math (STEM). On May 6, Peter Appel, the administrator of the Research and Innovative Technology Administration (RITA), met with students, faculty, researchers, and NTC advisory committee members in the School of Engineering.

LaHood Promotes Industry Careers

Before his town hall, LaHood had a 30-minute meeting with a group of transportation undergraduate and

graduate students. Two members of his USDOT entourage were Morgan alums: Dawn Tucker-Thomas, UTC grant manager, and Robert Mariner, a senior policy analyst. Tucker-Thomas and Mariner credited Morgan as their platform to the transportation industry. After a brief introduction, LaHood allowed them to share their personal stories and advice.

Tucker-Thomas enrolled in Morgan's graduate program in transportation to give herself a competitive edge, and she came in ready to take advantage of opportunities. While at Morgan, Tucker-Thomas interned at the Maryland Department of Transportation and the Federal Highway Administration's Baltimore office. She was also the first president of Morgan's Conference of Minority Transportation Officials (COMTO) chapter. Mariner came to

Morgan on a singing scholarship, realized he needed a plan B, and left with a degree in civil engineering. "Go after every opportunity. Don't say no," Mariner said. "Research, go after jobs, use us as a resource... Picking up the phone and talking to someone can go a long way."

At both events, Sec. LaHood drew parallels between President Obama's vision for high-speed rail and President Eisenhower's vision for the Interstate highway system. President Obama's

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A Message from the NTC Director

It's been an exciting first few months of 2011. We've been deeply honored to have four eminent federal officials visit the university's School of Engineering and NTC. Secretary of Transportation Ray LaHood and NHTSA Administrator David Strickland launched a student outreach program on safe driving and conducted a town hall meeting with university and high school students on Feb. 17, 2011. Secretary of Energy Stephen Chu toured the School of Engineering, presented a video, and spoke to the university community about electric car batteries and other topics on Mar. 10. RITA Administrator Peter Appel visited NTC on May 6, enjoying a research showcase, participating in a NTC advisory committee meeting, and speaking with transportation students. All of these well-respected individuals declared that our university has played a major role in workforce development and diversity of the next generation of scientists, engineers, planners, and managers in transportation.

NTC and academic departments on campus have played their parts well, as evidenced by alumni of transportation programs at Morgan, and now employees of USDOT, accompanying these leaders. Many other students and graduates are gaining positions of authority within the transportation community, from the Baltimore City engineer in charge of the nearby Argonne Drive bridge reconstruction to Baltimore City's Red Line transit coordinator to Harford County's expert on culverts. We are extremely proud of all of them. We are confident that we will produce more alums who will not only accompany high federal officials, but will perhaps "be them" in years to come.

As always, we value your comments, particularly about your experiences with our students and graduates.

Dr. Andrew Farkas
NTC Director

About the Center

The National Transportation Center (NTC) at Morgan State University is committed to transportation research and education that support the well-being and economic development of communities.

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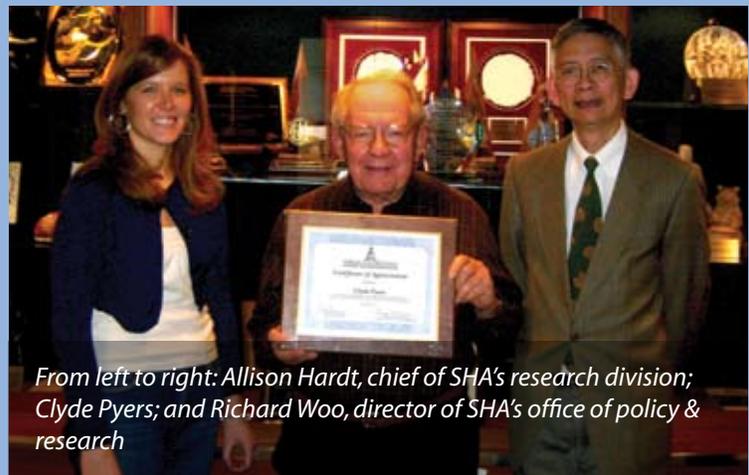
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Honoring Clyde Pyers

Clyde Pyers, who recently ended his tenure with the NTC advisory committee, was presented with a framed certificate at an informal ceremony at the Maryland State Highway Administration (SHA) on March 11. The certificate—which was signed by Dr. David Wilson, Morgan's president, and Dr. Eugene DeLoatch, dean of the School of Engineering—thanked Pyers for "years of commitment to transportation internships, research, and service on the NTC advisory committee."

Pyers is the retired and former director of policy and planning for SHA. He helped establish Morgan's MDOT internship program in the early 1980s, and its success led to the development of the SHA summer internship program. Both programs have provided dozens of Morgan students with career-building opportunities. An upcoming report by the National Cooperative Highway Research Program highlights the programs as models that other organizations can use to involve underrepresented groups in the industry.

"I was of the early and continued belief that the interns'



From left to right: Allison Hardt, chief of SHA's research division; Clyde Pyers; and Richard Woo, director of SHA's office of policy & research

program was valuable for everybody," Pyers said. "It was a win-win-win-win situation. I know SHA has gained a number of employees through this internship program. Some of the interns during their period, of course, have worked in various offices of State Highway, and that's a double win for the student as well as the agency. I just think it's one of the very valuable things that we've done."

Officials Visit Morgan *continued from cover*

proposed budget for 2012 includes the first \$50 billion of a six-year, \$550 billion investment in the nation's transportation programs and infrastructure. Sec. LaHood said that the plan would take care of existing roads and bridges, connect 80 percent of America with high-speed intercity rail by the year 2036, and foster job growth.

"We know that transportation puts people to work. We know that," LaHood said. "We've proved it over the last two years [with the stimulus bill]: 15,000 projects; our friends and neighbors—65,000 of them or more—put to work. And some of those projects will continue this year. Hopefully, we pass the transportation bill. This is a great time to be in transportation."

David Strickland, the administrator for the National Highway Traffic Safety Administration (NHTSA), joined Sec. LaHood at the town hall and repeated the job opportunities available in transportation.

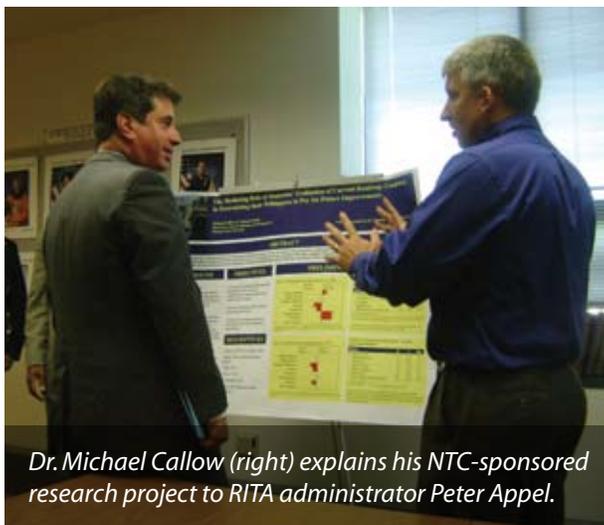
"About 40 percent of my senior managerial core is up for retirement...It really is your time to develop yourselves and fill these new leadership roles," Strickland said.

Strickland also used the event to kickoff NHTSA's safe driving campaign with historically black colleges and universities.

"We need you because, quite frankly, we need every voice in America," Strickland said. "...There's a host of things that we have to work together to improve, and we need brilliant minds like you all have here at Morgan State to be able to partner with us to promote that message."

Chu: Energize Science Education

According to the campus announcement, Sec. Chu's Mar. 10 visit was part of the Obama administration's ongoing commitment to STEM



Dr. Michael Callow (right) explains his NTC-sponsored research project to RITA administrator Peter Appel.

education and research at historically Black institutions.

Chu's day began with a tour of the School of Engineering and Center for Advanced Energy Systems and Environmental Control. Chu's opening remarks at the town hall focused on the United States' new "Sputnik moment," the clean energy race.

His presentation showed how the United States is losing ground in scientific areas where it once led, and he announced two new Department of Energy initiatives that will help the country "out-innovate, out-educate, and out-build" the rest of the world. The Energy Efficiency and Renewable Energy Postdoctoral Fellowship Program will provide financial support and research opportunities to 20 doctoral candidates whose careers have focused on energy efficiency and renewable energy technology. The SunShot Initiative Fellowship Program is open to recent master's or doctoral graduates. Working in the Department of Energy's Solar Energy Technologies Program, the SunShot fellows will help develop innovations that will reduce the cost of solar energy systems.

"So we still have the opportunity to lead the world in clean energy and capture the jobs for this century," Chu said. "We need you, the students at Morgan State, to help win the energy race."

Appel: "I'm a big fan of the UTC program."

As RITA administrator, Peter Appel coordinates USDOT's research, education, and analysis programs. Those efforts include the University Transportation Centers program, which funds the NTC.

Appel's May 6 visit included a meeting with Dr. David Wilson, Morgan's president; a research showcase; lunch with NTC researchers and advisory committee members; and a student town hall on

transportation careers.

Throughout his day at Morgan, Appel made a case for how focused research and collaboration ensures the effectiveness of any infrastructure investment.

"My favorite thing about transportation is—I like optimizing things," Appel said. "I like trying to figure out how to match up resources to make the best possible solutions. I look at transportation as one massive optimization problem."

Although the current budget environment is difficult, the administrator would like the UTC program to become bigger, more competitive, and aligned with USDOT's goals. He'd also like it to feature more collaboration and communication amongst centers.

That idea was the impetus for RITA's University Research Technology Transfer Day on April 6. Held in Washington, the event brought together 25 UTCs, including the NTC, who presented their projects to each other and USDOT officials.

"Synergy creates tremendous value as long as there is something in place that facilitates communication and collaboration," Appel said.



COMPLETED PROJECTS

Second Parenthoods: The Influence of Custodial Care of Children Among African-American Elderly on Their Travel Behavior and Transportation Needs

Authors: Dr. Robert Smith and Dr. Stella Hargett

Summary : This study reports the demographics, travel patterns, and transportation needs of elderly African Americans who participated in the 2001-02 National Household Travel Survey. Of all households, female-headed households were most disadvantaged in terms of education, residential location, and medical conditions that affected travel behaviors and transportation needs.

Life Cycle and Economic Efficiency Analysis Phase II: Durable Pavement Markings

Author: Dr. Young-Jae Lee

Summary: This project compared the durability and economic efficiency of inlaid tape and thermoplastic under different weather and traffic conditions. Inlaid tape's estimated life cycle was longer than thermoplastic's, but thermoplastic's lower cost made it the most economical material for all conditions. The results are based on three to four years of data collection.

The full reports for both projects can be found at http://www.morgan.edu/School_of_Engineering/Research_Centers/National_Transportation_Center/Research/Completed_Projects.html

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NEW PROJECTS

Maryland Motor Carrier Program Performance Enhancement

Principal Investigator:
Dr. Hyeon-Shic Shin



The proposed study will facilitate the analysis of the effects of different combinations of commercial vehicle inspection programs, inspections, and locations on a reduction in commercial vehicle-related fatalities and injuries. The project will include five primary tasks:

- literature review and benchmarking inspections programs
- collection of readily available data to be utilized for measuring the effectiveness of different types of inspection methods
- development of a resource allocation model with performance measures
- evaluation of the resource allocation model
- development of a final report

Evaluation of Waste Concrete Road Materials for Use in Oyster Aquaculture

Principal Investigators:
Dr. Kelton Clark and Dr. James Hunter



The primary objective is to determine the suitability of waste concrete from road projects as bottom conditioning material for on-bottom oyster aquaculture in the Chesapeake Bay.

A full description for each project can be found at http://www.morgan.edu/School_of_Engineering/Research_Centers/National_Transportation_Center/Research/New_Projects.html

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