



The NTC Today

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

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The CBEIS groundbreaking was led by (from left to right) Dr. Eugene DeLoatch, dean of the School of Engineering; Monika Davis, an architecture student; Dr. Mary Anne Akers, dean of the School of Architecture; Dr. David Wilson, university president-designee; Gov. Martin O'Malley; Dr. Earl Richardson, outgoing university president; and the Hon. Laurence Levitan, member of the university's board of regents. Photo by Paul Greene/Morgan State University.

Construction Begins on the NTC's New Home

Gov. Martin O'Malley took part in the April 2 groundbreaking for Morgan State University's Center for the Built Environment and Infrastructure Studies (CBEIS). Scheduled to be completed in Fall 2012, the CBEIS will house the NTC, the School of Architecture & Planning, the Department of Civil Engineering, and the Department of Transportation & Urban Infrastructure Studies. Grouping all of these interrelated programs in the

same location will allow for many collaborative opportunities. "This is the perfect shotgun marriage," said Dr. Mary Anne Akers, dean of the School of Architecture & Planning.

The CBEIS's 126,000 gross square feet will include a green roof, a seismic simulator, daylighting, solar panels, rain gardens, and waste water recycling. At a minimum, the building will achieve LEED Silver certification.



The CBEIS was designed by the Freelon Group, in association with CSD Architects.



A Message from the NTC Director

DR. ANDREW FARKAS



The National Transportation Center at Morgan State University will soon finish its fourth grant year under SAFETEA-LU's University Transportation Centers Program. Congress' recent extensions of SAFETEA-LU and various opinions on an authorization bill leave surface transportation programs, including NTC, in a state of uncertainty. However, it's clear from all the discussions and policy papers that the next act will authorize the usual transportation programs in some form and will address goals of financially sustainable transportation, economic development, congestion relief, community livability, green house gasses reduction, energy conservation, environmental mitigation, and enhancement of safety. All of these areas are rife with opportunities for research and educating a new generation of transportation professionals. The NTC will continue its commitment to support research and education in these areas of national significance.

Morgan State University is also making its commitment to the future of interdisciplinary transportation research and education. On April 2, 2010,

the Center for Built Environment and Infrastructure Studies building broke ground in a ceremony featuring Gov. Martin O'Malley and university president Dr. Earl Richardson (see article). The CBEIS will house the School of Architecture and Planning, the Department of Civil Engineering, the Department of Transportation & Urban Infrastructure Studies, and the NTC. Those of us leading these programs spent many years justifying and planning the space for this building. We are looking forward to residing in one of the few green buildings on a university campus in Maryland starting in 2012.

We've recently been involved in selecting Eisenhower Fellowship recipients and interns for the Maryland Department of Transportation. We'll soon embark on our 14th Summer Transportation Institute for secondary school students and our second Teacher Transportation Institute. To learn more about the center, its dedicated staff, and our various programs, please visit our Web site at www.morgan.edu/soe/ntc. As always, we welcome your comments and suggestions.

Coming Soon

May 7

NTC Advisory Committee Meeting

May 19-21

TRB Conference on Surface Transportation Finance

June 3

Summer Transportation Institute (STI) Applications Due

June 21

Teacher Transportation Institute (TTI) Applications Due

July 2

STI Begins

July 19

TTI Begins

July 30

STI Awards Banquet

Morgan-WMATA Program Produces Its First Graduates

Three employees of the Washington Metropolitan Area Transit Authority (WMATA) are the first graduates of the Advanced Certificate Program in Transportation Management and Entrepreneurship. They were feted at a reception on Jan. 20 in the School of Engineering.

The certificate program is offered through the Department of Transportation and Urban Infrastructure Studies, and its 18 credit hours can be applied toward Morgan's master's degree in transportation.

The WMATA employees — Beck Pak, Raquella A. Gilbert, and Michael J. Sherman — enrolled in the program via their employer's Senior Leadership Development Program,



The first graduates of the WMATA Senior Leadership Development Program are (from left to right) Beck Y. Pak, Raquella A. Gilbert, and Michael J. Sherman.

which trains mid-level employees for senior management roles. They left their regular jobs and spent 18 months rotating within various WMATA departments and attending external

"This program is all about training senior leaders."

*Dr. Anthony Saka
Chair, Department of
Transportation & Urban
Infrastructure Studies*

training and development opportunities. Their classes at Morgan, which they attended while working full time, included engineering, planning, business, and policy.

"This whole exercise — rotations and schools and all this stuff — is good for me personally, but now I can pay Metro back," said Michael J. Sherman.

TRB Travel Grant Awardees

Thanks to a grant from the conference's planning committee, the following students will attend the TRB Conference on Surface Transportation Finance in New Orleans for free. The conference is May 19-21.

Price Armstrong, *University of Oregon*
Eric Ganther, *San Jose State University*
Marc Howlett, *University of North Carolina at Chapel Hill*

Lisa Jacobson, *University of Pennsylvania*
Catherine Lowe, *Cornell University*
Aikatarni Rentziou, *Iowa State University*
Naveed Shah, *Morgan State University*





COMPLETED PROJECT

Title: Trip Generation Studies for Special Generators

Authors: Mansoureh Jeihani, Ph.D., and Ricardo Camilo

Summary of Findings: The results verified that the Institute of Transportation Engineers (ITE) Trip Generation Manual underestimates trips generated by age-restricted housing. The ITE trip rates are one-third of the calculated ones. However, the studied age-restricted developments generated 27 to 63 percent fewer trips than regular housing. The results have been sent to the ITE for incorporation in its manual. Town centers seem to have completely different trip generation patterns from shopping centers. Therefore, town centers need to be included as a new category in the ITE manual.

The full report can be found at http://www.morgan.edu/Documents/ACADEMICS/SOE/ntc/Trip_Jeihani_0910.pdf.

PUBLISHED PAPER

Title: Real-Time Highway Traffic Condition Assessment Framework Using Vehicle-Infrastructure Integration (VII) With Artificial Intelligence

Transaction/Journal: IEEE Transactions on Intelligent Transportation Systems, Volume 10, Issue 4

Authors: Y. Ma, M. Chowdhury, A. Sedak, and M. Jeihani

NEW PROJECTS

The Mediating Role of Motorists' Evaluation of Current Roadway Conditions in Determining Their Willingness to Pay for Future Improvements

Principal Investigators: Michael Callow, Ph.D., and Nathan Austin, Ph.D.

This project investigates motorists' and non-motorists' levels of satisfaction with highway infrastructure, and their willingness to pay for future transportation expenditures aimed at improving congestion, pollution, and safety. In particular, the project will apply various demographic, psychographic, and product usage variables to segment the motorist market in order to analyze attitudinal similarities and differences among the various groups.

Susceptibility of Eastern Oyster Early Life Stages to Road Surface Polycyclic Aromatic Hydrocarbons (PAHs)

Principal Investigators: Chunlei Fan, Ph.D. (Morgan State University Estuarine Research Center) and Randolph K. Larsen, Ph.D. (St. Mary's College of Maryland)

This study assesses the effects of PAH types and concentrations on the early life stages of oysters. PAH types and concentrations will be recreated from a previous study, and the toxicity of these compounds will be tested on oyster gamete viability, the transformation of fertilized eggs to D-stage larvae, and the success of spat settlement.

Cumulative Impact of Developments on the Surrounding Roadways

Principal Investigator: Mansoureh Jeihani, Ph.D.

The objectives of this research effort are

- to investigate and evaluate the effect of combined trips generated by built developments in a corridor.
- to recommend traffic impact study (TIS) guidelines for when an investigation's results necessitate an update.
- to quantify the identified problem by linking the traffic demand model (TDM) and TIS using a pilot study.
- to propose a prototype to decrease the gap between TDM and TIS.
- to propose recommendations for future study.

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