

# TranSearch

## DELAWARE CENTER FOR TRANSPORTATION

*Your main resource for transportation education and research*

Winter/Spring 2004

Vol. 3, No. 1



Department of Civil and  
Environmental Engineering  
University of Delaware

355 DuPont Hall

Newark, DE 19716

Phone: 302/831-1446

FAX: 302/831-0674

Web Site:

<http://www.ce.udel.edu/dct>

## THE 2003 TRANSPORTATION EDUCATION AND RESEARCH FORUM

The third, and the most widely attended Transportation Forum, since the establishment of the Delaware Transportation Research Center in the late 1980s was held at the University of Delaware on Thursday, November 6, 2003. More than 180 participants from different government and private agencies throughout the States of Delaware, Maryland, New Jersey and Pennsylvania attended the day-long Forum. The theme of the Forum was "identifying important issues related to the transportation system in Delaware and the surrounding region". At the conclusion of the meeting more than 50 ideas in 9 different disciplines were identified. The disciplines presented were: Bridges and Structures; Construction, Pavement, Materials and Maintenance; Design; Environment; Local Municipalities Issues; Traffic and ITS; Transit and Public Transportation; Planning and Multi-Modal; and, Administration and Government Policy. The Honorable Nathan Hayward, Delaware Secretary of Transportation, Ralph Reeb, DelDOT Director of Planning, Tom Myers, Delaware Division Administrator for the Federal Highway Administration, and the



*Left to right: Ralph A. Reeb, Director of Planning, DelDOT; The Honorable Roger P. Roy, Delaware State Representative; The Honorable Nathan Hayward, State of Delaware Secretary of Transportation; Tom Myers, Delaware Division Administrator, FHWA, confer at the Transportation Research and Education Forum.*



*Attendees view the exhibits at the Transportation Research and Education Forum.*

Honorable Roger Roy, Representative for District 20, Delaware House of Representatives and Director of the Transportation Management Association, were among the attendees. The lunch speaker was William Hoffman, Transportation Research Specialist and State of New Jersey Division Administrator for the Federal Highway Administration, and former Research Bureau Chief of the New Jersey Department of Transportation.

One major difference between the 2003 Forum as compared with all the previous ones was the participation and contribution of 13 different exhibitors. The exhibitors included: The American Public Works Association; the ASTI Transportation Systems Inc.; the Delaware Department of Transportation; DMJM & Harris, Inc.; Edwards and Kelcey Inc.; Enterprise Flasher Company; the Federal Highway Administration; Figg Engineering Group; Kercher Engineering, Inc.; MACTEC Engineering & Consulting, Inc.; Pennoni Associates; RK&K, LLP; and WILMAPCO.

The Delaware Center for Transportation staff will use the identified ideas in the next several years as a basis for conducting different research projects and sponsoring of new educational opportunities for DelDOT staff as well as all the transportation professionals in the Mid-Atlantic region.

## In This Issue

The 2003 Transportation Education and Research Forum	1
Message from the Director	2
DCT Profile: Alan S. Kercher, P.E.	2
DCT Invites France to be Partners in Transportation Education and Research	3
Delaware Transportation Festival	4
Delaware T <sup>2</sup> Center Hosts 2004 Roadway Management Conference	4
Research	5

Sub-division Interconnectivity Project	5
Education	6
T <sup>2</sup> Program	6
Calendar of Upcoming T <sup>2</sup> Events	6
Coordinators Assess 2003 Summer Intern Program	6
Bridge Center to Host Workshop	7
DCT Website	7
Principal Investigator/Project Manager (PI/PM) Showcase to be Held in the Spring of 2004 in Dover	7

## MESSAGE FROM THE DIRECTOR



*Ardeshir Faghri, Director*

I would like to use this opportunity to wish all of our readers a healthy, happy and successful 2004. The last few months of 2003 were especially productive for DCT. First, we expanded our international cooperative efforts by establishing exchange programs with two of the most prestigious transportation education and research centers in France. Ecole Nationale des Travaux Publics de L'etat (ENTPE), or the National Graduate School of Local and Rural Management, Development, Planning and Design, and Ecole Nationale des Ponts et Chaussees (ENPC), or the National Institution for the Study of Transportation, Pavements and Bridges, are two well known centers of excellence that provide education and research services not only to France, but to countries all over the world. This exchange of ideas and people will place DCT in the forefront of global transportation innovations.

Another important event that took place this past November was the 2003 Transportation Education and Research Forum. More than 180 transportation professionals, faculty, students, as well as civic group representatives were gathered on campus of the

University of Delaware to share and exchange ideas and information on how to improve the transportation system in Delaware and the surrounding region. For the first time in the history of Delaware Transportation Research, we received sponsorship from 13 different organizations for contributions to the Forum. I would like to express my deepest gratitude towards these organizations for their contributions, for realizing the mutual benefits that we all can acquire, and hope that their cooperation and contributions will continue in the future. The list of exhibitors include: The American Public Works Association; The ASTI Transportation Systems, Inc.; the Delaware Department of Transportation; DMJM & Harris, Inc.; Edwards and Kelcey, Inc.; Enterprise Flasher Company; the Federal Highway Administration; Figg Engineering Group; Kercher Engineering, Inc.; MACTEC Engineering & Consulting, Inc.; Pennoni Associates; RK&K, LLP; and WILMAPCO.

In 2004, we will launch many new programs that we think will enhance our main mission of providing quality education and research to our constituents. In the Spring, instead of having research report presentations, we will hold a Research Showcase. This will allow all of our researchers to present their projects in poster formats. Another exciting program that we will start in this new year is our non-thesis professional Masters Degree program in three different areas of Traffic Engineering and ITS, Transportation Planning and Policy, and Transportation Construction and Materials. This new program will enable many transportation professionals to obtain their Masters degree on a part-time basis.

Again, a happy 2004 to all of our readers. The DCT staff will again work hard to continue the tradition of excellence and articulate all of our new ideas and programs to our constituents. For the latest information about the events and programs at the Center, please check our new and improved web-site at <http://www.ce.udel.edu/dct>.

## DCT PROFILE: ALAN S. KERCHER, P.E.



*DCT T<sup>2</sup> Center's Engineer, Alan Kercher, standing by the T<sup>2</sup> Van ready to serve Delaware's municipalities*

One of the most popular and highly regarded services offered by the T<sup>2</sup> Center is the engineer, Alan S. Kercher, P.E., who makes on-site visits to Delaware's cities and towns. On these visits he gives free technical assistance on a variety of diverse transportation issues such as

pavement management techniques, contracts and specifications, drainage, utilities, work zone safety, and snow and ice control. The Federal Highway Administration and the Delaware Department of Transportation provide funding for these activities.

Mr. Kercher, 46, is a consultant who works part-time for the T<sup>2</sup> Center. He is also the founder and president of Kercher Engineering, Inc., an engineering consulting firm that has offices near Newark and Georgetown. He is a registered Professional Engineer in Delaware, Maryland, New Jersey, and Pennsylvania. In addition to his activities with the Delaware T<sup>2</sup> Center, he has had projects with DelDOT, the Federal Highway Administration, and the Maryland and Pennsylvania T<sup>2</sup> Centers. His firm has grown from one employee (himself) to fifteen. Before going off on his own, Mr. Kercher worked for Stone and Webster Engineering and taught Civil Engineering Technology for several years at the Stanton campus of the Delaware Technical and Community College.

Delaware has 57 municipalities that have responsibilities for their local streets. Unlike most other states, there are no county road systems in Delaware. The state took over county roads in 1935 during the height of the Depression. Larger cities such as Wilmington, Newark, Middletown, and Dover have substantial public works departments. Smaller municipalities including Wyoming, Delaware City, and Fenwick Island have much smaller street staffs. Delaware's



small towns, most with little or no staff support, must hire private contractors to do routine work including pavement repairs and snow removal.

DelDOT helps all municipalities to fund street improvements by redistributing state funds to them. Each municipality receives funding using a formula that considers street mileage and population. Recently this fund has grown to \$6 million annually. Additionally, each State Representative and Senator can direct more funds to municipalities within his or her district. The greatest portion of both types of funds is spent on capital projects. Many towns and cities need technical assistance to make sure that they spend their funds effectively. This is where Mr. Kercher can step in to help.

Since 1992 Mr. Kercher has developed ongoing relationships with over 25 of the 57 municipalities in the State. He has emphasized pavement management systems that promote cost saving strategies to maintain smooth riding, well constructed streets. In essence he believes that spending moderate amounts of money to maintain quality pavements is smarter and cheaper than postponing maintenance until a street literally falls apart.

Mr. Kercher has helped 20 municipalities to implement pavement management systems. His preferred software is Road Surface Management Systems (RSMS) developed by the New Hampshire T<sup>2</sup> Center. He has also worked closely with New Hampshire to update and improve RSMS which is now in its 2002 version.

In 1995-96 Mr. Kercher closely worked with the Town of Fenwick Island to upgrade all of the town's streets and storm water drainage facilities. In appreciation for his help, Mayor Peggy Baunchaulk spoke about his assistance at an annual meeting of the Mid-Atlantic T<sup>2</sup> Centers. She said, "Without the valuable resource of the

(Delaware) T<sup>2</sup> Center, the folks in Fenwick Island could still be riding on tar and chip." The National T<sup>2</sup> Association and the Federal Highway Administration chose this quote for national prominence in marketing the T<sup>2</sup> program.

What does the future hold? Mr. Kercher would like to achieve the following goals as T<sup>2</sup> Engineer:

- Serve most if not all of Delaware's municipalities
- Conduct research on the long-term performance of the pavement management techniques he has recommended and overseen
- Encourage more participation in his training programs including supervisors, managers, and elected officials.
- Prepare a course on Superpave\* for local officials emphasizing that new pavement designs can improve ride quality and durability, but this will not happen unless pavements are constructed very carefully by knowledgeable crews and supervisors

\* Superpave (SUPERior PERforming asphalt PAVement), developed as part of the Strategic Highway Research Program, is a new (and better) way of specifying hot mix asphalt component materials, mixture design and analysis, and flexible pavement performance

The author Ben Sweetland has said, "Success is a journey, not a destination." Mr. Kercher's "journey" with the T<sup>2</sup> Center is now more than a decade old and he has (literally) covered thousands of miles in his service to Delaware's local governments. He has accomplished much and hopes to do more. The University of Delaware, DelDOT, and the Federal Highway Administration have recognized his contributions and have fulfilled their mission to enable small entrepreneurs to grow and thrive under our system of government.

## DCT INVITES FRANCE TO BE PARTNERS IN TRANSPORTATION EDUCATION AND RESEARCH

One of the most important initiatives adopted by the DCT staff has been to seek cooperation and partnership with major international transportation education and research centers around the world. In August 2003, Dr. Faghri, Director of DCT, was invited to visit two such centers in France and seek areas of mutual partnership with them. The first, Ecole Nationale des Travaux Publics de L'etat (ENTPE) (National Graduate School of Local and Rural Management, Development, Planning and Design) is a premier educational organization providing world class graduate education and research in different areas of Civil Engineering with an emphasis in town planning, transport economics, urban and regional transportation, and risk control and management. The second, Ecole Nationale des Ponts et Chaussees (ENPC) (National Institution for the Study of Transportation, Pavements and Bridges) has the primary responsibility of providing initial and continuing education of engineers with high-level scientific, technical and general skills in the areas of public works, planning, construction, transports, industry and environment. During the week long visit, Dr. Faghri met some of the administrators, faculty and students and visited their laboratories and research centers. Both institutions agreed to start exchanging information on important research areas with DCT and, more importantly, initiate a formal student and faculty exchange program. Subsequently, in October 2003, Pascal Vincent, ENTPE's Director of Exchange Programs and International Relations, along with Jean

Chaudonneret, who is the institute's Dean of Graduate Studies visited the University of Delaware and met with Dr. Faghri, Dr. Chajes, Chair of Civil and Environmental Engineering Department, Dr. Lesa Griffith, Director of International Studies Program, Mr. Dan LaCombe, Director of Research and Planning at the Delaware Department of Transportation, and Tom Myers, the Delaware Administrator for the Federal Highway Administration (FHWA). The meeting resulted in invitations and agreements for information, student and faculty exchange between DCT and ENTPE.



*In the picture, from left, Pascal Vincent, ENTPE's Director of Exchange Programs and International Relations, Jean Chaudonneret, ENTPE's Dean of Graduate Studies, and Dr. Faghri, DCT Director.*

### DELAWARE TRANSPORTATION FESTIVAL

The Delaware Center for Transportation participated in this year's Delaware Transportation Festival and DuPont RiverFest held on September 27 at the riverfront and Wilmington Train Station. In addition to the booth for DCT, there were exhibits on alternative fuel, vehicles, aviation, bus transportation, transportation technology, road traffic support equipment, motor cycle safety, nautical transportation, pedestrian and bicycle services, rail passenger and freight services, and future transportation plans. Outside the train station, in the Transportation Festival lot, machinery of all sorts was on display. Children, and adults alike, could climb into a snow plow, various buses, and other large vehicles for a tour or just to blow the horn.

In the Tubman-Garrett Park and along the Riverwalk, there was the DuPont Riverfest, for which all proceeds benefit the Boys & Girls Clubs of Delaware. They offered everything from numerous rides, educational displays, live music, and of course, food vendors.

Combined, the festivals hosted about 8000 people this year despite rain in some of the nearby areas.



Wanda Taylor, DCT Assistant to the Director, hands out Education Catalog at the DCT Exhibit at the Delaware Transportation Festival held at the Wilmington Train Station on September 27.

### DELAWARE T<sup>2</sup> CENTER HOSTS 2004 ROADWAY MANAGEMENT CONFERENCE

The Delaware T<sup>2</sup> Center will host the 12th Roadway Management Conference on March 22-24, 2004, at Clayton Hall on the University of Delaware campus in Newark. Since 1992, the T<sup>2</sup> Centers in Delaware, Maryland, Pennsylvania, Virginia, and West Virginia have cooperatively worked on this conference which moves from state to state every year. Recently about 300 federal, state, and local transportation agency employees have attended annually.

Highlights of the 2004 Conference are:

- A keynote address by A. George Ostensen, Associate Administrator for Safety, Federal Highway Administration

- A mock trial covering tort liability issues
- A bus trip to several construction and maintenance projects in New Castle County
- 30+ vendors and exhibitors

Breakout sessions on a variety of topics such as Homeland Security, SuperPave, E-mail Etiquette, Best Practices in Highway Safety, Preventative Maintenance, Chainsaw Safety, Winter Maintenance, and others.

Detailed conference information will appear on the Delaware Center for Transportation's web page in early January. Online registration will be available. The URL is [www.ce.udel.edu/dct](http://www.ce.udel.edu/dct). If you are interested in being an exhibitor, please contact Ms. Kim Carr, West Virginia T<sup>2</sup> Center, 302-293-3031 X2612, before February 20, 2004.

# Research

In addition to our current research projects listed in the Summer 2003 edition of TranSearch, we have added two new projects to our 2003-2004 fiscal year research program:

## Commercial Vehicle Information System and Network (CVISN) for Delaware/I-95 Corridor Coalition

The I-95 Corridor Coalition is moving forward with a corridor project to implement a Commercial Vehicle Operation (CVO) Commercial Vehicle Information Systems and Networks (CVISN) in neighboring states. This project will determine the best practices in the states that are implementing CVISN, and frame a CVISN implementation program in the Delaware model. It will recommend an incremental approach and identify what current practices within DelDOT, Motor Fuel, Public Safety, and the Delaware Code may need changes or revisions, and identify the cost to implement a program, as well as the cost savings to the State and the trucking companies.

Principal Investigator: Bernard Dworsky, Institute of Public Administration  
Project Manager: Greg Oliver, DelDOT, Division of Planning

## Letting Scenic and Historic Roads in Delaware Tell Their Story

A web-based manual to facilitate the identification, designation and management of scenic and historic highways

Principal Investigator: David Ames, Center for Historical Architecture and Design  
Project Manager: David Petrosky, DelDOT, Division of Planning

Several of the projects listed in the last issue of *TranSearch* have been completed and are in the process of being published. Check our website [www.ce.udel.edu/dct](http://www.ce.udel.edu/dct) to see new DCT publications as they occur.

For future research projects for DCT, the 2003 Transportation Education & Research Forum held in November has given DCT and DelDOT many transportation concerns and opportunities for the State of Delaware. We will be meeting with the DelDOT Research Committee in January to determine which concerns are most important to DelDOT and can be funded as projects for the following fiscal year.

working on the project along with research assistant Rene Tseng. The research question is to determine whether or not the degree of interconnectivity has an impact upon travel characteristics. In the past researchers have claimed that by providing road connections between large sub-divisions the result will be fewer and shorter automobile trips and less congestion on the adjacent arterial road system. This is due in fact that the residents can make trips on internal roads, which provide interconnections through their communities without having to travel on the major arterials. One of the concerns in providing a high degree of interconnectivity is as these connections become known to the general motoring public (i.e. through traffic) there is a tendency to use this interconnectivity as a short-cut through communities to avoid congested arterials. This in turn leads to opposition from community residents for a variety of reasons, e.g. safety, noise, pollution and increased traffic. Possible remedies to address these problems include traffic common, better sub-division design, signage, and traffic engineering.

Project work tasks include a literature review, transportation network modeling, and analysis of traffic calming techniques, sub-division design and traffic engineering. In addition, there will also be an effort to determine community resident concerns through interviews with public/community liaison staff of state, county, regional and appropriate transportation/land-use agencies. A key component of the project work task will be the analysis of several sets of match-paired communities, i.e. sub-divisions which have similar demographic characteristics but differing degrees of interconnectivity. An interconnectivity index will be prepared for each of the test communities. In addition to the demographic information, detailed transportation characteristics will also be developed for the test communities. The Institute for Public Administration will also be working with the New Castle County Department of Land Use and other University of Delaware research groups.

Based upon the analysis, an attempt will be made to develop a set of guidelines, which would indicate the circumstances that are necessary for interconnectivity to be successful. Depending on the accuracy and completeness of the analysis it may be also possible to develop some form of a quantitative model, which could protect success or failure based on a community's interconnectivity characteristics.



Pictured [above]: Edward O'Donnell, Project Investigator showing Research Assistant Rene Tseng some possible locations for sub-division interconnections.

## SUB-DIVISION INTERCONNECTIVITY PROJECT

The Delaware Center for Transportation in conjunction with the Delaware Department of Transportation and the Institute for Public Administration are currently working on a research project concerning sub-division interconnectivity. The project manager is Ralph Reeb, Director of Planning for the Delaware Department of Transportation. The principal investigator is Edward O'Donnell, AICP, with the Institute for Public Administration. In addition, Lori Athey, also with the Institute for Public Administration, is



# EDUCATION

## T<sup>2</sup> PROGRAM

Why should we train our employees throughout their careers? The answers seem obvious. (1) They will perform their jobs more efficiently and effectively. (2) They will save us money. (3) They will help us remain competitive. And so on.

These answers are all correct but they focus on the needs of the employer. What about the needs of the employee? The director of business development for the Disney Corporation put it this way: "We invest in training because (employees) see we are investing in them, that we care about them and are concerned where their careers go. Training tells them that, as a company, 'we can help to get you there.' This builds loyalty."<sup>1</sup>

To build this loyalty training has to be ongoing. It cannot end with a new employees' orientation. We cannot tell employees, "Just do your job and call me if you have any problems." There must be "hard" training to build technical skills and training to build the "soft" skills of managing, communicating, team building, etc.

DelDOT has asked the Delaware Center for Transportation (including the T<sup>2</sup> Center) to help it design a comprehensive training program that will eventually cover most if not all of its employees. The T<sup>2</sup> Center will include many aspects of this program in its mission to assist Delaware's local governments. This project is in its initial stages. As we make progress we will report it to you in future issues of this newsletter.

<sup>1</sup> August/September 2001 issue of MRO Today Magazine

## CALENDAR OF UPCOMING T<sup>2</sup> CENTER EVENTS

### January 30, 2004

Alkali Silica Reactivity (ASR) Workshop  
Del Tech, Dover Campus  
Taught by FHWA staff

### February 23-26, 2004

Geometrics/Traffic Operations Workshop  
Del Tech, Dover Campus  
Taught by Dr. Abishai Polus

### February 27, 2004

Construction Project Management Workshop  
Perkins Student Center  
University of Delaware  
Taught by Mr. Tim O'Brien, PennDOT

### March 22-24, 2004

Roadway Management Conference  
See related article

For current T<sup>2</sup> offerings go to [www.ce.udel.edu/dct](http://www.ce.udel.edu/dct)

Geometric Design of Highways and Streets  
February 9, 2004-May 19, 2004  
Evening Class  
Instructed by Ray Harbeson, PE  
For information call: Kathy Werrell  
(302) 831-4863 or (302) 831-2401

Delaware Center for Transportation

## COORDINATORS ASSESS 2003 SUMMER INTERN PROGRAM

The previous issue of this newsletter included an article on the 2003 Summer Intern Program at DelDOT. This article focused on the experiences and impressions of the students who were employed. In this issue we visit with the two persons who coordinated the program: Bernard Dworsky from the University of Delaware and Denise Beaston of DelDOT.

Bernie Dworsky is a project director with the Institute of Public Administration. The IPA has for many years placed interns with Delaware executive departments, the Legislature, and other public and private agencies. Bernie has worked with many of the interns to make sure that their experiences were productive both for themselves and their employers. Early in 2003, he agreed to work with the DCT to select, orient, and monitor the 15 summer interns that the DCT would place with DelDOT.

Here are some of Bernie's observations made after the program ended in September:

*We know that the students are very capable and well prepared academically but transitioning to a work setting is a challenge. The students adapted very well to the pace, push and pull of real projects and continuing demands. They had a great learning experience...The key factor for me was the (DelDOT) supervisors and how well they embraced the students and worked at getting them included in all facets of their respective operations from the people issues to the technical. They were the major reasons for the success of the summer. The caveats I would have is that we do more in the student orientation regarding location, travel requirements, etc., that they may have; we should work more on ensuring that the supervisor-student fit is right early on so adjustments can be made (if necessary); maybe organize the site visits better by only taking on a number of students we can reasonably handle. These comments aside, the department and the university deserve great credit for organizing a summer program of experiences that serves the students and the public very well.*

Denise Beaston was Bernie's counterpart at the Human Relations Management Office at DelDOT. Most of her HRM experience has been on the transit side with the Delaware Transit Corporation. When DelDOT's transit and highway HRM functions were recently merged, Denise took on new responsibilities including the Summer Intern Program.

Denise agreed with Bernie's observations and added some of her own:

*In light of our efforts to recruit, train, and retain the most qualified individuals to support the vision, goals, and objectives of (DelDOT), we believe the summer intern program was a valuable experience. Linking education and practical experience with summer employment at DelDOT benefited everyone involved. Open communication, accountability and a successful feedback loop between students, the U of D, and DelDOT staff contributed to DelDOT's mission to be accessible, responsive and efficient.*

Clearly, both coordinators saw much merit to the program and the participation in it by the university and the department. With a few tweaks, next year promises to be even better.

## BRIDGE CENTER TO HOST WORKSHOP

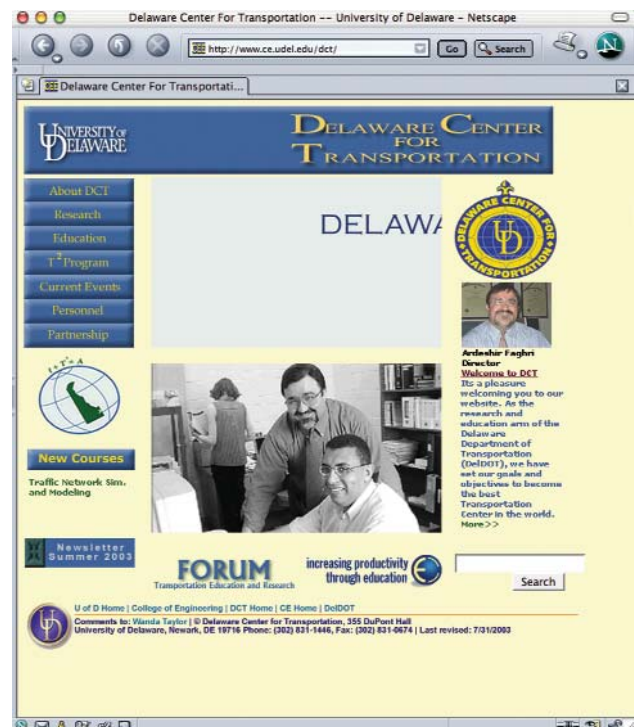
The University of Delaware Center for Innovative Bridge Engineering (CIBrE) will hold its Third Annual Bridge Workshop on March 5, 2004, at the Trabant University Center. The annual event addresses a different topic in bridge engineering each year. The 2004 workshop will focus on "Fatigue and Fracture," including an overview of the topic, case studies, testing and in-service monitoring, and design. A special session will be devoted to "Experiences from State Bridge Engineers," with representation from each of the states in the region.

For more information, contact Diane Kukich at 302-831-1721 or [dkukich@udel.edu](mailto:dkukich@udel.edu). The Center's web site ([www.ce.udel.edu/cibre](http://www.ce.udel.edu/cibre)) also has information and online registration for the workshop.

— Diane Kukich

## DELAWARE CENTER FOR TRANSPORTATION WEB SITE [www.ce.udel.edu/dct](http://www.ce.udel.edu/dct)

The Delaware Center for Transportation has a new web site which was created by Vishal Arora, a graduate student in Computer and Information Science. We invite you to visit our web site often to find the latest happenings at DCT, e.g., current research projects, completed and published research reports, courses and workshops being offered, as well as on-line registration, and much more. There are a couple of menu items still "under construction." We hope to have everything complete next month. If you have any comments, suggestions or concerns regarding our web site, please feel free to contact Wanda Taylor at 302-831-1446 or by email: [wtaylor@udel.edu](mailto:wtaylor@udel.edu).



## PRINCIPAL INVESTIGATOR/PROJECT MANAGER (PI/PM) SHOWCASE TO BE HELD IN THE SPRING OF 2004 IN DOVER

DCT kicked off the academic year with our annual PI/PM meeting for the new 2003-2004 fiscal year research projects. Each Principal Investigator gave a short report on his/her project, followed by any comments from the Project Manager. The main purpose of this meeting is to provide an opportunity for the Principal Investigators and Project Managers to get together in a casual setting and go over their projects personally.

In spring, 2004, DCT will sponsor a PI/PM Showcase in Dover. At this Showcase, the Project Investigators will provide poster sessions for ALL the current DCT research projects. Participants will have the opportunity to go to the project poster of their choice and speak to the Principal Investigator on a one-to-one basis.

Be sure to check our web site: [www.ce.udel.edu/dct](http://www.ce.udel.edu/dct), for the exact date and location of our PI/PM Showcase.



## CONTACT INFORMATION

Delaware Center for Transportation  
355 DuPont Hall  
University of Delaware  
Newark, DE 19716

Phone: 302-831-1446  
FAX: 302-831-0674  
Web site: <http://www.ce.udel.edu/dct>

## DCT Staff

Ardeshir Faghri, Director (e-mail: [faghri@ce.udel.edu](mailto:faghri@ce.udel.edu))  
Jerome Lewis, Associate Director (e-mail: [jlewis@udel.edu](mailto:jlewis@udel.edu))  
Wanda L. Taylor, Assistant to the Director (e-mail: [wtaylor@udel.edu](mailto:wtaylor@udel.edu))  
Lawrence H. Klepner, T<sup>2</sup> Program Coordinator (e-mail: [lklepner@ce.udel.edu](mailto:lklepner@ce.udel.edu))

*The mission of the Delaware Center for Transportation is to improve the movement of people, goods, and ideas within, to, and through the State of Delaware, the mid-Atlantic region, the nation, and the world through research, development, and education.*