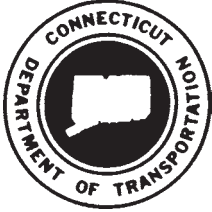


Technology Transfer



U.S. Department of Transportation
Federal Highway Administration

Vol. 18 No. 2

November 2001

Congratulations to Our 2001 Graduates!

Ninety-two graduates of the Connecticut Road Master and Municipal Legal Traffic Authority programs were formally recognized at a ceremony at the University of Connecticut on September 12.

The Connecticut Transportation Institute's Technology Transfer Center staff joined friends, family and colleagues in honoring the achievements of the largest graduating class to date.

Technology Transfer Center Manager, Donna Shea welcomed guest speakers Michael Turano, ConnDOT's Director of Maintenance, and Richard Miller, New Haven's City Engineer and the Technology Transfer Center's Advisory Committee Chairman, who praised the graduates' achievements and stressed the value and personal gratification of lifelong learning.

Connecticut Road Master Program

The following ninety-one individuals, comprising the sixth graduating class of the

Connecticut Road Master Program, completed the program's seven required workshops and two of five elective workshops:

James Alesi
Assistant Operator
Town of New Fairfield

Carl G. Almquist
Assistant Director — Solid Waste
Town of Groton

Douglas Arndt
Operations Program Specialist
City of Stamford

Brian E. Baker
Highway Foreman
Town of Waterford

Joseph Bates
Maintenance Crew Leader
CT Department of Transportation

Tim Bockus
Operations Engineer
Town of East Hartford

Frank E. Carey
Crew Leader
CT Department of Transportation

Michael J. Caruso, III
Surveyor
City of New Britain

Ronald Charter
Construction Inspector
Town of Manchester

Eric B. Christiana
Maintainer III
CT Department of Transportation

Dale P. Clark
First Selectman
Town of Sterling

Rick Conlombe
Crew Leader
CT Department of Transportation

Robert Cortello
General Supervisor — Maintenance
CT Department of Transportation



The Class of 2001

John Cottell

Deputy Director of Public Facilities
City of Bridgeport

James Crabb

Operations Supervisor
City of Stamford

Alan Craig

Superintendent of Highways
Town of Stratford

Mark Czerepuszko

Chief Construction Inspector
Town of Manchester

Kevin Darling

Crew Leader
CT Department of Transportation

Harold Dumas

Driver/Laborer/Mechanic
Town of Eastford

William Dunn, Jr.

Foreman
City of New Britain

Robert Eickenhorst, Jr.

Maintainer III
CT Department of Transportation

Salvatore Emanuele

Superintendent
City of Middletown

Leslie Feuerstein

Crew Leader
City of Torrington

Russell Franklin, III

Crew Leader
CT Department of Transportation

Daniel B. Gardner

Crew Leader
CT Department of Transportation

Peter H. Garguilo, Sr.

Crew Leader — Special Services
CT Department of Transportation

Richard E. Garvais

Maintenance Crew Leader
CT Department of Transportation

Robert Gerbert

Operations Supervisor
City of Stamford

Alexander Haddad

Laborer
Town of Scotland

John D. Haggerty, Jr.

Crew Leader
CT Department of Transportation

Richard J. Haight

Transportation Engineer II
CT Department of Transportation

Lawrence Hinchcliffe

Foreman
Town of New Britain

Douglas Hoyt

Operations Foreman
City of Stamford

Anthony Hubeny, III

Crew Leader
CT Department of Transportation

Douglas E. Humes, Jr.

Transportation District Services Agent
CT Department of Transportation

Peter Iannaccone

Operations Foreman
City of Stamford

Mark Jeffers

Crew Leader
Town of Farmington

John Johnson

Special Equipment Operator
City of Norwich

Fred Kelley, III

Mechanic
Town of Ridgefield

Raymond J. Kingston

Contract Manager
Town of West Hartford

Barry Knight

Crew Leader
Town of Farmington

Edward A. Kozlowski

Treatment Plant Operator
City of Milford

Ernest E. Lagoja

Traffic Transportation Engineer III
CT Department of Transportation

Michael J. Lamano

Crew Leader
CT Department of Transportation

John A. Leslie

Maintenance Crew Leader
CT Department of Transportation

Edwin Lieberman

Director of Public Works
Town of Orange

Brian Lister

Landfill/Transfer Station Foreman
City of Waterbury

Robert Lizotte

Superintendent of Streets
City of Torrington

Kenneth Longo

Superintendent Machinery/Equipment
Town of Avon

Sherwood Lovejoy

Director of Public Works
Town of Monroe

Gerald J. Lukowski

Facility Manager
City of Stamford

Donald Mattos, Jr.

Driver/Maintainer
Town of Voluntown

William G. McKnight

Driver/Laborer
Town of Ridgefield

Doug Metheny

Construction Inspector
Town of Manchester

Ronald J. Millovitsch

Road Foreman
Town of Voluntown

James Morris

Driver/Laborer
Town of Ridgefield

Kevin Munson

Assistant Director of Public Works
City of Meriden

Technology Transfer

Published by the:
**Connecticut Transportation Institute
Technology Transfer Center**

Phone: 860-486-5400

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Web: www.cti.uconn.edu

Supported through a cooperative effort of the Connecticut Department of Transportation and the Federal Highway Administration's Local Technical Assistance Program (LTAP) to provide information on the latest transportation technology to Connecticut's state and local government officials.

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John Phillips

Senior Equipment Operator
Town of West Hartford

William Pietrowicz

Surveyor
City of New Britain

Michael Pontello

Driver
Town of Ridgefield

Daniel Primmer

Highway Lead Man
Town of Portland

David Rizzo

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General Supervisor — Maintenance
CT Department of Transportation

Gerald Rollett

Director of Public Works
City of Torrington

Donald M. Sage

General Supervisor
CT Department of Transportation



*Donna Shea joined by speakers
Richard Miller (left) and Michael Turano*

Frank Sanzo

Assistant Highway Superintendent
Town of Newington

Alphonse E. Savarese

Town Engineer
Town of Hamden

Fred W. Schaefer

Inspector/Maintainer II
CT Department of Transportation

Timothy D. Scully

Crew Leader
CT Department of Transportation

William J. Sears

Crew Leader
Town of Newtown

Chris Sherman

Maintainer III
CT Department of Transportation

Susan H. Smith

Administration Assistant
Town of Newington

Bronac Stachura

Crew Leader
Town of Killingly

Melvin C. Stead, Jr.

Superintendent of Streets
Town of South Windsor

Joseph Tavares

Maintainer II
CT Department of Transportation

Richard J. Wall, III

Maintainer II
CT Department of Transportation

Michael Widger

Truck Driver
Town of Plainville

Thomas H. Wilber

First Selectman
Town of Voluntown

James F. Wilson

Senior Construction Inspector
CT Department of Transportation

Ralph Winn

Highway Foreman
Town of Windsor Locks

Larry A. Wright

Public Works Superintendent
Town of Killingly

Philip Zoppi

General Supervisor — Maintenance
CT Department of Transportation

The Connecticut Road Master Program provides highway personnel with knowledge of the fundamentals of modern road maintenance management procedures and techniques. The program is designed for road maintenance supervisors at all levels and those who may assume supervisory positions in the future.

Connecticut Municipal Legal Traffic Authority Program

The following individual completed the Connecticut Municipal Legal Traffic Authority Program's four required workshops:

Louis J. Fusaro, Sr.

Chief of Police
City of Norwich

The Connecticut Municipal Legal Traffic Authority Program is a series of workshops designed to provide municipal Legal Traffic Authorities with a fundamental knowledge of their powers and responsibilities and a background for dealing with related traffic operations problems.

For more information on the Connecticut Road Master Program, the Connecticut Municipal Legal Traffic Authority Program, or any of the other training programs and services available from the Connecticut Transportation Institute's Technology Transfer Center, please call 860-486-5400.

By the Way...

**Donna Shea, Manager
Technology Transfer Center**

September 26, 2001 marked the First Annual Technology Transfer Expo to be held at the University of Connecticut.

The Expo was a collaborative effort between the Technology Transfer Center and CHSSA (Connecticut Highway Street Supervisor Association).

Close to 500 attendees visited 34 vendor booths and 8 public service agency displays. Eleven of the vendors were offering participants an opportunity to view live demos of their latest equipment and technology. Visit our web site to see a list of all vendors and public service agencies that participated, along with photos of the expo. Our web site address is: www.cti.uconn.edu.

A very popular event was the Backhoe Competition that attracted 32 competitors from all over Connecticut. The University of Connecticut's team competed for the first time and I actually got a little practice in myself. I still don't think they will let me compete next year (the bowling ball event was not as easy as those competitors made it look). Plaques were presented for the First, Second and Third place winners. Our congratulations to:

1st Place

Cliff LaBrec, Town of Coventry
Time: 4 minutes 33 seconds



2nd Place

Scott Rose, Sr., Town of Monroe
Time: 6 minutes 29 seconds

3rd Place

Jay Tuttle, Town of Mansfield
Time: 6 minutes 35 seconds



And the winners are...(from left) Cliff LaBrec, Scott Rose, Jay Tuttle

I want to take this opportunity to extend our thanks to all of the vendors who made this expo possible, to our hosts, the Connecticut Advanced Pavement Laboratory, and to the Technology Transfer Center staff and the CHSSA members who worked so hard to make this a spectacular day for all involved.

We look forward to seeing you all next year. Mark your calendars—September 18, 2002, here at UConn.



Technology Transfer Expo 2001 Planning Committee

CHSSA Members

(back, from left)
Scott Zenke, Glastonbury
Wes Beebe, Willinton
David Gofstein, Bloomfield
Scott Lappen, Windsor Locks, Co-Chair
Chuck Holyfield, East Lyme

Technology Transfer Center Members (front, from left)

Mary McCarthy
Donna Shea, Co-Chair

Walking in the United States

A visit to almost any local community on a pleasant late afternoon or early evening will show that walking is clearly a popular activity, whether for recreation, exercise or simply for relaxation and enjoyment of the outdoors. However, the potential of walking as a mode of transportation is just beginning to be realized.

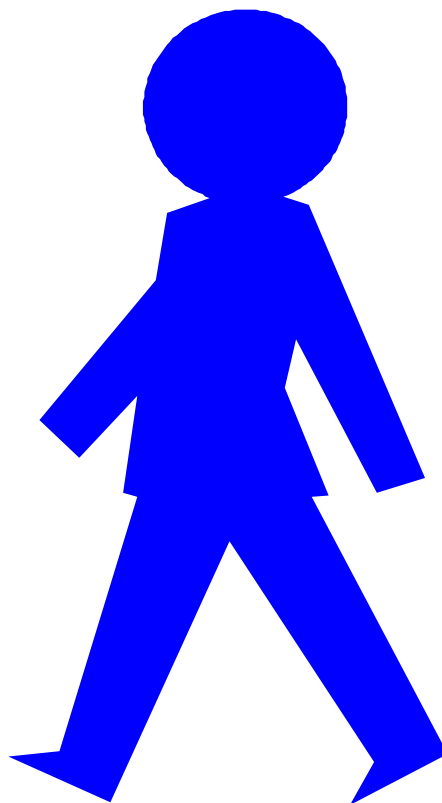
Results of the 1990 Nationwide Personal Transportation Survey revealed that only one out of five trips involved travel to or from work, and less than 2 percent involved on-the-job travel. The largest portion of trips (42 percent) are family or personal business travel, which includes trips to the grocery store, to the doctor or dentist, or to transport a child to school. Social or recreational travel accounts for another 25 percent of trips. This category includes visits to friends or relatives, trips to a park or sporting event, and pleasure driving and vacation travel. Overall, 7.2 percent of all trips were by walking. The survey showed that walking was a frequent component of multi-modal trips, although these accounted for only 1 percent of all trips. About one-third of the walking trips were for social or recreational purposes. Family and personal business travel, along with school and church-related travel, were also significant contributors. Average length of a walking trip was 0.6 mile.

Madison, Wisconsin, Portland, Oregon, and Boulder, Colorado are all places that enjoy relatively high levels of walking for transportation as well as recreation and fitness. These cities and many others in Europe and Asia provide strong evidence that walking is more than just a good way to stay fit and enjoy the outdoors. It is a mode of transportation that can reduce the need for automobile trips and play an important role in the overall transportation system.

Benefits of Walking

Increased levels of walking would result in significant benefits in terms of health and physical fitness, the environment and transportation-related effects. Research has shown that even low to moderate levels of exercise, such as regular walking, can reduce the risk of coronary heart disease, stroke and other chronic diseases; help reduce health

care costs; contribute to greater functional independence in later years of life; and, improve quality of life at every stage. Replacing automobile trips with nonmotorized and nonpolluting walking trips can yield significant environmental benefits. According to a Minnesota study, public savings from reduced pollution, oil importation, and congestion costs alone have been estimated at between 5 and



22 cents for every automobile-mile displaced by bicycling or walking. Efforts to facilitate walking can also result in more general transportation benefits besides offering additional travel options for those who are unable to drive or who choose not to drive for all or some trips. For example, measures to reduce vehicle speeds, which can encourage greater pedestrian activity in residential or downtown shopping and business areas, also impact positively on motor vehicle safety. Greenways along waterways, railway lines or other public rights-of-way yield recreational, educational, environmental, and aesthetic benefits in addition to providing corridors for walking.

Excerpted from an article by Ronald Eck, P.E. in *Country Roads & City Streets*, West Virginia Technology Transfer Center, Vol. 16, No. 2, July 2001.

Points to Make to Your Elected Officials

- Walking is an excellent indicator of the quality of life in a community.
- A vital walkable downtown or neighborhood center with attractive places to walk and shop contributes to the local economy and attracts or keeps businesses in the community.
- A walkable community is a place where people can get to know each other.
- Children, senior citizens and people with disabilities can get around on their own.
- As new housing developments are designed with walking in mind, as gaps in the sidewalk system are filled and as street crossings are made safer, more short car trips can be made on foot.
- A shift to more walking reduces air pollution, traffic congestion and parking demands.

From *Arizona Milepost*, Arizona Local Technical Assistance Program, Vol. 6, No. 2, Summer 2000.

Pedestrian and Bicycle Crash Analysis Tool

The Federal Highway Administration (FHWA), in cooperation with the National Highway Traffic Safety Administration (NHTSA), has developed a Pedestrian and Bicycle Crash Analysis Tool (PBCAT) through the University of North Carolina Highway Safety Research Center.

What Is PBCAT?

In 1998, 5,220 pedestrians and 761 bicyclists were killed, accounting for 14 percent of all traffic fatalities. An additional 69,000 pedestrians and 53,000 bicyclists were reported to have been injured as a result of collisions with motor vehicles. PBCAT is a software product intended to assist state and local pedestrian and bicycle coordinators, planners, and engineers with this problem.

PBCAT accomplishes this goal through the development and analysis of a database containing details associated with crashes between motor vehicles and pedestrians or bicyclists. One of these details is the crash type, which describes the pre-crash actions of the parties involved. With the database developed, the software can then be used to produce reports and select countermeasures to address the problems identified.



Software Features

PBCAT is designed with the following features:

- Ability to quickly determine the crash type through a series of on-screen questions about the crash, crash location, and maneuvers of the parties involved.
- Ability to customize the database in terms of units of measurement, variables, and location referencing as well as import/export data from/to other data bases.

- Ability to produce a series of tables and graphs defining the various crash types and other factors associated with the crashes such as age, sex, light condition, etc.
- Recommended countermeasures linked to specific bicycle and pedestrian crash types and related resource and reference information.
- User-friendly, on-line instructions and help features, including examples, along with a user's manual.

For More Information

PBCAT is now available and includes the software and a User's Manual. To obtain the software, visit the Pedestrian and Bicycle Information Center web site at: www.walkinginfo.org/pbcats

The software was developed by David L. Harkey of the University of North Carolina Highway Safety Research Center and Jim Mekemson and Min-Ching Chen of

the Lendis Corporation. For more information about this product, please contact any of the individuals below:

David Harkey

University of North Carolina
Highway Safety Research Center
Phone: 919-962-8705
E-mail: david_harkey@unc.edu

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E-mail: carol.tan.esse@fhwa.dot.gov

Essie Wagner

National Highway Traffic Safety Administration
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E-mail: esther.wagner@nhtsa.dot.gov

From *Pedestrian and Bicycle Crash Analysis Tool*, Federal Highway Administration, March 2000.

Selected Pedestrian/Bicycle On-line Resources

Federal

- *FHWA Pedestrian and Bicycle Safety*
safety.fhwa.dot.gov/programs/ped_bike.htm
- *FHWA Pedestrian and Bicycle Safety Research*
www.tfhrcc.gov/safety/pedbike/pedbike.htm
- *National Highway Traffic Safety Administration Pedestrian Safety Program*
www.nhtsa.dot.gov/people/injury/pedbimot/ped
- *U.S. Architectural and Transportation Barriers Compliance Board (Access Board)*
www.access-board.gov

State

- *Connecticut Department of Transportation Bicycle and Pedestrian Web Page*

www.dot.state.ct.us/bureau/pp/docs/bike

Other

- *Association of Pedestrian and Bicycle Professionals*
www.apbp.org
- *National Center for Bicycling and Walking*
www.bikefed.org
- *National Safety Council Partnership for a Walkable America*
www.nsc.org/walkable.htm
- *Pedestrian and Bicycle Information Center*
www.pedbikeinfo.org
www.walkinginfo.org
www.bicyclinginfo.org
- *Trails and Greenways Clearinghouse*
www.trailsandgreenways.org

From Our Resource Library

To request any of the following materials, please use the enclosed form or contact the Connecticut Transportation Institute's Technology Transfer Center by phone at 860-486-5400, by fax at 860-486-2399, or by e-mail at smerrall@engr.uconn.edu. Publications are free while supplies last. Videotapes and CD-ROMs may be borrowed free of charge for two weeks.

PUBLICATION

A Walkable Community, Federal Highway Administration, Pub. No. FHWA-SA-00-10.

This brochure provides a snapshot on designing for a walkable community. Creating a walkable community is much more than just sidewalks; it is important to understand the needs and characteristics of pedestrians and the issues that affect their travel. A crash-type safety countermeasure matrix is featured with related graphics. More detailed information on each of the 60+ countermeasures illustrated in the brochure can be found on the *Safer Journey* CD-ROM in the library section. The brochure is intended for safety practitioners, advocates, and other special road users who want to create walkable/bikeable communities.

CD-ROMS

Pedestrian/Bicycle Safety Resource Set, Federal Highway Administration, Pub. No. FHWA-SA-00-005.

This CD-ROM contains a library of information on how to improve pedestrian/bicyclist safety in communities across the nation. Included in the set is information on facility design, planning, guidelines, good practices, and tools to aid in problem identification, and countermeasures development. The CD-ROM contains about 15,000 pages of information classified by various categories (e.g., design, planning, outreach, tools, etc.) and is intended for safety practitioners and other advocates who want to create walkable/bikeable communities.

Safer Journey: Interactive Pedestrian Safety Awareness, Federal Highway Administration, Pub. No. FHWA-SA-00-009.

This interactive CD-ROM takes the user through various pedestrian safety scenarios encountered every day across America. It has been developed to improve the level of pedestrian knowledge for all road users (including schools,

driver education groups, enforcement, etc.) and safety practitioners. The CD-ROM activities include the Journey, the Quiz, and a library of resources. During the Journey section, the user interacts with the software to determine the outcome of the scenario. A crash-type safety countermeasure matrix is included in the library section.

VIDEOTAPE

Pedestrian Safety: What You Can Do, Federal Highway Administration, 9 minutes.

This video examines many common urban and rural pedestrian safety problems and identifies countermeasures for each problem. It also depicts the common problems faced by various age groups and by the handicapped and identifies sources of additional information.

Training Pays Off

Surveying

Here are comments from recent participants regarding our training opportunities:

Roundabout Design (Professional Development Series)

"The course was very hands-on. The use of real world examples was much better than a textbook hypothetical. I have had the opportunity to incorporate 2 different roundabouts into a recent project. They have been very well received by other engineers and by our clients."

- *Rudolfo Franciamone*
Purcell Associates

"I was very impressed with the course and the instructor. It was a real hands-on 'nuts & bolts' approach. I brought back many working tools that I can use in my current position. This workshop fit like a glove with the first one I attended last year on Traffic Calming and Neighborhood design."

- *William Brown*
Town of Greenwich

"I really enjoyed this hands-on experience. It was very well done."

- *Participant Evaluation*

"A Great Workshop—Very Good Instructor"

- *Participant Evaluation*

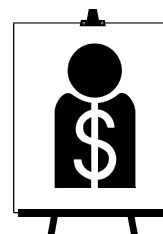
Managing the Small Highway Department (Road Master Program)

"Really enjoyed this workshop. The instructor was interesting, and easy to listen to. I was never bored."

- *Ernie Orgera*
City of Stamford

"I truly enjoyed this workshop and can see some shortcomings that I can improve upon."

- *Participant Evaluation*



"Just wanted to say that this class was very helpful. This is a wonderful teacher, very lively and teaches at our level of understanding."

- *Participant Evaluation*

Technology Transfer Expo 2001

"It was nice to see the show take place again! The fact that it was a combined effort between CHSSA and the Technology Transfer Center made it a unique experience that I enjoyed very much. I found the event to be both educational and entertaining. The hands on demonstrations and participation allowed you to get a real feel for the equipment. I think the backhoe rodeo was challenging and amusing to all who watched and participated. All in all I would say the affair was a success and I look forward to next years show."

- *Ralph Winn*
Town of Windsor Locks

Conference Calendar

Beneficial Use of Recycled Materials in Transportation Applications

November 13, 2001 in Washington, DC

Contact: Recycled Materials Resource Center

phone: 603-862-4704, e-mail: rmrc@rmrc.unh.edu, web: www.rmrc.unh.edu

NLC Congress of Cities and Exposition

November 27-December 1, 2001 in Atlanta, GA

Contact: National League of Cities

phone: 202-626-300, e-mail: pa@nlc.org, web: www.nlc.org

TRB Annual Meeting

January 13-January 17, 2002 in Washington, DC

Contact: Transportation Research Board

phone: 202-334-2934, web: www.trb.org

Check It Out

Technology Transfer newsletter is now accessible on line at:

www.cti.uconn.edu/ti/Technology/TT_Newsletters.htm

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