



# ROADTALK

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## Congratulations to our TATE Graduates

by Frank Brewer



(Left to right: Brandon Darks, David Utley, Reza Baghaevaji, Chauncey Davis Sr., Chris Lynch, Charles King)

The Tennessee Academy for Transportation Engineering (TATE) is proud to announce that

- ▶ Reza Baghaevaji, Operation Specialist I – TDOT,
- ▶ Brandon Darks, Planner III – TDOT,
- ▶ Chauncey Davis, Sr., Photogrammetrist – TDOT,
- ▶ Christopher Lynch, Transportation Technologist II – TDOT,
- ▶ Charles King, Transportation Manager I – TDOT,
- ▶ Scott McCormick, Plans Examiner – Nashville/Davidson County Metropolitan Government, and
- ▶ David Utley, Director of Alternate Transportation Programs & State Bicycle and Pedestrian Coordinator – TDOT

*continued on page 4*

### In this issue...

*TATE Graduates.....Page 1*  
*Technical Assistance...Page 2*  
*ITS in Memphis..... Page 3*  
*MUTCD.....Page 5*  
*TTAP Training.....Page 6*

### Mark your calendar...

*Southeastern Local  
 Roads Conference  
 October 12-14, 2003  
 Asheville, NC*

**(Registration material coming soon!)**

### Routing Slip

Please don't file this away. Read it, copy what you like, initial below, and pass it on to others.

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# ROADTALK

is a publication of the Tennessee Transportation Assistance Program (TTAP). TTAP is part of a nationwide Local Technical Assistance Program (LTAP) financed jointly by the Federal Highway Administration (FHWA) and Tennessee Department of Transportation (TDOT). Its purpose is to translate into understandable terms the latest state-of-the-art technologies in the areas of roads, bridges, and public transportation to local highway and transportation personnel.

The views, opinions, and recommendations contained within this newsletter are those of the authors and do not necessarily reflect the views of FHWA and TDOT.

**Robert Russell**, Interim Director

**Frank Brewer**, Assistant Director, Training

**Matt Cate**, Technical Assistance Coordinator

**Denczil Rolle**, Graduate Research Assistant

**Linda Capps**, Sign Grant Technician

**Jenny Jones**, RoadTalk Editor

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**Annette Jones**, Course Registration

**Julie Robinson**, Course Materials

#### FIELD REPRESENTATIVE

**Darcy Sullivan**, Technical Assistance

## From the Director

Greetings,

**Training:** The new training season is here. We need you to participate to make it viable. Please review our hardcopy catalog or look at it on our website. You are sure to find a course that will help you do a better job in improving our Tennessee road network.

**TTAP Advisory Committee:** The TTAP Advisory Committee is established and will conduct our first meeting in September, 2003. Initially, we will address the following major topic areas:

- TTAP Training Program
- TTAP Mailing List
- Technical Assistance
- TTAP Web page and ROADTALK
- Circuit Rider Program
- Regional Representation

Please advise us of important issues to add to the agenda. We all thank the new committee members for their participation.

Ralph Volpe/FHWA  
Bill Kervin/Consultant  
Sharon Rollins/MTAS  
Robert Russell/TTAP

Preston Elliott/TDOT  
Rodney Carmical/TCHOA  
Ed Archer/TCAPWA

Robert Russell

## Free Technical Assistance Available to Tennessee Cities and Counties

by Matt Cate

On the new TTAP webpage, the first thing that visitors see on our homepage is the TTAP mission statement. Our goal is simple: "...to foster a safe, efficient, and environmentally sound transportation system by providing training, technical assistance, and technology transfer materials ..." While TTAP's training and technology transfer programs are widely utilized by local transportation officials across the state, our technical assistance program often seems like a well-kept secret among these same officials.

While the training and technology transfer programs are de-

signed to benefit local agencies by providing pertinent information that may be applied to a variety of situations, the technical assistance program is intended to help provide information and guidance to transportation agencies in specific situations. TTAP's technical assistance can be as simple as loaning traffic counting equipment to an agency. It can also take the form of a more complex project involving one or more on-site visits by TTAP staff members and technical consultants to carefully assess a situation and provide detailed technical guidance.

If you think that TTAP may be able to offer assistance to your city or county agency, contact us at 1-800-252-7623. As TTAP's technical

assistance coordinator, I will be happy to talk with you to assess your specific request and determine the next steps. Remember, TTAP is available to help any city or county in Tennessee, regardless of your distance from our home office in Knoxville.

Typical TTAP Technical Assistance Areas:

- Traffic counts
- Pavement management systems
- School zone signing
- Drainage studies
- Intersection studies
- Traffic signs and pavement markings
- Traffic signal warrant analysis

# Tennessee Department of Transportation Plans Intelligent Transportation System for Memphis Region

by Rodney Chester, *Gresham, Smith & Partners, Nashville, TN*

(Editor's Note: This is part three of a series of articles on Intelligent Transportation Systems (ITS) in Tennessee.)

The Tennessee Department of Transportation (TDOT) recently began design for an Intelligent Transportation System (ITS) for the Memphis Region. This system, which will be referred to as "SMARTway", will cover approximately 86 miles of interstate on sections of I-40, I-240, I-55, SR-385 and Sam Cooper Boulevard in Shelby County, Tennessee and Crittenden County, Arkansas.

The project will involve installing various types of ITS devices including:

- ▶ Pole-mounted surveillance cameras
- ▶ Pole-mounted speed sensors to monitor traffic flow
- ▶ Electronic dynamic message signs
- ▶ Highway advisory radio
- ▶ Security cameras on the Mississippi River bridges

The project will be designed in two phases. The first phase is an early release project on the two Mississippi River bridges at I-40 and I-55, with security cameras for Arkansas Highway and Transportation Department (AHTD) and roadway surveillance cameras for TDOT. This first phase will begin construction in early 2004 and will take ap-



Surveillance Cameras are used to monitor traffic conditions on the freeways

proximately 10 months to construct.

The second phase will include installing the ITS devices on the entire 86-mile project limits. This larger project will begin construction in 2005 and should be completed in late 2007. In conjunction with

this phase, a new Transportation Management Center (TMC) will be designed and con-



Electronic Dynamic Message Boards are used to alert drivers to any traffic problems ahead

*continued on Page 5*

**Tate Graduates, *continued from page 1***

have joined the ranks of TATE Certificate recipients. The graduates have attended workshops within the TATE curriculum, amassed a minimum 144 Professional Development Hours, and successfully passed the exams attached to the workshops. The certificate acknowledges their commitment to the transportation field, that of creating safer roadways and mitigating congestion which will enhance the traveling experience to all roadway users.



**On August 5<sup>th</sup>, 2003, Commissioner Nicely presented the TDOT recipients their certificates during a TDOT awards ceremony.**

**Commissioner Gerald F. Nicely with TATE and other TDOT awards recipients**

**Charles Hasty, Development Services Manager, Nashville/ Davidson County Metropolitan Government, presented Scott McCormick his TATE certificate later that same day.**



**(Left to right: Scott McCormick, Charles Hasty)**

structed under a separate contract.

From the TMC, operators will monitor traffic flow on the interstates and respond to incidents by quickly notifying the appropriate emergency response personnel and placing real-time messages on the dynamic message signs. Typical messages will include information concerning lane blockages, anticipated delay and recommended detour routes. Throughout the day, the signs can display approximate travel times to selected exits or interchanges.

The information from the system will also be available on TDOT's website <http://www.tdot.state.tn.us/>. In addition to camera images, the TDOT website will include a speed map that shows the current average speeds for each segment of the interstate. This map will quickly identify the real-time travel conditions along a route. Using the internet, travelers can access the messages being displayed on the dynamic message signs. A complete picture of the current travel conditions will be readily available via the Internet.

The benefits of the Intelligent Transportation System extend beyond warning motorists of potential delays. The system will help reduce the amount of delay and even

reduce the number of accidents on Memphis interstates. Installing cameras, traffic sensors and dynamic message signs will produce faster response time to incidents and will ensure that the appropriate incident response personnel are on the scene, thus resulting in a quicker clearing of the incident. An incident that closes down two lanes for 15-20 minutes can have a lingering effect on traffic conditions for a much longer period; therefore, being able to clear the accident five or ten minutes faster can have a dramatic impact on the



**The ITS devices are monitored and operated from a transportation management center**

reduction in overall delay for the motorists.

Research shows that up to 30% of all accidents are secondary accidents that happen because of another accident that occurred downstream. The system will be able to reduce the number of these secondary accidents through two means: first, by clearing these accidents more quickly, there is less time for the secondary accidents to occur; and secondly, by using the dynamic message signs to warn motorists of the slowed or stopped traffic conditions ahead.

The system described above is being designed by a team of consultants led by Gresham, Smith and Partners.

## MUTCD Compliance Dates are Coming!

by Matt Cate

By now you're probably aware that the Federal Highway Administration has developed a new edition of the *Manual on Uniform Traffic Control Devices*. Because the *Millennium Edition of the MUTCD* supersedes the previous 1988 edition of the manual, you should be sure to reference the newest version at all times when making decisions regarding traffic control devices. In many cases, the two editions of the *MUTCD* do not conflict, but there are numerous changes to be aware of.

FHWA has allowed phase-in compliance periods of several years for many of these changes. Two of these compliance periods, both addressing new warrants for centerline and edge line markings, expired earlier this year. Additionally, seven more new regulations will take effect in the next three years. The first of these upcoming compliance dates takes effect on January 17 of next year. The *Millennium Edition of the MUTCD* states "At intersections where all approaches are controlled by STOP signs, a supplemental plaque shall be mounted below each STOP sign." Previously, the use of the "4-Way" or "All-Way" plaque at these intersections was optional. Also remember that these supplemental plaques should not be used if any approach to the intersection is not STOP controlled.

*continued on page 8*



**Education and training opportunities** are available through The University of Tennessee Center for Transportation Research (CTR), Southeast Transportation Center (STC), and Tennessee Transportation Assistance Program (TTAP). This listing of courses currently available includes both TTAP and TATE courses that are offered in conjunction with The University of Tennessee Department of Civil and Environmental Engineering and the Tennessee Section of the Institute of Transportation Engineers. Local roadway departments can benefit from all of the workshops. Because of this, we ask that you please share this listing with others who might be interested in our workshops. The Center for Transportation Research is always eager to meet your research and training needs. If you have a special course in mind or would like a course held on site especially for your employees, please contact Annette Jones at 1-800-252-ROAD.

**\*CEU and PDH credit hours available.**

TITLE	DATE	LOCATION	INSTRUCTOR(S)
Innovations in Concrete	Sept 17, 2003	Nashville	Various
Work Zone/Flagging	Oct 06, 2003	Jackson	Kervin
Work Zone/Flagging	Oct 07, 2003	Nashville	Kervin
Asphalt Pavement Patching	Oct 23, 2003	Nashville	Hearn
Asphalt Pavement Patching	Oct 24, 2003	Jackson	Hearn
Geotechnical Engineering Concepts 1	Oct 27, 2003	Nashville	Drumm
Pavement Design	Nov 03, 2003	Knoxville	Huang
Road Surface Management System (RSMS) for Beginners	Nov 06, 2003	Nashville	Cate/Brewer
Storm Water Drainage	Nov 10, 2003	Jackson	Kervin
Basic Roadway Surveying	Nov 12, 2003	Jackson	Kervin
Storm Water Drainage	Dec 08, 2003	Nashville	Kervin
Traffic Engineering 1	Dec 16-18, 2003	Nashville	Wegmann/Chatterjee/Han
Geotechnical Engineering Concepts 2	Jan 26, 2004	Nashville	Drumm
Plans Interpretation	Jan 30, 2004	Nashville	Beckwith
Design of At-Grade Intersections	Feb 02, 2004	Knoxville	Childers
Work Zone / Flagging	Feb 11, 2004	Chattanooga	Kervin
Work Zone / Flagging	Feb 12, 2004	Knoxville	Kervin
Traffic Signs & Pavement Markings	Feb 24, 2004	Jackson	Kervin/ Brunelle
Road Surface Management System (RSMS) for Beginners	Mar 01, 2004	Jackson	Cate/Brewer
Storm Water Drainage	Mar 04, 2004	Chattanooga	Kervin
Advanced Roadway Surveying	Mar 25-26, 2004	Jackson	Kervin
Basic Roadway Surveying	Apr 08, 2004	Knoxville	Kervin
Context Sensitive Highway Design	Apr 22, 2004	Nashville	Norm Johnson
Millennium Edition of the MUTCD: Revision 2 Significant Changes	Apr 27, 2004	Jackson	Brunelle
Millennium Edition of the MUTCD: Revision 2 Significant Changes	Apr 29, 2004	Chattanooga	Brunelle
Traffic Engineering 2	May 12-14, 2004	Nashville	Wegmann/Chatterjee/Han
Pavement Design	May 17, 2004	Chattanooga	Huang

*continued on page 7*

TITLE	DATE	LOCATION	INSTRUCTOR(S)
Road Surface Management System (RSMS) for Beginners	Sept 08, 2004	Nashville	Cate/Brewer
Design of At-Grade Intersections	Sept 13, 2004	Nashville	Childers
Advanced Roadway Surveying	Sept 20-21, 2004	Nashville	Kervin
Roadside Design Guide	Sept 29, 2004	Chattanooga	Brunelle
Work Zone/Flagging	Oct 04, 2004	Jackson	Kervin
Work Zone/Flagging	Oct 05, 2004	Nashville	Kervin
Pavement Design	Oct 14, 2004	Jackson	Huang
Storm Water Drainage	Oct 25, 2004	Nashville	Kervin
Asphalt Pavement Patching	Nov 08, 2004	Knoxville	Hearn
Asphalt Pavement Patching	Nov, 09, 2004	Nashville	Hearn
Traffic Signs & Pavement Markings	Nov 16, 2004	Nashville	Kervin/Brunelle
Traffic Engineering 1	Dec 13-15, 2004	Nashville	Wegmann/Chatterjee/Han

**ADDITIONAL WORKSHOPS MAY BE ADDED.  
WATCH OUT FOR BROCHURES.**

## TALK TO TTAP

**We** are always looking for your comments, ideas and suggestions to help make the TTAP program more useful to you.

1. Please send me more information on the following articles mentioned in this newsletter.

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2. Please list any additional training workshops you would be interested in attending.

\_\_\_\_\_

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3. Please list topics for videos you would like TTAP to obtain.

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4. Please list any other ideas or suggestions on how TTAP could assist you.

\_\_\_\_\_

\_\_\_\_\_

5. Please list your name and organization to verify for TTAP's mailing list.

Name \_\_\_\_\_

Address \_\_\_\_\_

Title \_\_\_\_\_

Organization \_\_\_\_\_

Phone \_\_\_\_\_ Fax \_\_\_\_\_

Email \_\_\_\_\_

Are you currently on TTAP's mailing list? \_\_\_\_ yes \_\_\_\_ no

Please fax your form to TTAP at (865) 974-3889 or mail to TTAP; Suite 309 Conference Center Building; Knoxville, TN 37996-4133.

FROM: \_\_\_\_\_

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 Web: [ctr.utk.edu/ttap](http://ctr.utk.edu/ttap)



Federal Highway  
 Administration



*MUTCD, continued from page 5*

MUTCD Section	Topic	Compliance Date
3B.01	Yellow Centerline and Left Edge Line Pavement Markings and Warrants	January 3, 2003
3B.07	Warrants for use of Edge Lines	January 3, 2003
2B.04	STOP Sign	January 17, 2004
4E.06	Accessible Pedestrian Signals	January 17, 2005
4E.08	Accessible Pedestrian Signal Detectors	January 17, 2005
10	Automatic gates, flashing-light signals, and blank-out signs	January 17, 2006
10C.11	Highway-Rail Advance Warning Signs: Removal of existing W10-6 series signs	January 17, 2006
9	Deletion of preferential lane symbol (diamond) for bicycles and pavement markings	January 17, 2006
9B.04	Bicycle Lane Signs	January 17, 2006

For the latest on the *Millennium Edition of the Manual on Uniform Traffic Control Devices*, including a complete listing of *MUTCD* compliance dates and free access to the entire manual, visit the Federal Highway Administration's *MUTCD* website at <http://mutcd.fhwa.dot.gov>.

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