



ROADTALK

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Governor's Highway Work Program Reflects State Budget Reductions

On April 16, 2003, Governor Phil Bredesen released the 2003-04 highway work program for the Tennessee Department of Transportation. The annual work program reflects the reduction in the overall \$1.4 billion dollar transportation budget announced earlier this year by the Governor and Transportation Commissioner Gerald Nicely. Commissioner Nicely applied the 9% reduction to all programs across the board with the exceptions of mass transit and aeronautics, which included federal revenues that might otherwise have been impacted.

Although the budget is leaner this year, the proposed projects



will provide improved safety and important links in the transportation system across the state. The Governor considered these points essential as a good transportation system has always been recognized as a catalyst for economic development.

Fifty projects in 40 counties are proposed for 2003-04. A list of the projects can be found at the following website: <http://www.tdot.state.tn.us/roadprojects/list.htm>.

At least one project cut from the transportation budget last year has been reinstated. Decisions on which projects were funded this year were partly based on where projects were in the development process. A new process for setting transportation priorities has just begun at the agency. It will include all modes of transportation that have traditionally not been in the mix or have been overlooked in the past.

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Routing Slip

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

Proposed Fiscal Year 2003-04 Transportation Improvement Program

<http://www.tdot.state.tn.us/roadprojects/list.htm>

**Click on county name to
view road project.**

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.

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From the Director

From our modern TTAP Webpage to some significant changes in Roadtalk, we have a new look. More importantly, we intend these visual changes to make it easier for you to use TTAP services. Read on to see some valuable "news" articles that affect you and your road support programs. Read about our more user-friendly Webpage. Even better—pull it up for a test drive.

<http://ctr.utk.edu/ttap>.

Look at our new logo on the cover of this Roadtalk. The color version on the webpage is even better.

Heads up: TTAP is establishing an Advisory Council to help the TTAP Staff do a better job in all mission areas. More to follow in the Fall Roadtalk.

Contact us at 1-800-252-ROAD or email TTAP@utk.edu

Robert Russell



Our new logo ... The three white stars represent the three grand divisions of our state: West, Middle, and East Tennessee. The new logo is to stress TTAP's services are available to cities and counties across Tennessee, from Memphis to Mountain City and all points in between.

New website...

<http://ctr.utk.edu/ttap>

Click on the menu bar to navigate to:

- ☞ Training & Workshops
- ☞ Technical Assistance
- ☞ Technology Transfer
- ☞ Newsletter
- ☞ Staff
- ☞ Links
- ☞ Director's Message



Tennessee Construction Career Days... A Showcase of Opportunity

By Brian Brasher, Federal Highway Administration –
Tennessee Division Office

On April 15-17, Tennessee Construction Career Days was held at Chilhowee Park in Knoxville. This event hosted nearly 1700 high school juniors and seniors from across East Tennessee who got an opportunity to see the varied careers available to them in the construction industry. The three-day event was a result of months of planning and was a combined effort of construction firms and related organizations, equipment sales and manufacturers, and suppliers.

During this event, students visited exhibit booths to talk one-on-one with representatives of the various organizations and companies, including the Federal Highway Administration - Tennessee Division Office, Tennessee Department of Transportation, and the Tennessee Technical Assistance Program (TTAP). They also got to test their skills at hands-on demonstrations of electrical, plumbing, heating and air, carpentry and engine mechanics.

The highlight of the event was an equipment demonstration featuring a wide range of ma-

chines from several different manufacturers including skid steer loaders, backhoe loaders, tractors and a 980G loading a Cat 740 Articulated Truck. The show was complete with a music soundtrack of country, rock and rap.

The Knoxville event marks the second time in as many years that Tennessee high school students were given such an opportunity to have a hands-on look at this industry.

Tennessee's vocational teachers and counselors have endorsed this event as an important part of their student's transition to the workforce. The next Tennessee Construction Career Days event is currently being planned for October 2003 in Franklin. If interested in exhibiting or volunteering your time for future events, please contact Wes Stovers at 800-362-9690.

Construction Career Days
Franklin, Tennessee
October 2003.
Contact Wes Stovers at
800-362-9690.



ITS Comes to East Tennessee

by John Benditz, Kimley-Horn
and Associates

(Editor's Note: This is a follow-up article on Intelligent Transportation Systems (ITS) published in our 2003 Spring RoadTalk.)

The Tennessee Department of Transportation (TDOT) is presently underway with the deployment of Intelligent Transportation System (ITS) technologies within the Knoxville region. This project, the Knoxville Regional Transportation Management System (TMS), is the second deployment of ITS technologies by TDOT in Tennessee, with the Nashville system being the first. The Knoxville Regional TMS will provide more accurate and timely information, thereby supplementing existing freeway service patrols, the TDOT HELP trucks, allowing them to better respond, control traffic and clear incidents within the TMS coverage area.

The Knoxville Regional TMS will ultimately consist of 73 closed circuit television cameras (CCTV), 16 dynamic message signs (DMS), over 200 detector stations (DS), and the use of highway advisory radio (HAR). The HAR system will include three transmitters located across the Knoxville region which allows traffic information to be broadcasted throughout the Knoxville urban area. In addition, there will be 18 flashing beacon signs, strategically located on major arterials, which alert motorists to the AM radio frequency (station to be determined) when "pertinent or important" traffic information is being broadcast.

Continued on page 5

“I don’t think we are in Kansas anymore Toto!”

by Frank Brewer

We get our share of extreme weather in Tennessee. As highway workers spend large portions of time outside in this weather, we should look at some of the problems we may all face. Also, we will attempt to provide information that can be applied at home.

Lately we have been teamed with extreme winds (tornadoes) and heavy rains. Along with the rains, several associated problems occur - namely floods, landslides, lightning, and uprooted trees due to the winds and saturated soils.

If you are outside and encounter a tornado, resist the temptation to get close to it. Determine its direction if possible and:

- Try to get inside (**not a construction trailer, all trailers are highly susceptible to high wind damage**) and get into a small protected space with no windows.
- Avoid large-span roof areas (garages, malls, schools, etc.)
- If you cannot get inside, crouch beside a strong structure and lie flat in a ditch or low-lying area. Cover your head and neck with your arms or pieces of clothing. Beware of fast moving water in ditches.

If in a car, stop immediately, get out and seek shelter. If you are already in a sturdy building, do not get into a vehicle to try to outrun the tornado.

Following a tornado, be very careful while working in the debris. Sturdy shoes or boots and gloves are important pieces of equipment. Pay attention to downed power lines. You cannot tell if they are still energized! Treat them as if they are still “hot.” In urban areas, structures affected may have collapsed or soon may.



There is the possibility of broken glass, nails in splintered wood, pieces of structural metals lying about, as well as broken gas lines.

If caught outside during a lightning storm, you should do the following:

- ▶▶ Take cover in the best shelter you can find.
 - ▶ If choosing between a building and a car, choose the building.

▶▶ If choosing between a convertible and a hardtop, choose the hardtop.

▶ If you are in a car, keep the doors closed.

▶▶ If there is no shelter:

▶ Find a low-lying open place a safe distance from trees, poles, or metal objects (construction equipment) which can conduct electricity.

▶ Squat low to the ground, making yourself as low as possible, and try to touch as little of your body to the ground as possible.

▶ Do not lie flat on the ground. This will create a larger surface to conduct electricity.

▶▶ If you feel your hair stand on end in a storm, immediately drop into the tuck position described above! This indicates that electric charges are already rushing up through your body from the ground toward an electrically charged cloud!

Work carefully, pay attention to your hearing, vision, and sense of smell. These senses may provide clues to dangers around you.

For more information, please contact your local Red Cross office. Also if you have internet access, try: www.weather.com/safeside, or www.redcross.org/disaster/safety/idex.html.

A network of fiber-optics, wireless, and leased communications will support the over 300 ITS devices deployed across the Knoxville region. All of these devices will be monitored at a Regional Transportation Management Center (TMC) to be built on the TDOT Region 1 campus at the Strawberry Plains Pike exit along Interstate 40 east of Knoxville. The project limits include interstates and controlled access facilities within the urban area of Knoxville is as follows:

- ▶▶ Interstate 40 – from the Lovell Road interchange east through the City to milepost 395 (Holston River Bridge)
- ▶▶ The entire length of Interstate 640
- ▶▶ Interstate 75 – from the Interstate 640/Clinton Highway interchange to just south of the Callahan Road interchange
- ▶▶ The entire length of Interstate 275
- ▶▶ Alcoa Highway from the Cherokee Trail/UT Hospital exit to the interchange with Interstate 40
- ▶▶ Pellissippi Parkway – from the Westland Drive exit north across both Kingston Pike and Interstate 40 up to the Lovell Road exit

Once complete, the Knoxville TMS will provide 44 miles of freeway and controlled access highway coverage within the Knoxville urban area.

The purpose of the Knoxville Regional TMS includes three primary areas: (1) incident management to provide early detection and verification, resulting in quicker response to incidents along the freeway, (2) provide traffic control and timely information during construction activities, and (3) provide traveler information to motorists based upon freeway incidents, freeway construction, special events, and

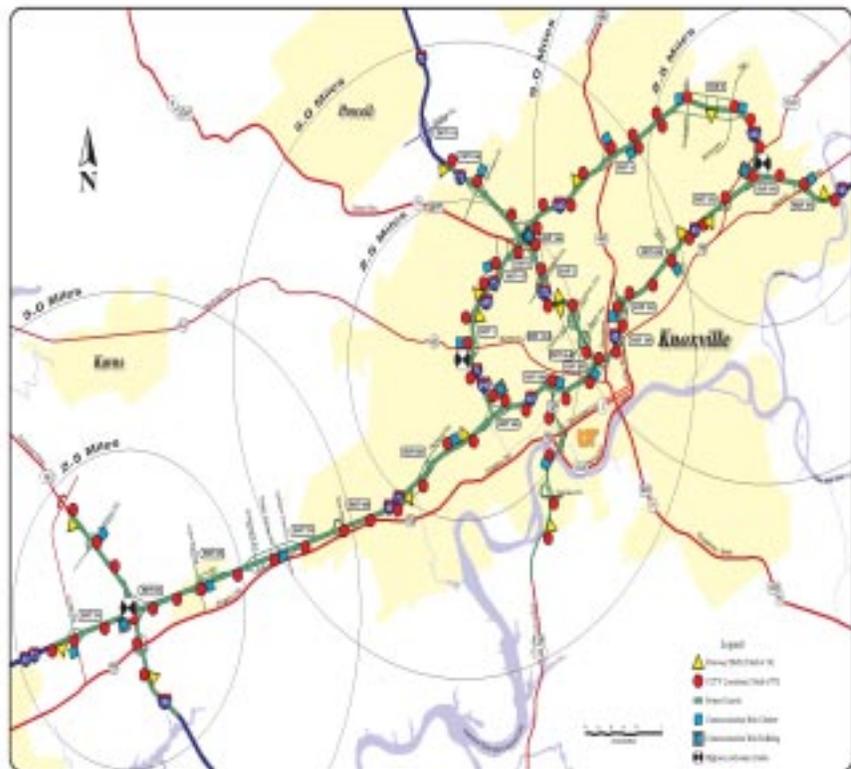
other information affecting motorists within the Knoxville region.

TMC operators will be able to monitor traffic flow conditions via CCTV's and DS strategically placed along all segments of the freeway system. Traffic data gained from the DS and video images obtained from the CCTV's will allow TMC operators to evaluate roadway conditions. This information will allow TMC operators to provide necessary traffic information to motorists via DMS and HAR signs. The goal of the Knoxville TMS is to allow multiple emergency responders to more quickly identify, evaluate, and respond to incidents along the freeway that cause traffic congestion and also to have a means of providing traffic information to motorists along the freeway.

Construction of the Knoxville TMS began this spring. By spring 2004, construction of the TMC at TDOT's Region 1 campus as well as

the installation of 24 CCTV cameras are scheduled for completion.

These first 24 CCTV cameras along with the completion of the TMC are part of TDOT's early deployment phase giving the TMC operators, and thus the traveling public, access to traffic conditions along the Knoxville freeways. These first CCTV camera installations will be placed at strategic locations within the project limits so that TMC operators will not only have visual access of the freeways but also provide images of exit ramps and adjacent surface street operations. Following the early deployment phase, the remainder of TMS construction will continue with the installation of the remaining CCTV's and all DMS, DS, and HAR installations. Completion of the balance of the Knoxville Regional TMS is scheduled to be complete before the end of 2004.



Knoxville Regional TMS



Coming Soon

2003-2004 Catalog

TTAP Training

by Frank Brewer

In March, TTAP held a workshop in Nashville on Site Impact Analysis. The instructor was Dane Ismart. Dane is an engineer with the Louis Berger organization in Florida and does a number of workshops for TTAP and NHI. He brings a body of knowledge and a sense of humor to his workshops. We had attendees from South Carolina, Kentucky, East Tennessee, West Tennessee, Middle Tennessee and consultants as well as TDOT personnel. The attendees took away from the class a better understanding of the influence and impact of land development on an area's traffic flow patterns and density. Also, there was the ability to have a peer exchange with those of different regions and states. It is more meaningful to be able to compare and contrast your methods with those of another area when done on a face-to-face basis.



Participants at the Site Impact Analysis Workshop in Nashville

TTAP is drawing to a close its current catalog of workshops. We at TTAP wish to thank everyone who participated in this program. A new catalog is being prepared to be published soon. This will be in paper format as well as on our website <http://ctr.utk.edu/ttap>.

This website is currently undergoing a much needed update. You will still be able to access our video catalog as well as the training catalog. Also, you will be able to register for any workshops by downloading the registration form and mailing to

TTAP Training, 309 CCB,
Knoxville TN 37996-4133
or faxing (865-974-3889) it
to TTAP.

As before, brochures will be mailed out in advance of each individual workshop or you may contact TTAP by telephone if you prefer. The toll-free number from inside Tennessee is 800-252-7623. If you are requesting to enroll for a workshop, we would like to have a hard copy registration as well. This can be done by US mail, fax, or e-mail (ttap@utk.edu).

We look forward to seeing you in one or more of our workshops.

Mark your calendar...

Tennessee Lifesavers

July 14-16, 2003

Knoxville, TN

www.tntrafficsafety.org (online registration)

Tel: 901-876-5497

(Ron Marshak for information)

Southeastern Local Roads Conference

October 12-14, 2003

Ashville, NC

(Registration materials will be coming soon)

Materials from TTAP



TTAP has received CDs and publications from a variety of sources. As part of TTAP's mission to provide information on the latest materials and techniques being used in transportation field, we make these materials available to you, the city and county transportation officials of Tennessee. We have multiple copies of some materials, while others can only be loaned for short-term use. If you have an interest in any of the materials listed below, please contact Denczil Rolle at 1-800-252-ROAD or (865) 974-5255.

| <i>Title</i> | <i>Agency</i> | <i>Date</i> |
|--|---|-------------|
| CDs | | |
| Bituminous Materials Research Series III: Projects 9-10, 9-14, and 9-19. | NCHRP | 2002 |
| Asphalt Pavement Maintenance | Minnesota Local Road Research Board/FHWA | 2003 |
| Selected Studies in Transportation Law Volume 4: Tort Liability of Highway Agencies | NCHRP | 2003 |
| Videos | | |
| New Hampshire Public Works Mutual Aid Program | University of New Hampshire Technology Transfer Center (LTAP) | 2003 |
| Publications | | |
| Effects of Water Flow Rate and Temperatures on Leaching from Creosote-Treated Wood | US Forest Service | 2002 |
| Assessment of Selected LTPP Material, Data Tables, and Development of Representative Test Tables | FHWA | 2003 |
| Cold Temperature Effects on Stress-Laminated Timber Bridges | US Forest Service | 2003 |
| Laboratory Evaluation of Waterborne Coatings on Steel | FHWA | 2003 |
| NCHRP Synthesis 307: Systems Engineering Processes for Developing Traffic Signal Systems | NCHRP | 2003 |
| NCHRP Synthesis 310: Impact of Red Light Camera Enforcement on Crash Experience | NCHRP | 2003 |
| TCRP Report 89: Financing Capital Investment: A Primer for the Transit Practitioner | TCRP | 2003 |
| Timber Bridges: 2002 Award Winners | US Forest Service | 2003 |

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.

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

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

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: <http://ctr.utk.edu/ttap>



Federal Highway
Administration



New Law To Speed Up Roadwork In Tennessee

Governor Phil Bredesen signed a new law to speed up highway construction projects across Tennessee, saving time and money for motorists and local governments.

The new utility relocation law allows the Tennessee Department of Transportation (TDOT) to reimburse local utility companies for moving equipment such as telephone, cable, electric, and gas lines if they complete relocations before highway projects are set to begin. The law also allows TDOT to include the cost of utility relocation in highway construction con-

tracts, thereby saving unnecessary delays in waiting for utilities to be moved.

In Tennessee, all utilities are given free access on highways at the edge of the state right-of-way. Until now, they were responsible



for the cost of moving their equipment and lines in the event the road is moved, widened or otherwise modified. According to the DOT, an estimated 10% of highway projects are delayed by utility relocation.

Bredesen commented: "Motorists should not be stuck in traffic waiting for utility relocation to occur... This law is... a welcome change for many rural communities, whose utility companies might not have the financial resources necessary to respond to relocation requests in a timely manner."

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