Tennessee's Highways Rank Best in Nation

The highway system in Tennessee is ranked number one in the nation according to an annual survey of the nation’s truck drivers.

In its December issue, Overdrive magazine gave Tennessee’s highway system high marks for the best roads putting them ahead of Florida, Ohio, Texas and Indiana. The worst roads according to the trucker survey were Arkansas, Pennsylvania, Louisiana, New York and Illinois.

Transportation Commissioner Bruce Saltsman credited a solid maintenance program and consistent funding and support from current and previous governors and the legislatures as reasons for the high ranking. According to statistics from the Federal Highway Administration, Tennessee spends more money on maintenance and protecting its highway investment than any of its sister states.

“Being rated the best by truckers who drive our roads the most, says our program of protecting and maintaining our investment in our highways has worked. The goal of resurfacing the interstate every 8 years and other state highways at least on a 12-year cycle has contributed to a system that is now ranked number one. It goes without saying that the consistent funding provided by three governors and eight legislatures over the last two decades has been the biggest contributor to the number one status,” said Transportation Commissioner Bruce Saltsman.

Tennessee also gained high marks landing at number three for both tough truck inspections and most scenic highways. The survey results reported in Overdrive, a national trucking publication, feature photographs of trucks on Tennessee highways and comments from truckers who drive the nation’s highways.

According to Saltsman being number one is more than just bragging rights. He says it means that Tennesseans have fewer car repairs, better traffic flow, and most of all, a safer highway system on which to travel.

“We aren’t just building roads, we are building better communities and with a first rate highway system we are well ahead of the pack,” said Saltsman.

For more information go to: www.tdot.state.tn.us

In This Issue Work Zone Checklist, p. 3
Busy times for the TTAP office. We have just completed an update of two National Highway Institute courses on Work Zones. These updates brought the courses into agreement with the “Manual on Uniform Traffic Control Devices – Millennium Edition.” This was quite an undertaking, our thanks go to the TTAP staff for their efforts. Sweat equity is a phrase that comes to mind. Unfortunately we have had to postpone the Non-destructive Concrete Testing workshop. Hopefully we can re-schedule it for late summer or fall. Watch for it, we will let you know when it is ready.

We are quite involved with the Truck Safety Symposium (April 3, 4, 5) to be held at the Knoxville Hyatt Hotel. Also with the Circuit Rider program. We have conducted classes and presented information to some of the utility companies in the Knoxville area. The video library is busy. They make great short in-service training sessions. There is a list of the videos on our website http://ctr.utk.edu/ttap. We are here to help; just a phone call away.
Chris Ahmadajian, the director of the Massachusetts LTAP Center, has developed this visual aid regarding Work Zone protection. It illustrates that Rings Are Protection (RAP). The RAP is a stylized layout of a work zone indicating how the rings or layers of protection place you the worker inside the protected area. Each ring provides additional protection and should be in place to keep you safe.

- **Signs** such as the “Construction Ahead” come first. Make sure they are legible and in good shape.
- **Cones** as well as other road markers are used to guide drivers safely through the work zone. If they can drive through the work zone safely, you will be safe too.
- **Lights** can range from overhead lighting for nighttime operations, flashing beacons, to flashing lights on police or service vehicles.
- **Vests** are used to make you visible to the drivers as well as equipment operators within the work zone.
- **Hard hats** are also needed. There may be flying debris as well as equipment being moved very near you. The hard hat can protect your head as well as offer some shade from the sun.
- **YOU** are also a part of the protection. You have to take an active part in the process by your awareness of the activity surrounding you. Do not let your mind wander! You just might wander into an open ditch, traffic, or in front of moving equipment.

To help ensure that no one gets hurt on the job, follow this work zone safety checklist!

1. All devices meet specifications and quality standards.
2. Traffic control persons and flaggers trained and equipped.
3. All signs are properly installed and legible or covered, turned, or removed when not needed.
4. Arrow displays and portable message signs are properly aligned and maintained.
5. Proper taper and buffer lengths meet specifications.
6. Channelizing devices are clean, aligned, and properly spaced.
7. Temporary barriers and attenuators are properly installed and maintained.
8. Pavement markers are in place at the end of the work shift.
9. Day and night drive through inspections are conducted and logged.
10. Ask yourself, “What is the driver’s view?”
Goodbye and Welcome...

First the goodbyes. Lawrence Perry graduated in December with a Masters in Engineering and has returned to TDOT in Nashville. His reflection on his experience with us is on page 7. Congratulations and our best wishes to Lawrence.

Mitzi Hall, a graduate student who has been helping us with TTAP’s projects has been offered an internship with the Metropolitan Planning Commission of Knoxville and Knox County. We wish her the very best also.

On the positive side, we have a group of new graduate students and we want to welcome them to TTAP. First is Kent Bontrager. Kent will be filling the position vacated by Lawrence Perry while he completes work on his master’s degree in Civil Engineering. Following his graduation from Auburn University, he has spent the past six years working as a consultant in locations ranging from Sarasota, Florida, to San Diego, California. Following the completion of his master’s degree in December, Kent expects to rejoin the consulting community.

Jonathan Cate is joining TTAP near the end of his educational career. At the completion of his bachelor’s degree in Civil Engineering from The University of Tennessee in August 2000, Jonathan continued into the master’s program. Jonathan will be with us until May, when he will join the workforce as a transportation engineer.

Shannon Fain is also near the completion of his master’s degree. After receiving his bachelor’s degree in Civil Engineering from UT in December 2000, Shannon moved immediately into the master’s program and expects to graduate and work as a full-time engineer in May.

Please join us in welcoming Kent, Jonathan and Shannon to TTAP.
Operators and trucks from the successful Tennessee Department of Transportation incident management program called HELP will travel to Salt Lake City to assist in interstate incident management during the Winter Olympic Games set to begin in early February. Four HELP trucks and eight HELP drivers will be sent at the request and expense of the Olympic Committee and the Utah Department of Transportation to operate during the two weeks the games are underway.

“We are proud our incident management program is recognized as one of the best and that Utah and the Olympics Committee had enough confidence to invite us to participate. We have worked hard to maintain excellence in the program since beginning three years ago. It is a once-in-a-lifetime opportunity for our HELP employees and the program,” said Transportation Commissioner Bruce Saltsman.

While Utah has its own incident management program, more assistance is needed with the additional motorists expected to attend the winter games. Early on, national experts on incident management recommended Tennessee as having one of the best operated incident management programs. Washington DOT and Illinois DOT will also participate.

Tennessee will be reimbursed for all expenses, which are expected to include travel, food, lodging and salaries.

Two operators and one truck will be dispatched to Salt Lake City from each of the four urban areas in Tennessee with HELP programs. They include Chattanooga, Knoxville, Memphis and Nashville. TDOT officials say, while the four trucks will be on site for the duration of the Olympics, the operators will be sent in two groups of four so that no more than one operator will be absent from each HELP unit at any one time.

“This is a great opportunity, but we are making certain all of our responsibilities are covered here on our highways in Tennessee during that time,” said Saltsman.

The Tennessee HELP contingent will be operating around the urban Salt Lake City interstate system on I-15, I-80 and I-84 which includes Provo, Ogden, Park City and Salt Lake City.

Two operators will represent each of the four urban HELP programs in Tennessee. Participation is voluntary but in order to be considered, at least one year of service as either an operator or supervisor of the HELP program is required.

The four HELP trucks are expected to be trucked from Nashville about a week before the Olympics begin with the first group of operators leaving on or about February 5. They will join their equipment and begin service on February 6. The second group will leave about February 12. Tennessee’s service to the Olympics will conclude on February 22.

Participants include from Knoxville, Mark Brooks and Charles Leatherwood; Nashville, Wayne Tidwell and Harold Herod; Chattanooga, Roger Steward and Lacy Word and from Memphis, Laura Smith and Jack Massey.

For more on the TDOT HELP program including monthly assist statistics and incident management information please go to the TDOT website at www.tdot.state.tn.us and click on the lime-green truck.
**Upcoming Training**

**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 Jean Spangler at 1-800-252-ROAD

*CEU and PDH credit hours available.

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<tr>
<th>Course Title</th>
<th>Date</th>
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<td>Sullivan</td>
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<td>Nov 8</td>
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<td>AASHTO Roadside Design Guide</td>
<td>Dec 12</td>
<td>Knoxville</td>
<td>Brunelle</td>
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**Planning and Engineering** | Apr 3-4 | Nashville | Beckwith |
for New Highways | | | Wallace |
| Basic Highway Surveying | Apr 16 | Nashville | Kervin |
| Basic Highway Surveying | Apr 17 | Chattanooga | Kervin |
| Highway Capacity Manual | May 1-3 | Nashville | Ismart |
| Traffic Engineering | May 14-16 | Nashville | Wegmann |
| Non-destructive Concrete Testing | Postponed | Nashville | Ismart |
| | | | |

*postponed and subject to course approval

**Changes:**

- Highway Design for Older Driver Nov. 27 (Knoxville) Nov. 29 (Nashville)
- Collection of Perishable Accident Data: Why-When-How Cancelled
- Utility Accommodations Manual Cancelled

**Watch out for other upcoming workshops**
My work at the Center for Transportation Research has prepared me for a job in civil engineering. I have had the opportunity to work with a friendly staff and many of the professors who teach my classes. I learned a lot of information from other outstanding professionals in the field of civil engineering, such as Don Jones.

Everything that I have learned here helps me to understand my coursework in a real world environment. Sometimes it is hard to grasp certain ideas from just reading a book or just listening to a lecture. By working as a research assistant, I got to see practical application of civil engineering in the real world.

I saw many different areas in Tennessee that I would have never gotten to see if I had not worked here. On my travels, I met and talked with many important city and county officials in Tennessee. It was beneficial to talk with the Mayors, Public Works Directors and other officials.

The three things that I appreciate from my experience here at the Center for Transportation Research were communication skills, travel, and learning new things. Probably, the most important thing I learned was communication skills. Being able to understand the problems people called about and being able to relay it back to someone in our staff, made it possible for us solve the problem. Many of the problems that these places had required me to visit the site. These visits took me all over Tennessee. Finally, I learned new things every day at the Center. We have a vast amount of resources on cutting-edge technology and from this I learned about new techniques being used in the field today.

All of these things have prepared me for a future job. Practicing practical engineering and communicating efficiently will help on my future job. Finally, traveling and learning new things in civil engineering will make me a well-rounded engineer. Thanks 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.
An excerpt from...
Building a Major Highway in Mountainous East Tennessee:
Environmental Impacts

By Pam Boaze

If you’ve ever driven a winding mountain road, you know what it is like to get stuck behind a tractor trailer going up a hill, or worse, coming down the mountain in front of one. This happened frequently on old US 23 between Erwin and Sams Gap at the top of the mountains dividing Tennessee and North Carolina.

The construction of US 23 (Future I-26) was one of the largest and most environmentally sensitive projects ever undertaken by TDOT. The 15.3 mile project began in 1990 on the first section just outside Erwin in the rolling hills and valleys of East Tennessee. The final sections along the steep grades of the Appalachian slopes were completed in 1994, and the road was opened to traffic in July 1995.

An article providing a brief summary of the findings of the TDOT research program can be found on their web site. It documented the implementation and results of the environmental mitigation techniques utilized from pre-construction to project completion and beyond.

http://www.tdot.state.tn.us/Chief_Engineer/assistant_engineer_Planning/planning/transportation_planning_office/novacapsule.pdf

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