

Transportation Technology Transfer Center
 Civil & Industrial Engineering Building, Room 201H
 North Dakota State University
 Fargo, ND 58105

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The Center Line

Local Technical Assistance Program

Serving North Dakota Transportation Agencies

North Dakota Transportation Technology Transfer Center

North Dakota State University

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Winter 2004

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Routing Slip

Don't file this newsletter too quickly. Read it, photo-copy what you want, sign below, and please pass it on — especially to the front-line troops.

 Return to:

50 YEAR EMPLOYEE RETIRES
ARLAN MONSON - BOTTINEAU COUNTY

by Vernon Monger

Bottineau County lost a very valuable road superintendent last summer as Arlan Monson retired from the road department. In the early 50's, the road superintendent asked Arlan to work for them, so he said he would try it, and for some reason he was satisfied with it and never did leave. He says there were many opportunities throughout the area where he could have probably made more money but, he says, this is where I was born, this is where I was raised, this is home and this is where I want to be.



Practically everyone in the county knows Arlan. He became road superintendent in 1973. Arlan was always available to assist anyone with roadway problems. One of the commissioners stated "No matter what time of day or night, if someone called with a need, he made sure it was taken care of."

Bottineau County is definitely an area with four seasons, with the lakes for summer recreation and the winter skiing and snowmobiling, increasing the tourism and recreational opportunities of the area. This all impacts the road department and the road crews maintaining the roadways.

I asked Arlan what some of the major changes have been from 50 years ago. He stated 50 years ago the main concern was to reconstruct a few roads and maintain the gravel surfacing on existing roads. Also then, if roads became blocked in the winter the farmers waited till you could open them. Today there are so many residences in the hills where the people work in town and must get out each day for work. The demand for daily service has increased so much.

Another big item was the improvement in roadway equipment. It is so much improved over years ago and

the county has been able to purchase a good line of equipment. It seems as though the winters are so much milder than years ago and of course the roadways better built up and with good equipment it makes the winter snow removal a little easier.

Bottineau County is divided into five commissioner districts. In the early years each district had a separate road department with limited equipment. In the 1970's they combined the five districts into one road department. Arlan says that was a positive move, making better use of equipment and manpower.

Reader's Response

Please help the Center Line become more effective by filling out this form and returning it to:

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Please send information on:

My idea, comment or suggestion is:

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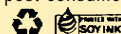
www.ce.ndsu.nodak.edu/ndltap/

The Transportation Technology Transfer Program is a nationwide partnership under the Local Technical Assistance Program (LTAP) of the Federal Highway Administration, state departments of transportation, universities, and others. The program's purpose is to translate into understandable terms the latest transportation research and technologies. This information is made available to local officials transportation personnel in towns, cities, counties and townships.

Federal support for operation of the North Dakota TTT Center at North Dakota State University (NDSU) is matched by the North Dakota Department of Transportation, NDSU, the North Dakota Insurance Reserve Fund and the ND TTT Center. Guidance for the ND TTT Center is provided by an Advisory Board composed of members representing the federal, state, local and private sector transportation community. This newsletter is designed to keep you informed about new publications, videos, innovative technologies and training opportunities that will be helpful to you and your local unit of government.

The use of product brand names in newsletter articles does not constitute any endorsement of those products by the ND TTT Center.

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Tim Kelly with Kadrmas, Lee & Jackson Consultants

**MEET ADVISORY COMMITTEE MEMBER
TIM KELLY,
CONSULTANT REPRESENTATIVE**

by Vernon Monger, ND LTAP

Tim Kelly is a member of our advisory committee and represents the consulting group. He is employed with Kadrmas, Lee and Jackson (KLJ) consultants and has been a member of the advisory committee for approximately 12 years.

Tim is a native of the Dickinson area. He attended college at North Dakota State University, receiving his degree in Civil Engineering in 1980. Following that he went to work for KLJ at Dickinson.

Tim is the Transportation Group Manager at the Dickinson office, principally covering the southwest North Dakota area and parts of Montana and South Dakota. He is responsible and oversees project development of roads and streets in the area and serving as the "engineer" for many of the counties. Tim and his wife, Nancy, reside in Dickinson with their two children Sean and Kaitlin. With children approaching their teens he says his spare time is taken up by being involved in their activities.

What about the LTAP program? Working with the rural counties and small cities, Tim has gotten a good feel for the training needs of the maintenance workers. He sees the LTAP as being an excellent facility for getting information to the locals. With very limited staffing in the smaller cities and the activities such as water and sewer, and other miscellaneous activities also being assigned to the maintenance worker, it is difficult for them to get a good handle on the street maintenance

needs. The short one day workshops are excellent for sharing of the information. For the locals to meet with their counterparts in other agencies and share common concerns can be very beneficial. Also having the LTAP staffing available to provide technical assistance and do research as necessary is beneficial for the locals.

**ARLAN MONSON -
BOTTINEAU COUNTY**
(continued from front page.)

During Arlan's tenure he worked for 24 different county commissions. He states all the commissioners he worked for were very good and he had excellent working relations with them, always having their full cooperation. He further states he always had a good hard working road crew.

As the tourism and recreational traffic increased, it was very difficult to maintain all the gravel roads. They were fortunate to get the heavier traveled county roads hard surfaced, which considerably reduced the maintenance efforts. Also being in a recreational area, the road department has been involved in construction and maintenance of bike trails and walking paths the last few years.

Arlan and his wife, Genevieve, reside on a small farm in the hills outside of Bottineau. He says this was a great place to raise their 14 children, several who reside in the area. They also have 28 grandchildren and 8 great grandchildren, so there is no shortage of activities. He is involved in raising cattle with a couple of his boys.

Arlan does some hunting, mainly for deer, and he says "I go out mainly so I can get all my visiting done". So if you are in the area and need someone to visit with, give him a call.



ADVISORY COMMITTEE

The following is a list of our North Dakota Local Technical Assistance Program (LTAP) Center Advisory Committee members. Please feel free to contact these individuals if you have suggestions, comments, or ideas regarding the operation and mission of our Center.

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YOUR INPUT IS NEEDED

We are looking for ways to improve services to our many customers throughout the North Dakota transportation community. Are we providing the services that you need and expect from us?

**Please Grade Your LTAP Center
Put Form in Envelope Provided and Mail Back**

Newsletter: Format, Content, Article Topics, etc.
A__ B__ C__ D__ F__
Information Useful? All Most Parts None
How many people you work with see each issue? ____
Suggestions? _____

Web Site: Navigation, Format, Content, etc.
A__ B__ C__ D__ F__
Have you used the web site? Yes No
Which do you prefer, (web site / newsletter / both)?
Suggestions? _____

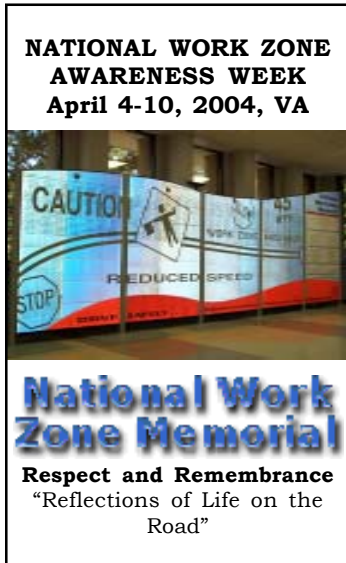
Training Workshops: Topics, Cost, Days of Week, Length, Multi-Media, Distance Learning, etc.
A__ B__ C__ D__ F__
Suggestions? _____

Videotapes: Topics, Quality, Sources, etc.
A__ B__ C__ D__ F__
Suggestions? _____

Publications: Topics, Availability, Format, etc.
A__ B__ C__ D__ F__
Suggestions? _____

Circuit Rider / Outreach: On-Site Technical and Information Assistance & Training Activities, etc.
A__ B__ C__ D__ F__
Suggestions? _____

Overall: A__ B__ C__ D__ F__
Please provide suggestions that you feel would make our services more useful to you and your community.





Bridge Trivia

(continued)

- **Highest altitude bridge in the world.** The Baily Bridge is 18,379 feet above sea level. The 98 foot long bridge was built in Ladakh Valley, India in 1982.
- **Busiest bridge in the world.** The San Francisco-Oakland Bay Bridge was used by an average of 274,000 vehicles a day in 1996 for an annual total of 100 million vehicles.
- **World's longest suspension bridge.** Japan officially opened the world's longest suspension bridge in 1997. Linking the islands of Shikoku and Honshu, the Akashi Kaikyo Bridge has a mainseam span of 6,530 feet, with a total length of 12,832 feet. It is engineered to withstand an 8.5 magnitude earthquake.

Reprinted with permission from the South Carolina LTAP Center newsletter, *Quarterly*, Winter 2003.

FHWA Operations Security

Role in Surface Transportation Security

Federal Highway Administration's role in surface transportation security is consistent with its role and approach to its other program areas, working with state and local transportation agencies and transportation partners to improve their capabilities and preparedness. The specific types of activities that FHWA plans to undertake include:

- Facilitating improved communication and creating partnerships
- Assembling and distributing best practices
- Providing for education, awareness, and training
- Engaging in R&D activities
- Coordinating with other federal agencies
- Distributing information on threats
- Ensuring the transportation system will support military deployments
- Advocating planning and preparation, and having in place a program of active management of the transportation network.

Program Areas:

- Emergency Transportation Planning
- Operational Tools and Technologies
- Homeland Security Advisory System
- National Defense
- Leadership

FHWA Activities:

- Regional Transportation Emergency Management Workshops
- Cargo Security and Efficiency
- Reducing Vulnerability of Agency Owned Tele-communications

- Transportation Operations Under Catastrophic Conditions
- iFlorida Model Deployment Initiative
- Blue Ribbon Panel on Bridge Security
- Bridge Surveillance Analysis
- Defense Mobilization Exercises
- International Border Crossing
- Planning in Security
- Alternate route development methodologies
- Updated information security booklet
- Communications Interoperability Demonstrations
- National ITS Architecture Security Revisions
- PTI Local Transportation Security Guidebook

FHWA Operations is engaged in emergency preparedness and management, working with other DOT administrations and Federal agencies, its State and local partners, academia, industry associations, and the private sector. The purpose is to ensure that surface transportation operating agencies throughout the nation have the necessary tools, techniques, information, and understanding to be able to prevent when possible, prepare for, respond to, and recover from both natural and man-made disasters. A key element is "emergency transportation operations preparedness." //

Information in this article was taken from the FHWA Office of Operations Web site. For more information and the downloadable brochure, Public Safety & Security Program, visit www.ops.fhwa.dot.gov/opssecurity/.

BLADING ROADS AGAINST TRAFFIC

by Vernon Monger, ND LTAP

At our recent Local Roads Conference at Rapid City one of the agenda items was a discussion of blading gravel roads against traffic. Most supervisors feel it is necessary to blade against traffic to avoid wasted travel (dead head) to the far end of the roadway being bladed when the gravel ridge is on the opposite side. Many feel that it is necessary to occasionally blade against traffic to properly maintain the road surface. At the same time, it becomes a major concern for safety when operating the motor grader in the oncoming traffic lane, particularly when going up hill where there is not adequate visibility for the oncoming traffic. There have been several accidents and close incidents in this regard in recent years. Some agencies have a policy of NOT operating against traffic at any time because of safety concerns.

If it is desired to blade against traffic, there are several precautions that can be taken. Burleigh and Oliver counties and perhaps others mount a flag on top of the motor grader for greater visibility. These are available through local suppliers and come in 3' and 5' lengths for a fiberglass pole, flag and flexible spring mount. With the spring mount it is possible to drive into the shop with the flag extended if there is a slight vertical clearance. See the noted photos.

Some counties also indicated they use two motor graders for this type operation (against traffic) and in instances where sight distance is critical one will remain visible to oncoming traffic while the other is blading. This way, the roadway traffic is aware of maintenance being done and supposedly drive with more care.

Another option is to blade against oncoming traffic only in instances where there is adequate visibility. Where there is not adequate visibility the operator should proceed (dead head) to the top of the hill and blade back with the traffic.



Perhaps everyone has a flag mounted on the end of the moldboard. This is a very good idea to give oncoming or passing traffic a better feel for where the edge of the moldboard is.

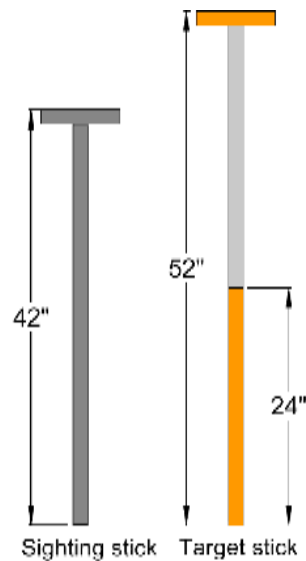
Regardless of the procedures used, it is most important that they be safe procedures, providing the utmost visibility to the traveler and the safety of the operator. //



Stopping Sight Distance: A Simple Road Safety Check YOU Can Do

by Jim Mearkle, Safety Technical Assistance Engineer, Cornell Local Roads Program

Sight Distance Measuring Sticks



Sticks can be made from 1x2 yellow pine, PVC pipe, or other lightweight materials. The orange cross piece on top of the target stick is used to measure intersection sight distance.

Roads are safer when drivers can see as far as it takes to stop. The distance it takes to notice a problem, to realize a stop is necessary, and come to a complete stop is called stopping sight distance. It is important all along the road and special attention is needed when approaching crosswalks, intersections, work zones, and driveways.

Stopping sight distance is measured using a driver's eye height of 42 inches, looking at an object 24 inches high. These correspond to the eye height of a small adult in a small car and the brake lights on passenger cars. Trucks need more distance to stop, but the driver's higher eye position allows for extra sight distance on hillcrests. However, it does not help seeing around an obstruction on the inside of a curve.

How to Measure Stopping Sight Distance

On hill crests, sight distance is measured along the center of the travel lane. Measuring stopping sight distance may require you to be in the travel lane with your back to traffic. Many times, measuring the sight distance along the shoulder is often close enough. But if you need to be accurate use caution and have extra persons watch or flag traffic if necessary. You will need:

- An assistant,
- High visibility clothing,
- Sight distance measuring sticks of 42" and 52" lengths,
- A measuring wheel, surveyor's tape or chain, and
- Traffic spotters or flaggers.

To measure sight distance, kneel and use the 42 inch sighting stick to get your eyes at the proper height. Have your assistant move the 52 inch target stick until you can not see the orange part on the bottom, or

until the assistant reaches the distance shown in the table (page ?).

On curves, stopping sight distance should be measured along the travel path of the vehicle. Note in the figure that the line of sight is shorter than the sight distance. Keep in mind that brush and tall seasonal crops can cause problems that may not be obvious when you are taking your measurements.

If you can still see the orange part on the bottom of the target stick when your assistant reaches the stopping sight distance needed, then there is adequate stopping sight distance. If you lose sight of the orange part before your assistant reaches the stopping sight distance, according to the table, then you may want to make some changes.

How Much is Enough?

Stopping sight distance varies with vehicle speed and roadway grade. On roads that carry less than 400 vehicles per day, less sight distance is acceptable because the chances of a conflict are lower. The table shows stopping sight distance for various speeds and traffic volumes. These distances are for level pavement. Less distance is needed going uphill and more is needed going downhill. As much as 20 percent more is needed on steep downgrades. It is always better if you can provide a sight distance that is longer than the minimum shown in the table.

If You Don't Have Enough...

If poor sight distance hides a safety condition, warn drivers with the appropriate warning sign. For example, where an intersection is hidden by a hillcrest or curve, install an intersection warning sign.



Pictured from left to right are Mickey Nenow, road foreman, Rita Jarrett, office manager, and Kendrick Thomas with the Utah LTAP Center.

They are Microsoft WORD documents but my version of WORD is an earlier version that does not allow me to open these documents. So, I haven't been able to print the manuals either.

Someday I hope to learn more. In the meantime, if you want to talk to someone that is knowledgeable, you should contact either Doyt or Kendrick at:

Utah Technology Transfer Center
4111 Old Main Hill
Logan, UT 84322-4111
Phone: (435) 797-2289
Wats: (800) 822-8878
Web Site: www.utahh2.usu.edu

Or Gerald Brickner or Mike Zimmerman at the Stutsman County Highway Department,
1508 4th Street NW
Jamestown, ND 58401
Phone: 701-252-9040
E-mail: stcohw@taktel.com

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APWA Click, Listen & Learn

<http://www.apwa.net/Education/CLL/>
(continued)

Trenchless Technology and Directional Boring

May 19, 2004

Doing Due Diligence: What Lawyers Want Public Works Directors to Know

July 22, 2004

Right-of-Way Cooperation for Consistency and Simplicity

August 18, 2004

Other Events

ATSSA "How To" Conference

March 23-24, 2004
 Fargo, ND

ITE Conference and Exhibit

March 28-31, 2004
 Irvine, CA

NACE Annual Meeting and Conference

April 4-8, 2004
 Orlando, FL

NLTAPA Regions 5 & 8 Joint Spring Meeting

April 14-15, 2004
 Minneapolis, MN

APWA North American Snow Conference

April 25-28, 2004
 Lexington, KY

COMING EVENTS

NDTTTC Events

Culvert Installation and Maintenance

March 24, 2004
Valley City, ND
March 25, 2004
New Town, ND

Asphalt Pavement Repair

March 30, 2004
Minot, ND
March 31, 2004
Jamestown, ND

Traffic Signing and Work Zone Control

April 20, 2004
Dickinson, ND
April 21, 2004
Carrington, ND

Basic Surveying Methods

May 4, 2004
Jamestown, ND
May 5, 2004
Minot, ND

APWA Click, Listen & Learn

<http://www.apwa.net/Education/CLL/>

What a Construction Manager Can Do for You

March 24, 2004

Erosion Control Compliance with NPDES Phase II

April 22, 2004

Developing an Effective Snow and Ice Program

April 27, 2004

COMPUTER CORNER



WINTER 2004

By Russ McDaniel, ND LTAP

In November, I attended a Transportation Asset Management Workshop in Jamestown. It was conducted by Doyt Bolling and Kendrick Thomas with the Utah Local Transportation Assistance Program (LTAP). Yes, both first names are spelled correctly. Doyt is director of the Utah LTAP center and Kendrick is a graduate student at the Utah State University. Both are directly involved in development of the program they presented.

It was sponsored by the Stutsman County Highway Department. Gerald Brickner is the Stutsman County Engineer and Mike Zimmerman is the Stutsman County Road Superintendent.

Doyt and Kendrick presented what they described as their "Technical Concepts & Basis of the Utah T2 Road Management Program". It is a process for linking GPS with roadway inventory data. Currently, it includes a procedure for roadway features and pavement condition data, one for roadway signing and a third for culverts. It does not yet include bridges, minor structures or cattle guards but they plan to include these features at a later date.

The pavement condition feature is complete with recommended improvement strategies, costs, and estimate of remaining pavement life.

It was very impressive and Stutsman County is committed to implementing the program. However, it may require a little more time, effort and cost than the average North Dakota county would want to invest.

Kadramas, Lee & Jackson (KLJ), a North Dakota Engineering Consultant firm, developed the digitized map for Stutsman County but the course did not cover this process.

Both Doyt and Kendrick made excellent presentations but I don't know how to describe what I learned. I guess I feel I learned a great deal but not nearly enough. Kendrick made us all feel a little better when he indicated that it took him a year before he fully understood the process. It was a hands-on learning experience as you can see in the picture.

With enough time, determination and a concerted effort, I think I learned enough so that I could go to the field and collect pavement condition data or sign data and enter these items into the computer tied to the corresponding GPS coordinates. I might even be able to generate the pre-designed reports.

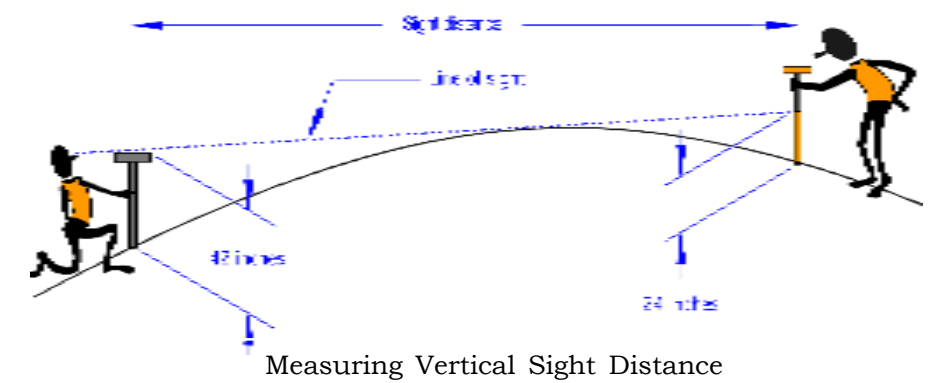
I have a reason, if not an excuse, for not knowing more about the process. Although I have a copy of the program, I'm having some problems with it. We tried to install it on our laptop, so it could be used at the workshop, but installation failed. Doyt and Kendrick thought it might be because the laptop is running Windows 95.

I installed it on my desktop when I got home but had a problem here too. It seemed to install OK but it wouldn't work for me. I suspect the program is OK and that I'm doing something wrong.

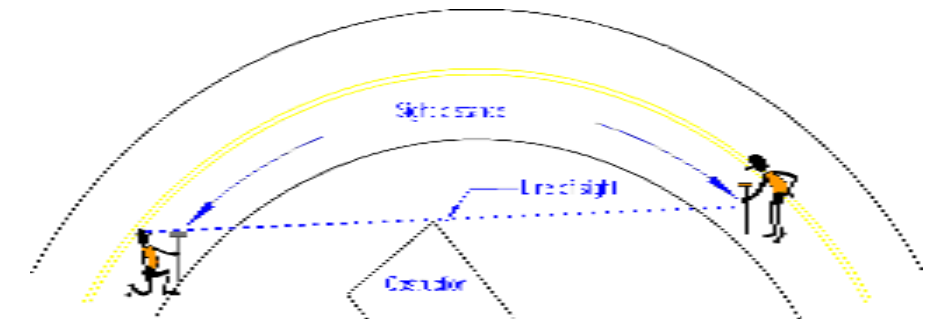
There are even more problems. The manuals, there are two, are included on the program disk.

Sight distance improvements are often costly. Improvements may be worthwhile at places where poor sight distance has played a role in crashes that have occurred there. Sight distance improvements are more likely to be worth the cost if you can add them to other work at that location. For example, you might eliminate a dip during culvert replacement or lower a crest during full-depth pavement repair. On the other hand, they can be very effective if something simple is all that is needed, like brush clearing.

Sight distance problems can be easier to avoid than fix. Work with your planning and zoning boards so new driveways, intersections, or crosswalks are not built in locations with poor sight distance. Many municipalities have local laws prohibiting landowners from placing buildings or landscaping that will block sight distance at intersections.



Measuring Vertical Sight Distance



Measuring Horizontal Sight Distance

Traffic Speed (mph)	Stopping Sight Distance (feet)				
	0-100 vehicles/day	100-250 vehicles/day		250-400 vehicles/day	>400 vehicles/day
		Lower Risk Locations ²	Higher Risk Locations ²		
25	115	115	125	125	155
30	135	135	165	165	200
35	170	170	205	205	250
40	215	215	250	250	305
45	260	260	300	300	360
50	310	310	350	350	425
55	365	365	405	405	495
60	435	435	470	470	570

¹ Choose a speed that includes most traffic on the road. If known, use the 85th percentile speed. This is the speed that 85% of traffic is not exceeding and 15% is exceeding.

² Higher risk locations include intersections, narrow bridges, railroad grade crossings, sharp curves or steep downgrades. Lower risk locations are areas without such features.

SOURCE: AASHTO Geometric Design of Very Low-volume Local Roads and AASHTO's "Green Book."

Reprinted with permission from the Cornell Local Roads Program newsletter, *Nuggets & Nibbles*, Volume 22, No. 4, Fall 2003. Much of the information is available from Iowa's [Handbook of Simplified Practice for Traffic Studies](#).

Bridge Trivia

- ▶ **Oldest Bridge in the world still in use.** Dating back to 850 B.C., the slab stone single-arch bridge spans the River Meles in Izmir, Turkey.
- ▶ **Oldest U.S. bridge in continuous use.** Built in 1697, the stone-arch Frankford Avenue Bridge crosses Pennypack Creek in Philadelphia. The 75 foot long, 3-span bridge was constructed as part of the King's Road which connected Philadelphia with New York.
- ▶ **Oldest U.S. covered bridge in continuous use.** Completed in 1829, the 256 foot long, double span Haverhill Bath Bridge crosses the Ammonoosuc River between the towns of Bath and Haverhill, New Hampshire.
- ▶ **Longest U.S. suspension bridge.** The Verrazona-Narrows Bridge is 4,260 feet long. Build in 1964, it spans the mouth of upper New York Bay and connects Staten Island to Brooklyn.
- ▶ **Highest bridge above water.** The Royal Gorge Bridge in Colorado is 1,053 feet above the Arkansas River. Its main span is 880 feet long and was constructed in six months in 1929.

(continued on page 10)

AASHTO NEWS

AASHTO TO OVERSEE TESTING OF WORK ZONE DYNAMIC MESSAGE SIGNS AND DEVICES

Washington, DC – The American Association of State Highway and Transportation Officials (AASHTO), which represents state departments of transportation, today announced that AASHTO will oversee testing of two types of dynamic signs used to guide motorists through highway work zones.

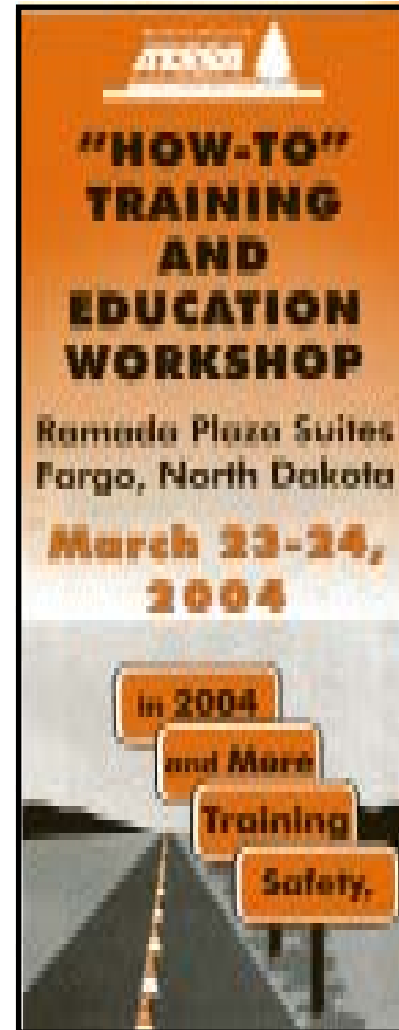
On behalf of the national organization, the North Carolina Department of Transportation – an AASHTO member – will coordinate endurance testing of portable changeable message signs (PCMS) and “flashing arrow” panels. Both types of dynamic signs are mounted on trailers so they can be moved easily from within work zones, or from site to site.

“Because manufacturers of these dynamic message signs are improving their products at technological speed, coordinating national testing through AASHTO is an efficient way to benchmark product performance” said Mujeeb Basha, AASTHO’s coordinator for the National Transportation Product Evaluation Program (NTPEP) which is the section within AASHTO responsible for such on-the-road product testing.

NTPEP is a technical service program established in 1994 by AASHTO’s board of directors. The program conducts evaluations of a wide array of traffic safety devices, construction materials, and highway maintenance products by sharing test results with the state DOT’s who approve products used to build America’s highways and bridges.

For more information about NTPEP, visit the NTPEP web site at: www.ntpep.org .

Mark your calendars and be sure to attend the region’s largest roadway safety event of the year! Sponsored by the Northland Chapter of ATSSA



BONUS TRAINING SESSION
No additional charge
Attend “Work Zone Traffic Control: A Common Sense Approach to Traffic Control” and earn 1/2 credit toward the Road Scholar Program.

Ten Reasons to Become a North Dakota LTAP Road Scholar

The North Dakota Local Technical Assistance Program (LTAP) Center offers workforce training and development for our customers working for employers that are part of North Dakota’s road and highway transportation community. Last year your ND LTAP (T2) Center initiated a “Road Scholar” Program designed to recognize the accomplishments of our road professionals.

In 2002 the Oklahoma LTAP Center published the following ten reasons why it is important to become a Road Scholar. They were presented by the Pittsburg, Oklahoma, County Commissioner, District 3, to their new commissioners.

1. Knowledge for Yourself and Your Employees

We don’t know everything about our business. By attending these classes, your knowledge will be taken to another level. This knowledge can help you and your employees keep their jobs.

2. Advice

Technical advice about road problems that you may face while doing your projects. We face so many issues in maintaining roads and we don’t know all the answers. Sometimes we need to ask questions.

3. Hands-On Training

Working with equipment and materials that you, your employees and your hired contractors use - knowing the equipment and standards used in this field can help you save money and make your contractors and taxpayers love you.

4. Cost

Cost is Minimal.

5. Friends

Meeting new people, meeting good people, and trading good ideas.

6. LTAP Needs Us

LTAP is funded with FHWA and

State money which can be reduced if unused.

7. Looks Good on Your Resume’

You may need one someday. Listing some training and experience will enhance your options.

8. Confidence

Knowing what to tell people when they have a problem or telling your employees how to fix a problem builds their confidence in you and also strengthens your own confidence in yourself. Both of these help you have a better working relationship with your employees and constituents.

9. Not Having to Worry

Having a well-trained work force saves time for your and your supervisors and saves money for your district which makes you look good.

10. Saves Dollars for Your District

By completing projects correctly the first time, you are saving tax dollars for the people for whom you work.

How to Participate

To enroll in the Road Scholar Program you must register with the ND LTAP Center at NDSU in Fargo. You can request a copy of the program brochure, which includes an enrollment form, or you can cut out the form included with this article. The brochure describes how the Road Scholar program works; lists courses you can take to fulfill requirements for Road Scholar levels I, II and III; and answers frequently asked questions about the program.

The ideas, knowledge, and skills you pick up through the LTAP Road Scholar program can help you on the job, strengthen your agency, and preserve the roadway infrastructure for future generations. //

North Dakota TTT Center
ROAD SCHOLAR PROGRAM
NORTH DAKOTA LOCAL TECHNICAL ASSISTANCE PROGRAM
TRANSPORTATION TECHNOLOGY TRANSFER CENTER
(ND LTAP TTT Center)

www.ce.ndsu.nodak.edu/ndltap/

Wats: 1-800-726-4143
Phone: 1-701-231-7051
Fax: 1-701-231-6185
E-Mail: Donna.Theusch@ndsu.nodak.edu

Road Scholar Program Enrollment Form

(Please Print)

Name: _____
(As you wish it to appear on plaque.)

Title: _____

Agency/Org: _____

Address: _____

City: _____

State: _____ Zip: _____

Telephone: _____

E-Mail: _____

Clothes _____ Hat _____ Shirt _____ Coat _____
Size: _____

MAIL TO: ND LTAP Center
CIE Building, Room 201H
Civil Engineering & Const. Dept.
North Dakota State University
1410 14th Avenue North
Fargo, North Dakota 58105

Ten Reasons To Become a Road Scholar adapted and reprinted with permission from Oklahoma LTAP News, Volume 6, No. 4, October 2002.