On October 17-18, 2006 the 5th Annual Minnesota “Tribes & Transportation” Conference was held in Walker, Minnesota at the Northern Lights Casino, Hotel and Event Center. Close to 200 participants attended sessions on the 4 “E’s” – Engineering, Enforcement, Emergency Medical & Education, as well as a vendor exhibit.

Cheryl Cloud gave a presentation on Tribal Safety Issues on American Indian Reservations with Dave Kopacz, Safety Engineer, FHWA-MN Division. Cheryl's portion of the presentation highlighted the comparison between the general population and Native Americans on an overall, national level. Mr. Kopacz’s presentation focused specifically on Minnesota statistics. The statistical evidence of the unsafe conditions within Tribal Communities, as compared to that of the general population, is quite sobering. Native American lives are being lost at a much higher rate than other races.

Here are some examples:

- Native Americans killed in motor vehicle crashes more often are driving while intoxicated, less validly licensed and less likely to be wearing a seat belt than the general population.
- 6.8% of deaths from all causes were attributable to motor vehicle crashes for Native Americans; and it’s the 3rd most frequent cause of death for all age groups. As a footnote, Chronic Liver Disease was the 3rd most frequent cause of death for Native Americans. Interesting correlation.
- While the national average for single vehicle crashes is 49%, for Native Americans, it’s 58%.
- Of all races (white, African American, Hispanic, Native American), Native Americans were the race least likely to be seat belted, and had the lowest rates for safety belt use for those 5 years and older.
- More than half of the Native American kids killed in cars, under the age of 5, were not in a child safety seat or wearing a seat belt. And more than half of them would have survived if they had been restrained.
- Native Americans had the highest percentage of fatally injured (57%) in alcohol-related crashes. Almost 70% of the occupants had been drinking at the time of the crash.
- It is estimated that in “on reservation” crashes, alcohol is involved 75% of the time. Of all races, Native Americans had the highest blood alcohol content (BAC).
• The percentage of female drinking drivers was considerably higher for the Native American race (31%) than any other.
• Native Americans were less likely to have a valid license, most likely to have prior DWI convictions and license suspensions.

Minority deaths, particularly American Indian/Native American, in motor vehicle crashes, is disproportionately higher than for the general population and is of considerable concern to both the Highway Safety Community and Tribal Governments/Communities. Efforts to reduce behaviors contributing to these crashes and make tribal communities and roads safer and thereby saving American Indian lives, are being made both with SAFETEA-LU legislation and BIA Indian Highway Safety Programs. Hopefully, additional funding and new program initiatives will extend the ability to reach more tribes and allow them to participate.

It is important to note that the statistics and information reported for what’s happening in Indian Country is historically under-reported. Conditions and the situation, in actuality, are much worse. Only good data and reporting will help to identify and measure the problems, allow tribes to make effective safety plans and to capitalize on their fair share of federal and state funding to address these safety problems in their communities.

**Editor’s Corner**

I would like to (very) briefly introduce myself as your new editor for *Pathways*. Although I may be new to the Michigan Tech TTAP, I’m no stranger when it comes to technology transfer programs as I worked in the Michigan Tech TTAP for over five years.

I look forward to the future challenges that my new position will bring, and I’ll do my best to continue to provide the high quality publications and service that you’ve come to expect.

- Scott Bershing

**Program Director**

*Bernard D. Alkire, Ph.D.*

**Manager**

*Cheryl Cloud*

**Editor**

*Scott Bershing*

**Workshop Instructor**

*John Lovato*

**Administrative Assistant**

*Amanda Abramson*

**Office Assistant**

*Tami Anderson*

Pathways is published quarterly by the Tribal Technical Assistance Program, in the Michigan Tech Transportation Institute at Michigan Technological University. The Tribal Technical Assistance Program is part of a nationwide effort jointly financed by the Federal Highway Administration (FHWA) and the Bureau of Indian Affairs (BIA). It intends to relay the latest technology and information on tribal roads and bridges, tourism, recreational travel, and related economic development to tribal transportation and planning personnel. Tribes in the Michigan Tech TTAP region include those in the Minneapolis and Eastern BIA Regions. Contact the TTAP office for a free *Pathways* subscription, or to submit articles and suggestions.

Pathways is sponsored by the Federal Highway Administration and the Bureau of Indian Affairs. Michigan Tech University is an equal opportunity educational institution/equal opportunity employer.
Optimized Sections for High-Strength Concrete Bridge Girders - Effect of Deck Concrete Strength

“For more than 25 years, concretes with compressive strengths in excess of 41 megapascals (MPa) (6,000 pounds per square inch (psi)) have been used in the construction of columns of highrise buildings. While the availability of high-strength concretes was limited initially to a few geographic locations, opportunities to use these concretes at more locations across the United States have arisen. Although the technology to produce higher-strength concretes has developed primarily within the ready-mix concrete industry for use in buildings, the same technology can be applied in the use of concretes for bridge girders and bridge decks.

The durability of concrete bridge decks has been a concern for many years, and numerous strategies to improve the performance of bridge decks have been undertaken. Many of the factors that enable a durable concrete to be produced also result in a high-strength concrete. Consequently, if a concrete for a bridge deck to be durable, it will probably also have a high compressive strength. This report contains an evaluation of the effect of high-performance concrete on the cost and structural performance of bridges constructed with high-performance concrete bridge decks and high-strength concrete girders. Several areas with the potential for improved structural performance through the use of high-performance concretes are investigated. This report should also assist designers and owners in recognizing that the use of high-performance concrete in bridges has advantages beyond those of improving durability.

Gary Henderson
Director, Office of Infrastructure Research and Development

Turner-Fairbank Highway Research Center
United States Department of Transportation - Federal Highway Administration - October, 2006, Publication No. FHWA-HRT-05-058
Document links:
http://www.tfhrc.gov/structur/pubs/05058/05058.pdf (PDF version)
http://www.tfhrc.gov/structur/pubs/05058/index.htm (HTML version)

Innovative Finance Primer

“This Innovative Finance Primer is a resource guide to support the use of innovative finance techniques for highway projects financed with Federal funds. The intended audience includes Federal, state, and local transportation officials who seek to overcome cash flow shortages and attract new sources of capital to transportation investment.

The techniques covered in this primer range from fairly modest strategies that permit states greater flexibility in satisfying the standard matching requirements for receipt of Federal funds, to very ambitious credit enhancement strategies suitable for capital-intensive projects. Key to the effective use of innovative finance is the ability to recognize what techniques are suitable to what types of projects. An appreciation for how tools operate and what they are designed to accomplish is an important first step in this analysis, and it is this kind of understanding that the primer seeks to foster.”

United States Department of Transportation - Federal Highway Administration - April, 2002
Document links:
http://www.fhwa.dot.gov/innovativefinance/ifp/ifprimer.pdf (PDF version)
http://www.fhwa.dot.gov/innovativefinance/ifp/index.htm (HTML version)
Meeting minutes condensed by Scott Bershing

A meeting of the Advocacy Council for Tribal Transportation (ACTT) was held on September 19, 2006 at 1:00 PM at the Grand Hinckley Inn, Hinckley, Minnesota.

Linda Aitken, Mn/DOT Tribal Liaison, called the meeting to order and welcomed the ACTT members and guests to the meeting. Introductions were made around the table. Two new members of the ACTT were introduced representing the Minnesota counties and Minnesota cities, Dave Enblom and Brian Freeberg, respectively.

Members Present: Burny Tibbetts, White Earth; Jim Walker, Red Lake; Mike Moilanen, Mille Lacs; Carl Dagen, Bois Forte; Bill Vogel, Grand Portage; Teresa Peterson, Upper Sioux Community; Jody Goodthunder, Lower Sioux Community; Lester Morris, Shakopee Mdewakanton Sioux Community; Marc Mogan, Prairie Island Indian Community; Linda Aitken, Mn/DOT; Mike Robinson, Mn/DOT; Dave Trooien, Mn/DOT; Tom Sorel, FHWA – MN Division; Cheryl Cloud, Mich TTAP; Brian Freeberg, City of Bemidji; Annamarie Hill, MN Indian Affairs Council; Todd Kennedy, BIA; David Enblom, Cass County.

Members Absent: Steve Kleeberger, Leech Lake; Jason Holliday, Fond du Lac; Donald May, Red Lake; Tadd Johnson, Mille Lacs Band of Ojibwe; and Cheryl Martin, FHWA – MN Division.

Guests Present: Scott Hanson, Mille Lacs; Dave Danz, Grand Portage; Paul Wavatne, Mn/DOT; Tom Jacobson, Mn/DOT; Susan Shaw, Mille Lacs Agriculture Inspectors Assn; Sue Groth, Mn/DOT; Mike Weiss, Mn/DOT; Dawn Sherk, White Earth; Bonnie Harper-Lore, FHWA – MN Division.

The meeting started with a review of the ACTT’s mission, goals and objectives:

The mission: The Advocacy Council for Tribal Transportation is committed to bringing forward recommendations for improving tribal transportation through effective collaboration and partnerships.

The Goals and Objectives:

1. Assess & Evaluate Common Tribal Issues
   a. Identify & prioritize issues
   b. Determine appropriate course of action for issues
2. Develop Statewide Policy and/or Legislation
   a. Determine external stakeholders
   b. Gather input
   c. Gain ACTT tribal consensus
   d. Obtain endorsement from MIAC
   e. Submit to appropriate agency for approval/implementation
3. Create Awareness & Educate on Issues
   a. Identify information resources
   b. Gather feedback on issues/topics of interest
   c. Identify & develop forums
4. Identify & Promote Successful Practices
   a. Develop process to identify, evaluate, and disseminate successful practices
   b. Identify resources & develop mechanisms to promote forums for successful practices

The next ACTT Meeting will be held March 23, 2007 at the Mn/DOT Metro District Office – Water’s Edge

More info can be found on the Michigan Tech TTAP web site:
<http://www.ttap.mtu.edu>

You can also download the original version of the September 19, 2006 ACTT Meeting Minutes at <http://www.ttap.mtu.edu/ACTT/actt_minutes_091906.pdf>
The meeting agenda for the issues called for presentations, discussion and process for action using the following strategy:
   a. Define the issue
   b. State Reason for Importance
   c. Presentations
   d. Comments & Discussion
   e. Determine Course of Action

**Issue: Roadside Vegetation Management**

1. This issue of managing brush within the clear zones on roads through Reservations was brought to the ACTT by Tina Markeson, Forester, Mn/DOT.
2. This issue was brought because of safety concerns on roads.
3. Presentations given.
4. Comments and discussion:
   - Want to protect tribal natural resources (e.g. keep the chemicals out of the lake at Nett Lake). Need to prove the chemical cannot get to the lake. Need to keep the dialog going.
   - Utility companies don’t always get approval for their spraying activities. The Mn/DOT permit holds them to our Mn/DOT standard but they don’t always do that. Need to require consultation with tribe. Need continuous education and notification of problem situations.
   - Mn/DOT could have more patience in managing weeds rather than reacting quickly when the public demands quick action.
   - On many reservations, there are no formal easements authorizing utilities, so they don’t get any permits when they decide to spray for weeds.
   - Many tribes have ordinances regarding no/or controlled chemical spraying within reservation boundaries.
   - Public awareness on impending danger & problems of noxious weed or invasive plants is important.
   - Leafy Spurge is one tough weed!
   - Groundwater testing is done by the Minnesota Department of Health in some areas and the County in other areas, but there is not consistency throughout the state with regard to testing. It is currently “hit & miss”.
   - There are funds available through the National Fish & Wildlife Service via the Cooperative Weed Management Areas program. Program was born out of the west and a goal for all of the State of Minnesota.
   - The core tribal issue that emerged is the protection (proof or assurance of) of resources (water) in managing roadside vegetation.

5. Determine Course of Action: Committees formed
   ACTION ITEM: Committees will research and bring back information to ACTT’s next meeting.
   (1) Look at Statewide Policy
   (2) Create Awareness & Educate on Issues
   (3) Identify & Promote Successful Practices

**Issue: Tribal Road Signs:**

1. Teresa Peterson, Vice-Chair of Upper Sioux Community brought the tribal road sign issue to the ACCT because there is a need to provide signage for tribal governments so that the general public and officials working with tribes know where to go.
2. It is important to tribes just as it is important for any government to be recognized for their boundaries, government offices and community recognition signs.
3. Presentations given.
4. Comments & Discussion
   Tribal Guide Signing - A clarification was made on the issue, that the scope of this issue is not just casino signs, but also refers to boundary, cultural, government center and community recognition signs.
   Types of signs:
   - Boundary signing
   - Tribal headquarters signing
   Installation/Maintenance:
   - Some tribes want to install/maintain, others would buy the service. (Mn/DOT Sign Shop - Tribes can buy from state contract or ask Mn/DOT to make specialty signs. They have a new machine that makes great signs. Tribe can work with the Mn/DOT Office of Traffic Engineering and the Mn/DOT State Sign Shop on ‘specific purpose’ sign designs (color & wording limitations).
   Other Sign Discussion:
   - Counties are not consistent – each county has different policy. Counties need
The Choctaw Hospitality Institute was the site for the “Design and Operation of Work Zone Traffic Control Training” held in Choctaw, MS, from October 30, 2006 to November 1, 2006. Participants from several organizations, the Mississippi Band of the Choctaw Indians, the Bureau of Indian Affairs, Mississippi Association of County Road Managers, Mississippi Department of Transportation/5th District and representatives from the private sector participated in three days of professional development training. At the end of the training, participants had a better understanding of the importance of standards and best-practices for work zone traffic control operations. Proper work zone traffic control creates a safer environment for work crews as well as the traveling public. Training and instructional materials employed standards established for work zone traffic control in the Manual Uniform Traffic Control Devices/Millennium Edition.

The Michigan Tech Tribal Technical Assistance Program (Michigan Tech TTAP) housed at Michigan Technological University, and the Mississippi Center for Technology Transfer (MCT2) at Jackson State University, were joint sponsors for the workshop. The workshop was designed to train the workforce, contractors, and consultants in the transportation community on workable concepts, standards, and techniques for designing, installing, and maintaining traffic controls and devices in construction, maintenance and utility operations. Both the Michigan Tech TTAP and MCT2 are part of a nationwide effort sponsored by the Federal Highway Administration under the National Local Technical Assistance Program. Additional support is provided to Michigan Tech TTAP by the Bureau of Indian Affairs (BIA), and to MCT2 by the Mississippi Department of Transportation (MDOT), to promote safety and efficiency for the orderly movement of all road users on tribal roads, streets, state maintained roads, county roads, and highways throughout the nation.

Workshop attendees included the following:

BIA: Jimmy Benn, Craig Chisolm, John Farve, Aaron Issac, William York.

Mississippi Band of Choctaw: Karen McMillan, Mark Whitney.

MDOT: LC Cole, Randall Copeland, Ronald Flake, Jerry Harris, Antonio Lindsey, Donald Myers, James Ridout, Bobby Robertson, Jackie Stewart, Michael Tisdale, Cleophus White, Will Brantley, John Donovan.

County/City/Local/Others: Alonzo Jones, Claireborne Co.; Maurice Massey, McCrory & Williams, Inc.; Cheryl Cloud, Michigan Tech TTAP.

For more information on this training, contact:
Elizabeth McInnis
Mississippi Center for Technology Transfer (MCT2)
Jackson State University
601-979-2339
statewide practice that it can take to their boards. Ideally a policy from Mn/DOT
• Need to develop consistency statewide between districts via the State Signing Committee (2 day meeting
  1st part of October, a good forum to discuss this issue);
• Dual Language (English/Tribal) on signs.
• Issue of disputed reservation boundaries – recognized by Federal government but not state or county

5. Determine Course of Action
(1) ACTT determined that a Statewide Policy needs to be developed.
(2) A committee was formed to work on this issue.
(3) During the research and development of a TRS policy, the Tribal Road Sign committee will solicit the
  tribes for additional input regarding tribal road signage.
(4) The Tribal Road Signs committee will report back to the ACTT on their recommendation for a statewide
  tribal road sign policy.
(5) The final recommendation will be forwarded to the MN Indian Affairs Council for endorsement of the
  policy.

Selection of ACTT Co-Chairs: ACTION TAKEN AT MEETING

Volunteers were requested for the positions of Co-Chairs for the ACTT. Burny Tibbitts (White Earth) &
Mike Moilanen (Mille Lacs) were voted as Co-Chairs for the ACTT.

1. The Co-Chairs will serve for the next four quarterly meetings: December 2006, March 2007, June 2007 and
   September 2007. At the September 2007 meeting, selection of Co-Chairs for the next year will take place.
2. Primary role of developing the ACTT’s agendas and Chair the meetings (Linda Aitken will work in coordina-
   tion with the Co-Chairs).

Now That’s a Work Break!

Here are two of our tribal transportation guys that recently went moose hunting in Canada. Both guys have dual
citizenship in Canada and exercise their native hunting privileges there. The moose were taken from their “secret hunting
spot” in New Brunswick, and as with most hunting/fishing stories, they claim the biggest one “got away”. Actually,
the two opted to not kill the largest bull they saw in order to save him for breeding purposes. Still, the ones they took........
majestically awesome!

Travis Solomon is the Construction & Transportation Manager for the St. Regis Mohawk Tribe in Akwesasne, NY. He is also Chairman of the USET Transportation Committee.

Edward “Charlie” Peter Paul is the Transportation Manager for the Aroostook Band of Micmac Indians in Presque Isle, Maine. He is also half Malaseet from New Brunswick.
Upcoming Events

Heavy Equipment Operation & Safety
March 20-22, 2007
TTAP Sponsored Training – Class Size Limited
Nett Lake, MN (Bois Forte)
Dawn Benner, 1-800-221-8129, ext. 116
or
John Lovato, 906-396-0501 (mobile)

Minnesota Advocacy Council for Tribal Transportation (ACTT)
Quarterly Meeting
March 23, 2007
Mn/DOT Metro District Office – Water’s Edge
Linda Aitken, 218-547-0060 or Linda.Aitken@dot.state.mn.us

Forklift Operation & Safety
March 26, 2007
TTAP Sponsored Training – Class Size Limited
Forklift Operation & Safety
Little River Band of Ottawa Indians – Manistee, MI
Yvonne Theodore, 231-723-8288 or ytheodore@lrboi.com
or John Lovato, 906-396-0501 (mobile)