A report was given (and draft provided) on the recently completed "State of Tribal Transportation" study at the 2007 Transportation Research Board (TRB) meeting of the Native American Issues Committee. The study report was commissioned some four years ago. The American Planning Association, consultant on the project, was available at the meeting to provide a summary and overview of the report. The report profiles 30 tribes, and is the first major TRB study in its field. The study attempted to establish a baseline for future research in Indian Tribal Transportation. It is the first time comparisons were made among users, including problems, circumstances, and solutions.

The topic panel included some ‘big names’ in tribal transportation:

- Linda Aitken, Minnesota DOT Tribal Liaison
- Jody Clark, Seneca Nation of New York
- Lewis George, Catawba Indian Tribe
- LeRoy Gishi, DOI-Bureau of Indian Affairs
- Ron Hall, TTAP-Colorado State University
- C. John Healy, Fort Belknap (ITA President)
- Sheldon Kipp, DOI-Bureau of Indian Affairs (Chief, BEODOT)
- Martine Miccozzi, TRB
- Richard Rolland, Northwest TTAP - Eastern Washington University
- Dick Winchell, Eastern Washington Univ.
- Tim Penney, FHWA

**Findings**

1. The primary vehicle for federal aid to tribal transportation remains the Indian Reservation Roads (IRR) Program.

2. Authorizations for the IRR Program & BIA Road Maintenance funds cover only a small fraction of the on-going needs of tribes.

3. Numerous tribes are seeking, experimenting with, or implementing additional sources of revenue to fund their transportation needs.

4. Tribal transportation managers (staff & government) make very specific initiatives and programs work in unique circumstances.

5. Tribes have incorporated a full range of responses to opportunities in self-determination.

6. There is a marked tendency among tribes to have taken full control of preparation of long-range transportation plans, two-thirds of them doing it “in-house” and almost none relying on the BIA for this – a function that’s the central element of decision-making for their own transportation futures.
Editor’s Corner

I would like to start out by saying that our thoughts and prayers go out to those affected by the Interstate 35W bridge collapse in Minneapolis/St. Paul. This is actually the second version of the “Editor’s Corner” that I’ve written. I had already completed the first version and was in the process of going through the final review of this issue of Pathways when I started hearing the awful news about the collapse. At this point, there are many unanswered questions as to what/why/how the bridge failed, but hopefully in the near future we’ll learn more and maybe we will all be able to take something from this event. It is my intention to focus a future issue of Pathways on bridge maintenance and inspection, hopefully applying some of the things that come to light from this tragic event.

Back to this issue of Pathways - we have a collection of articles that should be particularly useful. One page, Cheryl provides a summary of the results of the recently published report on the “State of Tribal Transportation” study. On page 4, we provide information from a recent showcase program on the Dallas Roadway Soil Stabilizer. Finally, on page 6 there is an interesting article provided by the Minnesota Department of Agriculture on steps they are taking to find and control Cutleaf Teasel, an invasive species that is becoming more widespread throughout the Midwestern and Eastern regions.

-Scott

The deadline for contributing suggestions, corrections, or information for publication in the next Pathways, Volume 13, No. 3, is August 31, 2007. Any contributions made after that date will appear in Volume 13, No. 4. You may contribute information for publication on www.ttap.mtu.edu at any time.
Invasive Plants of the Eastern United States: Identification & Control

“A biological invasion of non-native plants is spreading into our nations’ fields, pastures, forests, wetlands and waterways, natural areas, and rights-of-way. Variously referred to as exotic, non-native, alien, noxious, or non-indigenous weeds, invasive plants impact native plant and animal communities by displacing native vegetation and disrupting habitats as they become established and spread over time.

Drawing on recent publications by the USDA Forest Service, National Park Service, U.S. Fish and Wildlife Service, USDA-APHIS-PPQ and the Southeast Exotic Pest Plant Council, this web site covers identification characteristics, distribution, and control options for 97 tree, shrub, vine, grass, fern, forb, and aquatic plant species that are invading the eastern United States. For each species, a menu of control options is presented, including mechanical treatments, specific herbicide prescriptions, and, for selected species, recent advances in biological control. Also included on the CD are 486 digital images taken by 81 photographers that are available in digital form in multiple file formats and can be off-loaded and used for educational purposes at no cost to the user.”

C.T. Bargeron1, D.J. Moorhead1, G.K. Douce1, R.C. Reardon2 and A.E. Miller3
1The University of Georgia, Tifton, GA
2USDA Forest Service-Forest Health Technology Enterprise Team, Morgantown, WV
3USDA-APHIS-PPQ, Eastern Regional Office, Raleigh, NC
Michigan Tech TTAP Library Reference No. 1646
More Information:
http://www.invasive.org/eastern/

NCHRP Synthesis 366: Tribal Transportation Programs
A Synthesis of Highway Practice

"This synthesis provides information that will prove useful to tribal governments, and state, local, and federal agencies, in determining the state of tribal transportation programs, and the steps needed to assist tribes in developing the capacity to effectively perform and manage transportation-related functions. The study identifies innovations and model practices among tribal transportation programs. It summarizes the history and legal and administrative evolution of tribal transportation programs within the larger context of issues of tribal sovereignty and relationships with federal, state, and local governments, and local and regional planning agencies. The report serves as a milestone signifying the inclusion of tribal governments as an essential component of the transportation community and assesses future tribal capacity and resource needs. Overall, 30 tribes of all sizes from across the nation were chosen for surveying and study; at least one from every state with a large number of tribes. The study also examined the extant literature in the field. In addition, extensive interviews were undertaken with directors of Transportation Technical Assistance Program centers, with Tim Penney of FHWA, and with several officials of the Bureau of Indian Affairs."

National Cooperative Highway Research Program
Transportation Research Board
Research sponsored by the American Association of State Highway and Transportation Officials in cooperation with the Federal Highway Administration
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On May 24, 2007 Robert Blanchard, tribal roads manager of the Bad River Band of Lake Superior Chippewa, and Dr. Bernard Alkire, director of the Tribal Technical Assistance Program at Michigan Technological University, traveled to Waco, Texas to attend a roadway soil stabilization showcase development meeting.

The goal of the showcase program is to encourage and hasten implementation of field-proven technologies. The program provides an opportunity for decision makers to gain practical, well rounded, hands-on experience with new and in-use products.

The product demonstrated was the Dallas Roadway Soil Stabilizer, which is used as a soil/road base stabilizer in road construction and reconstruction. The product claims to increase strength, improve bearing capacity, and enhance durability. The product is a proprietary liquid acid chemical that when introduced into the soil produces a chemical and physical reaction within the soil and base mass.

The development meeting was coordinated by Tiffinay Wise from the Florida Local Technical Assistance Program (LTAP) and Keri Shoemaker from the Utah LTAP.

Mclennan County, Texas has used the Dallas product for over ten years and has had a positive experience. The participants were taken on a field tour of select roads to see how it was used and how it performs. The county road engineer has detailed records showing how much the product costs and compares it to other stabilizers and dust control agents. He compares the costs of asphalt emulsion primer to the Dallas product as producing a $2000/mile savings for dust control and an $8400/mile savings for road stabilization (21 ft. wide) when comparing the Dallas product to Lime.

The end result from the meeting was that there was enough interest for a product demonstration. The demonstration will be hosted in Mclennan County some time in the near future, most likely in November of 2007 or April of 2008.

For tribal road departments, this product has the potential to provide cost savings for dust control or stabilization. The possibility of a demonstration at a tribal site in the upper Midwest to observe the product performance in areas subject to freeze thaw was discussed with the product representatives. We will provide more information on that demonstration as it becomes available.

Tiffany Wise (left), Florida LTAP, and Keri Shoemaker (right), Utah LTAP, coordinated the development meeting.

Safety Corner: Safety Compass Newsletter

The Federal Highway Administration (FHWA) Safety Compass newsletter is an outreach source to share and provide the latest in program delivery, best practices, research, training, regulations and legislation designed to help improve and establish a more productive national and local safety program. The Safety Compass also provides resources for implementation, networking, and applicable tools to unify the overall highway safety community efforts and involvement.

The June/July/August 2007 newsletters can be found on the Safety Campus website: <http://safety.fhwa.dot.gov/newsletter/safety-compass/index.htm>
Two-thirds of tribes surveyed in this study reported they had taken charge of developing and maintaining their own road inventory – the central element of BIA formula funding.

There is a growing determination among tribes to assume greater responsibilities for program operation.

Tribal Transportation Plans most commonly established linkages with four other types of plans – 1) Community/Economic Development; 2) Land Use; 3) Historic Preservation; and 4) Public Utilities.

With regard to citizen/public participation techniques – Tribes largely rely on public hearings or public meetings as their primary mechanism of involvement.

Tribal use of TTAP centers was found to be pervasive, suggesting this is likely to remain a highly successful means of distribution of technical assistance and resources.

Regarding Tribal coordination with outside agencies – BIA was universal and State Department of Transportations was the next most frequent. This is likely to increase given new mandates. The study also showed extensive involvement with other outside agencies such as FHWA, FTA and FAA.

**Innovations Discovered**

1. Relationship building with outside entities.
2. Financing and fund raising.
3. Design & environment management.
4. Transit.
5. Transportation enhancements.
6. Marketing technical skills.
7. Solving problems related to special hazards.
8. Use of planning tools.
9. Cultural preservation techniques.
10. Solving social problems through transportation programs.

**Potential Future Research**

1. Operation & Development of Tribal Transit Services.
2. Staffing of Tribal Transportation Programs
3. Creative Financing.
4. Building Relationships to Further Tribal Transportation Goals.

**Report Summary**

The report documents that context is everything, each tribe with their own set. Over simplification of trends and issues in tribal transportation must be avoided.

Certain elements, though, are nearly universal throughout Indian Country:

1. Preparation of a long-range plan.
2. Capital budget/improvement program.
3. Design and construction of new roads.
4. Development of a transportation inventory.
5. Use and appreciation of TTAP resources.
6. The differences in thinking and perspective on contracting and compacting with either the BIA or FHWA, between Tribes, is far ranging. One could make the correlation here to context, as well. The universal element being that it is completely individual to each Tribe.

**General Observations**

- Tribes fear diminishment of their sovereignty and it’s effects on their programs.
- State transportation agencies and tribal transportation programs are finding new ways to cooperate, and several states have established liaisons to work with tribes. It appears an atmosphere of respect for tribal sovereignty is conducive to tribal cooperation.
- There is increased tribal self-determination with regard to transportation.
- Federal transportation legislation has steadily added new opportunities for tribes to seek increased autonomy as well as improved funding.
- Formulas for IRR funding have been anything but static, & tribal governments have had to adapt to changes in the rules, eligibility and new methodology.

**Widespread Needs**

1. Funding for road maintenance is inadequate.
2. Pedestrian safety on Indian Reservations is a serious problem.
3. There is a growing need for technical assistance with tribes for public transportation. This report provides a good base, background, and more importantly, future direction for any entity working with Tribes.

Watch for Cutleaf Teasel
Minnesota takes proactive approach in controlling this invasive species

Article by Blane White
Minnesota Department of Agriculture

Photos by Peter Dziuk
Minnesota Department of Agriculture

Editor’s Note: This article was provided by the Minnesota Department of Agriculture. Although it describes the actions being taken in Minnesota to find and control Cutleaf Teasel, it is applicable to a large portion of the Midwestern and Eastern Regions. The ever-increasing threat to native plants and animals by this and other invasive species should not be ignored.

The Minnesota Department of Agriculture (MDA) is asking your help to spot cutleaf teasel (Dipsacus laciniatus L.) and report the locations to us. Teasels are aggressive plants capable of invading, outcompeting, and displacing even a thick stand of grass. Most of the plants displaced are of greater values as livestock forage, wildlife habitat, or erosion control. Open grassland or prairie areas are vulnerable to teasel invasion. Teasel requires sunny sites and doesn’t invade forest areas under an established tree canopy. It can invade right of ways and is easily spread by mowing and maintenance equipment. The unusual seed heads are sometimes used in floral arrangements, and the seeds may grow if they are discarded into ditches and other open areas. Once established, it will spread to nearby open areas crowding out native vegetation.

Teasels are monocarpic perennials, which produce a basal rosette that can grow several seasons before sending up a flower stalk, after which the plant dies. The rosettes develop increasingly large, oblong, hairy leaves and long tap roots. Blooming takes place from July through September. The small, dense white flowers occur on oval-shaped, terminal heads enclosed by stiff, spiny bracts. Flower stalks may grow to over 7 feet in height and have large, opposite, sessile leaves that form cups which often hold water. Both the broad, deeply lobed leaves and the stem are very prickly.

Cutting flower stalks once blooming has begun will kill teasel plants but the seed heads must be removed from the area and disposed of by burning or land filling since some viable seed will be produced. Teasel can be readily controlled by proper application of herbicide. The area must be monitored for at least 5 years after last seed production since the seed can remain viable in the soil for 3 years.

Cutleaf teasel is native throughout central
Invasive Species Exclusion Unit Projects focus on prevention, early detection, and rapid response to new pests and invasive species including terrestrial plants, insects, diseases, and other pests. Prevention involves pest risk assessment, outreach activities, and regulatory actions such as quarantines to reduce the spread of pests. Early detection involves surveys and cooperative networks to discover new invaders before they establish, when eradication or containment efforts can be successfully implemented. Two examples of current projects are the Invasive Plants Early Detection Rapid Response (EDRR) Project and the Emerald Ash Borer (EAB) Project.

The Invasive Plants EDRR Project is designed to detect plant invasions early enough so they can be eradicated from the state. Blane White is the Invasive Plant EDRR Project Manager and can be reached by phone at 651-201-6578 or Email at blane.white@state.mn.us.

The EAB Project is designed to prevent the introduction of the EAB into Minnesota, provide early detection of EAB infestations, and mitigate damage caused by the EAB through quarantine and eradication. For more information on the EAB Project, visit our webpage at <http://www.mda.state.mn.us/invasives/eab>. Mark Abrahamson is the EAB Project Manager and can be reached by phone at 651-201-6505 or Email at mark.abrahamson@state.mn.us.
Training Requests for 2008 are due October 1, 2007

Upcoming Events

How to Manage the NEPA Process & Write Effective NEPA Documents
August 28-30, 2007
Eastern Band of Cherokee Indians
Cherokee, NC
Contact: Ken Green, kengree@nc-cherokee.com or 828-497-1892

Transit 101
2007 Minnesota Tribes & Transportation Conference
October 9-10, 2007
Shakopee Mdewakanton Sioux Community
Prior Lake, MN
Contact: Linda Aitken, Linda.Aitken@dot.state.mn.us, or 218-547-0060

Traffic Counting
GIS & GPS in Transportation
October 16, 2007
United South & Eastern Tribes Annual Meeting & Expo
Tunica-Biloxi Tribe of Louisiana
Marksville, LA