FEDERAL HIGHWAY ADMINISTRATION ENVIRONMENTAL CONFERENCE

Alexandria, Virginia

June 28 – 30, 2004

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CONFERENCE WELCOME

Speaker
Don Cote, Environment Technical Service Team Leader, FHWA Resource Center

Description: Don Cote welcomed conference participants and identified the purpose, objectives, and goals of the Conference.

Mr. Cote, on behalf of the Conference Planning Committee, welcomed participants to the first FHWA Environmental Conference in 13 years. Mr. Cote briefly described that the objectives of the Conference included providing a forum for FHWA field and headquarters personnel to share and learn from others about activities in the environmental arena, including critical environmental stewardship and streamlining initiatives. He also introduced the Conference Planning Team and explained to participants Conference logistics.

CONFERENCE KICK-OFF

Presenter
Don Cote, Environmental Technical Service Team Leader, FHWA Resource Center

Speaker
Frederick G. (Bud) Wright, Executive Director, FHWA

Description: Mr. Wright welcomed the participants and emphasized the benefits of sharing lessons with fellow participants about activities in the environmental arena, including critical environmental stewardship and streamlining initiatives. Wright pointed out that FHWA needs to be a "learning organization," and that those in Federal Highway who are working at the nexus of transportation and environment are true "agents of change."

Mr. Wright provided an overview of the current status of Reauthorization. His points included the following:

- The major challenge for Reauthorization is gaining agreement on the total funding amount to be authorized in the new Transportation Bill. Both the House of Representatives and the Senate have passed their versions of the new bill. There is a major difference in funding levels between the two versions, and both are significantly different from the President's version.
- FHWA is currently in its fourth extension of FY04, which expires at the end of July. Because Congress is only in session for 12 days in July, it is speculated that another extension is the most likely scenario for Reauthorization.

Mr. Wright concluded his presentation by emphasizing that FHWA is committed to the Vital Few Goals, regardless of the status of Reauthorization.

Comments, Questions, and Answers

- Question: What is the likelihood of current FHWA environmental proposals being passed in Reauthorization? Answer: The prospects are hopeful, as none of the environmental components of the new Transportation Bill is proposed exclusively by FHWA. Many other stakeholders have partnered with FHWA to request reforms in the environmental arena of Reauthorization.

- Question: Will the project lead also be the Project Development Lead with respect to the 404 Merger in Reauthorization? Answer: Because the issue is not embodied in both the House and Senate versions of the Bill, the issue is up for negotiation.
- Question: Will the Streamlining Task Force continue operating if there is a change in presidential administrations? Answer: The current Streamlining Task Force was created in response to an Executive Order of the current president. Historically, new presidents have reviewed the Executive Orders of the preceding president to retain items that are consistent with the new president's policies. Not all Executive Orders are automatically overturned. A potentially new presidential administration would be at least as committed to the environmental ethic as the current administration.
- Question: Could we have an update on the issue of competitive sourcing? Answer: FHWA is nearly finished stabilizing its competitive sourcing inventory, whereby positions that may be eligible for competitive sourcing are identified and catalogued. FHWA is committed to some competitions in two small efforts in specialized technical areas for 2004, and plants to honor that commitment. Potential competitive sourcing changes will not affect the Resource Center. Any changes that result will take place primarily, if not exclusively, in headquarters. Rick Capka, who manages the competitive sourcing issue for FHWA, has emphasized that any competitive sourcing should be rational and provide a reasonable level of service instead of a process for meeting a specific number target.

OPENING SESSION HQ

Presenter
Dote Cote, Environmental Technical Service Team Leader, FHWA Resource Center

Speaker
Cindy Burbank, Associate Administrator, Office of Planning, Environment, and Realty, FHWA

Description: Cindy Burbank welcomed participants to the Conference and discussed environmental, stewardship and streamlining initiatives for FHWA, focusing on the Office of Planning, Environment, and Realty's (HEP) Guidance, website, trainings, and workshops.

<u>Some Overview</u>
- NEPA was enacted in 1969, and went into effect on January 1, 1970
- There has been impressive progress over the last 30 plus years in streamlining and stewardship

<u>Results</u>
- Creation of NEPA and 30 plus laws for implementing environmental protection
- Environmental Stewardship and Streamlining as a VFG (Vital Few Goal)
- Performance Goals and Results
    - Enhance Ecosystems
    - Environmental considerations to be adopted early on as state level [GAO report highlights success of incorporating ecosystem planning in transportation planning]
    - Workshop: Linking planning and NEPA (building consensus, working with partners)
    - CSS/CSD with FLHD- training in states
    - Wetlands- tracking impacts and protection and mitigation 1:1.5 ratio (for every one acre of wetland removed, 1.5 acres of wetland are created to replace it)
    - AQ Conformity (non-conformity below 6 parts per million)
    - Critter Crossings and website WSJ and NYT featured website

- Streamlining Goals
    - Median time for EISs by 2007 down to 3 years; we need to stay focused to achieve this goal.

Three Focus Areas

1) Need to raise level of FHWA performance on the environment
    - Increase quality of documents
    - Avoid lawsuits
    - Build credibility with the public
    - Create training and mentoring opportunities
2) Planning/NEPA Linkage
    - Deal with population growth and demand for transportation
    - Need to have RAs work with us to look at 20 year long-range plan and resources that need to be protected
    - Have local governments focus on land-use planning and environmental concerns
3) Timeliness Issue
    - Moving efficiency through process and have states set schedule to streamline process
    - Build relationships with RAs

Comments, Questions, and Answers

- Question: At SCOE they discussed linking planning and environmental issues. How does FHWA stand on this? Answer: Several states (for example Florida) have designed process to bring in environmental RAs early during planning process. Answer 2: Oregon and Washington are creating new process with coordination in planning and environment during professional development workshop provides opportunity for MPO, State, RA, and Division Office to talk about issues and needs.
- Question: Could you share thoughts on liaisons in RAs-are they paid by FHWA or DOT. 25-30 funded positions at EPA, FWS, and USACE. Feedback from states is positive, but must be structured. Answer: They are valuable and have improved relationships as well as timeliness on projects. There needs to a high standard for these positions so that it is not taken advantage? Answer 2: Delaware provided a position with the EPA, but USACE was annoyed that they didn't get one, so they cut back communication. Answer 3: Missouri funded 9 positions with DEQ; FWS wants a position but MIDOT has focus on urban areas and doesn't want to fund the position. If state wants service above baseline (greater timeliness etc.) then it needs to provide more staff.
- Comment: Offices must demonstrate an increased level of service, should have an accounting system, but eventually will be audited.
    - States can not threaten to reduce work as an attempt to get a funded position-that is illegal
    - RAs are cutting back staff or growth in demand and are struggling to catch up
    - Process should be redesigned to help manage work load
- Question: Congress earmarks specific projects but they often do not provide enough funding to be fully implemented? Answer: Headquarters need to persuade Congress to hold off on earmarks. Division Offices should help states prioritize what projects have funding and environmental priority.
- Question: What are the priority areas with the authorization package regarding the environment? Answer: 4(f), Planning and NEPA, Exempting Interstate from 4(f) and section106, Delegating CEs to states (many have already been doing this, but this will set new threshold.)

MANAGEMENT PERSPECTIVE FROM THE FIELD

Presenter
Don Cote, Environmental Technical Service Team Leader, FHWA Resource Center

Speakers
Joe Toole, Acting Associate Administrator for Professional Development, FHWA
Dan Mathis, Divisions Administrator, Washington Division Office, FHWA
Larry Smith, Division Engineer, CFLH

Description: Each of the panelists presented opportunities and challenges for environmental programs and processes.

Mr. Toole opened the session thanking the field for their outstanding work. He emphasized three key components of FHWA's role in the environment:

- *To serve and provide for the public good*- FHWA's goal is to serve and to understand the public good. This mission allows flexibility in finding solutions, which address public values (e.g., air quality, historic preservation, etc.) and build relationships.
- *To build relationships*- Having strong relationships essential to the Federal-aid program and shows that:
    - We are listening to each other
    - We have shared values, which will ultimately bring us closer together
- *To find your own environmental ethic*- FHWA environmental specialists are encouraged to find their own environmental ethic by exploring their passion and learning from it.

Mr. Mathis addressed the participants on current challenges and opportunities related to the Endangered Species Act- an issue that Washington State must often address. Mr. Mathis explained that many agencies have been operating under a false assumption that with more resources the result is faster consultations. However, the reality is that the agency's organizational culture often determines how an agency and its consultation processes operate. Recommendations for addressing this include:

- Make provisions to track the consultation
- Determine who sets the time and the order of thing
- Keep informed, engaged, and do not relinquish responsibility

Mr. Mathis described three lessons learned from Washington State's history with the consultation process:

- Read ESA laws, regulations and legal opinions
- Track and measure all ESA consultations
- Have explicit performance standards.

Mr. Smith emphasized the need for trust and relationships from the FLH perspective. FLH has a staff of 20-25 and is often introduced to challenges with their partners, such as resource agencies not fully understanding a specific project's objective. To address these challenges, Mr. Smith and FLH believe that trust is necessary at all levels and for all stakeholders in order to achieve a successful outcome. He recommends the following practices:

- Build trust from the very start of the process – if people change you must act; find common interests.
- Use visuals to better communicate information to the general public.

Comments, Questions, and Answers:

- Question (to Mr. Mathis): How much data are enough? Answer: It is not an easy issue. It is spelled out in laws and regulations, but we are always asked for more by resource agencies. We need to look at the regulations and determine what data is actually required, rather than trying to create requested data that does not exist and is not required.
- Question: NOAA and FWS often request more data, but the USACE may want different information. Does the USACE provide flexibility or do they require that information to be completed before providing permits? Answer: Yes, there are some issues with providing information to USACE; however, Washington State experiences many issues with NOAA Fisheries because the majority of projects address water and salmon.

COUNCIL ON ENVIRONMENTAL QUALITY

Moderator
Lamar Smith, Team Leader, Office of Project Development and Environmental Review, FHWA

Speaker:
Horst Greczmiel, NEPA Oversight, Council on Environmental Quality

Description: Mr. Greczmiel identified national initiatives, which addressed highway-specific issues**.**

Mr. Greczmiel discussed NEPA oversight, CEQ, and the NEPA Task Force by providing a brief history and delineating roles and responsibilities including:

- Reviewing an agency's NEPA proposals.
- Issuing alternative arrangements.
- Identifying the lead agency.
- Resolving disputes between agencies over EISs, etc.

The role of the Task Force is as follows:

- Harmonizing the process among agencies.
- Ensuring flexibility of the process as there is a continual need to improve the process.
- Although input is solicited from the public, a report issued in '03 resulted in a public outcry – number of public roundtables increased to 4.
- Work of the Task Force must be open and transparent.
- Recommendations:
    - Bring more people into the Task Force
    - CEQ should host an annual forum with practitioners and legal staff
    - Publish all guidance in a user-friendly way
    - Consider developing a "Citizen's Guide" and increase training

The focus areas include:

- Technology information management and security
- Increasing training on how to work together (AASHTO working on this issue)
- Programmatic change and adaptive management
- Specific categories and environmental assessment – issue guidance on how to establish Categorical Exclusions

Comments, Questions, and Answers

- Question: NE COE developed its own guidelines. Will legislation change this? Answer: We can address this, but the lead agency must remain in front.
- Question: Could you give us an update on the tribal/interagency workgroup? Answer: We hope to end lack of communication and miscommunication. We have posted points of contact on the web and have provided an easier access to resources via the web... Please send us any other suggestions.
- Question: Has the CEQ evaluated the recent Supreme Court decision on Mexican trucking? Answer: We are doing so now.
- Question: Do you see a difference in the way NEPA is operating now? Answer: The process is improving especially in the area of the "fear" of doing an EIS.
- Question: How does the quality of our NEPA work compare with that of other Federal agencies? Answer: We are doing an excellent job. There are some inconsistencies – e.g., readability. I commend the State of Washington on the readability of its EISs. Quality of FHWA NEPA work to other Federal agencies is excellent.

DIVISION ADMINISTRATOR PANEL

Moderator
Lucy Garliauskas, Division Administrator, Rhode Island Division Office, FHWA

Speakers
Jan Brown, Division Administrator, Montana Division Office, FHWA
Allen Masuda, Division Administrator, Missouri Division Office, FHWA
Daniel Mathis, Division Administrator, Washington Division Office, FHWA

Description: Division Administrators from across the country described what steps they have taken to advance specific initiatives and address problematic issues in the field. They discussed the role that FHWA plays in the field and the importance behind the Environmental Vital Few Goal.

Before introducing the members of the Division Administrator Panel, Ms. Garliauskas described three qualities that FHWA staff possesses. These included:

- Power
- Authority
- Leverage

According to Ms. Garliauskas, the extent to which these characteristics can be exercised depends on the extent to which District Administrators, those who can facilitate the environmental agenda, support staff decisions. Interaction between these groups is improving. District Administrators and not only signing off on documentation, but now are closely reading documentation and maintaining communication with staff.

Mr. Masuda discussed the stages leading to the decision to use a tiered environmental process used for a project on I-70 in Missouri. Use of a tiered process, anticipated to reduce the time associated with the EIS process by two years, would set a precedent for all corridors in Missouri. The stages were as follows:

- Engineering brainstorm – A brainstorm was held to determine a desired course of action. Design exceptions were analyzed.
- Review of others' use of a tiered process – Wanting to model their tiered process after previously completed tiered processes, FHWA Missouri Division looked for other tiered process successes.

None were found. For this reason, Missouri Division delineated the contents that would be included in a tiered environmental document.

- Communication with FHWA Headquarters – Missouri Division sought advice from FHWA Headquarters. It was decided to look for all opportunities for context sensitive solutions. Some considerations included giving each bridge a unique design, refurbishing rest stops, creating corridor-long bike paths, incorporating historical and cultural themes throughout. A consultant was hired to estimate the cost of the various design scenarios.

Ms. Jan Brown, mentioned that stewardship can be a litmus test of how an agency is performing environmentally. Ms. Brown discussed wildlife connectivity and the advantages in pursuing increased connectivity:

- A field guide for developing an interagency ecosystem approach to wildlife connectivity is being developed. The handbook aims to increase predictability, connectivity, and conservation during highway improvements.
- The idea for the handbook came during a highway project for I-93 in Montana. During the project, much press was given to wildlife connectivity and the need for wildlife crossings. It was difficult to get the involved agencies to agree on solutions. A research study was made to identify ways that agencies might work better together and how they might go about creating a crediting system for projects increasing wildlife connectivity.
- Since wildlife habitat extends beyond state boundaries, the handbook and ecosystem approach it supports will need to be supported by leadership among partnering agencies.

Mr. Mathis described the tools for leading change. The tools consist of (1) passion, (2) support for those doing work, and (3) open communication. He also noted ways that leadership can help streamline the NEPA process:

- Since the Vital Few Goals are important to all agencies as a whole, FHWA needs to be involved with other agencies.
- The biggest way to streamline NEPA is to assess the environmental risk appropriately and use the fitting environmental documentation.
- Re-read what is written in the environmental documentation that other agencies are reading.
- Staff should be given the opportunity to do their jobs and Division Offices should provide corresponding support.

Comments, Questions, and Answers

- Question: How do you start doing projects that far exceed what needs to be done environmentally? Answer: All of the appropriate agencies will need to sit down together and discuss the issues. The real interests and needs of each agency will to be outlined up-front.
- Question: What is the key to get the relationship going? Answer: Try to negotiate… Make one try with top leadership, have government motivation, and explain various alternatives.
- Question: Plans are sometimes more damaging to the environment then they need to be; when does the agency think it has a blank check? Answer: First place to start is to sit down and talk about it. Find out what agencies real interest is. Answer2: It is important to talk with them… telephone, email and fax are great tools but no substitute for talking in person.

Follow up questions to be pondered by managers

1) Communication is a powerful tool and a theme that has been highlighted throughout our examples. We should discuss the cornerstones of effective communication in your situation?
2) DA Actions: When was it important for you as the DA to get involved, how? What did this change? (e.g., review of documents led to questions about proper level of documentation – Allen saw CE's that should have been EAs, Dan saw EIS s that should have been CE s)

3) What are the messages that we send through our actions—to staff, to DOT, and to stakeholders?
4) Give examples of how the actions we take empower staff.

Follow up questions to be pondered by managers (continued)

5) Elevation – when to do it, and how and who should initiate it?

ENVIRONMENTAL STREAMLINING AND STEWARDSHIP: VFG AND PERFORMANCE MEASURES

Speakers
Jim Shrouds, Director, Office of Natural and Human Environmental, FHWA
Fred Skaer, Director, Office of Project Development and Environmental Review, FWHA

Description: Speakers introduced the topic of Environmental Streamlining and Stewardship as it relates to the Vital Few Goals (VFG). They led an open discussion focusing on VFG and included a dialogue on some of the Agency's other performance measures.

Mr. Jim Shrouds discussed the importance of performance planning, and the challenges that exist:

- Performance planning can be complicated because it needs to incorporate a variety of plans and needs to include performance over several Fiscal Years.
  - FHWA's Strategic Planning Process is designed to align all of these plans. It is a 10-year plan, which began in 1998. During the FHWA Spring business meeting, the Field Service Directors are charged with designing the strategic plan.
  - The FHWA/AASHTO/TRB International Scan on Performance Measures, held in March 2004, identified two areas of concern when implementing performance measures: (1) environmental measures, and (2) sustainability.
- The US DOT Environmental Stewardship Goal and FHWA Vital Few Environment Goal are similar. The USDOT Goal focuses on the wetland replacement ratio and Executive Order 13274, *Environmental Stewardship and Transportation Infrastructure Project Reviews.*
- The FHWA Vital Few Goals integrate safety, mobility, and environment to create the largest benefit.
  - The Vital Few Environment Goal is highly visible, important to resource agencies, and is designed to create an effective benefit.
  - FHWA's Strategic Goals incorporate the Vital Few Goal and address ecosystem initiatives and wetlands replacement. The ecosystem initiative emphasizes watersheds, landscape, and other similar factors. To learn about the Exemplary Ecosystem Initiatives and the 2004 winners, visit http://www.fhwa.dot.gov/environment/ecosystems. The wetlands replacement effort aims to achieve a net gain of over 27,000 acres of wetlands.
  - Air quality is also a priority, and addresses issues related to conformity. A report is issued every month, which sets performance goals for air quality in order to measure improvement. Air quality is a very visible issue because the general perception is that the public does not like the idea of poor air quality.

Mr. Fred Skaer shared details on FHWA's Strategic Objectives for Fiscal Year 2005 and emphasized that the two key issues are: (1) quality, and (2) timeliness.

- The FHWA strategic goals for 2005, include:
  - Increase the number of states with Integrated Actions
  - Have agreed upon schedules with states
  - Achieve a standard for EISs to be completed in 45 months (median time) and EAs to be completed in 15 months (median time).

- Achieving a *quality* decision-making process is important. Several activities can help to achieve this.
    - Integrated approaches can coordinate decisions and ensure full communication.
    - Context Sensitive Solutions/Design can provide many opportunities to connect different aspects of planning, leading to comprehensive decision-making.
    - FHWA guidance exists for both these activities
    - The goal is to achieve a quality decision-making process in every state by October 1, 2007.
- Timeliness is important when working to achieve the strategic goals outlining the median times to complete EISs and EAs. Activities being implemented to achieve this include:
    - Every EIS and EA after 2003 will have negotiated timeframes. Timeframes must be met in 90 percent of the cases.
    - The median time to complete EISs continues to grow, rather than meeting the designed timeframe. The new strategic goal is designed to address this. In addition, the length of EIS documents also continues to grow. In the 1970s EISs were only 12 pages in length; the current length of EISs also needs to be reevaluated.
    - The standard for EAs is currently not being met, and a solution to addressing the timeliness of completing EAs also needs to be addressed.
- Mr. Skaer also described the results of the Gallup Survey, which analyzed the relationship among transportation and resource agencies. The results, which focused on the trust among agencies and the perceived success of projects, will be used as an opportunity to improve current relationships.
    - In response to the Gallup results, FHWA will work with field staff and five states to see how to apply their feedback.

In summarizing Mr. Shrouds' and Mr. Skaer's comments on FHWA's Performance Measures and Vital Few Goals, they concluded with two thoughts for the audience to ponder:

1) Has FHWA left out any environmental performance measures that should be included in the future?
2) How do we measure out?

Comments, Questions, and Answers

- Question: How do you address the problem of determining start dates for EAs and the fact that they may be inconsistent at times? Answer: Use what guidance has and will be created by FHWA and share your suggestions for future improvements.
- Question: What are your thoughts on Exemplary Ecosystem Initiatives in Human Environment? Answer: This was to be looked at in 2004, but has been delayed.
- Question: Regarding the 12-month timeframe for EAs, what about endangered species? Answer: It is a two-year timeframe.
- Question: Are we tracking *why* we didn't meet these timeframe goals? Answer: It often is an issue of funding and the amount of staffing resources.
- Comment: The Negotiated Timeframe guidance will give you the flexibility to determine how to address these constraints. It should be desirable to work with state DOTs and resource agencies in order to address these goals. The Wizard will document exactly why projects do and do not meet timeframes.
- Comment: Public involvement should not be short-changed. Answer: Things being done in a timely fashion should not detract from the public involvement process; it is still at the top of the list for the process.

Comments, Questions, and Answers (continued)

- Question: Will FHWA's Environmental Document Tracking System (EDTS) be integrating the Wizard? Answer: There will be an effort to integrate the systems as best as possible.
- Question: As analysis has become more data-drive, does the Delphi method still work? Answer (from Bill O'Donnell): The Delphi method was used in New Hampshire for the I-93 widening project. The Delphi method was used to get a subjective opinion from a panel of experts who used input from stakeholders to shape their decision. Some resource agencies responded differently to using the Delphi method. Mr. O'Donnell explained that the Delphi method speaks to a higher degree of the scoping process, but the information needed for this should be received early-on before the project reaches the Delphi method.
    - Many states have developed good databases with information, and Delphi may not always achieve this.
- Question: How do we reach the Performance Plan without Reauthorization? Answer: Most of the reauthorization proposals have projects heading in a similar direction, so the Performance Plan should not be greatly impacted.
- Comment: Data collection on wetlands is important. Field staff would like a standardized protocol for collecting data. It is often difficult to work with states and know that the number of acres being reported might not be accurate, or should not be used to meet the Performance Plan, because the state may be rushing to have a number to report out.

THE INTERACTION OF ROADS AND NATURE

Moderator
Mary Gray, Environmental Program Specialist, Office of Natural and Human Environment, FHWA

Speakers
Paul Garrett, Ecologist, Office of Natural and Human Environment, FHWA
Pat Cazenas, Office of Natural and Human Environment, FHWA
Dick Gersib, Washington State DOT
Connie Hill, Office of Natural and Human Environment, FHWA
Bonnie Harper-Lore, Vegetation Specialist, Office of Natural and Human Environment, FHWA

Description: The Interaction of Roads and Nature breakout session was intended to disseminate new studies and information that when applied help make projects more environmentally friendly. The session focused on several practices that are contributing to streamlining the environmental process. Topics discussed included: Storm-water Research/Regulatory Changes; Stream Restoration and the National Mitigation Action Plan; Innovative Storm-water Mitigation Strategies; Brownfields and Waste Management; and Invasive Plant Species.

Stormwater Research and Regulatory Changes (Pat Cazenas)

- Ms. Cazenas explained that FHWA's water quality research priorities have focused on watershed techniques, impact assessment, and mitigation and best management practices. Specifically, FHWA has sought to determine the components of infrastructure to stormwater runoff. GIS has been especially helpful here, helping users to identify the percentage of impervious surfaces caused by DOTs.
- Research has been carried out along with other Federal agencies, TRB, NCHRP, and State DOTs.
- FHWA has also evaluated and updated the Pollutant Loading Model for Highway Storm-water Runoff to include dissolved concentrations of pollutants.

- NCHRP 25-20 helped to create a synthesis and research plan for management of runoff from surface transportation facilities. It (1) put the data in a useable format, (2) identified gaps in data, and (3) created a way to share data among agencies.

Regulatory Issues

- It is often hard to quantify Total Maximum Daily Loads (TMD Loads) for non-point source loadings. In order to overcome this, it is necessary to work in close association with the agency with jurisdiction over the impacted water body.
- A National Pollutant Discharge Elimination System has been created to help educate and involve the public about detection, elimination, and prevention of water pollution.
- Several programs and guidelines addressing road salt and storm-water runoff have been created. These include:
    - NCHRP Project 6-13, Guidelines for Snow and Ice Control Materials and Methods
    - The Snow and Ice Cooperative Program, a program that is analyzing alternative compounds to salt for snow and ice control. It is anticipated that this program will have preliminary findings in 2005.
    - NCHRP Project 6-16, Guidelines for the Selection of Snow and Ice Control Materials to Mitigate Environmental Impacts
- Recent publications and reports on storm-water issues are listed below:
    - Management of the Discharge and Quality of Highway Runoff in Karst Areas; National Highway Runoff and Water Quality Data and Methodology Synthesis; Guidance Manual for Monitoring Highway Runoff Water Quality; Assessments of Impacts of Bridge Deck Runoff of Receiving Waters; Environmental Impact of Construction and Repair Materials on Surface and Ground Waters; Evaluation and Management of Highway Runoff Water Quality; Storm-water Best Management Practices in an Ultra-Urban Setting.
- Courses on storm-water runoff issues include "Design and Implementation of Erosion and Sediment Control (NHI #13454) and "Water Quality Management of Highway Runoff (#142047). The courses look at inspection and maintenance approaches and techniques to water quality management in highway settings.

Stream Restoration and the National Mitigation Action Plan (Paul Garrett)

- Mr. Garrett explained that at least ½ of the stream miles in the United States are altered in some way, and many are not fishable or safe for swimming due to pollution or other alteration. Since highways frequently follow stream valleys, they often impact streams and riparian vegetation.
- Stream restoration refers to returning a stream to its natural, functional condition. Functional condition includes hydrological and biological conditions.
- The National Mitigation Action Plan aims to develop a compendium of techniques to assess stream restoration methodologies. Fifty techniques from across the country are being evaluated and sorted.
- There are several widely used stream assessment approaches. One is the Rosgen Approach to stream restoration. The Rosgen Approach, which focuses on stream geomorphology and does not include biological assessment, uses reference streams to profile the stream. Restoration efforts will then seek to restore the stream to the profiled state. Another approach is to return the stream to its proper functioning condition. This method includes biological indicators but may falsely assume that the stream was once in a "proper functioning condition."
- Programmatic stream restoration, however, is likely to become a more widely used technique. This method provides ecological gains where they are most needed and can be sustained. It can focus on statewide, regional, or watershed conservation priorities such as, important habitats, water quality, and saving key parcels from development or degradation.
- All waters of the United States are subject to Section 404. The USACE can require mitigation

Mr. Garrett showed a short video on stream restoration, which he narrated. He pointed out that embankment stabilization techniques are increasingly "natural" nowadays, allowing the stream to maintain its own banks.

Comments, Questions, and Answers

- Question: Will USACE count dam removal as credit? Answer: It is hard to say. Their assessment will be based on function and not footage. USACE will probably look at impacted fish habitat.
- Question: Is USACE crediting for dam removal widespread? Answer: No. Credits for both dam removal and stream restoration will likely be difficult to get.

Innovative Stormwater Mitigation Strategies (Dick Gersib)

- Mr. Gersib stated to better mitigate transportation projects the ecosystem of that site must be understood to the greatest extent possible. It is necessary to avoid considering mitigation as a problem and start thinking of it as an ecological challenge to address.
- To increase the environmental benefit and reduce costs of storm-water mitigation strategies, the following steps should be followed:
    - Assess project impacts (site)
    - Avoid/minimize impacts (site/landscape)
    - Assess condition of ecological processes (landscape)
    - Maximize benefits by identifying areas capable of matching #1 and #3 (landscape/site)
    - Target sites maximizing long-term environmental benefits (landscape)
    - Tell the story (site/landscape)
- Watershed characterization methods seek to integrate the mitigation of wetland, riparian, floodplain, and storm-water impacts by restoring the landscape's capacity to function, as impacted natural systems once functioned. For example, best management practices for storm-water often equate to large engineered detention ponds to capture and store runoff before it reaches a stream system. These BMPs are expensive to build and maintain and provide only the functions intended, that is water quality and quantity benefits. When mitigation focuses on restoring the natural capacity of the landscape to store and clean water, through the restoration of degraded wetland or riparian systems or the removal of existing impervious area, self-maintaining systems are reestablished that provide the needed water quality and quantity functions along with a suite of other functions and values.
- Four concepts in keep in during watershed characterization efforts are as follows:
    1. Mitigate project impacts
    2. Target mitigation for maximum benefits
    3. Target mitigation where it will be most effective – Identification of key ecological processes will help in determining where the largest environmental returns might be made.
    4. Focus on ecological processes in project areas – Characterize the various conditions of watersheds and try to identify a range of potential impacts to the area.
- It is important to establish spatial and temporal scales for analysis and mitigation, as well as a characterization of the study area's existing condition. An understanding of the change that has occurred from pre-development conditions to the current conditions provides the context for evaluating the extent of process alterations and resulting resource degradation.
- Understanding how the landscape will potentially change in the future provides better insight to the possible ramifications of land use change.
    - GIS use can help build the case for a potential mitigation site. It can show an area's potential for a mitigation, restoration, and retrofit sites.

Brownfields and Waste Management (Connie Hill)

- Ms. Hill defined a brownfield as a site that people are afraid to use due to a real or perceived contamination at the location. Although most brownfields sites are in urban areas, there is no entity that designates a site as an official brownfield. The difference between a brownfield and a Superfund site is drastic – the Superfund site is much more polluted.
- In the past USDOT discouraged the use of brownfield sites for transportation projects due to economic concerns. In 1998, USDOT revised its policy and now permits state and local transportation agencies and MPOs the flexibility to consider brownfields redevelopment in their transportation planning.
- There is no separate DOT funding source for brownfields-related transportation projects. State DOTs may use some of their Federal transportation funding for site clean-up and construction.
- In January 2002, President Bush signed the Brownfields Reform and Small Business Liability Relief Act. The Act, which encourages brownfields redevelopment, provides liability relief and protection to land owners, indicating how long the government can hold the landowner responsible for a site.
- FHWA's brownfields activities have included two research studies. In attempt to better understand how some funds are being used, the first study identified how localities are using Federal funds for brownfields redevelopment efforts. The second study was a follow-up to the first and describes how transportation and brownfields redevelopment impacts a region. Currently, FHWA is working with FTA to develop updated guidance to include brownfields redevelopment.
- Other: FHWA has a Recycling Team that has developed a materials recycling policy. It has also made a recycled concrete aggregate domestic scan.

Invasive Plant Species (Bonnie Harper-Lore)

- Ms. Harper-Lore described invasive plants as plants that become aggressive after being introduced from one place to another place where its competition is absent. Noxious weeds are plants that are harmful to agriculture, human health, and/or the environment. Most states have a list of invasive species and noxious weed laws.
- Of roughly 12 million acres of green space along U.S. roadways, approximately 460 acres are reached by invasive species per day.
- Introduction of an invasive can be either purposeful (ornamental, erosion control, pasture grasses) or accidental (seeds imported crop seeds, ships' ballast, animal vectors, vehicles, etc.)
- There are many best management practices to prevent invasive species introduction. Some include: specification of weed-free mulches; avoidance of topsoil import into a project; stream cleaning of gravel at pits; washing of equipment before leaving; cleaning mowers between sites; staff training; partner with adjacent landowners; find alternatives for erosion control; educate the public; honor adjacent States' noxious weed lists; plant native species.

Ms. Harper-Lore listed several print and electronic references. One resource is FHWA's website on invasive species, www.fhwa.dot.gov/roadsides

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STATE OF THE PRACTICE: FEDERAL LANDS

Moderator
Brian Allen, Environment Discipline Leader, FLH

Speakers
Larry Smith, Division Engineer, CFLH
Jack VanDop, Senior Environmental Compliance Specialist, EFLH

Jennifer Corwin, Environmental Compliance Specialist, CFLH
Terri Thomas, Senior Environmental Manager, WFLH

Description: This session started with introductory comments from Larry Smith followed by 15-minute presentations relating to projects or environmental compliance practices within their respective Divisions, and the final presentation highlighted results from the environmental streamlining and collaboration workshops conducted with the Forest Service, National Park Service, and the Fish and Wildlife Service in 2003. Twenty percent of FHWA employees currently manage the $706 million FLH Program with 480 projects, valued at a total of $2 billion, are currently in development. Responsibility for environmental compliance and permits falls to 23 environmental specialists.

Staffing Levels (Larry Smith)
Mr. Smith provided an overview of historical staffing levels by legislation covering numbers in FTEs as well as showing contractor support. He stressed the following:

- New FTEs are needed just to manage contractors.
- We must quantify actual needs through workforce analysis.
- We must better utilize Federal aid, people, and we must listen. As a good example, he cited the Colorado Leadership Council.

Comments, Questions, and Answers

- Question: What is your opinion on contractor quality control? How do we ensure a good contractor relationship? Answer: Must work to build the relationship. Define expectations, context, design, etc. Oversight is now 30 percent of an FTE. Answer2: We need to get this percentage down to 9 percent.

Overview of the "North Shore Road" (NSR) EIS, (Jack VanDop)
Mr. VanDop described an EIS in the Great Smokey Mountains National Park. He provided background history beginning with the construction of the 1943 Fontana Dam Project, the partial building of the road, re-authorization of the road, and the need for an EIS under NEPA. He emphasized efforts in public involvement – 25 meetings held to date, outreach, websites, a newsletter, etc. Topics addressed included the human environment, displaced/dispersed settlement – both homes and property; cultural resources such as cemeteries, archeological sites, etc.; the physical environment; and, data gathering.

Comments, Questions, and Answers

- Question: Are there 4F exemptions? Answer: Yes, as part of the Park Management Plan.

"Environmental Compliance for Segment 4 of the Beartooth Highway Construction Project" (Jennifer Corwin)
Ms. Corwin emphasized interagency involvement in a project that crossed two states, three counties, and three national forests including Yellowstone National Park. She provided the current status of the project with the overall goal to construct a road up to standards so that any government entity would maintain it while maintaining and preserving habitats as well as covering problems and major mitigation strategies. An interagency team was formed for the project including members of FHWA, COE, NPS, and USFS. This team:

- Held annual and semi-annual meetings and reviews
- Held subject specific meetings with appropriate agencies
- Recorded and distributed meeting notes with all action items
- Ensured productive and efficient use of each agency's time with e-files
- Had consistent team member participation

- Cultivated trust and mutual respect
- Followed through on commitments

The operation of the team minimized impacts and resulted in creative design and construction; most importantly, it leads to further collaboration for post-NEPA activities.

Lessons learned:
- Maintain contact with all involved
- Reach out to new members
- Document everything
- Meet with agencies when nothing is at stake to develop trust

Thompson River Road Project in Montana (Terri Thomas)
Mr. Thomas described that this project is in its early stages and involves two roads – one privately owned by a timber company and one owned by the county. Issues involve water quality, wetlands wildlife including sensitive species as well as plant species, several historic structures and Native American sites. This project has begun with 1) early agency coordination through the establishment of a Multi-Agency Team (MAT) and extensive public involvement.

Closing (Brian Allen)
Mr. Allen closed the session with some additional information on Land Management mentioning training courses, a pamphlet on collaborative workshops, work on updating the Project Management and Design Manual (anticipated publication – 2005), etc.

MAKING RIGHT OF WAY WORK TO YOUR ADVANTAGE: EVOLVING PROCESS INTEGRATION AND CORRIDOR PRESERVATION TECHNIQUES

Moderator
Janet Myers, Program Manager, Office of Real Estate Services, FHWA

Speakers
Dick Henry, Right-of-Way Team Leader, Ohio Division Office, FHWA
Mark Hasselmann, Right of Way Team Environmental Program Manager, Maine Division Office, FHWA

Description: This session presented useful, but not necessarily well-used or fully-developed Right-of-Way methodologies that can be applied to achieve better project results for individuals, communities, and our transportation agency partners. The session focused on process integration and the use of tiered EISs to support acquisitions.

Making Right of Way Work to Your Advantage: Process Integration (Dick Henry)
ROW has been an issue from the first creation of highways. Engineering makes decisions on ROW selections, but they have not listened to other groups or incorporated these ideas. Integration allows for better results as development incorporates individual and community needs.

Integration Research
- Study from Jack Fawcett and Associates revealed the following for various fields regarding the usefulness of integration (numbers given in percentages of respondents in agreement).

	Integrated Agency	Non-Integrated Agency
Engineering	83%	85%
Environment	100%	92%
Planning	95%	91%
Real Estate	100%	83%
Average	95%	88%

- Engineers have the largest number of people who did not see the benefits of ROW above the non-integrated approach
- Environmental regulations can be viewed by some as a "stumbling block" during project planning and implementation
- We have to take steps to mitigate this trend

Integration Challenges

- When the process draws out, people lose interest in it, and start to believe that components will never get built.
- Local governments often think only about increasing tax revenue instead of how to integrate all areas affected
- Project that creates two additional lanes of traffic ends up only creating more development and congestion… we often do not look far enough into the future
- Some stakeholders question if we (FHWA) want to stand in the way of development

Impacts

- Types of impacts include Primary (to property owners), Secondary (Removal of access to retail or religious venues), and Cumulative Impacts such as Environmental Justice issues, and Flood Control
- Creating a "Great Wall of China" within a community can adversely affect businesses on one side by loss of customers seeking easier access alternatives
- Historic Districts can have huge effect and can halt everything
- Have to study the effects in all areas as railroad, utility, local industry (especially when they deal in Hazardous Materials) can have huge implications to your project

Managing and Planning

- Have to get consensus whenever possible
- Securing strong public support will help
- Using data from all areas will assist you with documentation; example: may find that you have to relocate a septic system and that can sometimes only be determined by getting empirical data from the field

Solutions and Benefits

- You may find that there is sufficient housing for Right of Way relocations in a nearby community so you can minimize disruption of owner's communities, etc.
- Sometimes need to give ROW more time to work out better solutions
- Need to keep in mind that when we buy Real Estate, we are taking property from people who do not want to sell. This demands that we be as sensitive to our citizens needs as much as possible

Comments, Questions, and Answers

- Question: ROW has often "missed the boat", as we have relocated people who do not have enough representation in the process. One personal example was a Church with a largely minority congregation. We had to buy ¾ of the homes in that community and the church and all

the parishioners were elderly. This caused us to have to buy up the other ¼. However, we couldn't buy these last homes with the stipulated funding. This puts us in a position of risk not being able to cover costs, so we call it environmental costs and proceed. Answer: It is possible to exceed the limits on relocation costs. One way to accomplish this is to go outside the process and call it an environmental consideration, not ROW.

- Question: Could you describe how ROW works best and how early do you have to get integrative measures? Answer: I will give you an example. We had to relocate two blind brothers that were living in a community for years. They had been in that area all of their lives, knew their way around their home, and the way to the local supermarket by memory. We had to relocate them from their location so I found an empty lot on the property of a nearby landowner and inquired if we could use his land for the brothers. We got permission to move their entire house to the location and they are now 2 blocks closer to the groceries.
- Question: How do ROW issues get incorporated into the planning process? Answer: Some States have multi-disciplinary teams to do the project. Answer2: Experienced ROW people can recognize potential problems like the blind brothers example. Environmental problems often do not get identified when many people in the community could be impacted.
- Question: Can you give examples of instances when environmental issues take the back seat to other considerations? Answer: Low income housing.

Tiered EIS in Maine (Mark Hasselmann)

Mr. Hasselmann presented a "Tiered EIS" example from Northern Maine as an alternative method of conducting environmental study for a project. Northern Maine suffers from a lack of employment opportunities and an impediment to future economic growth is the limited transportation infrastructure. The State of Maine is conducting a modified process in their EIS to minimize future development problems. Have achieved some degree of success with this approach.

Note: Sometimes it is more appropriate to refer to a Tiered NEPA approach rather than a Tiered EIS.

Tiering in Maine

- Aroostock County looking at a 30-40 year project
- County suffers from population loss, higher unemployment than state average, lack of diverse job opportunities
- Study looks at Highway improvements to expand accessibility, marketability, expand economy, improve multi-modal facilities
- 2 parts of Maine: Southern (considered a suburb of Boston) and Northern (very rural)

Qualities of Region

- Total population: 75,000 people
- Largest Metropolitan Area: Presque Isle (25,000)
- 2,800 square miles
- Needs for new alignment of highway

Strategy for Study

- Will do a detailed analysis ROW impacts, other impacts at corridor level
- Conducting study of impacts in wide corridor which provides many options for eventual implementation in adjustments for Endangered Species etc.

Comments, Questions, and Answers

- Question: How do you get resource agencies to get "buy in" on Tier 1? Answer: Resource Agencies react well, one example of the critical documentation is the EO-2 and the EPA

recognized that we were developing it as a tiered NEPA document so that it would be challenged to permit anything.

- Question: What kind of agreements do you have with Resource Agencies? Answer: State of Maine does a collective meeting with all regulatory offices. Presentations are made to achieve "buy in" or "buy off" and then we proceed. We made progress with regulatory folks. An example of some of the work we evaluated was over 1100 eligible historic properties; we looked at each "buildable" segment and presented to SHPO for approval. Over 600 are eligible or probably eligible. We did a Macro look and then we upgraded the corridor; we are looking at 3-400 times vs. 2-3,000.
- Question: When you acquire ROW for segment, do you have a final ROD? Answer: No, we do not have final ROD to accomplish this. There will be no build and we do not anticipate other needs than preserving existing highway. No access without final ROW document.
- Question: Is money earmarked, and what happens if funding is halted? Answer: All the study is through an annual earmark of $3-4 million. Not sure that if that will continue for very much longer and that is why we want to do this by spring 2005. We would only do this study with earmarked funds.
- Question: How can you adopt a ROD if you rely on earmarked funds; how are you showing fiscal constraint? Answer: There are $12 million in funds in a bank for this project, the money is collected via taxes and the full funding will be achieved at this pace by 2096 (as completion date).
- Question: Have you run into issues with level of analysis? Answer (from audience): Indiana did this with each resource agency and discussed with them what the scopes of the analysis should be, what alternatives should look like, and we discussed with each of them individually, we tried to go through each of the analysis on the whole. We had an agreement with SHPO that we would get through potential effects and we had an MOA. Did with section 7 and had coordinated with USACE and FWS and achieved success.
- Question: Where exactly is acquisition actually being done? Are you buying excess land for alternatives? Answer: On our build piece we will authorize ROW analysis. There has been a substantial amount of minimization. Also a bridge and interchange with 30 percent of design where the bridge is actually located. Under current management plan, we won't have used more than access rights. Presque Isle needs are less than $2 million and will only buy an amount to secure 200-300 feet of corridor.
- Question: Are those segments cleared all the way through the final decision: such as the Presque Isle Bypass TDM? Answer: You studied it in a tiered document CE, and then you have to study it in an EA and ESA TDM, which will not work well in Aroostock County.
- Question: If your corridors are so wide, do you have to look into 4f issues? Answer: We have 2 recognized tribes that we are looking at with traditional cultural issues. Within the draft we avoided all known resources. We have tribal acquisition in our 4f. We have to do enough design around these areas and look at 4f resources and have identified one we have to accommodate.
- Question: Did you make an evaluation that you would have to avoid all these resources? Answer: We used resource layers in GIS to avoid 4f resources. Not a lot of build on Rt. 1 south of Presque Isle to Rt. 1 North of Presque Isle. A lot of resources have been identified in the past 6 months.
- Comment: West Virginia did a tiered process but looked at corridor and only had a "no build' on the second tier. Had to do a lot of things with the statement: "as best as we can avoid." We made some commitments that we later found to be embarrassing. I think you need to do a thorough 4f. (Question to Audience) How many people feel that a Tier 1 is something that should be pursued? Answer: 4 out of 20. How many people feel that it is too risky? Answer: 12 out of 20.

APPLIED TECHNOLOGIES/GIS

Moderator
Randall Looney, Environmental Coordinator, Arkansas Division Office, FHWA

Speakers
Elizabeth L. Lanzer, Environmental GIS Manager, Washington State DOT
Robert Fuhler, GIS Section Head, Environmental Division, Arkansas Highway and Transportation Department.
Sharon Osowski, Ph.D., Ecologist, EPA Region 6

Description: The Applied Technologies/GIS session highlighted approaches to environmental problem solving that use geospatial tools. The presentations demonstrated some advantages of using geospatial tools relative to traditional ways of doing business. Randall Looney mentioned to attendees FHWA's new GIS website, GIS in Transportation (www.gis.fhwa.dot.gov) and introduced the session's three speakers. Each of the speakers provided an overview of ways their agency is using GIS to streamline the environmental review process.

Washington State's Environmental GIS Program (Elizabeth Lanzer)
Ms. Lanzer described the elements Washington State's Environmental GIS Program, focusing particularly on the State's GIS Workbench. The Workbench is a custom application built to assist WSDOT staff in accessing over 60 layers of environmental, natural resource management, and transportation data. Other aspects of the GIS Program and Workbench include:
WSDOT has made a lot of effort to enter into interagency data sharing agreements. There has been statewide data sharing coordination, allowing interested agencies quick and easy access to geospatial data. Agencies with which WSDOT has made data-sharing agreements include the WA State Department of Fish and Wildlife, the Office of Archeology and Historic Preservation, and the Department of Natural Resources. Every three months, the agencies update the data with any new information they may have acquired or developed. To date, WSDOT has not enforced data standards from data collect from different agencies.

- The agencies have also supported the development of an interagency data management forum located on the Internet (www.swim.wa.gov).
- The Environmental GIS Workbench, which now utilizes ArcMap software, provides WSDOT staff with a tool to locate proposed transportation projects and display relevant environmental data themes for that location or route. Prior to the Environmental GIS Workbench, users seeking this data had to navigate through a difficult environment that required them to know detailed information about scale and agency management of the data. The Environmental GIS Workbench provides a more intuitive method to locate this information.
- The Workbench offers access to 300 datasets by subject area and can be used through multiple phases of environmental review process.
- The Workbench also consists of a Highway Project Location Tool, a Map a Point Tool, a State Route View Tool, a Buffer Tool, and a Basic Mapping Tool.
- A valuable advantage of GIS is enables creation of consistent and better maps.

Comments, Questions, and Answers

- Question: How do the 300 data sets line up in the GIS? Answer: Sometimes the data do not line up. WSDOT accepts the accuracies of the Resource Agency data, and it works with the users to help them understand the data and any inconsistencies that may exist.

Streamlining Environmental Assessment through GIS (Robert Fuhler)
Mr. Fuhler described how Arkansas State Highway and Transportation Department (AHTD) initiated a GIS Unit in November 2000. The GIS Unit was fully operational in January 2001 and gained Section status in July 2003. The GIS Section acquires data from agency partners and creates its own data in-house. In-house data produced includes data on hazardous waste consolidation, land cover, land use, historic bridges, select prime farmlands, noise analysis, aerial imagery survey, and Arkansas base map data. Acquired data comes from various state and municipal agencies and requires AHTD to coordinate closely with them.

AHTD has developed a GIS Flowchart for EISs. The steps are as follows:

1) Initial request for study.
2) Identification of Need.
3) GIS Implementation.
4) Establishment of project boundary.
5) Development of imagery.
6) Compilation and analysis of data.
7) Post-processing and storage of data.

Within Steps 5 through 7, there are sub-steps that include alignment analysis, public involvement, preparation for contingencies, environmental constraints mapping, and documentation of metadata.

Examples of AHTD's GIS work are listed below:

- Analysis of low-strength soils – information obtained in these analyses can help transportation planners determine appropriate alignments for corridors.
- Wetland mitigation
- Wetland delineation
- Endangered species protection
- Historic structures management – AHTD digitally documents the cultural and natural features noted on GLO plats. It provides a quick an efficient way for staff archeologists to access plat information. The system also allows AHTD a new method to model and predict potentially historically valuable sites, as well as to facilitate new studies into areas such as historic transportation networks, historic wetlands, historic watersheds, and Native American Lands.
- Water quality analysis – AHTD uses GIS to buffer each public water supply wellhead. These buffers then become wellhead protection areas. The data layer is used to mitigate, minimize, and avoid these areas during projects.

After describing some of the ways in which AHTD is using GIS to promote environmental streamlining, Mr. Fuhler enumerated the following lessons learned:

- Coordinate with partnering agencies and institutions when possible.
- Communicate within own agency.
- At project start, develop a GIS method and standards to follow.
- Develop contingency plans or be prepared to develop them. Prepare for change.
- Train personnel and build the program from the bottom up, not top down.
- Post-process data.
- Document the process and metadata.

Comments, Questions, and Answers

- Question: Have FHWA Division Offices supported GIS and GIS purchases? Answer: Some Division Offices have given software, including ArcView, to some State DOTs. Some Divisions have also done some cost sharing with State DOTs.

- Question: Why is the GIS Section at AHTD organizationally connected to the Environmental Section? Answer: Leadership and staff in the Environmental Section at AHTD were the groups that would listen to and collaborate with the GIS staff and leadership. The Environmental Section also believed GIS could be a valuable tool at the front-end of highway projects.
- Question: Does AHTD have a standard for collecting data in the field? Answer: There is a standard that has been set up in conjunction with the State Historic Preservation Office for the collection of historic and cultural data.

Geospatial Tools in Action: EPA Region 6 GIS Screening Tool for Environmental Assessment and the Texas Ecological Assessment Protocol (Sharon Osowski)

Ms. Osowski detailed how the GIS Screening Tool (GISST), developed by EPA Region 6, can be used to streamline the NEPA process. GISST is a system that imposes a scoring structure on GIS "coverages" to inform decision-making and prioritize environmental protection. The system has many applications from evaluating soil permeability and erosion potential to assessing the cumulative impacts of livestock feedlots. In Texas, TxDOT has used the GISST for environmental assessment. TxDOT uses the tool to identify priority areas and to inform TxDOT decisions about where to concentrate resources for further studies. The GISST has been designed to better understand the potential significance of single and cumulative impacts and to facilitate communication of technical and regulatory data with industry, the public, and other stakeholders.

GISST uses a watershed approach to evaluate risks. A ranking system of 1 (less concern) to 5 (heavy impact) is used to evaluate over 90 different, peer-reviewed criteria. The ranking system provides users a way to proactively identify environmental constraints and potential red flags. It helps provide the opportunity for avoidance instead of mitigation.

Texas Ecological Assessment Protocol (TEAP)

Currently, FHWA, EPA, and other agencies are using GISST in the Texas Ecological Assessment Protocol (TEAP). The purpose of TEAP is to identify ecologically important resources across the State in order to support greater collaborative approaches to strategic, ecosystem management. The TEAP model is analyzing three key environmental aspects: **diversity, rarity**, and **sustainability**.

For diversity, the model measures:

1. The appropriateness of land cover
2. The contiguous size of undeveloped land
3. The Shannon Land Cover Diversity Index
4. Ecologically significant stream segments

For rarity, it measures:

1. Vegetation rarity
2. Natural heritage rank
3. Taxonomic richness
4. Rare species richness

For sustainability, TEAP measures:

1. Contiguous land cover type
2. Regularity of ecosystem boundary
3. Appropriateness of land cover
4. Waterway obstruction
5. Road density

A composite layer is created for these three aspects and then transportation layers are overlaid on the composite. A cumulative impacts map can be created, and project alignments might be more appropriately placed through less constraining areas.

SHAPING THE FUTURE OF THE PROFESSION: THE ENVIRONMENTAL COMPETENCY BUILDING PROGRAM

Facilitators
Esther Lee, Program and Policy Analyst, Volpe Center
Jennifer Bowmar, Transportation Engineer, Oklahoma Division Office, FHWA

Description: This session was a facilitated discussion on the recent efforts of the FHWA Office of Project Development and Environmental Review to improve the quality of the environmental/regulatory process by addressing the existing needs, available resources, and opportunities to assist environmental practitioners in the field.

FHWA office of development and product review has created this program. The project intends to gain the following:

1) Honest Feedback
2) Priority of issues for ECB
3) Critical Elements to develop ECB

Reasons for creating institutional knowledge base:

1) Transportation projects and environmental review process challenges
   Project delays, cost overruns, strained interagency relationships
2) 43 percent of the FHWA workforce is eligible for retirement by 2010; and, 50 percent of the state transportation workforce is eligible for retirement by 2013.

The purpose of ECB is to develop, prepare, and maintain a high level of environmental expertise for transportation agencies and their partners. The first steps of ECB are 1) draft a "State of the Practice Report" and 2) conduct Needs Assessment interviews and draft subsequent report.

Questions that were addressed in this workshop, include:

1. Are there any critical challenges to add or future trends to consider?
2. What are your personal (agency or region's) top 3 priority issues? Why?
3. What are your current or past examples of what is working well/or not working well with current competency-building initiatives by FHWA and partner agencies?
4. What kinds of activities are needed but missing?

ECB Plan with Potential Elements
Technical Assistance
Training-Resource Guide, Calendar of Courses
Education- UTC, colleges, distance learning

- Information Dissemination – catalogue of research and resources
- Outreach and Customer Feedback – website, conferences, newsletter
- Certification Programs
- Program Evaluation

Insights

- There are conflicting missions, no common understanding

- Regional variations in agencies
    - Pennsylvania has 3 different offices
    - Texas has 4 different offices
    - New York has 2 different offices
    - Mississippi has 5 different offices
- All with different personnel, procedures, interpretations
  This is similar to FWS
- Personal Relationships are essential
- Need for an Environmental Ethic, across the board
- Consultants cost, time, project administration, change orders and accountability
- Inadequate scope of work w/ DOT and Consultant Understanding of Scope
- Viability of NEPA projects in LRTP
- Need to go beyond NEPA to include other areas and make future additions
    - Clearance vs. Decision-making for DOT Document Decision, not document for making "decision x"
- Social and Community Impacts, including Public Involvement
- Maintaining Environmental Management Mindset
- Clarification, Consistency of FHWA Program across country
- Lack of succession planning (as stated in the purpose for the ECB program creation)
- Integration of other disciplines
- Honest Decision-making, transparent documentation
- Update file, better record administration
- Mentorship
- NHI is working, but needs to offer more courses more often
- More trainings from resource center in divisions
- Customization of training to Division by RC
    - NHI is good for technical mentorship to teach leadership management, interpersonal skills
- Written Guidance Cookbook
- Try to incorporate NEPA training into University Curriculum
- Technology for information training distribution (web, CD ROM, etc.)

UPDATE ON HISTORIC PRESERVATION ISSUES

Moderator
Mary Ann Naber, FHWA Preservation Officer, Office of Project Development and Environmental Review, FHWA

Speakers
Carol Legard, Liaison with the Advisory Council on Historic Preservation, FHWA
Mary Ann Naber, FHWA Preservation Officer, Office of Project Development and Environmental Review, FHWA

Description: The purpose of this session was to update attendees on recent developments affecting historic preservation practice in transportation. Speakers presented the latest information on Section 106 regulatory duties of the FHWA Liaison, and developments in the approach to address potential National Register eligibility of the Interstate System.

National Register Eligibility of the Interstate System (Mary Ann Naber)
Ms. Naber explained that the U.S. Interstate Program, the largest piece of infrastructure in world history, will celebrate its 50th anniversary of the concept in 2006. The Federal Highway Administration (FHWA) is developing a programmatic agreement to determine the Interstate Program's role in being eligible for the National Register of Historic Preservation (Register). The 46,000 miles of Interstate -- including bridges, turnpikes, and corridors – first began being assessed for the Register in 2000 while work on Missouri's Interstate 70 was underway. Ms. Naber described the following activities that are underway to address the question of Register eligibility:

- The US Department of Transportation (DOT), FHWA, the Advisory Council on Historic Preservation, the National Conference of State Historic Preservation Officers (SHPO), the National Trust for Historic Preservation, and others, created an Ad Hoc Task Force to address eligibility for the Register with representation. The Task Force was charged with determining how to handle the Interstate Program if it is found to be eligible for the Register.
    - The Task Force agreed to implement a historic context study to determine eligibility. FHWA financed this study in 2002. A preliminary draft report was issued in the summer of 2003 for comment, and identifies historical resources in the Interstate system.

Ms. Naber attributed much of design of the Draft Programmatic Agreement (PA) to Allan Masuda, the Division Administrator of the FHWA Missouri Division Office.

- A Draft PA was created that recognizes that (1) the Interstate system, as a network, is eligible under Section 106, (2) the resource being protected is the interconnectivity created by the Interstate, allowing most of the lane miles to be continuously upgraded, and (3) the system is eligible for the Register, with individual pieces being eligible, not the system as a whole.
    - The PA lists activities that can be done to the Interstate to continue its evolution as a safe and effective system (e.g., upgrades, repairs, etc. that do not have an adverse affect on the system). This includes adding new links and upgrading bridges not included under Section 106 of the National Historic Preservation Act.
- Options exist for states to identify Register eligibility for individual features:
    - Receive concurrence by SHPO that there are no resources covered under Section 106
    - Determine corridor significance. This survey does not require extensive studies, but instead requires that the DOT and SHPO visit the site under review. It allows flexibility for states to address this determination using their own approach.
- The comment period for the Draft PA has been extended to July 21, 2004.

Legislation for Reauthorization
The three key issues related to historic preservation that will be further defined in new legislation include: (1) Interstate eligibility, (2) exemption determinations, and (3) the satisfaction of Section 4(f) under Section 106. Below is a description of current legislation proposals.

- SAFE-TEA has a provision to exempt the Interstate System from Section 106 and Section 4(f) determination to ensure it operates as a safe network system.
    - SAFE-TEA allows Section 4(f) to be met with the Section 106 agreement, with the result being no adverse effect or an adverse effect Memorandum of Agreement (MOA).
- The House and Senate bill provide exemptions under Section 4(f), but not Section 106. However, they include different provisions for how states determine pieces of Section 106 eligibility (i.e., some states have SHPO as lead, others have Secretary of Transportation as lead).

Interagency Agreement with ACHP on Tribal Consultations
An interagency agreement between ACHP and FHWA is being creating, which defines how Federal agencies meet regulations and requirements in accordance with ACHP and tribal consultation issues.

- 45 percent of the cases reviewed by ACHP are for FHWA
- ACHP plans to create training for FHWA Division Offices to address these issues.
    - October 12, 2004: Porch Creek Band Tribal meeting with south eastern states
    - Alaska training to be determined

The Role of ACHP (Carol Legard)
Carol Legard described her position as FHWA Liaison to ACHP and upcoming amendments to Section 106.
Role of the Liaison to ACHP

- Provides better service and a single point of contact to FHWA Division Offices, and to provide technical assistance on Section 106.
- Intends to participate on all statewide programmatic agreements related to historic preservation
- Will work with FHWA Headquarters on national initiatives
- Serves as a resource on tribal consultation

Aims to provide a more timely review of things, especially adverse-effect findings or statewide programmatic agreements

Amendments to Section 106:
Amendments to Section 106 are to be printed in the Federal Register in late summer 2004. They will go into effect 30 days after they are published in the Register. The amendments address the concern of whether ACHP has exceeded their authority to overturn a finding of effect for a Federal agency. See www.achp.gov for more information. The amendments include:

- If there is a disagreement between the SHPO and Federal agency on the finding of no adverse effect or no historic finding, the agency still needs to consult with ACHP, but it is not binding.
    - If the SHPO's view is adverse effect, see ACHP and if they agree with the SHPO further work by the Federal agency will be needed to reach a determination.
- The ACHP will have 15 days to comment on no-adverse effect. The new regulations will allow ACHP to extend the comment period by another 15 days with given notice.
- Even if no-adverse effect is found, an agency cannot proceed with the project until all consulting parties have been able to comment (assumes a 30 day comment period).

Comments, Questions, and Answers

- Comment: FHWA funding would be a possibility through research or streamlining funds for specific states, but this option is still under investigation.
- Comment: Regulations state that ACHP has 15 days to review. Amendments will allow extension if working with a dispute of no-adverse effect. If an agency has not heard from ACHP in 15 days, projects can continue (if non-dispute). ACHP reserves the right to enter into the process at anytime.
- Question: What is the status of the Net Benefits Programmatic Evaluation? Answer: Comments are currently being incorporated to include ACHP's thoughts. A meeting with the US Department of the Interior will take place and the final will be posted soon. The historic roads programmatic evaluation is also being developed to have no adverse effect or minimize adverse effects.
- Question: What decided not to determine actual eligibility of the Interstate by the Register? Answer: A consensus determination of eligibility was made to address comments of individual pieces at a network basis. The Register was not asked to make determination because the Interstate is not a good fit with the Register's objectives. This keeps the determination at a broader level.

- Question: How is a MOA to be filed with ACHP? Answer: Currently MOAs can be sent for review to Don Clemens at the ACHP Eastern Office, or to Ms. Legard at the Western Office. All new work can be sent directly to Ms. Legard. She will be moving to the Washington, D.C. Office in September 2004.
- Comment: Division Offices would like to receive notification from ACHP that their MOAs were received and filed. This can occur via email or letter. Currently, they receive no notification.
- Question: Is the Interstate Context Study available? Answer: It is currently in draft form and FHWA Headquarters will decide whether it can be immediately shared with states, or needs further refining before being shared.
- Question: Will FHWA Division Administrators be invited to the tribal consultation meetings/training? Answer: All Division Office and Federal Lands Highway staff are all invited. Many Division Administrators are often the lead in building relationships with the tribes (e.g., Minnesota Division Administrator meets monthly with tribes).
- Comment: Alabama was concerned with the system as a whole being eligible for the Register, but the state agrees with the programmatic approach.
- Question: Why not have Interstate be exempt? Answer: Pieces are already listed in the Register and other pieces are still eligible. The programmatic agreement sets a protocol for determination and lists activities that are allowable.
- Question: Has their been consideration for railroad programmatic agreements or exemption? Answer: Individual undertakings cross over railroads, but may not undertake the entire railroad. The integrity of the system is not consistent because of varied railroad companies.

AIR QUALITY INNOVATIONS

Moderator
Victoria Martinez, Air Quality Team, Office of Natural and Human Environment, FHWA

Speakers
Diane Turchetta, Air Quality Team, Office of Natural and Human Environment, FHWA
Becky Dennison, Air Quality Specialist, Office of Natural and Human Environment, FHWA
Kathy Daniel, Air Quality Team, Office of Natural and Human Environment, FHWA
Reggie Korthals, Environmental Director, Northwestern Indiana Regional Planning Commission
Mike Koontz, Air Quality Team, Office of Natural and Human Environment, FHWA
Rob Kafalenos, Air Quality Team, Office of Natural and Human Environment, FHWA

Description: The session updated participants on recent innovations in reducing mobile source emissions. It provided new information on freight/idle-reduction/diesel retrofit efforts, the Congestion Mitigation and Air Quality Improvement Program (CMAQ), and It All Adds Up to Cleaner Air, the DOT/EPA public outreach/education initiative. This air quality session stressed FHWA's on-going commitment to researching, implementing, and distributing mobile source emission reduction techniques, innovations, and applications. The session focused on emerging air quality issues related to freight transport; public education tools that can assist state and local organizations; and, how the CMAQQ program is evolving.

Addressing Northwestern Indiana Air Quality Issues (Reggie Korthals)
Northwestern Indiana has many hurdles to publicizing and promoting a cleaner air program with its citizens. Ms. Korthal's office has found some innovative and entrepreneurial methods to accomplish this task.

Facts about the area:

- 47 percent of pollution is from mobile sources
- Northwest Indiana has almost no public transportation
- One small area is served by a train
- More difficult to communicate with public for outreach programs (without advertising on transit)

As everyone has a finance problem, possible solutions include forming collaborative agreements. On the environmental front, Northwest Indiana has one of the highest concentrations of biodiversity in the United States

Have used CMAQ money to create air quality information projects. This funding has been critical as the county in the only one in the state that is not permitted to conduct its own tax assessment and thus can not rely on property taxes as a source of revenue.

The selected approach is the "pooled fund effort"

- Accomplish coordination with greater Chicago Media Market
- Now all buses will run off of bio-diesel or be retrofit to run off of it
- Travel Centers are being outfitted with emissions reducing technology, and this has helped with environmental justice issues in the area
- Gas Can Exchange, has been a great way to replace old gas cans and we have given 10,000 gas cans and collected 12,000
- Goal to share each other's material for regional planning issues
- Have an environmental component to new drivers education program, which includes XRT- a guide sponsored by Ford recommending vehicle make and model to help consumers understand the impacts of their consumer choices

Comments, Questions, and Answers

- Question: Can you CMAQ funds for hybrid vehicles? Answer: No, as current regulations specify vehicles that run off of alternative fuels. Also, CMAQ money is specified for heavy vehicles not private/light vehicles.

"Innovative Projects" in Four Non-Attainment Areas (Becky Dennison)

- Money is divided between states according to federal formula
- Idle-Air has aggressively marketed itself as a provider of electrification of truck stops, now there are 250 Idle Air spaces
- This is a public private partnership (gave $2.5 million for installation of initial project)
- In contract that they have to keep it operable for 10 years
- Idling was included in Mobile 6 conformity regulations
- Beaumont is currently in a conformity lapse and there are limited options for addressing the problem. Planning on creating an Idle-Air could bring them into conformity, as this travel center would have a reduction of 3-4 percent of emissions.
- Have to look at Idle Air vs. competitors, as the company is currently making profits without competitive bids. CMAQ pays for engine replacement or accelerated retirement. It has 5-6 school contracts pending.

Social Marketing (Kathy Daniel)

- Tried new outreach approach called "social marketing". One thing the team looked at was how people operated their vehicles.

- Explored questions such as: Do people keep buying new vehicles on a regular schedule vs. it driving it until it dies?
- Have to exchange information on most recent innovations. People get emailed whenever there is a new development or message posted to website
- Use free billboards where billboard companies do not want to have blank facings
- DOE, CDC, and market research results have shown us the benefit of creating a new set of adds.
- Funding for this project is one of the longest running federal programs

Why does FHWA Care about Freight Emissions? (Diane Turchetta)

- Transportation is the second leading sector in total usage of energy and fastest growing for creation of emissions.
- There are many new non-attainment areas.

EPA Regulatory Actions:

- Heavy Duty Diesel trucks and buses will require new control technologies to the level of 15parts per million in 2007
- Vehicles will be 95 percent cleaner than today's versions
- Non Road sources including construction, agricultural, and industrial equipment will have to reduce emissions by over 90 percent
- Locomotives and Marine Engines reduces sulfur levels to 500 parts per million by 2007 and 15 parts per million for land based fuel by 2010
- Voluntary Programs include: Clean School Bus, which retrofits engines with better emission control technology, Smartway Transport, which focuses on voluntary CO2 emissions, and Diesel Retrofit, which addresses pollution from construction equipment

What the Office is doing:

- Research: Impacts of Inter-modal Freight Movement on Air Quality
- Working with DOE and EPA to reduce idling emissions from heavy duty engines
- Heavy duty Diesel Engine Retrofits
- Collaborations between FHWA Office of Freight Management and Operations, and Office of Planning
- Monthly FHWA sponsored net conference seminars
- July 21 seminar will cover idle-reduction technologies/initiatives

TEA-21 updates for CMAQ in Reauthorization (Mike Koontz and Rob Kafalenos)

Mr. Koontz described how TEA-21 focused on transportation issues and brought up areas of non-attainment (for air quality) and alternative fuels.

- CMAQ invested $13 Billion dollars in 15,000 projects; these funds are apportioned according to the formula in the transportation bill. Can make many changes to the National Ambient Air Quality Standards (NAAQS)
- CMAQ will probably switch to MPUs, and result in more non attainment areas for Particulate Matter 2.5 Standard
- Diesel Trucks need traps; catalytic converters can only go to school buses if the individual vehicle has been determined to have unsafe levels of emissions

Mr. Kafalenos went on to elaborate on these changes:

- New standards will affect CMAQ…the new transportation bill holds formula (see 23 USC 104)
- No counties have been removed from the apportionment in the short term
- CMAQ Funds apportioned based on severity of the one-hour ozone non-attainment classification
- Carbon Monoxide is included in formula
- Maintenance areas are included in the formula

SAFETEA and New Pollutants:

- FY 05 apportionment will include newly designated ozone areas at a 1.0 value
- New PM counties will receive a value of 1.2 in the apportionment formula
- Multiple pollutants earn an extra weighting
- Biodiesel is a good alternative to diesel, but not in NOx limited areas as Bio-diesel (like conventional diesel gas) contributes high NOx emissions
- CMAQ currently can not be used for hybrids, but this may change in the future

Five areas of interest include:

1) Codified the "enlibra" principles (House of Representatives)
2) Deadline for NEPA comments (the administration wants 30 day comment period, 60 days for DEIS) Senate Bill
3) Statute of limitations what is the statute of limitations, administration proposed 180 days for this time period, and 100 day proposed by House of Rep., Senate proposed none/unlimited
4) 4F to allow it to be substituted with 106 as long as there is no adverse effect
    a. Movement will allow states to do a CE if approved by Secretary; secretary will follow guidelines
    b. Will subject that agency to all federal laws
5) CE's Don Young said "All we need is an "amber light" urgency and everyone wants this bill"

The office is in the process of establishing a public access database to enable the public to track interesting uses for CMAQ.

Comments, Questions, and Answers

- Question: Between using qualitative and quantitative eligibility as criteria, do you use qualitative data for CMAQ? Answer: Most projects want conformity credit so they have some sort of value involved. We take a dim view of qualitative analysis.
- Question: At the Resource Center I am always interested in what other people are doing, how can we get that information out? Answer: That can be done with public data on a website.
- Question: Where did conformity come from? Answer: We were interested in off road emissions. We saw tremendous benefits in these areas; it was not hard to see how these impacted the States. In a position of funding projects that will never make it to CMAQ, CMAQ has to come for a Transport Plan and TIP.

Question: Re: tracking systems FIAMS? Feed directly into data. It seems better to put lump funds instead of detailed amounts, which may change by nominal amounts? Answer: Good Point.

TRIBAL TRANSPORTATION AND ENVIRONMENTAL ISSUES

Moderator
Tim Penney, Native American Coordinator, Office of Planning, FHWA

Speakers
David Grachen, Project Development Manger, Georgia Davison Office, FHWA
Sharon Love, Environmental Program Manger, Washington Division Office, FHWA

Description: Tim Penney introduced the topic of outreach, consultation, and coordination with tribes. Specifically, Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to hold meetings with tribes on issues related to historic and cultural properties. It is FHWA's policy to

have a government-to-government relationship with Federally-recognized tribes. In order to maintain this relationship, Mr. Penney emphasizes the importance in consultation, outreach, coordination, and continued communication.

New Echota Traditional Cultural Property (TCP), (David Grachen)
Mr. Grachen introduced the TCP Study, which was initiated in 2000 and occurred in northwest Georgia. The Study was the recipient of the 2004 National Association of Environmental Professional Public Involvement Award.

The TCP area, defined in the National Register Bulletin 38 in 1993, is one that has cultural, spiritual, or historical significance. TCP studies first began in Hawaii and California and were focused on Polynesian and Chinese areas, respectively. The Case Study described below was a proactive consultation process initiated by the Georgia DOT and Georgia FHWA Division Office to address the New Echota area.

- Goals of Study: Conduct effective consultation with Cherokee, document basics, serve as a tool and model, and help state build trust with tribes
- Funding: FHWA Headquarters provided $200,000 in Preliminary Engineering funds and $100,000 in Environmental Streamlining funds for Phase II of the Study. This financial support proved to the state that they were invested in the effort.
- The Study worked to determine if a known historic site could be designated a TCP. If so, it could then be placed in the National Register.
- The Study relied on archaeological and cultural data. New Echota continues to be important to cultural groups and its' history is shared verbally throughout the community, however oral history is often difficult to measure for the National Registry.
    - The TCP Process included oral history and the importance of New Echota to the people, as communicated through research and interviews. After discussing the community's feeling about New Echota, it became clear that the area was a TCP.
- Phase II will focus on continued consultation with tribes and may include land acquisition and/or archaeological work to determine if artifacts exist.
- Key successes of this Study included:
    - The dialogue that began will continue to help build relationships and trust and will benefit future projects.
    - Finding a way to develop a process is the first step to seeing change.

Comments, Questions, and Answers

- Question: Is there discussion of relocating the road outside the park that is in the New Echota Historic Site? Answer: Yes, it is being considered. The environmental review had not yet begun. It is expected to be an environmental assessment.
- Question: Will the new TCP boundary be the new Park boundary? Answer: The landowners want to develop within this boundary and are not yet willing to allow this change.

Tribal Issues and Project Delivery (Sharon Love)
Ms. Love of the FHWA Washington State Division Office described several projects taking place in the state that have important impacts on tribal issues and project delivery. The Washington State DOT hired a tribal liaison for tribal projects, and reports directly to the Secretary of the DOT. Prior to Section 106 changes, Ms. Love noted that failure to act early was the largest operational issue that the state faced. Several highlighted projects, with their successes and lessons learned, are included below.

Spokane County, Coyote Rocks

- Transportation Enhancement funds were used to add bike lanes and accomplish sidewalk widening.

- Mitigation will be carried out in the form of a video that will be developed by the Tribe about their history.
- The area was already listed as a TCP in the national register, but the designation was initially overlooked.
- *Lesson Learned:* A new checklist has been created to ensure that no step is overlooked.

Edmonds Crossing
Project began in 1994 and involved a fishing boundary issue.

- Out of the 29 tribes in the state, 6 tribes had Edmonds Crossing as a critical area.
- The consultant did not follow through with all the tribes and Section 404 was not addressed.
- *Lesson Learned:* It is essential that all issues be addressed early-on.

Hood Canal Bridge
Floating bridge had a portion sink in the 1970s.
In order to replace bridge, an old village now underwater was going to be impacted.
Problems with data accuracy had GIS showing the village outside of the projects site. Artifacts and human remains were found in site.

- *Lesson Learned:* Early involvement with the tribe and a good monitoring plan are necessary.

Washington State DOT is taking several steps to improve their coordination with tribes in order to avoid potential issues. They have created a Section 106 programmatic agreement that exempts projects with minimal impacts. A training program has also been created to train state transportation professionals on Section 106. In addition, the State Secretary of Transportation was very involved with the tribes even during staff turnover. However, the success of any project must rely on the agency itself rather than particular staff in case of staff turnover and the need to rebuild relationships. Finally, the State was willing to meet in a neutral/positive setting to help build on the relationship.

Comments, Questions, and Answers
Question: For the Hood Canal project, would you have been able to find another site? Answer: The bridge was in very bad condition and required preparation in the area to account for detours while the pontoon work was being done. From a national environmental standpoint there were few issues because it was already an industrial site and would actually create improvements in the area.

- Comment: It was an internal decision to have Ms. Love carry the project through to the MOA because she continued to build the relationship with the tribes.
- Comment: Several concerns related to tribal consultation should be addressed by FHWA Headquarters, including:
- Question: How do you work with tribal groups that are not federally recognized? Answer: They can still be included in public involvement and scoping. Under Section 106, they can be invited as a consulting party.
- Question: What tribal capacity building efforts are underway? Answer: A Peer Exchange with tribes discussing transportation planning tools took place in February 2004 and can be found at http://www.planning.dot.gov/Peer/NewMex/NewMex.htm. Also, Robin Mayhew at FHWA is preparing case studies on tribal transportation planning, which will be posted on FHWA's tribal website.
- Question: Is anyone paying for tribal travel? Answer: Project mitigation funds or T2 funding can be used for this purpose, if planned in advance.
- Comment: Compensation is an issue for Western states and more tribes also want to be compensated for monitoring project areas. Tribes want to be compensated at the Federal rate instead of the state rate.

- Guidance on payment can be found on FHWA's Historic Preservation website http://environment.fhwa.dot.gov/histpres/index.htm.
- Comment: Upcoming events include: FHWA meeting on tribal issues (August 17-18, 2004) and the Annual National Tribal Transportation Conference to be held in Scottsdale, AZ (October 2004).

CONTEXT SENSITIVE SOLUTIONS

Moderator
Harold Peaks, Project Development Team Leader, Office of Project Development and Environmental Review, FHWA

Speakers
Mark Taylor, Project Development Engineer, Central Federal Lands Highway Division, FHWA
KLynn Berry, Community Impact Specialist, FHWA Resource Center
Keith Moore, Community Planner, Office of Project Development and Environmental Review, FHWA

Description:
Presentations during this session focused on examples and methods for considering the total context within which a transportation improvement project exists. Case studies and experiences from both the Federal Lands and the Federal-aid programs were presented.

Context Sensitive Solutions Overview (Harold Peaks)
Every project has a community, and project design should be appropriate to the community.
Context sensitive solutions (CSS) preserve the environmental, scenic, aesthetic, and historic resources of an area while maintaining safety and mobility.
FHWA is committed to moving CSS forward and is promoting flexibility in highway design. States and Federal lands are becoming active in CSS.
There are not CSS sections in EISs or EAs.
FHWA's long-range strategy is to encourage and support all States and Federal lands CSS training.
FHWA is also looking to fund marketing through AASHTO's CEE and to support Federal Lands' CSS course development. The development of guidance for CSS in the urban environment is also being funded.
The CSS roles of FHWA Division Office staff is to:
Seek to get involved in the CSS process
Encourage interdisciplinary teams
Seek to develop details
Help define the context
    - Help define sensitive resources
    - Focus on integration and outreach
    - Be proactive
    - Ask questions as part of the project meetings
    - Serve as a catalyst for change
    - Have peer to peer exchanges
    - Collect good examples to share

Examples of FLH's experience with CSS (Mark Taylor)
Mr. Taylor described why FLH emphasizes CSS because they enable the organization to achieve its vision—to create the best transportation system in balance with the values of Federal and Tribal lands. The CSS approach that FLH takes seeks to see that the project outcome satisfies the purpose and need; to explore alternatives that equally address goals for safety, mobility, protection of the environment, and reflect community values; and, to be collaborative and interdisciplinary in nature, involving stakeholders, resource agencies, and the public as a part of the design team.

Other characteristics of FLH's CSS experience are summarized below:

- FLH believes CSS extend service life and aesthetic value while increasing safety.
- A long-standing partnership with FLMA has been developed.
- FLH emphasizes early public involvement, the establishment of interagency, multi-disciplinary teams, the maintenance of early and continuous stakeholder communication, collaborative decision-making with FLMA, and development of an understanding of the scenic, aesthetic, historic, environmental, and cultural contexts of project areas.

Mr. Taylor outlined several recommended practices. These practices include:

- Verify the sound, factual basis for the purpose and need.
- Listen to those who may be affected before proposing design solutions.
- Be flexible and consider alternative, corridor-specific design criteria that meet needs.
- Understand the basis for design criteria and how it affects operational performance and safety risk.
- Verify what is needed for collaborative evaluation and decision-making.
- Be ready, willing, creative, and innovative when responding to local environmental concerns.
- Follow proven processes that attend to details affecting quality for all disciplines.
- FLH uses visualization to promote CSS and to facilitate stakeholder and public involvement. It helps to convey to the user and community the contextual value of the project. Photo simulations, 360^{o} views, and animations are some of the design visualizations that FLH has used.
- Design techniques that FLH employs were also described during the presentation. Some of these design techniques are:
- Curvilinear alignment, slope treatments, rounded/vegetated ditches, aesthetic curbs and pedestrian sidewalks, fences that blend with the environment

Context Sensitive Solutions with High Dollar Amenities (KLynn Berry)
Ms. Berry stated that the equation of context sensitive solutions with high-dollar amenities and complex mitigation strategies leaves some practitioners cautious about the CSS approach. But being responsive to community concerns, aware of local needs, and "in sync" with the project's surroundings does not have to mean having big budgets. Stressing that CSS does not have to equate big projects and high costs, Ms. Berry presented case studies in context sensitivity from projects that are smaller in scale and cost but just as high in benefits to the community as other CSS.

Example 1 – North Carolina: Grassy Creek Bridge:
The existing bridge at Grassy Creek was a one-lane bridge that had historical significance within the community. It was built over a wild and scenic river. The bridge, however, was "fracture critical," or could collapse with the failure of one member. Considerable community interest surfaced when it was proposed that the bridge be replaced.

NCDOT originally wanted to build a 3-box culvert but met resistance from the community. It wanted the existing bridge to remain or wanted another single lane bridge. The culvert would have also required a

temporary on-site detour. After comprehensive involvement with the community, it was decided that the new bridge would be a spanning-arch structure with a stone façade. NCDOT also committed to keeping the natural bottom to the stream, to maintaining a sandbar for animal passage, and to building a rustic guardrail through grass shoulders.

Original cost estimates for the 3-box culvert alternative were $651,000, including the on-site detour, which would have cost $105,000. The new, community-accepted project, which did not require construction of the detour, ended up costing $565,000, roughly a $19,000 difference.

Example 2 – Griffin, Georgia: Sixth Street Bridge:
The Sixth Street Bridge in Griffin, GA spans six rail lines of the Norfolk Southern Rail Road, two lanes of SR 155, and two lanes of Broad Street. It was originally constructed in 1912 and reconstructed in 1958. A bridge replacement was necessary to address a low sufficiency rating for its structural condition – a score of 38.3 out of 100. The functionally obsolete existing bridge also had inadequate vertical clearance.

The community setting of the bridge required CSS as the City of Griffin had an interest in the aesthetic appeal and associated history of the original structure. The original street for Griffin, Spaulding County's first county seat, grid was laid out in 1840. The railroad line helped Griffin serve as a major cotton market throughout the 19th Century, and it also supported a chair factory, lumber company, bottling works, and a flourmill. The neighborhood of East Broad Street is an older neighborhood first inhabited between the 1890s and 1930s. Gabled Ell cottages, Georgian bungalows, Greek revivals, and American foursquare buildings are in the area. Several of these buildings are eligible for the National Register. In fact, the district received a National Register District nomination in 1988 and is now the Griffin Commercial Historic District.

The City wrote a letter to GDOT requesting that the new bridge look like the old, keeping its recognizable trusses. GDOT was responsive to the community and the new bridge will have two 12-ft lanes, a curb & gutter, sidewalks, pedestrian handrails, and ornamental lighting. GDOT also agreed to fabricate and attach a non-structural steel truss structure on the outside of the bridge caps, similar to the existing overhead structure, to the new bridge. Columns will also be designed to replicate the original.

The anticipated classification of action is a CE and the estimated cost is $2.5 million. The cosmetic truss is expected to cost $75,000, or about 3 percent of the total project costs.

Example 3 – Idaho: SH-75, Alturas to Timber Way:
During the construction of SH-75 in Idaho, it became necessary to reseed the new slopes create along the road. Instead of using the traditional trucks and equipment to do this, a much cheaper and context sensitive solution was used—sheep.

On the project, the mixing and seeding of the soil were concerns of project managers. The slopes were too steep to use a seed drill on or to run a disk or harrow. Furthermore, broadcast seeding would not be very effective in the setting, as animals might eat the surface seeds. The seeds needed to be mixed with mulch and soil and pushed down below the surface. To do this, sheep were used to roughen and pockmark the soil, creating a rough soil surface to catch water and resist runoff. The idea was borrowed from the Forest Service, which sometimes uses this approach in burned areas inaccessible to vehicles.

The technique also matched the historic setting of the community. In 1880, the Town of Ketchum, Idaho was one of the richest mining districts in the Northwest. By the early 1890's, the price of silver declined and the mining boom had ended, and a new industry appeared in Ketchum. Sheepherders from the South

drove their herds through Ketchum to summer grazing in the region. By 1920, Ketchum was the largest sheep/lamb shipping station in the U.S.

Now, in October, the mountain town of Ketchum, Idaho is the setting for The Trailing of the Sheep Festival. In keeping with the century-old tradition, sheepherders move their flocks from summer pastures in the mountains north of the areas resort towns, south through the Wood River Valley to winter desert grazing areas. The Festival celebrates this tradition and for one afternoon over 1,700 sheep are paraded down Main Street Ketchum, passing restaurants, boutique shops, coffeehouses and hotels.

Example 4 – Mississippi: Senator Delma Furniss Hospitality Station:
Mississippi law allows for the construction of hospitality centers. Typically, engineers and architects are hired to design them. During construction of the Senator Delma Furniss Hospitality Station, contractors discovered an important archaeological site. Local students were invited to visit the site on days called "School Visit Days" to learn about the site. After construction, MDOT decided to highlight the archaeological resources found and the area's prehistory at the hospitality center. To do so, MDOT produced brochures, posters, and other materials to educate the public. Local students continue to be invited to the center.

Key Lesson Learned:

- Projects that appear to be complex and expensive, are not always so, and projects that appear simple and inexpensive are not always so.

FHWA's Monitoring of CSS progress in States (Keith Moore)
Mr. Moore gave a presentation describing FHWA's monitoring of CSS progress in the States. He discussed the criteria created as a part of the VFG that asks Divisions to provide CSS information every six months. A majority of the session was a question and answer session with the session attendees. The key comments, questions, and answers are summarized below.

Comments, Questions, and Answers

- Question: What is the difference between CSS and Integrated Approaches? Answer: They are two pathways to the same implementation outcome. As a part of the VFG there is an either/or clause that indicates States can be classified as a CSS-State or an integrated approach State.
- Question: Is there a significant difference between the FHWA and AASHTO design guides? Answer: In 1997, ASHTO had planned to formally adopt FHWA's design guides. The believed it needed four additional chapters, so they wrote these in addition to FHWA's guide. The AASHTO design guide is a supplement to the FHWA guide.
- Question: Do you have any words of wisdom on how CSS activities match negotiated time frames goals? Answer: It is hoped that CSS activities will shorten the time required to complete a project. CSS are intended to avoid duplication of work and garner early public support. When a community is involved to the point it feels it is a decision-maker, time is saved in the long run. By the time formal public involvement arises, people have already developed support and a sense of ownership over the projects.
- Comment: Wildlife crossings should be included in CSS speak and examples because they are context sensitive to resource issues.

AIR QUALITY AND NEPA: THE SLEEPING VOLCANOE

Moderator
Mike Savonis, Air Quality Team Leader, Office of Natural and Human Environment FHWA

Speakers
Bob O'Loughlin, Air Quality Technical Service Team Leader, FHWA Resource Center
Jim Cramer, Transportation Planning Group Leader, Michigan Division Office, FHWA
Gary Jensen, Office of Natural and Human Environment, FHWA
Cecilia Ho, Transportation Conformity Team Leader, Office of Natural and Human Environment, FHWA.

Description: The Air Quality and NEPA session was an interactive session that provided participants an opportunity to learn about air quality opportunities and challenges that occur during project development. Topics included air toxics, greenhouse gases, active living, cross border air-quality protocol, and other emerging issues.

Update on the Mexican Truck Study (Cecilia Ho)
Ms. Ho gave an update of the Mexican Truck Study update. Key points include:

- In 2002, President Bush lifted a moratorium on trucks and buses crossing the U.S./Mexico border. Congress took action, requiring that FMSCA issue safety regulations on Mexican trucks entering the U.S.
- FMSCA completed an EA on the impact of the regulation, issued a FONSI, and then was sued. FMSCA had to do a general conformity finding and demonstrate that it would not take action that would impact the Clean Air Act.
- At the time of the conformity evaluation, which projected the NAFTA-highway truck traffic for non-attainment areas that would be impacted in 2015, no emissions factors were known for Mexican trucks and U.S. emissions standards were in the process of changing. Since then, Mexican trucks have not followed suit and are still using 1998 standards.
- On June 7, 2004, the Supreme Court ruled that an EIS and general conformity did not need to be performed. There has been no official decision on next steps to take.

NEPA and Project Level Conformity (Gary Jensen)
Mr. Jensen discussed NEPA and project level conformity. Key points from the presentation include:

- Air quality issues that affect NEPA include criteria pollutants, mobile source air toxics, greenhouse gases, regional haze and visibility, and construction emissions.
- There are a number of regulations and guidance to project-level conformity and NEPA, including the Transportation Conformity Rule, the Transportation Conformity Reference Guide, and a 1987 Technical Advisory, among others.
- Project-level conformity requirements include conforming plan/TIP in Metro Areas, regional emissions analyses in rural areas, CO hot-spot analysis, Particulate Matter (PM)-10 hot-spot analysis, and PM-10 control measures.
- New Standards: 8-Hour Conformity will be required starting June 15, 2005. Prior to the final environmental document, a project must be part of a conforming plan/TIP. If a project is past the environmental stage, project-level conformity will be required prior to project approval. PM-2.5 Conformity will be required in 2006 – EPA is developing a supplemental proposal that discusses how the PM-2.5 hot-spot issue should be addressed and whether changes should be made to the PM-10 hot-spot requirements.

- Some states have computerized screening protocols for CO-hot spot analyses. These protocols allow users to predict impacts within less than hour. Other States use look-up tables to conduct the analyses.
- Alaska is the only state that has found CO violations, and these have been in downtown areas. Similarly, no states seem to have had PM-10 violations.
- In NEPA documents, ozone issues are addressed by conformity analyses, CO issues are addressed by regional emissions and hot-stop analyses, and PM-10 issues are addressed by regional emission and hot-spot analyses, as well as PM-10 control measures.
- NEPA and project-level conformity next steps are as follows: There will be amendments to the Transportation Conformity Rule, an Update of the Transportation Conformity Reference Guide, and NEPA Air Quality Guidance to replace the Technical Advisory and out-dated guidance.

Mr. Cramer provided session attendees with an update to the Detroit Intermodal Freight Terminal (DIFT) project. The project is important because $146 billion of trade annually can be accounted for by truck travel across the U.S./Canada border in Michigan. Detroit has three crossings into Canada, all of which are at or near capacity and cause many congestion problems. DIFT aims to ease some of these system constraints.

Alternatives being evaluated include: (1) no action, (2) combine all existing sites, and (3) improve each existing site, (4) reduction of the 7 existing terminals to 5 terminals with one specialized terminal. Analyses that were required include: conformity analysis for VOC, NOx, and CO (on road only), with additional corridor level emissions analyses done for PM2.5, diesel PM, and air toxics species by source.

The environmental objective of the project is to "use a single integrated planning and environmental study process, resulting in a single product, which will meet the requirements of all members of the Canada-US-Ontario-Michigan Border Transportation Partnership (Partnership). Both Canadian and U.S. environmental processes are highly structured:

- The Canadian structure is more related to timing and major studies while the U.S. structure is more related to process and fewer, yet broader studies.

Differences include:

- U.S. variance from the process likely results in lawsuit, where Canadian process variances are likely to be mediated.
- In the U.S., FHWA has strong control over the project, while in Canada more authority resides with Environment Canada.

The Partnership developed an Air Quality Task Force to develop an analysis protocol that fulfills the objective of "one process," meets the needs of all agencies, and meets the requirements of both countries. The AQ Task Force includes: Transport Canada, Health Canada, Environment Canada, Ministry of Transport Ontario, Ontario Ministry of the Environment, FHWA, EPA, MDOT, Michigan Department of Environmental Quality, Southeast Michigan Council of Governments, the URS Corporation, and the Corradino Group. Final agreements regarding which country's laws will be followed and how to combine laws have not yet been reached. However, the partnership has decided that separate environmental studies will be conducted in the U.S. and Canada.

Methodologies outlined in the Air Quality Assessment Work Plan are:

- Review of bi-lateral agreements
- Comparison of air quality data and standards
- Emissions and burden analysis
- Dispersion modeling
- Mitigation

- Overall qualitative analysis.

Emerging Issues in Air Quality (Bob O'Loughlin)
Mr. O'Loughlin explained that twenty-seven percent of greenhouse gas emissions in the U.S. are produced from transportation; this is second only to electricity generation. These emissions threaten air quality across the nation. Furthermore, studies have shown that 100 million people live in areas where the cancer risk exceeds 10 in a million. A 1999 EPA air toxics study showed that excess cancer deaths were linked to mobile source air toxics (MSAT).

Mr. O'Loughlin discussed three issues related to these air quality concerns:
- Global climate change/greenhouse gases
- Active living/obesity/built environment – How a community can be built to increase physical activity.
- Mobile source air toxics/fine particulates – Particular attention has been paid to diesel particulates.

These air quality issues were qualified as "emerging" because State, regional, and national level agencies have been acknowledging that they present problems, they are issues that have been primarily addressed on research agendas, and there is a high degree of uncertainty and lack of local data associated with them.

What is Being Done:
For global climate change and greenhouse gases (GHG), 25 states plus Puerto Rico have initiated GHG plans and 134 cities and counties are participating in initiatives to reduce local GHG emissions.

For MSATs, between 1990 and 2020, on-road controls will reduce MSATs by 67-76 percent and PM by 90 percent according to EPA. Theses on-road controls will take time to show in air quality analyses.

Emerging Issues in NEPA include:
- Necessity to disclose all available information
- Need to document incomplete or unavailable information
- Requirement to utilize the FHWA website for applicable information, guidance, and other links
- Assistance from FHWA HQ and Resource Center staff
- Public Outreach and Education
- Development of new mitigation strategies such as ultra-low sulfur fuels

Active Living:
Sixty-five percent of the adult population in the U.S. is overweight, and almost one in three is obese. Some have begun to ask whether there is a role in NEPA to address these problems. Since 1992, Federal spending on bicycle and pedestrian projects has been 20 times the level prior to 1992. This investment has doubled the number of walking and biking trips, and reduced injuries and fatalities by ten percent.

Comments, Questions, and Answers
- Question: Is there a timeframe for a quantitative approach in guidance to air toxics? Answer: Not really. Guidance will likely outline a combination of qualitative and quantitative approaches agreed upon with EPA. EPA now suggests that FHWA complete a full health assessment.
- Question: How reliable is data for dispersion modeling for air toxics? Answer: The dispersion models are fine and are only as good as the data being put into them. There are some concerns as to how accurate emissions concentrations data are. With the Mobile 6.2 model, the uncertainty can be up to plus or minus two times.

- Question: How are information gaps being filled in? Answer: FHWA is conducting research activities. A strategic work plan for particulate matter was released a few years ago, and a similar work plan is to be released for air toxics. FHWA is also working with TRB to try and determine the state of the science and best practices.
- Question: Is the memo on global warming and NEPA still available? Answer: Yes.
- Question: Is anyone considering the fact that air quality affects pedestrian and bicyclists alongside roads? Answer: Research is focusing on how far along corridor transportation improvements affect air quality. Analysts are asking whether impacts are local or whether they occur in other areas.
- Comment: EPA will soon release the first of three new models that estimate GHG emissions. GHG issues will likely be increasingly prevalent in NEPA documents. Public health assessments will also likely be more and more a part of NEPA documentation.

REAUTHORIZATION AND LEGAL ISSUES

Moderator
Ed Kussy, Deputy Chief Counsel, FHWA

Speakers
Jim Kilbourne, Chief, Appellate Section, Environment and Natural Resources Division, Department of Justice (Invited)
Jack Gilbert, Assistant Attorney General, State of Texas (currently has IPA assignment with the FHWA Office of Chief Counsel)
Harold Aikens, Assistant Chief Counsel, FHWA, Program Legal Services Division
David Ortiz, Assistant Chief Counsel, FHWA, Office of the Chief Counsel, Resource Center
Bob Black, Attorney Advisor, FHWA, Office of the Chief Counsel, Program Legal Services Division
Glenn Harris, Attorney Advisor, FHWA, Office of the Chief Counsel, Resource Center
Dave Sett, Senior Attorney, FHWA, Office of the Chief Counsel, Resource Center

Description: This session was divided into three parts: 1) Important pending environmental litigation and recent decisions that relate to FHWA programs; 2) Presentation of proposed provisions relating to FHWA's environmental programs in the surface transportation reauthorization bill; 3) Roundtable discussion by FHWA field and headquarters attorneys on key environmental issues, with a focus on how and when to best serve program officials in meeting their responsibilities and further agency goals regarding environmental stewardship and project delivery.

Relevant Recent Supreme Court Rulings (Ellen Durkee [sic]{for Jim Kilburne})
This preliminary component of the legal issues session began with an update on two recent Supreme Court decisions that will have an effect on future Transportation Projects.

In *Department of Transportation v. Public Citizen ("Mexican Truck Case"),* S. Ct. No. 03-358, 124 S. CT. 2204 (June 7, 2004), the Supreme Court reversed a Ninth Circuit Court ruling that re-issued a moratorium on cross-border operations by Mexican motor carriers. In the original cases, the court had ruled that the federal agency had failed to look at the overall impacts, including the increased truck traffic across the border, of lifting the moratorium. In the appellate court, the court ruled that the agency did not

have discretion over traffic management, but responsibility only for safety. Some of the pertinent lessons learned from the Mexican Truck Case include:

- Duty to comment – Ensure a public comment period. The court did not ask about an alternatives analysis because the documentation from the public comment did not refer to other alternatives.
- The scope of NEPA analysis depends on the agency's discretion – NEPA requires a "reasonably close causal relationship" between the environmental effect and the alleged cause.
- Cumulative and secondary impacts – the regulation requires that the incremental impact be considered, in the context of circumstances relevant to the project and the agency's discretion.

Lessons to take away from this court case:

- Avoid aggressive positions unless you like litigation
- Clean Air Act rulings can evade logic as seen by the Supreme Court's ruling that the emissions from Mexican trucks are neither 'direct' nor 'indirect' due to the fact that they were zero emissions at the time of creating the regulation

In *Norton v. Southern Utah Wilderness Alliance,* S. Ct. No. 03-101, 124 S. Ct. 2372 (June 14, 2004), the Supreme Court unanimously reversed the decision of the Ninth Circuit Court to allow plaintiffs to challenge management of public lands even in the absence of any agency final action. Some of the pertinent lessons learned from the Norton v. Southern Utah case include:

- Final agency action – Location decisions can be reviewed without being considered an agency's final decision.
- Maintain close oversight of state decision-making, since accommodating too many local and state DOTs could potentially pose litigation issues.

Implication for DOT Environmentally Related Work:

- RODS are judicially renewable
- DOT works with State and Local agencies more than other agencies, which potentially puts us in the position to be liable for State's actions in legal proceedings
- Trails and Enhancements- should just be performed in guidance (or even interim guidance)

Other recent legal actions of a similar nature that may have some relation to Transportation Development:

- Klamath River Basin and Rio Grande River are in current litigation over the insufficient supply of water for fish argued using the Endangered Species Act (ESA).
- Zion National Park and noise complaints from planes as it is located under a major flyway

Panel Discussion

Mr. Gilbert covered the current status of reauthorization and the differences between the House and Senate versions of the legislation. Mr. Gilbert noted that another extension is anticipated when the current one expires on July 23. Potential riders on global warming and emissions, however, could hold up the extension. The Conference committee is hung up on the amount of total funding. He did expect that a compromise would be reached and that a signed piece of legislation would be ready before the November election. Mr. Gilbert concluded his presentation by reviewing six issues in which the versions of the Senate, House and Presidential Administration differed:

- En Libra – The House codified the En Libra principles, which probably will not have a substantial effect if passed.
- Deadline for NEPA comments – The Administration and House versions allow 60 days for comments on a draft EIS while the Senate version allows up to 105 days for comment.
- Statute of limitations – The Administration version allows 180 days for a statute of limitations, the House version allows 90 days, while the Senate version does not include a statute of limitations.

- 4(f) – One of the ideas is to allow Section 106 regulations to replace 4(f) regulations as long as there is no adverse effect.
- States to do their own Categorical Exclusions and other environmental documentation themselves – States who do their own documentation would be considered to be a federal agency, and under federal law. If the Secretary of Transportation approves this feature, a MOU would be established between the State and the Secretary, and the Secretary would assign a representative to monitor the state.
- Purpose and need – The senate version is very prescriptive with firm guidelines and deadlines.

Mr. Gilbert believes that the Conference Committee will have many other issues to resolve before many of the controversial environmental issues will be addressed.

The final portion of the session was a roundtable discussion**,** including questions and answers. The members of the panel – Ed Kussy (Moderator), Ellen Durkee [sic], Jack Gilbert, Bob Black, Harold Aikens, David Ortez, Glenn Harris, and Dave Sett, addressed the following issues:

When to Seek Legal Advice:

- The panel emphasized the need to involve and consult legal as early as possible in the process, especially when litigation of any sort is anticipated. For instance, forwarding a letter of complaint from the public, or inviting legal to attend public meetings are two easy ways to involve legal staff.
- The earlier legal staff can become involved in a project, the more opportunity they have to become as familiar with a project as possible.

Legal Sufficiency of NEPA Documentation:

- Legal staff will inevitably desire more information about data, tools, methodology and other project details in case the project is taken to court. Courts determine legal sufficiency, in part, by reviewing whether or not an agency has included all adequate information in the environmental review process. The issue of air quality, however, is an exception. Because of the complexity of air quality issues, it has become the rule to trust the air quality office.
- Any potentially problematic Categorical Exclusions or Environmental Assessments (EA) can and should be reviewed by legal staff. In additional, reevaluation of these documents is an additional resource that the legal staff can provide.
- Anything that is written when compiling the document (e.g., email, memo, etc.) is considered to be part of the record. Start organizing and preparing files early.
- Resolve any disputes with resource agencies, because the odds of losing a case are greater when disputes exist.

Common Problems with NEPA Documentation:

- A proper Purpose and Need (P & N) portion of the NEPA documentation is crucial, as it drives the entire process, including identification of alternatives. The P & N should not be overly narrow with too few alternatives. One Conference participant pointed out that the local US Army Corps of Engineers usually re-writes the P & N based on their permitting process. The panel responded that a Memorandum of Understanding between transportation and resource agencies helps to avoid such process issues. In one state, the P & N is restricted to the transportation plan because growth and/or development are included in the Growth Management Plan of the state.
- The quality of writing is problematic.
- Cumulative impacts need to be better addressed.
- Legal staff prefer to review pre-draft Environmental Impact Statements.

- Ensure that all comments, even those made by legal staff, are addressed.
- FHWA Division offices should be involved in the draft EIS early in the process.

When a Lawsuit is Filed:
- Contact a FHWA lawyer
- Contact the Department of Justice and Assistant US Attorney
- Coordination with FHWA counsel is key. The FHWA attorney is responsible for keeping the Division office informed.

Products in Development**:**
- 4(f) policy paper in question and answer format and practitioner's manual
- Litigation overview
- Environmental law issues

Issues on the Horizon:
- State of the science – In the Las Vegas Air Toxics litigation, the plaintiff argued that the travel demand forecast did not accurately capture all elements of induced traffic. The court ruled that FHWA was close enough, since EPA had already ruled that better technology was not available. The team of lawyers relied on HEP for help. Because the current state of the science is limited, the plaintiff's demands were nearly impossible to meet. NEPA documents need to reflect any changes in the state of the science (e.g., Mobile 6.2).
- Public hearing process – Most states do not have a "town hall" approach, where everyone can speak. In the Las Vegas case, the court thought that the proposed public involvement process was ambiguous and that FHWA should conduct a town hall approach where the public would have an opportunity to confront decision-makers and an opportunity to listen to others. The NHI Public Involvement course, however, encourages an "open house/confessional" approach.
- 23 USC 109H requires construction site waste to be considered and mitigated, including air toxics.

Project-specific locations – many Resource Agencies think it is FHWA's responsibility to control where contractors dump their construction materials and debris, but it is not.

INDIRECT AND CUMULATIVE IMPACTS

Moderator
Dave Sullivan, Environmental Program Specialist, FHWA

Speakers
Jaclyn Lawton, Environmental Programs Engineer, Wisconsin Division Office, FHWA
Larry Pesesky, Senior Vice President, The Louis Berger Group
Lamar Smith, Team Leader, Office of Project Development and Environmental Review, FHWA

Description: This session highlighted the current state of the practice by showcasing certain state DOTs and Division Offices that are leading the way in analysis process development and training.

Making Sense of Indirect and Cumulative Analysis (Lamar Smith)
Mr. Smith stated that indirect impacts are further removed (vs. direct impacts) either in distance or time
- These impacts will require some seeing into the future (predicting)
- Effects can either be positive or negative and it helps to view the resource over time.

- Decisions rely on historical data and concentrates on every action that has a past, present, and future impacting a resource and resulting in a change of condition.
- Deals with the likelihood of something happening and often deals with speculation.
- Mitigation should be part of the evaluation. Not an after thought.
- We all need to take another look at the13 USC 109 Standards

When do you do ICS?
- Environment Impact Statements (yes)
- Environmental Assessments (maybe)
- Categorical Exclusion (no)

What is the result of not looking at impacts?
- Go find a lawyer and have them talk about the Fritofson Case.
- Cumulative can be seen as the total effect
- Interim Guidance- we have to relook at this from 2003

We would like your help as we are asking for good examples. Please let us know if your state has any training courses or programs. We would like to hear problems and successes.

Secondary Effects: USH 12 Experience (Jaclyn Lawton)
Example from US Highway 12, Wisconsin
Wanted to improve a 2-lane highway by creating a 4-lane Highway so that people could make left turns safely.
- Portions of the Highway would be altered to 4-lane where people had to make turns and other segments would remain as 2-lane.
- Did Impact Analysis to determine what would happen to the farmland in the area and a nearby natural feature known as the Wisconsin Dells. This was significant, as perhaps the two most well known parts of Wisconsin are the Green Bay Packers and the Wisconsin Dells.
- Wisconsin Dells are a geologic land feature with limestone outcroppings and quartzite rock bluffs with surrounding forest cover.

Transportation needs for the project were:
1) Dealing with local traffic
2) Commuter Traffic to nearby Madison

The Baraboo Range was designated a Natural National Landmark and prior to the Highway project, not much changed until this Highway Improvement Project was proposed. Local groups became concerned that this project would create new impacts that would negatively impact the site.

Some of the many impacts concerned feral cats impacting the migratory bird (Neo Tropical Migrants) population with the creation of new homes near the highway.

The Plan dealt with the following:
- Creation of 167 acres of more residential land, attribute 28 acres of development directly to Highway Project
- EPA threatened an EU (Environmentally Unacceptable) Rating and after they commissioned their own study, required a supplemental study
- Created a 500 foot control of access to minimize chance of facilities being created close to the road
- Agreement was created to put use $5 million dollars to set aside development rights and used state funds to provide to a land trust

- State Legislature did not condone funding so made a subsequent rule that highway projects could only use funds to cover land impact within ½ mile of a highway.
- Final Project included a pedestrian bridge crossing to facilitate hiking trail access on both sides of the highway

Facts, Myths, and Uncertainties about Cumulative and Indirect Analysis (Larry Pesesky)
Mr. Pesesky reviewed the reasons that these studies are done as originating with a legal obligation. He offered Highway-26 Asheville NC and Chittenden County VT as projects that Courts stopped. The courts ruled that government did not do enough with Indirect and Cumulative Impacts

Differences between Direct and Indirect/Cumulative Impacts
Indirect/Cumulative Impacts:

- Future is uncertain
- Application is inconsistent from project to project
- Numerous studies of highway bypass drawing businesses from downtown but not in other cases
- Dependent on huge number of characteristics of the community

Regulators say where impacts are expected, they must be studied and there are the various components to this study:

1) Perception: If you build it, growth will come and this is viewed as inevitable
2) Consumers: ICI attempts to assess residential and business consumption patterns
3) Uncertainty: Must be able to assess why a highway interchange is essential to a beltway

Highway System Maturation- Initial highways had a great influence on development and subsequent pieces have less effect (marginal returns). The Age of a Highway will affect the degree of the effect of created new projects

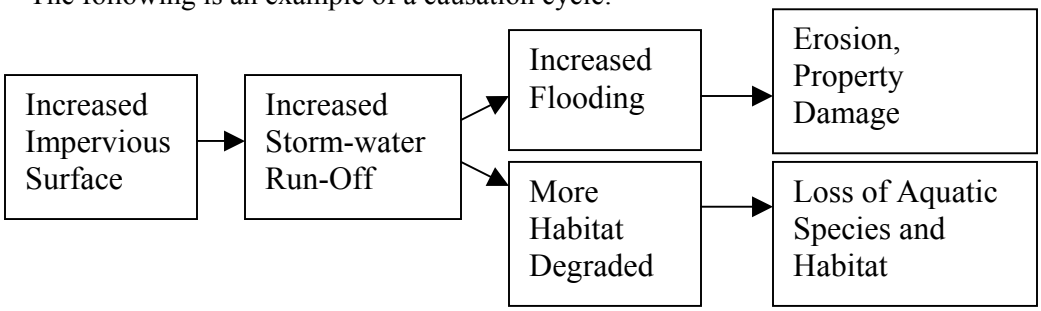
There are a number of other factors contributing to the development trends, which include knowing the local setting.

- The factors that differ are the following: Household Income, Quality of School, Access to Jobs, Other Amenities, Available Land (Good Farmland also makes good residential), Water/Sewer Infrastructure, Growth Policies (Pro-Growth, Anti-Growth, Neutral), and Economic Climate.

How do you handle these Impacts?

- With the following studies: Demographic Forecast and Trends, Expert Panels, and Identifying the Opportunities and Threats.
- Keep in Mind the "No Build Scenario". Highway projects are probably not going to have huge impact without the project (quantify numbers). Once you have an accurate forecast of movement patterns, you can get an idea of trends.
- Make sure to include impacts that show reduction in resource availability and quality. Expect loss of forest and habitat fragmentation.

The following is an example of a causation cycle:



When should ICI' be assessed? Should be part of systems planning and modes of transportation

- Systems
- Project Development
- Construction, Operation, and Maintenance

Is there more than Right of way to do in ICI Assessment?

Beware of "Worst Case"/What if analysis as it sometimes leads to other problems with communities.

- ICI alone will not guarantee amelioration of a controversy
- How do we get to good results in the end, without casting aspersions/keeping the minimum amount of acrimony.

Under the Executive Order (EO13274) you have an interagency group that includes resource agencies such as FWS, NOAH, and the EPA. Can have a "mind blowing" amount of detail, but it all boils down to mitigation approaches. There is a wide range of techniques in dealing with these impacts.

Questions

1) How do you get down to a reasonable amount of effort?
2) How do we get acceptance and not become stymied by the quantity of information and opt for the worst-case analysis

Worst case scenarios ultimately do not inform agencies in a reasonable way.

1) Resource Agencies have a need for proportionality
2) "Commensurate Effort": Effort needs to match scale of info/project
3) Reasonable Effort": Getting info is half of battle, having to deal with gaps is the other half.
4) "Mitigation": Brings all of the concerns into context so that we can offset effects

We have a range of efforts to attend to such as maintaining some forest interior for neo-tropical migrants and where do we assess animals and ecological concerns that are not covered by current laws?

There is a report to the President with certain follow up tasks grants a good sense of what needs to be done. It contains:

1) Compiling resource, guidance and training materials
2) Identifying methodologies (guidebook for newcomers)
3) Exercise in identifying mitigation requirements (including watershed and trading opportunities)

General sense that integrative approaches between agencies are the best way to have DOT activities fit into environmental consideration.

Comments, Questions, and Answers

- Question: Could you share more about Watershed vs. Ecosystem approaches, concerns, and consternations? Answer: Ecosystems do not follow political or watershed boundaries. Ecosystems are in the eyes of the beholder- there are delineation problems with ecosystems. With watersheds there are less issues as the USGS has already assessed their boundaries. Clean Water Act follows this assessment. Clean Air act could be seen as "Air Sheds." With Ecosystems there is no one-size fits all. Answer2: Watersheds are not necessarily more manageable, as the watershed is more than just about hydrology; it is also about land cover, habitat, aquatic species, and their survival.
- Question: Would qualitative analysis have been more accepted with the Wisconsin Project? Answer: No.

- Question: Do you suggest any takeaway lessons from defined gravity analysis; do they fall short because it is too complex and we are forced to oversimplify? Answer: Limitation of the gravity model is for commuter traffic measurements but not for residential or second home trips. It is a difficulty when you seek to add where people want to live etc. You have to be able to tell a story. You have to be able relate it to the story or it will not work.
- Question: How about farming accommodations (same questioner as before). Answer: We looked at a snapshot of trends to determine what they would be in the future.
- Question: I see worst case scenarios actualized in various areas across the nation. Is there a time when you should do a worst case? You have to go with the information and examples of the worst case actually happening are the exception and not the rule. Answer2: CEQ eliminated worst case scenario; it deals with incomplete information and it should instead concentrate on a foreseeable scenario. If we are working with doing the best we can do still adhering to NEPA. Answer3: CEQ eliminates "worst case" as it deals with conjecture and guessing which should not be allowed. When we try to predict the future we will be wrong. Answer4: If we make a statement it should be immediately followed with a degree of uncertainty.
- Question: Do courts ever approve a project due to finding that a "no build" is more damaging? Answer: I do not think that the scenario you have posed exists.

SECTION 4(f); LIVE, LOCAL, AND LATE BREAKING

Moderator
Dave Gamble, Environmental Program Specialist, FHWA Resource Center

Speakers
Betsy Merritt, Associate General Counsel, National Trust on Historic Preservation
Harold Aikens, Assistant Chief Counsel for Program Legal Services, Office of Chief Counsel, FHWA
Dan Johnson, Environmental Protection Specialist, Maryland Division Office, FHWA

Description
Section 4(f) of the 1966 US Department of Transportation Act was created to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. Section 4(f) is often a target in litigation and there is a constant demand to improve the process.

Successful Solutions to Section 4(f) (Dan Johnson)
Mr. Johnson described the keys to a successful Section 4(f) process as the following:
- Having all the facts
- Align all the facts properly
- "Sell" the facts that have been assembled

Mr. Johnson also shared several successful solutions stemming from projects he has worked on for both Maryland and Pennsylvania.
- Publicly Owned Park and Recreation Project
    - Example: An urban renewal project proposed to increase industrial activity. The project called for widening of 2-lane road to 4-lane road, which required the taking of a section of a park in the right-of-way (ROW).

- Solution: City moved the children's park to another area.

- Historic Properties
  - Example: Bridge replacement project, which impacted ROW of historic area. Need for guidance on historic issues and knowing the economic viability of the area. Project required conflict resolution and perseverance to address Section 4(f) issues.
  - Solution: Community enhancement and area was listed as Historic District. Bridge was redesigned to match the look of the historic courthouse.

Comments, Questions, and Answers

- Question: Did the road under the cut and cover become 4 lanes? Answer: No, it was kept as two lanes.
- Question: How were air and noise pollutant factors analyzed? Answer: They were found not to be significant.
- Comment: There was no avoidance alternative because people walked on the bridge to and from work. There was only a proposed option and the no-build option.

Reauthorization and Section 4(f), (Harold Aikens)

Mr. Aikens served as the principle author if FHWA's Section 4(f) Policy Paper. He provided an update on the status of Reauthorization and where Section 4(f) stands.

- Many believe that Section 4(f) is too rigid and many state DOTs avoid any related alternative due to cost, harm to resources, and others
- The differences found among the reauthorization proposals include:
  - DOT (SAFETEA of 2003)
    - Clarification of standards – statutory
    - Agreement under 106 satisfies 4(f)
    - Funds to expedite historic preservation review
  - Senate (SAFETEA of 2004 – S1072)
    - *De minimus (too insignificant to be worthy of concern)* impact is not a 4(f) use
    - Issue regulation to clarify standards within year
  - House (TEA-LU – HR3550)
    - Compliance with Section 106 satisfies 4(f) if "no adverse effect"

The Section 4(f) Policy Paper is currently being revisited to include more guidance. This includes:

- Rewrite for 22 policy questions
- A new introduction
- The addition of case law, best practices, and new questions
- The Policy Paper will be sent out for comments at the end of the year for legal and environmental review

Mr. Aikens described several lawsuits related to Section 4(f), including *Stewart Park and Reserve Coalition Inc. v. Slater.* In this case, state agencies determined that land reserved for future transportation projects was to be used principally as a park until needed. However, the Court held that uninterrupted used for a period of 30 days "cannot be characterized as interim," therefore Section 4(f) still applies. Mr. Aikens stated that FHWA needs to address this further because of the impact on other state DOT's use of land that is not needed immediately for highway purposes. In order to avoid lawsuits and ensure that the transportation project addresses all necessary issues, it is essential that everything be documented. If enough data exists for a given project, Section 4(f) analysis should be done regardless.

Comments, Questions, and Answers

- Comment: An emerging issue within Section 4(f) is archaeology. Native Americans are often more opposed to recovery than State Historic Preservation Offices (SHPO).

- Question: Do you know how different circuit courts feel about Section 4(f)? Answer: If you have multiple Section 4(f) sites, you may need to reassess.
- Question: Is the policy paper going to address historic roads? Answer: A programmatic agreement to address this is sitting in the pipeline. The US Department of the Interior is looking to have the agreement include railroad canals, telephone lines, etc.

Role the National Trust on Historic Preservation (NTHP) Plays with Section 4(f) and FHWA (Betsy Merritt)

- Ms. Merritt emphasized that Section 4(f) and Section 106 of the National Historic Preservation Act are not redundant. Section 106 is described as being strictly procedural and is not a substitute for Section 4(f).
- Some common problems with implementing Section 4(f) include:
    - Misinterpretation of mitigation and rigidity of states
    - Avoidance of projects all together
    - Avoidance of "take" when it results in more destruction
- NTHP is not in favor of having more flexibility; they would like a narrower category with *de minimus* impacts. *De minimus* impacts require public involvement and scoping.
    - They want safeguard to ensure consensus of *de minimus* impacts
    - Ohio DOT wanted Section 4(f) to be replaced by Section 106. Senator Voinovich of Ohio proposed this idea on the Senate Floor. NHTP worked with Ohio DOT to avoid this, and instead came to consensus to ensure that a finding of no adverse effects would involve consulting parties and have an affirmative signature by the SHPO.
    - NTHP would like to meet with FHWA and AASHTO like they have with Ohio DOT to find a common ground and reach consensus on a national level

Comments, Questions, and Answers

- Question: Would *de minimis* impacts put more political pressure on SHPOs? Answer: Pressures will remain the same. The Senate bill does define *de minimis* impacts as no adverse effect or no effect with sign-off from SHPO and consulting parties.
- Question: Can Section 106 replace Section 4(f) in special circumstance? Answer (from Mr. Aikens): Yes, the Section 106 consultation process can be used to satisfy Section 4(f). NTHP perspective: If there is agreement on the effects, it can govern as Section 4(f), but the alternatives analysis is not the same.

SOLUTIONS TO THE DELAYS RESULTING FROM SECTION 7 CONSULTATION

Moderator
Brian Yanchik, Ecologist, FHWA Resource Center

Speakers
Paul Garrett, Ecologist, Office of Natural and Human Environment, FHWA
Alex Levy, Ecologist, FHWA Resource Center
Paul Wagner, Biologist, Washington State DOT
Dale Paulson, Program Development Engineer, Montana Division Office
Mary Gray, Environmental Program Specialist, Office of Natural and Human Environment, FHWA

Description: The Solutions to the Delays Resulting from Section 7 Consultation session focused on several innovative approaches that some States are using to streamlining Section 7 of the Endangered Species Act (ESA) consultations. Topics presented included: the Migratory Bird Treaty Act; Washington State's Aquatic Species; Wildlife Crossings; the Critter Book; and, the "Lance Memo."

Transportation, Fish, and Wildlife in Washington State (Paul Wagner)
In Washington State, high quality, diversity-filled, unique habitats exist. Some of these habitat areas are pristine and have not experience the pressures of urbanization found in other regions in the State. These habitats are home to 46 Federally listed species, some of which are in the urban areas, and the public values these species. In response to this context, WSDOT actively supports endangered species conservation on its projects, in its programs, and through its interagency coordination efforts.

ESA consultation challenges that WSDOT faces include:

- Sufficient data for biological assessments;
- Disagreements on when the process starts;
- Developing effective processes for dealing with new policy issues;
- Policy posturing on project consultations; and,
- Agreeing on predictable timeframes.

To overcome these challenges WSDOT utilizes: training, guidance for BA's, liaisons at NMFS and USFWS, programmatic consultations, project tracking, policy/guidance development, research, and issue elevation processes. In particular, Mr. Wagner highlighted these four basic principles for successful consultation:

1. Know the regulations, but do not obsess on them.
2. Be patient but persistent with coordination and communication.
3. Do some good on the ground: look for opportunities for discretionary actions to benefit species vs. compensatory mitigation.
4. Apply research to information gaps.

The Lance Memo: ESA Consultation (Mary Gray)
The following lessons learned can be drawn from Ms. Gray's presentation on the "Lance Memo," a legal memo written by the FHWA Resource Center.

- A job of State DOTs is to not jeopardize the continued existence of species, to make guidance, and to be actively involved in formal consultation.
- Unlike with informal consultation, there are timeframes associated with formal consultation.
- In Washington State, a letter indicating that the formal consultation clock has started is submitted to all involved agencies.
- "Consultation" is an important word. It indicates that agencies are supposed to be helping each other. By setting up a communication network, the basis for developing alternative dispute resolution techniques is developed.
- To overcome a lack of trust it is important for DOTs to consistently produce high quality BA's. It is also necessary to maintain communication at and between different organizational levels.

Comments, Questions, Answers

- Question: How many formal consultations are there per year in Washington State? Answer: Approximately 40-60 per year.
- Question: What can a DOT do if after 135 days a biological opinion has not been submitted? Answer: Regulations indicate that an agency must respond within 135 days. The problem is that currently there are no repercussions for not doing so.

Wildlife, Ecology, and Roadways (Alex Levy)
Mr. Levy discussed issues currently surrounding wildlife, roadways, and habitat connectivity. The presentation contained many images of wildlife and roadway interaction as well as of structures that have been built to create wildlife passages. Many of the images were collected on a FHWA scan of wildlife crossings in several European countries. The purpose of the scan was to understand how connectivity issues were being addressed in places outside of the U.S.

To date, various techniques have been used in effort to reduce the number of wildlife-vehicle collisions on roadways. Some of these techniques include: herd size thinning, the installation of visual barriers to the roadways, and electronic signaling to alter animal behavior. Recently, transportation professionals have begun exploring techniques that may more naturally reduce the impacts of roads on wildlife movement. These include wildlife crossings, cameras and motion triggers, and active signage to alert drivers when animals have been detected in the area, among others.

Comments, Questions, and Answers

- Question: Are enough studies being done to determine the locations where wildlife passage across roadways is most likely to be occurring? Answer: In most cases, enough studies are being performed. The amounts of money associated with constructing wildlife crossings are typically not invested without there being sufficient data indicating where passage usually occurs.

Wildlife and Habitat Connectivity Handbook (Dale Paulson)
Mr. Paulson gave a presentation on the Wildlife and Habitat Connectivity Handbook that is currently being drafted. The handbook, a result of interagency collaboration, will be designed for people involved in infrastructure planning, design, review, and development. It will provide direction, guidance, and examples that illustrate how agencies can work together to enhance and sustain the natural environment while developing needed infrastructure.

During project development, many opportunities for environmental stewardship and resource conservation exist, to each of which agencies can apply their skills and resources. Together, significant contributions to restoration and recovery of declining species and ecosystems can be made, while accomplishing cost-effective and streamlined development of facilities, equipment, services, forest products, and recreation. It is anticipated that the book, which will provide a framework for connectivity banking, will help agencies avoid missing opportunities for increasing habitat connectivity.

Mr. Paulson highlighted three key items for success in this effort:
1. **Predictability –** Confidence that commitments made by all agencies will be honored
2. **Connectivity** – Capitalization on important opportunities to reduce habitat fragmentation
3. **Conservation** – Focus on larger scale, multi-species, ecosystem solutions

Comments, Questions, and Answers
Question: When will the handbook be finished and available? Answer: We are currently working on finishing it. Hopefully, it will be done within the next few months.

Migratory Bird Treaty Act (Paul Garrett)
In the final presentation of the Section 7 session, Mr. Garrett led a discussion on the Migratory Bird Treaty Act (MBTA). The MBTA prohibits the taking of adult and young birds, young birds, eggs, and nests. Roughly 1,000 birds are on the MBTA list. This list excludes exotic birds, pigeons, quails, grouse, and partridges. The Act does not prohibit the taking of bird habitat.

Executive Order 13186 calls for the conservation of migratory birds and directs Federal agencies to create MOUs with FWS in order to do so. In response to the EO and at FWS's request, FHWA was elected to develop a draft MOU. In the resultant MOU, FWS and FHWA agreed that federally funded highway construction projects and maintenance activities are necessary and could result in short-term or periodic, unintentional "take" of migratory birds (It is likely that most takings occur during nesting periods). Both Agencies agreed to:

- Perform timely, appropriate, environmental analysis and review of Federal actions required by NEPA or other established environmental review processes to evaluate the effects of agency actions and Federal-aid highway projects on migratory birds, with emphasis on species of concern;
- Consider habitats needed for reproduction, migration, and over-wintering. This includes activities directly related to federally funded highway project planning, construction, and operation.

Currently, a letter from the FWS has requested that FHWA proceed with MOU. The FWS has also developed a draft Programmatic permit for Federal agencies, but has yet to release it.

MBTA in NEPA:
Mr. Garrett outlined MBTA topics that should be included in NEPA documents. These include:

- Habitat analysis
- Species lists
- Likely mechanisms of takings
- Mitigation measures (avoidance/minimization)
- Acknowledgement that contractor will be advised of MBTA issues
- NEPA analysis should also consider population level effects. To help with these environmental documentation efforts, FWS should provide FHWA and State DOTs with:
- Information on the species likely to nest in different habitat types; a list of birds of special concern for the region the transportation project is proposed.
- FWS should also review and respond to NEPA analyses in a timely manner.

LINKING PLANNING AND THE ENVIRONMENT

Moderator
Larry Anderson, Planning Oversight and Stewardship Team Leader, FHWA Office of Planning

Speakers
Janet D'Ignazio, Senior Research Fellow, Center for Transportation and Environment
Ed Studor, Administrative Manager, Riverside (California) County Transportation Department
Carolyn Ismart, Manager, Environmental Management Office, Florida Department of Transportation

Description: The session discussed processes, systems and specific methods that have been developed to incorporate environmental and community values into transportation decisions from the early planning stages through project design and construction. The session emphasized that the integration of planning and the environment allows environmental elements to receive stronger consideration during the early planning process that can then be carried into the project development phase. In particular, interagency activities and multi-disciplinary efforts between project phases were cited as two strategies for integrating approaches to achieve more balanced decision-making.

North Carolina as an Example (Janet D'Ignazio)
Ms. Janet D'Ignazio provided an overview of North Carolina's experience with the integration of systems planning and project development processes. Highlights of her presentation included the following:

- North Carolina faces the challenge of streamlining a transportation decision-making process that is governed by three separate sets of law (Tea-21, NEPA, permitting process regulations) and multiple agencies making decisions along the project lifespan. Program delivery problems, out-of-date procedures manuals and process documentation, turnover in staff and managers, and the mismatch of substantially updated project development processes (which were updated to merge with the environmental review process) met by fairly unchanged long range planning processes are additional challenges to the feat of integrating planning and project development.
- The Integrated Process Mission is to identify, through data-driven decision-making, long-range transportation solutions that can be evaluated, detailed and permitted for construction.
- The Integration Project Purpose is to develop a well-documented, integrated planning process that enables a seamless transfer of information about transportation needs and environmental and community considerations, allows appropriate decisions to be upheld, meets legal requirements, and is consistent with the Merger 01 process.
- The anticipated deliverables from the project are a well-documented, integrated planning process; electronically accessible procedures manual; systems level purpose and need framework; recommendation for automation support; process to identify fatally flawed alternatives; and performance goals.
- TransTIP is a highly structured methodology and process improvement tool developed in North Carolina to integrate the traditionally independent and separated transportation planning process with the project development process. TransTIP consists of:
    - Selecting and scoping the integration process
    - Analyzing currently independent transportation planning and project development processes
    - Designing a newly integrated process
    - Implementing the new process
    - Manage process performance
    - Commit to performance improvement

- North Carolina's integration strategy is comprised of the following:
    - Identify products needed from the long range plan, including a robust problem statement, multi-modal analysis/opportunities, fatally flawed and locally endorsed corridors, and a land use element.
    - Establish criteria to define product acceptability standards, such as legal and agency/partner requirements
    - Develop policies, processes and procedures needed in the long range plan to meet acceptability standards
    - Conduct pilot test(s).

Currently, the scoping interviews and conceptual redesign of the long range comprehensive transportation planning process is complete. Limited redesign of the project development process is anticipated.

Florida's Efficient Transportation Decision-making (Carolyn Ismart)
Ms. Carolyn Ismart described Florida's Efficient Transportation Decision-making (ETDM) process and Environmental Screening Tool. Highlights of her presentation included the following:

- Florida created ETDM to address the following problems:
    - Environmental documents analyze all issues in equal detail, which is more costly and time consuming without necessarily resulting in "better" projects
    - Environmental considerations are not linked to project planning up-front

    - The planning and project development process suffers from a long time-line of sequential actions that are often separated by significant gaps and late agency involvement
- The ETDM Process introduces the identification and consideration of potential environmental and socio-cultural effects of major capacity improvements into the planning process by:
    - Early, continuous and interactive involvement of resource agencies, public, MPOs and FDOT from planning through permitting.
    - Implementation of a Planning "Screen", which enacts community outreach and the Environmental Technical Advisory Team (ETAT) comprised of resource agency representatives responsible for interaction with Florida DOT.
    - Implementation of a Programming "Screen", which continues the opportunity for feedback and interaction with the community and members of ETAT.
    - Documentation of purpose and need; effects considered; degree of impact assessed; recommendations made; alternatives considered; and, commitments entered into at each stage.
    - Use of a GIS-based Environmental Screening Tool to enhance analyses of impacts and to record results and decisions made at every phase.

With the early consideration of environmental and socio-cultural effects in the planning phase, much of the project scope, basis for permits, and public involvement has been initiated or completed in the project development phase.

Lessons learned from ETDM include:
- It takes longer to integrate project development and planning
- ETDM is an evolving process anticipated to change with ETAT feedback
- ETDM is a data-intensive process requiring significant up-front time for quality control, data collection, and maintenance
- A dedicated resource agency position was funded by FDOT to provide the necessary data
- There is a difference between the high-level commitment of agencies and the day-to-day functions of workers
- Relationships are extremely important

Riverside County Integrated Project (Ed Studor)
Mr. Ed Studor discussed Southern California's experience with the Riverside County Integrated Project (RCIP). His comments included the following:
- The driving question for the project was: "How do we balance the demands of population growth, mobility needs, housing requirements, job creation, open space, and conservation in a county that is nearly the size of Massachusetts?"
- The goal of the project is to create a high-quality, balanced and sustainable environment. It has a second goal to create a framework that makes the Riverside County a great place to live, work and play.
- RCIP is a four-part program that consists of the environmental plan (Multiple Species Habitat Conservation Plans - MSHCP), transportation plan (Community and Environmental Transportation Acceptability Process - CETAP), the County General Plan, and the Special Area Management Plan (SAMP).
    - The MSHCP mitigates for the Endangered Species Act, providing future stability for new housing and transportation improvements.
    - The CETAP is a transportation implementation plan for multi-modal transportation corridors and creates a county-wide arterial system.
    - The County General Plan establishes land use for the future and identifies open space and conservation issues.
    - The SAMP establishes regional general permits for waters of the US.

- The RCIP Guiding Principles are:
    - Bottom-up process with public support and input and public committees.
    - Interconnectedness of RCIP elements, in order to optimize the balance between transportation , habitats, open space, housing and commercial needs.
    - Financing is everybody's responsibility, at all levels of government and for private landowners.

Mr. Studor noted that the local resource agencies have helped to develop the RCIP process, rather than playing a tangential role of reviewing the plan after it has already been developed.

SOLUTIONS TO THE DELAYS RESULTING FROM SECTION 7

Moderator
Brian Yanchik, Ecologist, FHWA Resource Center

Speakers
Paul Garrett, Ecologist, Office of Natural and Human Environment, FHWA
Alex Levy, Ecologist, FHWA Resource Center
Paul Wagner, Biologist, Washington State DOT
Dale Paulson, Program Development Engineer, Montana Division Office
Mary Gray, Environmental Program Specialist, Office of Natural and Human Environment, FHWA

Description: The Solutions to the Delays Resulting from Section 7 Consultation session focused on several innovative approaches that some States are using to streamlining Section 7 of the Endangered Species Act (ESA) consultations. Topics presented included: the Migratory Bird Treaty Act; Washington State's Aquatic Species; Wildlife Crossings; the Critter Book; and, the "Lance Memo."

Washington State (Paul Wagner)
In Washington State, high quality, diversity-filled, unique habitats exist. Some of these habitat areas are pristine and have not experience the pressures of urbanization found in other regions in the State. These habitats are home to 46 Federally listed species, some of which are in the urban areas, and the public holds high value on these species. In response to this context, WSDOT actively supports endangered species conservation on its projects, in its programs, and through its interagency coordination efforts.

ESA consultation challenges that WSDOT faces include:
- Sufficient data for biological assessments
- Disagreements on when the process starts
- Developing effective processes for dealing with new policy issues
- Policy posturing on project consultations
- Agreeing on predictable timeframes

To overcome these challenges WSDOT utilizes: training, guidance for BA's, liaisons at NMFS and USFWS, programmatic consultations, project tracking, policy/guidance development, research, and issue elevation processes. In particular, Mr. Wagner highlighted these four basic principles for successful consultation:

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Lance Memo (Mary Gray)
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Comments, Questions, Answers

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- Question: What can a DOT do if after 135 days a biological opinion has not been submitted? Answer: Regulations indicate that an agency must respond within 135 days. The problem is that currently there are no repercussions for not doing so.

Issues Surrounding Wildlife, Roadways, and Habitat Connectivity (Alex Levy)
Mr. Levy's presentation contained many images of wildlife and roadway interaction as well as of structures that have been built to create wildlife passages. Many of the images were collected on a FHWA scan of wildlife crossings in several European countries. The purpose of the scan was to understand how connectivity issues were being addressed in places outside of the U.S.

To date, various techniques have been used in effort to reduce the number of wildlife-vehicle collisions on roadways. Some of these techniques include: herd size thinning, the installation of visual barriers to the roadways, and electronic signally to alter animal behavior. Recently, transportation professionals have begun exploring techniques that may more naturally reduce the impacts of roads on wildlife movement. These include wildlife crossings, cameras and motion triggers, and active signage to alert drivers when animals have been detected in the area, among others.

Comments, Questions, and Answers

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RE: NEPA LIVE!

Facilitator
Lamar Smith, Team Leader, Office of Project Development and Environmental Review, FHWA

Speakers
Fred Skaer, Director, Office of Project Development and Environmental Review, FHWA
Lamar Smith, Team Leader, Pam Stephenson, Project Development Specialist, Office of Project Development and Environmental Review, FHWA
David Ortez, Assistant Chief Counsel, Office of Chief Counsel, FHWA
Carol Adkins, Project Development Specialist, Office of Project Development and Environmental Review, FHWA

Description: Attendees to the conference were invited to write down and submit anonymous questions throughout the three days and leave their written submissions in a box in the front lobby. These questions were read in front of a panel of experts and an audience and answered by all the people in attendance. Lamar Smith opened the session with the format and first had a few comments about the RE: NEPA website.

Mr. Smith described RE: NEPA as surpassing all expectations in the number of people who utilize the website. RE: NEPA began as a "Pilot" to exchange professional information regarding implementing NEPA regulations. The idea was to host a web location where practitioners could create a community of shared expertise and it was launched in September of 2000. Questions and answers on the website can be posted anonymously. Mr. Smith has noted that while attributions are preferred, the quality of the anonymous contribution is not necessary less than one that includes the author's name. RE: NEPA presents the latest information on the topic and serves as a continuing update to the environmental handbook.

Comments, Questions, and Answers

- Question: What is the fallout of the situation with FHWA NYDO using the federal register for a CE? Answer: There is no problem if a state wants to do this. It's a categorical 404 exclusion and it might pertain to only parts of New York and it may also pertain to parts of another state like Pennsylvania.
- Question: Can a division office develop a CE for a State? Answer: Yes, it follows programmatic on the D-list with certain criteria and caveats. Do not have to add them to federal register. The advantage with publishing in the Federal Register is using it in Public Record. The Federal Register can also publish notices. It can serve as a means of publicizing in a formal manner.
- Question: What is the procedure of publishing in the federal register? Answer: It doesn't get into the Federal Register unless someone signs off on it. It should be done carefully using prudence.
- Question: What is the state of net benefits in the 4F? Answer: It is finished; examples are being added as we speak. It has been through two rounds of thorough legal review and DOI had comments that were confusing to us so we are making sure that they are clear and that they approve of the final product.
- Question: I am curious about current EIS products. Where is all the guidance and expectations since reorganization? Answer: It is in the revised technical advisory, which is not published. But for this we are getting legal sufficiency and letting it go. All executive order priorities are prior to concurrence. Legal sufficiency is a regulatory requirement. It was slightly modified in 1996, and used to be delegated to the regions. We delegated the approval to regional offices. Prior

concurrence guidance didn't do anything until 2001. The distribution of the EIS is sent to Headquarters and that way they know what is going on.

- Question: How and what strategies should FHWA pursue so that the problem with EIS are minimized? Answer: By being very open and deliberate, as we want to get some level of assurance. The things that you want to consider are CEQ, 309, 403, and 466.
- Question: How do you know what to use? Answer: You have to figure it out every time. Sometimes you do not let the public know that you have gone above the minimum standards required by law. We may reduce the distrust if we demonstrated that we exceeded the expectations.
- Question: Have there been circumstances in which community have taken deliberate impacts… Answer: One example is with land use regulators on the local level. As long as trends do not change in development, indirect and cumulative impact analysis has been upheld. We also have to better establish the case to manage impacts. Most of us are aware that the read usage and future development are loosely linked. A study by the John Locke organization reveals that the connection may be less direct than previously assumed.

From this point the session shifted from answering the pre-written questions to an open forum of exchanging ideas as well as posing questions and answers.

- Comment: With a project in North Carolina known as the Munroe connector and Munroe Divider we had to deal with the species known as the heel splitter mussel. We went through get a 401 certificate, but the development efforts for the community to get a growth development plan ran into some resistance while attempting to get approval. The "No Build" scenario was seriously considered. There is still an issue with this, as the mussel needs to be protected.
- Comment: In Mississippi we are economically disadvantaged and conduct EAs and EISs with a pro-development focus. It puts a whole new twist in the process.
- Comment: Indiana uses tiered EIS, and half the counties do not have land use plans in the rural areas. If you talk to them about getting one you run the risk of being run out of town. We are trying to find a way to get communities to see the value of land use planning. There is a need to identify where the environmentally sensitive areas are so that there will be no development in these areas.
- Comment: In the Mississippi Delta, home of the blues, and if you spent much time there you would understand why that music comes from there, we consider the build alternative that yields the highest increase in development.
- Comment: Expectations should be met in meeting with resource agencies at an early stage for integration.
- Question: Can you speak to what they have been doing in Colorado? Answer: The regional plans have benefits and drawbacks in them. We used a panel to look at the cumulative effects such as quality of life and sustainability. However, it is difficult to determine these cumulative effects. The EPA determined that the I-25 Colorado Springs project implied in a recent letter that the cumulative effects could add up to significant impact.
- Comment: We took all the projects with the MPO and looked at the whole area to make our plan and the innovation was good. The collective plan was a good tool that a city and surrounding areas can do to conserve the land areas. We developed GIS layers and achieved 80 percent accuracy in prediction of future growth trends. There may be methods of even achieving a 90 percent accurate model with more refined use of GIS.
- Question: If we had determined regional effects with a TIP, what do we do with indirect and cumulative information? Answer: In Winston-Salem we just did that into one EIS and then will go for segment-by-segment development for this programmatic EIS.
- Question: Waste and borrowed areas, what is the latest info/news? Answer: We did a survey and plotted responses. The findings were that many states are asking contractors to provide evidence

that they have done archeological procedures. Most states do this without the federal regulations mandating action. Some states do not do this and still report that they have not run into any problems.

- Comment: There has been an ongoing problem for years, when developers dig up the gophers and Native American skeletons in the dirt and they have to do something at that point. Comment: You have to look through the public opinion lens, if we appear to be callous or not careful, there will be negative consequences. The key is to find a way to make the state look good and the state should position itself to be proactive and a leader.
- Comment: That is what we have been doing in Mississippi. We now have an archeological survey for all burial sites and most counties do biological surveys. We require that a certified letter be sent from a qualified biologist prior to work and we are doing it before the NEPA process.
- Comment: We have a bypass project based on the Sidney Jones plan that the EPA refused to accept unless the city acquired the land around the interchange to preserve it. But the state did not follow the request. Comment: We have 39 tribes in residence in Kansas and we have a chart from every region that they have historically lived. In all places that we suspect archeological sites we follow regulations to preserve the artifacts. If the areas are part of recorded sites, we consult with the related tribe prior to any digging.
- Question: I am having trouble with integrating the NEPA process- NEPA process is supposed to be the process that eliminates problems before they occur, but that is not happening. Answer: We have found success with our system of inter-state access request. It is taken by many people to be location approval- if this was part of NEPA instead of before it would reduce the public problems as they assume that is where the project is going. Technically, approval of access is a NEPA triggered process.
- Question: One Vital Few goal is getting the EIS median down to 36 months, but state DOTs may not be ready to go. FHWA has no control of this; why not encourage mitigated FONSIs? Answer: From a federal lands perspective we are very concerned that at some point the leadership will say that the federal lands will never achieve 36 months with survey windows we have parts of the country that are located with short growing seasons for plant study, or have snow for the majority of the year. Often, we can't work for 9 months out of the year on a certain land area. Just saying the median is the goal for "all" projects and some may be longer like federal lands do not provide us solace, as we know that we affect the average.
- Comment: Mitigated FONSIs more likely then not. Comment: We should not file the NOI unless they state that they are ready to go. It is a political item, as the politician wants to claim credit for a work start. Comment: Do not want to put notice out and take a year longer to scope. We are still in the process of developing the basic infrastructure. Delays are caused by two things: local opposition by groups who use NEPA, and lack of focus, or priority of the local highway office. Timeframes and median times will yield data that is not useful. I know ones the highway is serious about and ones that are not. You can find out a different way to measure them, as this is not the most helpful method. (I.e. pick different criteria rather than the limited 36-month goal.)
- Comment: "we want sprawl, sprawl is good, bring it to West Virginia."
- Comment: I am frustrated with the timeframe. ACE is totally schedule driven and they are sacrificing quality! I appreciate that time needs to shorten but the likelihood increases that the final document will be excrement.
- Comment: Have told the project will be done in one year. The schedule drives the process and the process suffers.
- Comment: In Indiana, high priority projects will have a schedule eventually the schedule falls apart. Median and low level priorities never get a revised time frame/schedule. We update those but it they often lag.
- Comment: Here is a fiscal point. Every year you get more requirements and we have to do them in far less time.

The questions that were submitted, but not covered due to lack of time, will be posted on the Re:NEPA website in the near future.

EARTH, FILL, AND WATER

Moderator
Paul Garrett, Ecologist, FHWA

Speakers
Fred Bank, Water and Ecosystems Team Leader, Office of Natural and Human Environment, FHWA
Dennis Durbin, Environmental Compliance Specialist, Eastern Federal Lands Highway Division

Description: The Earth Fill and Water session addressed project specific location issues that affect a State DOT's ability to obtain a Section 404 permit in a timely manner. The National Wetlands Mitigation Action Plan, the Rapid Wetland Assessment Primer, and project specific locations were discussed.

National Wetlands Mitigation Action Plan (Fred Bank)

- The National Wetlands Action Plan (Plan), released December 26, 2002, was created in response to independent studies that raised significant concerns with effectiveness of CWA Section 404 in replacing lost wetlands. The National Academy of Science's National Research Council (NAS) study in 2001 and the General Accounting Office (GAO) report in 2001 were two of these studies.
- The Plan commits six Federal agencies to completing 17 tasks by 2005 to improve the ecological performance and results of compensatory mitigation. The 17 tasks are designed to address the specific concerns raised by NAS and GAO.
- In 1998, TEA-21 established a preference for mitigation banking to compensate for wetland impacts resulting from the construction of Federal-aid highway projects, consistent with the 1995 Banking Guidance and all other applicable laws and regulations. This guidance recognizes that the Corps, in consultation with EPA, is responsible for deciding what mitigation most suitably compensates for unavoidable impacts but also recognizes the benefits that mitigation banking provides, particularly for highway projects, which may have numerous small impacts, and encourages the use of banks in accordance with the TEA-21 mandate.
- The guidance created a 2-step process for implementing the TEA-21 banking preference on a project-by-project basis:
    - Step 1: Determine the suitability of banking in the context of whether the impacts occur within the service area of an approved bank, whether the bank has available credits, and whether the functions of those wetlands impacted are adequately replaced through banking.
    - Step 2: Address those situations where there are several opportunities or choices to adequately compensate for unavoidable impacts, while acknowledging the DOT's ability to choose amongst these mitigation plans in light of the TEA-21 banking preference.
    - The guidance also encourages early coordination amongst the Federal agencies in an effort to streamline the review and approval process and encourages, to the extent appropriate, the exchange of information between the agencies responsible for the approval of banking instruments (MBRT) and the DOTs.
- Existing preference is based on sound science: some functions are location-specific; wetland type specific. NAS did not conclude that on-site in-kind compensation is wrong, only that an automatic preference for it ignored other potentially more compelling ecological factors. Watershed guidance is due out in 2005 and will likely take additional time to implement. Site/kind guidance will bridge that gap.

2004 and 2005 Action Items

- 2004: Release of buffer guidance; release of preservation guidance; and, release of guidance of aquatic resources that are difficult to replace (DTR)
- 2005: Performance standards guidance; creation of a shared database; creation of a national report card; and, mitigation in the watershed context

Comments, Questions, Answers

- Question: Has anyone used the wetland mitigation database? Answer: One session attendee has used the database. The database will identify the type of aquatic environment impacted by a project, as well as list mitigation options and delineate whether the project is a Federal or non-Federal project.

Rapid Wetlands Assessment Primer (Dennis Durbin)

Mr. Durbin discussed various wetlands assessment methods that are being used across the U.S. He also described some of the laws and legislation that make wetlands assessment necessary. Related laws, regulations, and guidance include:

- NEPA
- Section 404 CWA Regulatory Program
- Executive Order 11990, Protection of Wetlands
- 23 CFR 777, Mitigation of Impacts to Wetlands
- FHWA Policy of a net gain of wetlands
- Section 404 Mitigation Action Plan
- Corps REGL 2-02

Wetlands and wetlands assessment pose several challenges facing linear highway projects. First, impacts could occur in different drainage areas. Wetlands within and among drainages could be of various types as well—In-kind mitigation may be difficult if more than one type of wetland is impact. Finally, wetlands in different areas may perform different functions.

To overcome these challenges FHWA has several assessment methodology needs and objectives. These are listed below:

- A flexible assessment methodology that is broad enough in scope to account for different wetland types and functions. It is necessary to utilize one assessment methodology for one project that takes into account different wetland sizes, functions, and types
- The methodology should be standardized, perhaps one methodology per region or State
- The methodology should be rapid to accommodate project timelines
- The methodology should be functionally based since linear projects may impact several different types of wetlands
- The methodology should be quantitative
- It is also necessary to identify all information needs for regulatory permitting requirements within the methodology's basic framework.

The objectives associated with wetlands assessment methodologies include:

- Allowances for integration of ecosystem based mitigation including wildlife habitat, vegetated buffers, uplands, and open water habitat
- Recognition of appropriate applications of bank in mitigation
- Recognition that on-site mitigation is not feasible in all instances
- Recognition of the important functional or condition indicators

Mr. Durbin described several alternatives in the field of wetlands assessment. The characteristics of a hydro-geomorphic approach, a New England Methodology, a Montana DOT Methodology, and a Washington DOT methodology were outlined. Their key distinctions are summarized:

1. Hydro-geomorphic Approach – The hydro-geomorphic approach, which provides numerical output, establishes appropriate mitigation ratios, identifies critical site parameters, can address all wetlands functions, and can be easily updated.
2. New England Methodology – This methodology is a relatively quick methodology capable of addressing all wetlands functions. It does not provide numerical output or define mitigation ratios.
3. Montana DOT Methodology – The Montana DOT methodology combines quantitative and subjective assessment of wetland condition, function, and value. It recognizes specific wetlands functions and yields wetland value ranking.
4. Washington DOT methodology – This methodology, an adaptation of the New England Methodology, uses characteristics similar to the hydro-geomorphic approach and can associate landscape level functions. It helps to identify specific characteristics of a mitigation site.

Project Specific Location (Paul Garrett)
Mr. Garrett gave an overview of the preliminary results of a nationwide project specific location (PSL) survey. FHWA intended for the PSL survey to help assess whether new PSL policy should be rewritten. Based on the preliminary results, it is not likely that the policy will be changed, because States appear to already be regulating and monitoring PSL for themselves.

Key survey results include:

- In four States, the DOT identifies or designates PSL
- Five States have no specifications for PSL
- Fourteen States have submission/approval of contractor-selected PSL
- Five States have general specification for PSL

Comments, Questions, and Answers

- Question: What level of PSL specificity is necessary when there are many choices? Answer: The contractor will likely use existing commercial spaces. Commercial spaces are PSL.

THE PEOPLE, THE PROCESS, AND THE PRODUCT

Moderator
Rob Ritter, Planning Capacity Building Team Leader, Office of Planning, FHWA

Speakers
Tashia Clemons, Environmental Program Specialist, FHWA Ohio Division Office
Deborah Suciu-Smith, Environmental Specialist, FHWA Pennsylvania, Division Office
Erika Thompson, Environmental Program Coordinator, FHWA New York Division Office
KLynn Berry, Community Impact Specialist, FHWA Resource Center
J. Shane Belcher, Environmental Manager, FHWA South Carolina Division Office

Description: This session focused on effective techniques for public involvement, methods to address the human environment, and activities related to these that exist throughout the entire lifecycle.

Environmental Justice Assessment Process in Ohio (Tashia Clemons)
Ms. Tashia Clemons described the environmental justice (EJ) process carried out thought he Mid-Ohio Regional Planning Commission (MORPC), Ohio's largest metropolitan planning organization (MPO). Ms. Clemons serves as the Federal liaison to the MPO.

- EJ is an ongoing process
- MORPC incorporates the target population into their process (they have a large Somalian population)
- The initial assessment process began in 2000 and identified the needs of the target population to ensure that they have adequate transportation options
- MOPRC's public involvement process included a walk through the Transportation Improvement Program (TIP) and the Regional Transportation Plan (TPlan)
- MOPRC identifies different types of data to measure to see if investments in the TIP are being applied, and if there is a benefit. This includes data that is based on (1) population group, (2) geographic area, and (3) maps.
- It has been identified that the target population deals with more congestion than the non-target population because they are located closer to the core. The 2030 TPlan will address this.

Public Involvement Techniques in Pennsylvania (Deborah Suciu-Smith)
Ms. Suciu-Smith described several public involvement techniques being implemented in Pennsylvania. These techniques are designed to keep public involvement flexible for a project-by-project basis.

- Example: Lancaster County, PA has a large Mennonite and Amish population. Most members do not participate in government due to their religious beliefs. They are not protected under EJ because they are low-income or minority. Rather, they choose to not accept aid, vote, etc.
    - Public involvement methods had to be created to reach out to these groups. The FHWA Division Office and Pennsylvania DOT wanted to avoid speaking on their behalf.
    - These populations do not want their names on the record so records state that they are not detailed in order to accommodate their religious requests.
    - Standard procedures were created to address this concern for future public outreach to these groups.
    - Federal funds were approved to create horse buggy lanes, but these populations communicated that they did not want that. Through closed meeting, the populations have communicated their input to FHWA and Pennsylvania DOT.
    - These discussions have been key in moving projects forward. It is now understood that these populations want to be represented as their own community.
- Example: Lebanon County, PA
    - The community is divided by a railroad with at-grade crossings. Minimal wetlands exist; it is primarily an urban area.
    - The project, in a largely historic area, required the taking of over 70 residential units for low-income and minorities, with a large Latino and Spanish population. The project would improve safety because it will allow emergency services even with trains passing.
    - Pennsylvania DOT translated the information materials into Spanish and worked with both community officials and local leaders to share information and receive feedback. However, no one offered any feedback.
    - The Draft EIS showed a disproportionate impact in the Latino community, but the community has not said anything about this impact. It is suspected that some illegal populations may not be willing to get involved in the process. FHWA does not agree that it is disproportionate because they cannot recognize who is being affected.

Visualization Techniques in New York (Erika Thompson)
Ms. Thompson described several techniques being developed and implemented in New York State that address context sensitive solution (CSS). Public involvement is a large component of CSS, and visualization is one tool that can be effective when communicating to the public.

- New York State DOT and New York FHWA Division Office play an active role throughout the planning and project development process. A one-day training is given for New York State DOT planners and engineers. A Public Involvement Manual has also been created, which includes specific tools and techniques.
- New York State DOT considers all projects to be CSS and began their environmental initiative in 1998, which incorporates CSS.
- New York State DOT has a nationally recognized visualization team with five full-time employees.
- For a project in Saratoga Springs, visualization was used as a means to improve communication with the public.
- Visualization can help to portray:
    - ROW impacts via Aerial photography and visualization models
    - Impacts when lowering a bridge clearance
    - Traffic patterns when a rotary is created
    - Before and after pictures of a given project area
- These techniques serve as a tool, but may not show exact details like yielding or congestion. Certain models can be adapted to show all elements.

Community Impact Assessment Methods from FHWA Resource Center (KLynn Berry)
Ms. Berry shared examples focusing on the effects of bicycle safety, pedestrian safety, barrier, and access management methods. These community impact assessment methods focus on multimodalism and how road improvements can benefit non-users such as bicyclists and pedestrians. Some elements of these methods include:

- Bicycle Safety Effects: The Bicycle Safety Index uses readily available data to measure the compatibility of a road to adopt bike lanes.
- Pedestrian Safety Effects: Pedestrian Road Crossing Level of Service can measure the performance of an intersection and address pedestrian delays. This delay may create a safety risk when pedestrians choose to cross an intersection when traffic is still flowing.
- Barrier Effects: Barrier size, crossing potential, and traffic disruption are all considered to be barrier effects. These can influence traffic flow and speed and can effect what traffic reaches certain business areas.
- Access Management Effects: Access management changes can have an economic impact to businesses. While there is typically little adverse impact on businesses for median projects, businesses that attract pass-by traffic are sensitive to access management changes.

Public Involvement in South Carolina's Long-Range Plans (Shane Belcher)
Mr. Belcher discussed South Carolina's new approach to including public involvement in the development of long-range plans, rather than just at the project level.

- The new public involvement effort began in 2001 with FHWA South Carolina Division working with the state's nine MPOs.
- The effort was designed to be a three-year strategy.
- MPOs attended the National Highway Institute course on public involvement, hosted by the FHWA South Carolina Division.
- Although all the MPOs are on different cycles for their long-range plans, each was very successful in using a variety of media to share information and receive feedback.
- The results of this new effort measured how many people provided feedback on their long-range plans. The results showed that the majority of MPOs surpassed the baseline of only received

feedback from three to five people. Many MPOs also reached the overall goal to increase their feedback responses by 100 people per MPO.

- Mr. Belcher emphasized that the key to successful public involvement in South Carolina was effective listening. This allows for a clearer understanding of what the public wants and needs, and builds trust and relationships with stakeholders.

CLOSING SESSION

Speaker
Lamar Smith, Team Leader, Office of Project Development and Environmental Review, FHWA

Mr. Smith concluded the Environmental Conference, FHWA's first nationwide environmental conference in over 10 years, with a presentation summarizing the events and sessions at the Conference. Mr. Smith's summary also highlighted quotes, what's new, and next steps identified throughout the three-day Conference. Key points discussed at the Closing presentation included:

- Over 265 participants from 54 of the 55 Offices attended (98.18 percent attendance!), including all three FLH Offices and 51 out of 52 Division Offices.
- It was pointed out that FHWA serves as an agent and leader of change that can help improve the quality of life. The key to this success is building relationships and trust, especially with resource agencies.
- Three focus areas for Division Offices should be:
  1) Work together to improve the quality of the environmental process and related documentation
  2) Work to link planning and NEPA
  3) Continue to improve the timeliness of the NEPA process.
- Three important roles for FHWA include:
  1) Working for the public good
  2) Striving to achieve trust
  3) Building partnerships to succeed

Next Steps

- FHWA should stay the course with environmental streamlining, stewardship, and the Vital Few Goals.
- Attendees informally expressed support for another environmental conference, perhaps in 2006.