



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

**North Carolina Board of Transportation
Environmental Planning and Policy Committee
Meeting Minutes for May 4, 2005**

A meeting of the Environmental Planning and Policy Committee (EPPC) was held May 4, 2005 at 8:30 AM in the Board Room (Room 150) of the Transportation Building. Board Member Nina Szlosberg chaired the meeting. Other Board of Transportation members that attended were:

Tom Betts	Arnold Lakey
Conrad Burrell	Cam McRae
Bob Collier	Andrew Perkins
Marion Cowell	Lanny Wilson
Nancy Dunn	

Ms. Szlosberg called the meeting to order at 8:30 AM and recognized special guests in attendance. She thanked Board Member Conrad Burrell for allowing the committee meeting to be extended until 9:45 AM during his previously scheduled committee time. Ms. Szlosberg accepted a motion to approve the meeting minutes from the April committee meeting as presented.

Ms. Szlosberg introduced Emily McGraw, NCDOT Pavement Preservation Engineer, to speak about NCDOT's Asphalt Solvent Testing Program. Ms. McGraw began by explaining that asphalt solvents are chemical products that are used to clean equipment and tools, such as asphalt distributors, spray bars, or hand tools. Asphalt solvents are used to help maintain the equipment and produce a better asphalt product. DOT currently has 103 highway maintenance facilities and 14 bituminous unit facilities (one in each division) that use asphalt solvents.

Ms. McGraw explained that the DOT Asphalt Solvent Testing Program was developed because of a number of environmental and management issues. Before the program began, vendors were telling DOT field personnel that the products they were selling were "environmentally safe or friendly." When the program requested Material Safety Data Sheets (MSDS), many times the sheets stated that the product contained chemicals that may require consultation with regulators. The department did not think it would be wise to expect field personnel, who by trade are not chemists or regulators, to make decisions about what chemicals are worse than others. Further, the department wanted to determine the potential hazards of the products and wanted to know how these products affect soil and groundwater.

In addition, the department wanted to select a series of tests that would exclude products that had a chemical composition of petroleum or chlorinated solvents. Historically, the department used

diesel fuel to clean the equipment, and now it knows that the use of fuel oil is hazardous to the natural environment. The EPA Method 8260B tests for chlorinated solvents and petroleum products. If a product passes this test, the product should be non-hazardous to soil and groundwater. As the department drafted the testing program, it determined that it wanted a product that if dropped on the ground, staff could clean up and not consult a regulator. NCDOT uses very small amounts of asphalt solvent in the field outside of the maintenance yards. While environmental operating procedures are followed, NCDOT wanted to ensure that whatever product is used is non-hazardous.

Ms. McGraw noted that several partners were involved in establishing the program, including NCDOT's State Road Maintenance Unit, Materials and Testing Unit, Roadside Environmental Unit, Purchasing, NC Department of Environment and Natural Resources (NCDENR), NC State University, and representatives from the private industry. NCDOT and its partners determined that a desirable asphalt solvent should be:

- Safe for people to use
- Safe for the environment
- Effective in removing asphalt
- Reasonable in price

Based on these criteria, four tests were used to measure the effectiveness of meeting its intent, and a list of qualified products was developed (QPL). The testing program was launched in 2003 with 18 products being submitted to NCDOT for use as an asphalt solvent. Using the four tests, only one submitted product passed. After sharing the testing results with NCDENR, a contract was awarded in 2003 for \$8.17 per gallon. In 2004 when the program began soliciting vendors, an inconsistency was identified with the product previously under contract. The department worked with the vendor, NCDENR, the industry, and independent labs to resolve the inconsistency and requested a contract extension. Ms. McGraw commented that based on the research, minor changes were made in the testing and administration of the program. In late 2004, vendors were again solicited to submit products for consideration. Twelve products were submitted from seven vendors, with five products from five different vendors passing all four required tests. A contract was awarded in 2004 for \$7.19 per gallon. The total cost spent in 2004 on asphalt solvent was \$488,255 and, in 2005, the anticipated cost is \$429,689 -- an anticipated cost savings of \$58,566.

Ms. McGraw concluded that the cost savings proves that the department can be a good steward of the environment and save money at the same time. With adopting this program, NCDOT has consistently saved the State money by purchasing the material. While the testing program cannot quantify all other savings, it believes that it has minimized the amount of asphalt solvent waste and has saved money by field personnel not having to make decisions about which solvent product to use. By adopting the program, the department has improved communication, both internally and with other state agencies. The department has also established a clear commitment to change by identifying the four critical tests in meeting its asphalt solvent needs.

Ms. McGraw asked the committee for questions. Board Member Marion Cowell asked whether the department reviews other state programs when developing new programs like this. Ms.

McGraw responded yes. She elaborated that the department looked at other state DOT's that had implemented similar programs. Mr. Cowell followed up by asking whether NCDOT shares its successes with other states after the program has been implemented. Ms. McGraw responded that the department does share our knowledge and program successes with others. She noted that NCDOT is currently a leader in this area and many states are looking to NCDOT for guidance and lessons learned.

Ms. Szlosberg began the next set of presentations by introducing John Sullivan, Administrator with the Federal Highway Administration – North Carolina Division, to announce the 2005 FHWA Environmental Excellence Awards. Mr. Sullivan opened by congratulating NCDOT on its continuous and outstanding achievements with environmental excellence. He commended NCDOT as a national leader in environmental stewardship. The Environmental Excellence Award is a national award that is sponsored by FHWA that recognizes environmental excellence in twelve categories. The awards are presented biannually on Earth Day. Mr. Sullivan noted that NCDOT has a strong tradition of receiving this prestigious award, having won in 1997 (the first year of the award), 1999, 2001 and in 2003 for Excellence in Environmental Leadership. This year NCDOT nominated five outstanding and diverse projects and programs. Each nominated project and program was summarized in a brief presentation to the committee.

Mr. Sullivan introduced Mr. Tom Norman, Director, Division of Bicycle and Pedestrian Transportation, to present some highlights of the first nomination -- the Reedy Creek Greenway System. The project was nominated in the Non-motorized Transportation Category. Mr. Norman summarized that the project is located in Raleigh and is a greenway system that ties together several communities. It begins near Meredith College and transverses westward adjacent to the NC Art Museum, over the Raleigh Beltline, and along Reedy Creek Road, ending at Umstead State Park. The project was a tremendous success because of the many partnerships involved throughout the planning and construction processes. One of the most notable successes of the greenway system was the completion of the state's longest pedestrian bridge. The 660-foot pedestrian bridge connects two previously fragmented urban areas across the I-440 beltline at Wade Avenue. Mr. Norman concluded by thanking his division staff and the many partners who made the project a huge success.

Mr. Sullivan then introduced Mr. Pat Ivey, Division 9 Engineer, to present some highlights of the Dan River Bridge Replacement Project. The project was nominated in the Ecosystems, Habitat, and Wildlife Category. Mr. Ivey began by noting that the project (B-3045) was located in Stokes County and was the replacement of a bridge that was quickly deteriorating. The project had some very serious environmental concerns, including the relocation of a stream, endangered mussels at the project site, and the demolition of the existing bridge. Each environmental concern took a multitude of partnerships and open communication throughout the process to achieve success. During the construction process the project had to also overcome adversity during the 2004 flood. Once the new bridge was constructed, the old bridge was removed with the utmost sensitivity to the environmental surroundings. Special procedures and a unique containment system were put into place to catch runoff and any debris during the removal process. Mr. Ivey concluded that the project was a success because of the partnerships and on-going communication with the resource agencies to protect the environmental concerns of the project site.

Mr. Sullivan then introduced Ms. Missy Dickens, Transportation Engineer with the Project Development and Environmental Analysis, to present some highlights on the Glenwood Avenue Bridge Replacement Project. The project was nominated in the Cultural and Historical Resources Category. Ms. Dickens opened by explaining the location of this bridge replacement project. The project is located along Glenwood Avenue over Wade Avenue and is between the Five Points Historic District and the Glenwood Historic District of Raleigh. Many of the adjacent properties have unique brick facades and mature trees. Some of the critical project issues during the design and construction were the attempt to save some of the mature trees that had been in the median and in the right of way since the construction of the old bridge. Seeking a win-win solution with the stakeholders involved, it was determined that some trees would have to be removed, and by altering the work zones, some trees could be saved. Additional new trees were also planted to mitigate any lost vegetation. In addition, the new bridge was constructed with a special simulated masonry treatment that resembles the surrounding historic structures. Ms. Dickens concluded by thanking the many stakeholders that helped make this bridge replacement project a cultural and historical success.

Mr. Sullivan introduced Mr. Jeff Lackey, Roadside Environmental Design Engineer, to present some highlights of the Scenic Byways Program. The program was nominated in the Scenic Byways Category. Mr. Lackey began by briefly explaining the background of NCDOT's Scenic Byways Program and the many unique roadways that are a part of the program. Scenic byways are categorized by their national or regional significance. Two of the more nationally significant scenic byways located in North Carolina are the Cherohala Skyway and the Blue Ridge Parkway. When compared to other programs, NCDOT's Scenic Byway program is unique because of an educational component. In 2003 NCDOT implemented a new educational program, "NC Scenic Byways: A Teacher's Guide." The purpose of this program was to provide educational support material to fourth grade students and teachers statewide. The program material, which includes hands-on lesson plans and activities, helps educators and students gain a greater knowledge of NC's byways while providing tremendous resources about geographical, historical, and cultural significance. The program has been praised for its unique approach to educate our youth about history and culture through the use of roads. Mr. Lackey commented that he has had the opportunity to see the material being used in his child's fourth grade classroom. He concluded by reiterating the unique success of this program and the possibility to expand the program as future needs develop.

Mr. Sullivan then introduced Mr. Roger Sheats, Deputy Secretary for Environment, Planning, and Local Government Affairs, to present some highlights of NCDOT's environmental research program. The program was nominated in the Environmental Research Category. Mr. Sheats opened by noting that the research program is rapidly becoming one of the most diverse and environmentally committed programs in the country. The program is a leader in four significant ways:

- Funding level
- State funding contribution
- Diversity
- Partnering efforts with regulatory agencies

Mr. Sheats commented that the funding level has significantly increased in the last seven years and that forty-six percent of the research budget is allocated for environmental research. The research is also diverse by providing research needs to improve project development for wetland mitigation, erosion and turbidity control, flora and fauna, and pollutant discharge. Some of the most notable environmental research in recent years has involved research on endangered species, such as mussels. Mr. Sheats concluded by recognizing the Program Development Branch and Dr. Moy Biswas' Research and Analysis Unit for their outstanding leadership with environmental research.

Mr. Sullivan thanked all of the presenters for their summaries of the environmentally excellent projects and programs and commended DOT's management for being environmental stewardship leaders. This year 238 nominations were accepted from 38 states for the twelve categories for the 2005 FHWA Environmental Excellence Awards. Mr. Sullivan congratulated NCDOT for winning an unprecedented three awards out of the twelve categories (the only state to win multiple awards). He then recognized the 2005 award winning nominations by presenting Secretary Lyndo Tippet and staff with the three award plaques. The awards included:

- The Reedy Creek Greenway System in the Non-motorized Transportation Category
- NCDOT's Environmental Research Program in the Environmental Research Category
- NCDOT's Scenic Byways Program in the Scenic Byways Category

Secretary Tippet thanked Mr. Sullivan for the presentation of the 2005 awards and praised NCDOT's staff for being national leaders in environmental stewardship. Ms. Szlosberg also reiterated the achievement of the department and the significance of Secretary Tippet's leadership with creating an environmental ethic within the department.

Ms. Szlosberg noted the continuing importance of air quality issues to the Board and invited Jamal Alavi, Transportation Planning Branch, to brief the committee on Congestion Mitigation and Air Quality (CMAQ). Mr. Alavi began by giving a status report and commenting that NCDOT received 138 projects for review during the call for projects. Following review of the submitted projects, the Transportation Planning Branch staff has recommended 115 RPO/MPO projects and 4 state projects. Mr. Alavi distributed a copy of the recommended CMAQ projects to the Board Members. He commented that the process used has been successful and many partners have reviewed the projects on the list. Mr. Alavi asked the committee for any feedback regarding the CMAQ tables. Ms. Szlosberg commended the DOT staff for changing the process and working so hard to develop the list of projects. She recommended that the committee take the time to carefully review the CMAQ list and tables and then take action at the June committee meeting. Mr. Alavi thanked the committee and advised the Board Members that he would be available to address any questions or hear any feedback before the June meeting.

Ms. Szlosberg thanked the presenters, Board Members, and meeting attendees. The next meeting of the Environmental Planning and Policy Committee is scheduled for Wednesday, June 1, 2005 at 8:30 AM in the Board Room (Room 150) of the Transportation Building.

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