Special Session

FHWA 2009 Environmental Excellence Awards

ICOET was pleased to once again host the Federal Highway Administration’s Environmental Excellence Awards ceremony. The biennial awards program recognizes organizations, projects, and individuals who forge creative solutions and innovations for balancing the needs of a safe and efficient transportation network with environmental sensitivity. This year 13 winners in 12 categories were selected to receive the 2009 awards. Judges for the program also selected one project for special recognition, and two projects for honorable mention, from 98 entries submitted.

Following opening remarks by Tom Sorel, Commissioner for the Minnesota Department of Transportation, FHWA Deputy Administrator Greg Nadeau and FHWA Minnesota Division Administrator Derrell Turner presented the awards during a luncheon ceremony, with assistance from Carol Adkins and Patricia Cazenias of FHWA’s Office of Project Development and Environmental Review. For more information on the 2009 awards program and winners, please refer to FHWA’s Environmental Excellence Awards Web site at www.fhwa.dot.gov/environment/eea2009.

Excellence in Air Quality Improvement and Global Climate Change

California Regional Blueprint Project, California Department of Transportation (Caltrans)
Caltrans, in coordination with the Governor’s Office of Planning and Research and the California Department of Housing and Community Development, oversees the California Regional Blueprint Program to encourage sustainable growth on a regional scale. The program provides funds for voluntary regional sustainable growth-planning efforts that emphasize transportation and scenario-planning activities. Participating Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs) engage in visualization and scenario planning with extensive public participation. Regional agencies then use this planning process to create and implement a Regional Blueprint Plan, which integrates transportation, environment, housing, and other key regional issues into a preferred-growth scenario. The outcome-based goals of each Regional Blueprint planning process include reducing emissions of greenhouse gases from mobile sources, integrating environmental concerns into regional planning, linking transportation and housing needs at a regional level, building interagency partnerships, and creating proactive public involvement. The Regional Blueprint Program is an innovative policy solution to encouraging sustainable growth and combating global climate change.

Excellence in America’s Byways

Minnesota’s North Shore Scenic Byway, Minnesota Department of Transportation
Minnesota’s North Shore Scenic Byway strategic master planning process enhances the ecological and cultural sustainability of the North Shore. Planning and maintaining the 154-mile North Shore Scenic Byway requires the integration of varying landscapes, national and State forests and parks, towns, communities, and harbors. To ensure that the byway responds to local needs, the North Shore Scenic Drive Council consults with a broad range of stakeholders and public agencies, and then updates the Long-Range Strategic Plan every three years. This plan integrates infrastructure with the surrounding landscape by balancing needs for mobility and safety with environmental, community, cultural, and scenic objectives. Examples of the Council’s commitment to the improvement of the byway include the implementation of traffic calming measures within town centers, the replacement of unsafe highway sections, and the construction of bridges that incorporate bicycle and pedestrian paths. The partner agencies’ creative efforts ensure that the byway allows all of its users to experience the unique scenic and cultural features of Minnesota's North Shore.

Excellence in Context Sensitive Solutions

Glenville Wetland Mitigation Bank / Fox Point State Park, Delaware Department of Transportation (DelDOT)
DelDOT and the Delaware Department of Natural Resources and Environmental Control (DNREC) joined forces with New Castle County and multiple Federal agencies led by FHWA to implement context sensitive solutions in response to the Glenville flood of 2003. Tropical Storm Henri and Hurricane Isabel flooded the community of Glenville, which lay in the 100-year floodplain of the Red Clay Creek. DelDOT, because of its knowledge, experience, and resource power, was chosen to lead the relocation effort for the residents living in the 145 homes affected by the flood. The project team found a creative and context-sensitive way to address the former location of these homes: the 57-acre area became the Glenville Wetland Mitigation Bank, created in conjunction with the U.S. Army Corps of Engineers and the Environmental Protection Agency. The mitigation bank consists of 46 acres of new and restored wetlands and habitat.
with a buffer area for the 30 residences that remain. After excavating over 300,000 cubic yards of soil to create this wetland bank, DelDOT and DNREC reused the soil to cap a brownfield site and create an expanded 55-acre Fox Point State Park along the Delaware River. The Federal, State, and local partnership produced context-sensitive strategies and saved approximately $3 million in Delaware tax dollars while providing a mitigation bank, flood mitigation, a functioning new park, and a revitalized housing community.

**Excellence in Cultural and Historical Resources**

**Minnesota Historic Bridge Management Program, Minnesota Department of Transportation (Mn/DOT)**
The Minnesota Historic Bridge Management Program demonstrates Mn/DOT's commitment to excellence in cultural and historical resource preservation. The program began over 25 years ago with the completion of historical contexts to guide the evaluation of bridges in the State and the subsequent evaluation and identification of 250 bridges with historical significance, 33 of which were owned by the State. Mn/DOT worked closely with the Minnesota SHPO to identify candidates for long-term preservation and to develop individual management plans for the 24 selected structures. Mn/DOT also provided local transportation agencies with generalized historic bridge management that could help guide preservation and restoration of the over 200 locally owned historic bridges. The Minnesota SHPO recognized Mn/DOT's extensive effort and agreed to streamline the environmental review process for all nonhistoric bridges, thereby decreasing the cost and delays for 5,000 potential bridge improvement projects. The Minnesota Historic Bridge Management Program promotes a deeper commitment to the preservation of the State's distinguished engineering heritage while expediting the environmental review process.

**Excellence in Ecosystems, Habitat, and Wildlife (2 Winners)**

**Innovative Top-down Construction Used on Washington Bypass Project, North Carolina Department of Transportation (NCDOT)**
The project design-build team used an innovative gantry design to construct a 2.8-mile bridge with minimal disturbance to the surrounding environmentally sensitive wetland ecosystem. The NCDOT Washington Bypass Project consists of a 6.8-mile bypass route around the city of Washington, North Carolina, on US 17. The team came up with the world's first erection gantry to construct the bridge from the top down. Using gantries to drive the piles that support the bridge minimizes the construction footprint and limits disturbance to the area immediately around the bridge. Compared with traditional wetland construction that makes extensive use of access trestles, barges or tugboats, and cranes, the new erection gantry method holds great promise for minimizing construction damage to environmentally sensitive areas in the future.

**Oregon Department of Transportation (ODOT) Vernal Pool Mitigation and Conservation Bank**
ODOT created the first conservation bank in the State of Oregon, the Vernal Pool Mitigation and Conservation Bank, in the Rogue Valley. Vernal pools are unique environments that fill with water during rainy seasons of the year and dry out during others. ODOT enlisted the U.S. Fish and Wildlife Service (USFWS) and State and local resource agencies to find a vernal pool preservation site that would contribute to the conservation of rare species and habitats. The agencies unanimously chose an 80.23-acre site located directly adjacent to The Nature Conservancy's Whetstone Savanna Preserve. Together, the mitigation bank and the preserve will provide 160 acres of contiguous high-functioning vernal pool habitat. The complex will be protected by The Nature Conservancy to sustain wetland functions and values. Habitat will be provided for large-flowered woolly meadowfoam and Cook's lomatium, two endangered plant species, as well as the threatened vernal pool fairy shrimp. In addition to addressing species issues, the bank is available to compensate for impacts to wetlands. ODOT's collaboration with resource agencies and the Conservancy exemplifies a carefully researched mitigation project that preserves wildlife habitat in a unique and sensitive ecosystem.

**Excellence in Environmental Research**

** Quieter Pavement Research: Development of Technology for Measurement of Tire / Pavement Noise Using the On-Board Sound Intensity Method, California Department of Transportation (Caltrans)**
Caltrans' Division of Environmental Analysis adapted a little-known General Motors (GM) measurement methodology to precisely quantify tire/pavement acoustics. The new methodology, On-Board Sound Intensity (OBSI), is based on acoustic work done on test tracks in the 1970s by GM. The dominant noise source on light vehicles operating at freeway speed is tire/pavement noise. The noise levels on different pavements can vary widely depending on material type and surface texture. It was this tire/pavement noise phenomenon that led Caltrans to develop OBSI. The Caltrans-modified approach uses one standard tire to evaluate many different pavements with traffic on active freeways in real time. The unique aspect of this procedure allows pavement noise to be separated from other noise generators on a moving vehicle. This work has demonstrated that lowering pavement noise levels also lowers community noise adjacent to highways. Development of quieter pavement is another potential tool that transportation departments may use to
lower overall traffic noise levels in the community. A better understanding of tire/pavement acoustics will improve noise-modeling calculations and noise-mitigating design features. This Caltrans-GM-developed process is now being adopted as a measurement standard by the American Association of State Highway and Transportation Officials (AASHTO), ASTM International (formerly the American Society for Testing and Materials), and SAE International (the Society of Automotive Engineers International).

**Excellence in Environmental Streamlining**

11th Street Bridges Environmental Impact Statement, District of Columbia Department of Transportation (DDOT)

DDOT's 11th Street Bridges project will enhance the mobility of traffic across the Anacostia River. The project will eliminate the need for traffic to cut through neighborhood streets between the Anacostia Freeway and the Southeast Freeway. DDOT adopted an aggressive schedule and committed the necessary resources to advance the project and meet the goal of improving the quality and timeliness of the transportation-delivery process. To develop the project's Draft Environmental Impact Statement (DEIS), DDOT partnered with the public and more than 30 Federal and non-Federal participating agencies to gain early acceptance by all stakeholders. The team identified critical project issues, which improved the scoping phase and addressed stakeholders' concerns early in the DEIS. As a result, the solutions presented in the Final DEIS were representative of stakeholder needs and were environmentally sound. DDOT's collaborative and proactive approach to developing the 11th Street Bridges DEIS resulted in a streamlined project, exceeding the Federal Highway Administration's National Performance Objective.

**Excellence in Nonmotorized Transportation**

Midtown Greenway & Bridge, Minnesota Department of Transportation

The Midtown Greenway and Bridge project transformed the Midtown railroad corridor into a safe, fast, and barrier-free trail system for commuting and recreation while preserving necessary space for possible future coexistence with a light-rail transit system. Successful completion of the Greenway corridor required innovative design elements to improve mobility, safety, and access for pedestrians, bicyclists, and transit users. During the project planning process, stakeholders wanted to create an aesthetic signature community gateway. The 215-foot cable-stayed bridge was designed for the gateway, which fits within the available right of way and is used by 3,000 bicyclists and pedestrians on a daily basis for commuting and recreation. This much-needed Midtown Greenway Trail and gateway bridge represent a significant and successful local, State, and Federal investment in alternatives that encourage sustainable transportation.

**Excellence in Roadside Resource Management and Maintenance**

Nebraska Department of Roads (NDOR) Plan for the Roadside Environment

NDOR's Plan for the Roadside Environment promotes the increased use of native plantings and vegetation management to provide a sustainable roadside. The plan emphasizes the use of native plantings adapted specifically to the varying climate zones across the State. It contains sections for each of the six landscape regions across Nebraska. Each individual landscape section contains regional maps and summarizes a variety of ecosystem information for the region, including hydrology, climate, and soil and plant communities, as well as regional-history, land-use, and economic features. The plan is applicable to the entire State and includes landscaping objectives for integration into transportation planning, safety, design, and operation of the system. The informational base benefits NDOR and natural resource agencies concerning the role of the roadside environment and how to achieve good stewardship and maintenance of a unique and sustainable "Nebraska-style" landscape.

**Excellence in Wetlands, Watersheds, and Water Quality**

Caltrans Statewide Stormwater Management Program, California Department of Transportation

Caltrans' integrated Statewide Stormwater Management Program protects water quality while fulfilling the agency's mission to improve mobility across California. The comprehensive program addresses water quality throughout the project-delivery process for highway improvement projects. The Stormwater Management Program developed best-management practices (BMPs) for all departmental activities, including environmental, design, construction, facility operations, and maintenance. The program implements over 70 BMP types and uses more than nine types of stormwater control devices to prevent pollution and treat stormwater runoff. The program also includes a public education component; Caltrans' statewide Don't Trash California campaign has educated nearly half a billion Californians about trash and its effects on water quality. In partnership and collaboration with State DOTs, Caltrans hosted the first American Association of State Highway and Transportation Officials (AASHTO) Stormwater Conference in June 2008 to bring together State DOT representatives, the Federal Highway Administration, the Environmental Protection Agency, and leading academic researchers to share and advance the knowledge of stormwater runoff management directly related to highways and transportation facilities.
**Excellence in Environmental Leadership**

**Gary Ruggerone, Senior Environmental Planner, District 5, California Department of Transportation**
Gary Ruggerone has demonstrated environmental leadership over the course of his 30-year tenure at Caltrans, where he oversees the Environmental Stewardship Branch and leads the Emergency Response Team for Environmental Planning in Caltrans – District 5. Gary's ability to foster cross-agency cooperation and to transmit information from field crews to upper management allows him to efficiently integrate ecological principles into his many transportation projects, a few of which stand out as true advances in environmental planning. In the Elkhorn Slough Early Mitigation Pilot Project, he was instrumental in initiating a watershed approach for an early mitigation process that can be implemented years in advance. He also conceived of and executed two Programmatic Agreements between the Federal Highway Administration and the Ventura Office of the US Fish and Wildlife Service (USFWS) for the California red-legged frog and Smith's blue butterfly, which saved time and money for Caltrans and USFWS staff. This award recognizes Gary's distinguished career as an innovative team and environmental leader.

**Judge's Award for Special Recognition**

**The Oregon Solar Highway Initiative, Oregon Department of Transportation**
The Oregon Solar Highway Initiative is a partnership with the private sector that utilizes State and Federal tax credits, depreciation, and utility incentives to finance renewable energy projects located in the highway operating right of way. The first project under the Initiative is a 594-panel, 104-kilowatt, ground-mounted solar array located inside the interchange of Interstate 5 (a federally-designated Corridor of the Future) and Interstate 205 in Tualatin, Oregon. ODOT seeks to demonstrate that solar arrays will complement and not compromise the transportation system, and that they can thus be deployed on highways throughout the nation. The Oregon Solar Highway Initiative reflects the innovation and spirit of partnership that are necessary to develop entrepreneurial and sustainable ways of addressing the nation's transportation and energy needs.

**Honorable Mentions for Environmental Excellence** (2 Winners)

**TRIP to Work Program, South I-25 Urban Corridor Transportation Management Association, Denver, Colorado**
The Transit Rider Incentive Program (TRIP) provides affordable public transportation services to employees working in the South I-25 Urban Corridor of Denver, Colorado. The South I-25 Urban Corridor Transportation Management Association, a coalition of local governments and business groups within the South I-25 Corridor, partnered with the Denver Regional Transportation District to discount monthly light-rail, bus, and "Call-n-Ride" passes that provide employees with a low-cost alternative to driving to work.

**Walk There!, Metro Regional Government, Portland, Oregon**
Portland's Walk There! program, developed by Metro, promotes walking as a healthy transportation option. The Walk There! guidebook highlights 50 walking routes in the Portland metropolitan region and enhances access for people with disabilities by including detailed information about each route's distance, difficulty, terrain, and incline. Metro distributed the guidebook through medical clinics around the region.

**Judges for 2009 Awards Program**

- **Catherine Liller**, National Transportation Liaison, US Fish and Wildlife Service
- **Rachel Herbert**, Water Permits Division, US Environmental Protection Agency
- **Jeremiah Dumas**, ASLA, GeoSystems Research Institute, Mississippi State University