In April 2006, the Federal Highway Administration (FHWA) published an environmental guide, *Eco-Logical: An Ecosystem Approach to Developing Infrastructure Projects* (*Eco-Logical*), to help transportation professionals improve their understanding of how infrastructure impacts habitat and ecosystems. This multi-agency initiative described a vision for integrating infrastructure development and ecosystem conservation processes with economic, environmental, and social needs and objectives. (For more details on the guide, see the March 2006 issue of *Successes in Stewardship*.)

A year later, in May 2007, FHWA issued a grant solicitation, “Integrating Transportation and Resource Planning to Develop Ecosystem-Based Infrastructure Projects,” to fund projects addressing one or more of the elements described in *Eco-Logical*’s integrated planning process. FHWA recently announced the names of the winning grantees; they are highlighted in this month’s newsletter.

**Promoting an Ecosystem-Based Approach to Planning**

The last three federal transportation bills have incorporated the U.S. Department of Transportation’s goal of improving the integration of infrastructure and ecological planning. Most recently, Section 6002 of the *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users* (*SAFETEA-LU*) has integrated environmental planning factors into statewide and metropolitan planning processes by requiring that transportation agencies coordinate with resource agencies and public stakeholders as early as possible in the environmental review process. These efforts are expected to lead to (1) more informed decisionmaking in transportation planning, (2) proactive integration of natural resource considerations with transportation needs, and (3) identification and prioritization of opportunities with the greatest potential to mitigate the possibly harmful environmental impacts of proposed transportation projects.

In line with both *SAFETEA-LU* and *Eco-Logical*, FHWA’s new *Eco-Logical* grant program is aimed at supporting efforts to:

- Conserve larger, multi-resource ecosystems to improve habitat connectivity
- Better predict outcomes in environmental review and regulatory processes
- Enhance public involvement and transparency
- Streamline infrastructure planning and development

In Fiscal Year 2008, FHWA intends to award grants totaling approximately $1.4 million to 14 projects. 40 applications were received for consideration of these grants. These awards are expressly conditioned upon the finalization of the award terms and conditions. Recipients include state and local departments of transportation, state resource agencies, Metropolitan Planning Organizations (MPOs), local governments, nongovernmental organizations (NGOs), and a university. Expectations are high that these projects will become case studies illustrating best practices in how to integrate transportation and environmental planning.

**And the Winners Are …**

**Colorado DOT (CDOT):** In coordination with regional partners, CDOT will use its grant to support development of a Regional Ecosystem Framework (REF) —an overlay of maps of agencies’ individual plans, along with descriptions of conservation goals in the region—for the I-70 corridor in Colorado from Denver to Glenwood Springs, an area traversing portions of three different watersheds.
Chicago DOT: Chicago DOT will develop a demonstration project on two miles of city streets, applying “green” principles to conventional urban streetscapes. The project will use green design practices to improve stormwater management, conserve water and energy, enhance bus stops and bicycle lanes, recycle construction materials, reduce ambient temperatures, and educate the public.

Tri-County Regional Planning Commission (TCRPC): Illinois TCRPC will develop a Regional Transportation, Ecosystem, and Land Use Integration Plan to integrate various transportation, ecosystem, and land-use planning efforts within its region.

Mid-America Regional Council (MARC): MARC will use its grant to (1) formulate educational programs structured to foster stronger interagency relationships and understanding of Eco-Logical approaches, (2) develop a highly collaborative and integrative environmental-transportation planning and consultation process, and (3) create a framework to support the creation of a regional, ecosystem-based green plan for infrastructure conservation, restoration, and mitigation.

Audubon Society of New Hampshire: New Hampshire’s Audubon Society will develop a framework to identify conflict areas and potential mitigation strategies on an ecosystem scale that can be used prior to the design phase of state transportation projects.

Tioga County Soil and Water Conservation District (TCSWCD): New York’s TCSWCD will produce an REF by overlaying current and future transportation projects on natural resource maps. Using the maps that are created, it will develop a Flexible Screening Template that identifies regional conservation opportunities.

Land of Sky Regional Council: The Council will design and produce an open-space planning program for four counties in western North Carolina. The project will incorporate existing data and plans into an integrated regional plan, strengthening local planning and conservation efforts.

North Carolina Department of Environment and Natural Resources (NCDENR): NCDENR will develop wildlife habitat maps to facilitate planning aimed at reducing habitat fragmentation. Funding will also support collaboration with North Carolina DOT in identifying opportunities for integrating the North Carolina Strategic Conservation Plan into various transportation planning processes.

Oregon State University (OSU): Building on the recently completed Oregon Conservation Strategy, OSU will move existing data on wetlands, endangered species, habitats, and important natural resources from a regional, landscape level to a higher-resolution, more detailed project level and will make the information publicly available online.

Capital Area Council of Governments: Without a clear map of the most critical natural resources in the region, construction of new transportation corridors (or other major infrastructure investments) could disturb healthy functioning of local and regional ecosystems. With this in mind, the Texas Capital Area Council of Governments and its partners will complete the Central Texas Greenprint for Growth, a tool for balancing sustainable conservation goals with the infrastructure needs of the rapidly urbanizing region. The Greenprint will map out and identify priority areas for conservation as well as local open space and park goals.

Houston-Galveston Area Council (H-GAC): H-GAC will develop a geographic information systems (GIS)-based environmental resource identification map for its eight-county region. This effort will assess critical conservation areas, integrate resource and conservation planning through a regional decision-support system, and identify high-priority mitigation locations. It represents the area’s first regional, systematic identification of critical environmental resources on a scale that is necessary for transportation and conservation planning.

North Central Texas Council of Governments (NCTCOG): NCTCOG is working to encourage a more robust consideration of environmental impacts and to develop mitigation strategies during its long-range transportation
planning process. Its grant will support the development of a conceptual framework for integrating environmental and infrastructure plans across agency and geographic boundaries.

**Coalition for Utah’s Future/Project 2000:** The Coalition recently established two important transportation planning tools, the MountainView Corridor Growth Choices Study and *Wasatch Choices 2040: A Four County Land-Use and Transportation Vision*. Both were among the first processes in the nation in which a coordinated land-use plan was created in advance of an environmental impact study (EIS) for a regional transportation project. The grant will move the planning of these two studies forward by incorporating an ecological sensitivity to transportation design in relationship to the Jordan River corridor.

**Thomas Jefferson Planning District Council (TJPDC):** To maximize the region’s sustainability, Virginia’s TJPDC is integrating environmental and transportation planning efforts. The grant will support the development of an integrated regional plan that will include a list of priority mitigation projects and a detailed analysis of at least two specific road and/or development projects, with suggestions on how their environmental impacts could be minimized.

Other related work that FHWA will be supporting includes the U.S. Environmental Protection Agency’s (EPA) expansion of the Texas Ecological Assessment Protocol, a tool used to determine ecologically sensitive areas in Texas, into a Regional Ecological Assessment Protocol (REAP) covering Arkansas, Louisiana, New Mexico, Oklahoma, and Texas.

Given the success of the Eco-Logical grant solicitation, FHWA’s Offices of Project Development and Environmental Review, Planning, and Natural and Human Environment plan to solicit additional projects in 2009.

**Where to Find Eco-Logical Grant Program Information**
To learn more about this year’s funded projects and/or to request hard copies of *Eco-Logical*, contact Bethaney Bacher-Gresock (Bethaney.Bacher-Gresock@dot.gov). The web version of the guidebook is available at www.environment.fhwa.dot.gov/ecological/eco_index.asp.

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**Successes in Stewardship** is a Federal Highway Administration newsletter highlighting current environmental streamlining and stewardship practices from around the country. To subscribe, visit http://environment.fhwa.dot.gov/sis_registration/Register.aspx or call 617-494-3137.