As a continuation of its efforts to find innovative ways to help state transportation agencies improve public trust, credibility, environmental performance and ultimately, program delivery, the AASHTO leadership recently initiated the Transportation Environmental Stewardship Pilot Program (Pilot Program). The purpose of the Pilot Program is to provide technical assistance and information to state transportation agencies undertaking environmental stewardship efforts, and to disseminate information about successful pilot projects. A work group was charged with developing pilot program guidance and recommendations for other program support.
Based on an on-line survey and a TRB stewardship workshop, environmental stewardship was defined as follows:

I. **Environmental stewardship is:**
   1. Careful management of things entrusted to one’s care.
   2. Attitude, ethic and behavior by individuals.
   3. Wise choices based on understanding consequences to natural, man-made and social environment.
   4. Fulfilling responsibilities as trustees of the environment for succeeding generations.
   5. Integrating environmental values within all transportation work as a “core business value”.
   6. Improving environmental conditions when possible, not just to comply with regulations.
   7. Acceptance of responsibility for leaving the world a better place than we found it.

II. **Agency-wide commitment to environmental excellence is important.**
   1. Especially in actions taken when regulators, public, press and special interest are not watching.
   2. Public perceives impacts of all actions by DOT, poor performance by any unit reflects on entire agency.
   3. Actions speak louder than declarations of intent.
   4. Environmental record of DOT can best be assessed by it’s customers.
   5. Can demonstrate commitment to environmental excellence from planning through construction/maintenance.
   6. Daily performance by collective operations sends strong message to customers.

III. **Environmental Stewardship improves public & regulatory attitudes towards DOT.**

IV. **Transportation programs & services can be improved through Environmental Stewardship.**

V. **There are many opportunities for environmental stewardship in transportation.**

VI. **Include the cost of Environmental Stewardship in price of transportation business.**
Why embrace Environmental Stewardship? Because it’s the right thing to do.

• As a public agency, it is the responsibility of all state transportation agencies, not just that of the environmental agencies, to protect the environmental resources within the state. As large public works agency, DOTs recognize their potential and opportunity to proactively advance the State environmental program, by protecting, improving and enhancing the environment as opportunities arise, especially when this can be done for little or no additional cost.

• Transportation agencies have the means and the opportunities to help communities enhance their public spaces and invest in their future.

• Environmental enhancements can be included during the planning, design, construction and maintenance of transportation facilities.

As noted in the photo above, downtown improvements could include decorative brick inlay, planting boxes, decorative light poles, decorative median design.
Developing trust as the foundation of streamlining is the smart thing to do. If DOT’s become environmental stewards, they will no longer warrant the degree of regulatory oversight currently devoted to keeping the environment safe from their activities. Partnerships founded on the basis of a shared environmental ethic allow for a much more efficient delivery of both transportation and environmental services. Environmental stewardship can be viewed as a simple extension of the public service ethic that already pervades DOT culture. Deeds speak louder than words, but action is already central to the DOT mindset.

DOT’s should help improve the environment, especially when they can do so a little of no additional cost. As they grow to trust the DOT’s, resource agencies should become partners instead of policemen and streamlining should progress more easily.

As environmental stewards, DOT staff may experience improved morale. Since it is “OK to be green,” designers enjoy more freedom and flexibility in their work, and DOT has stronger, more positive working relationships with external agencies, local municipalities and other environmental groups. DOT employees can feel proud of their accomplishments and contributions as stewards of the environment. The communities are enhanced and citizens reap the benefits of DOT projects.

As environmental agencies and groups become partners instead of policemen, permit approval times improve, mitigation costs decline, and environmental benefits are realized by all. The cooperative sharing of the engineering capabilities of NYSDOT with the stewardship and expertise of environmental agencies is a smarter, faster, better way of doing the people’s work.

Bottom line: an environmental ethic is not just the right thing to do, it is a very smart way to do business.
There has been a growing movement toward environmental stewardship within transportation agencies.

In the 1990’s, transportation agencies were developing an awareness that they have great influence on the landscape and environment, and consequently, as some of the largest public works agencies, have a corporate obligation and responsibility to the public to protect, improve and enhance the environment as opportunities arise. To accomplish this, they could use the organizational strengths and its employees’ personal sense of environmental stewardship to contribute affirmatively to the nation’s environment and to proactively partner with communities to improve the environment.

In December 2000, AASHTO recognized that the time had come for AASHTO to put it's best foot forward on the environment. To this end, AASHTO invited Commissioner Joe Boardman of New York and Secretary Tom Barry of Florida, their environmental Best Practices winners, to join with Secretary Jim Codell, SCOE Chair, in kicking off an AASHTO Environmental Stewardship Pilot Program with a December 10, 2000 breakfast meeting at the AASHTO Annual Meeting in Indianapolis. Pursuant to discussions at AASHTO's “Stewardship Breakfast”, eighteen states (later a total of 23) signed on to develop a proactive approach to our environmental responsibilities.

In January 2001, a workshop was held at the annual Transportation Research Board (TRB) meeting to identify and address environmental stewardship in transportation. J. Horsley requested a Concept Plan from SCOE (J. Carr, C. Cutshall, B. Smith, G. McVoy, W. Kober, J. Meyers).

In February 2001, an AASHTO Work Group for the development of the Environmental Stewardship Pilot Program met to discuss the general purpose and scope of the AASHTO Environmental Stewardship Pilot Program. The Work Group adopted the following vision for the pilot program: Moving state transportation agencies towards environmental excellence by making stewardship a part of their transportation mission. At the end of February 2001, SCOE presented its concept plan to AASHTO Execs (D. Carlson, J. Codell, M. Peters, B. Mallory, J. Horsley, et al.).

In April 2001, the AASHTO Stewardship Pilot work group presented its findings and recommendations to the SCOP/SCOE.
As a continuation of its efforts to find innovative ways to help state transportation agencies improve public trust, credibility, environmental performance and ultimately, program delivery, the AASHTO leadership recently initiated the Transportation Environmental Stewardship Pilot Program (Pilot Program). The purpose of the Pilot Program is to provide technical assistance and information to state transportation agencies undertaking environmental stewardship efforts, and to disseminate information about successful pilot projects. A work group was charged with developing pilot program guidance and recommendations for other program support.

As transportation professionals, we have long understood the importance of communities and the environment in our work and are well versed in the mechanics of avoiding, minimizing and mitigating impacts. However, as indicated by member efforts to “Think Beyond the Pavement”, advance “Context Sensitive Design”, build “Livable Communities”, have “Smart Growth”, do “Community Outreach”, and other initiatives; many of us are already trying to do much more than just “fix what we break” and to cultivate an environmental ethic throughout our organizations. Further, it is becoming clearer every month that the reactive, defensive approach to community and environmental issues has been difficult for agencies in public service, and often does not work.

As such, it seems logical to foster agencies’ organizational strengths and its employees’ personal sense of environmental stewardship to contribute affirmatively to the nation’s environment and to proactively partner with communities to improve the environment.

Organizationally AASHTO has tried to advance and highlight our environmental successes through last year’s Environmental Best Practices competition, President Tom Warne’s organizational goals for Context Sensitive Design and Environmental Streamlining, Vice President Dean Carlson’s review of the recent NPRMs, and Executive Director John Horsley’s remarks in several venues, including the September 29 Environmental Stewardship teleconference.

As demonstrated by the activities of the State DOTs of New York and Florida, as well as several other states, the regulatory community seems ready to join with us in a more positive approach to the environment.
The AASHTO is the process of advancing environmental streamlining and stewardship initiatives to assist state highway and transportation agencies, regulatory and resource agencies, and transportation and environmental interests groups in substantially improving the delivery of transportation plans, programs, and projects, while protecting and enhancing the environment and communities.

One of these initiatives is to promote environmental best practices through an AASHTO Environmental Stewardship Demonstration Program. Through this program of leadership development and information sharing, the various organizations engaged in transportation decision-making would voluntarily incorporate environmental and community protection and enhancement measures into their business practices. As part of this demonstration program, the states would learn about how to approach environmental stewardship in the transportation context and monitor and report on their environmental stewardship activities.

The Work Group identified three primary goals for the AASHTO Environmental Stewardship Pilot Program: make a positive contribution to the environment; establish, through the documentation of environmental stewardship activities and results, a credible track record of state transportation agencies' performance as environmental stewards; build a reputation for state transportation agencies as "part of the solution" rather than "part of the problem."

**Pilot Program Customers**

The Work Group recognized that there are many potential customers for the pilot program and its results. To facilitate a focused effort, the Work Group selected the following principal target groups: state transportation agency executive management; state transportation agency environmental, design, planning, construction, and operations managers; and transportation consultants.

The Work Group recommends that the pilot program expand its customer focus as it matures. Other potential customers the Work Group identified include metropolitan planning organizations, rural planning organizations, local public agencies, regional planning councils, other transportation agencies such as port authorities and transit authorities, state transportation agency staff, public and private development entities, and legislative officials and staff at the state and federal levels.

**Pilot Program Benefits**

The benefits of the Environmental Stewardship Pilot Program include the development of innovative approaches to environmental stewardship, improvement of state transportation agency operating practices, the sharing of successful stewardship practices among state transportation agencies, and an increasing awareness of transportation agency stewardship results.

The benefits of environmental stewardship are discussed in detail in a report entitled "Workshop Summary: A 'Work in Progress', Environmental Stewardship in Transportation Program Execution," produced by the Environmental Analysis in Transportation Committee (A1F02) of the Transportation Research Board. Significant benefits cited in that report include: improvement in public and regulatory agency attitudes towards transportation agencies; improved transportation programs and services; and streamlining transportation project and program delivery.
The Work Group agreed that the Environmental Stewardship Pilot Program should provide to program customers a general framework for understanding environmental stewardship. Such a framework will assist pilot states in understanding the full potential of stewardship and will help them determine their stewardship paths. The framework developed by the Work Group is presented below:
Approach 1 is to add stewardship features to projects, one by one. It’s simple, cost-effective, visible, and immediate. Results can be seen within the organization and outside of the organization by the public and environmental agencies and groups. It’s deeds vs words.
e.g. Stream access opportunities

Examples include stream access opportunities for fishing and boating, particularly at bridges.
Wildlife passages and nesting structures are visible, popular enhancements that can be added to transportation projects. Examples include herptile tunnels, deer crossings, nesting structures, such as this one provided for nesting peregrine falcons on a bridge, or platforms for osprey.
Environmental stewardship opportunities may include building or extending sidewalks, trails and bike paths, as well as landscaping, aesthetic treatments, interpretive signage, and kiosks.
Bird box installation, such as shown here on a restored site, is an easy, inexpensive enhancement project. It can involve community partners such as Boys/Girl Scouts, the Bluebird society, local students, or other civic groups.
Environmental betterments take advantage of the “economies of scale” possible on large public works projects and should cost the sponsors less than individual projects designed, constructed and let by themselves. This kind of effort is easy for DOT, but harder for resource agency or municipalities.
Control of noxious and exotic plants is an extended adopt a highway concept that serves well for grass roots outreach.

In the Adirondack Park Non-Native Invasive Plant Species Project, NYSDOT is partnering with other agencies, groups and volunteers to inventory, develop best management practices, and control the spread of species such as Purple Loosestrife in the Adirondack Park.
An essential Environmental Stewardship element is context sensitive design. Context sensitive design strives to provide a product that is in harmony with the community because it considers the environmental, scenic, historic and natural resources of the area. Projects that recognize community goals are designed, built and maintained with minimal disruption to the community, add value and are sustainable as context sensitive projects.
Sample “How-to” Guidance

Approach 1: Add Stewardship Features

• Provide examples
• Draft instructions
• Program funds
• Track projects
• Give awards

Steps to Approach 1 (add stewardship features to projects on a case-by-case basis) may include issuing official instructions, programming needed funds, conducting training and workshops, providing technical assistance, maintaining lists of projects and enhancements, tracking progress of projects, and awarding outstanding teams and projects.
Approach 2 is to develop programmatic stewardship efforts to address multiple projects. This is more complex than Approach 1, requiring mid-level commitment. The results are more powerful within the agencies and outside of the agency.
Partnering with environmental agencies and groups

By partnering with environmental agencies and groups, agencies take notice and DOT gains credibility that they are genuine in their stewardship philosophy.
Examples of Approach 2 may include Programmatic Section 106 agreements to address historic preservation issues.
Wetland creation, restoration and enhancement activities can be addressed programmatically.
Wildlife habitat preservation / enhancement

Agencies can work together to identify, preserve and enhance wildlife habitat. DOTs can assist environmental agencies and groups by providing means and materials in progressing preservation and enhancement efforts.
Programmatic planning & std. design criteria for aesthetics, pedestrian / bicycle paths

By planning and designing aesthetically-pleasing transportation corridors, pedestrian and bicycle paths, DOTs are viewed in a positive light. The media provides positive press and the customers are happy that they are provided with what they want.
Scenic highway and historic road programs

By implementing scenic highway and historic road programs, DOTs can ensure the public that their drives will remain pleasing and the features they appreciate are preserved.
Sample “How-to” Guidance
Approach 2: Work Programmatically

- Training, workshops, technical assistance
- Program Updates
- Operational Plans
- Promotional publications

Possible guidance in developing programmatic stewardship efforts to address multiple projects can be disseminated through training, workshops, and technical assistance, Department Program Updates, Agency and Office Operational Plans, and promotional publications.
The third approach is to institute organizational and cultural changes within the agency. This approach is still more complex, requiring executive commitment and involving all levels. The end result is still more powerful both within the agency and outside the agency with the public, communities, environmental groups and agencies.
To institute cultural and organizational changes, the agency mission statements should incorporate wording addressing environmental protection and enhancement. Likewise, an environmental policy should be developed and implemented agency-wide. These are good places to start that involve executive management and show others that environmental stewardship is acceptable and encouraged.
Environmental protection and enhancement in all activities

By incorporating environmental protection and enhancement in all activities, cultural change will happen.
Organizational changes

Organizational changes should be made to support consideration of environmental factors in agency work. Executive management is essential in this role.
When the Structures engineers see this as something more than a “R” rated bridge with sub-standard hydraulic capacity, you’ve arrived. This is really what this is all about, the object of program. By changing yourself, others will change in response. This can be as easy as saying it’s OK.
Steps to achieving organizational & cultural change may include developing environmental policies, reviewing environmental capacity, clarifying responsibilities & performance measures, developing organization charts, providing adequate staffing and training, embracing full depth partnering both within the agency and outside the agency, and reaching out to the public and other agencies and groups.
Approach 4 is the most complex approach in which an environmental management system is instituted. This can happen only after the culture has changed in order to build on the organizational strengths. This is the most powerful approach, with gains on all sides, both within the organization and outside the organization.
Approach 4 involves instituting a comprehensive process improvement program in planning, design, construction and maintenance of transportation facilities; developing environmental management systems for agency functions; developing environmental quality assurance/control procedures; designing and using an environmental cost accounting system; initiating effective project tracking and management; and establishing performance measures.

**Approach 4 Examples:**

- Performance measures
- Project tracking and management
- QA / QC procedures
- Environmental management system
- Environmental cost accounting

- EMS program team selection
- Briefings for executive management
- Cost / time estimates
- Linkages to ISO certified organizations
- Benchmark reviews
- ISO 14000 support

Steps to achieving Approach 4 may include selecting an environmental management system program team, providing briefings for executive management, developing cost and time estimates, developing linkages to ISO certified organizations, conducting benchmark reviews, and developing ISO 14000 support.
AASHTO ROLE

• Offsite Help – Information Exchange
  • Publications, Meetings
  • Model Plan
  • Registration Option
• Onsite Active Help (Center for Environmental Excellence)

Program Goals
The Work Group identified three primary goals for the AASHTO Environmental Stewardship Pilot Program:
- Make a positive contribution to the environment
- Establish, through the documentation of environmental stewardship activities and results, a credible track record of state transportation agencies’ performance as environmental stewards
- Build a reputation for state transportation agencies as "part of the solution" rather than "part of the problem."

Offsite Help – Information Exchange
The program will help state transportation agencies develop, maintain, and operate transportation systems that improve the quality of life in an environmentally responsible manner. Through the pilot program, AASHTO will inform state transportation agencies about the potential scope of environmental stewardship activities and energize them to initiate stewardship efforts. States will receive practical ideas about what they can do to be environmental stewards, as well as technical assistance with their pilot projects. Finally, by tracking the experiences of the pilot states and reporting on their successes, the AASHTO Environmental Stewardship Pilot Program will provide an educational opportunity for other state transportation agencies.

Onsite Help – Center for Environmental Excellence
Continuing the efforts to find innovative ways to help state transportation agencies improve public trust, credibility, environmental performance and, ultimately, program delivery, AASHTO leadership decided to actively explore the concept of establishing an environmental AASHTO Center for Environmental Excellence (ACEE) within AASHTO. As a first step, AASHTO formed the above-mentioned Work Group and charged it with developing a proposal for such a center. The Center for Environmental Excellence should cover a broad range of activities that will help state transportation agencies improve their environmental practices and achieve environmental excellence. The structure of the Center should permit adjustment to changing needs over time, and should not be tied solely to current "hot button" issues. To reflect these values, the Work Group selected the name “AASHTO Center for Environmental Excellence” (ACEE).
The next steps to moving the Environmental Stewardship Pilot Program forward are to get input from AASHTO Standing Committee on the Environment and Standing Committee on Planning at the joint meeting in April 2001, to report on pilot program concept and status at the May Executive meeting, and to report on pilot program and the first results from the pilots at the annual AASHTO meeting in November 2001, as well as to keep going with leadership and support for the Center for Environmental Excellence.
NOW WHAT?

• REALITY CHECK – Will It Work for You?
  – Pilot Concept
  – 4 Approaches
  – Web-based Plan
  – Electronic Meeting

We are seeking feedback on what will work for you. Different states have different needs, capabilities and preferences, which is why we are pursuing ideas such as pilot or demonstration projects, the four approaches, a web-based plan, and electronic meetings.