This Engineering Instruction (EI) does not supersede any previous issuances.

**EFFECTIVE DATE:**

This EI is effective immediately.

**PURPOSE:**

This Engineering Instruction (EI) provides guidelines and procedures for implementing the Environmental Initiative. These materials will be incorporated into updates of various Department manuals, such as the *Design Procedures Manual*, the *Environmental Procedure Manual*, the *Highway Design Manual*, and the Department’s *Policy and Procedures Manual*.

**TRANSMITTED MATERIAL:**

Three appendices are transmitted with this EI:
1. Examples of Environmental Initiative Practices, Features, Programs and Activities;
2. State Laws Authorizing Funding for Environmental Protection and Enhancement; and
3. FHWA Policies and Funding Programs Supporting Environmental Protection, Mitigation, and Enhancements.

**BACKGROUND:**

As New York State’s largest public works agency, the Department of Transportation (DOT) has an obligation and responsibility to the people of New York to protect, improve and enhance the environment. Strict regulatory compliance is only part of DOT’s responsibility. This Department can and should use its organizational strengths and its employees’ personal sense of environmental stewardship to contribute affirmatively to the State’s environment and to proactively partner with communities to improve the environment and context sensitive design issues. Context sensitive design is the proactive approach to design that looks at the project within the context of its site, and gathering and including the public’s input throughout the design process.

To that end, the Environmental Initiative is a Department-wide effort to:
- promote an environmental ethic throughout the Department,
• advance State and federal environmental policies and objectives, and
• strengthen relationships with environmental agencies and the public.

The Environmental Initiative was approved by the Department’s Program Policy Committee on April 7, 1998 and was publicly announced by Governor Pataki on October 20, 1998. The DOT Environmental Initiative Statement is contained on the Department’s Web-page.

NEPA and SEQR, and many other State and federal environmental regulations, require that environmental considerations be addressed in transportation decision making, plans and programs. Most transportation capital and maintenance projects have the potential to affect natural and human-made resources in both positive and negative ways. The Department must ensure full and objective consideration of all reasonable alternatives that avoid adverse impacts to the environment and communities. Where adverse impacts are unavoidable, the Department must identify the impacts and incorporate measures to mitigate impacts to the maximum extent practicable.

GUIDELINES:

It is the mission of the New York State Department of Transportation to ensure our customers -- those who live, work and travel in New York State -- have a safe, efficient, balanced and environmentally sound transportation system.

Within the context of the Department’s mission and this initiative, it shall be the practice of the Department of Transportation to:

• Coordinate and communicate closely with State and federal resource agencies to identify opportunities to advance State and federal environmental policies, programs and objectives.

• Ensure that all necessary steps are taken in planning, design, and construction to avoid and minimize adverse effects of transportation projects and operations on important elements of the environment and adjacent communities.

• Proactively plan, design, construct and maintain transportation projects in an environmentally sound manner using context sensitive design to meet transportation needs while at the same time protecting, conserving, restoring or enhancing important natural and man-made resources.

• Incorporate into DOT capital and maintenance projects specific design features or facilities to mitigate unavoidable adverse impacts to the environment.

• Consider and implement, as appropriate, measures to enhance natural and man-made resources above and beyond project-specific permit and mitigation requirements.
• Incorporate, where practicable, environmental projects funded by local agencies or groups into ongoing DOT projects as “Environmental Betterments.”

• Promote an environmental and context sensitive design ethic within all Department organizations.

**ROLES AND RESPONSIBILITIES:**

Regional Directors and Main Office Division Directors are responsible for implementing the Department’s Environmental Initiative in their respective program areas.

**ENVIRONMENTAL INITIATIVE EXAMPLES:**

The Department already does an excellent job of providing project-specific avoidance, minimization, and mitigation in transportation projects. In many instances, the Department also provides important environmental enhancements through close coordination with municipalities and State and federal resource agencies. However, a primary goal of this initiative is to encourage proactive consideration and implementation of context sensitive design and construction and maintenance practices beyond permit and mitigation requirements. See “Appendix A” for examples of features, practices and programs that should be incorporated into DOT capital and maintenance projects to improve DOT’s current environmental performance.

**FUNDING:**

A. State and federal highway funds shall continue to be used for project-specific avoidance, minimization, mitigation and enhancement efforts. They may also be used to advance this Environmental Initiative consistent with State and federal funding programs.

• See “Appendix B” for State laws that support funding for environmental measures.

• See “Appendix C” for FHWA policies and funding programs that support environmental protection, mitigation and enhancements actions.

B. Other State agencies, municipalities and non-governmental organizations should be invited to provide funding for “Environmental Betterments” for inclusion in Department transportation projects.
PROCEDURES:

A. ACTIONS TO IMPLEMENT THE ENVIRONMENTAL INITIATIVE

All Region and Main Office program areas shall identify and implement specific actions in their areas of responsibility to incorporate the Environmental Initiative into their operating and business practices pursuant to the Deputy Commissioner and Chief Engineer’s memorandum on the Environmental Initiative, dated September 29, 1998. The Environmental Analysis Bureau (EAB) has issued recommendations for model plans. EAB is reviewing plans prepared by Region and Main Office units.

B. COORDINATION AND COMMUNICATION WITH OTHER AGENCIES

1. DOT Regional Directors shall meet quarterly with their counterpart DEC Regional Directors to:
   a) discuss progress under the Environmental Initiative,
   b) review DOT’s five-year capital construction and annual maintenance program,
   c) identify opportunities to improve resource protection and enhancement practices, and
   d) exchange lists of contact people.

2. DOT Regional Landscape/Environmental Managers shall meet monthly, or as mutually agreed upon, with their DEC counterparts to:
   a) discuss progress under the Environmental Initiative,
   b) identify specific opportunities to include resource protection and enhancement practices in DOT projects, and
   c) update lists of contact people.

3. DOT Regions shall meet as needed with DEC to progress individual projects through existing project development and permit review processes.

4. DOT Regions are encouraged to establish similar meetings with other State and federal resource agencies, as appropriate, with coordination assistance by EAB.

C. PUBLIC INVOLVEMENT

DOT’s Regional Planning and Program Management and Regional Design Groups shall take leadership roles in expanding use of existing project planning and development processes to communicate with, solicit and encourage input from municipalities, environmental interest groups, citizens groups, corporations and the general public to assure early and full consideration of environmental and community concerns and innovative context sensitive solutions in transportation projects.
D. JOINT DEVELOPMENT

DOT Regional Design Groups should look for opportunities for joint development with municipalities, other agencies, and private developers whereby design, construction, land acquisition and maintenance responsibilities can be mutually and equitably shared. In some instances, for example, a combined stormwater management facility (e.g., an extended detention basin) might be sized and constructed to serve the stormwater needs of both DOT (for highway drainage) and of an adjoining land owner, such as another State agency, a municipality, or a corporate owner. DOT, for example, might cover the design and construction costs if the public or private owner provides the land for the facility and agrees to maintain it.

E. ENVIRONMENTAL BETTERMENTS

Specific environmental elements or facilities requested and funded by others (e.g., municipalities, other agencies, environmental groups) may, wherever practicable, be incorporated in DOT capital and maintenance projects as “Environmental Betterments.” These elements or facilities may include, but not be limited to, landscaping, park amenities, historic building preservation, noise barriers, created wetlands, stream restorations, stormwater basins, habitat improvements, and new municipal sanitary sewer lines, storm sewer lines and water mains that provide an environmental benefit.

These Environmental Betterments should benefit from the “economies of scale” possible on large public works projects and could cost the sponsors less than individual projects designed, constructed and let by themselves.

As part of the Department’s proactive public outreach effort, DOT Regional Design should invite local municipalities, environmental groups and agencies to combine their funded and designed environmental elements or facilities with ongoing DOT projects. The Department will provide added design services to assure that the “Environmental Betterment” work is appropriately integrated into the transportation project plans and specifications. The Department may provide contract letting and construction inspection of the Environmental Betterment work at no charge to the municipality, other agency or environmental group.

F. CONTEXT SENSITIVE DESIGN

An essential element in the implementation of the Environmental Initiative 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 a minimal disruption to the community, add value and are sustainable are context sensitive projects. The Design Division will be developing written guidance on context sensitive design.
G. PROGRAM UPDATE

The Environmental Initiative has been identified as a component of the Department’s Capital Program Update process. As of August 1998, Regional Planning and Program Managers are required to include Environmental Initiative projects on their updated program. Regions are requested to identify those projects that have environmental or context sensitive design work which goes above and beyond regular mitigation or permit requirements. Any external coordination that has occurred with outside agencies or interested groups should also be identified. Regional Design shall provide appropriate information for the annual updates.

H. PROJECT AND PROGRAM MANAGEMENT INFORMATION SYSTEM (P/PMIS)

Environmental Initiative projects will be identified and tracked using the Department’s Project and Program Management Information System (P/PMIS). Environmental Initiative work will be identified as a project attribute in P/PMIS. Various work types will allow environmental initiative projects to be grouped by a specific activity, (e.g., water quality improvement, wetland mitigation).

Until P/PMIS access permissions are defined in the Regions, Regional Design shall provide the appropriate information for data entry to the appropriate group. EAB shall regularly generate management reports from P/PMIS, allowing the Department to track Environmental Initiative projects and subsequent activities.

I. MASTER PLAN IMPLEMENTATION

The Environmental Initiative also plays a role in implementing the Department’s 1998 State Transportation Master Plan, “The Next Generation: Transportation Choices for the 21st Century.” For example, several needs were identified by Regional DOT offices that relate to environmental processing, including better coordination with outside agencies, a proactive approach to public outreach, and presenting a more positive image of the Department. The initiative directly addresses these needs and will indirectly improve the Department’s image, while improving the quality of life for New York State residents.

J. INCLUSION INTO DEPARTMENT GUIDANCE DOCUMENTS

All Divisions and Bureaus shall incorporate into their respective manuals appropriate guidance to support the Environmental Initiative.

For example, the Design Procedure Manual, Appendix B, already includes guidance on documenting Environmental Initiative actions in the design approval documents. The Environmental Analysis Bureau will incorporate portions of this EI into the Environmental Procedures Manual and the Design Quality Assurance Bureau will incorporate appropriate information in the Highway Design Manual and the Design Procedure Manual.

K. KEY RESULT AREAS

The Environmental Initiative will help the Department advance the following four Key Result Areas. Office of Engineering Division staff shall support KRA reporting as appropriate.
• **Public Involvement**: The Department will use the Environmental Initiative to encourage earlier involvement of municipal officials, environmental groups and the general public in DOT project planning and development processes. This will help to identify local community and environmental concerns, obtain timely input on project alternatives, and identify opportunities for inclusion of local “Environmental Betterments.”

• **Economic Development**: Improvements to public access and the aesthetic character of transportation corridors will support eco-tourism, a growing and sustainable part of New York State’s economy.

• **Public Sector Partnerships**: Partnering under the initiative will enhance our positive working relationship with municipalities, other State and federal resource agencies and with environmental organizations.

• **Continuous Improvement**: The Department will use the initiative to improve the quality of DOT delivered projects, programs and services through thoughtfully managed and environmentally sound planning, design, construction and maintenance actions.

**CONTACT PERSON**

Questions regarding this Engineering Instruction should be directed to Gary McVoy or Mark Sengenberger at (518) 457-5672.
APPENDIX A

EXAMPLES OF ENVIRONMENTAL INITIATIVE
PRACTICES, FEATURES, PROGRAMS AND ACTIVITIES

A. The following are examples of practices or features that should be incorporated into DOT capital and maintenance projects, as appropriate:

- the practice of context sensitive design,
- street ambience enhancements (e.g., benches, decorative paving, bollards, period lighting fixtures),
- restoration of historic highway related features (e.g., historic lighting fixtures, stone walls, guiderails),
- measures to retain the integrity of historic parkways and bridges,
- increased wild flower plantings,
- additional landscaping to enhance the appearance of noise barriers,
- increased landscape plantings to improve roadside appearance and streetscapes,
- new or rehabilitated fishing access and trail head parking areas,
- new or rehabilitated boat and canoe launch sites,
- new or rehabilitated historic markers and interpretive signing,
- increased signing of important waterways and watersheds,
- new or rehabilitated scenic overlooks,
- retrofits of existing highway drainage systems with created wetlands and stormwater management facilities,
- soil bio-engineered stream banks,
- plantings, boulders, deflectors and other techniques to improve fisheries habitat,
- culverts for wildlife crossings,
- new or rehabilitated wildlife viewing sites,
- wildlife habitat improvements,
- mitigation and enhancement for past wetland impacts,
- restored and enhanced wetlands,
- acquisition of endangered species habitat,
- acquisition for preservation of regionally important wetlands and upland habitat,
- acquisition of scenic easements,
- improvements to highway entrances of public parks, wildlife management areas, and historic sites and
- replacement of fixed-time traffic signals with vehicle activated signals

B. The following are examples of some of the practices and programs that should be considered to improve DOT’s current environmental performance:

- continue to identify improved ways to use deicing materials and abrasives,
- improve efforts to sweep/collect/recycle the roadside abrasives in the spring,
- continue efforts to reduce herbicide use,
- clean up wastes previously generated at DOT projects and facilities,
C encourage and implement Transportation Demand Management, Transportation
System Management' and Intelligent Traffic System practices,
C encourage alternatives to single occupancy vehicle commuting,
C expand Ozone Alert Day initiatives,
C promote alternative fueled vehicles,
C increase support for mass transit,
C pilot and promote the use of recycled tires in highway embankments; glass, plastics
and aggregate in pavements; and plastic, rubber and aggregate in noise walls,
C preserve historic structures and
C promote State bike routes and greenways

C. The following are some examples of technology transfer and data sharing activities
with other local, State and federal resource and highway agencies to advance
environmental stewardship in the transportation industry:

C provide and/or participate in joint training,
C share standard details, specifications, and best management practices,
C share guidance manuals and handbooks,
C conduct joint research and share results,
C exchange GIS data sets,
C identify agency points of contact and subject matter experts,
C exchange staff phone numbers and e-mail addresses and
C participate and present at relevant State and national conferences
APPENDIX B

STATE LAWS AUTHORIZING FUNDING FOR
ENVIRONMENTAL PROTECTION AND ENHANCEMENT

State Highway Law Article 2 Section 21 - “The commissioner of transportation is hereby authorized and empowered to acquire property for the restoration, preservation and enhancement of natural or scenic beauty of areas traversed by state highways, in order for the state to comply with any federal aid highway acts.”

State Highway Law Article 2 Section 22 - “The commissioner of transportation is hereby authorized and empowered to acquire property in order to provide multi-use areas adjacent to state highways and recreational, natural and scenic areas along, but not necessarily contiguous to, state highways, except that the commissioner may acquire property anywhere in the state for the purpose of constructing bikeways. Such multi-use areas may be utilized for, but not limited to walking, hiking, bicycle, trailbike, recreational vehicle and snowmobile trails and the installation of public utilities. Such acquisitions shall constitute a state highway purpose. Property acquired for multi-use areas shall be such as to complement the highway facilities by providing the multi-use areas adjacent to the highway facilities. Property acquired for recreational, natural and scenic areas along, but not necessarily contiguous to, state highways shall consist of predominantly unimproved, natural or scenic areas suitable to serve the recreational needs of the expanding population of the state, and shall lend itself to restoration, preservation or enhancement as a recreational, natural or scenic area or provides visual access from the highway to such area. The commissioner is hereby authorized to undertake work of construction, improvement, restoration, preservation or enhancement of such areas and the expense of such work may be a proper charge against funds available for the construction, restoration, improvement or maintenance of state highways....Such acquisitions and work in recreational, natural or scenic areas may be undertaken in cooperation with other state departments or agencies and provision shall be made for the funding of such acquisitions and work.”

State Highway Law Article 3 Section 30.2 - “The commissioner of transportation, for and in behalf of the people of the state of New York may acquire, pursuant to the eminent domain procedure law any and all property necessary for the construction, reconstruction and improvement of state highways and bridges or culverts on the state highway system, including the appropriation of property for drains, ditches, spoil banks, gravel pits and stone quarries.”

APPENDIX C
Eligibility of Federal-aid for Environmental Initiatives

It is the Federal Highway Administration’s policy to:

1. **Avoid, minimize, and mitigate** to the fullest extent possible the adverse effects of transportation programs and projects on the neighborhood, community, and natural resources.

2. Seek opportunities to go beyond the traditional project mitigation efforts and implement **innovative enhancement measures** to help the project fit harmoniously within the community and natural environs.

3. Participate, to the fullest extent permitted by law, in funding **mitigation and enhancement activities** required by Federal, State, and local statutes and regulations for project related impacts to the natural environment, neighborhoods, and communities.

Note that all activities that are approved mitigation as a result of the project development process under the National Environmental Policy Act are eligible for the class of federal-aid of the project. Mitigation outside of the project limits is encouraged when it is more cost effective than mitigation on-site and serves the same purpose.

Below is a table of environmental activities that go beyond required mitigation, and the applicable federal funding categories which can be used to fund these activities.

Note: the explanation of each work type follows the table.

<table>
<thead>
<tr>
<th>Environmental Initiative</th>
<th>Incidental to construction of an otherwise eligible federal-aid project</th>
<th>Stand Alone federal-aid project</th>
<th>Eligible Categories</th>
<th>Comments</th>
<th>WorkType</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mitigation of Water Pollution Due to Highway Runoff</td>
<td>All</td>
<td>STP only</td>
<td>NHS if maintaining natural habitat or wetland</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Create Stormwater Management Structures</td>
<td>All</td>
<td>STP only</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>All</td>
<td>STP or NHS</td>
<td>Mitigation Details</td>
<td></td>
<td></td>
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<tr>
<td>-------------------------------------------------------------------------</td>
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<td>------------</td>
<td>------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bio-engineered Streambanks</td>
<td>All</td>
<td>All</td>
<td>Where needed to protect the stability of the highway</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialized Water Quality Inlet Structures such as low flow fish channels</td>
<td>All</td>
<td>STP or NHS</td>
<td>As part of habitat improvement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create, Conserve, and Restore Wetlands or other natural habitat</td>
<td>All</td>
<td>STP or NHS</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working with others to preserve important existing wetland sites</td>
<td>NA</td>
<td>NA</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protect Fish and Wildlife Habitat</td>
<td>All</td>
<td>STP or NHS</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boulders and Stone Weirs to improve fisheries habitat</td>
<td>All</td>
<td>STP or NHS</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culverts for Wildlife Crossings</td>
<td>All</td>
<td>STP or NHS</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plantings for Wildlife Habitat</td>
<td>All</td>
<td>STP or NHS</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bird nesting boxes or bat houses</td>
<td>All</td>
<td>No</td>
<td>Could be eligible as an incidental to a stand alone project to enhance wildlife habitat or wetland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Mitigation to reduce vehicle caused wildlife mortality while maintaining habitat connectivity</td>
<td>All</td>
<td>STP or NHS</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Historic Preservation of publically owned sites to be converted to public use</td>
<td>STP only</td>
<td>STP only</td>
<td>Remember, this is not required mitigation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehabilitation and Restoration of Historic Transportation Structures</td>
<td>All</td>
<td>STP only</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rehabilitation of Historic Railroad Facilities, Canals, and Ferry Terminals</td>
<td>STP</td>
<td>STP</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Archeological Planning and Research</td>
<td>NA</td>
<td>STP only</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establishment of Transportation-Related Museums</td>
<td>NA</td>
<td>STP only</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>STP only or NA</td>
<td>STP only or None</td>
<td>Must be on a designated scenic byway. Could use other funds for other eligible activities listed in this table</td>
<td>5,6</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>----------------</td>
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<td>-------------------------------------------------------------------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td>Promote eco-tourism</td>
<td>STP only</td>
<td>STP only</td>
<td>Must be on a designated scenic byway. Could use other funds for other eligible activities listed in this table</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>New or Rehabilitated fishing access</td>
<td>NHS or STP, IM only to rehab.</td>
<td>STP only</td>
<td>STP as a stand alone only on designated scenic byways</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Trail head parking areas</td>
<td>All</td>
<td>STP</td>
<td>STP only on a designated byway</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Historic Markers and other interpretive signing</td>
<td>All</td>
<td>STP only</td>
<td>STP only on a designated byway</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Promoting State bike routes and greenways</td>
<td>NA</td>
<td>None</td>
<td>STP only on a designated byway</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Community friendly signals and signs</td>
<td>All</td>
<td>STP or NHS</td>
<td>Must conform to the MUTCD</td>
<td>5,6</td>
<td></td>
</tr>
<tr>
<td>Provision of facilities for bicycles and pedestrians</td>
<td>All</td>
<td>STP, NHS, or CMAQ</td>
<td>IM cannot be used to add a facility</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Safety and Educational Activities for Bicycles and Pedestrian</td>
<td>STP, CMAQ</td>
<td>STP, CMAQ</td>
<td></td>
<td>5,6</td>
<td></td>
</tr>
<tr>
<td>Scenic or Historic Highway Programs, and Provision of Tourist and Welcome Center Facilities</td>
<td>All</td>
<td>STP</td>
<td>Could be IM or NHS for guidewails</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Installation of interpretive plaques, signs, aesthetic guiderails</td>
<td>All</td>
<td>STP</td>
<td>Could be IM or NHS for guidewalls</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Restoration of historic highway-related features such as lighting, sidewalks, retaining walls, or historic markers</td>
<td>All</td>
<td>STP or NHS</td>
<td>Not NHS for stand alone project to install historic markers</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Construction of tourist and welcome centers related to scenic or historical sites</td>
<td>All</td>
<td>STP or NHS</td>
<td>For NHS, has to be linked to a safety rest area</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Development of scenic overlooks</td>
<td>All</td>
<td>STP or NHS</td>
<td>For NHS, has to be linked to a safety rest area</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Reforestation of slopes along a scenic/historic highway corridors</td>
<td>All</td>
<td>STP, IM, NHS</td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Development of corridor management plans on a designated scenic byway</td>
<td>NA</td>
<td>STP only</td>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Acquisition of Scenic Easements</td>
<td>All</td>
<td>STP only</td>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Landscaping and other Scenic beautification</td>
<td>All</td>
<td>STP or NHS</td>
<td>6</td>
<td></td>
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<tr>
<td>Linear highway landscaping, landscaping at interchanges, noise barriers, reintroduction of native or endangered plants, wildflower planting, re-establishment of trees in historic districts</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Streetscape features including lighting, sidewalk pavers, benches, planting containers, decorative walls and walkways, signs, public art, historical markers, etc.</td>
<td>All</td>
<td>STP</td>
<td>Can use NHS for a stand alone project for pedestrian facilities and any incidentals to that project such as streetscape features</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking Facilities for safety or community development (Off street parking)</td>
<td>All</td>
<td>STP or NHS</td>
<td>Must improve highway or pedestrian safety/operations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preservation of Abandoned Railway Corridors, including conversion and use for Pedestrian and Bicycle Trails</td>
<td>STP only</td>
<td>STP only</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control and Removal of Outdoor Advertising</td>
<td>IM, NHS, or STP</td>
<td>STP or NHS</td>
<td>Has to be a controlled Route, see your real estate officer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase Maintenance on existing facilities</td>
<td>NA</td>
<td>NA</td>
<td>See element specific work for eligible maintenance activities using federal aid (EB 96-034)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional acquisitions to improve pedestrian circulation</td>
<td>All</td>
<td>STP or NHS</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase turf and plantings in median areas</td>
<td>All</td>
<td>No</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screen maintenance yards</td>
<td>All</td>
<td>STP or NHS</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve the appearance of construction related storage areas</td>
<td>All</td>
<td>NA</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increase the use of recycled materials</td>
<td>All</td>
<td>NA</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use tires in highway embankments</td>
<td>All</td>
<td>NA</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use glass plastics and aggregate in pavements</td>
<td>All</td>
<td>NA</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use plastic rubber and aggregate in noise walls</td>
<td>All</td>
<td>NHS or STP</td>
<td>If noise walls are eligible, this activity is also</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use salt and sand for highway deicing more judiciously by utilizing other deicing agents which are less environmentally damaging</td>
<td>STP only</td>
<td>STP only</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean up wastes previously generated at DOT projects and facilities</td>
<td>All</td>
<td>No</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Improve air quality</td>
<td>All</td>
<td>CMAQ</td>
<td>Possibility of eligibility under other funding</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Implement Transportation Demand Management practices</td>
<td>All</td>
<td>STP, NHS, or CMAQ</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expand Ozone alert day initiatives</td>
<td>CMAQ only</td>
<td>CMAQ only</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Promote alternative fueled vehicles</td>
<td>CMAQ only</td>
<td>CMAQ only</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support mass transit such as park-n-ride lots, bus turnouts, etc...</td>
<td>All</td>
<td>STP, NHS, or CMAQ</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signal Conversion from fixed time to traffic actuated</td>
<td>All</td>
<td>STP, NHS, or CMAQ</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking Facilities: Intermodal/Demand management such as fringe (transit) or corridor (car pool transit)</td>
<td>All</td>
<td>STP, NHS or CMAQ</td>
<td>6,9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combine local enhancement projects with ongoing DOT projects</td>
<td>STP only</td>
<td>STP only</td>
<td>Could qualify for other funds according to this table</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For any other Environmental Initiative not listed in the table, or for more information, please contact the Federal Highway Administration’s New York Division Office at (518) 431-4125.

**Work Types in the above table which should be used to identify Environmental Initiative project work:**

1) **{Water Quality} Improvements**
2) **{Wetlands} Creation, Restoration or Enhancement**
3) **{Fish and Wildlife} Habitat Improvements**
4) **{Historic/Cultural Resources} Preservation and Enhancement**
5) **{Eco-Tourism} and Public Access Improvements**
6) **{Corridor Enhancements} Landscaping/Streetscape Enhancements**
7) **{Recycling and Reducing} materials and emissions**
8) **{Remediating} Contamination**
9) **{Air Quality} Improvements**
1) **Water Quality** - Any project or work activity that improves existing or future biological or chemical quality of a water resource, including streams, rivers, wetlands, drinking water sources, and highway/stormwater runoff. Water quality can be improved by preventing or removing sediments and pollutants; retrofitting highway drainage systems; installing stormwater treatment facilities; preventing or reducing erosion through bioengineering, best management practices (BMP’s) use, or training in BMP’s and facilities design and installation.

2) **Wetlands** - Creating, restoring or enhancing wetland beyond the minimum required in State and federal wetland permits. The creation of new wetland acreage is one form of mitigation for past wetland impacts in which an upland area is converted, typically by excavation or damming, to a flooded or moist soil condition where wetland vegetation, soil, and hydrology will persist. Restoration and enhancement may include adjusting water flow or level onsite, additional planting or seeding with wetland vegetation, improving habitats and vegetation cover type diversity within the wetland, removing invasive plant species, or acquiring regionally important wetland areas for preservation purposes.

3) **Fish and Wildlife** - Habitat enhancements made to improve the life of wildlife, including planting specialized food and cover crops along highway corridors, protecting and managing specific habitats deemed valuable to target wildlife species (endangered species), providing wildlife crossings under highways and providing nest boxes and various refuge for wildlife. Fisheries habitat can be enhanced by bioengineering of streambanks and placement of in-stream structures such as boulders and weirs for diversity of cover and nesting sites.

4) **Historic/Cultural Resources** - An activity that preserves or enhances the historic or cultural heritage of New York State. DOT is in a unique position to incorporate protection of these resources into projects by preserving historic structures, acquiring or stabilizing archaeological sites, supporting archaeological excavations, developing interpretive programs for archaeological and cultural sites, providing street ambience enhancements (such as period lighting fixtures, bollards, benches, and pavers) and adding additional historic markers and interpretive signs.

5) **Ecotourism** - A project enhancement that promotes the use, enjoyment and appreciation of the natural and man-made resources of the State. Ecotourism can be encouraged in highway work projects by simply improving the appearance of roadsides and entrances to natural and cultural features. This can be accomplished by providing new or rehabilitated fishing and boating access and parking, promoting state bike routes and greenways, improving trailhead parking and facilities, and upgrading scenic overlooks and acquisition of scenic easements. Placement of landmark and interpretive signs or identification of important waterways, watersheds and habitats are also potential accomplishments toward increasing ecotourism in New York State.
6) **Corridor Enhancements** - Any additions to DOT projects that enhance the visual, aesthetic, and natural character of the roadside or streetscape. These enhancements may include increasing wildflower and roadside plantings, constructing noise barriers, adding landscaping to enhance the appearance of noise barriers, providing streetscape amenities (such as benches, lighting fixtures, decorative pavers), re-establishing street trees, rehabilitating comfort stations and rest areas, incorporating traffic calming features, as well as promoting State bike routes and greenways.

7) **Recycling and Reducing Waste/Emission** - Any project that includes innovative ways to utilize recycled materials, reduce waste generated by DOT, or reduce hazardous substance use. In dealing with solid waste, DOT projects may promote the use of recycled tires in highway embankments, recycled glass, plastics and aggregate in pavement mixes and recycled plastic, rubber and aggregate in noise walls. DOT may minimize herbicide applications and sweep roadsides better and more often and develop innovative use of salt/sand and other ice removal substances.

8) **Remediating Contamination** - Any project that includes innovative ways to clean up contamination, either previously generated by DOT projects or at DOT facilities or present along DOT Right-of-Way. Whenever possible, promote activities to support brownfield development.

9) **Air Quality** - Project elements incorporated to reduce emission levels, resulting in cleaner air. These project enhancements are aimed primarily at reducing single-occupancy vehicles (SOV’s). Initiatives that will reduce these emissions include support for mass transit, expanding Ozone Alert Day initiatives, promoting the use of alternative fuel vehicles, encouraging alternatives to SOV’s, implementing Transportation Demand Management practices, providing facilities for pedestrians and bicyclists, and replacing fixed-time traffic signals with vehicle-actuated signals, when appropriate.