



At the Intersection of Maintenance and the Environment

The Center for Environmental Excellence by AASHTO offers diverse products and programs for technical assistance, training, information exchange, partnership-building opportunities, and quick access to environmental tools. The Center helps practitioners incorporate environmental compliance, sustainability, and stewardship into transportation planning, design, construction, maintenance, operations, project delivery and multimodal systems. For more information, please visit <http://environment.transportation.org>.

How do Maintenance and Environmental Issues Intersect? Much of the work of the nation's transportation agencies focuses on maintaining existing roads, rails, bridges, rights-of-way, and related facilities. Maintenance activities – from cleaning of storm drains and culverts, to snow and ice removal, to vegetation management – can affect the natural and human environment. As stewards of the nation's roads and roadsides, maintenance personnel are working to limit negative impacts from transportation systems and



where possible, improve the natural environment, while ensuring mobility and safety of the traveling public. The Center's [Water Quality topic](#) and [Invasive Species/Vegetation Management topic](#) provide links to resources for maintenance personnel. (Photo: Idaho Transportation Department)

Sustainable Maintenance Practices: Transportation agencies across the nation are implementing more sustainable maintenance practices, including systems for measuring and tracking progress. The Center's [Sustainability topic](#) highlights practices such as New York State DOT's Leadership in Transportation and

Environmental Sustainability ([GreenLITES](#)) self-certification program.

The program recognizes sustainable practices such as:

- roadside maintenance, including erosion and sediment control, enhancing natural and historic resources, reduced mowing, litter control, invasive species management, alternatives to herbicides; and noise reduction from equipment;
- maintenance of drainage systems;
- pavement maintenance, including in-place recycling and use of green cleaning products;
- bridge maintenance;
- effective snow and ice control measures, including snow fences, road weather information systems, and use alternative deicers; and
- improved maintenance of transportation facilities and rest areas, including energy efficiency measures, and waste reduction/recycling/reuse.

(Image: NYSDOT)



Extreme Weather Concerns: Maintenance personnel often are a first line of defense in protecting infrastructure and ensuring public safety, helping to identify and address those facilities most vulnerable to extreme conditions. The Center's [Stormwater Field Guide](#) provides a range of recommended practices, such as erosion control measures and clearing culverts and drainage structures, which can help address extreme weather impacts. Maintenance personnel also support emergency response through actions such as facilitating the use of early warning systems and implementing contingency plans for road closures. The Center's [Infrastructure Resilience topic](#) and [Water Quality topic](#) provide additional examples and resources. (Image: AASHTO)





Resources for Maintenance Practitioners

The Center web site at <http://environment.transportation.org> offers access to a range of products and services for practitioners. The following resources are relevant to Maintenance Practitioners.

The Center website includes 21 separate environmental topics pertinent to transportation. Information can be sorted by discipline, mode, or state. **Topics of interest include:**

- Air Quality
- Context Sensitive Solutions
- Energy/Greenhouse Gas Emissions
- Environmental Justice
- Environmental Management Systems
- Geographic Information Systems
- Health & Human Environment
- Historic Preservation/Cultural Resources
- Indirect Effects/Cumulative Impacts
- Infrastructure Resilience
- Invasive Species/Vegetation Management
- MAP-21
- NEPA Process
- Noise
- Planning & Environment Linkages
- Project Delivery/Streamlining
- Section 4(f)/Section 6(f)
- Sustainability
- Waste Management/Recycling
- Water Quality/Wetlands
- Wildlife & Ecosystems

- **AASHTO's Maintenance Stormwater Field Guide:** provides practical advice for roadside maintenance including storm drain cleaning and repair, erosion control, street sweeping, vegetation management, snow removal, bridge painting, and pavement repair, as well as best practices for facilities management.
- **Practitioner's Handbooks:** These comprehensive resources provide practical advice on a range of environmental issues that arise in transportation projects and programs.
- **The Compendium of Environmental Stewardship Practices in Construction and Maintenance:** includes thousands of individual effective practices used by DOTs across the country.
- **Transportation and Environmental Research Ideas (TERI) database:** a storehouse for tracking and sharing transportation and environment research ideas in over 20 topic areas.
- **Conference & Workshop Materials:** the Center hosts a number of conferences and workshops for technical

assistance, training, information exchange, partnership-building opportunities. Materials are provided from peer exchanges on topics including transportation and health, noise, and effects of extreme weather events on highway maintenance.

- **Webcasts/Webinars:** These recordings and materials provide training to advance the state-of-the practice on important topics and are archived on the Center website.
- **Communities of Practice:** The Center facilitates an on-going dialogue with transportation practitioners in the topic areas of air quality, storm water management, and historic bridges.
- **Roadmap for Developing and Implementing Programmatic Agreements and the Programmatic Agreement Tracking Tool:** The Roadmap is a user-friendly web-based tool that guides practitioners through the process to develop and implement a programmatic agreement. The Tracking Tool provides a web-based template for state DOTs to track the benefits of programmatic agreements.

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Center for Environmental Excellence by AASHTO Contact Information

How can we assist you? If you have a particular need for environmental information, technical assistance, partnership-building, or training, please contact us at environment@transportation.org.

