

Going From GRAY to GREEN

BY KATE SHIRLEY

We often think of transportation infrastructure and responsible environmental stewardship as mutually exclusive concepts. Certainly, it is inevitable that the construction and maintenance of transportation infrastructure will impact the surrounding natural environment unless specific precautions or concessions are made. The fact is, the time has come to promote transportation infrastructure that has a positive impact on the communities it serves and the environment it inhabits. Transportation officials are increasingly seeking to collaborate with environmental experts to ensure both needs are met.

It was with this in mind that the United States Environmental Protection Agency (EPA) and the Federal Highway Administration (FHWA) created the Green Highways Partnership (GHP). The agencies joined together in 2005, along with the Maryland State Highway Administration and transportation experts from other state transportation departments, private firms, construction advocates, and industry and trade associations, to form the public-private partnership. The aim of this unprecedented alliance was to encourage the construction of safe and reliable highway projects, specifically in the mid-Atlantic region of the United States, that meet environmentally-friendly and sustainable goals. The alliance seeks to achieve this by facilitating collaboration between environmental and transportation agencies, implementing pilot programs to showcase sustainable possibilities, creating a recognition program for exemplary projects, as well as through market-based approaches and economic incentives.

What constitutes a green highway can vary greatly, as all projects are different in purpose, scope and location. The partnership decided that, instead of creating specific benchmarks, it would issue a set of guidelines to steer organizations toward more sustainability-driven highway projects.

Characteristics of a green highway include providing stormwater management with roads built from permeable materials that minimize toxins washing into local waterways; using recycled materials to reduce waste and energy needed for construction; promoting carpooling and the use of public transportation to ease traffic flow and pollution; and designing infrastructure that is sensitive to surrounding ecosystems and wildlife habitats, thereby reducing its environmental impact.

The alliance has also implemented pilot projects to highlight the potential benefits of green highway projects and to inspire green building throughout the design, construction and ongoing maintenance process. A few noteworthy examples of these projects include the Anacostia Watershed Protection, Villanova University Pervious Pavement Stormwater Studies, Prince George's County Green Highways Program and Delaware Department of Transportation National Pollutant Discharge Elimination System permit. These projects have gone beyond complying with basic environmental standards, and have shown true innovation and conservation in their design and construction.



The partnership has been gaining recognition for its efforts in recent years. In 2007, the GHP was awarded a Gold Medal at the EPA's National Honor Award Ceremony and was lauded by the United States House Subcommittee on Technology and Innovation as "the primary federal vehicle for encouraging the use of green transportation infrastructure by state and local governments and private industry." The subcommittee is a supporter of promoting the adoption of green transportation techniques through legislation.

Over time, we are becoming increasingly aware of the toll modern conveniences are taking on the natural world. The GHP was developed to facilitate environmentally and socially responsible highway construction through innovation and cooperation. The partnership's revolutionary collaborative approach to inspiring change has the potential to inspire transportation officials to not just comply with minimal environmental standard, but to strive to exceed them – improving irreplaceable natural and cultural environments while meeting the growing transportation needs of the country.