Stormwater runoff is the leading cause of water pollution in the United States each year. Water runoff from highways and roads enter storm drains and carry harmful pollutants such as fertilizer, pesticides, trash, and pet waste. Without proper management these pollutants can deteriorate watersheds and aquatic habitats.

The problem of stormwater runoff is magnified in urbanized areas where roads and sidewalks replace pervious surfaces. According to the Environmental Protection Agency, a typical city block produces 5 times more runoff than woodland areas of the same size. This is due to the impervious surfaces such as rooftops, sidewalks, and roads in urban areas. While natural ground cover produces 10% runoff from a storm, typical urban areas produce 50% runoff.

Thoughtful management of stormwater runoff is important in Lansing, Michigan where stormwater flows into the Grand River and eventually into Lake Michigan. Two projects in the capital city utilized Transportation Enhancement funding to landscape and improve stormwater facilities near the Grand River. A project on Michigan Ave. and one near Washington Square feature rain gardens (bioretention areas) to filter out pollutants and help prevent water from entering storm drains.

Urban rain gardens are constructed so that stormwater from roads is diverted away from storm drains and into pervious gardens. The gardens in Lansing feature native plants and grasses with strong root systems which grow deep into the soil. Strong roots help to absorb water and filter out pollutants. The gardens feature an engineered soil mixture that filters and drains efficiently. The mixture consists of sand, topsoil, compost, and coir fiber. After the water filters through this soil it enters a drain which connects with the storm drain. A sump at the entrance of the rain garden with an open grate traps trash and other materials and prevents them from flowing into the gardens.

The Michigan Avenue project received $2,000,000 in TE funding with a $500,000 local match. Additional funding for the project came from an EPA 319 Nonpoint Source grant and a Clean Michigan Initiative grant through the Michigan Department of Environment Quality. The project took place along four blocks of Michigan Avenue and included 20 rain gardens. The funds paid for streetscaping, pavers, planter islands, trees, and lighting. This project was completed in 2008.

Along Washington Square 12 rain gardens were constructed. The project received $267,000 in TE funding and $1,067,200 in local match funds. The project included rain gardens in addition to brick pavers, historic lighting, and other amenities.

Bioretention areas also help to enhance the beauty of urbanized areas. Native plants help to transform dull concrete landscapes into attractive walkways and meeting places. These colorful landscapes enhance storefronts and create pedestrian friendly streetscapes.

The city of Lansing developed Continued on page 2
Despite Rescission and Uncertainty, TE Program Continues

By Kyle Lukacs

This past May, NTEC published the Transportation Enhancements Spending Report: Analysis of the State’s Use of Federal Funding. In addition to a thorough explanation and background of the FHWA TE program, this report explains how states spent nearly $9.87 billion in TE funds from fiscal year (FY) 1992 through the end of FY 2010.

The 2010 fiscal year was one of extremes. An August 2010 rescission of $2.2 billion overall impacted TE disproportionately with $500 million returned from this program alone. This reflects the actions of roughly half of the states. Some of these same states suspended or scaled back implementation of their TE programs due to shifting political priorities and uncertainty surrounding reauthorization. Spending trends of other states demonstrate a commitment to the program and even increased funding for these activities. Growth in the TE project list, obligation trends, and matching funds leveraged show that these states are affirming their commitment to delivering the small-scale, large-impact livable infrastructure projects represented by TE.

Since the TE program was established in FY 1992, Congress has apportioned $12.47 billion funding nearly 26,000 projects across the United States.

The FY 2010 Spending Report presents these major findings:

- Cumulative obligation rate was 88% of available balance (70% of original apportionment)
- Obligation of yearly apportionment for FY 10 returned to FY 08 level of 64%, (from 74% in FY 09)
- 5-year cumulative obligation rate of 68%
- Obligation of available balance increased in 2010 from 83% to 88% after August rescission
- 29% of total FHWA August rescissions composed of TE funding authority
- The 12 TE-eligible activities were funded at similar percentages as in past years with some minor adjustments. Category 1, bicycle and pedestrian related facilities, continues to be the highest funded activity and increased 1.2% in FY 10. The percentage of category 7, rehabilitation of historic transportation structure projects, declined slightly while the number of landscaping and scenic beautification projects increased for the second straight year (page 20)
- Match rate for projects from 1992-2010: 29%
- Average Federal award: $380,000
- 1,234 ARRA projects received a total of $944.5 million in TE funding

To access the full report and to view statistics including obligation rates for your state, visit www.enhancements.org.

Rain Gardens Continued

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