North Carolina DOT Wins Prestigious Award for Restoring Railroad Stations

The North Carolina Department of Transportation Rail Division received from the National Trust for Historic Preservation the 2007 John H. Chafee Trustees Award for Outstanding Achievement in Public Policy. For many state DOTs, “transportation” is synonymous with “highways.” But in North Carolina, the Department of Transportation sees things in a larger context. Financed with Transportation Enhancement funds, NCDOT made its policy to launch the biggest historic preservation program in the state’s history – and it’s all about railroad stations. This is an especially significant award in view of the fact that Senator Chafee conceptualized, developed, and passed the Transportation Enhancements program into law with the help of Senator Moynihan.

In 1991, NCDOT joined federal agencies and local governments to reinvigorate the state’s passenger rail network. As part of this effort, a bold decision was made to restore historic train stations across the state - a decision that has thus far led to the investment of $74 million to bring these long-neglected landmarks back to life. The backbone of funding for the project is provided by Transportation Enhancements under TE eligibility Category 7: rehabilitation and operation of historic transportation buildings, structures, or facilities.

So far, twelve stations have been rehabbed, with more to come. Built between the 1860s and the 1920s and representing a wide range of architectural styles, the

**WAITING ROOM AT ROCKY MOUNT RAILROAD STATION, NORTH CAROLINA**

The Rocky Mount railroad station was first built in 1893. Rehabilitation was completed in conjunction with a downtown master plan. It included a new entryway, a new “commons” park in front of the station to provide a visual link to downtown, improved driveways, parking and streetscaping. Parts of the station were also set aside for adaptive reuse as a restaurant and office space.
This far-reaching program, linking the reinstitution of passenger train service with the restoration of historic railroad structures, is a model that should inspire other states and communities. NCDOT’s exemplary initiative and use of Transportation Enhancements as the major funding source has already sparked significant private investment in these communities across the state and created a buzz of excitement around each future project.

To see more about the rehabilitated stations, see: http://www.bytrain.org/istation/

stations have been given sensitive makeovers that spotlight their distinctive design features while allowing them to function efficiently in their historic role as community gateways.

The stations are in big and small communities across the state. For instance, the Historic Hamlet Depot, in Hamlet, NC, is the only Victorian Queen Anne passenger station in North Carolina. It was built in 1900, as a passenger station and division headquarters for the Seaboard Air Line RR. Hamlet Depot received local funds, state funds, and $3.3 million in Transportation Enhancement funds to cover the $11.7 million needed to rotate the building 90 degrees, move it across the railroad track, and restore it. Completed in 2004, the restoration has sparked private investment in the surrounding historic district so that today the station is at the center of a revitalized community.

In another instance, $6.3 million in TE funds provided 70% of the funds needed for the renovation of the Rocky Mount Station, in Rocky Mount, NC. The station saw the removal of the modern structure added in the 1960s, the addition of an entryway to allow patrons direct access to the station, and the reconstruction of the 1911-12 platforms and canopies. Not only does the station have active train service, it also houses the Rocky Mount Chamber of Commerce, and there are leased offices on the third floor.

“Thanks to the bold and innovative leadership of the North Carolina Department of Transportation, a new generation of travelers will have a chance to experience the romance of the rails,” said Richard Moe, president of the National Trust for Historic Preservation. “Already, this program has renewed citizens’ pride in their local heritage and created a viable transportation alternative for the public - and it’s not finished yet.”

Receiving the award on behalf of North Carolina: Allan Paul, NCDOT Rail Division, center left, and Ed Davis, NCDOT, center right. Giving the award: Jonathan Kemper, National Trust Chairman, far left, and Richard Moe, National Trust President, far right.

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Greensboro station was built in 1927 and reopened for passengers in 2005 after rehabilitation. From 1979 to 2005, passengers waited for trains in a freight railroad office several miles from downtown.
A regular run-of-the-mill TE funded sidewalk replacement and beautification project is now on the cutting edge of sustainable infrastructure design. It should come as no surprise that it occurred in Portland, Oregon: those Portlanders are known for looking for better solutions. What is striking, however, is that the TE award application was standard, without any mention of green infrastructure. The project as envisioned called for the construction of sidewalks, bike lanes, curb/drainage, landscaping, and lighting along 92nd Avenue with bump-outs filled with grass strip buffers to help separate the traffic from pedestrians. However, when the project was completed, in addition to the standard beautification and pedestrian and bicycle infrastructure improvements, a stormwater infiltration facility was built into the area that had originally called for grass strip buffers.

This type of active infrastructure is known by many names, including high-performance infrastructure, natural drainage systems, bioretention, low-impact development, and sustainable stormwater management. However, the basic concept of a natural drainage system is the same: the street is designed so that it reduces the stormwater runoff entering the sewer or nearby streams. This is done by having the stormwater drain through plantings instead of directly into the stormwater system. That way, water is first filtered through the ground, and requires less treatment to clean it at the water treatment facility. This system also reduces the danger of the infrastructure being overwhelmed during storms by adding to the amount of water that can be drained.

Somewhere along the way, after the TE award was made but before construction started, the planners in Portland decided that this large project was a good candidate for a stormwater infiltration program that Portland had first started experimenting with in 2003. The early projects have shown that the system had the ability to capture around 80 - 90% of street runoff during a simulated heavy stormwater event.

Basic Stormwater Management

Stormwater management has been an issue for streets since Roman times. To keep a street from becoming a river during a storm, basic street design dictates that the roadway surface be rounded so that the water sheds to the sides. Next a gutter is built to direct the water along the sides and away from the road. On many smaller rural roads this is the extent of water management: direct water from the center of the roadway outward. However, in urban areas or on larger roads, removing the water collecting in the gutters is a problem. This problem is exacerbated by the amount of non-permeable surfaces in urban areas such as parking lots, driveways, and buildings that add to the volume of water not soaking into the ground but instead flowing along the surfaces.

The traditional solution in urban areas is to build a storm drain system that pipes the water away from the roads. In most cases this stormwater is full of road and other pollutants such as oils, trash, and silt. In many areas the concentrated toxic soup coming out of the storm sewer system needs to be treated before being dumped into a river or stream. To clean the water the system is tied into a treatment system, which usually consists of the local sewage system in urban areas.

Although this system is a definite improvement over the simple “direct water away from the road solution”, it does have some problems. In particular, this involves a great deal of infrastructure to maintain, and a single storm often easily overwhelms the treatment facilities sized for average drainage needs when the city - and demand - was smaller.

TE can and is used by many communities to mitigate environmental damages caused by highway runoff from older roads under enhancement category 11. However, as this project in Portland shows, even TE projects NOT funded under category 11 can meaningfully improve stormwater management.
Portland is not the first city to use some form of natural drainage system. Similar systems are being implemented across the nation in places like Seattle, Washington and Charlotte, North Carolina. What makes this project special is that it was funded with TE funds and this project was awarded funds under the Pedestrian & Bicycle Infrastructure and the Scenic Beautifications categories (1 and 5). Normally, TE projects that focus on stormwater management are awarded funds because they are eligible under Category 11: Environmental Mitigation to address water pollution.

One question that seems to come up a lot is “What types of review must I go through to receive federal TE funding?” On 92nd Avenue in Portland the stormwater infiltration system was never included in the TE application. When asked, Pat Fisher, ODOT’s TE manager, said that as far as she was concerned the project was primarily a pedestrian facility and landscaping project. The original plan called for a green strip, and upon review that is what is there: the fact that the green strip is part of the stormwater system is a bonus. While in this case the project sponsor (City of Portland) did not make it a highlight of their TE application, it is likely that such a point would be seen positively by TE selection committees in Oregon or other states.

The green strip buffer allows water infiltration both from the sidewalk and the street into the plant bed.

The Rails-to-Trails Conservancy has added a trail toolbox to its website, in an effort to build the most comprehensive resource for rail-trail development. The toolbox currently includes discussions on many topics, including corridor research, railbanking, acquisition, outreach and insurance. For instance the railbanking section includes a history of railbanking, a full description of what is involved and how to go about it. The toolbox also includes links to other RTC and outside resources. Other sections of the toolbox are still being added, including sections on construction, design and financing. The toolbox can be found at: http://www.railstotrails.org/whatwedo/trailbuilding/index.html

The Project for Public Spaces (PPS) has a number of toolkits available including one regarding Furnishing Your Public Space. In this toolkit, PPS details the kinds of public-space amenities that can enliven an area, as well as why and how to design, build and maintain them. Amenities discussed include seating, lighting, signage, water features and waste receptacles, among others. Each topic section offers design and use guidelines as well as examples and photographs to help lay people and professional designers work with together in building effective, attractive features to enliven public spaces. The toolkit is available at: http://www.pps.org/civic_centers/info/how_to/amenities_bb/

The USDA Forest Service published a guidebook in October entitled Federal Surface Transportation Programs and Transportation Planning for Federal Land Management Agencies. The guidebook, with the aid of numerous illustrations, charts and examples, discusses transportation process, FHWA and FTA funding programs, implementation funding, and presents a number of success stories. The guidebook outlines the transportation planning process and serves as a primer on: which activities are eligible for funding, where to find funding, which agencies to partner with, and how to integrate Federal land management objectives with State and local objectives. The guidebook is designed to assist Federal land management agencies (FLMAs), staff, and partners in developing relationships and in maximizing participation in FHWA and FTA surface transportation programs. With technical assistance available through FHWA and FTA, FLMAs can help further regional and local community goals as well as help fulfill their own mission. The guidebook is available for download at: http://www.fs.fed.us/eng/pubs/pdf/07771814.pdf

RESOURCES
WELLSBORO JUNCTION, PENNSYLVANIA

The Pine Creek Trail, one of the state’s longest and most popular nonmotorized, multi-purpose rail trails, has been extended 8 miles from Ansonia to Wellsboro Junction in Tioga County. State and local officials gathered at the trailhead outside Wellsboro Junction in September to celebrate the opening of the new section. The 62-mile trail runs through Pine Creek Gorge in Tioga and Lycoming counties.

Pennsylvania’s Department of Conservation and Natural Resources has invested about $7.5 million in Pine Creek Trail, including $1.4 million for this new section. Most funds – close to $1.1 million – came through federal Transportation Enhancements administered by PennDOT.

The first phase of the trail opened in 1996 on an abandoned railroad bed that parallels Pine Creek in the Pine Creek Gorge, proudly referred to by locals as the “Grand Canyon of Pennsylvania.” The trail generates about $5.5 million a year for the local economy, according to a Rails-Trails Conservancy survey that was funded by a DCNR “Growing Greener” grant. The trail work is part of ongoing efforts to improve recreational opportunities and increase “nature tourism” in the Pennsylvania Wilds.

MORGANTOWN, WEST VIRGINIA

The Willowdale sidewalk project at West Virginia University was completed in August. The project runs alongside Milan Puskar Stadium at Mountaineer Field and includes the connecting roadway from Ira Rogers Drive to Medical Center Drive. The student-driven project, proposed over two years ago, was largely funded from the federal Transportation Enhancement Program with additional support from WVU, the city and county. Gov. Joe Manchin and Transportation Secretary Paul Mattox joined student leaders and other government officials last fall for an official groundbreaking. “The students are absolutely thrilled that this heavily traveled path will soon be complete,” said David Kirkpatrick, SGA president. “Not only will it be a safer area for foot, bicycle and vehicular travelers, but it will provide greater access to the stadium, hospital and area residences. I want to thank the administration and our city and state leaders for their support.”

[Targeted News Service, August 20, 2007]

LANSONG, MICHIGAN

The Lansing mayor unveiled the completion of the first of the new rain gardens along Michigan Avenue and the start of construction on the new traffic circle at the intersection of Michigan Avenue and Washington Square in downtown Lansing. Citing the need for a new gateway to the State Capitol building, he praised this project as a way to welcome visitors and attract tourism in order to aid in economic revitalization. The new traffic circle at the intersection of Michigan and Washington Square is the centerpiece of the new gateway to the State Capitol building, featuring both plantings and a privately-funded fountain. The circle was designed to improve pedestrian safety by changing the flow of traffic, slowing vehicles and setting back crosswalks from the circle. There are also pedestrian safety areas between traffic lanes.

The new Michigan Avenue rain gardens – like the Portland project featured in this issue of Connections – are an environmentally progressive way to filter the contaminants from storm water run-off: they will not only be visually appealing but will also improve water quality of the Grand River. The Michigan Avenue Enhancement Project was funded by a $2.6 million Transportation Enhancement Fund grant awarded by the Michigan Department of Transportation and also received a $600,000 grant from the Michigan Department of Environmental Quality for the rain gardens.

[US States News, August 15, 2007]

SAN JUAN CAPISTRANO, CALIFORNIA

Construction has been completed at the Vereda Bikeway Undercrossing, which allows bicycle traffic along San Juan Creek to pass under the railroad. Part of the funding came from the Transportation Enhancement Award, awarded in 2001. The project, administered by Caltrans, cost $2.5 million, $1.1 million of which was a Transportation Enhancement Grant. Orange-based J.L. Patterson & Associates led construction, which began in spring 2006.

[Orange County Business Journal, July 22, 2007]
The North Point Light Station in Milwaukee, Wisconsin, consists of a 74-foot lighthouse tower and 2 1/2 story wood-frame Keeper’s Quarters. Built in 1888, this iconic structure played an important role in the region’s maritime trade and economic growth for more than 120 years, where it remained in use until being decommissioned in 1996. The lighthouse was recently restored with the help of close to $1 million in TE funds, for which it qualified under TE Category 7 (Rehabilitation and Operation of Historic Transportation Buildings). The lighthouse and keeper’s house will be open to visitors this winter. More photos of this and other TE projects are available in our online image library at www.enhancements.org/library.