



A Special Look

at New Jersey's Transportation System



New Jersey Department of Transportation
Governor Christine Todd Whitman
Commissioner James Weinstein



West Side Avenue, Bayonne
Bumper Structure, Don Kennell



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August 2000

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The photographs in this book present for the first time a special view of initiatives by the New Jersey Department of Transportation (NJDOT) and its partners to make our state a better place to live, work and raise a family. As we work to provide excellent transportation service, we also strive to enhance the quality of our environment, add an aesthetic dimension to our designs and preserve our heritage. And we do this because our citizens desire it.

The planning and design concepts we used during most of the 20th century, when our mandate was to complete the major highway networks, served us well. But we have begun to reshape these standards and make them flexible enough to meet our latest challenges. We need to make the most efficient use of existing investments, to expand public transit and to rebuild worn out elements in a way that enhances our environment, respects our history and augments the beauty around us.

To accomplish this, we will spend more time listening to the voices in the communities hosting our projects. We will strive to exceed the requirements of the state and federal agencies to protect our environment.

The photographs in this publication include recent examples of our commitment to these ideals. They show work completed by NJDOT, NJ TRANSIT and other partners, funded through our Department's many programs.

It is a pictorial tour of environmental innovations, construction and maintenance operations. You may be pleasantly surprised by their range.

As you travel around our state, please take the time to notice some of the projects we have called to your attention in this book. Tell us when you see something you like or something we missed. It will give us a clearer understanding of what you value and will motivate us to do more.



James Weinstein
Commissioner of Transportation

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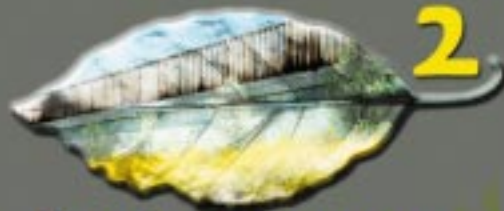
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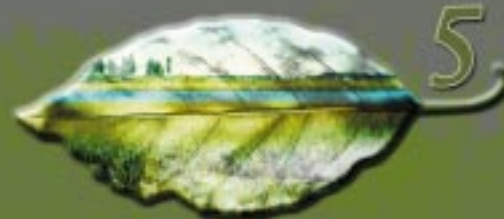
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Bridges

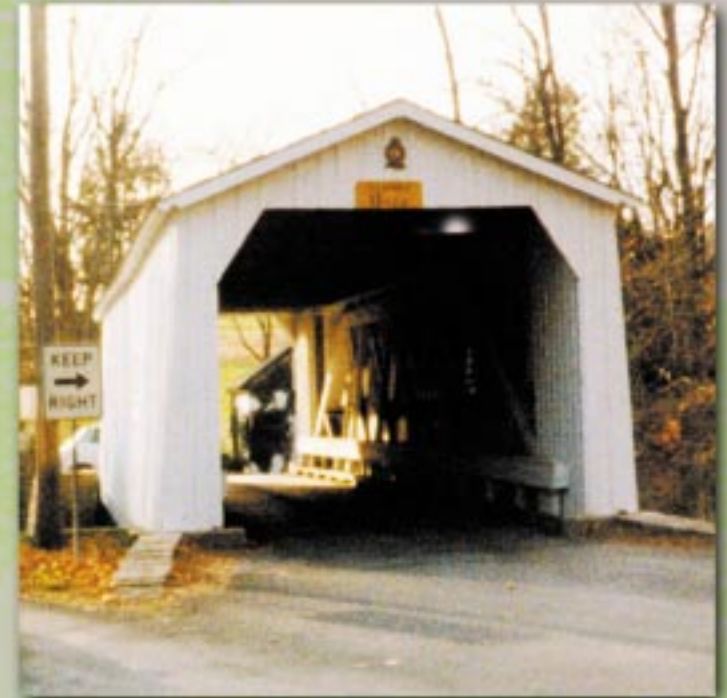
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Bridges have inspired designers and builders to soar beyond basic function to heights of innovation and beauty. Many of New Jersey's 6,300 bridges have served us faithfully for more than a century — more than 400 are eligible for inclusion in the National Register of Historic Places — and are a source of pride for their communities. We plan to preserve as many as possible. When we cannot, we will ensure their replacements reflect their surroundings.



The Pulaski Skyway spans the navigable waters of the Hackensack and Passaic Rivers, and connects Newark and Jersey City. Called the "most beautiful steel bridge" by the American Institute of Steel Construction when it opened for traffic in 1932, it has been designated a civil engineering landmark.





Top left: The Erie-Lackawanna bridge over the Hackensack River in Kearny is a familiar profile. *Top right:* A stone marker on the 1872 covered bridge in Sergeantsville, the state's only covered bridge of the era, reads: "In 1961, as a result of the efforts of an aroused group of citizens, the state of New Jersey, using the materials of the original covered bridge, fully restored this link with the past." *Below:* The Route 206 bridge over Stony Brook in Princeton dates from 1792 and may be the oldest bridge in New Jersey. Its character has remained largely unchanged.





Two vintage bridges feature distinctive period iron trusswork. *Left:* The Main Street bridge over the South Branch of the Raritan River in Clinton was built in 1870 and recently rehabilitated. *Right:* The Arch Street bridge over the Passaic River in Paterson was built in 1905 and restored in 1997.





VINCENTOWN BRIDGE
DECK BUILT 1915
CHARLES JOYCE, CHAIRMAN,
COMMITTEE
THOS. B. AARONSON EDW. DURELL
JOS. SYKES WILLIAM THACKARA
A. I. DAVIS DIR. HARRY HAWKINS JR. C.E.
JAMES LOGAN Co. ENGINEER
MEDFORD CONCRETE, Co. CONTR.

The original iron railing was reused when the 1915 Vincenttown Bridge in Burlington County was replaced in 1995. Stone was added to complement its rural setting.



In 1996 we replaced the Tuttle Parkway Bridge over an historic rail corridor in Westfield.

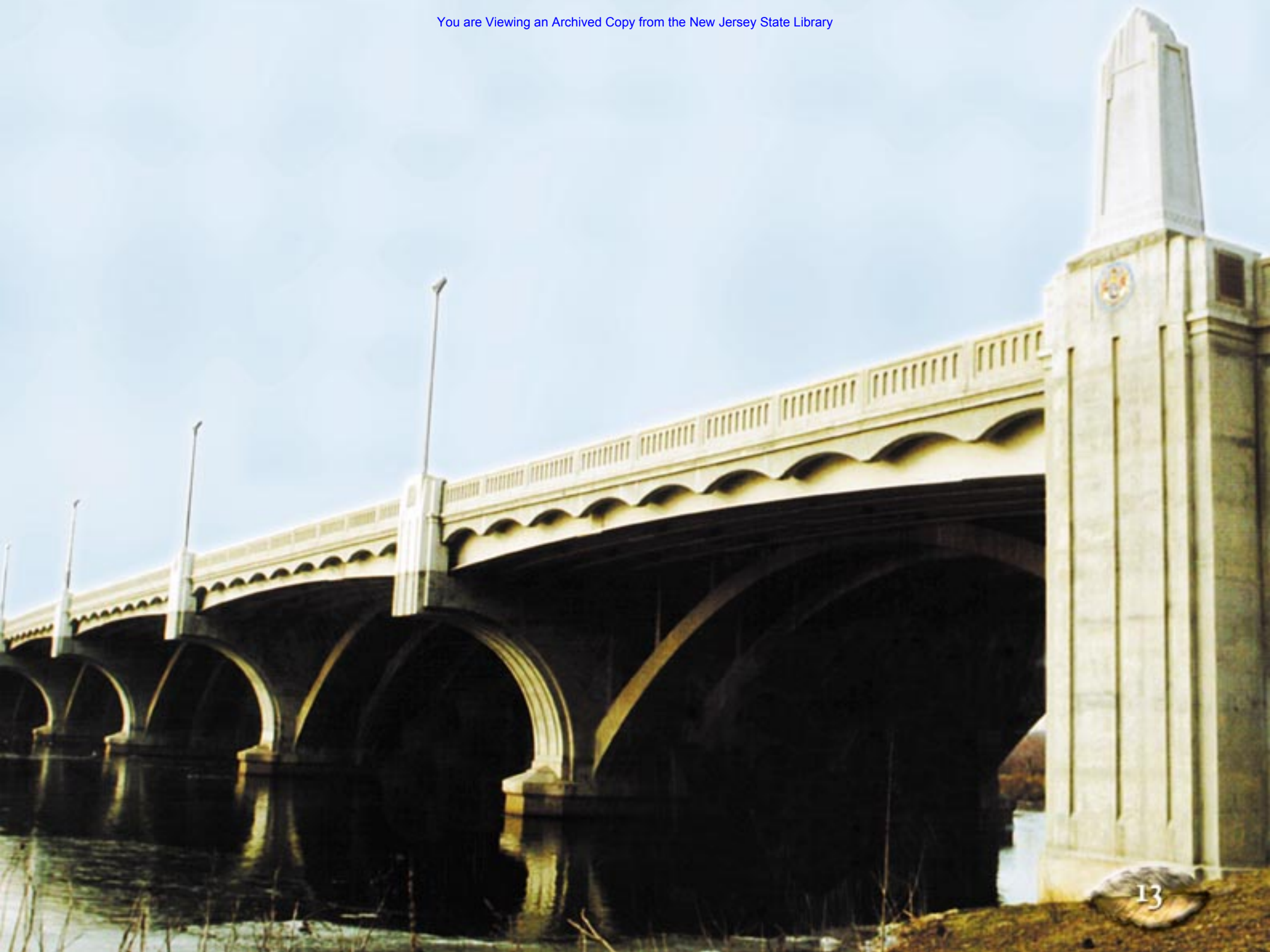




Pages 10-13: When we replaced the Route 46 and Crooks Avenue interchange bridges in Clifton in 1997, we either replicated or reused their original architectural elements: art deco bas reliefs, colorful mosaics, state seals, massive columns and intricate stone patterns.









Rural historic bridges unable to bear the full burden of today's traffic can still live useful lives for lighter traffic volumes in recreational areas. Montgomery Township's Burnt Hill Bridge (*left*) and the Augusta Road Bridge (*right*) in Frankford Township work nicely in their new park settings.



The new Route 47 Bridge, adjacent to an historic district in Dennis Township, includes 1930s style architectural details.

The new Route 35 Bridge over the Navesink River in Red Bank was designed to reflect the aesthetics of its neighborhood. Graceful goosenecked lights, finials and geometric concrete shapes complement its surroundings.





The new Highland-Baldwin Avenue Bridge in Glen Ridge was replaced with period details such as iron railing and light fixtures, attesting to the 19th century origins of the community it serves.



It looks like a bridge but it's not. A long wall on the Route 21 Freeway along the Passaic River in Clifton uses trompe l'oeil to provide visual relief.

Roadsides

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The most all-encompassing landscape in our small, densely populated state is the scenery along its 36,000 roadside miles. Carrying people and freight, our roads traverse communities and natural habitats. It is an enormous responsibility for the NJDOT to enhance, protect and maintain this roadside landscape while providing mobility for our citizens and businesses. Here are some examples of our efforts.

Motorists find flowering trees and miles of forsythia like these on I-295 in Hamilton Township to be a calming view.



Previous page: Traveling to the Vineland Fair children saw the graceful weeping love grass along Route 55. This sturdy drought-resistant landscape material is easy to grow and maintain on our coastal plain. *Right:* The neighborhood view of the Route 21 noise wall in Clifton is softened by evergreens.







Left: Flowering trees and shrubs highlight the natural beauty of New Jersey's first Scenic Byway, Route 29 from Trenton to Frenchtown (*bottom and page 27*) and Route 1, Trenton (*top*). *Above and next page:* Local residents guided the design and appearance of noise walls along I-295 in Camden County. Each municipality selected an individual expression of design and landscaping.





Daylilies, daffodils and other early blooming plants along New Jersey roadsides announce the arrival of spring.





Above: Volunteers play an active role in landscaping and removing litter and (next page) in planning transportation improvements such as the Route 29 Scenic Byway and the Route 29 deck park in Trenton (page 62).







The landscaping along Admiral Wilson Boulevard in Camden provides an attractive entrance to surrounding neighborhoods.



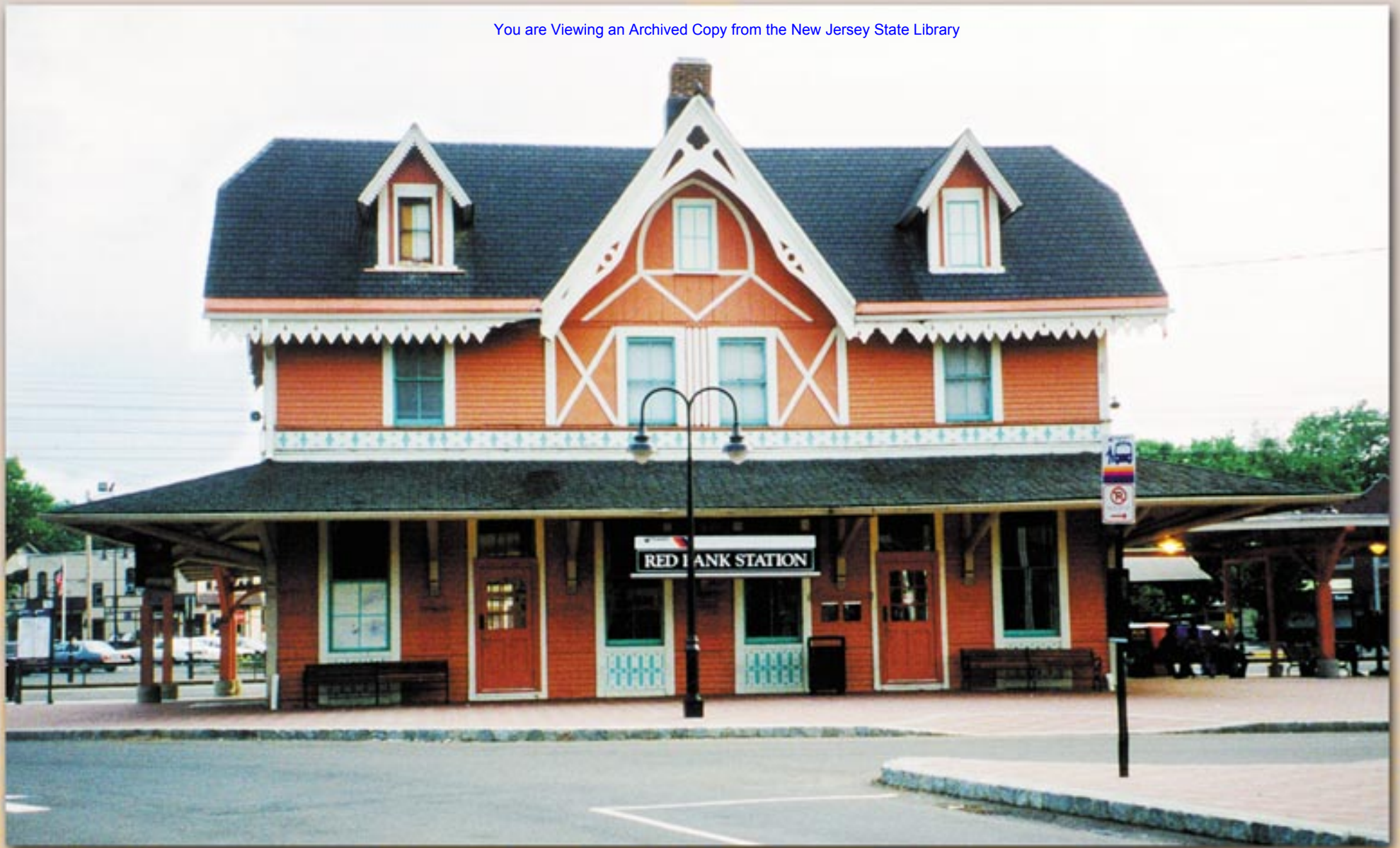
New Jersey's precious watersheds are clearly identified for motorists through a joint sign project of the state Departments of Transportation and Environmental Protection.



Rail Stations

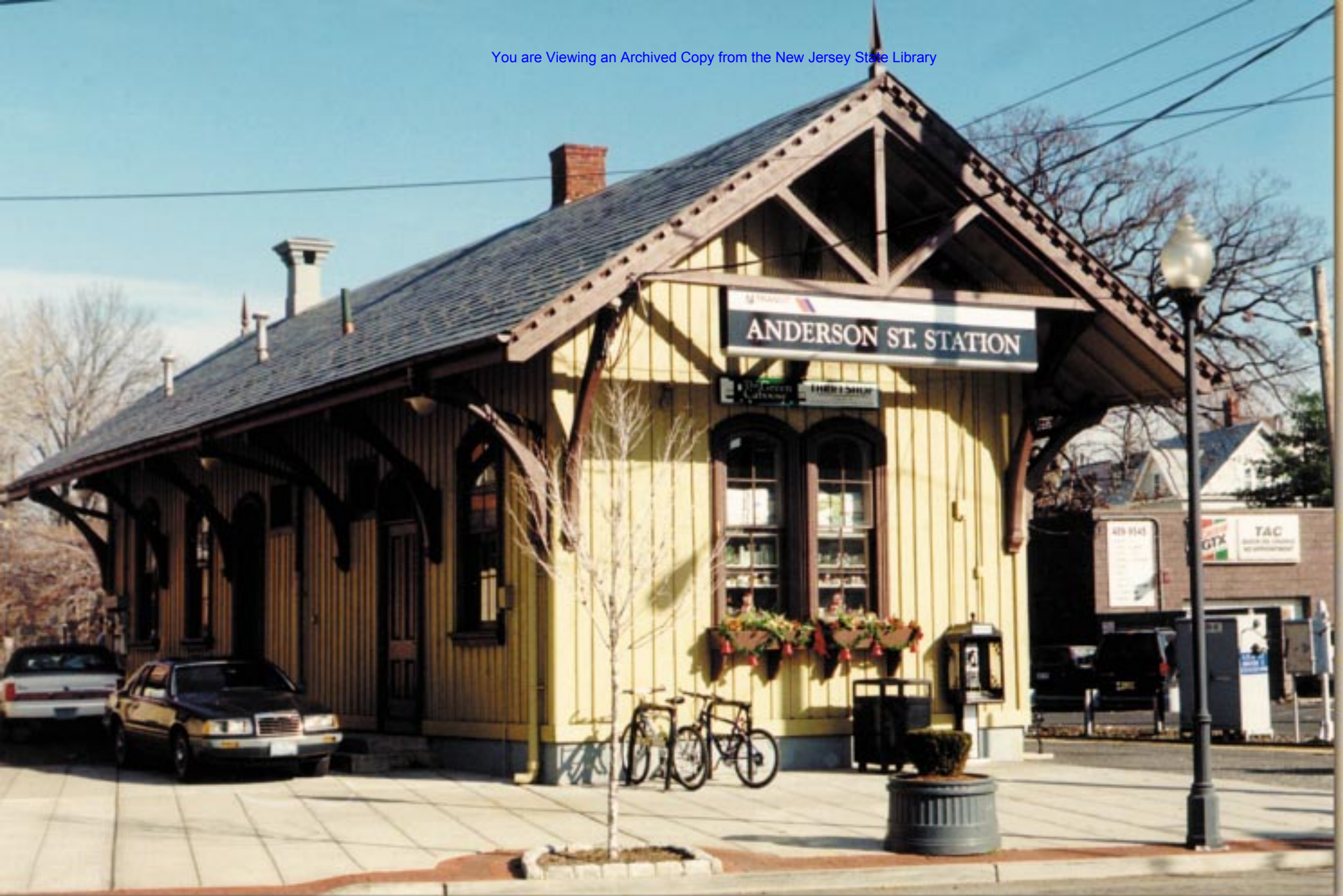
Railroads once, and now again, play a central role in our lives. More than a hundred years ago train stations from the vast vaulted Penn Stations in Newark and Hoboken to the more modest ones along the lines were built as architectural expressions of their owners and communities. As new commuters discover the convenience and environmental benefits of taking the train, state agencies, communities and businesses build, rebuild and restore rail stations with close attention to their architectural beauty along with other passenger amenities. Some favorites are presented here.





Previous page: NJ TRANSIT opened its new transit complex in Hamilton Township (Mercer County) in 1999: a rail station, park and ride and a bus maintenance facility. The first new rail station NJ TRANSIT completed in its 20-year history, **Hamilton's** park-like setting and distinctive architecture make it a community asset. High quality modern building materials, spacious covered platforms, an airy rotunda, gracious entranceways and a distinctive clock tower evoke the golden age of rail travel.

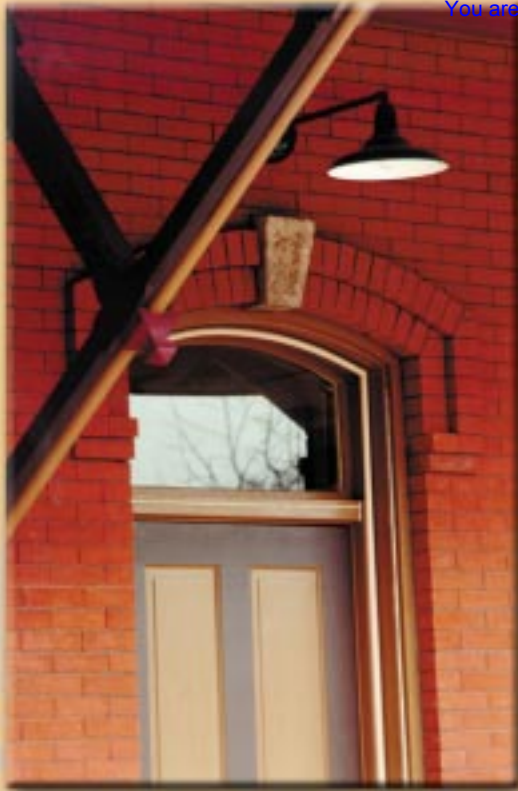
Above: The 1876 **Red Bank Station** is a fine example of a small town combination station in the Carpenter Gothic tradition. The Red Bank Station, a gateway to the town, was rehabilitated in 1976. NJ TRANSIT plans to historically restore it in the next few years.



The restored **Anderson Street Station** in Hackensack is typical of the first generation of stations built over the Erie-Lackawanna lines during the late 19th century. It was designed in a simplified Carpenter Gothic style, an appearance consistent with the neighborhood's suburban "cottages."



The light-filled waiting room and clock tower are features of the busy **Rahway Station** totally rebuilt and opened in 1998. A committee of local officials worked with NJ TRANSIT design engineers for almost a decade to replace the 1930s station. A bronze map of Rahway in front of the entrance is the centerpiece of the new rail facility which serves as a link to other downtown development and enhancement projects.



HOPEWELL RAILROAD STATION RESTORATION

OWNER

Borough of Hopewell
Hopewell, New Jersey
George Padgett, Mayor

ARCHITECT

Fred Farewell Mills and Galush
Princeton, New Jersey

GENERAL CONTRACTOR

Haverstick Brothers
Plymouth Meeting, Pennsylvania

GRANTING AGENCY

New Jersey Historic Trust

GRANTING AGENCY

New Jersey Department of Transportation

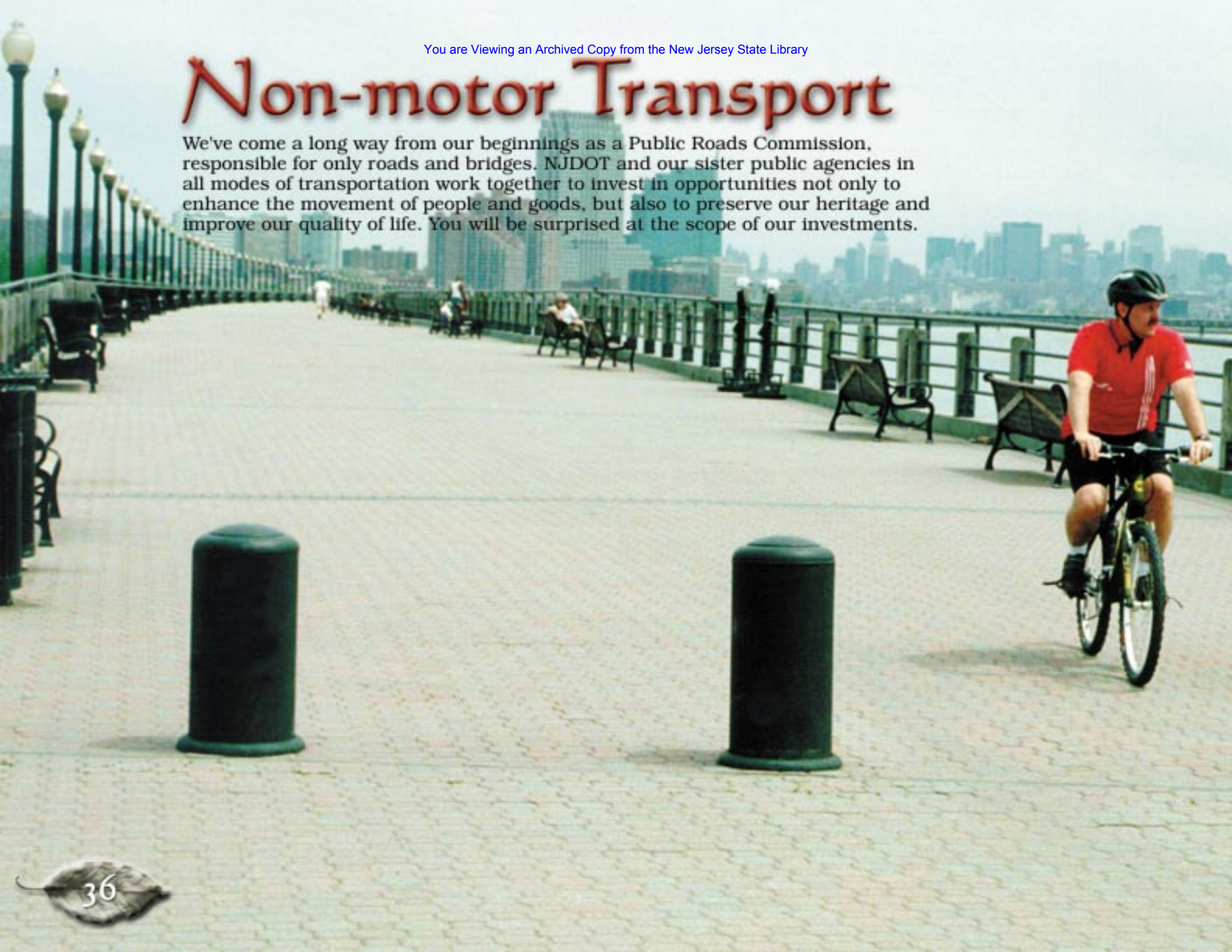
Hopewell is currently renovating its 1876 station with the help of state and federal funding. It is a rare example of a New Jersey suburban station in the Second Empire style. The building boasts an unusual attention to decorative detail. NJ TRANSIT is now studying the feasibility of restoring passenger service on this line.



The 1907 classic beaux-arts style of the **Hoboken Terminal's** main waiting room was restored to its original splendor in 1999. Besides improving safety, comfort and efficiency for passengers, the massive skylight, copper windows, wood benches and terrazzo floor were restored in this \$10.5 million project. In addition, replicas of original hanging lights were installed, plaster was repaired and painted, limestone was cleaned and patched, woodwork was refinished and the exterior copper and roofing were repaired.

Non-motor Transport

We've come a long way from our beginnings as a Public Roads Commission, responsible for only roads and bridges. NJDOT and our sister public agencies in all modes of transportation work together to invest in opportunities not only to enhance the movement of people and goods, but also to preserve our heritage and improve our quality of life. You will be surprised at the scope of our investments.





Previous page: A bicyclist enjoys the promenade at Liberty State Park in Jersey City. *Right:* Transportation enhancement funds were used to stabilize the historic lighthouse at Absecon and add an interpretive facility.



*Left: The sculpture, **The Dublin Spring Water Boy**, by Gaetano Federici was restored to its original lustre through a transportation streetscape project to preserve the character of this unique Paterson neighborhood. Above: Pedestrians enjoy this Paterson streetscape designed and built as part of the Route 19 project. Right: The design of the park structures near the Route 21 Freeway in Clifton imitates the roof lines of the weaving sheds in the former Botany Mills. The meandering river stones represent the power source for the mills, the Passaic River.*







Brick sidewalks and decorative iron tree grates in Paterson and curved light stands in Millville offer an aesthetic urban environment.







Previous page: Transportation enhancement funds contributed to the restoration of New Jersey's official tall ship, the *A.J. Meerwald*, whose home port is Bivalve on the Maurice River. *Meerwald* was built in 1928 as a Delaware Bay oyster dredge and served in the U.S. Coast Guard in World War II. It now sails as a hands-on classroom promoting ecological and historical awareness while visiting ports along the Delaware Bay and River and the New Jersey coast. *This page:* The Delaware and Raritan Canal outlet locks in New Brunswick's Boyd Park were restored through a partnership with historic preservation advocates and the city. The canal played a significant role in 19th century life in the region.



Transformed into trails, former rail lines such as these in Sussex (*top*) and Burlington (*right*) counties allow for multiple recreational uses.





Natural vistas along the Appalachian Trail like this one in Wantage Township in Sussex County are preserved for future generations.

Nature

We work hard to protect our natural resources as we improve our transportation network for our citizens. When unavoidable impacts take place, as a last resort, we replace the habitat. Here are some successful examples.





Left: We returned this 24-acre area on Drag Island in Atlantic County to its natural state as a salt marsh, a viable habitat for indigenous wildlife and plants. It had been used as a dump for silt dredged from the nearby channel. *Above:* Newly created fresh water wetlands provide two acres of new wetlands for every acre lost.



Above: The brook trout is a native New Jerseyan. To protect it and two other wild trout species during the construction of a truck passing lane on Route 206 in Flanders, we moved Flanders Brook. *Top Right:* Volunteers from Trout Unlimited helped to move trout. *Bottom Right:* The stream was diverted into an enclosed pipe to protect the water from eroding soil during construction. *Next Page:* The trout are flourishing in their new habitat.



Top: Wildlife have a safe crossing under Route 31 in Clinton. Above: NJDOT is an active participant in the state's anti-global warming initiative in which we replace two trees for every one we remove during a project.

History

Native Americans have lived in New Jersey for 10,000 years; Europeans settled here 400 years ago. As we provide for better transportation for today's citizens, we look for evidence of our state's heritage. We preserve it when we can and share our discoveries with you.



Shards of decorated redware pottery were unearthed from the 18th century Beverwyck Plantation site. They were discovered during the expansion of the park and ride in Parsippany-Troy Hills.





Clockwise from top left: Clay pipes from the 18th and 19th centuries, a fully grooved axe dating from 3,000 B.C. to 1,000 A.D., prehistoric projectile points and pewter regimental buttons from an American soldier's Revolutionary War uniform were excavated from the Beverwyck site. *Left:* The archaeological work at the Abbott Farm National Historic Landmark in Mercer County contributed significantly to the understanding of prehistoric cultures in the Delaware River Valley.





Local volunteers sometimes work alongside professionals. Boy Scouts (*top*) assisted on Route 29 and school children (*right*) worked at the Henry A. Hopper site in Fair Lawn. *Bottom right*: After archaeological work has been completed, the consultants work with NJDOT professionals to provide publications, exhibits and videos for use in sharing historical information with both adults and children.





The crew is on location at the Abbott Farm National Historic Landmark in Hamilton Township filming *The Turtle Stone* video. Archaeological research before the construction of the Trenton Complex, the conflux of I-295, I-195 and Routes 29 and 129, refined our understanding of the people who camped, fished, farmed and settled in this area almost 10,000 years ago. The video won Mid-Atlantic Emmy Individual Achievement awards for best director and best composer.

Housekeeping

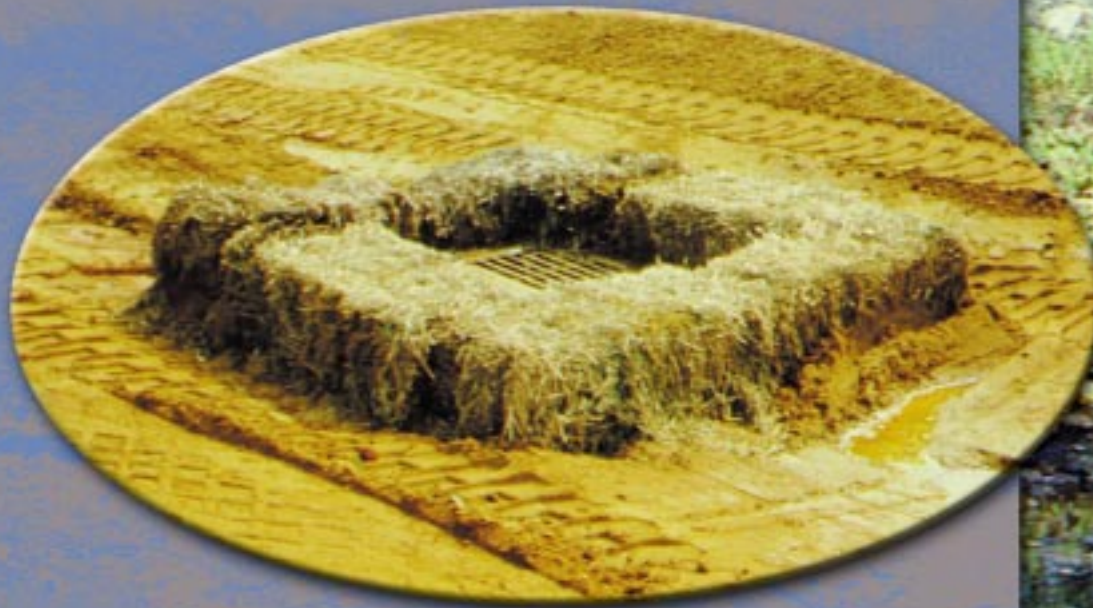
NJDOT is diligent in its stewardship of our natural environment. Besides exercising care when working near fragile natural resources, we store our equipment and chemicals in a safe manner. We are rebuilding our maintenance facilities using the latest methods to control and prevent pollution. At the same time we are experimenting with techniques to recycle waste and by-products from our projects.





This page and next page: NJDOT's Maintenance Yard in Bloomsbury is an attractive new building with facilities for controlling pollutants. The building is outfitted with drains to separate oil from water before released into the environment and concrete tanks to provide safe storage of fuel and chemicals and tubs to collect leaks.





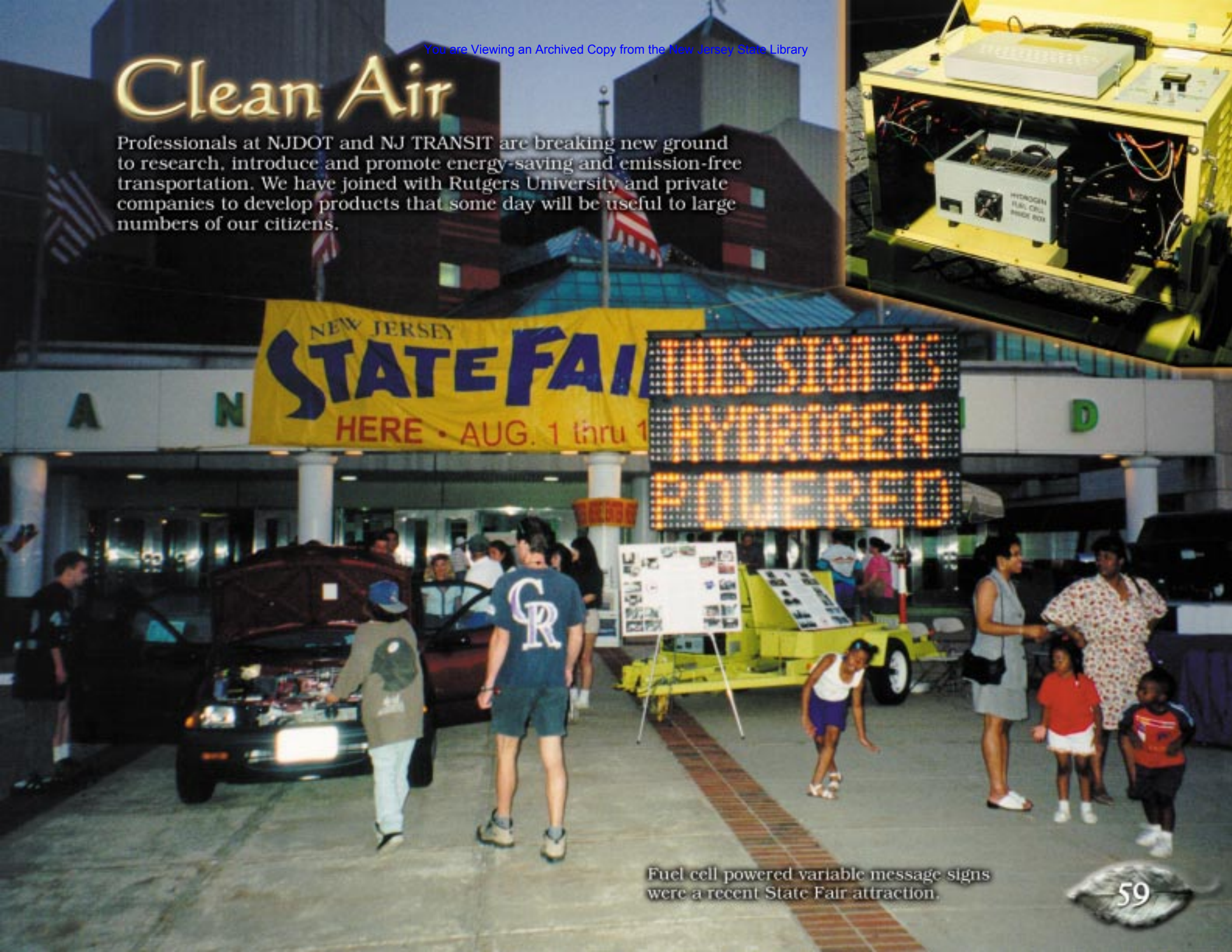
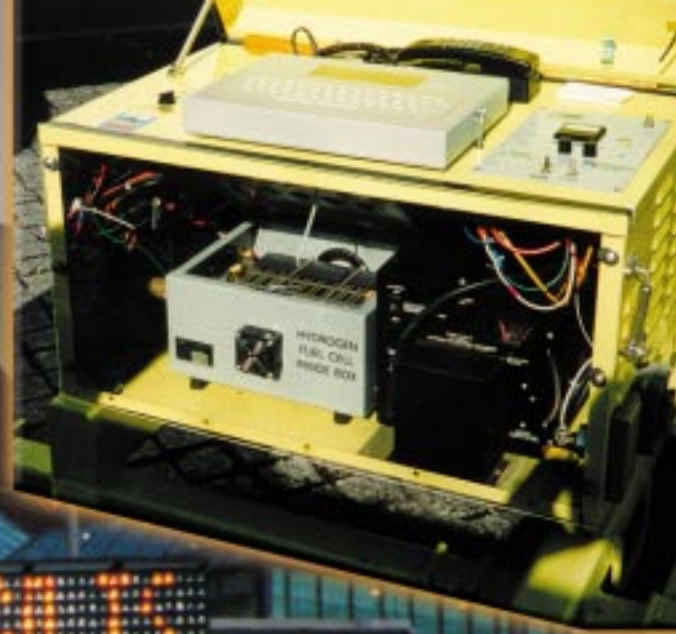
We take steps to protect the natural environment at our construction sites. *Above:* Hay bales prevent mud from invading natural water bodies. *Right:* A boom collects debris.



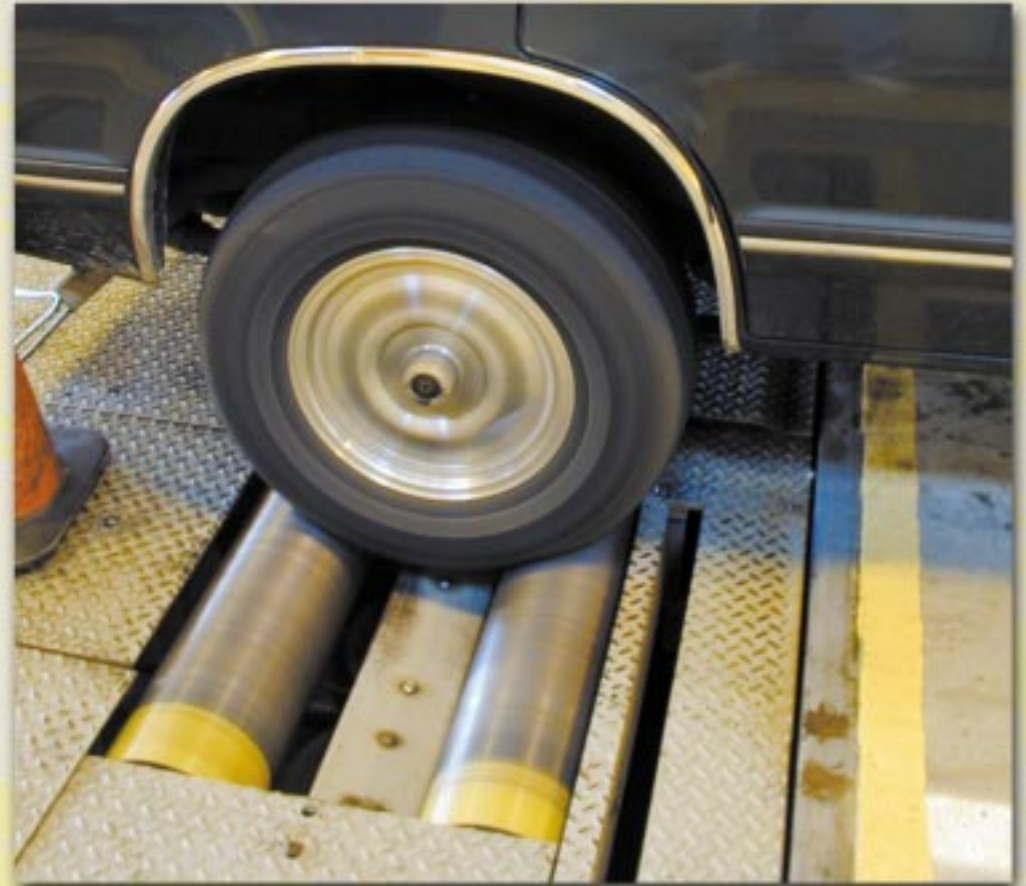
Top: Plastic and hay prevent rain from washing away soil. *Right:* A silt fence protects a nearby forest from mud.

Clean Air

Professionals at NJDOT and NJ TRANSIT are breaking new ground to research, introduce and promote energy-saving and emission-free transportation. We have joined with Rutgers University and private companies to develop products that some day will be useful to large numbers of our citizens.

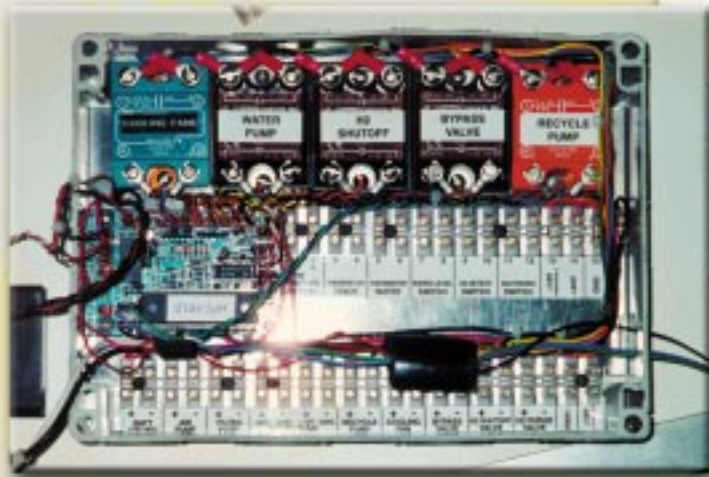


Fuel cell powered variable message signs were a recent State Fair attraction.



Top left and right: New Jersey's Clean Air program launched an enhanced two-year vehicle inspection. Emissions are now computer-tested on a dynamometer based on the manufacturer's standards for model and year. The emissions tests will remove more than 80 tons of air pollution each day.





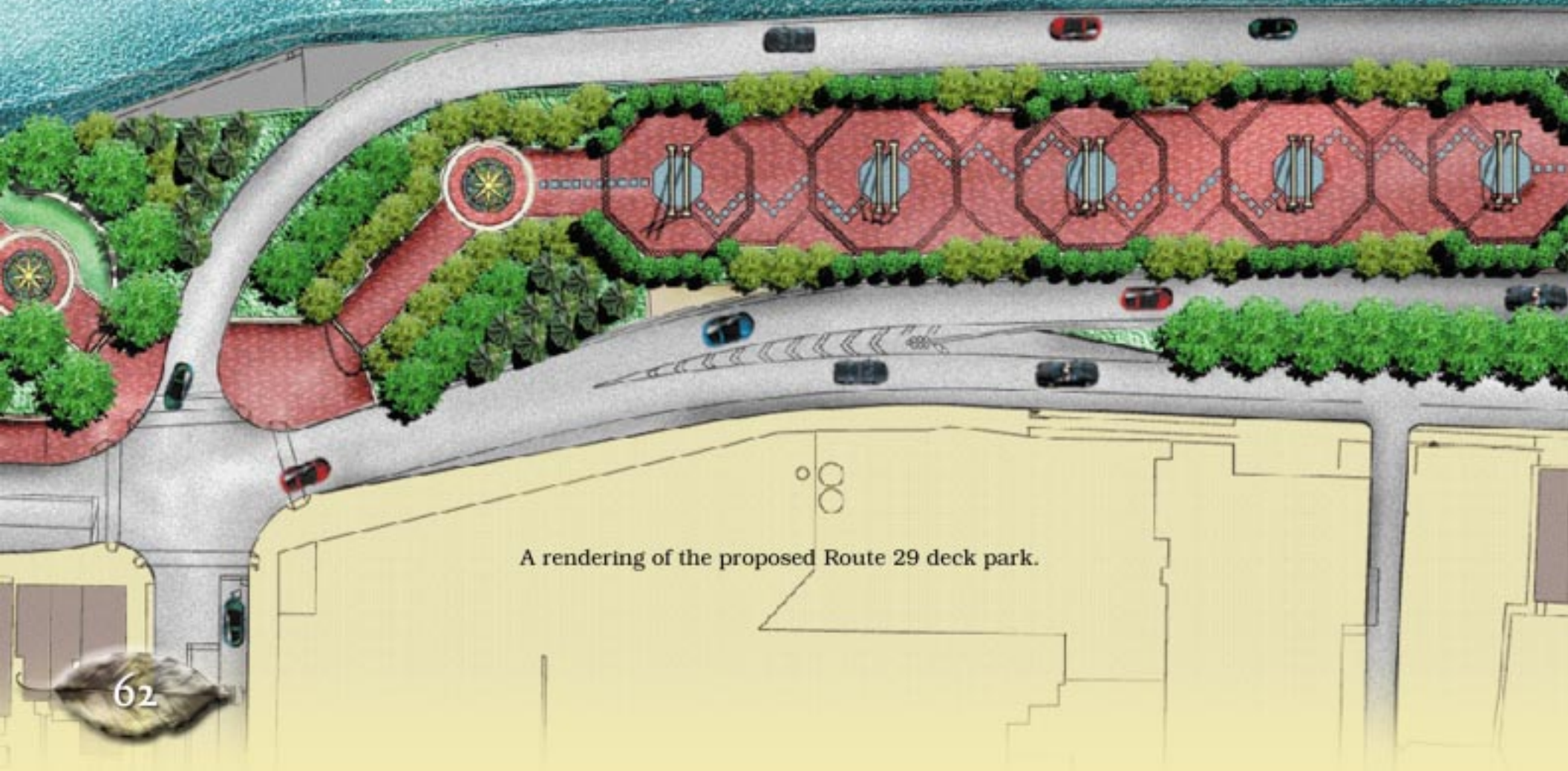
Below: NJDOT and NJ TRANSIT now use an electric car, the Solectra, for short trips in a demonstration of clean technology. We are part of a public-private team developing fuel cell electric and hydrogen fuel cell powered vehicles. Our prototypes, called NJ Venturer (above) and Genesis, compete annually in the Tour de Sol event for environmentally friendly and emission-free vehicles.



Where are we going?



The photographs in this book illustrate the NJDOT's and NJ TRANSIT's efforts to enhance the quality of our projects and the communities we touch. It is our intention to discover how to do more and do it better in the coming years. You can help by sharing your vision with us. We look forward to hearing from you.



A rendering of the proposed Route 29 deck park.





The New Jersey state bird
is the Eastern goldfinch.

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NJ TRANSIT
The Way To Go



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The images used in this brochure depict work completed by NJDOT, NJ TRANSIT,
counties, municipalities and non-profit organizations through programs funded by the
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Federal Transit Administration.



Marin Boulevard, Jersey City
Paving Inserts, Wopo Holup



45th Street, Bayonne
Tile Mural, Katherine Hackl

Inside front and back covers:
**Hudson-Bergen
Light Rail Transit System**
Photographs by David Sailors

Art is an integral part of the Hudson-Bergen Light Rail Transit System which began operation in April 2000. Artists interpreted platforms, plazas, windscreens, kiosks, canopies and signs in a variety of media to evoke the character of the surrounding community and to celebrate its cultural diversity.

