

New Jersey Department of Transportation 1987 Annual Report

Thomas H. Kean
Governor

Hazel Frank Gluck
Commissioner



New Jersey Department of Transportation

1987 Annual Report

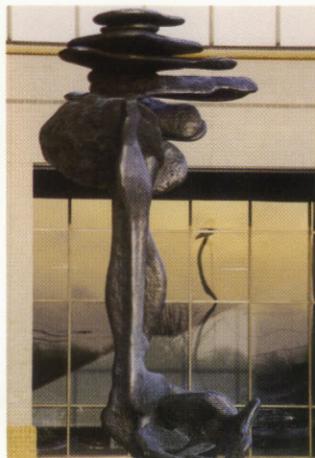
The Department of Transportation hammered out a new official Mission Statement in September to delineate the major goals of the organization. The eight objectives listed in this new Mission Statement make up the theme of this annual report. (See page 24.)

An abstract 18-foot bronze sculpture by Isaac Witkin, "Earth, Water and Sky," was installed in front of the Engineering and Operations Building at the Headquarters Complex in Ewing. It was commissioned through the New Jersey State Council on the Arts under the NJ Public Buildings Arts Inclusion Act of 1978.

Cover photograph by Michael J. Peters

Contents

Strategic Planning	3
Objective 1	4
Objective 2	6
Objective 3	9
Objectives 4 & 5	11
Objectives 6 & 8	14
Objective 7	20





STATE OF NEW JERSEY

DEPARTMENT OF TRANSPORTATION

1035 PARKWAY AVENUE

CN 600

TRENTON, N.J. 08625

609-530-3535

HAZEL FRANK GLUCK
COMMISSIONER



Thomas H. Kean
Governor



Hazel Frank Gluck
Commissioner

December 31, 1987

Dear Governor Kean:

This Annual Report of the Department of Transportation records our major accomplishments in 1987, including our first steps in planning for the complete integration of this state's transportation network.

In 1987 we committed the last of New Jersey Transportation Trust monies, thus completing in three years, rather than four, many critical projects which had been on hold for decades. The general condition of the state's roads, bridges and public transit is better than it has been in decades. Yet it is only the first step toward meeting our long-term goals of returning New Jersey's transportation system to among the best in the nation. A reliable funding source will continue the momentum the Department and NJ TRANSIT have built up in delivering vital transportation projects.

Another challenge confronting the entire transportation community is how to gear up for the next decades, particularly when the federal interstate system is completed. To this end, the Department has redefined its mission and objectives. We have also initiated a dynamic strategic planning management approach to achieving the goals delineated in the Mission Statement within our budgetary framework.

I trust that you will find that we are strengthening the Department from its very foundation so that we can continue to deliver transportation projects in an increasingly effective manner in an era of change.

Sincerely yours,

Hazel Frank Gluck
Commissioner of Transportation

STRATEGIC PLANNING

Getting ready for the next decades

In January 1987 Commissioner Hazel Frank Gluck took a major first step to prepare the Department to address the transportation problems of the next decades by initiating an on-going strategic policy and planning cycle.

Strategic planning, a planning and management tool widely used in the private sector, is being introduced into state transportation departments and port and public transit agencies nationwide. Strategic planning requires organizations to state clearly their missions and goals. It demands accountability and quantifiable performance measures at every management level which are directly tied to the budget process.

In February the Department of Treasury's Office of Management and Budget Services interviewed senior and middle NJDOT managers to find out what problems they believed existed in the Department's organization. Career opportunities, policy information, determination of priorities and allocation of resources were among the first issues to surface.

Senior managers of the Department and NJ TRANSIT further defined problems and issues and possible immediate and short-term solutions during March and August retreats. Out of these sessions also came the formation of a Policy Advisory Committee composed of top-level decision-makers who will steer the strategic policy and planning process. Heading its first agenda was the redefinition of the Department's Mission Statement and identification of the

Department's clients and strategies.

The Department's new Mission Statement was published in September and disseminated to all Department employees. The objectives listed in this Mission Statement make up the theme of this 1987 annual report.

The Policy Advisory Committee established three subcommittees to deal with key issues: human resource development; project management; and planning and resources. At the same time, all employees were also invited through the *Transporter*, the employee newsletter, to submit policy questions or suggestions to the Director of the Office of Policy and Legislative Analysis.

At this critical point in the strategic planning process, the Department turned to a management consultant, Ernst and Whinney, to do an organizational analysis, the next step in building a strategic planning cycle. In September, the consultant began to study the Department's strengths, weaknesses, opportunities and threats to find out, in simple terms, if the Department is organized to achieve the goals which it set forth in its new Mission Statement.

This audit/analysis identified the existing functional responsibilities within the organization and their interrelationships; determined current organizational problems and issues; defined and evaluated organizational alternatives.

If necessary, a new organizational structure complete with duties, responsibilities, staffing and interrelationships will be developed by the end of January 1988. In addition, duplication of job responsibilities would be eliminated and a more direct process for completing projects put in place.

In the coming year, Ernst and Whinney will conduct an "environmental scan," i.e., a study of the Department's external influences, including opportunities, economic trends and legislative impacts and duplication of effort in the transportation community. It will encompass Eagleton Institute of Politics, a Center for Public Interest Polling of New Jersey residents, interviews with members of unions and the Legislature and data collected at the two *Transportation 2020 Forums* held in New Jersey during January 1988 to discuss the future of transportation after 1992. The consultants expect to complete this final phase of their work by September 1988.

Meanwhile, managers were introduced to their role in strategic planning through workshops conducted by Stockton State College's Center for Public Affairs.

Objective 1: Plan, design, construct, maintain and manage an efficient, balanced, statewide transportation system which promotes the state's economic development goals.

Thanks to the one-year extension of the Transportation Trust Fund, the Department continued to carry out an energetic capital program which Governor Kean and others have credited with fueling the economic boom and excellent employment picture in New Jersey in 1987.

The Trust Fund also enabled the Department to allocate \$15 million for the reconstruction, resurfacing and/or rehabilitation of 197 local projects. It also provided over \$31 million in state aid funds to the counties, Jersey City and Newark for transportation improvements and obligated \$25 million in federal funds for local engineering, right of way acquisition and construction.

Major construction projects were completed, several ahead of schedule because of contractual incentives for early completion which minimized inconveniences to motorists. Critical new projects finally got off the drawing boards and more than 100 lane miles of deteriorating pavement on the state highway system were resurfaced.

CONSTRUCTION HIGHLIGHTS

The new **Route 88** bridge in Point Pleasant was named Veterans Memorial Bridge in a special ceremony in May in appreciation of the sacrifices made for the nation by members of the Armed Forces. This bridge over the Inland

Waterway was constructed at a cost of \$13.7 million, replacing the old structure which had caused countless hours of frustration and delay to motorists during its frequent openings. The new structure's higher clearance results in 75 percent fewer openings.

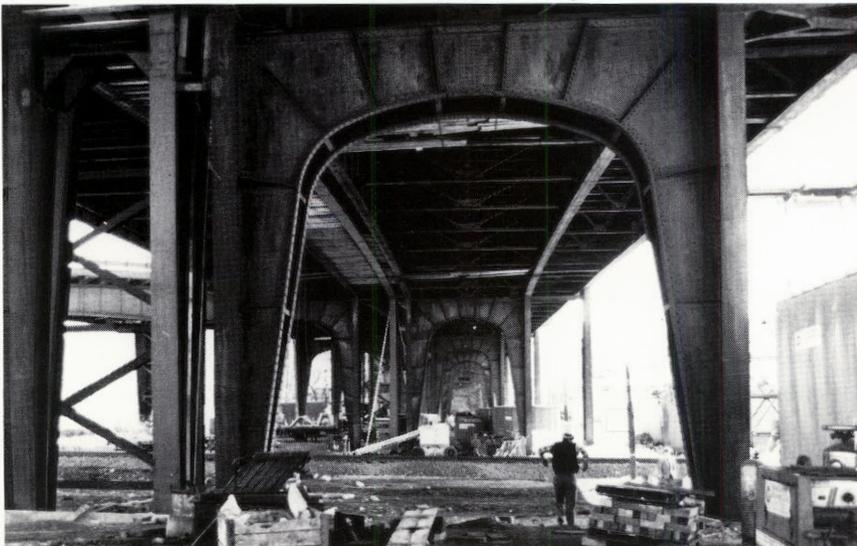
The August opening of the new \$33-million, five and one-half mile section of **I-295** in Hamilton Township, Mercer County was greeted with enthusiasm because it connects directly with I-195 via a temporary ramp which will ultimately be part of a larger cloverleaf interchange. The new interchange immediately reduced traffic on local roads. The project is part of a proposed \$250 million highway network known as the Trenton Complex.

The opening of the \$26-million Quakerbridge Road overpass over **Route 1** in Lawrence and West Windsor Townships, Mercer County was opened in September. This is the first in a series of proposed capacity and safety improvements along the **Route 1** corridor between Trenton and New Brunswick.

A \$19.5-million project to rehabilitate ten bridges along a seven-mile stretch of **I-80** from Totowa to Elmwood Park, Passaic County was completed in November, two and one-half months ahead of schedule. In planning this project, the Department made a special attempt to keep inconveniences to travelers on the roadway at a minimum, including providing incentives for early completion. A major public information campaign informed motorists about the work schedule.

The improved **Route 70/88** intersection at the newly-eliminated Laurelton Circle in

*Route 495 repairs,
Hudson County*





The new bridge under construction on Route 18 over the Weston Mill Pond of Lawrence Brook may be the longest single span, curved girder bridge ever constructed. Bridges of this type usually have a pier in mid-span for support, but this option was rejected to avoid adversely impacting the floodplain and because the waterway is part of New Brunswick's potable water supply.

Brick Township, Ocean County, opened to traffic December 1. The \$12-million project included an at-grade, signalized intersection at the junction of Routes 70 and 88 and Princeton Avenue. Both routes were widened to improve the approaches to the new intersection and a jughandle and a new connector road between Routes 70 and 88 were built.

In December, the Department also completed a \$10.9-million project to rehabilitate the heavily traveled **Route 495** North Bergen Viaduct in Hudson County that leads into the Lincoln Tunnel.

The third of four contracts to complete the **Route 55 Freeway** in Gloucester County was advertised this year. Work on this 3.3-mile project is expected to be completed in September 1989.

The preferred alternative was established for the improvements

to seven miles of **Route 206** from Route 518 in Montgomery Township to the Somerville Circle in Bridgewater Township, Somerset County.

BRIDGE REHABILITATIONS

During 1987 work was begun on two bridges -- **Route 130/Raccoon Creek**, Bridgeport, and **Route 44/Mantua Creek**, Paulsboro. These 50-year-old bridges are being rehabilitated electrically, mechanically, and architecturally using 1983 Bridge Bond Funds. The old equipment is being replaced by solid state controls. Both bridges and new bridge houses will be in use with the new systems in the spring of 1988.

A 16-mile project to improve safety, rehabilitate bridge decks,

and solve a subsurface problem on **Route I-295** from Route 38 to Route 130 in Burlington County was advertised in November. Ground-penetrating radar was used to detect voids under the concrete.

It is anticipated that the \$31.8-million **Route 90** project, a 1.1-mile connector route between the Betsy Ross Bridge and Route 73, under construction in 1987, will be completed in October.

As the **Route 35** bridge over the Matawan Creek, between Aberdeen and Keyport, Monmouth County, is replaced, a precast, concrete box is being utilized as a template and form to place the foundation piles and pile cap. The precast box will remain in place to allow the pier to be built in less time by eliminating the need for cofferdams and pile cap forming.

Objective 2: Seek cost-effective solutions to transportation problems while promoting the conservation of non-renewable resources and minimizing adverse environmental impacts.

Cost-effectiveness became more of a reality than ever in 1987 when the Trust Fund was extended for one-year with no reliable funding source for the future. The marriage of economic and environmental goals for transportation was sometimes difficult. New Jersey is a small, densely populated state which values and balances both. Design and construction projects addressed the impacts on wetlands, farmland preservation and historic preservation.

WETLANDS PRESERVATION

The preservation of the state's wetlands has remained a major factor in planning transportation improvements. A mitigation plan to replace nearly 80 acres of wetlands for the **Trenton Complex**, which is made up of Routes 29 and 129, I-195 and I-295, was submitted to the appropriate permit agencies for their approval this year.

In April, public hearings were held for two more sections of **I-287** through Morris, Passaic and Bergen Counties where wetlands permits from the US Army Corps of Engineers are required. The application was approved in December, allowing construction to continue on this 19.1-mile project that involves approximately 14 separate contracts.

Construction of part of **Route 18** in Monmouth County from Deal Road to Wyckoff-Shafto Road is anticipated to be completed by June of 1988. New wetlands to compensate for

those being filled by the Route 18 project are being constructed within an area adjacent to the right of way in accordance with the conditions of the permit issued by the US Army Corps of Engineers.

The new wetlands will duplicate a cross-section of four former wetland habitats that included open water, an emergent zone, a scrub-shrub zone and a transition zone that leads to upland habitat.

FARMLAND PRESERVATION

The Department changed its preferred alternative for **Route 206** improvements in Montgomery Township to one which avoids Somerset County's only active vineyard. Through continuous coordination with state and federal agencies, this project has been modified further to reduce its adverse effect on sites eligible for inclusion on the National Register of Historic Places.



Cut-through of Eatontown Circle, Monmouth County

HISTORIC PRESERVATION

The Major Road Bridge project in Middlesex County received a "no impact" determination from the Deputy State Historic Preservation Officer. This determination was a result of the Department's recommended shift of the roadway to avoid two structures that are eligible for inclusion on the National Register of Historic Places. This shaved approximately two years from the project timetable by eliminating the need to go through the documentation process for historic buildings.



NJDOT mows more than 1,900 acres a year.

NOISE MITIGATION

In order to maintain schedules on such major projects such as I-287, I-295, the Route 24 Freeway and the I-80 and Route 17 widenings, the

Department's noise staff has developed a computer-graphics design program for noise barrier analysis. The system is considered one of the most advanced of its kind in the United States for highway noise analysis. It offers the best design for both noise

mitigation and cost-effectiveness.

This past year the Department hosted a noise abatement seminar in Princeton attended by transportation noise experts from the United States and Canada.



LITTER

\$4.3 million and 186,000 worker hours are spent annually to remove 152,685 pounds of litter from state roads. In an effort to try to reduce costs, nearly 700 prisoners help clear the road-sides accounting for nearly 62,000 hours of the total.



WILDFLOWERS

The Department is continuing to expand the wildflower planting program along state highways which it began in 1986. Expanses of wildflowers are an aesthetic substitution for mowing state-owned right of way and actually reduce driver fatigue by relieving visual monotony. This year 400 acres were planted in 19 counties, almost 300 more than last year. Every county is slated for planting in 1988. By 1990, the Department will have planted between 10 and 15 percent of the mowable acres of right of way it maintains for a total of approximately 1,000 to 1,500 acres of wildflowers.

DOING IT BETTER

This year the Department used a new, streamlined federal code for several projects where minor parcels of land for parks, recreation areas, wildlife/waterfowl refuges or historic sites were used. In most cases, this enabled the project to be completed in one season rather than two. It was used for the Harrison Street Bridge in Princeton Township and the Jackson Street Bridge in Newark this year.

The Department also initiated environmental mitigation engineering in 1987. This technology will substantially reduce or eliminate the delays directly attributable to adding mitigation measures not previously identified in the Environmental Impact Statement to the project's preliminary design.

Detailed studies are performed to identify noise impacts and evaluate mitigation measures, such as noise barriers, as part of any new highway construction.

Objective 3: Promote efficient land development patterns based upon existing transportation facilities.

The Department focused on land use and planning issues through New Jersey TRANSPLAN, corridor studies, the South Jersey Highway Improvement Study, and revisions to its highway access policies in 1987.

"We must make an effort to address demand management," Commissioner Gluck told a regional development group in northern Monmouth County in December.

"By that I mean actions that government and the private sector can undertake collectively to reduce the magnitude of traffic on the state's roads. Carpooling, vanpooling, staggered work hours, the promotion of public transit, and regional planning are the most prominent examples," she said.

TRANSPLAN

Perhaps the most long-range Department program is TRANSPLAN, the three companion bills introduced into the State Assembly in October 1986: the State Highway Access Management Act, the New Jersey Transportation Development District Act and the Municipal-County Planning Partnership Amendments.

TRANSPLAN underwent extensive public scrutiny this year. Although the TRANSPLAN bills did not advance through the Legislature during 1987, the discussions which they engendered show promise for 1988.

Newspaper editorial boards across the state praised the legislation and endorsed its early passage. Members of the Department worked with concerned groups to broaden support for the legislation.

Many New Jersey residents have become convinced that TRANSPLAN will play an important role in safeguarding the quality of life in New Jersey by providing effective tools for keeping the state's transportation

system in balance with its development.

CORRIDOR STUDIES

The Department continues to study the five high-growth corridors in the state: I-78, from the Garden State Parkway to the Delaware River; Routes 40/322 in Atlantic County; Route 130 in Middlesex, Mercer and Burlington Counties; Routes 73, 38, and 70 in Burlington and Camden Counties; and Routes 46 and 3 in Essex, Morris and Passaic Counties.

These studies are to develop long-range transportation plans that are financially plausible and establish a clear relationship between the timing of improvements within the plan and the staging of development, so that the capacity of the transportation network is not overtaxed. The studies will also provide an analytic basis for discussions between the Department, local governments and the development community about transportation development districts as envisioned by TRANSPLAN. Alternative transportation improvements are



*Route 55 Freeway
Gloucester County
Photo by Teresa Colanerc*

being developed and evaluated with recommendations due in spring 1988.

A special study of the **Route 1 Corridor** sponsored by the Department in cooperation with an 80-member multi-agency advisory board was published early in 1987. The *Route 1 Corridor Transportation Study* examined the future of the 19-mile stretch between Trenton and New Brunswick. It focused on the probable impact of the development expected to occur through the year 2005 in Lawrence, West Windsor, Princeton Borough and Township, Plainsboro, North and South Brunswick. The anticipated residential and commercial development nearly equals in size the creation of a major city and will carry with it increased demand for transportation services. The report underscores the need to find new ways to fund the highway and public transit improvements through public-private sector partnerships.

ATLANTIC CITY

The Department this year reached an agreement with the Atlantic City Marina Area Casinos (Marina Associates) and the Department of Environmental Protection concerning the highway improvements in the Marina area. This agreement replaces an earlier plan to construct overpasses at targeted intersections — a plan the casinos no longer favored because of a slow-down in the development of the area and the traffic growth associated with it.

Under this new scheme, Marina Associates will provide \$16 million towards the cost of construction of an overpass at the **Route 30/Huron Avenue** inter-



Route 70 bridge, Burlington County

section and modifications at the Huron Avenue-Brigantine Boulevard intersection. Marina Associates remains obligated under the earlier Coastal Area Facilities Review Act agreement to make additional intersection and highway improvements as necessary after 1993. The settlement will enable needed safety improvements to be made with private sector participation based on the actual, rather than projected, growth in the marina area of Atlantic City.

MONORAILS

The Department joined forces with Atlantic City to initiate a feasibility study for a monorail system to serve the city and nearby areas. This study coincides with a similar study for monorails being done in the

Newark-Newark Airport-Elizabeth corridor. The Department is also reviewing application of monorail technology to the Hudson River Waterfront. Legislation giving the NJDOT \$250,000 for preliminary monorail studies was approved by the Legislature.

ACCESS PERMIT GUIDE

A new highway access permit guide was published by the Department in November in an effort to help citizens obtain access permits in a timely manner. The revised policies will allow the appropriate Department units to be more responsive to permit requests while still preserving the efficiency and safety of state highways.

OBJECTIVE 4: Develop and maintain a safe, efficient passenger and freight transportation system which provides essential connections within the state and the region.

OBJECTIVE 5: Enhance access to the state transportation system for all people, including the transportation disadvantaged.

Promoting bus, rail, aviation, bicycle and pedestrian, and handicapped safety, ensuring dependable and safe rail freight and finding better ways to safely transport people across the Hudson River over congested and older highway, bridge and rail networks remained among the Department's priorities in 1987.

PUBLIC TRANSIT

In Fiscal Year 1987, the Transportation Trust Fund allowed NJ TRANSIT to continue its efforts to improve public transportation in the state through important capital investment projects.

NJ TRANSIT received \$121.5 million in Fiscal Year 1987 from the Trust Fund to match federal grants and to provide 100 percent state funding for several other projects.

The Trust Fund, when used as the local matching share for federally funded capital projects, was successful in generating additional funding from the federal Urban Mass Transportation Administration. The \$69.2 million of Trust Fund monies used as the matching share for federal grants generated another \$258.1 million in federal funding during Fiscal Year 1987.

The Trust Fund is serving as a catalyst for dozens of modernization projects initiated by NJ TRANSIT. The projects include railroad bridge rehabilitation, bus garage renovation and

construction, train station modernization, acquisition of special transit vehicles for senior citizens and disabled riders, and the electrification of the North Jersey Coast Line from Matawan to Long Branch.

NJ TRANSIT's Fiscal Year 1987 use of the Trust Fund included:

- \$32.5 million for the renewal of the Atlantic City rail line between Philadelphia and the resort city.

- \$15.8 million for the overhaul of passenger coaches and diesel locomotives and the purchase of electric locomotives.

- \$7.7 million for the electrification of rail service from Matawan to Long Branch on the North Jersey Coast Line to be completed in 1988.

- \$8.9 million for design and engineering, land acquisition, construction and renovation of bus maintenance facilities throughout the state.

- \$2.3 million for new park-and-rides and improvements at rail stations to better serve NJ TRANSIT commuters.

NJ TRANSIT buses serve travelers at Newark International Airport.



•\$7.2 million to match federal grants for new buses and improve administration of privately owned bus companies in the state and the transportation services they offer.

•\$29.3 million to match federal grants for the purchase of new buses.

•\$800,000 to match federal grants for the purchase of vehicles to be used by senior citizens and physically handicapped riders.

\$18.6 million for the purchase, overhaul and rehabilitation of rail coaches and locomotives.

HUDSON WATERFRONT

A *Conceptual Engineering Report* for the Hudson River Waterfront Transportation Project was completed this year. It defines alternate alignments and conceptual designs for a proposed 16-mile transit system consisting of buses and light rail and a 12-mile roadway. These new initiatives will serve major new developments and existing communities along the waterfront, helping to revitalize the region.

STATE RAIL PLAN

NJDOT held public hearings on a draft *NJ State Rail Plan* for 1987-88. Originally formulated in 1975, the plan is periodically updated to maintain a current comprehensive assessment of changes in the state's rail freight system.

The Department also prepared a program to preserve and rehabilitate New Jersey's rail freight network in Fiscal Year

1988, costing \$2 million in state funds. Federal funds from the Federal Rail Assistance Program have not yet been authorized.

AVIATION SAFETY

The Aeronautics Division is responsible for airport development and aviation safety. New projects undertaken this year include initiation of the *State Aviation System Plan* to analyze the role of all aeronautical facilities in the state and determine the economic impact of general aviation to New Jersey.

At the close of 1987, the third year of providing airport improvement grants, nearly \$20.8 million in federal Aviation Trust Fund money had been drawn for New Jersey airports, including Newark and Atlantic City. \$978,000 in state grants went to 15 airports. The grants funded a variety of projects including runway and taxiway overlays, ramp expansions and visual guidance equipment. An additional \$1.7 million in state aid construction and planning projects has been targeted.

The Division made several regulatory changes for the distribution of state aid monies. Two new programs have been started—a biennial grant of \$100,000 (no sponsor matching required) and a 90/10 program for projects over \$100,000 with the sponsor providing 10 percent and the state paying 90 percent of the total project cost.

To further expand the use of New Jersey airports, the Department supported the installation of Loran-C approaches at Mercer County

Airport and Steel Pier in Atlantic City. Loran-C is an independent navigation system which does not require on-site ground equipment.

The Department also enforced the Air Safety and Hazardous Zoning Act this year. The Act requires municipalities to include appropriate land use planning through compatible zoning in the vicinity of aviation facilities. Several communities have adopted airport safety zoning ordinances.

The Department conducted approximately 900 safety inspections at both public and private airports/heliports and issued more than 800 certificates for temporary or permanent licenses. NJDOT personnel also participated in 50 accident investigations during 1987.

The Department's aviation advocacy role continued through presentation of an airport managers workshop, safety seminars, education clinics and exhibitions, and participation in Civil Air Patrol activities. A special newsletter, *New Jersey Aviation*, keeps municipalities and pilots abreast of current aviation issues. Aeronautics' publications list includes accident notification procedures, the airport directory, a new aeronautical chart, and a brochure on airport safety zoning to explain the Act in layman's terms.

SECOND DEDICATED LANE ON ROUTE 495

The Department held three public hearings this fall for a proposal to dedicate another lane on the Route 495 approach to the Lincoln Tunnel for use by buses, vanpools, and carpools of

three or more people during weekday morning peak hours.

The dedicated lane would be implemented in late 1988 as an interim measure to relieve problems plaguing the

existing exclusive bus lane (XBL) by providing expanded lane capacity to meet the demand by buses and other multiple occupancy vehicles until permanent improvements can be constructed elsewhere.

The proposal is the result of study and coordination by the Department, the Port Authority of New York and New Jersey, NJ TRANSIT and other agencies concerned with the flow of traffic into Manhattan daily.

OPERATION LIFESAVER

is the public information and education program coordinated by the Department to educate pre-school to high school students about safety at railroad-highway grade crossings. In the past three years, injuries and fatalities at the state's railroad crossings have decreased. All the state's rail freight operators and NJ TRANSIT join the Department in this program.



OBJECTIVE 6: *Encourage involvement in decision-making by including local governments, advisory committees, commuter groups and employees in the process.*

OBJECTIVE 8: *Coordinate the activities of the Department with those of other state agencies and public authorities, regional organizations, and other agencies with transportation responsibilities within the state.*

There is increasing realization that transportation problems and solutions overlap the spheres of a variety of public and private groups. The Department has steadfastly supported a multi-interest approach towards common goals.

A Task Force to determine why more New Jersey women are not employed in the construction industry became a top Department priority this year and is an excellent example of a variety of groups working together to solve a problem which affects them all.

Other topics, from ridesharing to bicycling, from the Hudson Waterfront to congested commuter lanes to the Lincoln Tunnel, from coordinating toll road authorities to Atlantic City issues, from weather to wetlands, have received the attention of the Department in collaboration with others in 1987.

WOMEN IN CONSTRUCTION

In early 1987, Commissioner Gluck convened a top-level public/private Task Force on Women in Construction to determine why New Jersey has one of the lowest female participation rates in highway construction work of any state in the

United States and to ensure that corrective findings are incorporated into actual state practices. Its primary objective is to increase the number of women workers on highway and bridge construction jobs in New Jersey.

In addition to the Commissioner, the executive Task Force includes nine members of the Governor's Cabinet, union leaders, contractors, officials from the Federal Highway Administration (FHWA) and tradeswomen's advocates.

The Task Force, which met twice during the year, has been assisted by a consulting firm, Stanwick Associates, in:

- collecting and analyzing basic data about women in construction;
- identifying barriers to women's participation in construction jobs;
- compiling an inventory of programs;
- developing preliminary recommendations for increasing the number of women working on publicly-funded highway construction projects.

*Route 55 Freeway,
Gloucester County*



The Commissioner also asked Department managers to step up their efforts in civil rights and contract auditing. Those who participated in the Construction and Maintenance workshops were asked to intensify their monitoring of minority and female participation in the Department's contracts.

In the FHWA's July 1987 report on the number of women and minority males working on NJDOT projects, there were 129 women employed, including clerical workers. This exceeded the 50 reported in July 1986. The new numbers moved New Jersey from 50th to 48th in the United States in the total number of women on FHWA projects. Excluding clerical workers, New Jersey ranked 48th in the United States in 1986 with 33 craftswomen; in 1987, New Jersey had more than three times as many women working in non-clerical jobs, bringing the state's ranking to 43rd.

The Department surpasses three of the four main minority/female goals set by the federal government for construction projects: minority-owned businesses, female-owned businesses and minority male participation in the labor force.

FIRST WOMAN CREW SUPERVISOR

Debbie Buckley has been named crew supervisor of Region III's Crew 348 in Lawrence. She becomes the first woman in NJDOT history to hold that title. Buckley joined the Department in 1979 as a truck driver.



Route 73, Burlington County

WOMEN ENGINEERS

In response to a request from female engineers for a support group in the Department, Commissioner Hazel Frank Gluck has invited the Society of Women Engineers to establish an NJDOT chapter.

COORDINATING PERMITS

A breakthrough in streamlining and coordinating the wetlands permit policies and procedures is in the making as a result of meetings initiated by

Commissioner Gluck with Department of Environmental Protection Commissioner Richard Dewling. Both agreed that the conflicting missions of their departments regarding implementation of the state's wetland policy should be unified.

The two departments are consolidating their respective wetlands permit processing units into single organizational areas to streamline communications and decision-making. Other items of agreement under development are the merging of environmental reviews required under the National Environmental Policy Act and various NJDEP administered environmental laws, certification of wetlands boundaries



WINTER OF 1986-87

The 1986-87 winter produced 38.7 inches of snow costing the Department \$12 million to remove snow and ice on 10,303 lane miles of highway. Maintenance has 1,200 employees available to operate snow equipment who are supplemented by other trained employee volunteers. During major snow storms, like the ones in January and February, private contractors do the bulk of the plowing.

by NJDOT, and using the New Jersey Wetlands Bank concept in the 1987 Freshwater Wetlands Protection Act to mitigate minor wetlands impacts.

Specific transportation projects which are facing construction delays because of the difficulties involved in implementing wetlands permits policies are now being studied together by the staffs of the two departments. These include Routes 37, 38, 70 and 147.

RIDESHARING

The Department works with corporations and other state and local government agencies to promote ridesharing and vanpooling. The program, which was revised this year, has re-

ceived a 21-month grant from the Federal Highway Administration to do this.

The Department has also developed a grant program to assist regional transportation management associations (TMAs) to establish local ride-sharing programs. Grants of \$200,000 have been made to Morris County "McRides," \$192,000 to "Meadowlink" in Bergen County, and \$60,000 to the Princeton TMA.

The Department has operated 11 vanpool routes for employees since 1980. Eight new 12-passenger vans were put into service this year, replacing vans with the highest mileage. These new, air-conditioned vans cost employees less than three cents a mile to ride compared with

private automobiles which would cost an estimated 34 cents per mile. The Department's vans will take as many as 132 vehicles off the highways during rush hours and help relieve congestion in the parking lots.

A park and ride policy was developed and studies made this year to identify potential park and ride locations on excess state land. As a result, a contract was signed for a facility in East Brunswick. Others in Summit, Oakland and Clinton Park are being negotiated.

GARDEN STATE PARKWAY

The official transfer of the three state-owned sections of the Garden State Parkway to the New Jersey Highway Authority took place in July. The Department's Highway Services Division, which monitors the activities of the 12 independent authorities which have jurisdiction over various transportation facilities in the state, coordinated the transfer of state-owned sections in Union, Middlesex, Ocean and Cape May Counties to the New Jersey Highway Authority. The agreement also involved the Federal Highway Administration, the State House Commission and the Governor's Office.

The transferred portions of the road were constructed prior to the creation of the Authority in 1952 and were subsequently incorporated into the Authority-built portions. With the entire Parkway under the jurisdiction of the Highway Authority, uniform standards of maintenance and operation can be assured along the road's entire 173-mile length. Under this agreement, the Authority

will meet all applicable state requirements on the connection of these sections with other state routes and retain toll-free access on the formerly state-owned segments.

In an unrelated Parkway issue, Governor Kean asked the Department to review the Highway Authority's proposed major capital construction program from an overall transportation standpoint. Department staffers will assess the capacity needs of the Parkway; how the plans impact state, county and municipal systems; and if the Authority's plans fit into the overall state transportation plan. The Department did a similar study of the New Jersey Turnpike's expansion program in 1986.

BICYCLING

The New Jersey Bicycle Advisory Council, chaired by Commissioner Gluck, presented its findings and recommendations in a report to Governor Kean in September. The Governor responded in December by re-es-

tablishing the Council so that it can provide advice on implementing the report's recommendations and continuing the Department's lead role in the effort.

Serving with the Department on the Council are representatives of the Departments of Environmental Protection, Law and Public Safety, Commerce and Economic Development, Education, and Community Affairs and the Divisions of Motor Vehicles and Travel and Tourism, and NJ TRANSIT and the Governor's Counsel's Office. It also includes eight public members with interest or expertise in bicycling.

The Council's report focused on major areas of concern for bicyclists: safety education, enforcement and registration, touring, racing, health and fitness, funding, and the current and potential use of the bicycle in New Jersey. It details the methods and responsibilities for improving the bicycling environment so that this activity can fulfill its potential as a means of recreation, fitness, and personal transportation.

PUBLIC MEETINGS

The Department made 50 public presentations on specific transportation projects this year. Of these, three dozen were information centers which offered the public scale and/or aerial maps, handouts, and an opportunity to confer with Department engineers and other specialists working on the project. More than two dozen were formal public meetings or official public hearings on transportation issues.

SURVEYS

Approximately 800 New Jersey residents took part in a random telephone survey on transportation sponsored by the Department in November. The polling, conducted by the Center for Public Interest Polling, Eagleton Institute of Politics, defined the respondents' attitudes towards transportation in general and what they saw as their own transportation needs — either suburb to suburb, suburb to city or intra-city. The 15-20 minute interviews surveyed attitudes on highway, bridge, transit and



Local officials meet at NJDOT to review projects.

focused on funding strategies.

This is the first time the Department has sponsored a public opinion poll. Originally conceived as a research tool for use in preparing the five-year *State Transportation Plan* the results of the poll will also be useful in other areas, for example, the NJDOT Transportation 2020 forums, an American Association of State Highway and Transportation Officials (AASHTO) program to identify the country's transportation needs after 1992.

RIGHT OF WAY

The Department made available for construction approximately 65 rights of way at an estimated value of more than \$123 million. This achievement, one of the most significant in the nation, included numerous projects for county and local governments, other state agencies and NJ TRANSIT.

OVERWEIGHT VEHICLES

A policy for routing overweight, oversized vehicles over state highways is being developed in coordination with the Division of Motor Vehicles. It will address taking an inventory of truck routes within the state and developing a computer program which will show the maximum available gross weights, axle gross weights and other data for various span lengths.

JUGHANDLE

A new jughandle on Route 46 at the Waterview Corporate Center in Parsippany-Troy Hills, Morris County, was completed in May. The project



WEATHER FORECASTING

The Department has purchased a radar weather system with a satellite. It will monitor the progress of storms more accurately and help maximize maintenance resources.

was recommended by the Department, implemented with the cooperation of the municipality and the county and fully funded by Bellemead Development Corporation, developers of the \$200-million, 132-acre office park.

WEATHER

The Department's Maintenance and Aeronautics units are entering into joint development of a statewide weather forecasting and observation network with the New Jersey State Police Office of Emergency Management. This proposal calls for Maintenance and Aeronautics to provide observation and collection/connecting points of weather information, while the State Police will provide the communication for relay from Cape May to High Point. The data collected at proposed individual remote computers would be fed via radio signal to a

central computer so that any agency could access the information on a personal computer.

RURAL ASSISTANCE

New Jersey became one of 40 states to establish a Rural Technical Assistance Program (RTAP) in 1987. It gives county and municipal governments effective state assistance on road problems. The center, based at Rutgers University, provides local agencies with seminars, training sessions and technology transfer material.

EMERGENCIES

This year the Department completed its Emergency Mobilization Plan, a basic reference guide for its role in responding to or providing support services in disaster or emergency situations. These may include incidents involving dangerous levels of radiation or other hazardous

substances or emergency highway traffic management in any declared emergency. The plan also outlines unit roles in an emergency at one of the Department's own facilities.

PERSONNEL

In February the Department's Personnel Division along with the state Personnel and Treasury Departments converted the entire personnel process, Performance Assessment Reviews, promotional examination eligibility rosters and the executive salary program from a manual to a computerized Personnel Management Information System (PMIS). The Department was the first in the state to go on-line.

AUTOMATED ROAD ANALYZER

The Automated Road Analyzer (ARAN) used in the Construction and Maintenance Division has made highway testing more precise. NJDOT engineers now use a van outfit-

ted with equipment that produces a video and computer profile of road roughness, pavement rut depth, grade of pavement, and radius of curve data all with a single pass of a van traveling at 40 miles per hour.

The new van is credited with saving lives and money. The engineers formerly had to stop or divert traffic while they placed a straight edge across the highway and measured the rut depth with a ruler. ARAN can measure ruts every 52 feet.

Videotape shot with a camera that is next to the driver provides engineers with a permanent visual record of road conditions. When combined with the computer data, the information provides management with the tools to set maintenance priorities and gives engineers data for planning and designing improvements.

RESEARCH

The *Research Digest* was published for the first time in 1987. The biannual digest will

be distributed to 2,500 researchers in the United States and abroad. The first issue describes current Department research in handling high occupancy vehicles, determining traffic noise barrier effectiveness, and predicting skid resistance of bituminous pavements through accelerated laboratory testing of aggregates.

TRAVEL MODELS

The Department is developing a travel demand model for the 11 counties which comprise the North Jersey Transportation Coordinating Council. When completed, the model will be capable of determining transportation impacts of various future development schemes and assessing systemwide changes in travel brought about by the implementation of major transportation improvements and/or public policy initiatives.

New Jersey is one of three states nationwide which have been awarded a Federal Highway Administration grant to document and evaluate the conversion of this system to a microcomputer.



ARAN equipped van brings high-technology to pavement safety.

Objective 7: Provide the opportunity for employees to develop professionally.

Improvement of child care in the workplace, training opportunities for senior clerical personnel, definition of the Department's mission and new policy initiatives with employee participation were highlights of 1987.

REGION III HEADQUARTERS

The quality and efficiency of service to Middlesex, Monmouth, Mercer and Ocean Counties will be improved along with the quality and efficiency of employee work areas in the Department's new Region III Headquarters complex in Freehold which opened in October. Thanks to a state provision for art in public buildings, the lobby of the new building features a specially commissioned mosaic floor with a multi-modal transportation theme.

The new complex centralizes the region's offices for engineering, construction, design, electrical, local aid, maintenance, materials and right of way units which had been housed in Metuchen, Edison, East Brunswick and Howell. A 10-bay garage and automotive

stock room will service the vehicles assigned to Region III.

HAZARDOUS SUBSTANCE RIGHTS

The quality of life in the workplace was also a priority in the Department's aggressive "right-to-know" program which conforms with requirements of a 1983 law guaranteeing state workers and residents access to information about hazardous substances in the workplace and community.

The Department's Training, Materials and Environmental Bureaus collaborated on the project which covers specific safety precautions for handling toxins and poisons, irritants, carcinogens, flammables and combustibles. The centralized computer system offers employees extensive information about chemical hazards. For additional



Region III Headquarters, Freehold, features a mosaic floor by Nina Yankowitz in the building's lobby.



Graduates of this year's Support Specialist Program.

information, the Department has direct access to federal sources as well.

EDUCATION AND TRAINING

A wide range of developmental and technical courses were offered to new and veteran employees this year, notably the Support Specialist Program for top level secretaries and the Certified Public Managers program.

Seventeen women were the first graduates of the **Support Specialist** course. The program is designed to give veteran secretaries advanced training in leadership skills, management, government and Department organization, assertiveness, personal interaction and related skills targeted to promote trainees' upward mobility within the Department.

The first level of the Certified Public Managers course was completed by 35 employees this year. The multi-level program, provided jointly by the

State Department of Personnel and Rutgers University, offers additional managerial and supervisory training to state employees.

This four-year-old national program, designed to parallel the certified public accountant designation, de-emphasizes pragmatic management tools and skills highlighted by case studies and "hands-on" laboratory techniques.

EMPLOYEES OF THE YEAR

This year 54 Department employees were designated by their divisions for the "Employee of the Year" award, the second year of this formal recognition of the highest non-managerial achievers.

To be eligible, an employee had to "far exceed" his or her job performance standard for the entire calendar year and have been an exceptional example in one or more of these categories: creativity, concern for safety, leadership skills, enhancement of

the public image of the Department, responsibility, or devotion to duty.

NEW SYSTEMS

This year the Department instituted new civil rights and internal security and control measures to update and improve Department practices in these areas and has finalized a new financial information system for 1988.

FMIS

The Financial Management Information System (FMIS) will provide an integrated, uniformly updated financial information and control system. When fully implemented FMIS will enable Department managers to track adjustments in capital program amounts, access broad and detailed account and encumbrance balances, reduce the number of separate job numbers required for federally funded projects, and improve the amount and quality of job cost, billing and obligation information.

The system will be accessible by and critical to performance in six areas of the Department: general accounting, capital accounting, accounts payable, consultant/utility/rail contract management, job accounting and federal tracking and control.

CIVIL RIGHTS REORGANIZED

To improve liaison with contractors concerning the participation of Disadvantaged Business Enterprises (women and minorities), as well as minority and female employees on construction jobs, the Department's Office of Civil Rights was

reorganized this summer and became the Office of Contract Compliance/Civil Rights.

The office monitors Disadvantaged Business Enterprise participation on construction sites and wage and hour compliance by contractors and investigates applications from potential contractors for DBE designation.

The Department's Equal Employment Opportunity/Affirmative Action Office was reassigned to the Assistant Commissioner for Finance and Administration. It will continue to monitor and improve the Department's Affirmative Action program including investigating

employee complaints of non-compliance.

INTERNAL CONTROL

The Office of the Inspector General was established in the Department early in 1987 to provide internal auditing and improve the coordination of existing investigative and security functions.

This office reviews accounting, financial and administrative controls to insure adherence to federal and state laws and regulations covering costs, obligation of funds, revenues and expenditures; safeguards Department funds and property from theft, misappropriation or unauthorized use; and provides security services at all Department facilities statewide.

CODE OF ETHICS

The Department published a revised Code of Ethics and distributed a copy to each employee. In addition, the Commission on Ethical Standards approved a Code of Ethics for Vendors which had not previously existed. The Employees Code details activities that may not be undertaken by any employee at any time. It also spells out the procedures that must be followed if such unethical activities are suggested to an employee by someone else. Guidelines are also included that specify what activities are permissible.



NJDOT's Training Program helps employees update their skills.



NJDOT employees who helped transform former offices into the DOT TOT Child Care Center at the Headquarters Complex in Ewing pose with Commissioner Gluck.

DOT TOT

The DOT TOT child care center was dedicated in October in a festive ceremony marked appropriately by the presence of children, clowns and balloons. Its opening followed an intensive cooperative effort among various state agencies and Department units and unions, volunteer private sector professionals and private enterprise.

DOT TOT is located at the Headquarters Complex in Ewing in a renovated building which formerly housed other Department offices. Hundreds of employees hours, many of them volunteered, went into the planning, renovation and furnishing of the new center. Toddler's Village, Inc., staffs the center and provides programs for infants, toddlers and pre-schoolers and is licensed to accept 91 children.

A parent/employee advisory group, which took part in the development of DOT TOT from the first, will continue to monitor the program and offer suggestions for its growth and improvement. In addition, a professional/technical advisory committee has been set up composed of an early childhood expert, a pediatrician and an attorney, all of whom serve DOT TOT as volunteers.

MISSION STATEMENT

It is the mission of the Department of Transportation to provide transportation systems for the citizens of New Jersey by using its resources in a coordinated, balanced cost effective manner.

Consistent with this Mission Statement, the Department of Transportation has established the following objectives:

1. Plan, design, construct, maintain and manage an efficient, balanced state-wide transportation system which promotes the state's economic development goals.
2. Seek cost effective solutions to transportation problems while promoting the conservation of non-renewable resources and minimizing adverse environmental impacts.
3. Promote efficient land development patterns based on existing transportation facilities.
4. Develop and maintain a safe, efficient passenger and freight transportation system which provides essential connections within the state and the region.
5. Enhance access to the state transportation system for all people, including the transportation disadvantaged.
6. Encourage involvement in decision-making by including local governments, advisory committees, commuter groups, and employees in the process.
7. Provide the opportunity for employees to develop professionally.
8. Coordinate the activities of the Department with those of other state agencies and public authorities, regional and national organizations, and other agencies with transportation responsibilities within the state.

THOMAS H. KEAN
Governor

HAZEL FRANK GLUCK
Commissioner

The 1987 Annual Report was designed, written and printed by employees of the New Jersey Department of Transportation. The photographs were taken by members of the New Jersey State Photographic Unit, unless otherwise credited.

**New Jersey
Department of Transportation
1035 Parkway Avenue, CN 600
Trenton, New Jersey 08625**