

NEW JERSEY TURNPIKE

*New Jersey
Turnpike Authority
Annual Report
1970*





**New Jersey
Turnpike Authority
1970
Twenty-second
Annual Report**

*The Administration Building, looking north,
with mainline at the right. Construction on
expansion of building nearing completion.*

*ON THE COVER: Interchange 10 at Edi-
son, where the widened Turnpike begins, in
a night view during a rainstorm.*

(Photo by Oleck)

*If you do not think about the future, you
cannot have one.*

John Galsworthy





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WILLIAM THOMAS CAHILL
Governor of New Jersey

The Turnpike at Elizabeth. Fly-over ramps curve to and from Interchange 13 (not seen) serving industrial and heavily populated areas.





ALFRED E. DRISCOLL, CHAIRMAN
ROBERT J. CITRINO, JR. VICE CHAIRMAN
ANGUS M. HARRIS, TREASURER
JOSEPH MORECRAFT, JR.
THEODORE DOLL, JR.

NEW JERSEY TURNPIKE AUTHORITY

(201)247-0900

NEW BRUNSWICK, N.J. 08903

January 21, 1971

To the Honorable William T. Cahill, Governor
and the Members of the New Jersey Legislature:

In compliance with statutory requirements, the New Jersey Turnpike Authority presents this 22nd Annual Report detailing its operations during a memorable year of change.

The year 1970 saw the three-year expansion program come to fruition in the Turnpike's 19th year of operation transforming the Turnpike into a 12-lane dual/dual facility along its heavily patronized northern 30 miles. Its impact on the traveling public was immediate. Traffic volumes rose to unprecedented levels, and the Turnpike connections with the Interstate system, the Garden State Parkway and State highways developed travel conveniences previously impossible.

Most significant was the confidence shown by the financial community in the Turnpike as a result of the ease with which it sold its six bond issues for the Widening. It is noteworthy that in a time of tight money, the New Jersey Turnpike's reputation as a well-run business operation marked it as an excellent investment.

Progress in the expansion of Turnpike facilities was accompanied by continuing advances in operational procedures and in the field of safety. Despite an 11.2% traffic increase to 89,655,299 revenue vehicles in 1970, the Turnpike maintained its low accident and fatality rate, one of the best in the toll road industry. And with plans underway for a sophisticated traffic surveillance and control system using computers, we look forward to a further reduction of the accident rate.

In a year which also brought change in the overall administration of the Authority, with its membership increased by law from three to five Commissioners, the Authority is prepared to further extend its efforts to meet the growing transportation needs of the state.

Respectfully submitted,

ALFRED E. DRISCOLL
Chairman

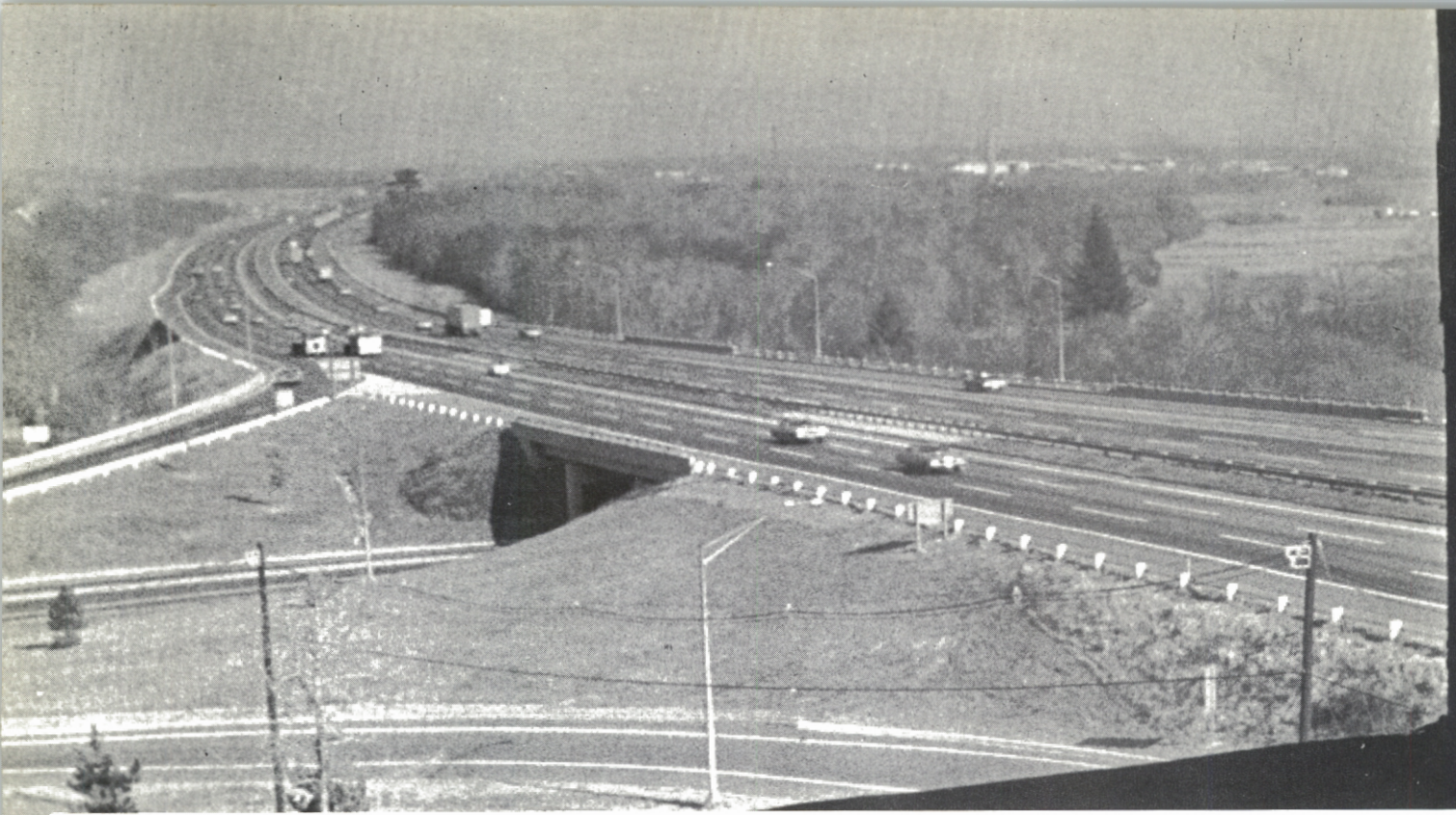
ROBERT J. CITRINO, JR.
Vice Chairman

ANGUS M. HARRIS
Treasurer

JOSEPH MORECRAFT, JR.
Commissioner

THEODORE DOLL, JR.
Commissioner

letter of transmittal



ROBERT J. CITRINO, JR.
Vice-Chairman



ANGUS M. HARRIS
Treasurer



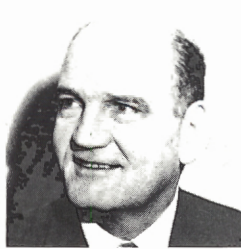
JOSEPH MORECRAFT, JR.
Commissioner



THEODORE DOLL, JR.
Commissioner



WILLIAM J. FLANAGAN
Executive Director



DAVID W. DOWD
General Counsel



LILLIAN M. SCHWARTZ
Secretary-Ass't Treasurer

New Jersey Turnpike Authority

New Brunswick, New Jersey

AUTHORITY MEMBERS

Alfred E. Driscoll, *Chairman*
Robert J. Citrino, Jr., *Vice-Chairman*
Angus M. Harris, *Treasurer*
Joseph Morecraft, Jr.
Theodore Doll, Jr.

• • •

David W. Dowd, *General Counsel*
(Appointed November 17, 1970)
Grover C. Richman, Jr., *General Counsel*
(Resigned July 1, 1970)
Lillian M. Schwartz, *Secretary & Assistant Treasurer*

STAFF

William J. Flanagan, Executive Director
Oliver K. Compton, Jr.
Assistant to the Executive Director
Robert E. Mosher, Comptroller
(Appointed October 1, 1970)
Neville R. Ashcroft, Comptroller
(Retired October 1, 1970)
Howard S. Heydon, Chief Engineer
Joseph R. Postizzi, Senior Attorney
Robert E. Ramsen, Director of Toll Collection
John P. Leshner, Director of Toll Collection
(Retired April 1, 1970)
Paul M. Weckesser, Traffic Engineer
Anthony E. DeSimon, Director of Maintenance
Horace A. Tani, Director of Public Information
Robert G. Ott
Director of Systems & Data Processing
Daniel J. Donahue, Director of Purchasing
John F. Merrigan, Director of Personnel

CONSULTING ENGINEERS

Howard, Needles, Tammen & Bergendoff

AUDITORS

Peat, Marwick, Mitchell & Co.

TRAFFIC AND REVENUE CONSULTANTS

Coverdale & Colpitts

BOND COUNSEL

Hawkins, Delafield & Wood

FINANCIAL ADVISOR

Smith, Barney & Co.

SENIOR CONSULTANT

Paul L. Troast



ALFRED E. DRISCOLL
Chairman

looking forward to a new decade

It was a year of great change. At its end, with the road widened along its upper thirty miles and patrons making the most of what became a transportation windfall, the New Jersey Turnpike continued to look forward to a new decade of achievement.

With the opening of the 12-lane dual/dual on January 12 and the completion of the westerly, meadowland extension on September 3, the travelling public began to enjoy the benefits of a toll facility that combined the unique conveniences of a parkway within a turnpike.

Completed at a construction cost of \$407 million, the new Turnpike immediately began to accommodate traffic at an accelerated rate. Its new connections with Interstate 287 and the Garden State Parkway, two strategic hubs in the Turnpike system, attracted motorists who had been prevented in the past from easy access to and from the Turnpike at those points. Now all three important highway arteries were joined in a convenient pattern of direct travel.

At the junction with Interstate 287, the link-up was a transportation windfall indeed. There the Authority's new Interchange 10 at Edison generated an average traf-

fic increase of 10,000 vehicles a day—vehicles that could not have used the Turnpike without the new interchange. And in addition, new Interchange 15W at Kearny, gateway to the new westerly alignment, brought another 5,000 additional vehicles daily to the Turnpike.

This flow of new traffic was only part of the overall increase throughout the Turnpike—reaching 89,655,299 revenue vehicles of all classes in 1970. It was 11.2 per cent greater than the 80,618,191 vehicles of 1969. The overall traffic gains for 1970 were distributed among the other areas from Deepwater to Ridgefield Park.

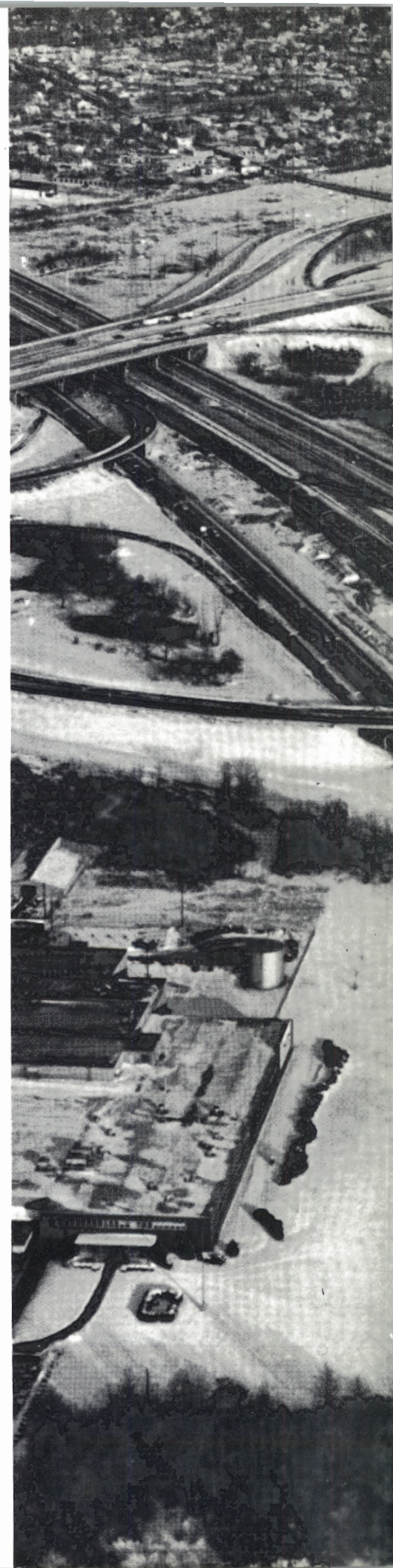
The increase of 9,037,108 revenue vehicles in 1970 was, numerically, the greatest since the New Jersey Turnpike opened to the public 19 years ago. Percentage-wise it was the largest gain since the 15% increase of 1959, when traffic totaled 46,199,339 vehicles.

If the vast widening program, sustained by six bond issues totaling \$616 million, was regarded by some as the ultimate in Turnpike planning for expansion, by year's end the notion of finality was soon dispelled. Not only were new projects either being studied or on the drawing boards, but the Authority was involved in discussions looking to the improvement of the transportation picture on a comprehensive statewide basis.

The Authority, with its membership increased from three to five under the chairmanship of former Governor Alfred E. Driscoll, figured prominently in the discussions. Toward year's end, the Authority turned to what was envisioned as

(continued)

Aerial view of roadway, showing loop ramps to and from new Interchange 10 at Edison after the road was cleared following snowstorm.





**looking
forward to a
new decade**

another great challenge—the proposal to build a toll road from Toms River in Ocean County to Wayne in Passaic County, connecting with Interstate 287 and the New York Thruway, a turnpike that would be a part of the plan announced by Governor William T. Cahill for modernization of New Jersey's transportation system.

Previously, the Authority set in motion a feasibility study of the proposed turnpike by its engineering consultants, Howard, Needles, Tammen and Bergendoff. At the same time, the Authority's traffic and revenue consultants, Coverdale and Colpitts, are studying the proposed road's traffic potential.

In the meantime, the New Jersey Turnpike in 1970 was also concerned with other more immediate improvements.

It is planning to advertise for construction bids early in 1971 for a new headquarters complex to serve the northern division. There at Newark Airport Interchange 14 a two-building facility will be built to accommodate the State Police and Maintenance Department. It would provide offices for Maintenance supervisors, now operating from trailers, and shop facilities as well for decentralizing the work being done at Central Shops in Hightstown. At the same time, travel distance would be shortened for the men in the crafts and shop operations. The State Police station—one of three operated on the Turnpike, by Troop D—will get a new facility in place of the present inadequate quarters at the interchange.

Projected for 1971, too, is the new service area in the vicinity of Mile 116 at the northern end of the





Turnpike. Construction contracts are scheduled to be advertised in the spring for what will be the Authority's largest service area, serving, near the junction of the Mainline and new westerly alignment, all four directions of traffic.

With the growth of traffic as a result of the Widening, it became evident that the expansion should be extended south, and preliminary studies were under way for widening to 12 lanes from Edison to New Brunswick, a project that would include a new interchange at New Brunswick and major improvements at the Raritan River crossing.

In cooperation with the State Department of Transportation and the Port of New York Authority, traffic studies are being conducted for a new interchange at North Avenue, between Elizabeth and Newark Airport Interchanges to serve the projected growth resulting from the airport's expansion. It will replace the Route 81 Bypass facility deleted from State plans.

At the northern end, the last of the Turnpike bridges over Route 46 is targeted for completion by July 1, 1971, and the Authority is seeking to arrange with the State for the interim completion phase of the so-called "missing mile" by that date. The Turnpike Authority's efforts to establish a temporary detour by 1970 did not come to fruition because the delay in awaiting the State's contract precluded completion of the work.

The constant growth of traffic is felt in many areas. To cope with this growth, there was undertaken a variety of improvements not con-

(continued)

New Jersey Turnpike from the air, showing Main Street, Woodbridge, crossing over Garden State Parkway and Turnpike. In foreground is official overhead U-turn, first such structure built as a safety feature on a highway.

**looking
forward to a
new decade**

nected with the Widening. Six new lanes are being added to the Elizabeth Interchange (No. 13), and three were added at Delaware Memorial Bridge (Interchange No. 1). And the need for additional toll lanes at new Interchange 11 at Woodbridge—opened to the public on September 18, 1969—and at Interchange 15E, is under study.

In addition, the facilities at several service area restaurants were upgraded, while the everyday, recurrent functions of repair and Maintenance kept Turnpike personnel as well as outside contractors busy. In East Brunswick the expansion of the Administration Building with the addition of two buildings was nearing completion. It is the largest construction project exclusive of the Widening.

Completion of the Widening brought with it a corresponding increase in responsibility of all operating forces in the northern division of Maintenance and toll collection, and a peculiar problem for Maintenance, with the mounting volumes of traffic, was that of air and water pollution. The department completed its program for combatting air pollution by updating all incinerators at service areas and changing oil burner units from a #4 to a #2 fuel oil system to reduce the sulfur content in compliance with the State Code of 1968.

In the realm of traffic safety, the

The Harry Laderman Bridge, key to the new westerly route of the expanded Turnpike. It is the second major span over the Passaic River and features full shoulders, as does the new Hackensack River span. The Laderman honors memory of the toll collector killed in line of duty February 1967.



Authority kept pace with the modern techniques and in some instances took pioneering steps in that direction. The Traffic Engineering Department submitted for Authority approval the studies for an automatic traffic surveillance and control system using computers. Continuation of the Sperry Systems study—Phase One was completed in 1970—was authorized in July and the work being done at year end is in preparation for the final specifications.

Traffic Engineering effected the operational features of the original design concept of the Widening, using the dual/dual roadways to divert traffic by the use of changeable message drum signals. The signs are remotely operated by a new control system activated in May—a system using a combination of buried cable and leased Bell telephone facilities.

Underlying all of these improvements, present and future, is the Authority's main concern: Safety. The 89,655,299 revenue vehicles that travelled 2,382,332,241 miles in 1970, represented a vehicular flow conspicuous for its safe movement.

The accident rate was 89.3 or 13.5% less than the 102.8% of 1969, when there were over 9 million fewer vehicles on the Turnpike. There were 137 less accidents in 1970—down from 2,272 to 2,135, marking an annual decrease for the first time in seven years. State Police Troop D's role in reducing accidents by intensified enforcement was considerable.

Significantly, the widened Turnpike contributed to the improved safety record—61% of fatal accidents in 1970 occurred in the area that was not widened—testimony to the value of the expanded Turnpike's built-in safety features.

Helicopter view of new Interchange 18W, Carlstadt, looking south, at meadow route opening September 3.



safety on the new turnpike

Following the successful opening of the widened Turnpike in January of 1970, the Traffic Engineering Department put into effect the operational aspects of the original design concept. This was done by utilizing the dual/dual roadways to divert traffic around construction areas, accident sites and other congested spots, through the use of newly installed changeable message drum signs.

These signs, as well as the speed limit signs, are now remotely operated by a new supervisory control system which was activated in May. It provides for the use of a combination of buried cable and leased Bell Telephone facility to remotely change sign messages and to receive return verification that message was changed. In addition, the system provides for constant surveillance on sign status.

Phase One of the automatic and control system study conducted by Sperry Systems Management Division was completed. In July the Authority approved the continuation of the study through phases two

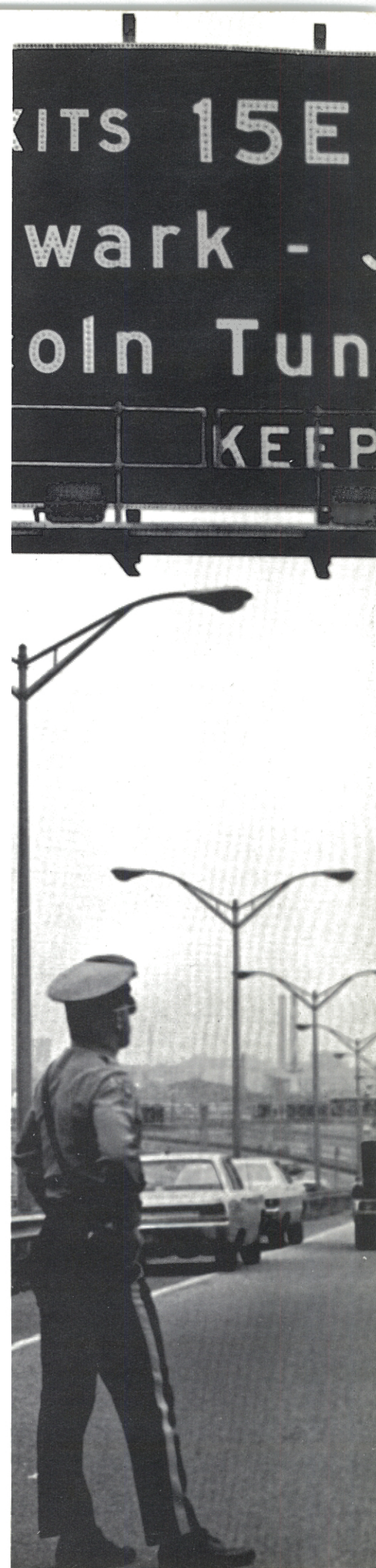
and three. Traffic operational theories on which the system is based have been simulated on in-house computers during the course of study and proven. The work being performed at year end is the preparation for the final systems specifications, with final completion date of February 1971.

In 1970 the left lane restriction against trucks and buses was extended southward from Interchange 9 to Interchange 4, the latter point marking the end of the six-lane roadway. (South of Interchange 4 to Interchange 1 at Deepwater, the Turnpike is four lanes, two in each direction.) The original left lane restriction from Interchange 9 to the northern end of the Turnpike, was initiated on January 1, 1964.

Despite a sharp increase in traffic volumes on the existing and widened Turnpike roadways, statistics compiled by the Department have reflected a decrease in the accident rate, by comparison with the average yearly increases in the past.

During 1969, the Turnpike accommodated 81,074,287 vehicles which travelled 2,210,233,603 miles. In 1970, 89,655,299 vehicles utilized the Turnpike accumulating 2,382,332,241 miles. During 1970, these vehicles were involved in 2,135 accidents, resulting in an accident rate of 89.3. We experienced 2,272 accidents during 1969, which resulted in an accident rate of 102.8. This reflects an increase of 11% in vehicles and a decrease of 6% in the number of accidents. *The fatality*
(continued)

State Trooper assigned to traffic protection as Maintenance men uncover signs on opening day of westerly route. As a safety measure, it was possible to close inner roadway and reroute traffic to outer barrel of 12-lane dual/dual Turnpike.



16E-18E
ersey City
el - U.S. 46

LEFT

EXITS 15W-16

3

Geo

ing
RIG



**safety on the
new turnpike**

rate for 1969 was 1.90. For the year 1970, the fatality rate was 1.92. This slight increase of .02% in the fatality rate corresponds with the increase in traffic and reveals that the widening of the Turnpike has been a contributing factor in improving the safety of Turnpike patrons. This is especially noteworthy, when consideration is given to the fact that 61% of the fatal accidents during 1970 occurred south of Milepost 87 (not in the widened areas of the Turnpike).

Thousands of motorists were assisted by Turnpike emergency service organizations during the year. Aids to motorists increased from an average 226 per day in 1969 to 264 per day in 1970. Additional emergency service organizations were enlisted to assist motorists on the widened Turnpike.

Under the direction of the Commander of Troop "D", New Jersey State Police Captain Joseph Nawrocki, who succeeded Captain Robert Dorrian on July 1, members of the Troop continued to enforce traffic regulations for patrons and contractors during the year while the widened Turnpike was opened to traffic. Their manpower, strengthened by the addition of 28 new men, insured adherence to new regulations; such as: road usage by trucks and buses, the left lane restrictions in dual/dual section, lane closings and other construction procedures. A total of 49,871 summonses were issued in 1970, as compared with 46,800 issued in 1969. This represents a 6% increase



Guns confiscated during routine check of a vehicle on the New Jersey Turnpike are examined at Troop D headquarters by Staff Sgt. Hans Schlicting, Detective Sgt. Nicholas Turse and Trooper John Frech, who made the arrest.

in enforcement which corresponds with the increase in traffic volumes.

The New Jersey Turnpike continues to maintain its position as one of the safest toll facilities in the nation. New safety measures for construction and operation of the roadways are constantly being test-

ed and instituted where applicable. All statistics and records of the Traffic Engineering Department reveal that the safety record of the Turnpike will continue to reflect the attitude of the Authority that our first consideration is the safety of motorists using our facility.



State Police officer checks buses for violation at Charter Bus Stop.

**turnpike
safety record**

Enforcement:	1970	1969
Summonses Issued	49,871	46,800
Criminal Arrests	2,884	1,839
Aids to Motorists:		
Mechanical	34,483	30,960
Gasoline	9,921	8,495
Flat Tires	13,245	12,430
Overheat	3,221	2,644
Other	35,494	28,089
Total Aids	96,364	82,618
Aids	1 per 930 vehicles	1 per 976 vehicles
Aids per day	264	226
Accident Information:		
Accidents	2,135	2,272
Accident Rate	89.3	102.8
Personal Injuries	1,646	1,765
Injury Rate	68.9	79.9
Fatal Accidents	41	33
Fatalities	46	42
Fatality Rate	1.92	1.90

financing:
a
milestone year

Nineteen Seventy was a milestone in the financial history of the Authority. On October 14, pursuant to the provisions of Section 603 of the Resolution Amending Resolution Authorizing the Issuance of Revenue Bonds adopted by the Authority on September 16, 1952, the Second Series Bonds were called for redemption at 101½. The redemption was in the amount of \$16,055,000 par value, being the total amount of these bonds outstanding at the redemption date. Our Second Series Bonds originally totaled \$211,200,000 and were issued during the years 1953 through 1955. The difference of \$195,145,000 par value was retired by way of the Sinking Fund.

Upon completion of the retirement of the Second Series Bonds, the pace of the redemption of General Bonds has been accelerated. We retired during the Fiscal Year 1970, \$23,907,000 of General Bonds and there remained outstanding at December 31, 1970 the following:

1950 Issue, 3¼%	\$124,837,000
1951 Issue, 3.20%	\$ 29,242,000
Total	<u>\$154,079,000</u>

There was also an additional \$547,000 of the 1950 Issue and \$230,000 of the 1951 Issue for which firm orders were on hand for delivery of these bonds in January, 1971, which will further reduce the outstanding.

The General Revenue Bond Resolution adopted by the Authority on September 22, 1966, provides that at November 30, 1970, the total of all General and Second Series Bonds (Series B) outstanding shall not exceed \$173,000,000. The total of these bonds outstanding at that date was \$156,893,000 after taking into consideration moneys held in the sinking fund for the redemption of bonds. Our requirement for the next year is that these bonds outstanding at November 30, 1971 shall not exceed \$139,000,000.

The new Turnpike Revenue Bonds issued to finance the Widening and certain other projects total in all \$616,000,000, consisting of the following issues:

Amount	Year of Issue	Coupon	Net Interest Cost
\$179,000,000	1966	4.75%	4.7981%
75,000,000	1968	5.125	5.1692
125,000,000	1968	5.20	5.2445
60,000,000	1969	5.75	5.7982
40,000,000	1969	5.875	5.9230
137,000,000	1969	7.00	7.0505

The average net interest cost of these six issues is 5.6024%. Interest on these new bonds is funded from the proceeds of sale of the bonds to and including January 1, 1976.

Total bond indebtedness of the Authority at December 31, 1970 was \$770,079,000, comprised of the following:

General Bonds	\$154,079,000
Turnpike Revenue Bonds	616,000,000
Total	<u>\$770,079,000</u>

It is presently estimated that the General Bonds will be fully redeemed not later than July 1, 1975. At December 31, 1970, all reserve requirements pertaining to the General Bonds had been fully met.

Our revenues which have in-

(continued)

Bus access road (at right) off Interchange 16-E connecting with exclusive bus lane to the Lincoln Tunnel. Turnpike Authority built the access road at its own expense in program with Port of New York Authority and State Transportation Department under sponsorship of the Tri-State Transportation Commission, which received a \$500,000 grant from U.S. Transportation Department.



**financing:
a
milestone year**

creased in all the major categories, together with the reduction in interest costs due to bond retirement, have enabled us to cope with increased expenses, both in operating and other charges, and have resulted in an increase in the net results of our operations of \$3,421,323, or 9.5%, when compared with the corresponding results for the Fiscal Year 1969. Although the new Turnpike Revenue Bonds do not participate in the revenues until the General Bonds are redeemed or provision for redemption is in hand, it is worthy of note that our Revenues after Expenses, Interest and Other Charges for the Fiscal Year 1970 of \$39,548,239 exceed the annual interest cost of our Turnpike Revenue Bonds, \$34,236,250, by \$5,311,989. As mentioned previously, the interest on the Turnpike Revenue Bonds is funded through January 1, 1976, from proceeds of sale of the bonds.

Toll revenue and concession revenue for the Fiscal Year 1970 were estimated by our Traffic Engineers to be \$63,462,000. We realized in this fiscal year toll and concession revenue of \$68,893,999, an increase of 8.6% over the engineers' estimate. Income from investments for 1970 totaled \$1,859,975 compared with \$1,801,375 for 1969. \$387,561 of this income was represented by interest earned on time deposits of moneys in the sinking funds.

As our bonds are redeemed and

the reserves become depleted, income from investments will diminish. Interest earned and capital gain on investments in the Construction Fund, the Special Projects Account and the Bond Interest Fund accrue to the respective funds and are not treated as revenues in accordance with the provisions of the General Revenue Bond Resolution.

The Annual Budget of Operating Expenses for the Fiscal Year 1970 was \$22,481,500. Our operating expenses for that year totaled \$22,130,231, an increase of \$4,288,584 over 1969. With so large a percentage of our costs represented by personnel, the Authority is greatly affected by the spiraling wage costs which are affecting industries throughout the nation.

Other charges financed from the reserves in accordance with provisions of the Bond Resolutions (subsequently restored from revenues) totaled \$3,223,707 in 1970. Major portions of this cost had to do with repairs to pavement, bridges and miscellaneous structures such as overpasses, etc. The Authority has expended a total of \$39,706,821 since its inception to December 31, 1970, in these major repairs to maintain its highway in first class condition for the benefit of its patrons.

The Authority opened on January 12, 1970, its expanded facility to the travelling public from Interchange 10 to Interchange 15W and on September 3, 1970, it opened from Interchange 15W to Route 46 its new westerly alignment. This new facility doubled the capacity of the highway from Interchange 10 to its northern terminus. Moneys to construct this expansion came

from the sale of our Turnpike Revenue Bonds.

The estimated cost of the Turnpike widening and other projects by the Consulting Engineer is \$407,500,000, exclusive of financing costs. At December 31, 1970, \$369,396,525 had been expended on this project. It is the considered opinion of the Consulting Engineer that the project will be completed within the estimate.

Further improvements and betterments to the Turnpike were made in 1970 at a cost of \$6,894,967 which were charged to the following funds:

Second Series	
Reserve Funds	\$4,050,175
1966 Turnpike	
Improvement	<u>2,844,792</u>
Total	<u>\$6,894,967</u>

(Note: Provision is made in the General Revenue Bond Resolution for charges to the proceeds of the sale of the Turnpike Revenue Bonds of certain amounts for improvements and betterments.)

Funds on hand at December 31, 1970, withdrawn from Second Series Reserve Funds for approved projects prior to the redemption of the Second Series Bonds totaled \$3,117,237, and \$221,966 was held in the Construction Fund pertaining to the Newark Bay-Hudson County Extension at that date.

At December 31, 1970, market value of our investments was approximately \$5,300,000 in excess of book value.

The financial statements and supporting schedules as reported on by Peat, Marwick, Mitchell & Co., auditors to the Authority are included in this Annual Report.

PEAT, MARWICK, MITCHELL & CO.
CERTIFIED PUBLIC ACCOUNTANTS
RAYMOND-COMMERCE BUILDING
NEWARK, N. J. 07102

New Jersey Turnpike Authority
New Brunswick, New Jersey:

We have examined the statement of assets and liabilities of the New Jersey Turnpike Authority as of December 31, 1970, the related statements of revenues and expenses and application of revenues after expenses, interest and other charges for the year then ended, and the statement of cost of investment in facilities to December 31, 1970. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying financial statements present fairly the assets and liabilities of the New Jersey Turnpike Authority as of December 31, 1970, the revenues resulting from its operations and the application thereof for the year then ended, and the cost of investment in facilities to December 31, 1970, in conformity with accounting principles set forth in note 1 of Notes to Financial Statements, applied on a basis consistent with that of the preceding year. The current year's supplementary data included in Schedules 1 through 6 have been subjected to the same auditing procedures and, in our opinion, are stated fairly in all material respects when considered in conjunction with the basic financial statements taken as a whole.

Further, we have read the provisions of the Bond Resolutions relating to the receipt and application of funds and, in our opinion, based on our examination of the financial statements referred to above, the Authority has complied with such provisions.

Peat, Marwick, Mitchell & Co.

January 21, 1971

statements of assets and liabilities december 31, 1970

with comparative figures for 1969

The Authority's efforts toward beautification receive attention as Maintenance Department employees prepare saplings for planting.

	ASSETS	1970	1969
Operating accounts:			
Cash		\$ 966,022	266,130
Investments—at cost (Schedule 1)		293,196	1,744,164
Accounts receivable		494,172	437,795
		1,753,390	2,448,089
 Funds allocated from reserve to provide for major improvements, repairs, replacements, maintenance, etc.:			
Cash		97,809	331,615
Investments—at cost (Schedule 1)		2,921,628	—
Deposits in condemnation cases		97,800	—
Accounts receivable		—	19,186
		3,117,237	350,801
 Other funds (Schedule 2):			
Revenue fund		6,080,011	6,427,150
Interest funds		100,022	52,131
Reserve funds		9,792,890	17,555,072
Sinking funds		774,125	17,251,162
		16,747,048	41,285,515
Total operating accounts		21,617,675	44,084,405
 Construction accounts (Schedule 4)		 195,738,992	 287,394,298
 Cost of investment in facilities		 940,350,867	 854,038,496
		\$1,157,707,534	1,185,517,199

See accompanying notes to financial statements.



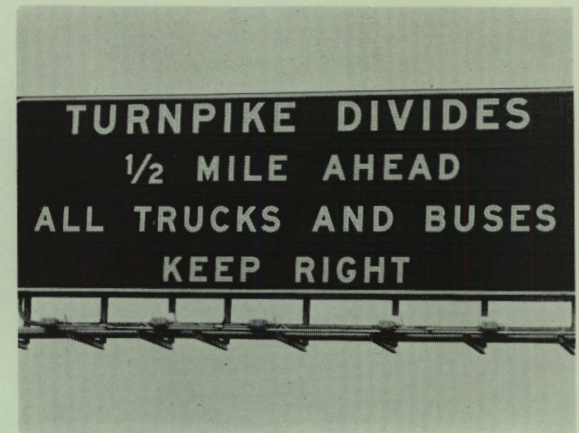
LIABILITIES

	1970	1969
Operating accounts:		
Withholdings from employees	\$ 181,345	180,077
Toll revenues received in advance.....	108,129	99,633
Other liabilities	1,783	7,684
	291,257	287,394
Funds allocated from reserve to provide for major improvements, repairs, replacements, maintenance, etc.:		
Amounts retained from contractors and engineers	448,987	292,270
Total operating accounts	740,244	579,664
Construction accounts (Schedule 4)	4,593,631	13,978,335
Bond indebtedness (Schedule 3):		
General revenue bonds.....	154,079,000	177,986,000
Second series revenue bonds.....	—	35,078,000
Turnpike revenue bonds	616,000,000	616,000,000
Total bond indebtedness	770,079,000	829,064,000
Bond indebtedness retired from revenues.....	302,343,196	243,362,096
Revenues retained in funds and other accounts:		
Invested in improvements, enlargements and betterments....	66,736,532	62,690,862
Retained in other funds by agreement with bondholders....	9,584,548	34,123,015
Retained for general operating purposes	3,630,383	1,719,227
	79,951,463	98,533,104
	\$1,157,707,534	1,185,517,199

**statement of cost
of investment
in facilities to
december 31, 1970**

with comparative figures for 1969

New drum-type changeable message sign before the beginning of the 12-lane Turnpike at Interchange 10. The signs are electronically controlled by hard wire.



	1966 Turnpike Improvements (Note)	Original Turnpike	Extensions and Additional Lanes	Improvements, Enlargements, and Betterments provided from Revenues	Total to December 31,	
					1970	1969
Engineering and architectural	\$ 24,229,661	17,569,745	10,513,533	10,855,216	63,168,155	58,970,840
Land, easements and rights-of-way	20,777,303	20,550,773	7,318,790	2,678,600	51,325,466	46,387,091
Construction, including cost of training and equipping operating personnel, machinery and equipment and miscellaneous pre- operating expenses....	328,071,522	231,708,536	139,690,117	53,006,590	752,476,765	694,169,044
Other costs, including administration	1,787,066	1,368,897	500,865	110,962	3,767,790	3,579,546
Financial	91,765,947	8,439,872	18,552,776	88,970	118,847,565	84,417,875
	<u>466,631,499</u>	<u>279,637,823</u>	<u>176,576,081</u>	<u>66,740,338</u>	<u>989,585,741</u>	<u>887,524,396</u>
Less income from inter- im investment of con- struction funds, etc.	41,554,894	1,093,951	6,582,223	3,806	49,234,874	33,485,900
	<u>\$425,076,605</u>	<u>278,543,872</u>	<u>169,993,858</u>	<u>66,736,532</u>	<u>940,350,867</u>	<u>854,038,496</u>

Note—Financial cost of the 1966 Turnpike Improvement includes \$79,341,136 interest on Turnpike Revenue Bonds from October 4, 1966, date of initial financing, and \$11,453,850 discount on the sale of the bonds.

See accompanying notes to financial statements.

**statement
of revenues
and expenses
year ended
december 31, 1970**

with comparative figures for 1969

*Maintenance crew
spray-painting bridge
structure at Haddon
Twp.*



	1970	1969
Revenues:		
Toll revenue (Schedule 6)	\$63,934,463	57,636,727
Concession revenue	4,959,536	4,624,406
Income from investments	1,859,975	1,801,375
Miscellaneous	89,382	178,479
	70,843,356	64,240,987
Budgeted operating expenses:		
Administration:		
General	791,106	711,315
Toll audit	569,052	461,597
Accounting	281,700	228,820
Operation:		
Traffic control and police	2,888,304	2,298,912
Toll collection	6,887,894	5,212,420
Maintenance, repair, replacement and reconstruction.....	7,815,837	6,245,584
Engineering	392,008	324,611
Real estate	20,872	21,568
Insurance	893,669	919,931
Professional fees and compensation.....	96,252	72,547
Expense and compensation of fiduciaries.....	97,121	150,567
Pension and retirement	1,360,906	1,173,781
Taxes	44,634	28,276
Cash discounts	(9,124)	(8,282)
	22,130,231	17,841,647
	48,713,125	46,399,340
Interest on bonds (excluding interest on Turnpike revenue bonds charged to cost of facilities—Note 2):		
General revenue bonds	5,514,544	5,891,717
Second series revenue bonds	426,635	1,311,284
	5,941,179	7,203,001
	42,771,946	39,196,339
Other charges:		
Repairs, replacements and maintenance items of a type not recurring annually or at short intervals.....	3,223,707	3,069,423
Revenues after expenses, interest and other charges (see accompanying statement for application thereof) (Note 1)	\$39,548,239	36,126,916

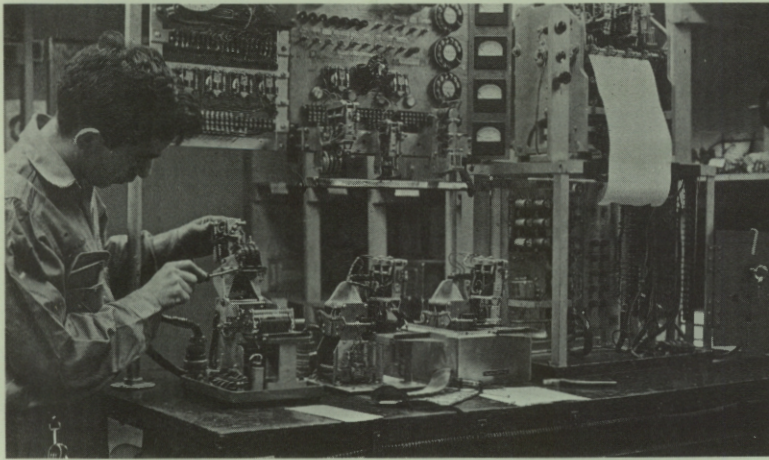
See accompanying notes to financial statements.

**statement of application
of revenues after expenses,
interest and other
charges to
december 31, 1970**

Electrical Department employee repairs an intricate traffic recorder, a portion of the Turnpike operation unseen by patrons.

	Combined Total	Revenue Fund	Interest Funds	General Interest Reserve Fund	Reser General Bon Reserve Fun
Balance December 31, 1969	\$349,557,700	6,427,150	52,131	2,933,174	7,000,000
Add:					
Revenues after expenses, interest and other charges for year ended December 31, 1970	39,548,239	(1,045,702)	159,685	—	—
Discount (premium) on bonds retired, net	851,220	—	—	—	—
Transfer of excess reserve requirements	—	—	(112,244)	(140,284)	—
Transfers from reserve funds	—	—	—	—	—
Proceeds from sale of property after certification of completion	8,405	—	450	—	—
Revenues invested in facilities during year	—	—	—	—	—
Change in net assets of other operating accounts	—	698,563	—	—	—
	<u>389,965,564</u>	<u>6,080,011</u>	<u>100,022</u>	<u>2,792,890</u>	<u>7,000,000</u>
Less:					
Principal amount of bonds retired, including \$58,981,100 from revenues and \$3,900 from con- struction moneys	3,900	—	—	—	—
Funds from construction accounts invested in facilities	4,505	—	—	—	—
	<u>8,405</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Balance December 31, 1970	<u>\$389,957,159</u>	<u>6,080,011</u>	<u>100,022</u>	<u>2,792,890</u>	<u>7,000,000</u>
Comprised as follows:					
Revenues invested in improvements, enlargements and betterments	\$ 66,736,532	—	—	—	—
Revenues retained in other funds by agreement with bondholders	9,584,548	6,080,011	100,022	2,630,390	—
Revenues retained for general operating purposes....	3,630,383	—	—	—	—
Total revenues retained in funds and other accounts	79,951,463	6,080,011	100,022	2,630,390	—
Bond indebtedness retired from revenues	302,343,196	—	—	—	—
Proceeds from sale of bonds	7,662,500	—	—	162,500	7,000,000
	<u>\$389,957,159</u>	<u>6,080,011</u>	<u>100,022</u>	<u>2,792,890</u>	<u>7,000,000</u>

See accompanying notes to financial statements.



Other Fund Accounts

Funds		Sinking Funds			Funds for Major Improvements, Repairs, Replacements, Maintenance, etc.	Net Assets of other Operating Accounts	Revenues Invested in Facilities	Bond Indebtedness Retired from Revenues
Second Series Interest Reserve Fund	Second Series Maintenance Fund	General Bonds	Second Series Bonds	Total (Schedule 2)				
3,507,800	4,114,098	177,495	17,073,667	41,285,515	58,531	2,160,696	62,690,862	243,362,096
—	3,070,023	21,819,403	18,768,537	42,771,946	(3,223,707)	—	—	—
—	—	1,281,390	(430,170)	851,220	—	—	—	—
(2,680,925)	1,868,100	1,399,387	(334,034)	—	—	—	—	—
(826,875)	(9,056,726)	—	—	(9,883,601)	9,883,601	—	—	—
—	4,505	3,450	—	8,405	—	—	—	—
—	—	—	—	—	(4,045,670)	—	4,045,670	—
—	—	—	—	698,563	—	(698,563)	—	—
—	—	24,681,125	35,078,000	75,732,048	2,672,755	1,462,133	66,736,532	243,362,096
—	—	23,907,000	35,078,000	58,985,000	—	—	—	(58,981,100)
—	—	—	—	—	4,505	—	—	—
—	—	23,907,000	35,078,000	58,985,000	4,505	—	—	(58,981,100)
—	—	774,125	—	16,747,048	2,668,250	1,462,133	66,736,532	302,343,196
—	—	—	—	—	—	—	66,736,532	—
—	—	774,125	—	9,584,548	—	—	—	—
—	—	—	—	—	2,668,250	962,133	—	—
—	—	774,125	—	9,584,548	2,668,250	962,133	66,736,532	—
—	—	—	—	—	—	—	—	302,343,196
—	—	—	—	7,162,500	—	500,000	—	—
—	—	774,125	—	16,747,048	2,668,250	1,462,133	66,736,532	302,343,196

investments

december 31, 1970

schedule 1

New snack bar at Woodrow Wilson Service Area. It is one of two such facilities added to Turnpike during the year.

	Interest Rate	Maturity (Note 1)	Par Value	Cost (Note 2)
Operating funds:				
United States Treasury bills	—%	June 17, 1971	\$ 300,000	293,196
Funds allocated from reserve to provide for major improvements, repairs, replacements, maintenance, etc.:				
United States Treasury bills	—	various	3,000,000	2,921,628
General interest fund:				
United States Treasury bills	—	June 22, 1971	60,000	57,995
General interest reserve fund:				
United States Treasury bills	—	Apr. 22, 1971	2,100,000	2,035,018
United States Treasury notes	7%	May 15, 1973	500,000	497,000
			<u>2,600,000</u>	<u>2,532,018</u>
General bond reserve fund:				
United States Treasury bills	—	various	4,050,000	3,937,645
United States Treasury notes	4%	May 15, 1972	1,700,000	1,700,000
United States Treasury notes	7%	May 15, 1973	1,170,000	1,162,980
			<u>6,920,000</u>	<u>6,800,625</u>
Construction fund—1966 Turnpike improvement (Note 2):				
Certificates of deposit (Note 4)	—	various	6,000,000	6,000,000
United States Treasury bills	—	various	6,000,000	5,929,965
Federal National Mortgage Assn. discount notes	—	Feb. 26, 1971	1,500,000	1,447,388
United States Treasury bonds	4	Feb. 15, 1972	1,910,000	1,789,431
United States Treasury notes	8½	Aug. 15, 1973	700,000	700,000
Federal National Mortgage Assn. Participation Certificates....	6	Feb. 1, 1971	1,500,000	1,452,656
Federal National Mortgage Association debentures	6	Mar. 11, 1971	1,500,000	1,452,891
Federal National Mortgage Association debentures	8.20	May 10, 1971	1,500,000	1,489,687
The Twelve Federal Land Banks bonds	6	Oct. 20, 1971	1,500,000	1,437,891
Federal National Mortgage Association debentures	6.85	Nov. 10, 1971	1,500,000	1,452,891
Federal National Mortgage Assn. Participation Certificates....	5	Jan. 19, 1972	1,100,000	1,019,906
Federal National Mortgage Association debentures	6¾	Mar. 10, 1972	1,000,000	962,812
Federal National Mortgage Assn. Participation Certificates....	5½	June 29, 1972	1,000,000	937,188
Federal National Mortgage Association debentures	7.40	Sept. 11, 1972	1,000,000	973,437
Federal National Mortgage Assn. Participation Certificates....	4%	Nov. 1, 1972	750,000	674,766
Federal National Mortgage Association debentures	8	Dec. 11, 1972	1,000,000	985,937
Federal National Mortgage Assn. Participation Certificates....	6.45	Apr. 9, 1973	750,000	708,516
Federal National Mortgage Association debentures	4¼	June 12, 1973	250,000	218,828
			<u>30,460,000</u>	<u>29,634,190</u>
Total carried forward			<u>\$43,340,000</u>	<u>42,239,652</u>

Notes:

- (1) United States Treasury bills and Federal National Mortgage Assn. discount notes mature periodically to June 28, 1971.
- (2) Investments of the Construction Fund and Bond Interest Fund—1966 Turnpike Improvement have been valued at the lower of cost or the principal amount thereof in accordance with the terms of the General Bond Resolution.
- (3) As of December 31, 1970, the aggregate market value of the investments was approximately \$5,300,000 in excess of cost.
- (4) Certificates of deposit bear interest at annual rates of 5.50% to 6.75% and mature periodically to April 22, 1971. The certificates which total \$6,700,000 were issued by The Chase Manhattan Bank, N.A.



	Interest Rate	Maturity (Note 1)	Par Value	Cost (Note 2)
Total brought forward			\$ 43,340,000	42,239,652
Bond interest fund—1966 Turnpike improvement (Note 2):				
Federal National Mortgage Assn. discount notes	—%	June 28, 1971	390,000	379,171
Federal Home Loan Bank notes	6.60	Feb. 25, 1971	1,310,000	1,307,544
Federal National Mortgage Assn. Participation Certificates....	6.30	Apr. 8, 1971	5,430,000	5,430,000
United States Treasury notes	5¼	May 15, 1971	3,440,000	3,422,800
Federal National Mortgage Association debentures	6.85	June 10, 1971	2,885,000	2,832,863
Federal National Mortgage Association debentures	4½	Sept. 10, 1971	3,530,000	3,366,737
Export-Import Bank Participation Certificates	6%	Sept. 19, 1971	3,850,000	3,848,313
Federal National Mortgage Association debentures	6.85	Nov. 10, 1971	915,000	896,700
Federal Home Loan Bank notes	8.20	Nov. 26, 1971	5,175,000	5,175,000
Federal National Mortgage Assn. Participation Certificates....	5	Jan. 19, 1972	1,560,000	1,505,400
United States Treasury bonds	4	Feb. 15, 1972	1,700,000	1,592,688
The Twelve Federal Land Banks bonds	5.70	Feb. 15, 1972	950,000	909,625
Federal National Mortgage Assn. Participation Certificates....	5½	June 29, 1972	9,795,000	9,485,737
United States Treasury bonds	4	Aug. 15, 1972	3,683,000	3,448,209
Federal National Mortgage Association debentures	7.40	Sept. 11, 1972	980,000	976,325
The Twelve Federal Land Banks bonds	5½	Oct. 23, 1972	4,081,000	4,052,380
Federal National Mortgage Association debentures	8	Dec. 11, 1972	5,585,000	5,557,075
Federal National Mortgage Assn. Participation Certificates....	6.45	Apr. 9, 1973	6,120,000	6,120,000
Export-Import Bank debentures	6.15	Apr. 30, 1973	1,015,000	966,787
Federal National Mortgage Association debentures	4¼	June 12, 1973	7,645,000	7,017,944
Federal National Mortgage Assn. Capital debentures	6	Oct. 1, 1973	4,320,000	4,280,494
United States Treasury bonds	4½	Nov. 15, 1973	10,850,000	9,778,459
The Twelve Federal Land Banks bonds	4½	Feb. 20, 1974	3,915,000	3,684,994
Export-Import Bank Participation Certificates	5½	May 4, 1974	11,610,000	10,938,044
Federal National Mortgage Association debentures	7.85	Sept. 10, 1974	2,020,000	2,013,687
United States Treasury bonds	3¾	Nov. 15, 1974	8,238,000	7,517,175
United States Treasury notes	5¾	Nov. 15, 1974	5,661,000	5,559,332
The Twelve Federal Land Banks bonds	4¾	Apr. 21, 1975	25,402,000	22,372,220
United States Treasury notes	6	May 15, 1975	8,035,000	8,020,984
			150,090,000	142,456,687
Special projects:				
Certificates of deposit (Note 4)	—	various	700,000	700,000
United States Treasury bills	—	various	650,000	639,133
Federal National Mortgage Assn. discount notes	—	Apr. 15, 1971	900,000	870,034
Federal Home Loan Bank notes	6.60	Feb. 25, 1971	1,500,000	1,471,406
Federal National Mortgage Association debentures	5½	Feb. 10, 1972	1,500,000	1,399,453
The Twelve Federal Land Banks bonds	3¾	Sept. 15, 1972	1,500,000	1,357,031
The Twelve Federal Land Banks bonds	4½	Feb. 20, 1974	1,500,000	1,340,625
Federal National Mortgage Assn. Participation Certificates....	4.70	Dec. 1, 1974	1,400,000	1,225,000
			9,650,000	9,002,682
Second Series proceeds fund (Series B—1953):				
United States Treasury bills	—	June 22, 1971	200,000	195,372
Deposits in condemnation cases:				
United States Treasury bills	—	various	840,000	823,194
Federal National Mortgage Assn. discount notes	—	various	8,950,000	8,670,887
			9,790,000	9,494,081
Total investments			\$213,070,000	203,388,474

other funds
december 31, 1970
schedule 2

with comparative figures for 1969

Mechanics at District 5, Elizabeth, repairing drive-shaft on truck.



	Cash on deposit with Trustee, Special Trustee and Sinking Fund Agent	Investments in United States Government obligations— at cost (Schedule 1)	Total December 31,	
			1970	1969
Revenue fund	\$6,080,011	—	6,080,011	6,427,150
Interest funds:				
General bonds	42,027	57,995	100,022	3,869
Second series bonds	—	—	—	48,262
	<u>42,027</u>	<u>57,995</u>	<u>100,022</u>	<u>52,131</u>
Reserve funds:				
General interest reserve fund	260,872	2,532,018	2,792,890	2,933,174
General bond reserve fund	199,375	6,800,625	7,000,000	7,000,000
Second series interest reserve fund	—	—	—	3,507,800
Second series maintenance fund	—	—	—	4,114,098
	<u>460,247</u>	<u>9,332,643</u>	<u>9,792,890</u>	<u>17,555,072</u>
Sinking funds:				
General sinking fund (Note):				
3¼ %—1950 issue	542,536	—	542,536	140,951
3.20 %—1951 issue	231,589	—	231,589	36,544
	<u>774,125</u>	<u>—</u>	<u>774,125</u>	<u>177,495</u>
Second series sinking fund:				
3¾ %—1953 issue	—	—	—	12,900,177
3 %—1954 issue	—	—	—	2,341,048
2.80 %—1955 issue	—	—	—	1,832,442
	<u>—</u>	<u>—</u>	<u>—</u>	<u>17,073,667</u>
	<u>774,125</u>	<u>—</u>	<u>774,125</u>	<u>17,251,162</u>
	<u>\$7,356,410</u>	<u>9,390,638</u>	<u>16,747,048</u>	<u>41,285,515</u>

Note—Approximately \$761,000 had been committed on firm orders to purchase bonds to be delivered in January 1971.

bond indebtedness — december 31, 1970

schedule 3

with comparative figures for 1969

	Original amount authorized and issued	Acquired and cancelled in prior years	Amount outstanding Dec. 31, 1969	Acquired by Sinking Fund and cancelled during 1970	Amount outstanding Dec. 31, 1970
General revenue bonds:					
Turnpike revenue bonds (1950 issue), 3¼%, maturing January 1, 1985.....	\$220,000,000	75,170,000	144,830,000	19,993,000	124,837,000
Turnpike revenue bonds (1951 issue), 3.20%, maturing January 1, 1986.....	35,000,000	1,844,000	33,156,000	3,914,000	29,242,000
	<u>255,000,000</u>	<u>77,014,000</u>	<u>177,986,000</u>	<u>23,907,000</u>	<u>154,079,000</u>
Second series revenue bonds, scheduled maturity July 1, 1988:					
Series B, 3% (1953 issue)....	150,000,000	124,983,000	25,017,000	25,017,000	—
Series B, 3% (1954 issue)....	27,200,000	22,512,000	4,688,000	4,688,000	—
Series B, 2.80% (1955 issue)....	34,000,000	28,627,000	5,373,000	5,373,000	—
	<u>211,200,000</u>	<u>176,122,000</u>	<u>35,078,000</u>	<u>35,078,000</u>	<u>—</u>
Turnpike revenue bonds:					
Series A, 4¼% (1966 issue), maturing January 1, 2006	179,000,000	—	179,000,000	—	179,000,000
Series B, 5½% (1968 issue), maturing January 1, 2008	75,000,000	—	75,000,000	—	75,000,000
Series C, 5.20% (1968 issue), maturing January 1, 2008	125,000,000	—	125,000,000	—	125,000,000
Series D, 5¾% (1969 issue), maturing January 1, 2008	60,000,000	—	60,000,000	—	60,000,000
Series E, 5½% (1969 issue), maturing January 1, 2008	40,000,000	—	40,000,000	—	40,000,000
Series F, 7% (1969 issue), maturing January 1, 2009	137,000,000	—	137,000,000	—	137,000,000
	<u>616,000,000</u>	<u>—</u>	<u>616,000,000</u>	<u>—</u>	<u>616,000,000</u>
	<u>\$1,082,200,000</u>	<u>253,136,000</u>	<u>829,064,000</u>	<u>58,985,000</u>	<u>770,079,000</u>

Note—To December 31, 1970, bond indebtedness totaling \$312,121,000 had been retired, of which amount \$302,343,196 had been retired from revenues and \$9,777,804 from excess construction funds.

summary of construction accounts — december 31, 1970

schedule 4

with comparative figures for 1969

	1966 Turnpike Improvement			Newark Bay-Hudson County Extension	Total December 31.	
	Construction Accounts	Bond Interest Fund	Special Projects		1970	1969
ASSETS						
Cash	\$ 1,112,530	3,794	131,364	26,594	1,274,282	3,549,238
Deposits in condemnation cases, including investments of \$9,494,081 (Schedule 1)	12,692,844	—	54,000	—	12,746,844	11,417,345
Interim investments of construction funds (Schedule 1)	29,634,190	142,456,687	9,002,682	195,372	181,288,931	271,472,139
Accrued interest purchased	—	—	—	—	—	476,003
Deposits, other than condemnation	125,777	—	—	—	125,777	130,261
Accounts receivable	303,158	—	—	—	303,158	349,312
	<u>\$43,868,499</u>	<u>142,460,481</u>	<u>9,188,046</u>	<u>221,966</u>	<u>195,738,992</u>	<u>287,394,298</u>
LIABILITIES						
Amounts retained from contractors and engineers	\$ 4,452,818	—	140,813	—	4,593,631	13,978,335

**cash receipts
and disbursements
year ended
december 31, 1970
schedule 5**

At one of three Turnpike State Police stations a Sergeant provides the instant communication link from a trooper on patrol to an emergency unit off the roadway.

	Combined Total	Operating Accounts	Funds for Major Improvements, Repairs, etc.	Revenue Fund	General Interest Fund	Second Series Interest Fund
Cash balances, December 31, 1969	\$ 30,062,159	266,130	331,615	6,427,150	3,869	48,262
Receipts:						
Revenues (including income of \$1,859,975 on investments)	70,801,632	139,566	166,044	68,941,657	175,213	7,349
Transfers of income on investments	—	(139,566)	(166,044)	1,859,975	(175,213)	(7,349)
Transfers from revenue fund	—	21,389,944	—	(71,148,771)	5,610,247	490,617
Income on construction investments	15,702,623	—	—	—	—	—
Sale or redemption of investments	223,151,725	5,655,341	5,772,239	—	5,694,787	599,614
Proceeds from sale of property after certification of completion	8,405	—	—	—	450	—
Transfers of excess reserves	—	—	—	—	—	(112,244)
Transfers from reserve funds	—	—	4,546,864	—	—	—
	<u>339,726,544</u>	<u>27,311,415</u>	<u>10,650,718</u>	<u>6,080,011</u>	<u>11,309,353</u>	<u>1,026,249</u>
Disbursements:						
Budgeted operating expenses	22,130,231	22,130,231	—	—	—	—
Interest on bond indebtedness	40,177,429	—	—	—	5,514,544	426,635
Purchase of investments including accrued interest... ..	127,948,573	4,215,162	3,357,130	—	5,752,782	599,614
Retirement of bond indebtedness of \$58,985,000	58,133,780	—	—	—	—	—
Payment of cost of construction, studies and other repairs, replacements and maintenance items	80,214,709	—	7,097,979	—	—	—
Deposits in condemnation cases	1,427,299	—	97,800	—	—	—
	<u>330,032,021</u>	<u>26,345,393</u>	<u>10,552,909</u>	<u>—</u>	<u>11,267,326</u>	<u>1,026,249</u>
Cash balances, December 31, 1970	\$ 9,694,523	966,022	97,809	6,080,011	42,027	—

DEPOSITORIES

	Cash Balance	Market Value of Securities Pledged to Secure Deposits
Operating Accounts:		
First Jersey National Bank	\$ 608,499	2,878,531
The Peoples National Bank of Central Jersey	246,733	1,407,734
Bank of Passaic and Clifton, N.A.	42,340	2,647,575
Toll collectors' and other imprest funds	68,450	—
Funds for Major Improvements, Repairs, etc.:		
First National Bank of Passaic County	38,923	3,947,562
National Community Bank	58,886	4,054,959
Revenue Fund:		
Fidelity Union Trust Company	971,020	6,736,469
The National State Bank	5,108,991	6,937,908
All Other Funds:		
The Chase Manhattan Bank, N. A.	2,550,681	31,713,301
	<u>\$9,694,523</u>	<u>60,324,039</u>



General Interest Reserve Fund	General Bond Reserve Fund	Second Series Interest Reserve Fund	Second Series Maintenance Fund	General Bonds Sinking Funds	Second Series Bonds Sinking Funds	1952 Bond Resolution Construction Funds	1966 Turnpike Improvement		
							Construction Accounts	Special Projects	Bond Interest Fund
72,670	155,801	1,740,651	215,611	177,495	17,073,667	227,266	3,110,666	127,071	84,235
206,130	469,052	81,949	227,111	—	387,561	—	—	—	—
(206,130)	(469,052)	(81,949)	(227,111)	—	(387,561)	—	—	—	—
—	—	—	3,070,023	21,819,403	18,768,537	—	—	—	—
—	—	—	—	—	—	—	5,397,928	702,878	9,601,817
5,478,700	9,033,373	2,730,498	5,821,534	—	—	—	120,063,739	9,274,719	53,027,181
—	—	—	4,505	3,450	—	—	—	—	—
(140,284)	—	(2,680,925)	1,868,100	1,399,387	(334,034)	—	—	—	—
—	—	(3,255)	(4,543,609)	—	—	—	—	—	—
<u>5,411,086</u>	<u>9,189,174</u>	<u>1,786,969</u>	<u>6,436,164</u>	<u>23,399,735</u>	<u>35,508,170</u>	<u>227,266</u>	<u>128,572,333</u>	<u>10,104,668</u>	<u>62,713,233</u>
—	—	—	—	—	—	—	—	—	—
5,150,214	8,989,799	1,786,969	6,436,164	—	—	195,372	55,821,407	7,170,771	34,236,250
—	—	—	—	22,625,610	35,508,170	—	—	—	28,473,189
—	—	—	—	—	—	5,300	70,362,897	2,748,533	—
—	—	—	—	—	—	—	1,275,499	54,000	—
<u>5,150,214</u>	<u>8,989,799</u>	<u>1,786,969</u>	<u>6,436,164</u>	<u>22,625,610</u>	<u>35,508,170</u>	<u>200,672</u>	<u>127,459,803</u>	<u>9,973,304</u>	<u>62,709,439</u>
<u>260,872</u>	<u>199,375</u>	<u>—</u>	<u>—</u>	<u>774,125</u>	<u>—</u>	<u>26,594</u>	<u>1,112,530</u>	<u>131,364</u>	<u>3,794</u>

**toll revenue
year ended
december 31, 1970
schedule 6**

with comparative figures for 1969

New sign bridge in advance of 12-lane Turnpike. Drum-sign message at left alerts patrons to closing of inner roadway during repairs while traffic is rerouted to the outer barrel, northbound.



Class	Description	1970		1969	
		Toll revenue	Vehicles	Toll revenue	Vehicles
1	Passenger car, motorcycle, taxi or hearse, light truck	\$40,600,141	75,580,708	\$36,558,705	67,733,582
2	Vehicles having two axles other than type described under Class 1	4,467,495	4,791,541	4,231,446	4,584,301
3	Vehicle (vehicles), single or in combination, having three axles	2,714,276	1,691,947	2,632,407	1,679,845
4	Vehicle (vehicles), single or in combination, having four axles	6,601,586	3,528,716	6,376,568	3,349,299
5	Vehicle (vehicles), single or in combination, having five axles	9,536,246	4,050,915	7,829,038	3,263,846
6	Vehicle (vehicles), single or in combination, having six or more axles	26,348	11,472	17,960	7,318
	Non-revenue vehicles*	—	512,885	—	456,096
		<u>63,946,092</u>	<u>90,168,184</u>	<u>57,646,124</u>	<u>81,074,287</u>
	Deduct toll adjustments	11,629		9,397	
		<u>\$63,934,463</u>		<u>\$57,636,727</u>	

* Non-revenue vehicles represents traffic of members, officers and employees of the Authority actually in the performance of their duties or traveling to or from such duties, members of the New Jersey State Police Force, members of Fire Departments or local Police Departments actually in the performance of their duties, ambulances, rescue squads or necessary vehicles of concessionaires.

notes to financial statements

(1) ACCOUNTING PRINCIPLES:

- (a) Authorizing legislation—The New Jersey Turnpike Authority is a body corporate and politic created by the New Jersey Turnpike Authority Act of 1948 as amended and supplemented, authorized to construct, maintain, repair and operate turnpike projects at locations established by law, and to issue turnpike revenue bonds of the Authority, subject to prior approval in writing of the Governor and of either or both the State Treasurer and the Comptroller of the Treasury, payable solely from tolls and other revenues of the Authority. Under the provisions of the Act, turnpike revenue bonds and the interest thereon shall not be deemed to constitute a debt or liability or a pledge of the faith and credit of the State or any political subdivision thereof.

The Authority has no stockholders nor equity holders and all revenues of the turnpike are required to be deposited by the Authority with, or in the name of, a special trustee to be applied in accordance with the provisions of the bond resolutions.

Accounts of the Authority are maintained in accordance with the principles set forth in this note, which are based on the provisions of the bond resolutions and on the Authority's interpretation of said resolutions.

- (b) Investment in facilities—Consists primarily of amounts expended to acquire right-of-way, construct and place in operation the turnpike, its ex-

tensions and related facilities. In accordance with the bond resolutions there have been included in construction costs expenses in connection with the offering, selling and issuance of bonds; discount on the sale of bonds; commitment fees under bond purchase agreements; cost of certain real estate in excess of right-of-way requirements which may be sold and the proceeds applied in reduction of construction costs; and interest on bonds (less income earned on unexpended construction funds) and administrative and legal expenses during the construction period. This amount also includes the cost of improvements, enlargements and betterments provided from revenues.

- (c) Interest—Interest on bond indebtedness is payable semi-annually on January 1, and July 1, of each year. Interest due on January 1, 1971 of \$19,602,737 had been deposited with the paying agent as of December 31, 1970 (as in the previous year) and, accordingly, there is no liability shown in the accounts for such interest at that date.
- (d) Pension and retirement plans—Employees of the Authority are covered by the Public Employees Retirement System of the State of New Jersey. Pension plan expense of \$852,915 for 1970 (\$756,807 in 1969) is based on annual billings received from the Retirement System and recorded on a cash basis. Authority employees are also covered by the Federal Social Security Act.
- (e) Operations—Toll revenues are recorded as earned, income on investments and from concessions is recorded when collected and costs of construction,

notes to financial statements

improvements, enlargements and betterments to the facility and operating expenses (including materials and supplies) are recorded when paid.

The Annual Budget of Operating Expenses as filed for the year 1970 amounted to \$22,481,500 as compared with cash disbursements during 1970 for operating expenses of \$22,130,231.

The bond resolutions state that operating expenses shall not include any allowance for depreciation and, accordingly, no provision for depreciation has been included in the accounts or in the accompanying financial statements. In the absence of a provision for depreciation, effective recovery of construction costs is expected to be accomplished through the required allocation of available revenues to the respective sinking funds for retirement of the related bond indebtedness. During 1970, \$41,656,743 was made available for the retirement of bonds, \$41,652,843 of which was from revenues and reserves and \$3,900 from construction moneys.

The Authority, with the approval of the Consulting Engineer, may direct the Trustee to transfer funds from Reserve Funds to special accounts to pay the cost of repairs, replacements or maintenance items of a type not recurring annually or at short intervals and which were not provided for in the budgeted operating expenses. Transfers may also include funds for major improvements and certain studies. During the year ended December 31, 1970, transfers for such purposes amounted to \$9,883,601 including \$4,505 provided from construction accounts. From funds so provided during the current and preceding year, expenditures were made for major improvements in the amount of \$4,050,175 which has been added to the cost of investment in facilities and \$3,223,707 for repairs, replacements and maintenance items which has been reflected as other charges in the accompanying Statement of Revenues and Expenses.

Net revenues for the year 1970 as defined in the 1966 bond resolution amounted to \$49,453,412 (revenues \$70,843,356, less amounts paid from the Revenue Fund into the Operating Fund, \$21,389,944). For the year 1969, net revenues as defined, were \$45,443,533.

(2) AGREEMENT WITH BOND HOLDERS:

The Authority has from time-to-time authorized the issuance of revenue bonds to finance the cost

of construction of the Turnpike, its extensions and various improvement programs. Details of the issues presently outstanding are shown in Schedule 3. The General Revenue Bond Resolution adopted in 1966 provides for the issuance of additional bonds subject to certain limitations.

In the bond resolutions relating to the Turnpike Revenue Bonds, the Authority has covenanted to charge such tolls as shall be required in order that net revenues will be at least sufficient, together with other available funds, to retire or provide for the retirement of all the General Revenue Bonds by January 1, 1976. Such requirement is greater than the minimum annual sinking fund requirements under the 1952 General Bond Resolutions, as amended. The requirement for the annual period ended November 30, 1970 has been satisfied. The requirement for the period ending November 30, 1971 is that the amount of General Revenue Bonds outstanding at that date, after taking into consideration moneys held in the sinking funds, shall not exceed \$139,000,000. The amount of General Revenue Bonds outstanding at December 31, 1970 was \$154,079,000 and the sinking funds at that date amounted to \$774,125.

During the year 1970, revenues and excess reserves transferred to the General Sinking Fund amounted to \$23,222,240. The remaining revenues and excess reserves applicable to the Second Series Bonds of \$18,434,503 were transferred to the Second Series Sinking Fund and applied in retirement of the remaining Second Series Bonds. General Revenue Bonds, at the election of the Authority, may be redeemed at varying premium rates other than by operation of the respective sinking funds, as set forth in the bond resolution.

Prior to January 1, 1976, interest on the Turnpike Revenue Bonds will be payable from a portion of the bond proceeds deposited in the Bond Interest Fund and the investment earnings of such fund. Such interest on Turnpike Revenue Bonds charged to cost of investment in facilities in 1970 amounted to \$34,236,250 and investment earnings of the related bond interest fund credited to cost of investment in facilities amounted to \$9,601,817.

On and after the retirement of all of the General Revenue Bonds, the Turnpike Revenue Bonds will be payable from and secured by pledge of the revenues of the turnpike system. Sinking fund requirements for the Turnpike Revenue Bonds commence with the annual period ending November 15, 1978.

traffic and toll revenues

REVENUE VEHICLES

	1970	1969
January	6,098,743	5,900,407
February	5,980,866	5,154,405
March	7,198,350	6,456,500
April	7,275,266	6,862,694
May	7,688,095	7,046,941
June	7,974,964	7,240,444
July	8,263,184	7,294,508
August	8,452,205	7,774,061
September	7,810,083	6,830,185
October	7,861,294	7,074,363
November	7,504,438	6,653,830
December	7,547,811	6,329,853
	89,655,299	80,618,191

REVENUE MILEAGE

	1970	1969
January	154,314,236	150,637,085
February	150,755,728	132,146,316
March	189,235,392	164,409,071
April	190,927,041	189,098,186
May	206,986,711	190,032,786
June	213,223,403	203,204,437
July	232,779,334	213,275,506
August	243,940,060	235,494,532
September	207,938,936	187,211,493
October	200,691,781	184,808,542
November	198,445,744	184,141,778
December	193,093,875	168,539,671
	2,382,332,241	2,202,999,403

TOLL REVENUES

	1970	1969
January	\$ 4,298,497	\$ 4,091,765
February	4,221,689	3,607,310
March	5,162,835	4,486,995
April	5,157,590	4,894,949
May	5,448,643	4,969,568
June	5,732,892	5,249,708
July	6,024,438	5,374,512
August	6,197,114	5,787,842
September	5,602,263	4,919,520
October	5,513,520	5,006,171
November	5,283,140	4,737,614
December	5,291,841	4,510,773
	\$63,934,463	\$57,636,727



The New Jersey Turnpike's 12-lane dual/dual in the Carteret area.



Executive Director William J. Flanagan opens ceremonies at dedication of new Interchange 10 at Edison, following heavy snowstorm.



Toll Collector Edward McMichael issues toll ticket to first patron Thomas Trevenna of Bayonne, at the opening on January 12 of new Interchange 10 at Edison, connecting with Interstate 287.

toll collection expands its scope

With the opening of four new interchanges and the expansion of two old-line interchanges during 1970, the Toll Collection Department enlarged its operations, with a fulltime personnel roster increased from 442 toll collectors in 1969 to a year end total of 580 in 1970. They handled a traffic flow that was 11.2% greater than 1969.

The four new interchanges added a total of 38 plaza lanes along the widened portion from Edison to Ridgefield Park. They were Interchange 10 (I-287-Perth Amboy-Metchen-Edison), 14 lanes, opened January 12; Interchange 15W (I-280-Newark-The Oranges) 6 lanes,

opened January 13; Interchange 16W (N.J. 3-Secaucus-Rutherford) 6 lanes, opened September 3, and Interchange 18W (George Washington Bridge-U.S. 46) 12 lanes, September 3.

In addition, three lanes were added at Interchange 1 (Delaware Memorial Bridge) for a total of 15, and six at Interchange 14 (I-78-Newark Airport) for a total of 20. Construction was also started on a 6-lane addition at Interchange 13 (I-278-Elizabeth-Goethals Bridge) to provide a total of 16 lanes at that facility.

Employees of the department continued the excellent record of assistance to the motoring public. An outstanding example occurred on August 7 when Collector Donald Kelly, a 19-year employee, saved the life of a 10-month-old baby girl who had stopped breathing when her parents rushed her to the Elizabeth Interchange where Collector Kelly was on duty. The Authority took cognizance of this at its August 12th meeting and adopted a resolution extolling Kelly's efforts.

The Turnpike's expanded service to passenger and commercial vehicles is illustrated in these comparison photos of the Woodbridge Interchange (No. 11). Aerial photo left shows the original construction. At right is view of the same area as it serves today's traffic, 20 years later.





keeping the road updated

In September of 1970 the final stage of the Widening was completed and opened to traffic. For the three preceding years all other construction and improvement programs were overshadowed by this 400-million dollar project. As in previous years, however, 1970 saw no letdown in the continuing policy of assuring that the facilities of the New Jersey Turnpike remain the most up to date, efficient and attractive possible.

A total of 35 non-widening construction contracts were in force during 1970 and 26 of them were completed. The balance is scheduled for completion early in 1971.

Several major resurfacing contracts were completed in the northern, or widened, area. An important design feature of the dual/dual

widening concept is that there should be an ability—at least for the next few years—to allow the resurfacing contractor the unhampered availability of at least two adjacent lanes simultaneously; and, quite possibly, three lanes (a complete roadway). This concept was utilized and was entirely successful in the newly widened areas. One contract alone placed 42,000 tons of asphalt, during daylight hours, as resurfacing. The contractor had, at almost all times, the unrestricted use of at least two lanes. Even more important is the fact that resurfacing could be undertaken during daylight hours. For several years it has been impossible, due to excessively heavy traffic densities, to close down lanes during the day for resurfacing in the northern areas. Contractor efficiency and quality of work is lower at night.

Bridge deck repair continued to be a major item for engineering consideration. Deck replacements were substantially less than in immediately prior years. Two contracts for the accomplishment of this work were undertaken and completed.

The patching systems and deck membranes that have been developed and specified in recent years

(continued)

The dual/dual Turnpike, looking north, with the Grover Cleveland Service Area, at right, and the Thomas A. Edison Service Area (left). Flyover ramps from inner roadways provide safe, convenient access to those areas on mainline in Middlesex County.







***keeping the
road updated***

have undoubtedly had an effect on inhibiting the deterioration of bridge deck concrete. The advancing age of the structures, however, and their continued exposure to de-icing chemicals will necessitate periodic bridge deck repair contracts.

A large-scale structural steel painting program continued throughout 1970. The Lewandowski Memorial Bridge over the Hackensack River was painted in 1970, as were several smaller ramp and viaduct structures in the Newark area. Another contract was let in 1970 to provide for the painting of over 60 structures south of New Brunswick. These are all structures that either carry the Turnpike over local roads or local roads over the Turnpike. This work is not scheduled for completion until early 1971.

Two cooperative programs, wherein the Authority joined with other agencies for their mutual benefit—as well as overall benefit to traffic handling in the northern end of the State—were undertaken.

Construction of a direct connection from Route 169 in Bayonne to Interchange 14A was begun in 1970. This work is divided into three contracts. One contract—providing for grading, drainage and paving—was completed. Another, providing for the structural work, was well along by the end of the year and is scheduled for completion in 1971. The third contract will provide for necessary signing. The cost of these three contracts is divided between the Authority and the New Jersey Department of Transportation.

At the Lincoln Tunnel Interchange Complex a contract was completed that provided necessary ramps, on Turnpike property, to facilitate an exclusive bus lane system. This system allows utilization by buses of opposing traffic lanes

on the State Highway System during commuter rush hours. The Turnpike participated in the program by building at its own expense a bus access road to Interstate 295 between the Turnpike and the Lincoln Tunnel. The Port of New York Authority and the State Department of Transportation, with a \$500,000 Federal grant to the Tri-State Transportation Committee, completed the construction of the project.

There were several contracts during 1970 to provide maintenance to various structural components of bridges. At two locations in the southern end a contractor repaired extensively eroded concrete piling. The bridge fender systems of the Hackensack River Bridge and the Newark Bay Bridge were repaired, as were several steel stringers supporting the Chaplain Washington Memorial Bridge over the Passaic River.

The continuing increase of traffic was reflected in areas of construc-

Overhead roadway signs being installed by Maintenance crew at Newark Airport area.

tion not directly related to the Widening program. Construction began and partial, staged completion was attained on a project to expand the Elizabeth Interchange. Six new lanes are being added to the existing ten-lane facility. The addition of three new lanes at Interchange 1, Deepwater, was also completed in 1970. Two new snack bars at the Richard Stockton (6S) and Woodrow Wilson (6N) Service Areas were completed and open to the public in 1970. Construction began in 1970 at the Clara Barton Service Area (1S) on another snack bar. Completion is scheduled for early 1971.

Constant upgrading of Authority facilities was under way throughout the year. Some of these projects, although very often relatively small, are very important in that they provide added comfort and security to the patron. Two signing contracts were completed, for example, that provided for improved directional signing at Interchanges 1, 6 (Flo-

rence), 14A (Bayonne) and 8 (Hightstown). Generally, these contracts replaced older ground-mounted signs with new signing, of the latest standards, on sign bridges. These sign bridges, incidentally, were purchased under existing Widening contracts so that full advantage could be taken of the large quantities purchased under the Widening. The parking lot at the Alexander Hamilton (12S) Service Area was greatly enlarged during 1970. The installation of a completely new water treatment system and the construction of a new 200,000-gallon watersphere were completed at the James Fennimore Cooper (4N) Service Area.

The Authority has been negotiating with East Brunswick Township for a park-ride lot adjacent to Interchange 9, which the Authority would build and operate on land to be leased from the township.

The largest single construction project under way in 1970, exclusive of the Widening, was the addi-

tion to the Authority's Administration Building Complex at New Brunswick. A series of disappointing and unavoidable situations have caused the completion of this project to be delayed from the scheduled December, 1970 completion to early in 1971. There are two new buildings, supporting systems for these buildings, as well as the existing building, and extensive site improvements included in the current project.

In a year of highly inflated construction costs, a relatively unstable construction labor market and constantly escalating material and subcontract costs, the challenges associated with preparing and completing projects such as those outlined above, have been particularly rewarding. The utmost in cooperation has been required between the various Authority departments, consulting engineers and architects so that the New Jersey Turnpike may continue to be the nation's number one toll road.

maintenance meets new challenge

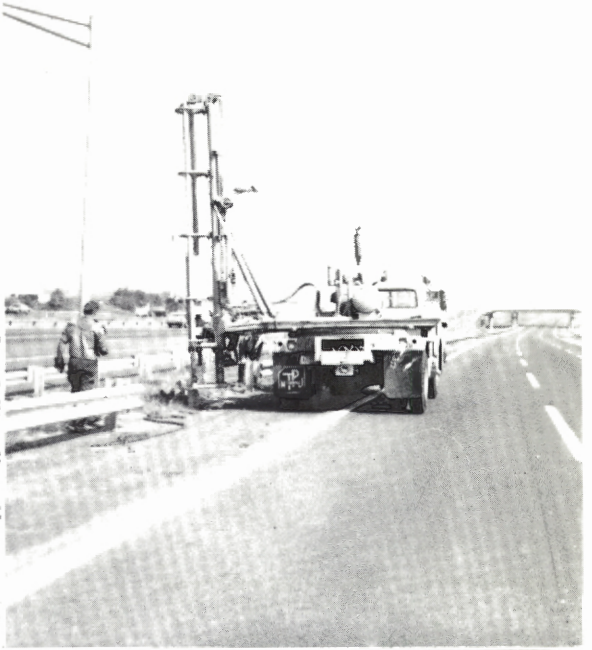
A new challenge faced the Maintenance Department in 1970. The dual/dual highway opened in January and the meadow route roadway opened in September. This increased the maintenance responsibility of the Northern Maintenance Division by 40%. In addition to this, the Southern Division Roadway, the Landscaping Section, the Water and Sewage Section, Buildings Section, Communications Section and Equipment Section were involved with problems brought about by

an increased volume of passenger cars, trucks and buses and a concentrated drive to overcome air and water pollution as well as improve environmental conditions by general clean-up and beautification.

A total of 446 employees in the operating group and 99 in Management and Office/Clerical made up the ranks of the Maintenance Department at year's end. In the Northern Division, the mainline roadway was doubled for the northern one third of District 4, the entire District 5 and the northern and southern fourth of District 6. In addition, a new district was formed to maintain the 12 miles of meadow route which includes three interchanges. The number of ramps to the three service areas and six interchanges was doubled and the total length of the ramps was increased by 300%. This means a big
(continued)

Keeping the Turnpike in tip-top condition involves a variety of Maintenance tasks, some of which are shown here: installing new delineator posts, removing snow at toll plaza, repairing and sandblasting guard rails, broom-sweeping the roadway, welding snow plow blade and putting down new line striping on the Turnpike mainline.





***maintenance
meets
new challenge***

increase in the demand for road patrol, guard rail repair, drainage maintenance, emergency call-outs, road patching, shoulder repair and salt control and snow removal.

The new construction had a large impact on the work of the Building Section. This section is comprised of the majority of the trade specialists on the Turnpike: electricians, carpenters, building maintenance specialists and painters. These people have increased their maintenance schedule by five new interchange buildings, 61 new toll booths with new treadles, validators and recorders and 700 new roadway signs of all types as well as 3,000 new roadway light fixtures. Besides the new work and the ordinary routine work in the Turn-

pike, the program of changing oil burner units from a #4 fuel oil system to a #2 fuel oil system was completed. This is a definite step to improve the air pollution problem. The program of updating all incinerators at Service Areas was also completed so that now State Permits for all building incinerators have been issued with an expiration date of 1975.

The Water and Sewage Section had a busy year keeping up with the demands of the increased volume of patrons using the Howard Johnson restaurants. It was the time to replace many of the original motorized valves and pumps in the water systems. The sewage treatment plant at Joyce Kilmer (8N) Service Area was shut down, dismantled and secured when the sewage connections from the building were tied into the municipal sewer system. Interchange 4 building was linked with the municipal water system after the failure of the well

at this interchange. James Fenimore Cooper (4N) Service Area had an entire new water supply system constructed by outside contract.

Southern Division roadway section experienced a more crowded and congested roadway than ever before. Routine maintenance took up most of the available time, but with extra effort new shoulder drains were installed along the Pennsylvania Extension and mainline roadway. All excavation and backfill for the Buildings Section program of replacing old and constructing new water and fuel and air lines was done by the Southern Division roadway forces. An old eyesore—the quonset hut at District 1—was dismantled and removed.

The Communications Section had to use all of the ingenuity and knowledge available to improvise temporary and transitional hookups with new interchanges as they were made operational. Also, a great deal of effort was devoted to the co-



Left: Line-striping crew pauses as Maintenance man adjusts paint sprayer on truck. Right: Steel girders on overpass get sandblasting before prime coat of paint is applied.



ordination of transmission circuits to accommodate the new supervised type of drum sign control in the widened section of the roadway.

A new Table of Organization was initiated in the Communications Shop which included an apprentice program. Reorganization of Central Control, to provide better coordination of all operations functions, was put into effect in December. In addition, the Communications Engineer engaged in various engineering studies and contract document preparation.

The Landscape Section carried on its continuous program of planting and caring for shrubs, trees and flower beds in the section of the Turnpike undisturbed by construction. In the new areas the Horticulturist prepared plans and set up specifications for landscape contracts which are being advertised for foundation planting sites as well as roadway beautification. The per-

sonnel in this section conducted a thorough spraying program which protected the trees and shrubs along the entire length of the Turnpike from disease and insect attack, prevalent in this area.

The Equipment section was heavily taxed with new equipment needed for additional roadway maintenance as well as increased police car fleet. The new Central Shops night shift helped a great deal and an additional night mechanic was added. There will be a new garage area for work on police and staff cars ready for use at the Administration Building within the next few months.

The truck fleet has been updated with the purchase of a fleet of 30,000 pounds. International dump trucks replaced smaller trucks which were ready for trade-in. New construction equipment to be used for ditch excavation and slope grading was also purchased. The necessary equipment for the new District

8 was also received, checked out and sent to the field. All investigation, demonstration, review, specification writing and checkout of new equipment are performed by the Equipment Section. In addition, the routine scheduling of preventive maintenance is handled in the district and division shops and all major repair work is performed at Central Shops in Hightstown.

There was a general change in the cooperative effort of both operating and management personnel in the Maintenance Department with the signing of a contract between the Authority and Local 194 of the AFTE AFL/CIO. Both parties have a thorough understanding of the contract and are cooperating to make the agreement continue an already pleasant working atmosphere in the Maintenance Department.

The year ended with a more efficient, knowledgeable and sophisticated Maintenance Department.

personnel adjusts to growth

It could not be considered a normal year for the Personnel Department. In addition to the traditional services and functions expected, the Department was required to react, adjust, and facilitate extraordinary changes in staffing, and to formalize the working relationship between an organized labor union and management.

The Personnel Department conducted a concerted recruitment drive for Toll Collection personnel for the new Interchanges No. 10-11-15W, 16W and for 16E, and personnel essential to the operational maintenance of the 30-mile, 12-lane section. More than 3,500 employment applications were received, representing the largest number of applications processed since the beginning of this toll facility.

Pre-employment tests were administered to more than 800 applicants, and medical examinations given to 492.

The recruitment resulted in the employment of 282 new people since January 1, 1970. Our present staffing now reflects 1,373 employees, or a staff of 662 in Toll Collection, 552 in Maintenance, and 189 in Office/Clerical and Management.

For the first eight months of the year, the aggregate turnover rate of the operating departments was

approximately 7½%. For the last four months, the rate diminished to an almost imperceptible 1½%.

Contributing factors were: the economical climate in the private sector with an increase in the unemployment rate, the fact that the New Jersey Turnpike Authority is a prestigious employer, and the stabilizing effect of an established

agreement between the Authority and an organized labor union.

During various stages of its development, the Authority did in fact establish memoranda of agreement with labor unions, but none of these agreements had the full force and effect of legislative and judicial sanction. The enactment of Chapter 303, of the Public Laws



of 1968, offered to the public employee for the first time the opportunity for formal organization and collective negotiations.

Under the combined supervision of the Public Employment Relations Commission, a state agency created by the Act, and the American Arbitration Association, a majority of the non-supervisory Tolls

and Maintenance employees elected to be represented by Local 194, American Federation of Technical Engineers, AFL/CIO. Later, negotiations with the union began.

The Authority's negotiating team consisted of Anthony E. DeSimon, Director of Maintenance; Joseph R. Postizzi, Senior Attorney; Robert E. Ramsen, Director of Toll Collection; John F. Merrigan, Director of Personnel, and Oliver K. Compton, Jr., Assistant to the Executive Director, Committee Chairman. The negotiations covered a period of more than five months.

The final agreement was ratified by the union membership and signed by Authority Chairman Alfred E. Driscoll on August 12, 1970. The agreement liberalized fringe benefits and provided for an average 8% increase for non-supervisory employees. It represents a document sensitive to the welfare of the employee, the fiscal integrity of the Authority, and safety and convenience of the traveling public.

Personnel has been charged with the implementation of major articles in the agreement. Testing programs have been accelerated and expanded. More than 90 written examinations have been conducted for promotions within the negotiating unit, and for advancement to first level supervisory positions. The examinations used were chosen because of their validity established on a national basis.

During the year, Office/Clerical

and Management positions have also been considered for re-evaluation and reclassification. All Office/Clerical and Management employees were granted an approximate 8% increase retroactive to January 1, 1970. The Authority has also directed that a continuing inventory and audit of these positions be made and submitted for review in 1971.

The Labor Relations Committee, in accordance with the agreement, now functions with greater authority in the handling and the resolution of employee grievances. Although the Committee received hundreds of grievances, only 13 required formal hearings. This is testimony to the committee's effectiveness.

The Medical Division continued to provide attention and treatment as part of the pre-employment process, the pre-promotional program, and the periodic health service. Nearly 3,500 examinations were conducted. Influenza immunizations were administered to some 500 employees.

More than 350 chest x-rays were taken for present and prospective employees. It is hoped in the future that all Turnpike employees will have the opportunity for an annual physical examination health service.

Longevity payments of \$250 for employees having ten years or more of service were distributed to 478 employees, representing 35% of the total number of Authority personnel.



Turnpike committee drafting wages and benefits program. From left: Senior Attorney Postizzi, Tolls Director Ramsen, Assistant to Executive Director, Compton; Maintenance Director DeSimon, and Personnel Director Merrigan.

legal: providing for property needs

The year 1970 continued to be a "litigation year" having had its inception in 1969. Litigation primarily devoted to condemnation matters, with personnel of the Legal-Real Estate Department of the New Jersey Turnpike Authority involved in the preparation of pleadings, trial of hearings before condemnation commissioners, the arguing of specific motions, and/or applications on appeal from condemnation hearings—all with the ultimate view of resolving the acquisition price for those properties previously acquired by the Authority upon which amicable settlement had not been possible.

Much of the litigation, however, has not been completed, because of the more serious issues that has permeated the question of title to real estate: the claim of riparian rights, propounded rather vigorously on behalf of the Natural Resource Council in the Division of Natural Resources of the Department of Environmental Protection.

In instances where a judgment or an order has been obtained regarding the value of the property and the riparian interests have not been resolved, the Authority has deposited those monies with the Clerk of the Superior Court, thus presenting a fund for those parties, claiming an interest in the property, to make application therefrom.

In the summer of 1970, the Authority accepted, with regret, the resignation of Grover C. Richman, Jr., as General Counsel. However, the Authority was fortunate in the appointment of the new General Counsel, David W. Dowd, who was, at the time, a member of the New Jersey Senate. Senator Dowd

resigned as Senator upon his appointment. Under the direction of Dowd, the Legal-Real Estate Department continues to direct its efforts at the heavy condemnation-litigation calendar. It also furnishes legal representation, counsel, advice and services to the Authority's staff members and employees in the daily performance of their assignments. It represents the Authority and appears on its behalf in court litigation, in addition to condemnation matters and administrative hearings, and appears in all other matters wherein the Authority is an adversary or principle party involved.

Further corollary of this Department's efforts involved participation in the negotiations and execution of the recent Agreement entered into between the Authority and the American Federation of Technical Engineers, AFL-CIO, Local 194, and in that connection represents the Authority at all labor arbitration matters.

As a consequence of the property acquisitions program necessitated by the Widening, some properties acquired by the Authority are now surplus to its needs. This occurs in instances where the Authority would acquire an entire tract, rather than dividing a portion of it, and in doing so sustains the payment of heavy severance damages to the remainder. As a result, Legal-Real Estate, in accordance with standard Turnpike policy to restore such properties as quickly as possible to the tax rolls, after receiving the necessary certifications that the property is surplus, proceeds to dispose of it by the receipt of bids at public, competitive sales.



David W. Dowd (center) sworn in as General Counsel by Vice-Chairman Citrino (left), with Commissioner Harris, Authority treasurer, at the right.

The year 1970 saw the finalization of the project for integrating the attendance, payroll and fringe benefit accounting into a single mechanized system. This generates by-product management statistics that were never before available and radically reduces the amounts of clerical efforts and paper work previously connected with these functions.

Progress in the development of managerial information reports was evident through the implementation of a system for computer generation of productivity data, and, in addition, the updating of existing computer method of generating reports to control mobile equipment usage and maintenance.

A system for the audit of ticket activity in entry lanes of interchanges was designed and implemented in synchronization with the installation at new interchanges of newly designed ticket validating machines, and in cooperation with Traffic Engineering the development of a system for computerized preparation of accident reports was initiated.

Cooperating with Traffic Engineering, the Comptroller and Toll Collection, a unique descriptive ticket format was designed for use on completion of each of the final two phases of Turnpike widening. In each instance, the difficult task of exchanging ticket inventories (new for old) on a precisely coordinated schedule was satisfactorily accomplished.

Ticket audit and statistics processing for the newly opened interchanges was integrated into the department routine as was the ticket audit and statistics processing of the unexpectedly high increase in ticket volume at the old-line interchanges.

First components of our Management Information System computer will be installed in February 1971,

data: toward a single system

NEW JERSEY TURNPIKE AUTHORITY		CLASS					
INTERCHANGE	1 ST CLASS	2 ND CLASS	3 RD CLASS	4 TH CLASS	5 TH CLASS	6 TH CLASS	
1 - DELAWARE MEMORIAL BRIDGE	1.15	2.10	2.85	3.30	3.75	4.20	
2 - SWEDENBORO CHESTER	1.00	1.85	2.50	2.90	3.30	3.70	
3 - WOODBURY SOUTH CAMDEN	.85	1.55	2.15	2.50	2.85	3.20	
4 - CAMDEN PHILADELPHIA	.75	1.40	1.90	2.20	2.50	2.80	
5 - BURLINGTON MOUNT HOLLY	.65	1.20	1.65	1.90	2.15	2.40	
6 - PENNSYLVANIA TURNPIKE	.80	1.45	1.95	2.25	2.55	2.85	
7 - HORDENTOWN TRENTON	.55	1.05	1.40	1.60	1.80	2.00	
7A - NOT YET OPEN	-	-	-	-	-	-	
8 - HIGHTSTOWN TRENTON	.40	.80	1.05	1.20	1.35	1.50	
8A - JAMESBURG CRANFORD	.35	.70	.90	1.00	1.10	1.20	
9 - NEW BRUNSWICK	.25	.50	.70	.80	.90	1.00	
10 - I-207-PERTH AMBOY BELLEVILLE-CHASON TWY	.20	.45	.55	.60	.65	.70	
11 - GARDEN STATE PKY. WOODBRIDGE	.10	.15	.25	.30	.35	.40	
ENTRY WAS MADE AT		PARK DISABLED VEHICLE ON RIGHT SHOULDER-STAY WITH VEHICLE AND AWAIT POLICE AID					
12 - ENTRY		-	-	-	-	-	
13 - I-276-ELIZABETH GOETHALS BRIDGE		.15	.15	.25	.30	.35	
Surrender ticket at exit and pay toll printed for exit interchange. If ticket is lost, toll to the most distant interchange will be collected. "U" TURNS ARE PROHIBITED							
AXLE VARIATION		CLASS					
14 - I-76-NEWARK AIRPORT		.35	.50	.75	.85	.95	
14A - BAYONNE		.60	1.00	1.35	1.55	1.75	
14B - JERSEY CITY		.65	1.10	1.50	1.70	1.90	
14C - HOLLAND TUNNEL		.70	1.20	1.60	1.85	2.10	
15 E - NEWARK JERSEY CITY		.45	.70	1.00	1.15	1.30	
15 W - I-280-NEWARK THE ORANGES		.50	.80	1.20	1.35	1.50	
16 E - LINCOLN TUNNEL NJ-9-SECAUCUS		.65	1.05	1.45	1.70	1.95	
16 W - NJ-9-SECAUCUS RUTHERFORD		.60	1.05	1.45	1.70	1.95	
16EW - GEORGE WASH BRIDGE U.S. 46		.85	1.40	1.90	2.20	2.50	

Proposed consolidated all-purpose toll ticket.

and the phases for application of functions to the computer are:

- (1) Ticket Prepunching: to start as soon as the machine is operable.
- (2) Inventory Control: Plan to start April 1, 1971.
- (3) Ticket Processing: July 1, 1971.
- (4) Batch Processing: October 1, 1971.
- (5) Purchasing: January 1, 1972.
- (6) Receiving and Invoice Control: July 1, 1972.
- (7) Personnel and Budgeting: October 1, 1972.
- (8) Payroll Adaption: January 1, 1973.

Activities of preparation for the new Computer (programming, procedure writing, inventory cataloging) are on schedule.

Inventory Control, generally considered the most interesting application, will be an "on-line" function with data for each of the estimated 20,000 items being maintained in disc storage at the Administration Building.

Field personnel will have access to the inventory data through three cathode ray tube consoles which will be located at Central Shops in Hightstown; Division Headquarters, North, in Elizabeth, and Division Headquarters, South, in Moorestown. Additional consoles can, of course, be added if they are considered desirable or necessary. The consoles will communicate with the central office computer via the Turnpike telephone networks. Central Shops and Division clerks will use the console for updating the inventory records on the computer disc and the Internal Audit Group of the Comptroller's office will make periodic physical counts as an audit check.

Reports that can be printed or displayed as required or on a fixed schedule include: (1) items to be requisitioned (2) lists of items for which delivery is overdue (3) items heavily overstocked or dangerously understocked (4) dollar value of inventory by location and overall, and (5) catalogue books or lists.

With the Widening a bright reality, there was in 1970 a ringing-out of the old and an increasing ringing-in of the new as the request for information turned from one large accomplishment to even more impressive projects under study for the future.

The last of the Widening links, the westerly alignment through the meadows, was opened to the public on September 3 without fanfare. Hardly had it opened when attention was focused on a proposal to extend the Widening south to New Brunswick. And it wasn't much later that the proposal for a turnpike from Toms River to Wayne, connecting with Interstate 287 and the New York Thruway, was advanced by Governor Cahill. The public's calls for information increased.

The telephone at Public Information became a most formidable instrument of communication. The mails too, were busy. Direct contact with the public became more frequent than when the 12-lane Widening program was first proposed in 1964. Here was another new concept to jog the imagination.

The press, too, shared in the quest for details. Through it the public was periodically advised on these future plans as well as other Turnpike activities and programs in the form of news releases to the media.

If the future loomed large in Authority thinking, the present was very much with us, too.

From time to time, we were hosts to visitors from foreign countries, including highway engineers from Japan, Australia, France and Spain.

They came, as they did in other years, to learn how things were done on the New Jersey Turnpike, to "pick its brains" on matters dealing with construction methods, data processing procedures, signing and communication techniques, operational features and, above all,

public information: ringing in the new

safety.

The Department in 1970 established closer relations with press and radio news media, and was host to the two radio helicopter teams from Mutual and CBS when they visited the Turnpike in October.

Internally, the information machine served employees along the entire Turnpike, nearly 1,400 persons in various capacities and professional skills. Every month for the 11th consecutive year, they received the Pike Interchange, their house organ, first issued in September 1959. The newspaper covered, within the allotted space, Turnpike activities and news of personnel, coverage designed to bring the organization in closer rapport despite the miles that separate its various units.



Fred Feldman, flying traffic reporter, greeted on visit to Turnpike by Director of Public Information H.A. Tani.

In Public Information the work of processing entries in the Suggestions Plan continued. It was the eighth year of the program, with 762 suggestions received from employees during the year. Two rounds of \$25 to \$50 cash awards were made to 18 employees by the Suggestions Committee after it had judged the entries reviewed by department heads. All suggestions are received, processed and filed by the Public Information Department for review at the Departmental and Committee levels. In the eight years of the program employees have received awards for 251 suggestions.

During the year the Department supplied many photographs and color slides to trade publications, school textbooks, map companies and other firms, in addition to furnishing photos to the news media. It also provided other Turnpike departments with photographs and complied with requests from attorneys and insurance companies for photos of accident sites.

The year ended on a hopeful note for Public Information's film project, its documentary on the Widening. After three years of operations by the Photographic Section, thousands of feet of color film were being collated for the final production.

Great interest in the film was shown by representatives of the American Iron and Steel Institute. As a result, discussions were conducted between representatives of the Turnpike and the Institute looking to the production of the film under their joint auspices for wide, non-commercial distribution in 1971.

For the Public Information Department, underscoring the policies of an organization continually on the move, the accent was on the future. As the year ended, it looked promising.

record year in purchasing

Record expenditures in purchasing and services totalling \$5,265,366 were made in 1970 resulting in an increase of more than \$2 million over 1969. Included is the purchase of additional equipment for the widening program and the opening of new District 8 in East Rutherford.

The most modern inventory of supplies is now available to keep this highly travelled portion of the roadway in excellent operating condition.

To maintain our "Queen of Toll Roads" image the appearance of the latest models of heavy equipment is constant. Tractors, vans, dump trucks, loaders, sweepers, graders and utility trailers of all types besides mowers, plows, spreaders, diggers, excavators, aerial tower and a high powered sewer cleaner were purchased on competitive bidding. Fuel and assorted accessories to keep this fleet completely operable were also purchased.

The many new miles of our additional lanes increased the demand for more guard rail, delineator posts, reflectors, markers, signs and components. New line-stripping machines, compressors, tar-kettles and all related elements also kept the department active.

A new paint is being used in an experimental way that, if proven successful, will be invaluable for the maintenance of guard rail in rust prevention.



Director of Purchasing Donabue checking on some department requisitions.

With air pollution uppermost in today's problems, new burners were purchased and installed at various locations where the use of a lower sulphuric content fuel can be burned. A further contribution to "cleaner air" was also made when the Authority installed new incinerators with the latest equipment to meet current Air Pollution codes. Fourteen new incinerators and twenty new burners are now functioning.

Improvements were made to air conditioning units at the various service areas.

Snow removal operations present a monumental task considering the Turnpike expansion of over 140 miles plus access ramps. To cope with the snow and extreme freezing conditions, more than 27,000 tons of rock salt are ordered and stored under bins at Maintenance Districts. Salt spreaders and a special snow melter are activated for instant use. Purchasing is responsible for securing outside contractors to help our own Maintenance Department with plowing operations so that lane closing is at a minimum.

State Police maintain constant patrols aided by an outside weather forecasting service. Turnpike communications are provided with the latest electronic devices to assist their Radio Control Section, and new equipment presently on order will allow messages to be transmitted with greater expediency in 1971.

patron facilities augmented

Constant surveillance and planning by Patron Services are necessary to provide satisfactory service to all categories of the Turnpike travelling public.

During the current year, restaurant and service station sales have increased. As usual, the greatest amount of business occurred during the summer months and on weekends, especially on the long holiday weekend periods.

Diesel sales, including other sales to truck patrons, have shown the greatest increase. Enlargement of the truck parking lot at the Alexander Hamilton (12S) Service Area, which was undertaken last year, is now completed with the original 10 spaces increased to 36. It has eliminated a hazardous parking condition in the service area caused by trucks on the ramps and curb lines, partially and at times completely blocking traffic. Since the opening of the enlarged lot on April 23, unsatisfactory parking problems have been removed.

To provide faster service to patrons and to eliminate congestion during busy periods in the restaurants at the Richard Stockton (6S) and the Woodrow Wilson (6N) Service Areas, new snack bars were constructed. The snack bar at the Woodrow Wilson Service Area opened for business on July 10 and the one at the Richard Stockton on July 31. Sales at both locations were much greater than anticipated, some of which were additional revenue, as sales in the conventional



*Citgo attendants servicing car
at Joyce Kilmer Service Area.*

restaurants did not decrease correspondingly. Total sales in the 6N snack bar during its seasonal operations to October 16 were \$75,271 and for the 6S snack bar to October 23 was \$49,480. In general, service in both restaurants is faster and more satisfactory with the snack bars in operation.

The interiors of several restaurants have been attractively redecorated. An additional replacement of restaurant equipment this year with new more modern types has resulted in better food quality, higher health standards and faster service. New microwave ovens were installed in all Turnpike restaurants and larger more modern dishwashing equipment has been installed in the James Fenimore Cooper (4N), Molly Pitcher (7S) and Thomas Edison (10S) restaurants.

Plans are being formulated for the construction of a new service area at Carlstadt in the northern part of the Turnpike accessible to patrons using both the easterly and westerly roadways. Changes in future traffic patterns being brought about by the construction of new feeder highways connecting with Turnpike interchanges will result in demands for changes in the service area operation. These prospects in addition to the greater than normal increase of business will necessitate recommendations for modifications and enlargements in order that the Turnpike can provide the type of satisfactory service required by its patrons.



Loop ramp configuration for new Interchange 16W (not seen left of photo) at Overpeck Creek. Route 3 bridge over Hackensack River is at the top right.

