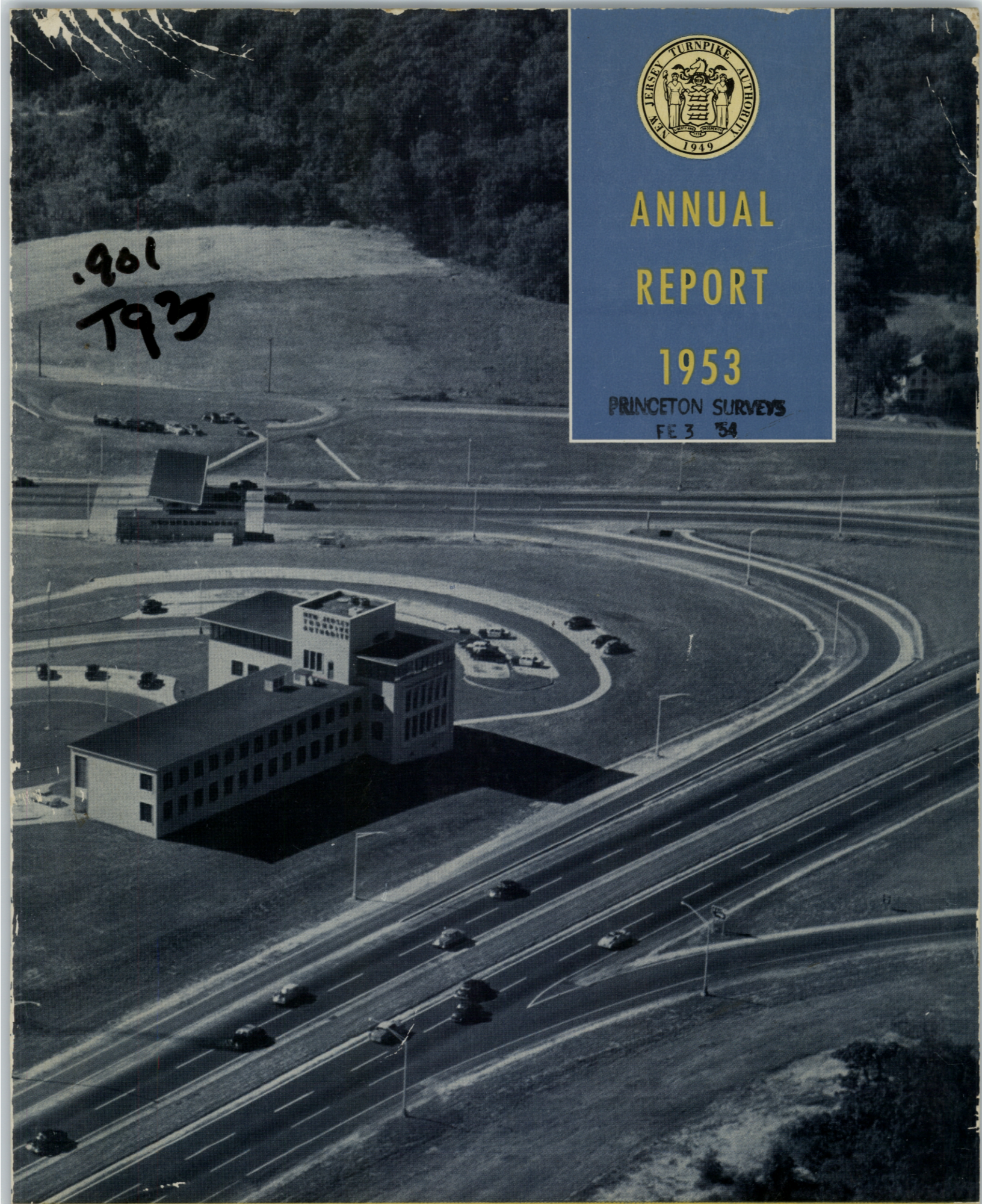

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ANNUAL REPORT 1953

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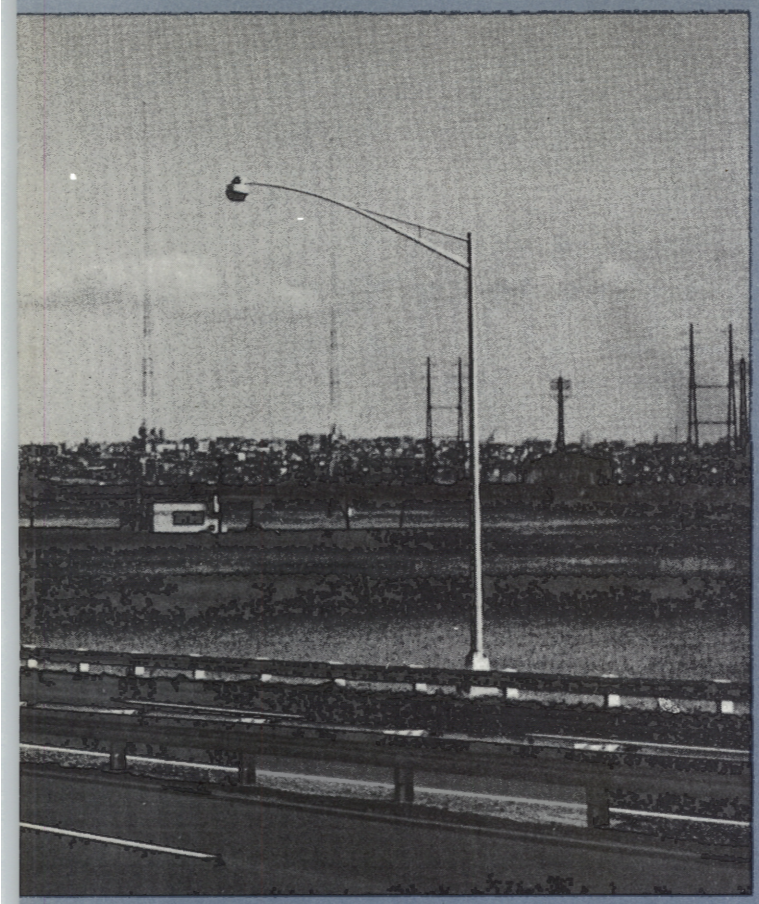
NEW JERSEY TURNPIKE AUTHORITY







NEW JERSEY TUR



New light standards erected in 1953 between bridge crossings of Hackensack and Passaic Rivers

N P I K E A U T H O R I T Y

FIFTH ANNUAL REPORT 1953

PAUL L. TROAST, Chairman

GEORGE F. SMITH, Vice-Chairman

MAXWELL LESTER, JR., Treasurer

STATE OF NEW JERSEY
OFFICE OF THE GOVERNOR
TRENTON

ALFRED E. DRISCOLL
GOVERNOR

January 7, 1954

Commissioner Paul L. Troast
Chairman, New Jersey Turnpike Authority
New Jersey Turnpike
New Brunswick, New Jersey

My dear Commissioner Troast:

This year, as in previous years, the annual report of the New Jersey Turnpike Authority presents a great New Jersey success story. In a comparatively short period of time, the New Jersey Turnpike has become an integral part of our lives. The facility that you and your fellow Commissioners have built, at my request, and with my support, serves the Nation as well as the State. It is one of the most important achievements of this administration.

From your report, which I have read with great interest, it is apparent that in two years over forty-one million vehicles have used our Turnpike. I shudder to think what would have happened if these forty-one million vehicles had been added to the millions of vehicles that, during this same period, were using U. S. 130 and U. S. 1, the free competing highways. It is, perhaps, significant that during the period of time that the Turnpike has been under construction, we have been spending many millions of dollars improving the highways that I have just mentioned.

Your report further discloses that more than a hundred million persons, from all parts of the country, have used the Turnpike and that their total mileage on the facility almost equals two billion miles. These are staggering figures, indicative of the public acceptance of a highway that the Commission built with maximum speed and minimum expense.

I am particularly impressed by the improvement in the safety record. Our statistics have always disclosed that the Turnpike was one of America's safest highways. When it comes to accidents, however, statistics do not provide a very satisfactory answer. One accident is too many. Accordingly, the reduction of the accident record by almost one-third is cause for congratulations and a challenge for future perseverance in our safety campaign.

In this, the last year of our association, I desire again, as I have in the past, to extend to the Commissioners my congratulations for the tremendous contribution that they have made to the welfare of our State and Nation. It was well done.

The Turnpike story, however, is not complete. Greatly needed extensions are now in the process of being built. I am confident that in the construction of these extensions, and in others that will soon be commenced, the same high standards will be maintained and that they will meet needs just as essential as those met by the main stem of the Turnpike.

Very sincerely yours,

Alfred E. Driscoll

Governor

PAUL L. TROAST, CHAIRMAN
GEORGE F. SMITH, VICE-CHAIRMAN
MAXWELL LESTER, JR., TREASURER

NEW JERSEY TURNPIKE AUTHORITY

NEW BRUNSWICK, N. J.

The Honorable Alfred E. Driscoll, Governor,
and the Members of the Legislature
of the State of New Jersey:

The New Jersey Turnpike Authority submits herewith its fifth annual report in accordance with the statutes, together with an independent audit of its accounts.

The year 1953, just ended, marked new milestones in traffic and revenues. It included an encouraging improvement in safety, the beginning of new construction deemed essential in the public interest, and progress on studies of other legislated projects to serve motorists and truckers adequately and safely.

We again express our appreciation and gratitude to the Governor for his encouragement and cooperation, and the members of the Legislature, the many officials and employees of the State, Counties and Municipalities for their assistance and support during the year. We are also appreciative of the cooperation extended by the press and other media in disseminating public information about the Turn-

pike. All have contributed importantly to the outstanding success of the Turnpike.

In retrospect, the accomplishments of the Authority since its organization on March 31, 1949 – just short of five years – have been gratifying. A summary of these accomplishments includes the resolving of many problems, some of which seemed impossible of resolution at the time; the building of a sound organization from a few employees in 1949 to 575 at the end of 1953; the successful financing and completion of construction in the record time of 23 months of the full 118-mile Turnpike and, the beginning of operation on November 5, 1951.

From the latter date to the end of 1953, the Turnpike carried 41,188,677 vehicles, transporting more than 100,000,000 persons for a distance of 1,677,876,051 miles. Total revenues for the year 1953 were $21,510,629. There is no similar highway anywhere which can match this record.

Because of the Turnpike construction and method of financing, the State and its citizens have gained many benefits. The State has been relieved of paying for a similar highway so that it may use its normal funds in the construction of free highways in other areas where they are urgently needed. And, by diverting substantial volumes of traffic from the public highways, the costs of maintenance and repair of the latter have been reduced and their useful life increased.

Taxes collected from the sales of gasoline on the Turnpike since its opening amounted to more than $1,000,000 and accrued to the State to implement the funds for the construction of new free highways and for the repair and maintenance of the existing system. During 1953, moreover,

fines imposed on violators of the Authority's traffic regulations, amounting to more than $204,000, were collected by the State for the benefit of its citizens. The Turnpike is self-supporting and self-liquidating. Not one penny of taxpayers' money is used and no government funds (national, state or local) are used. There are no subsidies of any kind.

Traffic and revenues during 1953, for the second year of operation, again set new records about two and a half times the original estimates and reached the levels forecast at the time of the financing for 1975. During the year, daily traffic frequently ranged from three to four times the forecasts; yet the heavy traffic volumes were handled efficiently, and without delays, throughout the 118 miles of the Turnpike. The average traffic for 1953 was 60,700 vehicles daily, and the peak of 97,800 vehicles was reached on August 1.

Because of the constantly soaring traffic in 1953, measures again had to be taken to provide additional facilities to meet demands on the highway and its service areas. It is quite apparent, on the past year's experience, that travel lanes in the northern section must be expanded to handle traffic volumes adequately and expeditiously. Plans for this expansion are well advanced and the work, after financing is arranged, will be undertaken as promptly as possible. The program contemplates that the four lane sections from the George Washington Bridge Interchange to the Camden-Philadelphia Interchange, will be expanded to six lanes, a distance of 83.3 miles. A short section in Elizabeth presently is eight lanes.

One of the most important projects on the Authority's program for 1954 is the Newark Bay-Hudson County Extension

for which legislation was passed by the State Legislature in 1952. Financing for this project was concluded last October and the initial contracts were awarded for construction. This Extension is urgently needed by Hudson and Essex Counties to afford relief from existing congestion and overloading on streets and highways, and construction will be expedited.

While progress was made on engineering plans last year for the direct connection with the Pennsylvania Turnpike, financing and construction were delayed because of legal problems affecting jurisdiction of the site of the new bridge crossing of the Delaware River. Late in the year this problem was clarified somewhat, but there still remain further problems to overcome. It is hoped that they will be resolved in the near future.

Only limited survey work was accomplished for the proposed East-West Turnpike and the northern extension of the Turnpike for a direct connection to the New York State Thruway. Funds, heretofore unavailable, to undertake comprehensive studies to determine the economic practicability of these projects were obtained recently from the sale of bonds and it is contemplated that studies will be actively pursued this year. The northern extension still awaits clarification of alternate route proposals and this, it is hoped, also will be forthcoming soon.

The past year witnessed the completion and successful operation of the three snack bars mentioned in the 1952 annual report, and certain other improvements and enlargements to service areas. Some of this work, including alterations and additions to restaurants and service stations, together with heating, plumbing, ventilating

and electrical work, water and sewage disposal facilities, has been carried over into 1954 on contracts awarded late in the year. Completion is scheduled for Spring.

A combination of factors, including an increase in the Turnpike detachment of the State Police, new procedures in operation during the adverse weather conditions, and rigid enforcement of regulations, was reflected in a greatly improved safety record. Accidents and fatalities were reduced sharply to levels well below those of the parallel public highways in New Jersey and of the nation's public highways as a whole.

During the major holiday periods in the past year, including Christmas and New Year's week-ends, there was not a single fatality on the Turnpike and the number of accidents was reduced to a level far below that on the Public highways. This favorable record reflects, also, the sound design and construction of the Turnpike which incorporates every modern safety device known to the engineering profession.

Safety will be under constant study by the Authority and its engineering and traffic divisions with the objective of further improvement in the excellent record which has been established. Accidents on the Turnpike, from careful analyses made at the time they occur, are largely the result of inattention to driving, carelessness or recklessness, causes which cannot be fully controlled even with the application of the finest skills of the engineers. Driver education on all highways must become an integral part of a continuing program in our expanding motorized economy.

Again we extend our thanks to our loyal staff, engineering, legal and financial advisors and others who played important roles in the success of the Turnpike during 1953.

For 1954 we enter another year of progressive development, the beginning of new construction to supply the demands of motorists and truckers for modern highways, and service in the public interest. The multiple tasks ahead will impose additional burdens on the staff, but we are confident that they will be accomplished efficiently and satisfactorily.

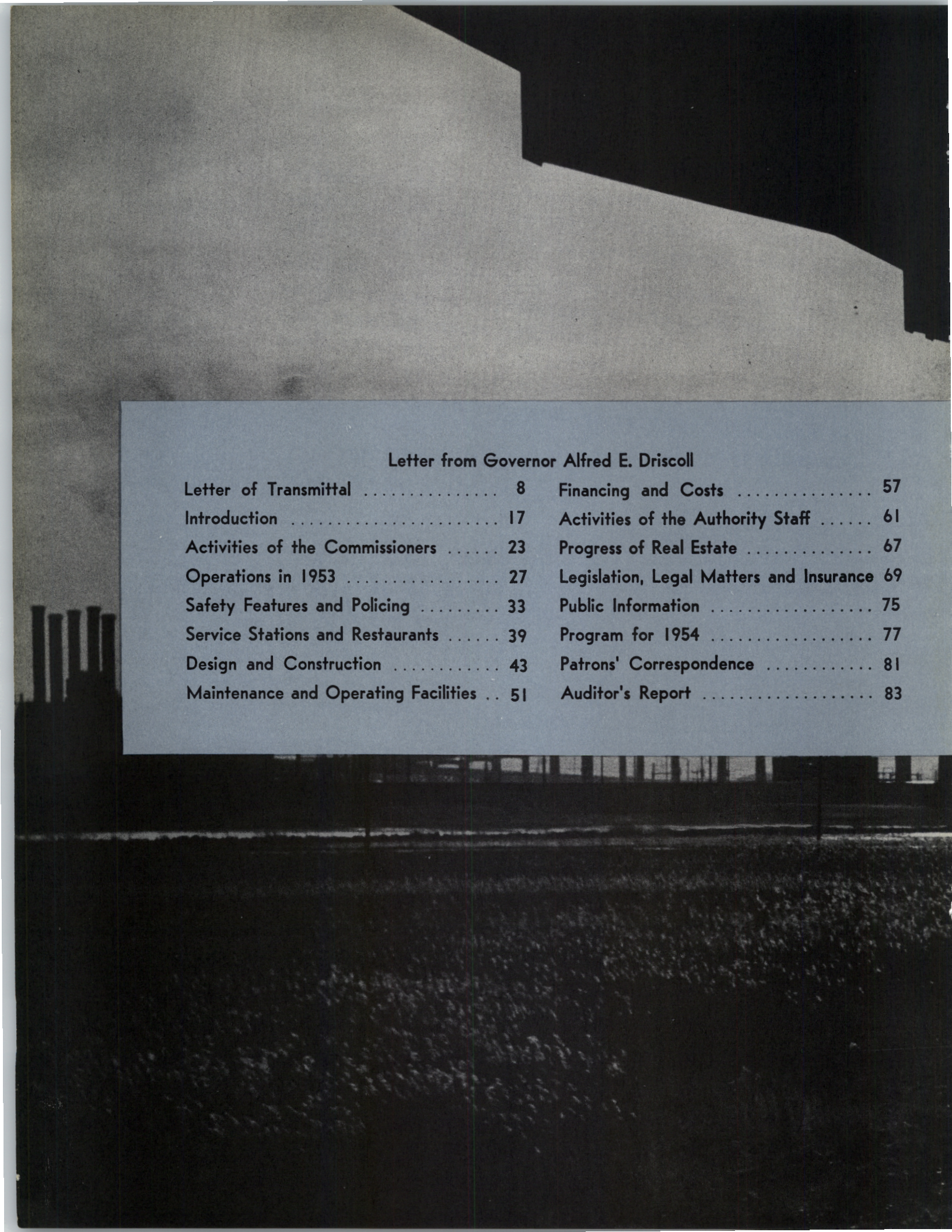
Respectfully submitted,
NEW JERSEY TURNPIKE AUTHORITY

Paul L. Troast, Chairman

George F. Smith, Vice-Chairman

Maxwell Lester, Jr., Treasurer

January 12, 1954



Letter from Governor Alfred E. Driscoll

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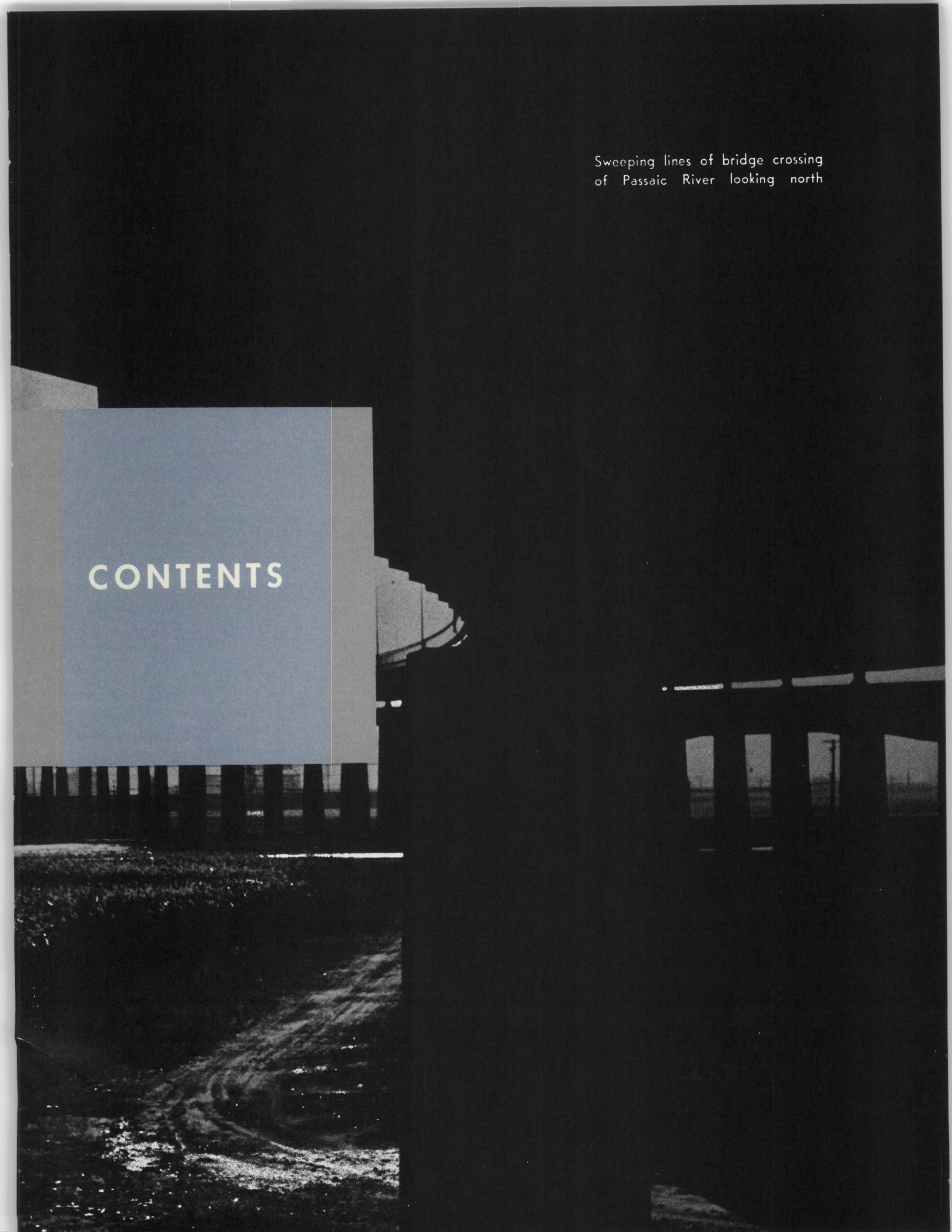

Sweeping lines of bridge crossing
of Passaic River looking north

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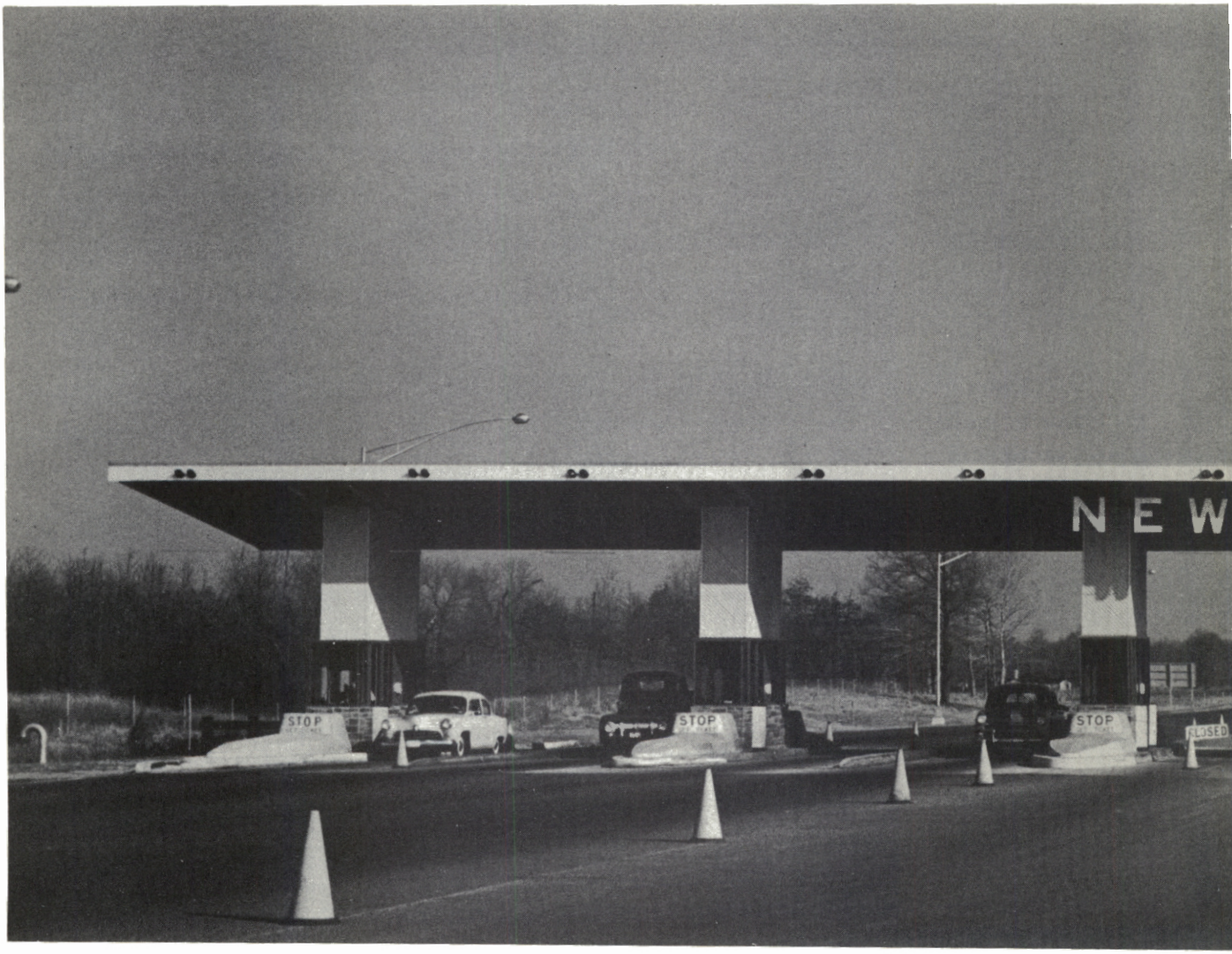
While it had been expected that the problem confronting the Authority with respect to the new crossing of the Delaware River for a direct connection to the Pennsylvania Turnpike would be resolved early in 1953, this did not materialize. Late in the year, however, substantial clarification of the jurisdictional issue had been accomplished, but there are other problems to be resolved before construction can get underway. This project, like the Newark Bay-Hudson County Extension, is economically feasible according to the independent engineers.

Studies are continuing of the proposed extension from the present northerly terminus of the Turnpike in Ridgefield Park through Bergen County to connect with a spur of the New York Thruway at the boundary. Construction of this project, as was stated in the annual report for 1952, will depend upon conferences with the New Jersey Highway Authority to determine whether or not the Garden State Parkway, being built by that Authority, or the Turnpike can better serve that area of New Jersey. That decision is still to be made.

Since the Authority was prohibited, under the terms of its bond resolution, from using current funds for studies of the East-West Turnpike across the northern part of the State, only very limited preliminary studies were made on this project. Coincident with the recent financing of the Newark Bay-Hudson County



Extension, however, funds were provided to undertake comprehensive surveys and it is planned to proceed in the immediate future to determine the economic practicability of the East-West Turnpike. If such feasibility is demonstrated, the East-West Turnpike probably will be undertaken as a project separate and distinct from the present Turnpike.

Engineering work is now approaching completion on the proposed widening to six lanes, from four, of certain sections of the 118-mile Turnpike to accommodate the constantly increasing volume of traffic. Such widening would result in six lanes or more from the George Washington Bridge Interchange to the Camden-Philadelphia Interchange, a distance of 83.3 miles. At present six lanes are available only between the Lincoln Tunnel and Woodbridge-Amboys interchanges.

Bondholders were kept informed of progress in 1953 by monthly reports as well as by quarterly reports as of March 31, June 30 and September 30. These reports outlined the status of operating conditions, contracts awarded and construction progress, together with other essential facts.

This, the fifth annual report to be issued by the Authority, describes these activities in greater detail for all of 1953 and projects the plans of the Authority for 1954.



Typical toll plaza


NEW JERSEY TURNPIKE AUTHORITY
LIBERTY AND PROSPERITY
1776
1949

NEW JERSEY TURNPIKE AUTHORITY

New Brunswick, New Jersey

COMMISSIONERS

PAUL L. TROAST
Chairman

GEORGE F. SMITH
Vice-Chairman

MAXWELL LESTER, JR.
Treasurer

LILLIAN M. SCHWARTZ
Secretary
Assistant Treasurer

THOMAS R. LOWRIE
Assistant Treasurer
Acting Executive Director
Director of Real Estate

JOHN A. UNDERWOOD
Executive Assistant
to
Chairman

WARD J. HERBERT
Counsel

CHARLES M. NOBLE
Chief Engineer

NEVILLE R. ASHCROFT
Comptroller

HENRY E. ROSE
Director of Public Information

CONSULTING ENGINEERS

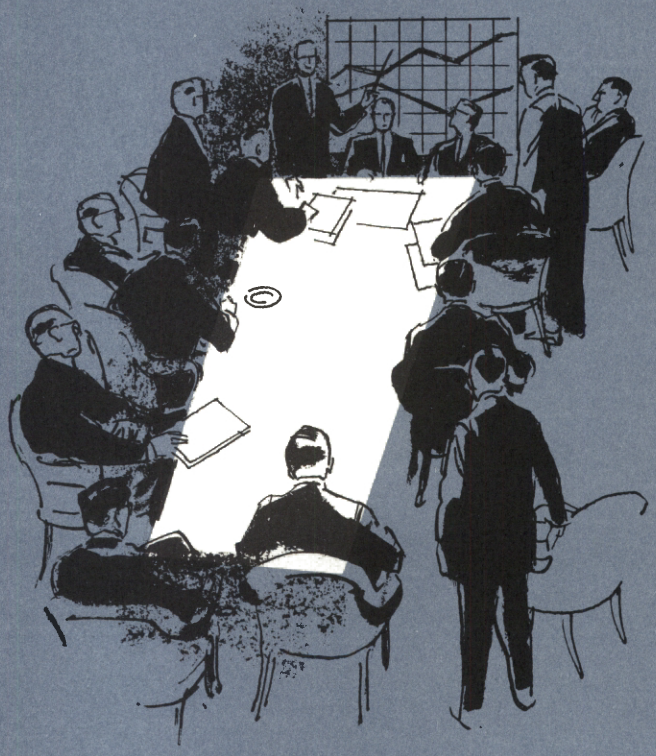
Howard, Needles, Tammen & Bergendoff

AUDITORS
Peat, Marwick, Mitchell & Co.

TRAFFIC AND REVENUE ENGINEERS
Coverdale & Colpitts

BOND COUNSEL
Hawkins, Delafield & Wood

Activities of the Commissioners



THE ACTIVITIES of the Commissioners were numerous during the past year. These activities ranged from the establishment of policy and direction regarding operations; the planning and construction of additional facilities essential to assure prompt, safe and adequate services to users; the planning, financing and beginning of construction of the Newark Bay-Hudson County Extension; the continuation of studies and discussions of other legislated projects; and, the resolving of problems affecting personnel and equipment for rendering the optimum in service at minimum cost.

Of outstanding importance was the continuing study, and adoption, of further measures to improve the fine safety record which the Turnpike has established in its relatively brief period of operation. Such measures included neon-lighted signs to be used in periods of adverse weather conditions, especially fog; a substantial increase in the State Police detachment assigned to the Turnpike; procedures with respect to policing operations under varying conditions of fog; an increase in the use of radar to check and apprehend violators of speed limitations; additional lighting in certain sections at the service areas and interchanges; and many others.

With particular emphasis on safety, the Authority availed itself of opportunities to bring this theme to public attention. Safety is a national problem and affects all highways. As was the case in 1952, the Commissioners were largely responsible for the introduction of additional measures to cope with this problem and, as experience indicated, the Commissioners sponsored sometimes revolutionary studies.

That the New Jersey Turnpike Authority is among the leaders in introducing novel safety practices is evidenced by inquiries from highway authorities in various states and, as well, from abroad.

The safety of the Turnpike, which is covered more completely in another section of this report, showed a marked improvement in 1953 as compared to 1952. Accidents, injuries and fatalities were sharply lower and well below the averages for the State's highway system and the nation's highways as a whole.

Significantly, the Turnpike experienced not a single fatality over seven holiday periods (New Year's, Lincoln's and Washington's Birthdays, Memorial Day, Independence Day, Thanksgiving and Christmas) when traffic was unusually heavy. Furthermore, there were relatively few accidents over these holiday periods. In contrast, the records for the national highway system were marred with many accidents and fatalities.

As was mentioned in the Annual Report for 1952, the need for constant driver education on a national scale is clearly apparent. The Authority will continue to participate actively in this program. It has sought, and obtained, the full cooperation of military officials in the eastern area in such a program as it relates to the use of highways by service personnel. It will continue, through the State Police on the Turnpike, to enforce speed and other regulations in a determined effort to control careless or reckless driving on the highway.

Labor relations entered into the activities of the Commissioners during the past year when the toll collectors and maintenance employees became affiliated with organized groups for the purpose of establishing schedules of wages and hours, and in setting up classifications for employees. Numerous discussions were held by the Commissioners with representatives of these groups and terms reached were generally satisfactory to both the Authority and the employees involved.

During the year considerable time of the Commissioners was devoted to studies of the Newark Bay-Hudson County Extension. When

the recommendations of the consulting and traffic and revenue engineers were submitted to the Authority, the three Commissioners presented the plans for this Extension to the officials of Hudson County, and later to Newark officials, for their consideration before adopting the final alignment. Financing was arranged in October, 1953, by the Commissioners after prolonged discussions with investment bankers and bond counsel. Bids for construction work were sought immediately and the contracts for the Newark Bay bridge, the major part of this Extension, were awarded by the Commissioners before the end of the year.

During the year, there were further discussions with members of the Pennsylvania Turnpike Commission of plans to provide a direct connection between the two Turnpikes; with the New Jersey Highway Authority and the New Jersey State Highway Department on problems of mutual interest, and with the Port of New York Authority in connection with the Newark Bay-Hudson County Extension and other matters bearing jointly on future plans as they affect other facilities.



New radar enforcement signs

All of these matters occupied considerable time of the Commissioners, aside from that devoted to the Authority's regular meetings. In addition, there were conferences with municipal officials in the several areas concerned with alignments of the various extensions and the proposed East-West Turnpike.

In all matters, the Commissioners kept Governor Driscoll informed of developments and progress. His encouragement and support and the cooperation of other officials in the State have served to minimize and overcome the problems posed at times, and have been extremely helpful in insuring the maximum of service to the public.

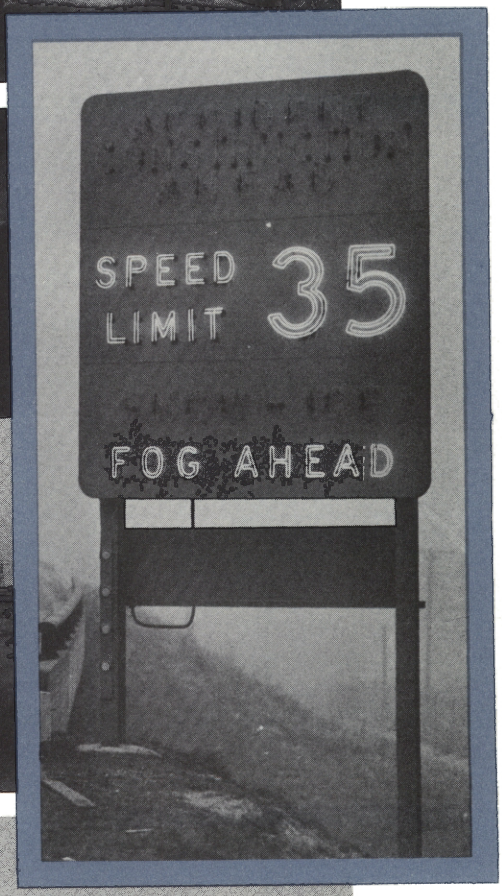
The Commissioners also participated in many addresses before professional, civic, social, business and religious groups in the past year, telling the story of the Turnpike and its plans for the future. These meetings afforded an opportunity for developing a better understanding of and, generally, a friendly attitude toward the Authority, its problems and its objectives.

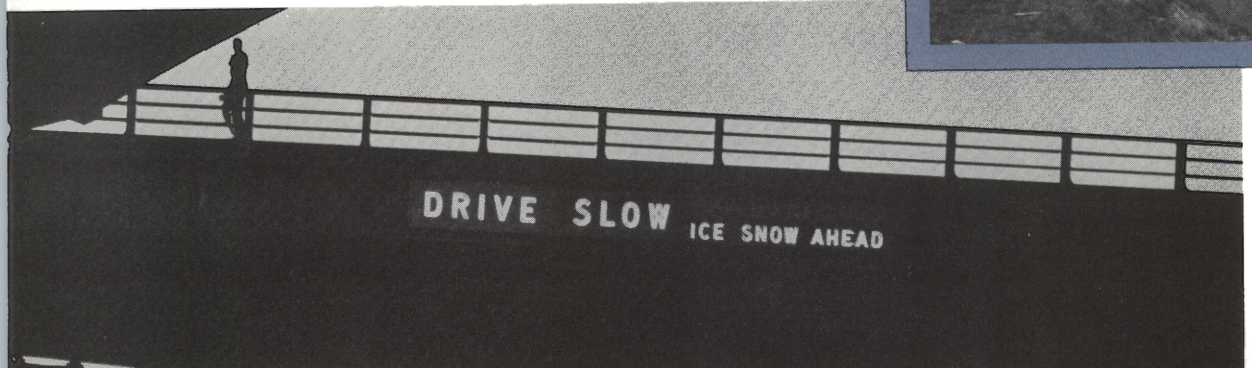
Only recently in Washington, the Chairman was a member of a panel on highway transportation sponsored by the Chamber of Commerce of the United States for a discussion of toll road financing, the service which such roads render, and the benefits they confer in supplementing the normal free highway systems.

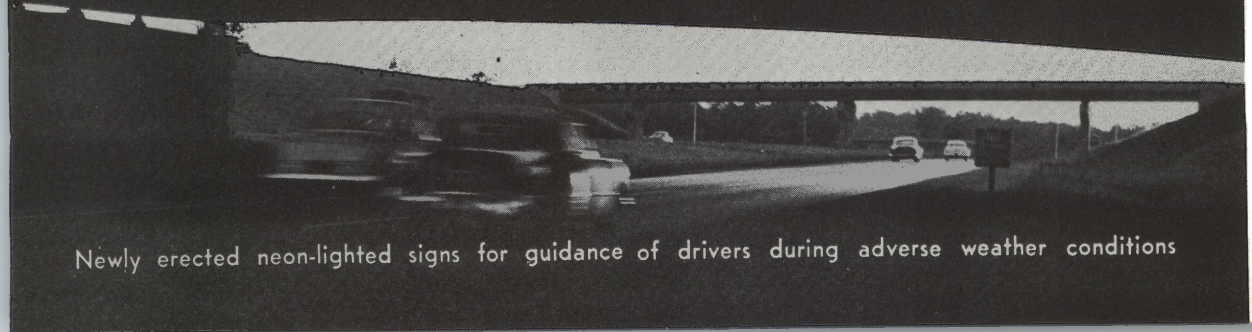
The Commissioners participated in several conferences at headquarters with representatives of toll authorities from other states, including Indiana, Illinois, Michigan, Wisconsin, New York, Missouri, Georgia, Florida, Kansas and California, giving information as to legislation, financing, design, engineering, construction and operating experiences. Some of these authorities have just been organized; others are in the process of organizing and others are still exploring the potentials of constructing and operating toll roads in their states.











Newly erected neon-lighted signs for guidance of drivers during adverse weather conditions

Operations in 1953



TRAFFIC AND REVENUES soared to new high levels during 1953, greatly exceeding original estimates. The traffic in 1953 was that forecast by the engineers for 1975, or 22 years from now. Revenues from tolls and concessions showed a similar trend.

A combination of factors accounts for the vastly increased volume of traffic. The New Jersey Turnpike is in the heart of the principal metropolitan area in the country, serving New York City and Philadelphia, the first and third largest cities. Traffic densities between these cities are the greatest of any comparable section in the world. Much larger volumes of newly generated traffic and substantial commuter travel also account, in part, for the high level of traffic.

A total of 22,159,084 vehicles moved over the Turnpike in 1953, a daily average of 60,700, or two and one-half times the number (23,900) estimated by the independent engineers. Of that number, 22,005,078 were revenue-producing vehicles of various classes. The remainder represented non-revenue vehicles used by engineers and a small number of contractors in their construction operations on the Turnpike; by the State Police detachment assigned to the Turnpike and members of the Authority staff in their normal duties; and by fire and other emergency services.

The increase in revenue-producing vehicles in 1953 over the preceding year was 22.6 percent, which would compare with the estimated increase by the independent engineers of 15 percent.

Revenues from tolls amounted to $19,192,647 an increase of 133.2 percent compared with the engineers' estimates of $8,250,000 in 1953, and of 18.1 percent compared with actual toll revenues in 1952. On a daily basis, actual toll revenues averaged $52,588 in 1953 compared with $44,386 in 1952 and $22,600 average estimated by the engineers.

The toll revenues in 1953, together with $2,317,982 in revenues from concessions operated by the Cities Service Oil Company and Howard Johnson Company, and miscellaneous income, lifted total revenues of the Authority from all sources to $21,510,629. The latter compared to $17,829,636 in 1952. The Authority's revenues from concessions, alone, were 198 percent above the engineers' estimates for 1953, and reflect, to some extent, the increased facilities, three snack bars and enlarged lunch rooms at several sites, which came into operation in the summer of that year.

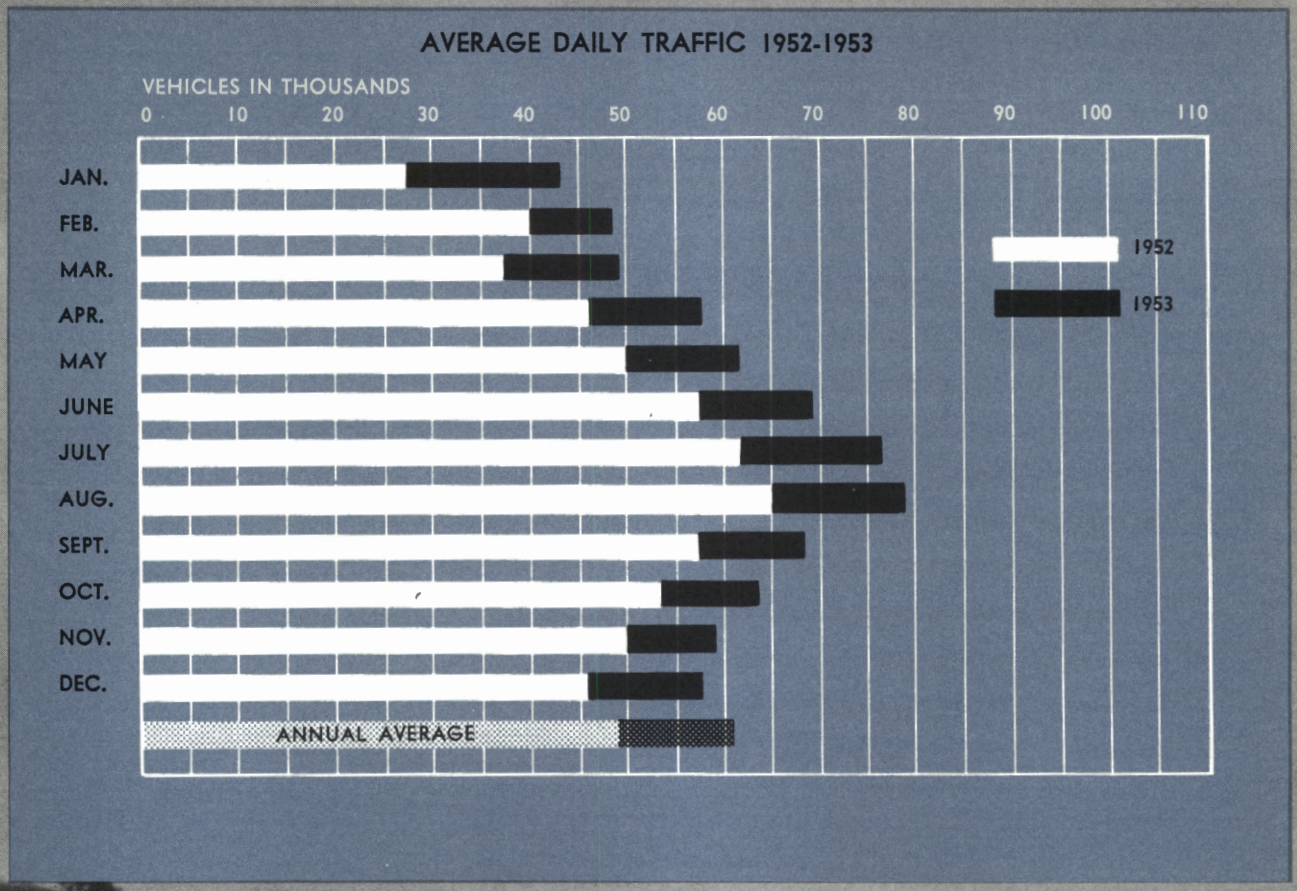
Of the various classes of vehicles using the Turnpike, it is interesting to note that travel by commercial vehicles continued to score exceptionally sharp gains during the year. Gains were also shown by buses of 64.8 percent in traffic and 57.9 percent in toll revenues.

Truck usage increased 49.4 percent and revenues 38.8 percent, and represented 19.2 percent of the total tolls in 1953, against 16.3 percent in 1952.

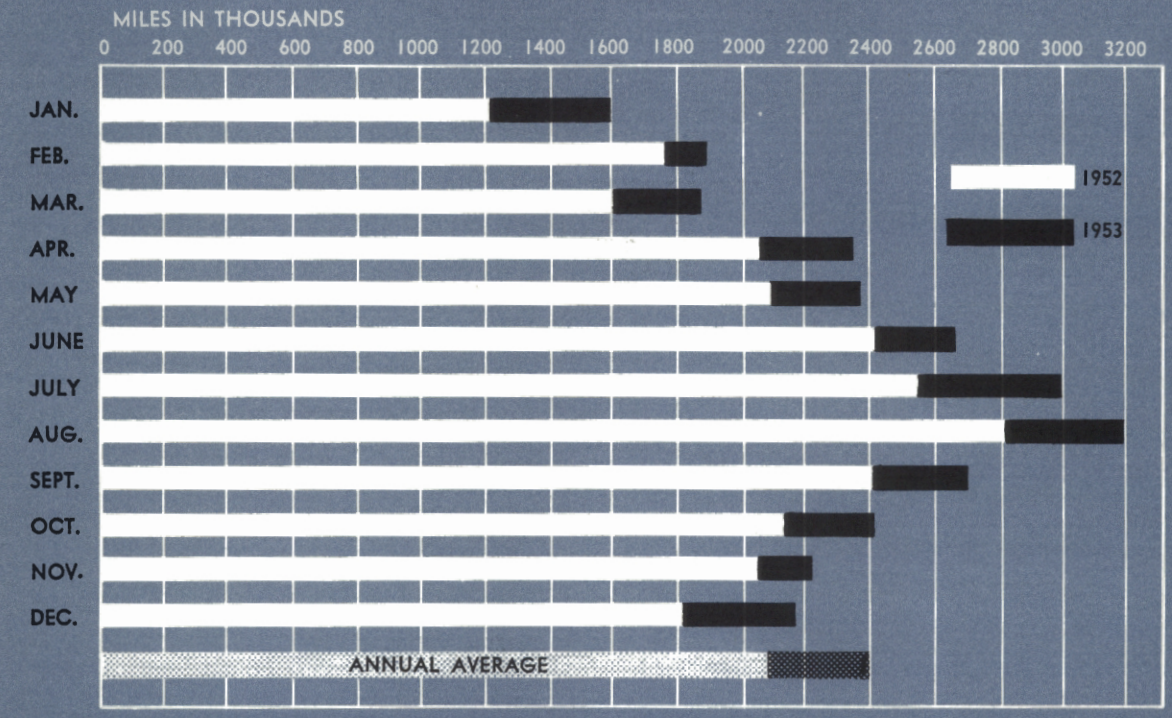
Class I vehicles, principally passenger cars, showed an increased usage of 19.6 percent, while revenue rose 13.1 percent. This class represented 88.3 percent of all vehicles traveling on the Turnpike in 1953 against 90.5 percent in 1952.

The average revenue per vehicle in 1953 was 87.2 cents compared to 90.5 cents a year ago. The average revenue produced by Class I vehicles on the Turnpike in 1953, was 78.0 cents compared to 81.4 cents per vehicle in 1952. Largely accountable for the reduction in the average toll in 1953, notwithstanding a substantial increase in overall traffic, was the sharp rise in short trip commuter traffic in the northern section of the Turnpike. Major savings in travel time can be effected in that area by using the Turnpike between the Newark Airport and Lincoln Tunnel and George Washington Bridge interchanges.

For larger vehicles (classes 2 to 6 inclusive), the average revenue was $1.75 and for buses (class 7) it was $1.08. Classes 3 to 6,


AVERAGE DAILY TRAFFIC 1952-1953
VEHICLES IN THOUSANDS
0
10
20
30
40
50
60
70
80
90
100
110
JAN.
FEB.
MAR.
APR.
MAY
JUNE
JULY
AUG.
SEPT.
OCT.
NOV.
DEC.
ANNUAL AVERAGE
1952
1953

AVERAGE DAILY VEHICLE MILES 1952-1953



Crossing of Hackensack River looking north
—New York City shown in right background

inclusive, all trucks, accounted for 2,102,558 vehicles, equal to 9.5 percent of the revenue vehicles, and produced $3,680,097 of revenue, or 16.2 percent of the total from all vehicles.

In the accompanying tabulation is shown the traffic using the Turnpike in 1953 and 1952, together with classifications and percentages of the total, and toll revenue and percentages produced by each classification.

From the figures cited here, it is obvious that the Turnpike, in its brief period of operation, has afforded material relief from congestion on the public highway system and, at the same time, contributed measurably to the already favorable economic position of New Jersey, its business, agriculture, commerce and industry.

Since opening of the first section in November, 1951, vehicles numbering more than 41,000,000 have used the Turnpike, transporting more than 100,000,000 persons over a combined distance of 1,677,876,051 miles. That the State and its citizens have received direct benefits from this traffic is evidenced by the fact that less than 6 percent of the vehicles using the highway travel the full distance of 118 miles. Many, obviously, stopped off within the State.

The average trip on the Turnpike during 1953 was 39.4 miles compared to 42.1 miles in the previous year.

Travel on the Turnpike in 1953 established a record of 97,800 vehicles for a single day on August 1. There were 82 days in that year when traffic topped 70,000 vehicles. There were 44 of those days when it exceeded 80,000 vehicles.

Numerous spot checks indicate that vehicles with out-of-state licenses account for 60 to 75 percent of the traffic using the Turnpike. During peak travel seasons, vehicles from the other 47 states can be observed almost every day, as well as vehicles from foreign countries.

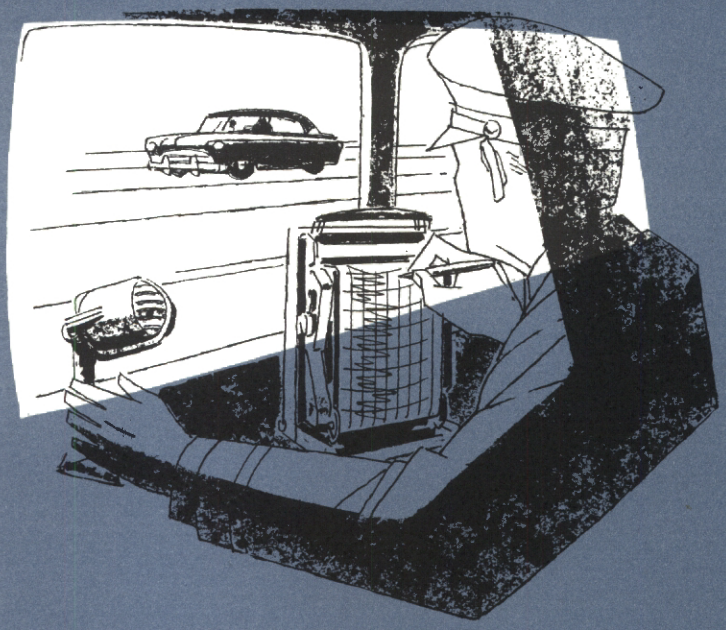
		1953				1952			
CLASS	DESCRIPTION	NO. OF VEHICLES	PERCENT OF TOTAL REVENUE VEHICLES	REVENUE	PERCENT OF TOTAL INDICATED TOLL REVENUE	NO. OF VEHICLES	PERCENT OF TOTAL REVENUE VEHICLES	REVENUE	PERCENT OF TOTAL INDICATED TOLL REVENUE
1	Passenger car, motorcycle, taxi, hearse, 2-axle, single-tire truck, 2-axle tractor without semi-trailer	19,434,968	88.32	$14,975,229	78.02	16,246,223	90.52	$13,235,991	81.48
2	Passenger car with trailer, 2-axle single tire truck with trailer, 3-axle tractor without semi-trailer	50,929	.23	87,404	.45	42,588	.24	73,518	.44
3	2-axle dual tire truck	693,927	3.15	753,803	3.93	468,309	2.61	545,642	3.36
4	3-axle single unit truck	67,745	.31	126,192	.66	54,366	.30	99,763	.62
5	3-axle semi-trailer combination..	727,533	3.31	1,204,967	6.28	480,456	2.67	865,616	5.32
6	Four or more axle semi-trailer combination, truck and full trailer combination	613,353	2.79	1,595,135	8.31	403,595	2.25	1,139,663	7.02
7	Buses	416,623	1.89	452,045	2.35	252,788	1.41	286,217	1.76
		22,005,078	100.00	19,194,775	100.00	17,948,325	100.00	16,245,410	100.00
9	Non-Revenue**	154,006				291,202			
		22,159,084		$19,194,775		18,239,527		$16,245,410	
	Less Toll Adjustments			2,128				4,143	
		22,159,084		$19,192,647		18,239,527		$16,241,267	
	Daily Average Revenue Vehicles	60,288				49,834			
	Daily Average Revenue			$52,588				$44,386	

**"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, ambulance, rescue squads or necessary vehicles of concessionaires, and vehicles of contractors used in the construction of the Turnpike and its buildings.



Large parking area at typical service area

Safety Features and Policing



As has been stated earlier in this report, the Turnpike's record of safety in 1953 showed encouraging improvement. Part of this improvement stemmed from an increase in the State Police detachment and the subsequent greater enforcement of regulations; changes in traffic rules to meet conditions pointed up in actual operating experiences; an increase in signing; better procedures for handling traffic during adverse weather conditions; greater lighting in fog-prone areas; and many other measures. The Authority is alert to the need for maximum safety and, in the past year, members of its staff reviewed many suggestions and devices offered by users and others for consideration as an aid to still greater safety.

After careful studies of conditions in fog-prone areas, it was decided to erect additional regulatory and informational signs. The most important of these were the large neon-lighted signs placed at intervals of approximately five miles in the northern end of the Turnpike, where traffic conditions are dense, to inform users of fog, ice, snow or other emergency conditions ahead. These signs carry a large message "Drive Slow" which flashes on and off to attract attention and mention the specific condition. The value of these signs was demonstrated in recent fog and smoke conditions.

To supplement the sign and lighting programs, a standing operating procedure was developed for use during fog conditions. Depending upon the density of fog conditions, or lack of visibility, these are classified from "A" for light fog to "E" for extremely heavy fog, the measures to be taken are defined with responsibilities clearly fixed. These measures include the informing of motorists, the placing of additional signs and warning lights or flares, and the recall to duty of off-duty personnel from the State Police detachment, maintenance and toll collection forces. The effectiveness of the new procedures was shown during the period of unexpected smoke in the Newark-Elizabeth airport area last fall. While it was found necessary to close the Turnpike to traffic in this area on occasion because of the smoke nuisance, potential accidents were avoided and the closing action was justified because of zero visibility.

In the smoke nuisance which emanated from a dump in the Newark-Elizabeth areas, immediate steps were taken by the Authority to correct the conditions in cooperation with owners and operators of the properties affected. Measurable improvement followed incident to extinguishing of the fires responsible for the smoke. The Authority is determined to take whatever steps are necessary to assure that there will not be a repetition of those hazardous conditions caused by others.

The program of research for dispersal of fog conditions is continuing through liaison with the United States Navy, Stanford Research Institute and others engaged in this field of endeavor. In October, last, the Authority employed the services of Weathercasts of America to provide frequent detailed forecasts of weather conditions to be found on the Turnpike. This is in addition to service from the U. S. Weather Bureau which has been used since opening of the Turnpike in 1951.

Other signs were installed:

to warn of the strict enforcement of speed limits by radar and patrol cars;

on exit ramps indicating the lower speed limits in effect on State highways;

on the entrance ramps of interchanges informing of the prohibition on hitchhiking; and,

large overhead signs at the beginning of the dual-dual section in Elizabeth to indicate that through traffic may use all lanes in either direction.

The benefits of changeable messages on the existing signs were demonstrated in 1953 in connection with the renumbering of the State's highways, making necessary only the replacement of a new number rather than the costly preparation of entirely new signs.

Additional lighting was provided at the



Portable radar equipment used by Police for checking and apprehending speed violators

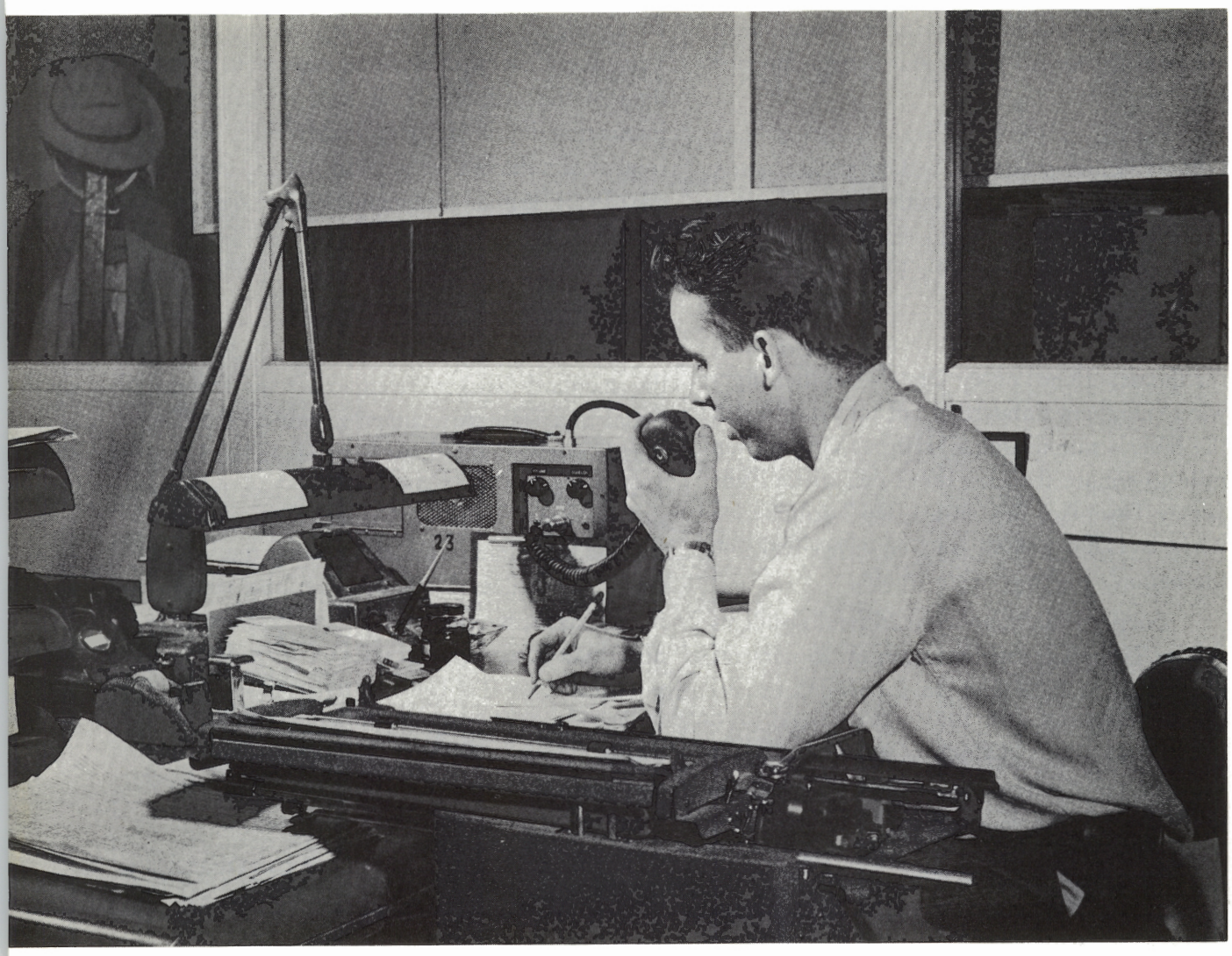
interchanges, in service areas and between the two bridge crossings of the Hackensack and Passaic Rivers to add to safety in those areas. In all, a total of 676 new lighting units, using the latest type mercury vapor lamps, was installed during 1953.

For the guidance of motorists during conditions of low visibility, the Authority provided continuous road striping for the full 118-miles between the left lane and the inner shoulder of both north and south roadways.

Greater protection also was afforded users by the installation of guard rail around all center bridge piers north of Elizabeth where the median strip is somewhat narrower than the 26-foot median which is generally standard throughout the Turnpike.

The staff continues to explore means to reduce cross median accidents even though these have been in the minority in relation to total accidents on the Turnpike; and elimination of headlight glare from opposing traffic lanes in a few areas at curves.

The desirability of using upper beam head lamps for night driving on the Turnpike encouraged the Authority to investigate the erection of a planted barrier at those locations where a combination of line and grade causes



Short-wave radio equipment at central maintenance shops

opposing headlights to shine in motorists' eyes. Extensive tests were made both on the Turnpike and on an unused runway at the Newark Airport, and others will be made to determine the desirability of improving seeing distances by means of such barrier plantings.

In recent months, moreover, the Authority initiated a research program to be directed by the Bureau of Highway Traffic at Yale University, seeking to improve the design of the median to the point where vehicles (1) may be prevented completely from crossing; (2) may be kept from being thrown into other vehicles traveling in the same direction; and (3) may minimize injury to the driver and damage to vehicles out of control. Such a design is expected to be tested early in 1954, and it is hoped that tests of the headlight protective strip may be conducted at the same time.

During 1953 the State Police detachment on the Turnpike was augmented by 15 permanent members, three of them being assigned to it in February for the operation of radar to apprehend violators of the Authority's speed limits, and the remainder at the end of the year. In consequence of these increases, the detachment reached a total of 77, providing a normal patrol of 13 men on duty 24 hours each day, or the equal of one man for each nine miles of highway. All expenses of the Police, including

salaries, maintenance, training and equipment are paid by the Authority and there is no cost to taxpayers.

For all of 1953, the records of the State Police disclose a total of 584 accidents, equal to 67.1 for each 100,000,000 miles of vehicular travel. This rate (67.1) was a reduction of 27.6 percent compared with 1952, when it was 92.7.

Comparable figures are not yet available for the experience on the State's parallel highways (numbers 1 and 130) but for all of 1952, the latter's rate averaged 410 per 100 million miles, or more than six times that of the New Jersey Turnpike. In contrast, the Turnpike experience is but a small fraction of accidents on the nation's highways as a whole.

During 1953 there were 26 fatal accidents on the Turnpike, causing death to 36 persons, reductions of 21.2 and 23.4 percent, respectively, compared with 1952. Of the fatal accidents, 9 were of the single vehicle type and 4 were of the "pedestrian" type where persons were killed while walking on, or crossing, the Turnpike. These two categories accounted for 13, or 36.1 percent of the total fatalities on the Turnpike. Careful analysis of conditions at the time of the accidents discloses the causes as inattention to, or fatigue in, driving; losing control of vehicle and overturning; or striking guard rail, bridge abutments or other fixed objects; and, falling from vehicles. The remainder involved more than one vehicle and were principally of the collision type.



Police use flares to aid in guiding motorists when visibility is low

The Turnpike's fatalities in 1953, using the standard basis of comparison of the national and state governments, and of the National Safety Council, were equal to 4.14 per 100 million miles of travel. The 4.14 rate on the Turnpike ranks with three States and the District of Columbia which reported the lowest rates for vehicular fatalities in the country during 1952, the latest year for which comparable figures are available. For New Jersey's parallel highways, (numbers 1 and 130), the indicated fatality rate in 1952, the latest figures available, was equal to 6 per 100 million miles and the national rate (based on the first 9 months' figures) was equal to 6.7.

The safety record of the Turnpike must be considered in conjunction with the extraordinarily heavy traffic which it is carrying. During 1953 a total of 22,159,084 vehicles, transporting about 55,000,000 persons, traveled a distance of 870,445,941 miles on the Turnpike.

Where accidents occurred, causing injury to persons in vehicles traveling on the Turnpike, the utilization of emergency services by volunteer and other ambulance squads were prompt to respond to calls for aid. Arrangements for these services were made when the Turnpike was first opened to traffic. They have proved eminently satisfactory in the rendering of prompt first-aid or other services. Similar arrangements exist for fire fighting units, volunteer or municipal, depending on the areas to be served. In such services the Authority, generally, makes regular contributions to defray their costs.

Improved safety on the Turnpike, following the expansion in Police personnel, is reflected in the activities of the State Police detachment during 1953. In that year a total of 18,574 summonses was issued, of which 15,339 were for violators of speed limits; 731 for failing to keep to the right; 613 for careless driving; and the remainder for other violations ranging from non-possession of proper motor vehicle credentials to "U" turns, and many others. Summonses issued to speeders and other violators as the result of the use of radar numbered 5,012 in 1953 compared to none in 1952.

Aids to motorists by the State Police numbered 42,112 in 1953 compared to 33,787 in the previous year. The most important aid was the providing of towing services for mechanically disabled vehicles, numbering 15,880 last year, compared to 15,331 in the previous year; 9,485 with flat tires; 9,050 running out of gasoline; 3,347 overheating and 1,079 needing fan belts.

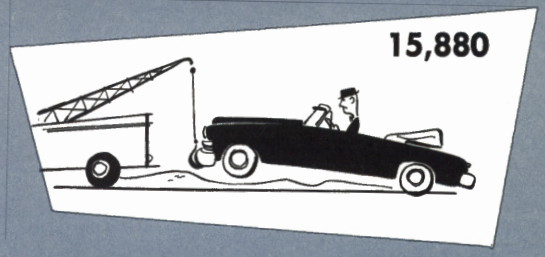
Arrests by the State Police of criminals and others, and in the recovery of stolen property, were much greater in 1953 than in the previous year. These arrests were the result, principally, of apprehensions for Turnpike violations which, in the process of interrogation and examination, uncovered other offenses ranging from 161 runaways; carrying of concealed weapons; juvenile delinquency; possession and transportation of narcotics; fugitives from other states; transporting stolen property; kidnapping; penal institution escapees; and transportation of untaxed cigarettes. During 1953 the State Police recovered 39 stolen vehicles on the Turnpike.

As the result of traffic violations and other offenses, the fines paid by those apprehended totaled $204,557 in 1953. None of these fines inures to the benefit of the Turnpike but is added to the general funds of the State; court costs going to the municipalities.

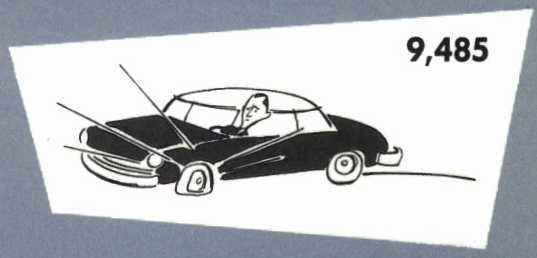
AID TO MOTORISTS--1953

42,112

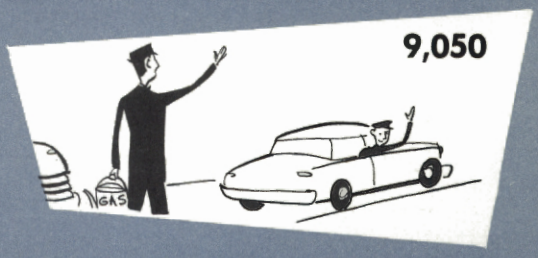
MECHANICAL FAILURES



FLAT TIRES



OUT OF GAS



OVERHEATING



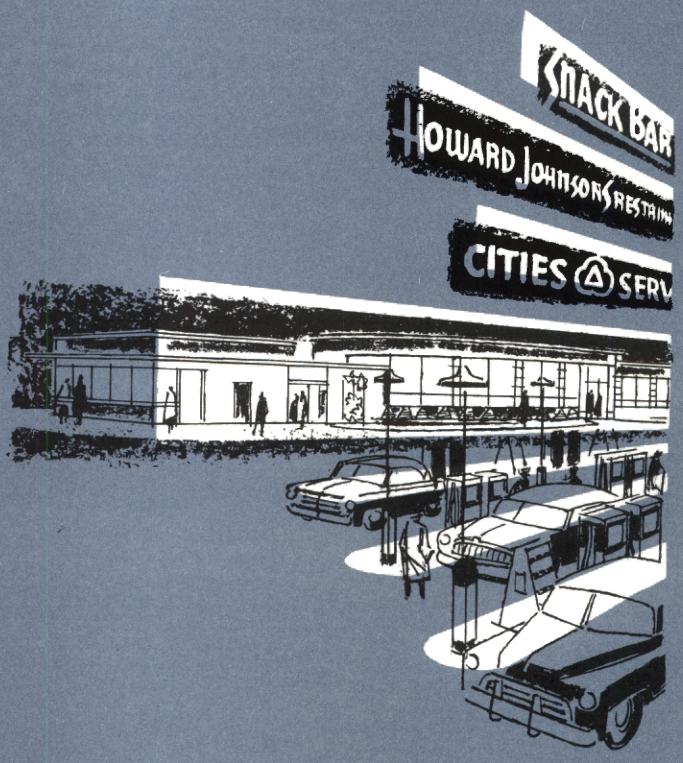
BROKEN FAN BELTS



OTHER AID



Service Stations and Restaurants



THE VOLUMES of business transacted by the two concessionaires on the Turnpike—Howard Johnson Co. and Cities Service Oil Co.—kept pace with the mounting traffic, aided by the new facilities which reduced waiting time of patrons and, generally, resulted in more satisfactory operations overall.

Improved service to the public was provided also by the completion of three new snack bars by the Authority in the southern section of the Turnpike, together with the expansion in seating capacity at other sites, all designed to relieve overcrowding and undue waiting. Additions and changes also were made at several service stations and in almost all parking areas.

Through the various food facilities available on the Turnpike, users may obtain a snack or a full course meal. There are five dining rooms available for northbound travelers and five for southbound travelers. Each group comprises one full-sized restaurant with a large dining room, booth and counter service, situated at Woodbridge. Three have a combination of booth and counter service, and two small lunch counter arrangements are available in the northern end; one southbound at Secaucus and one northbound at Elizabeth. Original plans of the latter contemplated only service stations without food facilities. Demand, however, made necessary the provision of minimum service at those areas. Studies are under way of a greatly increased facility in Secaucus, where, apparently, the demand exists for a wider selection of food and more satisfactory accommodations.

During the latter part of May, last, the three new snack bars were opened to the traveling public at Cranbury, Haddonfield and Milltown. These supplement the existing food service in those areas by providing a ready "take-out" service. They are adjacent to recently expanded parking areas and their popularity has been demonstrated by the thousands this past summer who wished only a snack to be consumed at the site, or to take out for consumption while traveling. The snack bars serve hot and cold sandwiches, beverages and desserts, and are open daily during the spring and summer seasons when motor travel is at its peak. The lunch room facilities at those sites are open 24 hours a day all year round.

The Authority makes frequent checks of the facilities of both concessionaires to assure that service is adequate and prompt, quality the highest and prices in line with those in the im-



Typical service station facilities

mediate vicinity. Daily inspections also are made by the Johnson Company which, in addition, engages the services of a consultant to make minute inspections at intervals.

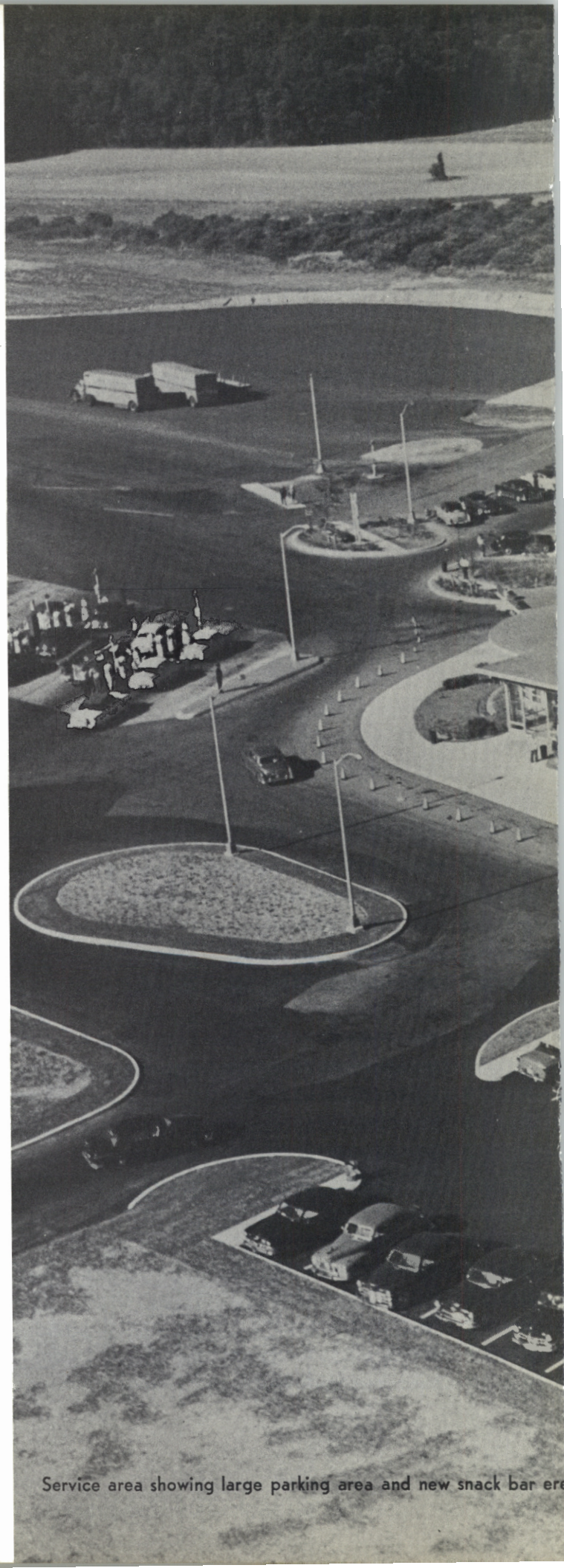
Some indication of the task confronting the Howard Johnson Co. in providing food for users of the Turnpike may be made from the fact that demand in an average month would amount to 22,000 pounds of turkey; 240,000 dinner rolls; 336,000 frankfurters and hamburger rolls; 20,000 pounds of hamburger and 20,000 gallons of ice cream.

Sales of the food concession on the Turnpike during 1953 showed an increase of 43 percent compared to 1952, and were far in excess of the original expectations. The revenues accruing to the Authority were up by 35.7 percent.

For Cities Service Oil Co., sales of motor fuels were up 15.5 percent in 1953, while sales of other products and services increased by 42.0 percent. The portion of sales payable to the Authority from this concession was up 19.0 percent in 1953.

During the year Cities Service answered about 25,000 calls for service on the Turnpike, including those for new fan belts, vehicles running out of gasoline, oil and water, and to render minor repairs. In its efforts to constantly increase safety on the Turnpike, the Authority made arrangements with Cities Service early in 1953 to have service cars patrolling the highway during weekends and holidays to render prompt service to vehicles in distress and to aid in emergency conditions such as fog and the like.

The independent garages off the Turnpike, operating under contract with the Authority to provide mechanical, wrecking and towing services, were quick to respond to calls and to aid in numerous other ways when needed. In line with the increasing traffic, the Authority added several garages to those already under contract.

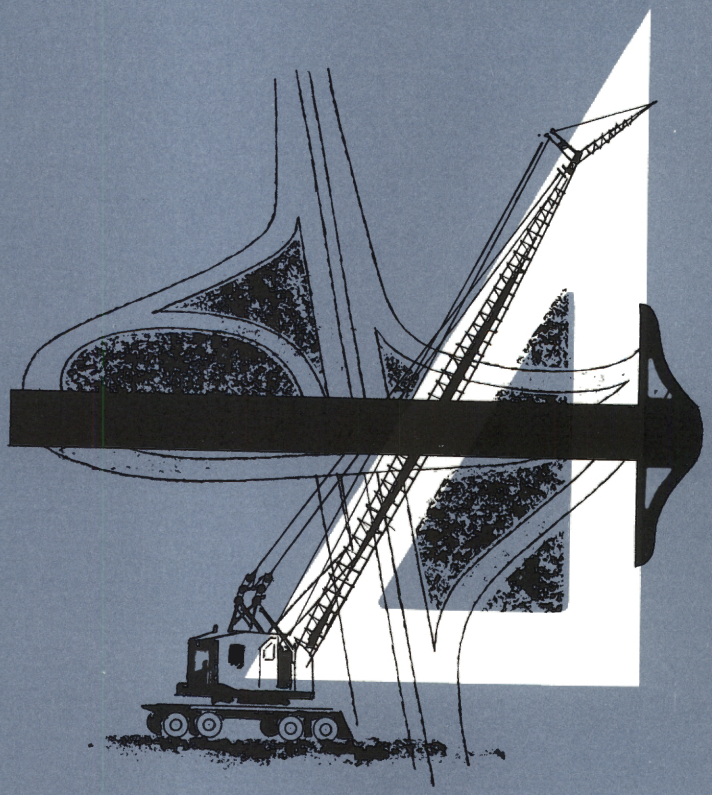


Service area showing large parking area and new snack bar er



l during 1953

Design and Construction



THE ENGINEERING staff was busily occupied during the past year in the planning of improvements for the existing Turnpike and for extensions and connections. Most improvements were made necessary by the unusually heavy traffic volumes being carried and included drainage, lighting facilities, new access roads for emergency use, the completion of rehabilitation of shoulder work which was begun in 1952 and carried into 1953, water supply and sewage disposal facilities.

Lighting over and under bridges, lane delineation, protective devices such as guard rail, drainage and other features are being studied constantly by the staff. Such additional lighting at the interchanges and in service areas, as well as for Turnpike roadways, was given major attention during the year when 676 additional light standards were installed, together with 15 neon-lighted emergency signs in the northern area where fog and smoke from adjacent industry affects visibility at times.

With respect to service areas—gasoline and food facilities—planning and construction were most active during the year to meet the requirements which were highlighted by actual operating experiences. At practically all of the service areas additional facilities were provided for food storage, garbage refrigeration, can washing, etc., and lubrication bays for car servicing were designed and constructed.

In one service area in Mt. Laurel Township, additional seating capacity for 100 is being provided to meet customer demands at this site. At three service areas (Haddonfield, Cranbury and Milltown) newly constructed snack bar and take-out facilities were provided to supplement the existing food services in those areas. The increased patronage at practically all service areas necessitated the construction of additional parking facilities for both passenger cars and commercial vehicles. Additional parking facilities were provided for approximately 550 passenger cars, to bring them up to about 1,000, and for approximately 225 trucks and buses for a capacity of about 300 vehicles.

Additional water supply and sewage disposal facilities were made necessary by the increased patronage in service areas. Where services were dependent upon a driven well for water supply, plans were formulated for an additional standby well in each case and, where necessary, accompanying water treatment equipment was provided to remove excessive lime, iron or sulphur which might be present in the water supply. Where the initial septic tank facilities were found to be inadequate the planning and construction of suitable sewage disposal facilities was undertaken and most of these installations are completed, and the remaining few will be in operation soon.

Current planning includes consideration of the increase in traffic volume on the Turnpike in connection with the completion of the Pennsylvania Turnpike connection below Bordentown, N. J. Traffic studies have indicated the need for an additional traffic lane on the Turnpike in each direction between the Camden-Philadelphia Interchange and the Woodbridge-Amboys Interchange, and between the George Washington Bridge and the Lincoln Tunnel Interchanges. Sufficient right-of-way is available for the additional lane and current planning, if decided upon, would be concerned principally with grading and drainage and pavement. Whenever practicable, the structures on the Turnpike were designed to accommodate additional lanes and no structural changes of consequence are now contemplated. Since the work of widening must be accomplished under operating conditions on the present Turnpike, planning also must consider the method and manner in which traffic may be kept moving safely while work is being performed.

All planning of the engineering staff involves liaison with the various utility companies as it affects the latter's connections and

extensions of services at points where they are adjacent to. or cross, the Turnpike. Installations, moreover, must be made under conditions of traffic and planned with safety to users of the highway.

Considerable work was accomplished during the year to finish crossroad approaches to Turnpike bridges and, when completed, the maintenance thereof will be transferred to local governing bodies. Slope paving with installation of drainage facilities at end span embankments also is under study. This work was completed under the many overpasses in Elizabeth, and proved so successful that similar methods will be used, where justified, in other areas. The assistance and cooperation of local official and private engineers were helpful in expediting work along the Turnpike.

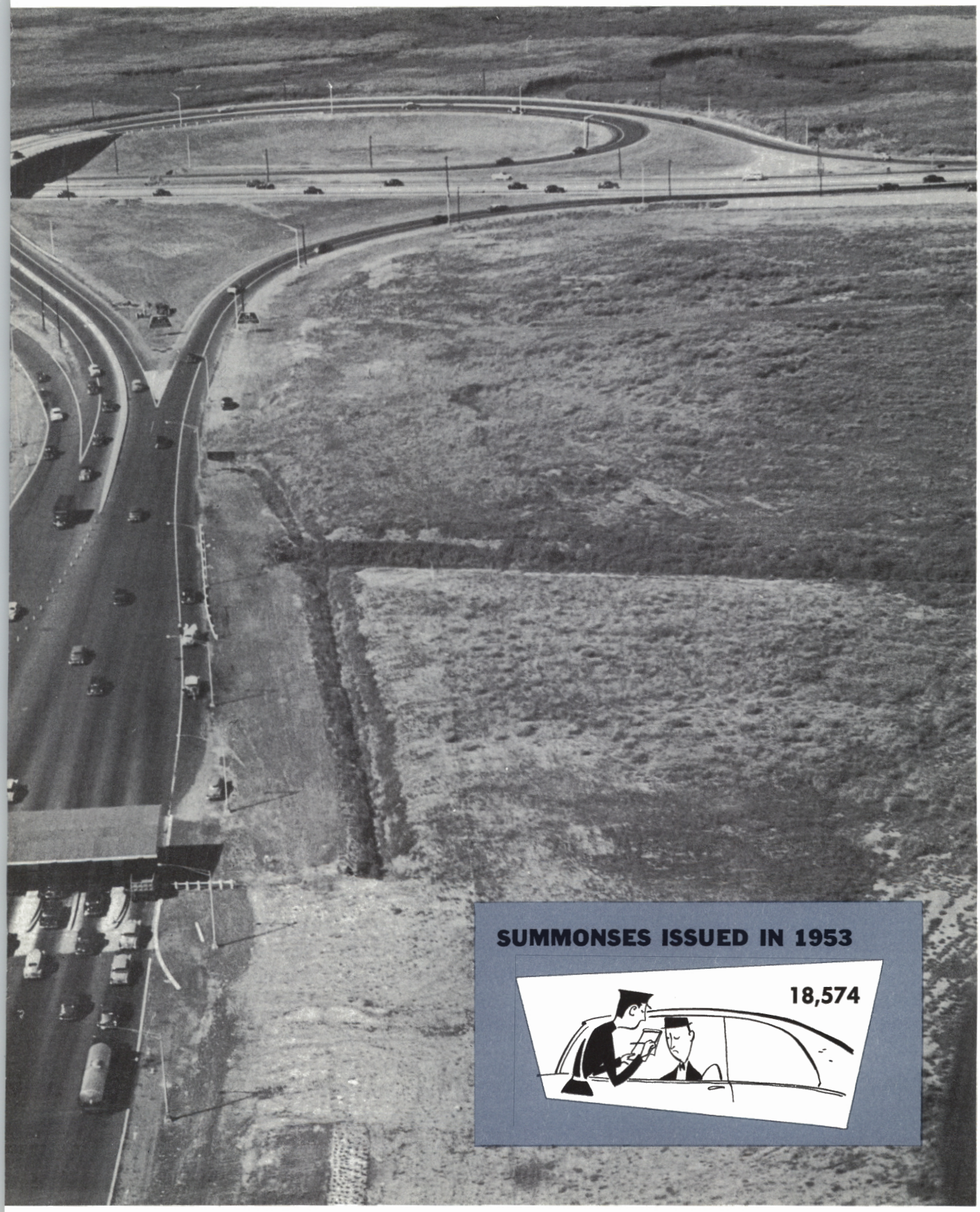
Planning and designing of the Newark Bay-Hudson County Extension continued throughout the year. Plans were formulated so that the Newark Bay crossing, the most difficult in this Extension, would be advertised for competitive bids on the day financing arrangements were assured. Meanwhile, orders for the structural steel required in the crossing were placed for early mill rolling.

Contracts were awarded to the lowest bidders for the foundations and superstructure of the Newark Bay bridge and it is contemplated that the remaining component parts such as the deck, fenders, lighting, etc., will be advertised for public bidding in the very near future. Planning for the connecting links on both the easterly and westerly ends of the bridge is progressing and numerous meetings have been held with railroad and utility companies to achieve the coordination that is desirable. Planning includes the construction of appropriate interchange locations and service areas, and detailed studies of these facilities are being undertaken in conjunction with the design of the roadways and structures themselves.

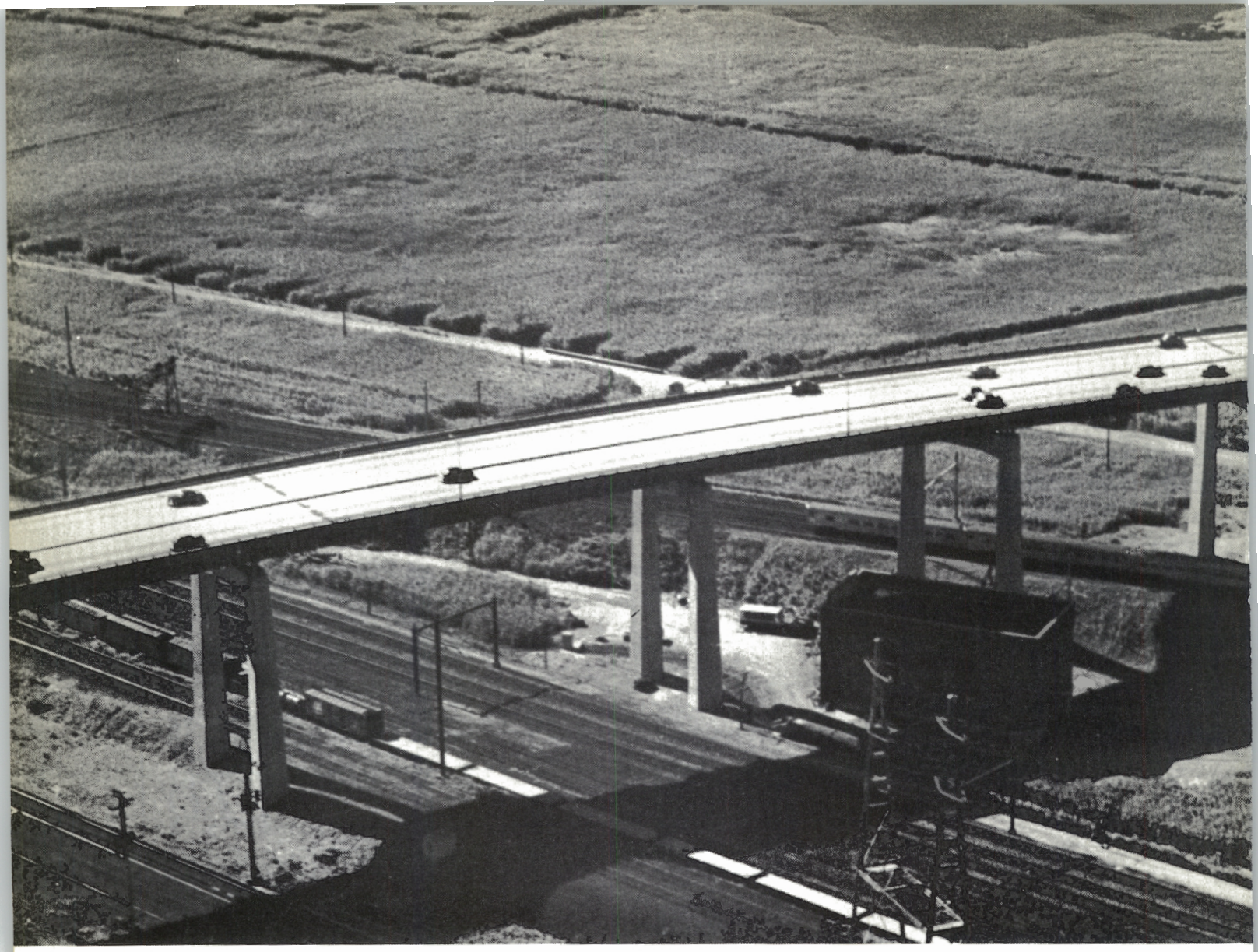
The Pennsylvania Turnpike extension from a point on the Turnpike below Borden-



George Washingto



idge interchange on Route 46—northern terminus of Turnpike

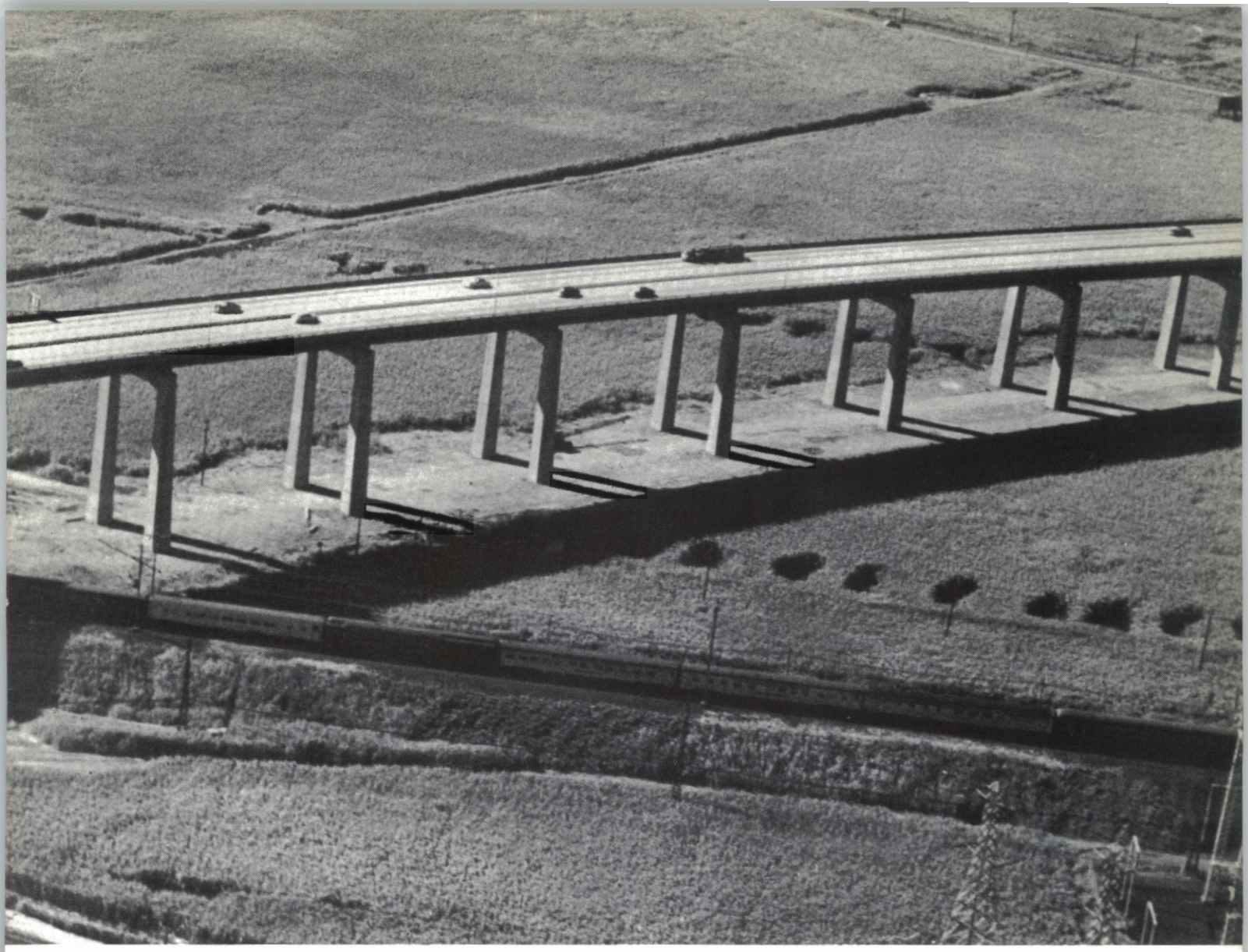


Section of bridge construction leading to crossing of Passaic River

town, N. J., has been progressing satisfactorily both from the standpoint of planning and design. Test borings were made of the area. The preparation of plans is continuing for the connection from the Turnpike, for a distance of approximately 6 miles, to the easterly end of the Delaware River Bridge. Recent clarification of the problem of jurisdiction over Delaware River crossings in the vicinity of the bridge will aid materially in expediting work on this important link between the two Turnpikes.

Planning for the New York Thruway connection from the northerly terminus of the present Turnpike at State Highway Route 46 to the New York State line has been deferred temporarily because of uncertainties associated with alternate route locations. It is hoped that a resolution of these problems may be reached in the near future so that detailed planning may proceed without further delay.

The progress of studies of the proposed construction of the East-West Turnpike which would, generally, parallel the present Route 10 in the north central portion of the State, was limited because of the lack of appropriate funds with which to make necessary economic and field surveys. Proposed alignments submitted by local persons and groups are being studied by the Authority's consulting engineers





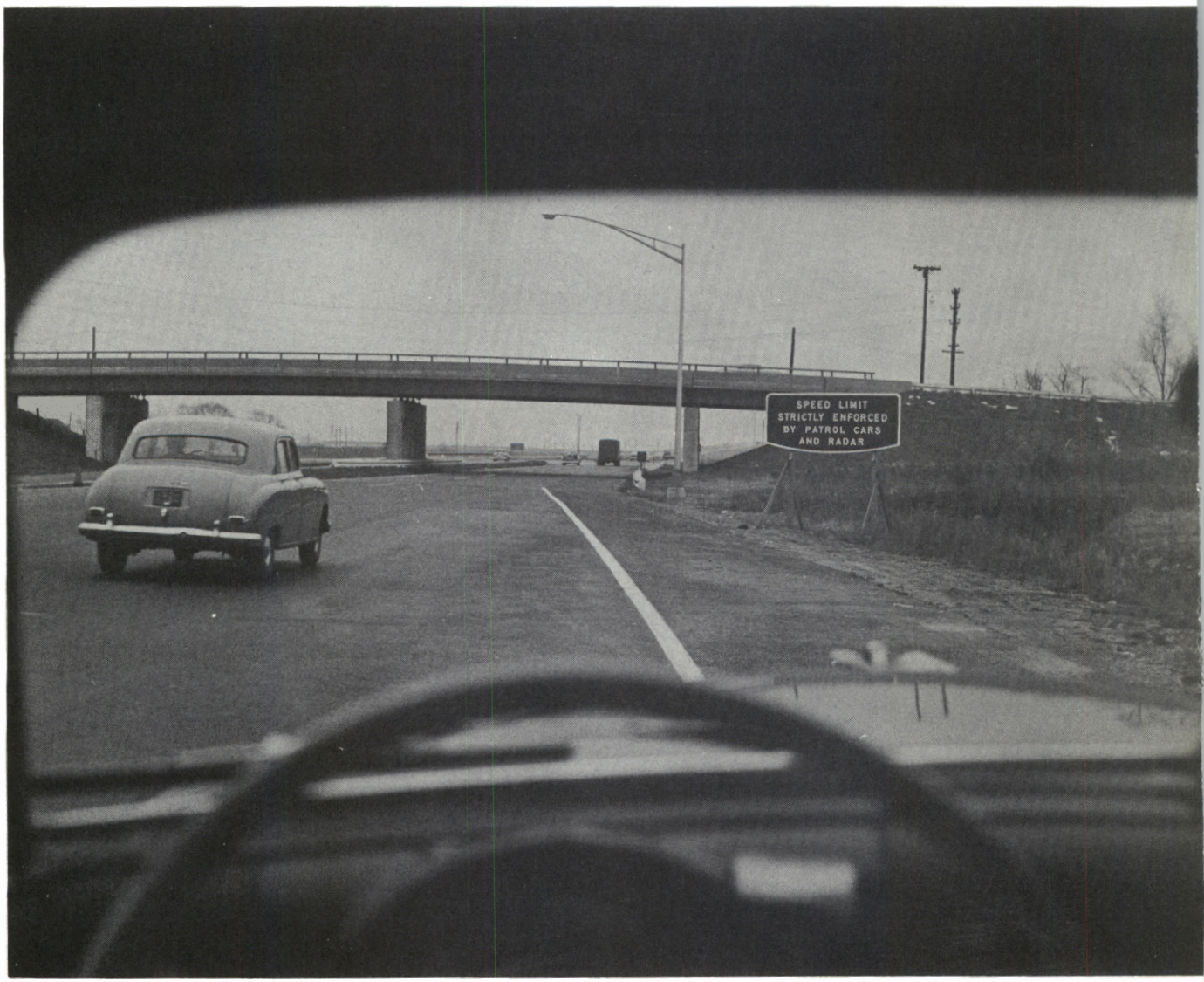
Dusk shot of overhead lighting on bridge crossing of Hackensack River

and a report thereon will be submitted to the Authority soon.

Direct connections with the proposed North-South Freeway being constructed by the State Highway Department in the vicinity of Gloucester have been studied, resulting in a tentative layout for an appropriate interchange with the Turnpike near Big Timber Creek. Progress on this must be paced with developments in connection with the new Delaware River bridge under construction at Gloucester.

Construction work on the Turnpike involved certain contracts begun in 1952 and carried over into 1953; work begun in the past year and, in some cases, work in certain categories where awards were made late in the year to be performed in 1954. The work awarded under contracts in 1952 for rehabilitation of inner and outer shoulders, mentioned in last year's report, was not completed until the early part of 1953 since the scope of the work was increased by virtue of the addition of large truck parking areas at service facilities.

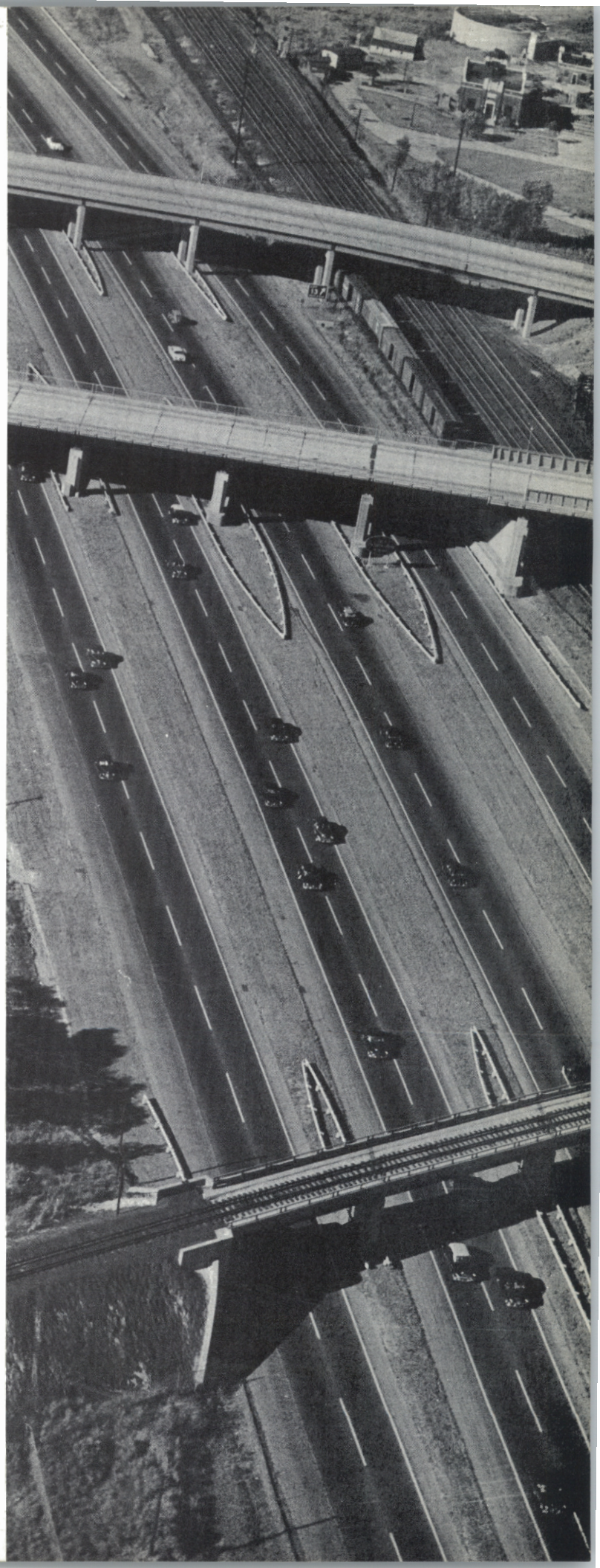
During 1953 a total of 99 contracts was awarded and of this number 55 were completed in that year, leaving the remainder to be carried over into the current year. Excluding the contracts awarded for work on the Newark Bay-Hudson County Extension, the total dollar



value of contracts placed in 1953 was $3,040,-757. The accompanying tabulation lists the contract awards in 1953, all on the basis of competitive bidding.

Within recent weeks contracts were awarded for the beginning of alterations and additions to the restaurant building in Mt. Laurel Township, the construction of a sewage disposal plant at Milltown, and additional standby water supply wells and treatment facilities at Haddonfield, Cranbury and Mount Laurel Township. Contracts also were awarded for landscaping at various sections, including the planting of floral annuals, ivy, shrubs and trees to further enhance the general appearance of the Turnpike. This work is being performed at interchanges, service and maintenance areas, and will carry into the early part of 1954.

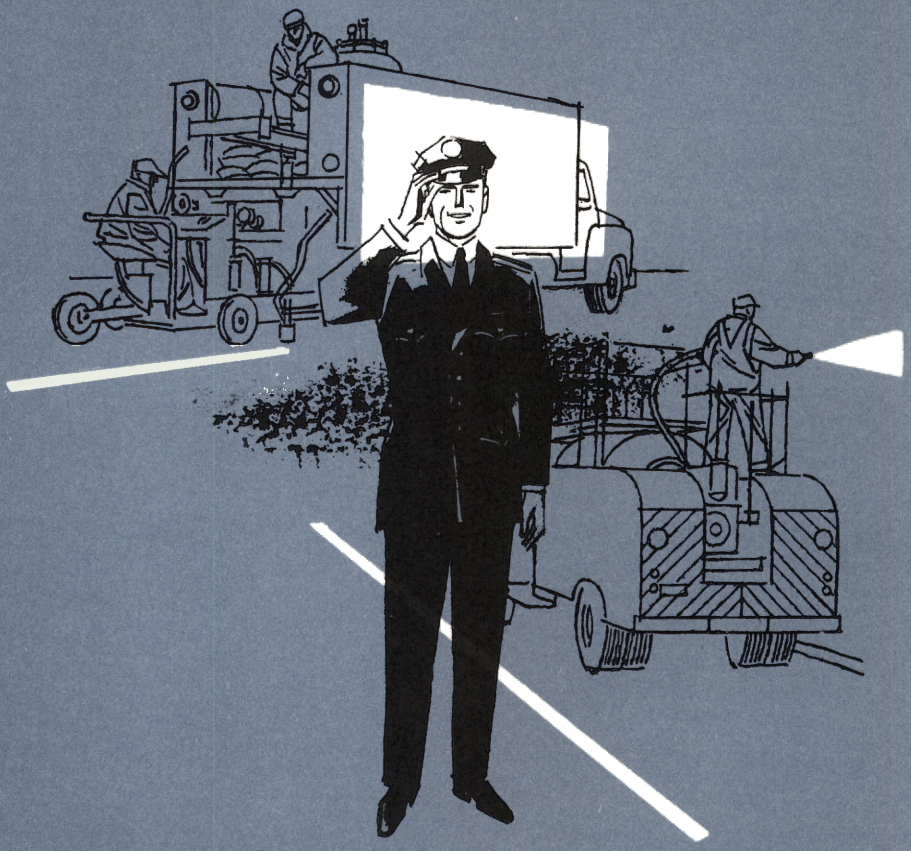
Construction work on the bridge crossing of the Newark Bay-Hudson County Extension has been started, and contracts have been awarded for the substructure of this bridge, and also the structural steel for the approaches and main span arch. An order in the approximate sum of $1,800,000 previously had been placed by the Authority with Bethlehem Steel Company, after the receipt of competitive bids, for steel H piles to support the piers to underlying rock. The total of contract awards for this Extension to the year-end amounted to $18,037,392. Design of the remaining section of this Extension is being pursued aggressively with the objective of expediting construction to make the highway available to motorists and truckers at the earliest possible date.



Dual-dual section of Turnpike in Elizabeth

New reflectorized signs at interchanges inform motorists of radar enforcement of speed limits

Maintenance and Operating Facilities



SUBSTANTIAL PROGRESS was made in the development of new maintenance techniques during the past year and in the organization of personnel and equipment to provide maximum service at a minimum of cost. Experience of the past two years has been extremely valuable, particularly when it is recognized that service to the motoring public on the Turnpike must be superior to that of other highways. The Turnpike has special problems because it is the only toll road serving the major metropolitan area where traffic volumes are unusually high.

Because of unexpectedly heavy traffic, mechanical and electrical problems developed in connection with water, sewage, air conditioning, heating and ventilating. Remedial steps were taken immediately. Additional equipment was purchased and supplies augmented. It is contemplated that by the beginning of the 1954 summer season, when all contractual work is scheduled for completion, emergency maintenance activities will be reduced to a minimum.

Problems of slope erosion, which were especially acute in the first two winters because of weather conditions unfavorable to the growth of proper stands of grass, have been largely overcome.

Good weather conditions during the season of 1953 enabled major improvement in the maintenance of grassed areas and the problem of mowing was largely resolved by the introduction of more efficient techniques.

A more abundant grass cover, particularly in bare spots, is being propagated through the use of the so-called "flossing" method of spreading fertilizer and seed simultaneously in solution. The "flossing" machine, designed in accordance with plans of the Authority's maintenance division, consists of a water tank with an agitator mounted on a truck chassis. It is powered by a pump that discharges the solution from the tank under pressure through a standard fire hose and nozzle. The machine requires only a driver on the truck, an operator on the back platform to spray the solution and an auxiliary tank truck to supply water to the flosser tank. It will completely cover one-half width of right-of-way for a distance of from eight to ten miles a day. It is adaptable, and will be used, for cleaning, with detergent solution, of guard rail and signs throughout the Turnpike. Material savings in manpower and costs, as well as time, will be accomplished.

The painting of intermittent white lines to mark out the various traffic lanes, together with the solid line along the inner edge of the pavement, also is being handled more efficiently and at less cost, as the result of the development of a new machine. The use of the conventional hand-operated line striping machines was both slow and hazardous.

The new striping machine will operate at an average speed of three miles an hour and will paint, simultaneously, both the intermittent line in the center of the pavement and the solid line on the left side. It will complete 15 miles of double traffic line per day and one roadway in eight working days, or two roadways the full length of the Turnpike in sixteen working days. Thus, this new machine will complete the painting of the entire Turnpike, excluding interchange ramps and service areas, in six weeks as against a minimum of six months with hand-operated machines.

The new line striper will serve a double purpose. It will be equipped with five spray guns to paint guard rail and to repaint wooden signs with flat coats, also at considerable savings in time, labor and material.

A program of pavement rehabilitation in a few sections of the Turnpike, where fills were used and where the Authority deemed it necessary, in the public interest, to speed opening of the highway before adequate time was allowed for complete settlement, represented part of the task of the maintenance division in 1953. Methods and techniques were developed to produce results comparable to the pavement as

originally designed and constructed, and the bituminous pavement consultants engaged by the Authority during the original construction were retained to coordinate the design and provide overall supervision of the mixing and placing of surface courses.

An innovation in performing this resurfacing work was the use of a heater-planer to remove the high places in the existing pavement and to provide a minimum normal depth of $1\frac{1}{2}$ inches of new pavement at the ends of each resurfaced section so that a true and smooth butt joint was constructed. This equipment was used in lieu of percussion tools in order to minimize damage or injury to the underlying and surrounding pavement structure.

The heater-planer has the further advantage of providing opportunity to salvage a considerable volume of the pavement removed. This salvage material was used in service areas and at interchanges. The value of this heater-planer was demonstrated in resurfacing work to the extent that a new machine was purchased by the Authority for the performance of other similar work.

As part of its function, the maintenance division repairs and replaces guard rail when



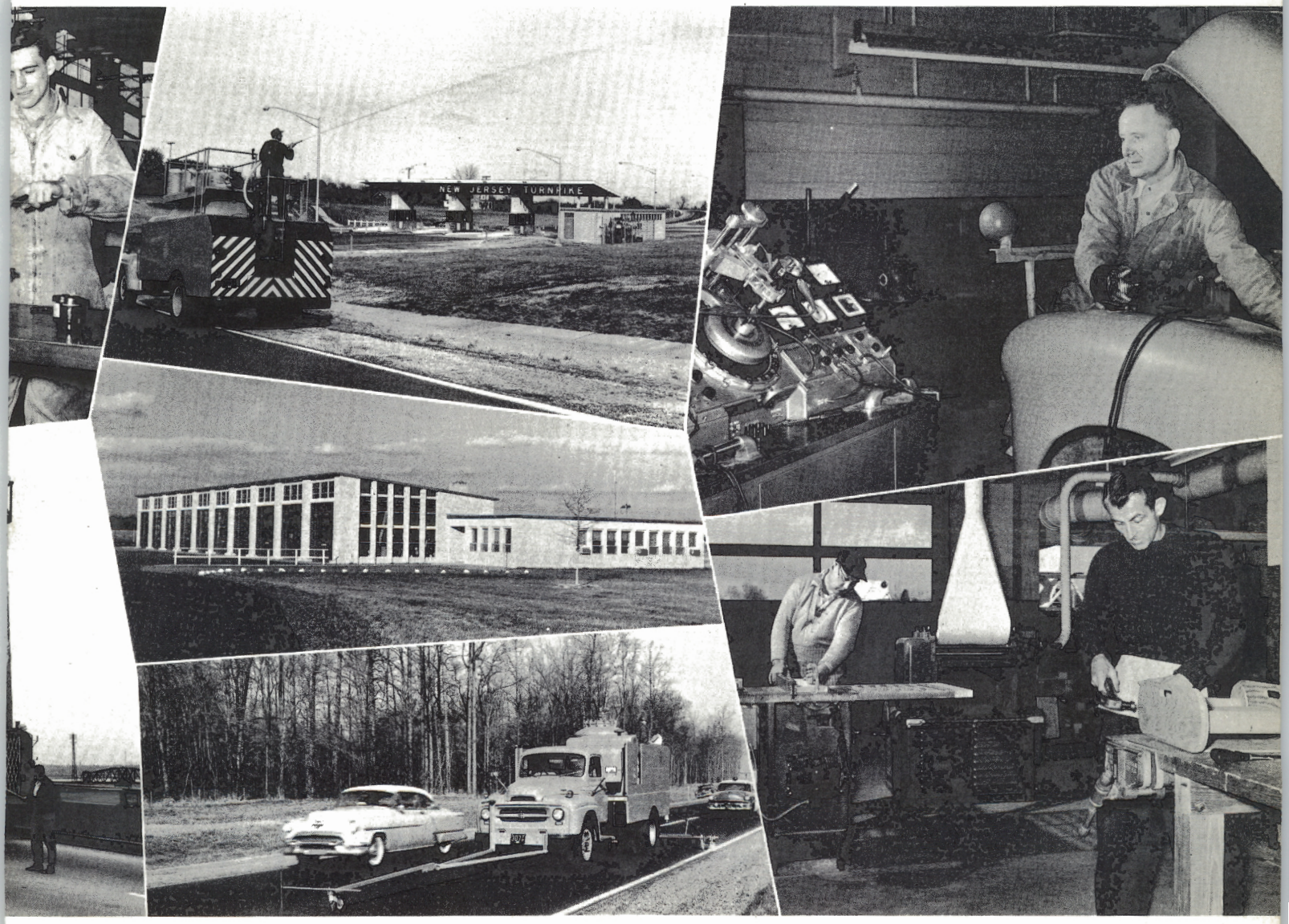
Montage of various activities c

it is damaged. An economical method for this work was devised in 1953 whereby the rail is being straightened and realigned at little more than half the cost of new sections. The program for 1954 contemplates the cleaning and repainting of the Turnpike's guard rail more expeditiously and more economically with the "flosser" machine mentioned above.

Because of considerable expansion in electrical and mechanical facilities, and the greater demand for water and sewage facilities, ventilating and air conditioning equipment and toll equipment brought about by heavy traffic volumes, it was necessary to increase some divisions of the maintenance force.

Progress was made during 1953 in enhancing the appearance of the Turnpike and new measures are being studied with the goal of providing the optimum of safety and attractiveness to the patrons.

Landscaping, mentioned in the Annual Report for 1952, is being augmented in 1953 with progress made in planting several areas with shrubs and trees, including the site of the Administration Building in East Brunswick. Other contracts were awarded recently and the work is in process under a modest budget for beautification purposes.



maintenance division at central shops

ESTIMATED COST OF CONSTRUCTION

Including Additions and Improvements as of December 31, 1953

CONSTRUCTION:	Estimate September 15, 1949	Estimate December 31, 1952	Current Estimate
Grading, drainage and structural (current estimate based on contracts awarded as of December 31, 1953)	$106,034,000	$121,205,000	$121,960,000
Paving (current estimates based on contracts awarded as of December 31, 1953)	28,344,000	40,837,000	41,044,000
Concession, Utility, Maintenance and Administration Buildings, including Radio Buildings, Toll Booths and Canopies and additions and improvements and related site development, excluding grading and paving except for 1949 (See Note 1)	6,927,000	14,782,000	16,970,000
House Moving and Demolition	—	869,000	871,000
Change Orders and Supplementary Agreements issued and approved provided for in 1949 and 1952 estimates under contingencies (See Note 2)	—	13,492,000	19,687,000
Change Orders being processed or contemplated	—	991,000	1,522,000
Contracts to be awarded	958,000	—	—
Relocation and Reconstruction of Utilities, Roads, and Other Communications	3,571,000	8,110,000	8,465,000
Traffic Aids, Communications, Safety Devices, and Interchange Lighting	1,987,000	3,600,000	4,698,000
Equipment	1,664,000	2,528,000	2,220,000
Miscellaneous, including construction signs, special construction policing, warehousing of equipment	—	1,282,000	955,000
	$149,485,000	**$207,696,000**	**$218,392,000**

NOTES

NOTE 1: The increase in 1953 is due substantially to additions and improvements to concession area facilities to more adequately serve increased traffic.

NOTE 2: The increase in 1953 is accounted for largely by settlement of contractors' accounts arising from final determination of quantities and other contractual conditions, including design changes and improvements.

NOTE 3: The total of $149,485,000 is carried forward as $149,030,000, the figure appearing in the Preliminary Report of September 1949. This difference is due to variations in the distribution of the Preliminary Report amount.

ESTIMATED COST OF CONSTRUCTION

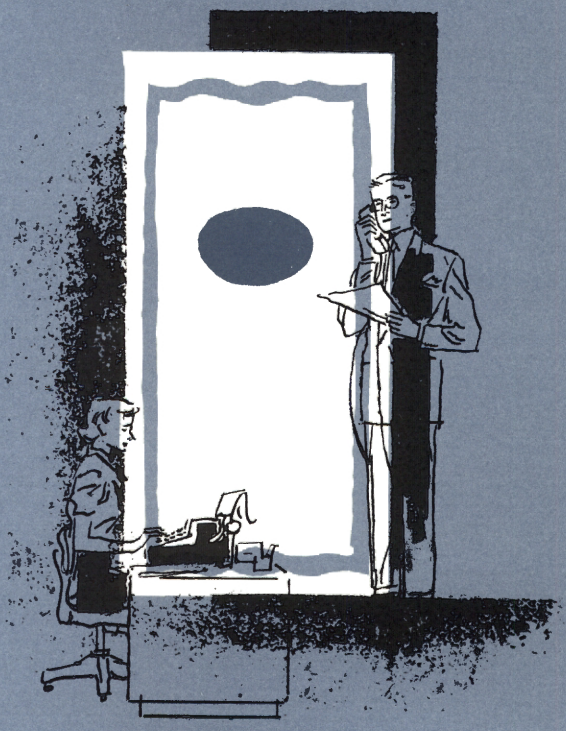
Including Additions and Improvements as of December 31, 1953

	Estimate September 15, 1949	Estimate December 31, 1952	Current Estimate
Carried Forward (See Note 3)	$149,030,000	$207,696,000	$218,392,000
Reimbursement to State of New Jersey	11,150,000	11,457,000	11,353,000
Real Estate	10,145,000	19,950,000	19,750,000
Engineering, Architectural, Borings, Design, Supervision and Inspection	13,600,000	16,970,000	17,700,000
Cost of organization of Maintenance, Toll Collection, Toll Audit and Police Departments, including construction work performed by Maintenance Department	—	725,000	854,000
Other Costs, including administration costs, and legal costs not provided for elsewhere and including financing costs other than those specifically mentioned below	1,000,000	2,196,000	2,319,000
	$184,925,000	$258,994,000	$270,368,000
Interest (See Note 4)	23,000,000	—	—
Interest and Committment Fees	—	6,503,000	6,028,000
Calls upon Construction Fund for initial Operating Funds and to fulfill requirements of general interest reserve fund	—	500,000	662,500
Discount on Bond Issues	—	648,000	648,000
Allowance for Contingencies	22,075,000	13,355,000	2,245,500
TOTAL (See Note 5)	**$230,000,000**	**$280,000,000**	**$279,952,000**

NOTE 4: Based upon the method of financing adopted, the item of interest (and interest reserve fund) was reduced to $16,315,000 and the contingency to $18,760,000, making the total bond issue $220,000,000.

NOTE 5: The total available for construction is reduced by $48,000 from $280,000,000 to $279,952,000. Series A Bonds totalling $2,024,000 and included in the $280,000,000 were not issued. They were replaced with Series B Bonds, the proceeds of which produced $1,975,459.50, resulting in the difference of $48,000.

Financing and Costs



THE 1952 Annual Report reviewed the sale of $30 millions (out of an authorized issue of $32,024,000) of Second Series 1⅞ percent bonds (Series A) due January 1, 1958, and mentioned the initial financing of $220 millions of 1950 bonds in mid-February of that year, and of $35 millions of 1951 bonds in October, 1951.

Upon completion of engineering studies in 1953 indicating financial feasibility of the Newark Bay-Hudson County Extension, arrangements were concluded for the financing of that project; the redemption of the Series A bonds; and for other stated purposes.

On October 14, 1953, therefore, the Authority, by resolution, provided for the issuance of, and sold, $150 millions of 3⅜ percent Second Series Bonds (Series B) due July 1, 1988.

Proceeds of the bonds are to be applied to the following purposes:

(a) To redeem the outstanding $30 millions of Series A bonds;

(b) To construct the Newark Bay-Hudson County Extension;

(c) To pay expenditures in connection with essential additional facilities to meet heavy traffic on the 118-mile Turnpike;

(d) To pay necessary financing and other costs; and

(e) To undertake comprehensive studies of new projects such as the East-West Turnpike.

Redemption of the $30 millions of 1⅞ percent Second Series Bonds (Series A) was accomplished as of December 10, 1953.

The resolution of October 14, 1953, also authorizes the issuance of additional Series B bonds:

(a) To construct a direct connection to the Pennsylvania Turnpike;

(b) To construct additional traffic lanes on the Turnpike from Interchance 4 to Interchange 11 and from Interchange 16 to Interchange 18; and

(c) To construct not exceeding four service areas on the Turnpike including service stations, service facilities, restaurants and other buildings and facilities in connection therewith deemed desirable or necessary by the Authority.

Under the resolutions there is pledged as security for Series-B Bonds all surplus revenues remaining after the payment of expenses of the Turnpike and extensions thereof, including the Newark Bay-Hudson County Extension, and after compliance with the requirements for the General Interest Fund, General Interest Reserve Fund, General Bond Reserve Fund, and General Sinking Fund established for the General Bonds.

The 1953 Series-B bonds may be called for redemption prior to maturity, on or after July 1, 1958, on not less than 60 days' published notice, at premium payments ranging from 3½ percent to June 30, 1963, and at successive reductions of 1 percent for each subsequent five-year period until June 30, 1978. Thereafter, they may be called for redemption at par.

The Authority is empowered to issue Second Series Bonds at any time, and from time to time, to the extent necessary to provide additional funds for completing the construction of any one or more of the projects mentioned herein without further recourse to the bondholders.

Second Series Bonds may also be issued for other lawful purposes if at the time of issuance:

(a) Such additional bonds shall mature not earlier than the date of the latest maturity of any of the Second Series Bonds then outstanding;

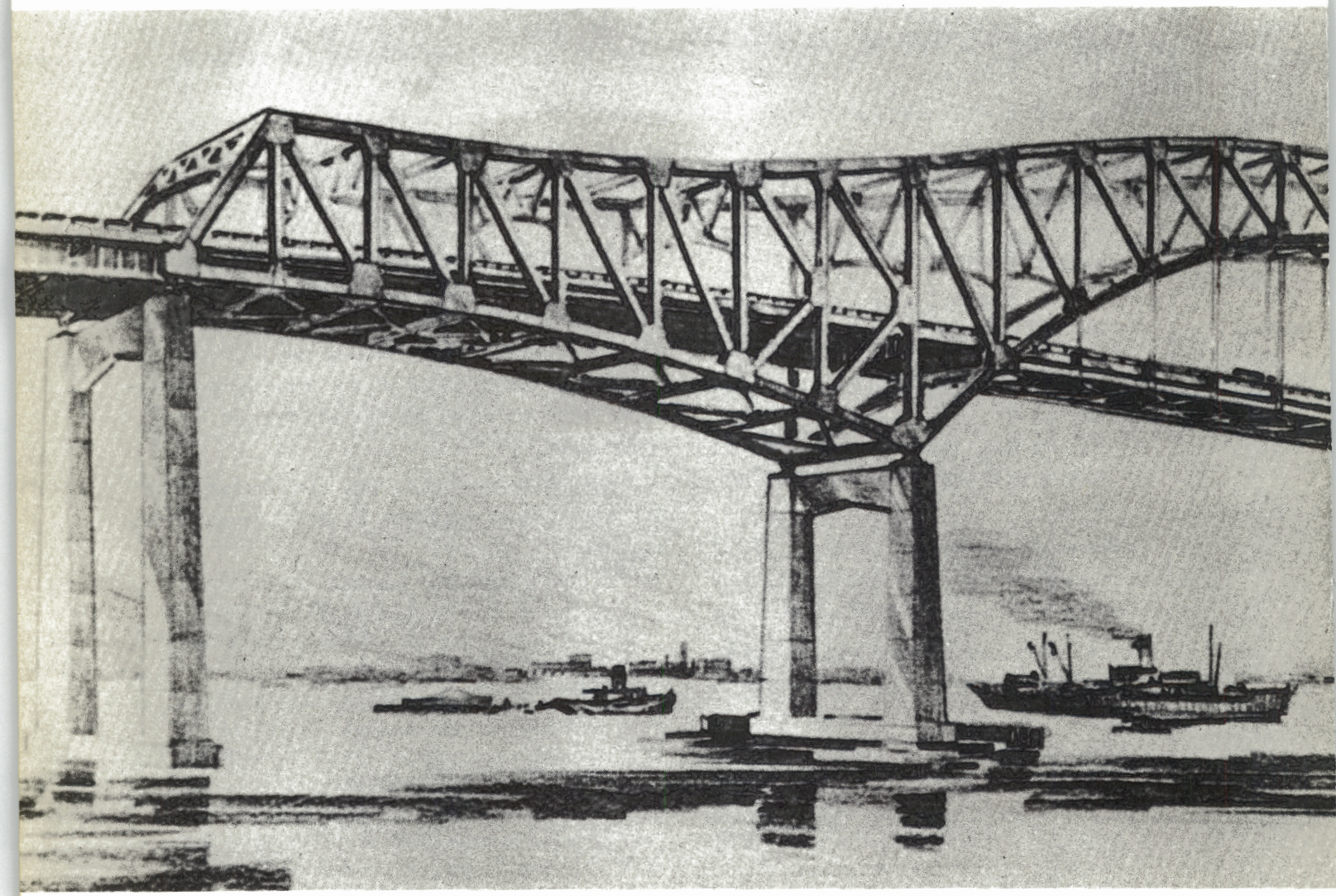
(b) The Consulting Engineer shall have certified that the proceeds of sale of the authorized issue of Second Series Bonds of which the Bonds being issued are a part, together with other moneys available therefor, will be sufficient for fulfilling the purpose or purposes for which such issue was authorized;

(c) The amount in the Second Series Reserve

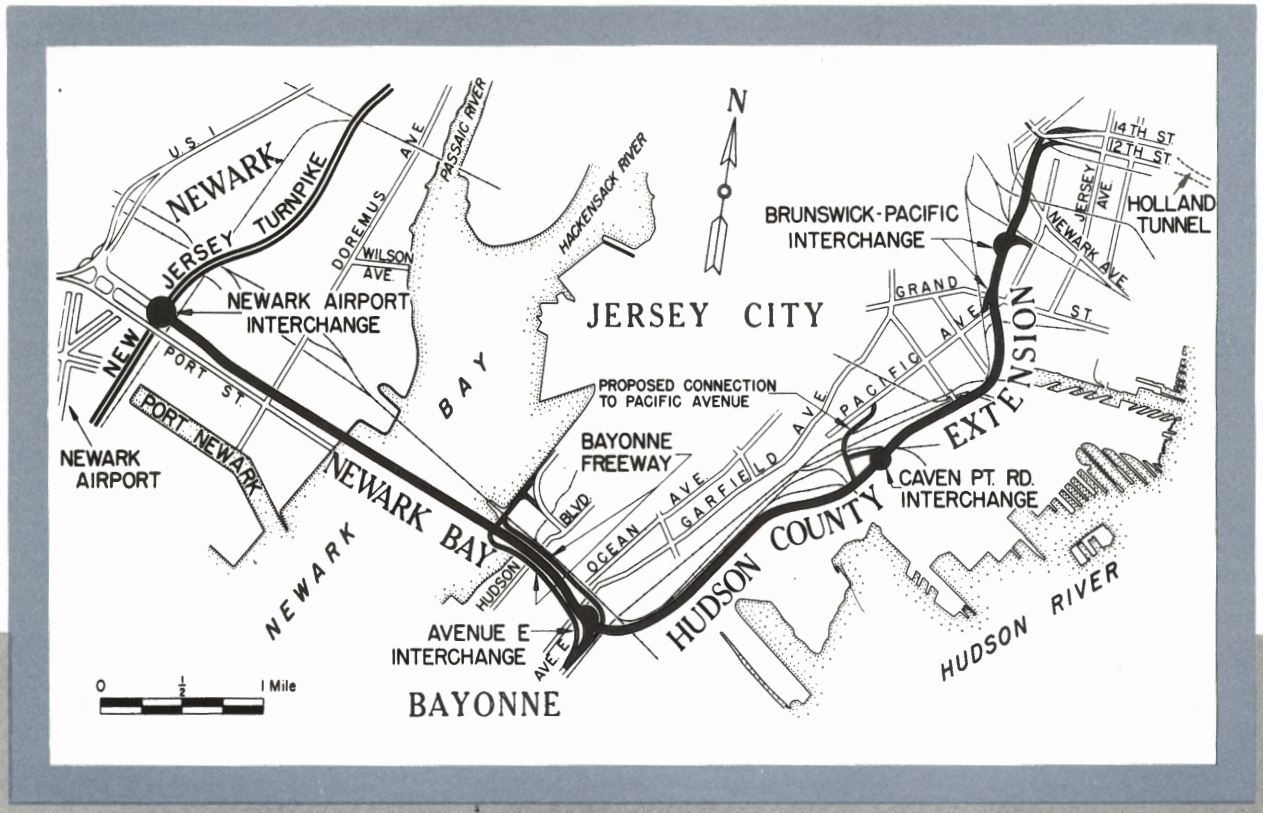
Fund shall equal the Second Series interest reserve fund requirement, and the amount in the Second Series Maintenance Fund shall equal the Second Series Maintenance Fund requirement, exclusive of any increase in such requirement by reason of the issuance of such additional Second Series Bonds; and

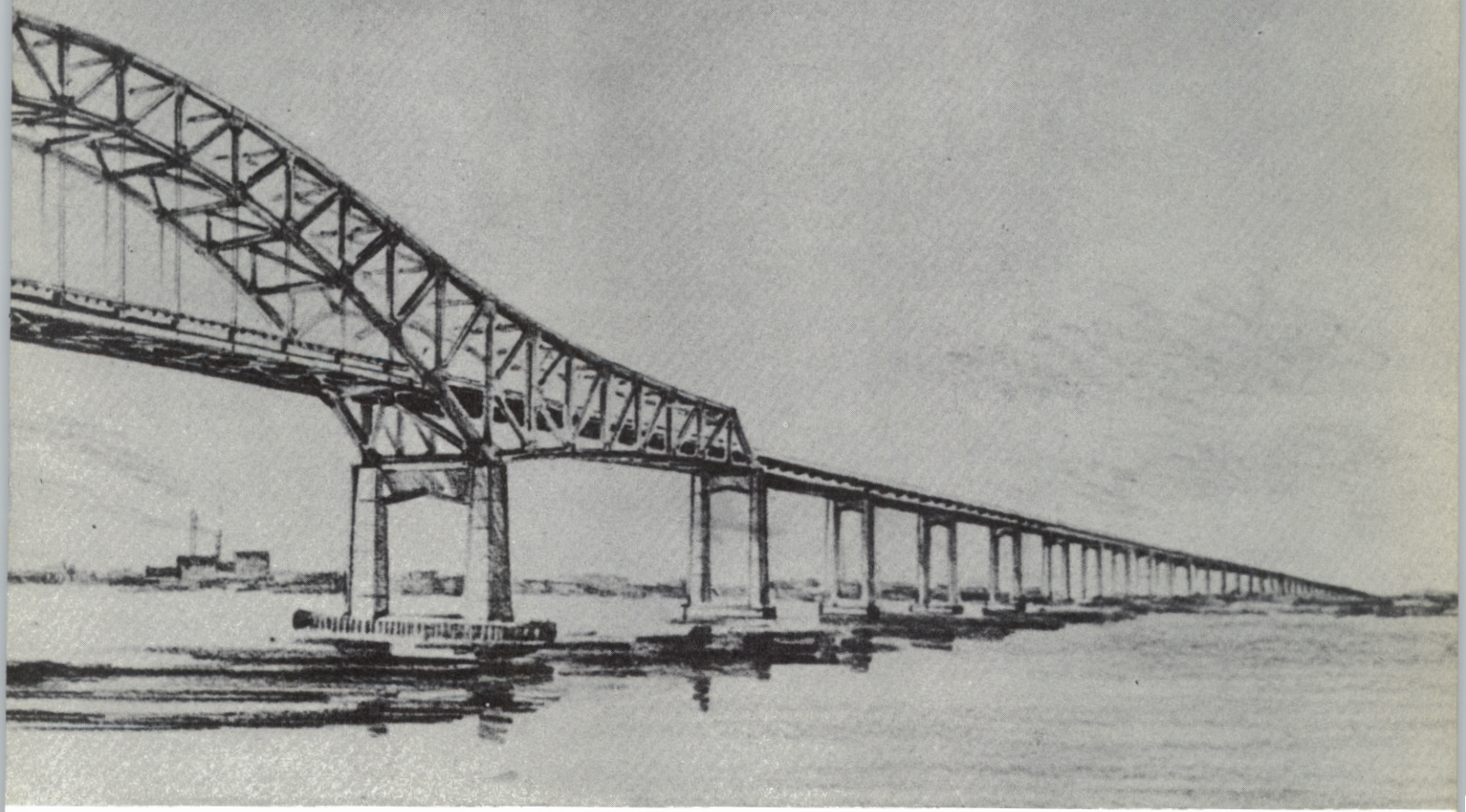
(d) One-half of the sum of the average annual net revenues applicable to Second Series Bonds for a period of 24 calendar months ending within three calendar months before the time of issuance of the Second Series Bonds then being issued, plus the average annual net revenue applicable to Second Series Bonds, as estimated by the Traffic Engineer, in the five-year period immediately following the date upon which, in the opinion of the Consulting Engineer, the facility to be financed by means of such additional Second Series Bonds will be placed in operation, shall be at least 150 percent of the aggregate amount of Level Debt Service requirements for all Second Series Bonds outstanding and for the additional Second Series Bonds then to be issued respectively, all as certified to the Trustee by the Consulting Engineer.

In the accompanying tabulation is shown the estimated cost of construction of the 118-mile Turnpike as of December 31, 1953, and previous estimates.



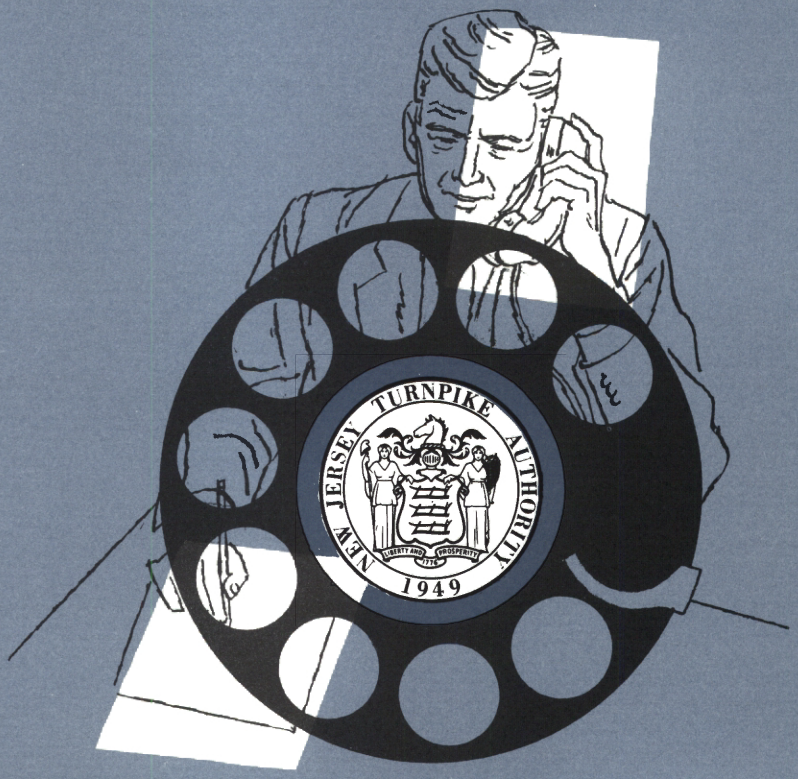
Architect's rendering of proposed new bridge crossing





ewark Bay as part of Newark Bay-Hudson County Extension

Activities of the Authority Staff



IN KEEPING with long established policy, the Authority's staff in 1953 was kept at a minimum and yet has been able to render the essential and adequate services which users of the Turnpike might reasonably expect. All members of the staff, from those in administration and engineering to those engaged in the field of toll collection, policing and maintenance were confronted with increasing duties as the result of constantly rising traffic.

To assure itself of competent personnel for the many assignments required for Turnpike operation, new techniques were developed for screening and selecting applicants. Special attention has been given to the selection techniques and training methods concerning employees who are in contact with the public.

Early in 1953 the Toll Collectors' Benevolent Association, an independent organization established by toll collectors themselves, presented certain suggestions for improvement in working conditions. These were reviewed by the Commissioners and the staff and, as a result, the collectors now work in improved toll booths and, beginning January 1, 1954, a uniform 40-hour week will be established. Moreover, salary ranges for toll collectors and senior collectors, including annual increases based on satisfactory performance, were adopted during the year to correspond with those of other similar facilities.

On July 31, last, a Memorandum of Understanding also was signed with the Highway Maintenance Employees' Union, an organization of employees in the Maintenance Department. This Memorandum gives full recognition to the right of employees to organize and the Authority will give a full hearing to any suggestions, petitions, or grievances which its employees may wish to present. It also establishes a 40-hour basic work week; grants a seventh holiday; establishes sick leave and vacation policies which, together with the extra holiday, have been made uniform for all employees of the Authority. It also provided for a general advance in pay schedules.

Of the 575 employees engaged directly by the Authority at the year-end, 486, or 84 percent, were in the maintenance, toll collection and toll audit departments, the three principal functional units. The remainder represented personnel in the executive, administrative and engineering divisions.



Turnpike display in lobby of Administration Building

CONTRACTS AWARDED IN 1953

CONT. NO.	CONTRACTOR		AWARD DATE	AWARD AMT.
93	A. Neri Inc.	Additional Lighting Along Entire Turnpike	2-5-53	$609,739.36
94	Teller Paving & Constr.	Underbridge Slope Pavement Elizabeth	1-19-53	65,100.00
95-1	John D. Lawrence	Snack Bar—Haddonfield	2-11-53	33,159.00
95A-1	John D. Lawrence	Snack Bar—Cranbury	2-11-53	33,703.00
95B-1	Wallace J. Wilck	Snack Bar—Milltown	2-11-53	39,919.00
95-2	Bergen Iron Works	Iron Work—Haddonfield	2-11-53	2,067.00
95A-2	Bergen Iron Works	Iron Work—Cranbury	2-11-53	2,067.00
95B-2	Bergen Iron Works	Iron Work—Milltown	2-11-53	2,066.00
95-3	Richardson Engineering Co.	Plumbing and Drainage—Haddonfield	2-11-53	5,135.00
95A-3	Richardson Engineering Co.	Plumbing and Drainage—Cranbury	2-11-53	4,710.00
95B-3	Richardson Engineering Co.	Plumbing and Drainage—Milltown	2-11-53	4,710.00
95-4	Richardson Engineering Co.	Ventilating Work—Haddonfield	2-11-53	757.00
95A-4	Richardson Engineering Co.	Ventilating Work—Cranbury	2-11-53	657.00
95B-4	Richardson Engineering Co.	Ventilating Work—Milltown	2-11-53	657.00
95-5	Ernest Jarvis & Co.	Electrical Work—Haddonfield	2-11-53	5,485.00
95A-5	Ernest Jarvis & Co.	Electrical Work—Cranbury	2-11-53	5,285.00
95B-5	Ernest Jarvis & Co.	Electrical Work—Milltown	2-11-53	5,285.00
95-6	Federal Manufacturing Co.	Food Service Equipment—Haddonfield	2-11-53	4,700.00
95A-6	Federal Manufacturing Co.	Food Service Equipment—Cranbury	2-11-53	4,400.00
95B-6	Federal Manufacturing Co.	Food Service Equipment—Milltown	2-11-53	4,400.00
96	Middlesex Sheet Metal Co.	Attendants' Booths on Fuel Pump Islands	6-10-53	36,512.00
97A	John D. Lawrence	Additions and Alterations at Service Areas	7-10-53	78,310.00
97B	Camden Iron Works	Structural Steel and Miscellaneous Metal Work—Additions and Alterations to Service Buildings	7-10-53	7,059.98
97C	Charles Simkin & Sons	Heating, Ventilating and Refrigeration Work—Additions and Alterations to Service Buildings	7-10-53	16,131.00
97D	Charles Simkin & Sons	Plumbing and Drainage Work—Additions and Alterations to Service Buildings	7-10-53	17,973.00
97E	James H. DeLaplaine	Electrical Work—Additions and Alterations to Service Buildings	7-10-53	5,811.00
98A	Wallace J. Wilck, Inc.	Additions and Alterations to Service Buildings 7S, & 8N	7-10-53	57,768.00
98B	Camden Iron Works	Structural Steel and Miscellaneous Metal Work—Service Buildings	7-10-53	4,883.32
98C	Richardson Engineering Co.	Heating, Ventilating and Refrigeration Work—Service Buildings	7-10-53	9,600.00
98D	Richardson Engineering Co.	Plumbing and Drainage — Service Buildings	7-10-53	10,400.00
98E	Ernest Jarvis & Co.	Electrical Work—Service Buildings	7-10-53	3,488.00

CONTRACTS AWARDED IN 1953

CONT. NO.	CONTRACTOR		AWARD DATE	AWARD AMT.
99A	A & W DeRiso	Additions and Alterations to Service Buildings	8-18-53	$33,875.00
99B	Elizabeth Iron Works, Inc.	Structural Steel and Miscellaneous Metal Work—Service Buildings	8-18-53	3,400.00
99C	Charles Simkin & Sons, Inc.	Heating, Ventilating and Refrigeration Work—Service Buildings	8-18-53	6,234.00
99D	Charles Simkin & Sons, Inc.	Plumbing and Drainage Work—Service Building	8-18-53	6,988.00
99E	Beach Electric Company	Electrical Work—Service Buildings	8-18-53	1,540.00
100A	Elliott-Lewis Corp.	Air Conditioning at 4 Service Buildings	7-10-53	12,280.00
100B	Charles Simkin & Sons	Additions and Alterations to Air Conditioning at 2 Service Buildings	7-10-53	7,658.00
100C	Charles Simkin & Sons	Additions and Alterations to Air Conditioning at 3 Service Buildings	7-10-53	10,228.00
100D	Charles Simkin & Sons	Additions and Alterations to Air Conditioning at 1 Service Building	7-10-53	3,748.00
101A	South Jersey Const. Co.	Service Area Expansion, 2 Service Areas	4-8-53	24,972.00
101B	South Jersey Const. Co.	Service Area Expansion, 1 Service Area	4-8-53	48,262.50
101C	South Jersey Const. Co.	Service Area Expansion, 1 Service Area	4-8-53	41,792.50
101D	South Jersey Const. Co.	Service Area Expansion, 1 Service Area	4-8-53	46,148.00
101E	M. J. Stavola, Inc.	Service Area Expansion, 1 Service Area	4-8-53	49,710.00
101F	South Jersey Const. Co.	Service Area Expansion, 2 Service Areas	4-8-53	33,048.50
101G	Franklin Construction	Service Area Expansion, 1 Service Area	4-8-53	29,479.00
102A	John D. Lawrence	Additions and Alterations to Service Buildings at 1 Service Area	12-7-53	115,850.00
102B	Bergen Iron & Engineering Co.	Structural Steel & Miscellaneous Metal Work—1 Service Area	12-7-53	27,650.00
102C	Richardson Engineering Co.	Heating, Ventilation and Refrigeration at 1 Service Area 4N	12-7-53	59,867.00
102D	Richardson Engineering Co.	Plumbing and Drainage—to 1 Service Building	12-7-53	24,883.00
102E	Lightning Electric Service Co.	Electrical Work—Additions and Alterations to Service Building at Service Area 4N	12-7-53	14,544.00
102F	Combined Kitchen Equipment Co.	Restaurant Kitchen Equipment—Additions and Alterations to Service Building at 4N	12-7-53	32,638.00
103	Bromberger & Gartman	Sewage Treatment Facilities for Service Area 4N	4-27-53	78,876.00

CONTRACTS AWARDED IN 1953

CONT. NO.	CONTRACTOR		AWARD DATE	AWARD AMT.
105A	Wallace J. Wilck, Inc.	General Construction — Additions and Alterations to Service Area, Service Building at 11N	6-25-53	$19,367.00
105B	Elizabeth Iron Works	Structural Steel and Miscellaneous Metal Work Additions and Alterations to Service Building at Service Area 11N	6-25-53	2,923.00
105C	Ernest Jarvis & Co.	Mechanical and Electrical Work—Additions and Alterations to Service Bldg. at Service Area 11N	6-25-53	3,968.00
106	Bromberger & Gartman	Sewage Treatment Facilities at Service Areas 3S, 7S	6-25-53	118,790.00
107	Lightning Electric Service Co.	Alterations to Electric Service at Various Service Areas	9-3-53	39,630.00
108	Blanding Construction	Sewage Treatment Facilities at Service Areas 1N and 1S	9-3-53	161,300.00
109	Cyclone Fence	Replacement Chainlink Fence Adjacent to Rutgers Village	7-22-53	9,346.34
293	E. D. Wortham Co.	Cleaning out Culverts and Sewers, Woodbridge	2-5-53	3,394.00
294	Spearin, Preston & Burrows, Inc.	Sheeting—Condenser Ditch Sheeting, Bayway Refinery	12-5-53	66,834.00
298	Franklin Contracting Co.	Marsh's Creek Bridge Pavement Patching	1-5-53	12,627.65
N-1	Dravo Corporation	Newark Bay Bridge—River Piers	12-7-53	3,934,250.00
N-2	Bethlehem Steel Company	Newark Bay Bridge—Steel Superstructure	12-8-53	11,347,002.50
N-3	Merritt, Chapman & Scott Corp.	Newark Bay Bridge—West Approach Land Piers	12-7-53	1,876,600.00
N-4	Merritt, Chapman & Scott Corp.	Newark Bay Bridge—East Approach Land Piers	12-7-53	879,540.00
300	Hutchinson Signs Corp.	Emergency Speed Warning Signs	5-14-53	22,912.00
301	William Stothoff & Co.	Water Service Improvement at Service Area 1-N	6-1-53	32,000.00
302	Fabcon, Inc.	Supports for Additional Traffic Signs at Elizabeth and Lincoln Tunnel Interchanges	6-1-53	28,000.00
303	The Napp-Grecco Co.	Repairs to Broken Culvert at Woodbridge Avenue Bridge	6-2-53	8,100.00
304	J. H. Schrufer	Access Road to Service Area 2-S	2-27-53	2,000.00
305	Lightning Electric Co.	Electric Service to Emergency Speed Warning Signs	7-22-53	28,965.00
307	Charles Bancheri	Approach Repairs to Bridges in Burlington County	8-6-53	28,465.00

CONTRACTS AWARDED IN 1953

CONT. NO.	CONTRACTOR		AWARD DATE	AWARD AMT.
308	Robert A. Senior	Planting at Interchange Circles and Service Areas	4-29-53	$5,620.00
309	Jersey City Bldg. Supply	Demolition — Secaucus	6-10-53	3,100.00
310	A. Clemente Inc.	Roadway Repairs South of Big Timber Creek Bridge	6-1-53	15,144.75
311	Charles Bancheri	Approach Repairs to Bridges in Burlington Co.	8-18-53	60,416.15
312	J. R. Williams (John J. McGovern)	Approach Repairs to Bridges in Camden County	10-20-53	15,750.00
313	Acme Valve Installing Co.	Fire Hydrants—Administration Area and Ser. Area 10S	9-17-53	1,985.00
314	Max Cohen	Police Restroom — Newark Airport Interchange	8-24-53	1,160.00
315	Central Construction Co.	Repair to Access Road & Drainage	10-20-53	7,787.75
316	Bergen Iron & Engineering Co.	Repairs to Expansion Joints	12-7-53	27,350.00
317	Halecrest Co.	Emergency Access Road — Wood Avenue	11-16-53	9,680.00
318	South Mountain Nurseries	Planting at Interchanges and Service Areas	11-16-53	65,160.00
319	A. Clemente, Inc.	Approach Repairs to Bridges	10-20-53	24,867.15
321	The Hallen Co., Inc.	Rocker Bearing Adjustment—Ramp B-C over Raymond Blvd.	11-16-53	2,900.00
323	Standard Bitulithic Co.	Pavement Repairs — Woodbridge Interchange to George Washington Interchange	10-2-53	106,550.00
324	Howe Nurseries	Planting Shrubs	11-16-53	11,900.00
325	Franklin Contracting Co.	Elizabeth	10-20-53	11,241.25
326	A. J. Lupton Jr., Inc.	Bridges in Gloucester County	11-16-53	140,181.52
327	Anchor Post Products, Inc.	Chain Link fence — Central Shop Annex	12-23-53	1,562.00
328	Charles Bancheri	Approach repairs to 12 Bridges in Burlington, Mercer and Middlesex Counties	12-7-53	89,752.55
332	Madsen and Christensen, Inc.	Planting annuals along entire Turnpike	11-6-53	18,180.00
333	Howe Nurseries	Landscaping at Administration Bldg. and Maintenance Area	11-16-53	19,960.00
334	Howe Nurseries	Planting Ivy at Bridges along entire Turnpike	12-23-53	3,380.00
335	Pembrook Nurseries	Planting Slopes at Elizabeth	12-23-53	10,080.00
336	South Mouutain Nurseries	Restoration of Landscaping at Service Area 10N and 10S	12-23-53	4,380.00
337	Whitmyer Bros.	Construction of Wooden Barrier at Divided Roadway Entrance at Port St. Interchange		450.00

Progress of Real Estate



PROGRESS WAS made during 1953 in the completing of real estate transactions. Settlements were made with 27 owners of property involving total payments of $470,378, bringing to $15,209,000 the total paid to all owners to December 31, last. Of approximately 1,600 owners of property affecting the 118-mile Turnpike, all but 41 have received full payment, the Authority receiving appropriate titles in all cases. The unsettled cases represent properties with title defects; situations where owners cannot be located, or properties which are in condemnation.

Although 377 properties were authorized for condemnation from the time acquisition began, only 12 currently are awaiting trial. Of the remaining 365, a total of 206 was settled prior to filing of condemnation petitions; 75 were settled in further negotiation after filing of condemnation proceedings; 68 were settled by awards of Condemnation Commissioners; and 16 remain outstanding on which condemnation has been authorized but on which petitions have not yet been filed. Overall, the Authority's record in condemnation was extraordinarily favorable, considering the large number of parcels to be acquired for the right-of-way, service and interchange areas.

Accelerated steps were taken during the year to dispose of properties not needed for Turnpike purposes and, as of December 31, last, such property disposals consisted of 26 dwellings in Elizabeth, 2 in Mercer County and 8 in Middlesex County on which recoveries of $306,412 were realized. There are still some remaining parcels in the process of disposition and they will be offered, through public sales, to the highest bidders in the near future.

As the acquisition of real estate for the 118-mile Turnpike reaches completion, the indications are that final purchase prices thus far have exceeded appraisal values by only 6 percent.

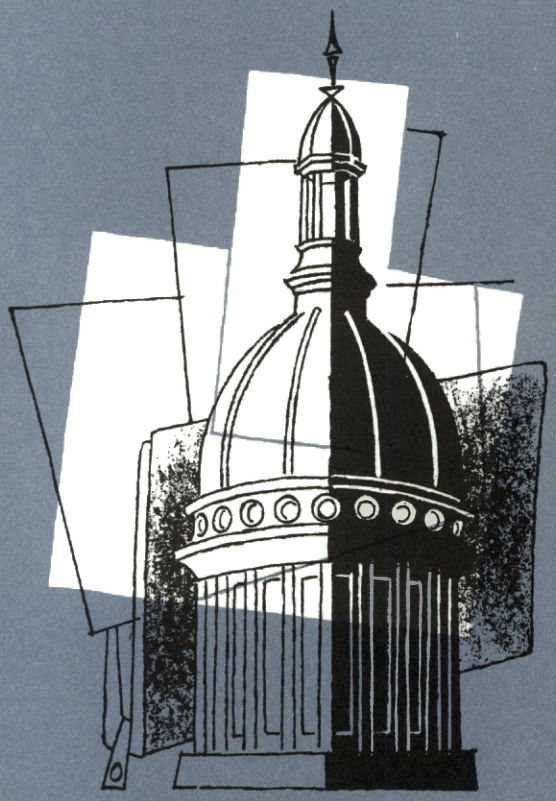
The Real Estate Department is currently engaged in the preparation of plans to acquire properties for the Newark Bay-Hudson County Extension, which will extend from the Newark Airport interchange of the Turnpike to the the Hudson County peninsula and the entrance to the Holland Tunnel. The Authority already has appointed the appraisers for real estate and actual acquisition awaits the completion of property maps which have been in preparation. Discussions have been held with various railroad and utility companies seeking their cooperation where the alignment is adjacent to, or crosses, their facilities.

The Real Estate Department already has made arrangements for the contractors to have access to land necessary to construct the Newark Bay bridge and the approaches thereto. Contracts for this work were awarded by the Authority late in 1953.



New directional sign erected last year in Elizabeth dual-dual area

Legislation, Legal Matters and Insurance



MATTERS mentioned in the last Annual Report continued to receive attention during 1953, and with good effect. A number of legal problems as to acquisition of Turnpike real estate was cleared up. A group of condemnation cases was concluded leaving only a few more to be prosecuted. Most of the open condemnation cases are in that category because every other means of clearing up difficult titles has been exhausted.

In the last Annual Report, it was noted that some of the contractors who built the Turnpike had filed claims for extra compensation and that the work of reviewing such claims from both engineering and legal points of view was proceeding. In 1953 a great deal of time was spent on claims and it can be reported with satisfaction that all claims filed have been reviewed with care and that nearly all of them have been settled and general releases obtained from the claimants. Although it appeared at times that certain claims would have to be disposed of by suit or arbitration, only one suit was actually brought and it was settled before trial. No arbitration proceedings were instituted. It is also a great satisfaction that the aggregate amount of the settlements is within the estimates set up months ago for contractors' claims, and it is obvious that the few claims which remain unsettled will not change that situation.

There is very little litigation pending. The Annual Report for 1952 mentioned a number of suits which had been brought on claims that damages were suffered by landowners as a result of Turnpike construction. Several of these were disposed of during the current year for nominal settlements and a few others are still pending. None of them is regarded as serious.

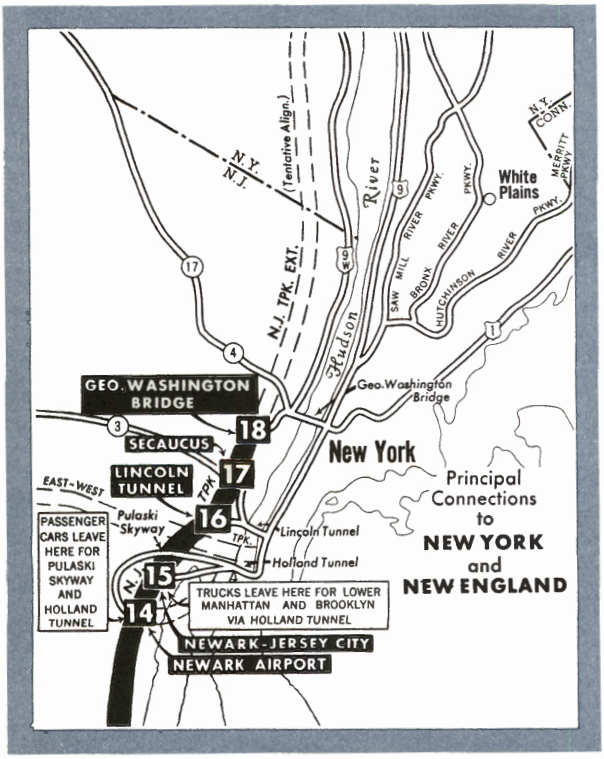
The Annual Report for 1952 also mentioned tax appeals being taken by the Authority for the purpose of establishing the scope of its exemption from local real estate taxes as to property lying outside of the right-of-way. A case has been heard by the State Division of Tax Appeals, but not yet decided which, it is believed, will produce a ruling as to try exemption of land acquired by the Authority in excess of that needed for Turnpike purposes. Such excess land was acquired where it was found to be desirable to purchase the entire holdings of an owner rather than leave him with a nearly useless portion of his land and pay him heavy damages for the severance. The lands not needed for Turnpike purposes will be sold at public sales as soon as possible.

Much time was devoted during the year by bond counsel of the Authority and by general counsel to planning and preparing a Supplemental Bond Resolution, and related documents, as a basis for financing the Newark Bay-Hudson County Extension, that Extension having been authorized by the Legislature in 1952. A great deal of this work was done in the Spring of 1953, but was not brought to a conclusion at that time because of the decision by the Authority to postpone new financing because of the unfavorable bond market. When market conditions improved in the Fall, the legal work which had been done in the Spring was reviewed and concluded.

Bonds to finance the connection between the New Jersey and Pennsylvania Turnpikes have not yet been issued, but the fundamental provisions for that financing, and for other stated purposes, are included in the Supplemental Bond Resolution just mentioned. The Annual Report for 1952 discussed the possible legal obstacle to a Turnpike bridge across the Delaware River consisting of a covenant between the Burlington County Bridge Commission and its bondholders that no competing bridge be built within ten miles of the Burlington Bristol Bridge, a zone within which the new Turnpike bridge must be located. Progress in clearing away that legal obstacle has been disappointingly slow, but on December 11, 1953, the Burlington County Bridge Commission adopted a resolution consenting to the con-

struction of a Turnpike bridge at any point to the north of the Burlington Bristol Bridge. Governor Driscoll furnished great assistance in achieving this result. It must now be implemented by concurrence of seventy-five percent of the holders of Burlington County Bridge Commission bonds, but it is hoped that the matter can be brought to a prompt conclusion.

For several years the subject of uniformity in traffic law enforcement has been under consideration in New Jersey. Under the Constitution of the State, the Chief Justice of the Supreme Court is the administrative head of all of the courts in the State. This power, which is lacking in most states, makes it possible for him to take effective action with respect to the functioning of the magistrates' courts, where traffic offenses are tried. The great volume of traffic on the Turnpike has led to many arrests for violations of the traffic laws—as high as six hundred summonses have been issued in a week—and with these cases coming up in various magistrates' courts over the full length of the Turnpike, it was realized that there was a very special need for uniformity in handling violators. A patron summoned for speeding in excess of the maximum limit should be penalized in the same way no matter whether his offense occurred on the Turnpike in Newark or in Swedesboro.

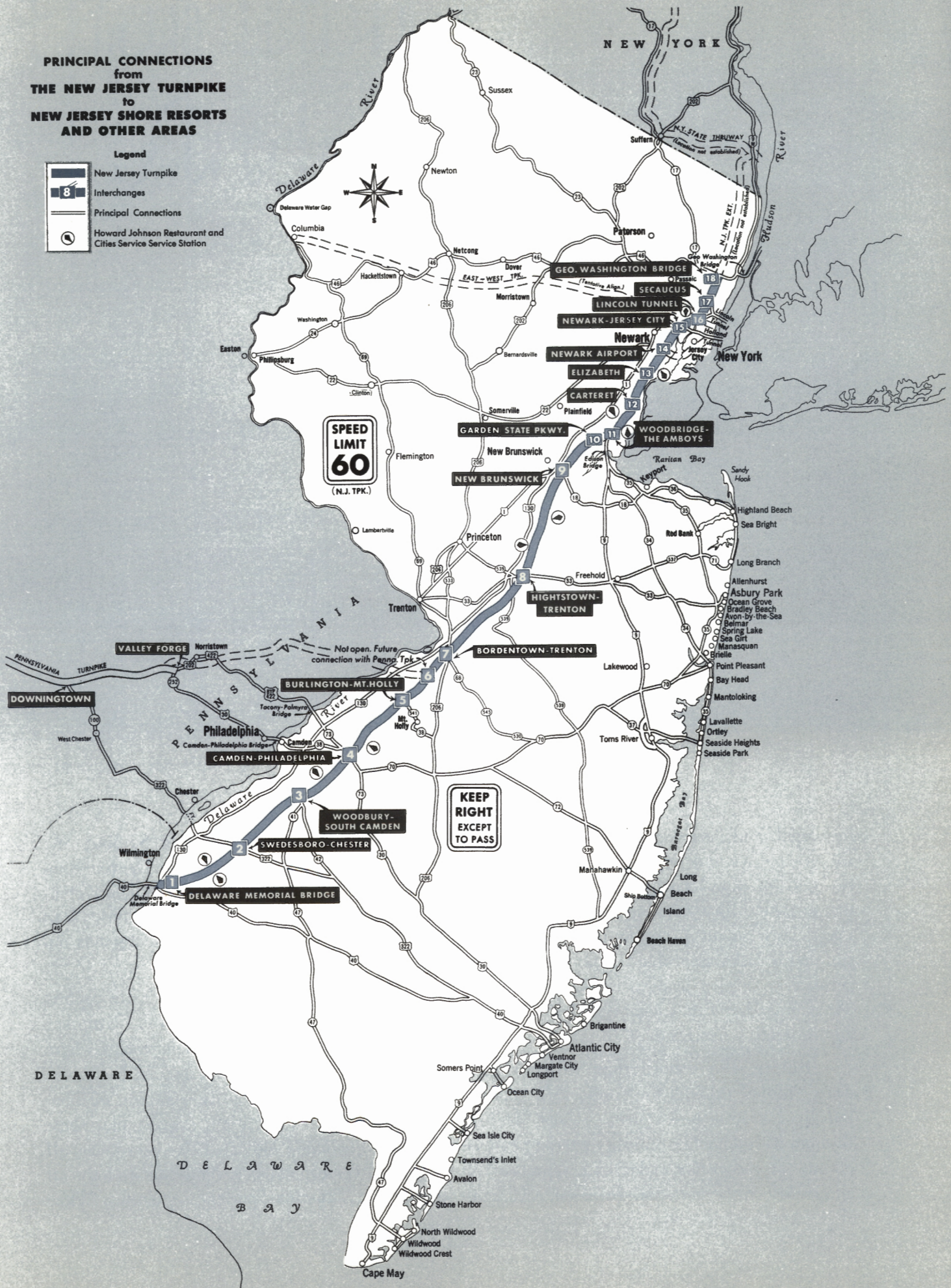


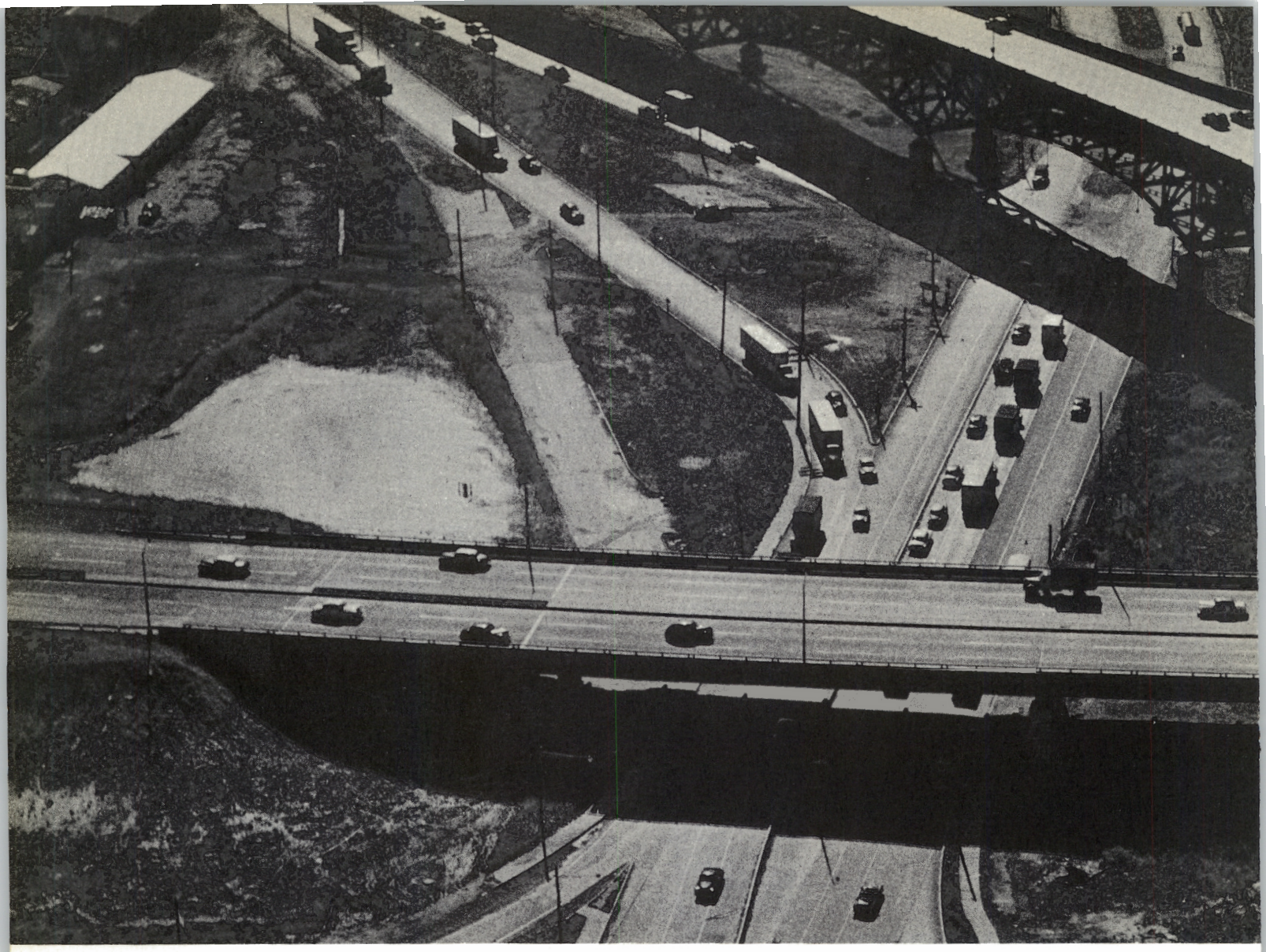
Under his administrative powers, Chief Justice Vanderbilt, early in 1953, called a conference of all magistrates in the municipalities through which the Turnpike passes. Also in attendance were the Attorney General, the Director of the Division of Motor Vehicles, the Administrative Director of the Courts and General Counsel for the Turnpike Authority. The Chief Justice took the lead in discussing the desirability of a system of uniform fines for the most common offenses on the Turnpike. At the close of the meeting Magistrate King, of Secaucus, was made chairman of a committee to prepare and suggest a schedule of uniform penalties. He was assisted by general counsel for the Turnpike Authority and Director Dearden of the Division of Motor Vehicles. Such a schedule was formulated and has now been put into effect. The most commonly applied feature of it is a fine for speeding consisting of one dollar a mile for each mile by which the defendant was exceeding the limit, plus costs. All of the standard penalties worked out by the committee and approved by the magistrates are subject to the condition that they may be increased in all cases where the driver's conduct represents more than a routine offense.

It is emphasized, however, that the Turnpike Authority is not a law enforcement agency and that the policing of the Turnpike is done by a regular detachment of State Police (the Authority paying all expenses), and each summons issued is handled in the usual way by the regular magistrates' courts along the Turnpike.

INSURANCE

While initially the determination of insurance coverages to be procured had to be based solely on the best judgment of engineer-


PRINCIPAL CONNECTIONS
from
THE NEW JERSEY TURNPIKE
to
NEW JERSEY SHORE RESORTS
AND OTHER AREAS
Legend
New Jersey Turnpike
Interchanges
Principal Connections
Howard Johnson Restaurant and Cities Service Service Station
NEW YORK
Delaware River
Hudson River
Sussex
Newton
Suffern
N.Y. STATE THRUWAY
(location not established)
Delaware Water Gap
Columbia
Paterson
N.J. TPK. EXT.
(location not established)
Netcong
Dover
GEO. WASHINGTON BRIDGE
Geo. Washington Bridge
Hackettstown
EAST-WEST TPK.
(Tentative Align.)
Passaic
SECAUCUS
Morristown
LINCOLN TUNNEL
Lincoln Tunnel
Holland Tunnel
Washington
NEWARK-JERSEY CITY
Newark
Easton
Phillipsburg
Bernardsville
NEWARK AIRPORT
Jersey City
New York
ELIZABETH
(Clinton)
CARTERET
Somerset
Plainfield
SPEED LIMIT 60
(N.J. TPK.)
GARDEN STATE PKWY.
WOODBRIDGE-THE AMBOYS
Flemington
New Brunswick
Edison Bridge
Raritan Bay
Keyport
Sandy Hook
NEW BRUNSWICK
Highland Beach
Sea Bright
Lambertville
Princeton
Red Bank
Long Branch
Freehold
Allenhurst
Asbury Park
Ocean Grove
Bradley Beach
Avon-by-the-Sea
Belmar
Spring Lake
Sea Girt
Manasquan
Brielle
HIGHTSTOWN-TRENTON
Trenton
PENNSYLVANIA
VALLEY FORGE
Norristown
Not open. Future connection with Penna. Tpk.
BORDENTOWN-TRENTON
Lakewood
Point Pleasant
Bay Head
PENNSYLVANIA TURNPIKE
BURLINGTON-MT.HOLLY
Mantoloking
DOWNINGTOWN
Tacony-Palmyra Bridge
Delaware River
Mt. Holly
Lavallette
Ortley
Seaside Heights
Seaside Park
Philadelphia
West Chester
Camden-Philadelphia Bridge
Camden
Toms River
CAMDEN-PHILADELPHIA
Chester
KEEP RIGHT EXCEPT TO PASS
Barnegat Bay
WOODBURY-SOUTH CAMDEN
Wilmington
SWEDESBORO-CHESTER
Manahawkin
Long Beach Island
Ship Bottom
DELAWARE MEMORIAL BRIDGE
Delaware Memorial Bridge
Beach Haven
Brigantine
Atlantic City
Ventnor
Somers Point
Margate City
Longport
Ocean City
DELAWARE
Sea Isle City
Townsend's Inlet
DELAWARE BAY
Avalon
Stone Harbor
North Wildwood
Wildwood
Wildwood Crest
Cape May

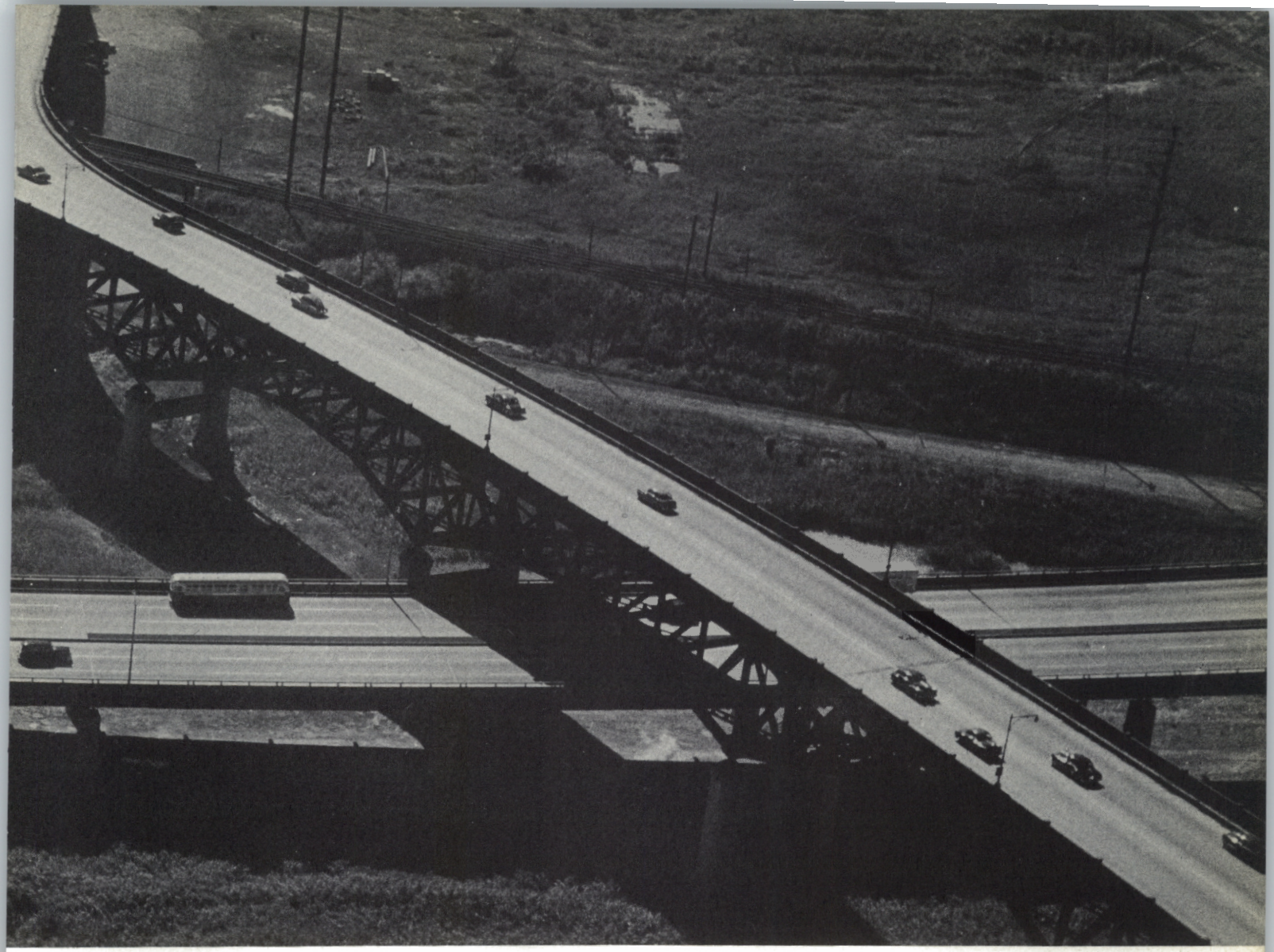


Northern section of Turnpike where

ing, legal, and insurance advisers, the Authority now enjoys and profits from the benefit of two years of experience in operations. Although the unavailability of necessary reserves still makes any sound program of self-insurance for major risks impractical, the fact that insurance is carried to cover such risks brings about an indirect and compensating saving in administrative overhead.

During 1953 more than thirty claims were handled through the Authority's general liability insurance carrier; eleven claims through its automobile liability carrier; eleven claims for recoveries under its comprehensive automobile fire, theft and collision coverage, resulting in collections totaling $1,800; one hundred and seven accidents and seven compensable claims through its workmen's compensation insurance carrier; and more than ten claims involving other miscellaneous insurance coverages.

The legal staff reviews all police reports of accidents and incidents on the Turnpike; refers information to other departments where appropriate; seeks to guard against hazardous situations, and watches for patterns of incidents which, by repetition, suggest that some remedial action is indicated. It also screens all patrons' correspondence, handling directly all claims or situations portending claims. When



derpasses Pulaski Skyway to right

received, claims are processed to the appropriate insurance carrier, if any, and records of loss and collection experience are kept for each separate form of Turnpike insurance coverage.

All incidents resulting in loss or damage to Turnpike property are reported to the Authority's legal department. Where the damaged property was insured by the Authority, the matter is usually processed for collection from the appropriate carrier. Where damage was negligently caused to Turnpike property by third parties, all relevant facts are assembled and efforts are made to recover from the party responsible, or his insurance carrier. During 1953, up to mid-December, a total of $6,295. was recovered from third parties for damage caused to miscellaneous Turnpike property, and an additional $1,805. for damage caused in ten accidents to Turnpike vehicles. This result was accomplished by letter writing alone, without unpleasant reaction or a single resort to the courts.

From the loss experience records being assembled, data is now available from which to justify alterations in the types and extent of insurance coverage carried. A number of such changes is being made in 1954 which is expected to result in net savings to the Authority.

Public Information



THE PUBLIC INFORMATION program during the past year continued to emphasize to motorists and truckers, the advantages of time savings, comfort and safety, afforded by using the Turnpike. Simultaneously, the expanded program of information highlighted the many steps being taken by the Authority in the interest of:

new and improved safety built into the highway;

new and expanded service facilities and parking areas to accommodate increased volumes of traffic;

new plans for the Newark Bay-Hudson County Extension; and

the status of the Pennsylvania Turnpike connection and studies of other extensions and projects.

In all of these phases, the fullest cooperation, giving the Authority nationwide coverage, was extended by various media such as newspapers, magazines (popular and technical); radio, and television.

Supplementing these media were personal appearances of members of the Authority and of the staff before groups, including civic, business and technical organizations, associations of all kinds, religious and school groups, to inform them of the Authority's activities and its plans. Addresses were delivered in New Jersey, in adjacent states of New York and Pennsylvania, in Washington and in several north central states where toll road activity is increasing.

A modest amount of paid advertising also was used in 1953 to develop an interest in, and use of, the Turnpike. Displays of relief models and exhibits were used to promote awareness of the Turnpike. At Atlantic City, for instance, a display was available for the entire vacation season of 1953. It was viewed by several million persons from all parts of the nation, as well as by visitors from abroad. Another exhibit was placed on display in the windows of Gimbel Brothers, Philadelphia, for several weeks, coincident with promotional efforts for the Delaware Valley area.

Through the courtesy of the U.S. State Department and at no cost to the Authority, several displays were erected in principal cities in Central Europe and, from reports, these were seen by thousands of persons, including visitors from the United States.

Foreign publications evidenced an increasing interest in modern highway construction, and particularly the New Jersey Turnpike. Many of these—newspapers and magazines—carried comprehensive illustrated articles on the Turnpike construction, its modern engineering details and operational aspects. Such publications were circulated throughout Germany, France, Spain, Norway, Sweden, Belgium, England and Africa.

It is interesting to note that from the beginning of construction, highway engineers, motor vehicle officials and specialists in pavement construction, have visited and examined the New Jersey Turnpike. Officials from states in this country which are interested in toll roads, and members of newly-organized authorities, have visited the Authority at various times to discuss financing, engineering, construction and operational details.

There has been a growing demand for informational material on the Turnpike on the part of patrons and others from all parts of the country as the result of published articles. Folders, showing the route of the highway, its interchanges, service areas and other interesting facts, have been prepared to meet these demands, and more than 1,700,000 have been distributed. These folders also have been supplied, in quantities, to touring services, hotels, motels and other avenues of tourist information. They have aided in attracting users to the Turnpike.

The promotional effort of the Authority has helped to focus attention on the State and its excellent highways, and the many advantages which stem from such progressive developments in transportation.

Program for 1954



THE MOST important project on the program for 1954 is the Newark Bay-Hudson County Extension for which financing was concluded in October, last, as the major part of an offering of new 3⅜ percent Second Series bonds in an amount of $150,000,000.

Plans for this Extension from the Newark Airport Interchange of the Turnpike to the Hudson County peninsula, and a direct connection to the Holland Tunnel, in Jersey City, were prepared and submitted to officials of Hudson County by the Commissioners of the Authority on August 18, 1953. This Extension had been under study since June, 1952, when the enabling Act governing it was passed by the State Legislature. There has been a great need for many years to relieve the congestion on streets and highways in Jersey City and Bayonne, and, incidentally, to pave the way for the further development of the adjacent water front and industrial property which forms a vital part of the greater New York Metropolitan area.

This Extension will have the effect of practically placing Bayonne and Jersey City directly on the Turnpike and it will be only a matter of minutes of express travel to Bayonne and Newark as compared to tedious and strenuous driving under present conditions. It will provide a more convenient and faster route for traffic moving between Route No. 1 and the New Jersey Turnpike and the Holland Tunnel, Jersey City and Bayonne. In addition, it will provide a new and direct route from New York City to the Newark Airport which serves an important segment of air traffic to and from New York City and the outlying metropolitan area.

Immediately upon the accomplishment of the financing for this project, contracts were advertised and competitive bids sought for the foundations and superstructure of the new bridge crossing of Newark Bay, the most important and time-consuming unit of this Extension. Following the receipt of bids, awards were promptly made to the lowest bidders who were instructed to proceed without delay toward the goal of placing the facility in operation as quickly as possible. The Newark Bay-Hudson County Extension will be self-supporting and self-liquidating according to surveys by nationally recognized traffic and revenue engineers. The urgency of this Extension is evident from those surveys which indicate that the major portion of the traffic using it—73 percent—will originate in, or be destined for, the Hudson County peninsula, and only 27 percent will be destined to, or from, the Holland Tunnel. Moreover, a substantial part of the 27 percent, according to the engineers, is tunnel traffic which already exists and therefore, it will not add to the existing load of the Holland Tunnel. On the other hand, this through traffic will be removed from the streets of Jersey City to proceed directly over the Extension to, and from, the Holland Tunnel, offering a material measure of relief from intolerable traffic conditions on Hudson County's streets.

Substantial relief from congestion also will be afforded with the completion of the third tube of the Lincoln Tunnel now under construction by the Port of New York Authority. Traffic engineers estimate that, with this completion, upwards of 4 million vehicles will be diverted from the Holland Tunnel and use the new tube of the Lincoln Tunnel.

The practicability of constructing an Extension into Hudson County was explored originally in 1949 when engineering studies were made for the present Turnpike. These studies, however, showed that the Extension would not be self-supporting and it could not be financed at that time. Subsequent studies made after the present Turnpike came into operation with its unusually heavy traffic did indicate the necessary feasibility.

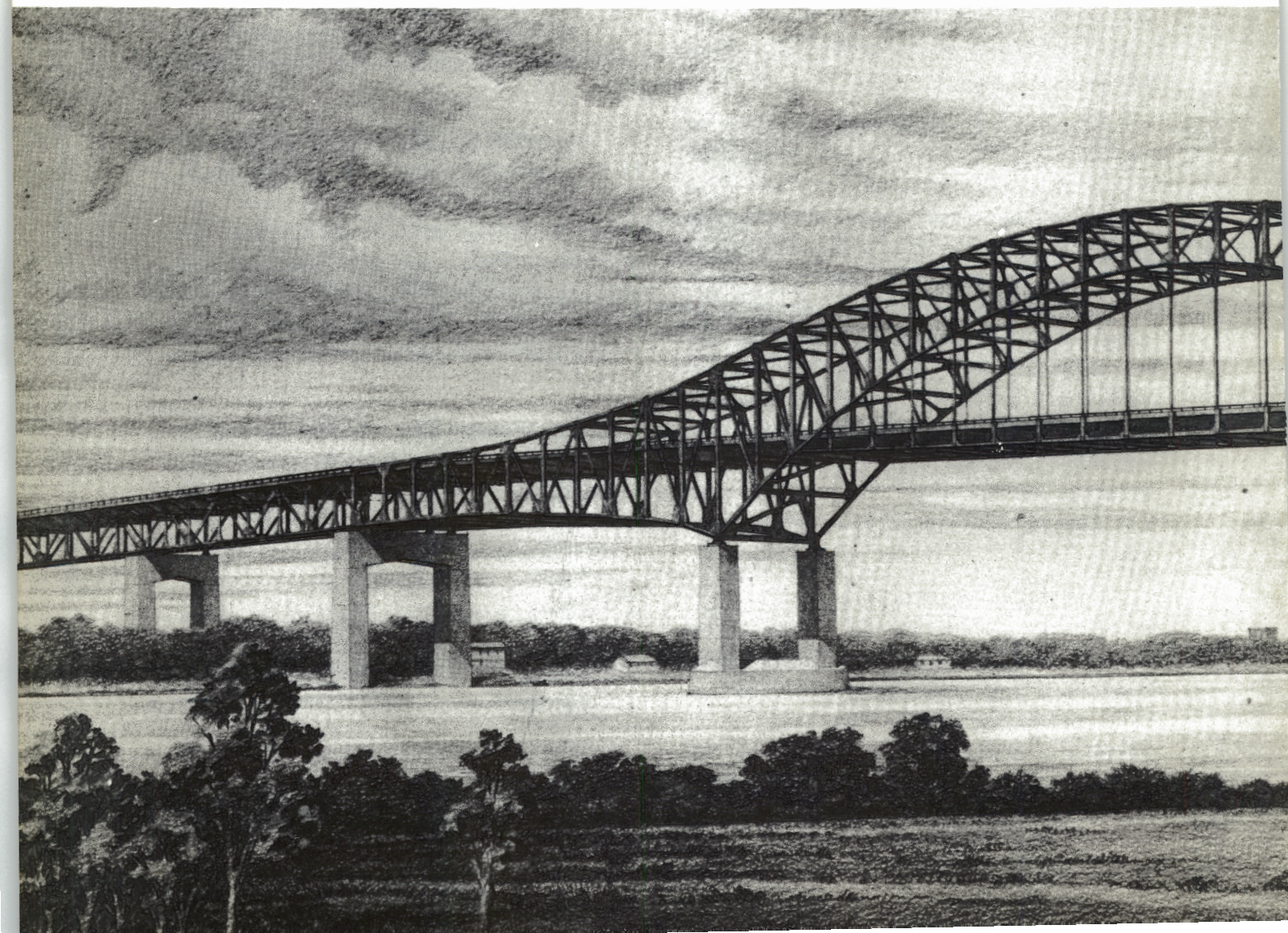
In the first year of operation, the engineers forecast usage at the rate of 14,000,000 vehicles

annually. This traffic is expected to increase to 20,500,000 by 1964 and steadily thereafter to 27,000,000 in 1980.

Engineering plans progressed during 1953 on the Extension of the Turnpike from a point below Bordentown to a new bridge crossing of the Delaware River for a direct connection to the Pennsylvania Turnpike, the latter now under construction from King of Prussia to the Delaware River. Within recent weeks clarification of the problem of jurisdiction over the Delaware River's crossing in the vicinity of the bridge it is expected, will aid materially in getting this project under way.

The Authority's proposed connection to the New York State Thruway by means of an Extension from the northern terminus at Ridgefield Park to the New York State line still awaits a determination as to whether or not the Garden State Parkway, under construction by that Authority, or the Turnpike extension can better serve the northern area of New Jersey. It is expected that a clarification of the alternate routes in this area will be reached in the early future so that detailed planning may be undertaken.

Studies of the feasibility of the proposed East-West Turnpike, which would begin in Hudson County (ultimately connecting directly to a proposed new tunnel crossing of the Hudson River) and proceed generally westward across Essex County, Morris County, the southern tip of Sussex County, and Warren County to the Delaware River, were delayed by the lack of funds to pay for such surveys. At the time legislation was passed for this project, there were no funds available for the



comprehensive studies needed to determine the economic practicability of this project, the Authority being precluded from using Turnpike revenues for such studies. The new financing concluded in October, principally for the Newark Bay-Hudson County Extension, included provisions for funds to make studies of new projects and the East-West Turnpike survey is scheduled in this program during 1954.

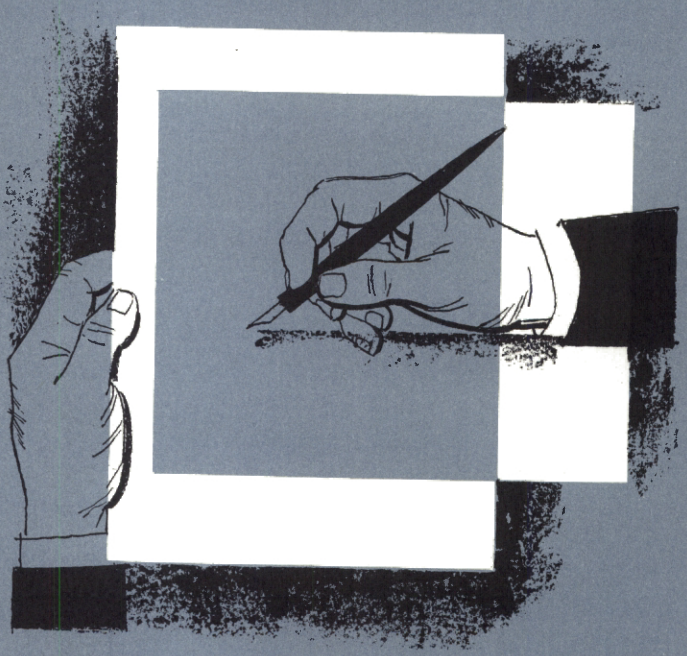
The proposed widening of the Turnpike to six lanes in the present four-lane sections from the George Washington Bridge interchange to the Camden-Philadelphia interchange is in its final engineering stages. The widening will be started as promptly as possible, assuming that financing arrangements can be satisfactorily concluded. At present the Turnpike is six lanes—three in each direction—between the Lincoln Tunnel and Woodbridge-Amboys interchanges, a distance of approximately 22 miles. There also is a dual-dual section for a short distance in the Elizabeth area. Widening of the traffic lanes would encompass a distance of approximately 52 miles and provide for the larger traffic volumes anticipated in the years ahead and, particularly, upon completion of the connection with the Pennsylvania Turnpike.

Miscellaneous work scheduled in 1954 includes the construction of new food facilities, completion of contracts for alterations and improvements to the service areas and buildings carried over from the past year, the heating, plumbing, ventilating and electrical work incident thereto, additional landscaping of the Turnpike, as well as other essential work to provide the adequate and prompt service to which users of the highway are entitled.



Architect's rendering of proposed new bridge over Delaware River for direct connection to Pennsylvania Turnpike

Patrons' Correspondence



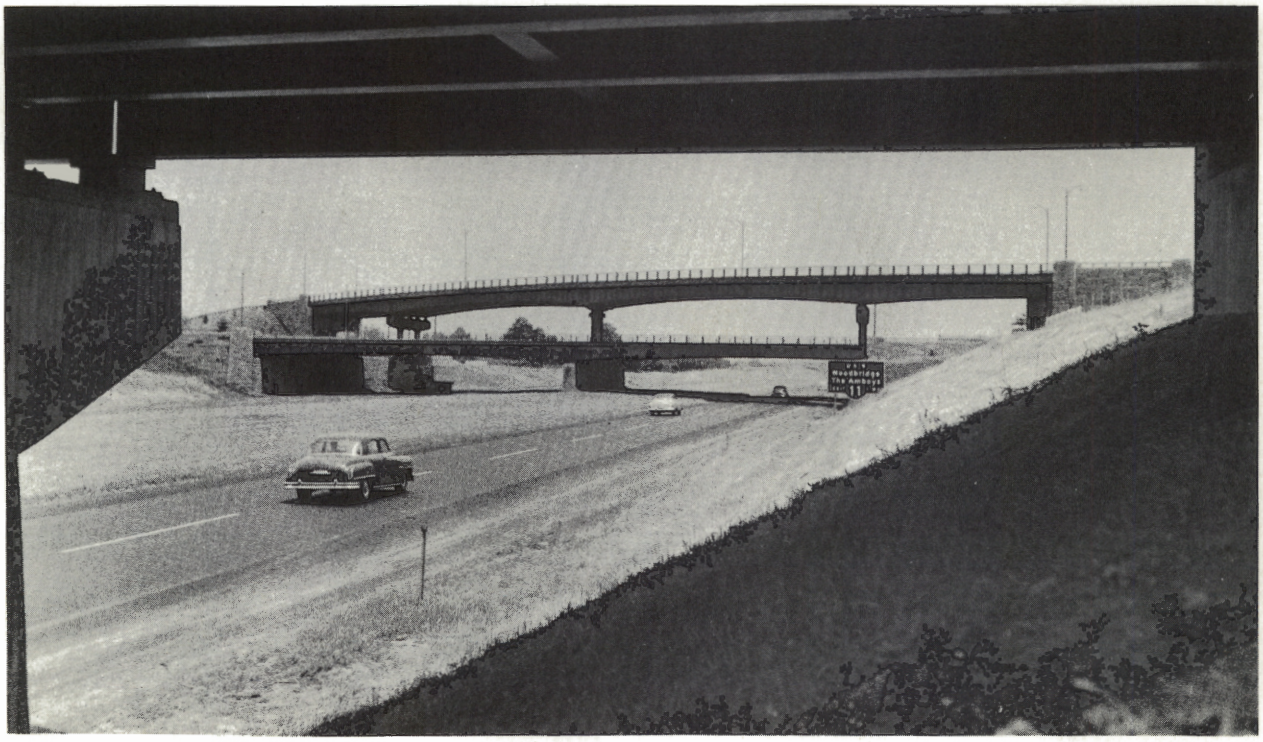
BEING IN THE public eye, the Authority has been the recipient of many communications from well wishers, the curious, the critical and from those offering suggestions for changes in, or additions, to operating procedures.

Among communications received, for example, are those involving overcharges or improper classifications of vehicles for toll purposes. Each case brought to the attention of the Authority is checked by the toll collection and toll audit departments and, if a discrepancy appears, the reasonable doubts being resolved in favor of the patron, refunds are made by check. If an improper vehicle classification is uncovered by toll collectors' reports, the Authority makes a prompt refund without awaiting a formal request therefor.

Many letters comment on road construction, accident prevention, fog dispersal, speed control and routing instructions received at toll booths.

The Authority has noted those matters on which the volume of correspondence has been greater than on others, and studies and conferences, and even regulations and policies, have resulted from such public reactions.

During the past year the Authority made use of every facility at its disposal to learn the attitudes of the motoring public toward its highway, both from New Jersey and from out-of-state. It addressed questions to them as to speed limits, policing and safety, the use of radar and single color vehicles for apprehending violators, the service stations and food facilities, the quality of products and services, as well as on other matters affecting operations. The results of these studies showed an overwhelming acceptance of the Turnpike and its service facilities by the traveling public. The Authority will continue its surveys with a view to developing new techniques and devices, seeking to provide users of its highway with the most modern conveniences and maximum services.



Two-lane section of Turnpike in Middlesex County passing under Garden State Parkway

Auditor's Report



PEAT, MARWICK, MITCHELL & CO.
CERTIFIED PUBLIC ACCOUNTANTS
744 BROAD STREET
NEWARK 2, N.J.

NEW YORK
ATLANTA
BALTIMORE
BILLINGS
BOSTON
BUFFALO
CHARLOTTE
CHICAGO
CINCINNATI
CLEVELAND
COLUMBUS
DALLAS
DENVER
DETROIT
GREENSBORO
HOUSTON
INDIANAPOLIS
KANSAS CITY
LINCOLN
LOS ANGELES
MEMPHIS
MILWAUKEE
MINNEAPOLIS
NEWARK
NEW ORLEANS
OKLAHOMA CITY
OMAHA
PHILADELPHIA
PITTSBURGH
PORTLAND
ST. LOUIS
SAN FRANCISCO
SAN JOSE
SEATTLE
SHREVEPORT
TERRE HAUTE
TULSA
WASHINGTON
WATERBURY

AFRICA
AUSTRALIA
CANADA
CONTINENTAL EUROPE
CUBA
GREAT BRITAIN
HONG KONG
INDIA
JAPAN
MEXICO
SOUTH AMERICA

ACCOUNTANTS' REPORT

New Jersey Turnpike Authority
New Brunswick, N. J.

We have examined the statement of financial condition of the New Jersey Turnpike Authority as of December 31, 1953, the related statement of operations for the year then ended, and the statement of construction costs of the New Jersey Turnpike to December 31, 1953. 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 statement of financial condition and statements of operations and construction costs present fairly the financial condition of the New Jersey Turnpike Authority as of December 31, 1953, the results of its operations for the year then ended, and the construction costs of the New Jersey Turnpike to December 31, 1953, all in conformity with generally accepted accounting principles applicable in the circumstances applied on a basis consistent with that of the preceding year.

Peat, Marwick, Mitchell & Co.

Peat, Marwick, Mitchell & Co.

Newark, N. J.
January 12, 1954.

NEW JERSE

Statement of Financial Conditi

ASSETS

Operating accounts:		
Cash:		
Operating fund	$ 499,316.66	
Collectors' change and other imprest funds	53,620.00	**$ 552,936.66**
Accounts receivable:		
Toll revenues	32,554.90	
Concession revenues	140,650.00	
Other	23,012.04	**196,216.94**
Accrued interest and earned discount on investments		**44,011.43**
Prepaid insurance and other expenses		**39,398.72**
Other funds (Schedule 1):		
Revenue fund	1,885,157.06	
Funds for general bonds:		
General interest reserve fund	4,135,000.00	
General bond reserve fund	8,270,000.00	
Funds for second series bonds (Series B):		
Second series interest fund	9,407,062.50	
Second series interest reserve fund	1,042,436.69	**24,739,656.25**
		25,572,220.00
General reserve fund accounts:		
Cash	957,001.28	
Investments—at cost (Schedule 2)	7,974,030.00	
Cost of studies relating to extensions	13,092.04	**8,944,123.32**
Construction accounts (Schedule 3):		
Cash	4,096,967.23	
Interim investments of construction funds — at cost (Schedule 2)	110,426,750.00	
Accrued interest and earned discount on investments	291,984.14	
Accounts receivable	1,105,829.81	
Deposits in condemnation cases	200,011.00	
Cost of turnpike — construction costs to December 31, 1953 per accompanying statement:		
Original Turnpike	269,236,984.87	
Newark Bay-Hudson County Extension	5,185,257.01	
	274,422,241.88	**390,543,784.06**
		$425,060,127.38

See accompanying notes to financial statements.

TURNPIKE AUTHORITY

As of December 31, 1953

LIABILITIES

Operating accounts:		
Vouchers payable	$ 163,863.76	
Employees' retirement contributions, etc. withheld	7,480.63	
Accrued expenses	91,549.37	
Unearned toll revenues	5,004.60	
Due to concessionaires for change funds deposited with Authority	14,000.00	
Due to customers for funds deposited as security with Authority	1,550.00	**$ 283,448.36**
Construction accounts (Schedule 3):		
Vouchers payable	2,081,136.76	
Employees' retirement contributions, etc. withheld	992.73	
Amounts retained from contractors and engineers	555,133.46	**2,637,262.95**
Bond indebtedness:		
General revenue bonds:		
Turnpike revenue bonds (1950 issue), 3¼%, maturing January 1, 1985 — amount authorized and issued	220,000,000.00	
Turnpike revenue bonds (1951 issue), 3.20%, maturing January 1, 1986 — amount authorized and issued	35,000,000.00	
	255,000,000.00	
Second series revenue bonds:		
Series B, 3⅜%, maturing July 1, 1988 — amount initially authorized and issued	150,000,000.00	**405,000,000.00**
Net revenues since beginning of operations, November 5, 1951, after interest allocations:		
Amount at December 31, 1952	7,686,667.69	
Net revenues after interest allocation for year ended December 31, 1953 per accompanying statement	9,452,748.38	
Amount at December 31, 1953		**17,139,416.07**
		$425,060,127.38

NEW JERSEY TURNPIKE AUTHORITY

Statement of Construction Costs of the New Jersey Turnpike to December 31, 1953

ORIGINAL TURNPIKE

Engineering and architectural:		
Salaries	$ 287,526.36	
Preliminary Engineering	399,468.32	
Test of materials	179,551.85	
Engineering borings and foundation investigations	450,362.16	
Estimates of costs and revenues	195,724.67	
Engineering and architectural services	14,950,625.25	
Travel — staff	16,256.35	
Blueprints, plans and specifications	88,826.36	
Services and travel (other than staff) including legal fees	104,769.96	
Administrative overhead	23,000.00	
Miscellaneous	6,306.60	**$ 16,702,417.88**
Land, easements and rights-of-way:		
Salaries	186,681.24	
Surveys	6,668.57	
Services and travel (other than staff) including legal fees	102,587.61	
Travel — staff	12,764.91	
Cost of land acquired by direct purchase, including damages	15,713,402.84	
Appraisals	134,106.22	
Negotiations	240,575.11	
Title insurance, examination and curative work	234,507.23	
Cost of land acquired by condemnation	347,672.06	
Expenses and costs incurred in condemnation cases	338,812.22	
Cost of options to acquire land	1,000.00	
Payments to State of New Jersey (Route 100)	2,362,604.60	
Administrative overhead	14,900.00	
Miscellaneous	8,618.21	
	19,704,900.82	
Less income from rentals and sales of land, buildings and borrow material	330,653.93	**19,374,246.89**
Construction:		
Salaries	112,148.46	
Demolitions, relocations and clearing rights-of-way	1,149,400.15	
Grading and drainage	53,124,599.47	
Major bridges	26,738,580.22	
Miscellaneous structures, excluding buildings	57,345,844.94	
Paving	44,957,551.11	
Buildings	14,355,314.25	
Travel — staff	5,248.80	
Lighting, communications, road marking, signs, delineators and fencing	4,686,763.80	
Relocation and reconstruction of utilities, roads and other communications	8,346,550.98	
Services and travel (other than staff) including legal fees	146,325.19	
Bid advertising and expense	13,282.28	
Toll booth canopies and toll collection equipment	1,898,593.75	
Construction policing	170,311.69	
Payments to State of New Jersey (Route 100)	8,901,324.25	
Payments to State of New Jersey (other)	88,914.38	
Miscellaneous	84,585.16	**222,125,338.88**

See accompanying notes to financial statements.

(Continued)

NEW JERSEY TURNPIKE AUTHORITY

Statement of Construction Costs of the New Jersey Turnpike to December 31, 1953

ORIGINAL TURNPIKE (Continued)

Maintenance organization, including miscellaneous construction work:		
Salaries and wages	$ 288,458.28	
Motor vehicles, road maintenance equipment, tools, etc.	1,142,228.73	
Temporary maintenance buildings	83,550.01	
Maintenance material and minor equipment	252,792.36	
Office supplies, special forms, etc.	945.94	
Travel — staff	12,323.15	
Maintenance overhead	20,800.00	
Miscellaneous	20,019.90	**$ 1,821,118.37**
Toll collection and toll audit organization:		
Salaries	7,365.03	
Office machines and machine rentals	226,362.21	
Office supplies, special forms, etc.	29,197.61	
Motor vehicles purchased and expense	20,247.01	
Uniforms and other equipment	61,135.34	
Travel — staff	542.36	
Special investigations and surveys	28,446.76	
Miscellaneous	7,328.31	**380,624.63**
Other costs, including administration:		
Salaries	338,332.22	
Legal expenses and fees	78,517.47	
Audits and fiscal advice	39,747.59	
Furnishings and fixtures	162,410.83	
Motor vehicles purchased and expense	58,707.51	
Insurance	14,364.32	
Rent	37,385.78	
Stationery and office supplies	55,495.43	
Postage	16,363.10	
Telephone and telegraph	55,886.61	
Advertising, printing and binding	2,667.61	
Travel — staff	14,129.12	
Services and travel (other than staff)	1,952.22	
Public information	268,769.95	
Surety bond fees	3,819.91	
Repairs and maintenance	22,644.56	
Employees' pension and retirement contributions	27,618.86	
Miscellaneous	24,766.19	**1,223,579.28**
Financial:		
Bond interest	5,275,093.78	
Discount on sale of turnpike revenue bonds (1951 issue)	647,500.00	
Financial advisory fees	343,375.74	
Commitment fees	1,560,763.32	
Preparation, offer, sale and issuance of bonds	249,203.59	
Fiduciary fees and expenses	108,481.22	
Bond counsel fees	257,953.78	**8,442,371.43**
		$270,069,697.36

See accompanying notes to financial statements.

(Continued)

NEW JERSEY TURNPIKE AUTHORITY

Statement of Construction Costs of the New Jersey Turnpike to December 31, 1953

ORIGINAL TURNPIKE (Continued)

Less:		
Income from interim investment of construction funds	$ 819,184.55	
Cash discounts	13,527.94	$ 832,712.49
Total Original Turnpike		269,236,984.87

NEWARK BAY-HUDSON COUNTY EXTENSION

Engineering:		
Salaries	4,195.57	
Traffic studies	27,469.63	
Engineering borings and foundation investigations	108,372.34	
Engineering services	825,046.99	
Blueprints, plans and specifications, less recoveries	(232.15)	964,852.38
Land, easements and rights-of-way:		
Salaries	805.66	
Services and travel (other than staff)	536.68	1,342.34
Construction:		
Salaries	48.92	
Bid advertising and expense	620.30	
Services and travel (other than staff)	50.00	
Miscellaneous	43.75	762.97
Other costs, including administration:		
Travel — staff	344.64	
Professional fees and expenses	4,077.72	
Stationery and office supplies	561.98	
Public information	120.75	5,105.09
Financial:		
Bond interest on Second Series Bonds (Series B)	717,937.50	
Discount on sale of Second Series Bonds (Series B)	3,525,000.00	
Preparation, offer, sale and issuance of bonds	35,224.24	
Fiduciary fees and expenses	101,750.00	
Bond counsel fees	75,000.00	4,454,911.74
		5,426,974.52
Less:		
Income from interim investment of construction funds	241,708.15	
Cash discounts	9.36	241,717.51
Total Newark Bay-Hudson County Extension		5,185,257.01
Total Construction Costs		$274,422,241.88

See accompanying notes to financial statements.

NEW JERSEY TURNPIKE AUTHORITY

Statement of Operations — Year ended December 31, 1953

Revenues:		
Toll revenue as shown in accompanying statement		$ 19,192,647.38
Concession revenue		1,853,880.02
Income from investments		396,948.26
Miscellaneous revenues		67,153.76
Total revenues		21,510,629.42
Operating expenses:		
Administration	$ 160,428.21	
Traffic control and police	543,195.14	
Toll collection	825,801.76	
Toll audit	95,548.77	
Accounting	45,905.24	
Maintenance, repair, reconstruction and replacement	1,258,365.23	
Insurance	128,542.42	
Professional fees	57,103.88	
Expense and compensation of fiduciaries	38,319.99	
Pension and retirement	39,636.14	
Miscellaneous	65,346.76	3,258,193.54
Net revenues		18,252,435.88
Net revenues allocated to payment of interest on bonds:		
Turnpike revenue bonds (1950 issue)	7,150,000.00	
Turnpike revenue bonds (1951 issue)	1,120,000.00	
Second series bonds (Series A)	529,687.50	8,799,687.50
Net revenues after interest allocation		$ 9,452,748.38

See accompanying notes to financial statements.

Statement of Toll Revenue — Year ended December 31, 1953

Class	Description	Toll Revenue	Miles traveled by vehicles	Vehicles
1	Passenger car, motorcycle, taxi or hearse, two-axle single-tire truck	$14,975,228.80	770,000,909	19,434,968
2	Passenger car with trailer, two-axle single-tire truck with trailer	87,404.30	3,400,229	50,929
3	Two-axle dual-tire truck, two-axle tractor without semi-trailer	753,803.25	19,641,159	693,927
4	Three-axle single-unit truck, three-axle tractor without semi-trailer	126,191.55	3,611,501	67,745
5	Three-axle semi-trailer combination, two-axle dual-tire truck with single-axle trailer	1,204,966.50	24,560,413	727,533
6	Four-axle single-unit truck, any dual-tire truck and trailer with four or more axles	1,595,135.30	35,182,114	613,353
7	Bus	452,045.35	12,209,775	416,623
9	Non-revenue vehicles*	—	1,902,886	154,006
		19,194,775.05	870,508,986	22,159,084
	Deduct toll adjustments	2,127.67		
		$19,192,647.38		

*Vehicle Class 9, 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, and vehicles of contractors used in construction of the turnpike and its buildings.

See accompanying notes to financial statements.

OTHER FUNDS

as of December 31, 1953

Schedule 1

Cash on deposit with Trustee and Special Trustee ....
Investments in United States Government obligations — at cost (Schedule 2) .....
Accrued interest purchased on above .....

INVESTMENTS

as of December 31, 1953

Schedule 2

Operating accounts:
Other funds:
General interest reserve fund:
United States Treasury bonds .....
United States Treasury bonds .....

General bond reserve fund:
United States Treasury bonds .....
United States Treasury bonds .....
United States Treasury bonds .....
United States Treasury bonds .....

Second series bonds (Series B) interest fund:
United States Treasury bonds .....
United States Treasury bonds .....
United States Treasury bonds .....

Second series bonds (Series B) interest reserve fun
United States Treasury bills .....

Total operating accounts .....

General reserve fund:
United States Treasury certificates of indebtedness
United States Treasury bills .....

Total general reserve fund .....

Construction accounts:
Second series proceeds fund (Series A):
United States Treasury bills .....

Second series proceeds fund (Series B):
United States Treasury bills .....
United States Treasury bonds .....
United States Treasury certificates of indebtedness
United States Treasury bonds .....
United States Treasury notes .....

Total construction accounts .....

venue fund	General interest reserve fund	General bond reserve fund	Second series bonds (Series B) interest fund	Second series bonds (Series B) interest reserve fund	Total
85,157.06	40,171.87	35,976.56	175,034.67	45,680.02	2,182,020.18
—	4,094,828.13	8,234,023.44	9,231,718.75	996,756.67	22,557,326.99
—	—	—	309.08	—	309.08
85,157.06	**4,135,000.00**	**8,270,000.00**	**9,407,062.50**	**1,042,436.69**	**24,739,656.25**

	Interest rate	Maturity	Par Value	Cost
	2 7/8%	Mar. 15, 1957	$ 1,000,000.00	1,000,000.00
	2 3/8	Jun. 15, 1958	3,100,000.00	3,094,828.13
			4,100,000.00	4,094,828.13
	2	Jun. 15, 1954	2,000,000.00	1,992,812.50
	2	Dec. 15, 1954	2,000,000.00	1,990,000.00
	2 1/4	Jun. 15, 1955	2,000,000.00	2,000,000.00
	2 3/8	Jun. 15, 1958	2,250,000.00	2,251,210.94
			8,250,000.00	8,234,023.44
	2	Jun. 15, 1954	2,500,000.00	2,510,156.25
	2	Dec. 15, 1954	4,200,000.00	4,209,843.75
	2 1/4	Jun. 15, 1955	2,500,000.00	2,511,718.75
			9,200,000.00	9,231,718.75
		Mar. 25, 1954	1,000,000.00	996,756.67
			22,550,000.00	**22,557,326.99**
	2 5/8	Sep. 15, 1954	1,000,000.00	1,000,000.00
		Feb. 25, 1954	7,000,000.00	6,974,030.00
			8,000,000.00	**7,974,030.00**
		Mar. 4, 1954	8,500,000.00	8,466,000.00
		Feb. 11, 1954	50,000,000.00	49,814,500.00
	2	Jun. 15, 1954	13,000,000.00	13,052,812.50
	2 5/8	Sep. 15, 1954	13,000,000.00	13,117,812.50
	2	Dec. 15, 1954	13,000,000.00	13,030,468.75
	1 1/2	Mar. 15, 1955	13,000,000.00	12,945,156.25
			102,000,000.00	101,960,750.00
			110,500,000.00	**110,426,750.00**
Total investments			**$141,050,000.00**	**140,958,106.99**

NEW JERSEY TURNPIKE AUTHORITY

Summary of Construction Accounts—As of December 31, 1953

Schedule 3

ASSETS	Original Turnpike	Newark Bay-Hudson County Extension	Total
Cash:			
Held by Trustee in construction fund	$ 1,436,676.17	—	1,436,676.17
Second series proceeds fund (Series A)	651,374.16	—	651,374.16
Second series proceeds fund (Series B)	—	1,809,276.18	1,809,276.18
Revolving fund	111,299.73	—	111,299.73
Real estate funds on deposit with fiduciaries	88,340.99	—	88,340.99
	2,287,691.05	1,809,276.18	4,096,967.23
Interim investments of construction funds — at cost (Schedule 2)	8,466,000.00	101,960,750.00	110,426,750.00
Accrued interest and earned discount on investments	11,692.25	280,291.89	291,984.14
Accounts receivable	1,105,829.81	—	1,105,829.81
Deposits in condemnation cases	200,011.00	—	200,011.00
Cost of turnpike — construction costs to December 31, 1953	269,236,984.87	5,185,257.01	274,422,241.88
	$281,308,208.98	**109,235,575.08**	**390,543,784.06**
LIABILITIES			
Vouchers payable	1,544,361.94	536,774.82	2,081,136.76
Employees' retirement contributions, etc., withheld	992.73	—	992.73
Amounts retained from contractors and engineers	472,628.76	82,504.70	555,133.46
	$ 2,017,983.43	**619,279.52**	**2,637,262.95**

NEW JERSEY TURNPIKE AUTHORITY

Notes to Financial Statements

1. AUTHORIZING LEGISLATION — 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 and empowered to construct, maintain, repair and operate turnpike projects at such locations as shall be established by law, and to issue turnpike revenue bonds of the Authority, payable solely from tolls and other revenues of the Authority. Under the provisions of the Act, turnpike revenue bonds 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.

2. AGREEMENT WITH BOND HOLDERS — To provide funds for the construction of the turnpike and extension, the Authority authorized on February 10, 1950 an issue of $220,000,000 Turnpike Revenue Bonds (1950 issue); on September 19, 1951 an issue of $35,000,000 Turnpike Revenue Bonds (1951 issue), both referred to as General Bonds; on November 18, 1952 an issue of $32,024,000 Second Series Bonds (Series A) of which $30,000,000 was issued and on October 14, 1953, an issue of $150,000,000 Second Series Bonds (Series B) of which $30,000,000 has been used to retire the Second Series Bonds (Series A). The bond resolution covering the Second Series Bonds (Series B) authorized the issuance of additional bonds of this series under certain conditions.

Minimum annual sinking fund payments sufficient to retire the General Bonds by maturity are required in increasing amounts commencing with the annual period ending November 15, 1959 in respect of the 1950 bonds which mature January 1, 1985, and the annual period ending November 15, 1968 in respect of the 1951 bonds which mature January 1, 1986. No minimum annual sinking fund payments are required for the Second Series Bonds (Series B) which mature July 1, 1988, however, all remaining Surplus Revenues, after satisfying the requirements of all other funds provided for in the bond resolution and amending supplements, will be allocated to the Second Series Sinking Fund.

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 Resolution and amending supplemental resolutions.

Transfers from construction funds to other funds (provided for in the bond resolution and amending supplements) have been made as follows:

Transfers from construction funds to:	
Operating Fund — initial moneys for operating expenses	$ 500,000.00
General interest reserve fund—to bring fund up to maximum requirements	162,500.00
General bond reserve fund——to bring fund up to maximum requirements	7,023,916.39
Second series interest fund—to set aside 24 months interest on Second Series Bonds (Series B) $10,125,000, less payments therefrom	9,407,062.50
	$17,093,478.89

3. GENERAL RESERVE FUND — In accordance with a directive of the Authority, approved by the Consulting Engineer, funds accumulated in the General Reserve Fund at date of issue of Second Series Bonds (Series B) have been allocated by the Special Trustee to special funds for the following purposes:

Studies related to extensions, other turnpikes, the Turnpike or improvements, enlargements and betterments thereto	$ 500,000.00
Cost of improvements, enlargements, and betterments to the Turnpike	8,444,123.32
	$8,944,123.32

4. CONSTRUCTION COST — In accordance with the Bond Resolution and amending supplements, 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; interest on bonds (less income earned on unexpended construction funds); 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 administrative and legal expenses during the construction period.

5. INTEREST — Interest on bonds is payable semi-annually on January 1, and July 1, in each year. Interest due January 1, 1954 on Turnpike Revenue Bonds (1950 issue), $3,575,000; on Turnpike Revenue Bonds (1951 issue), $560,000; and on 3⅜% Second Series Bonds (Series B) $2,532,000, had been deposited with the paying agent prior to December 31, 1953 (as in the previous year) and, accordingly, there is no liability shown in the accounts for such interest at that date.

6. OPERATIONS — The accompanying financial statements have been prepared on the accrual basis. Operating expenses of $3,258,193.54, as reported in the Statement of Operations, include adjustments for prepaid and accrued expenses and accounts payable at the beginning and end of the year. Funds to pay operating expenses of the turnpike are allocated to the Authority by the Special Trustee on the basis of monthly cash requirements as set forth in the Annual Budget of the Authority which is prepared on a cash disbursement basis. The amended Annual Budget of operating expenses as filed for the year 1953 amounted to $3,190,000.00 as compared with disbursements during 1953 for operating expenses of $3,174,688.82.






NJ TURNPIKE