

1955

Maine Turnpike story

Reginald C. Barrows

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The
Maine
Trail
1955

MAINE
TURNPIKE
STORY

50¢



The Board of Governors of the Maine Good Roads Association
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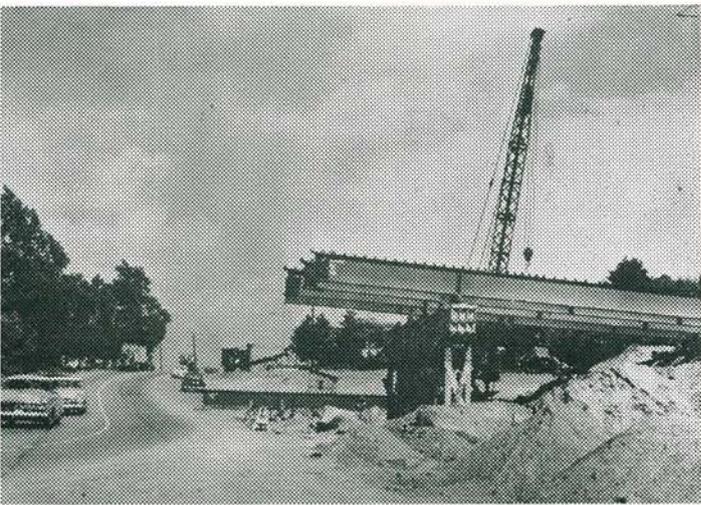
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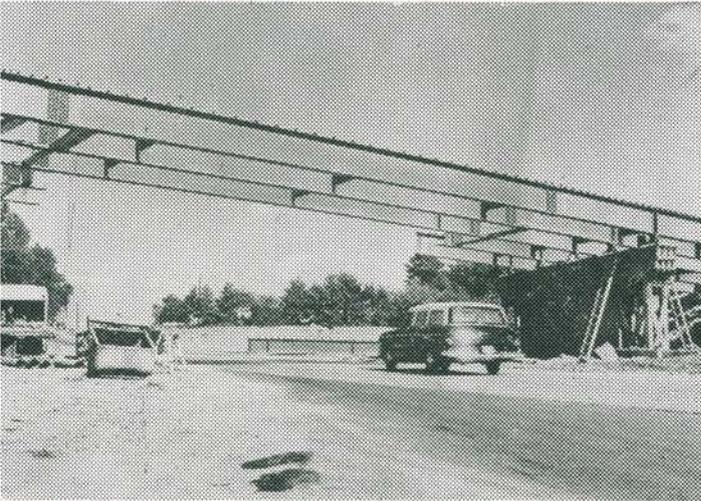
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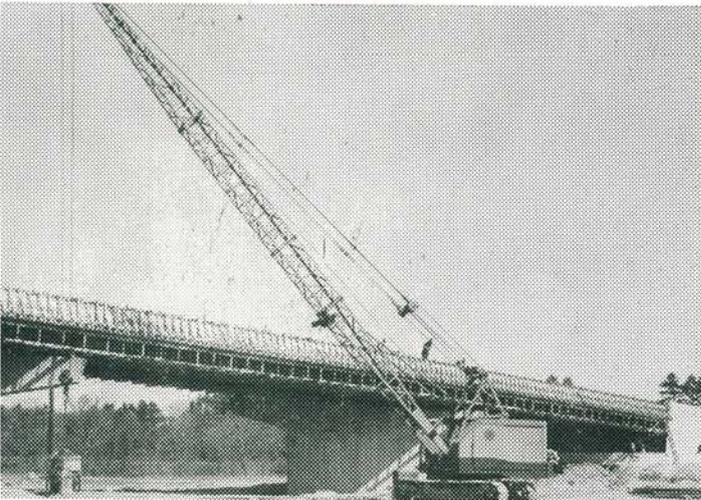
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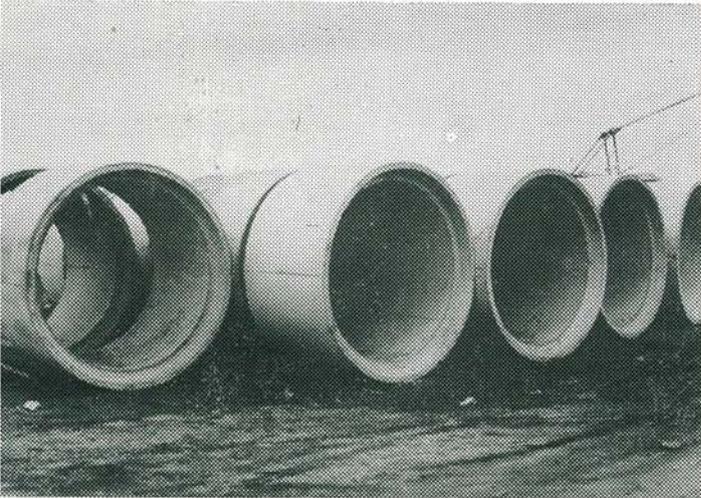
Structural steel from Bancroft & Martin going into the Maine Turnpike.



One of the many overpasses on the Turnpike built with Bancroft & Martin steel.

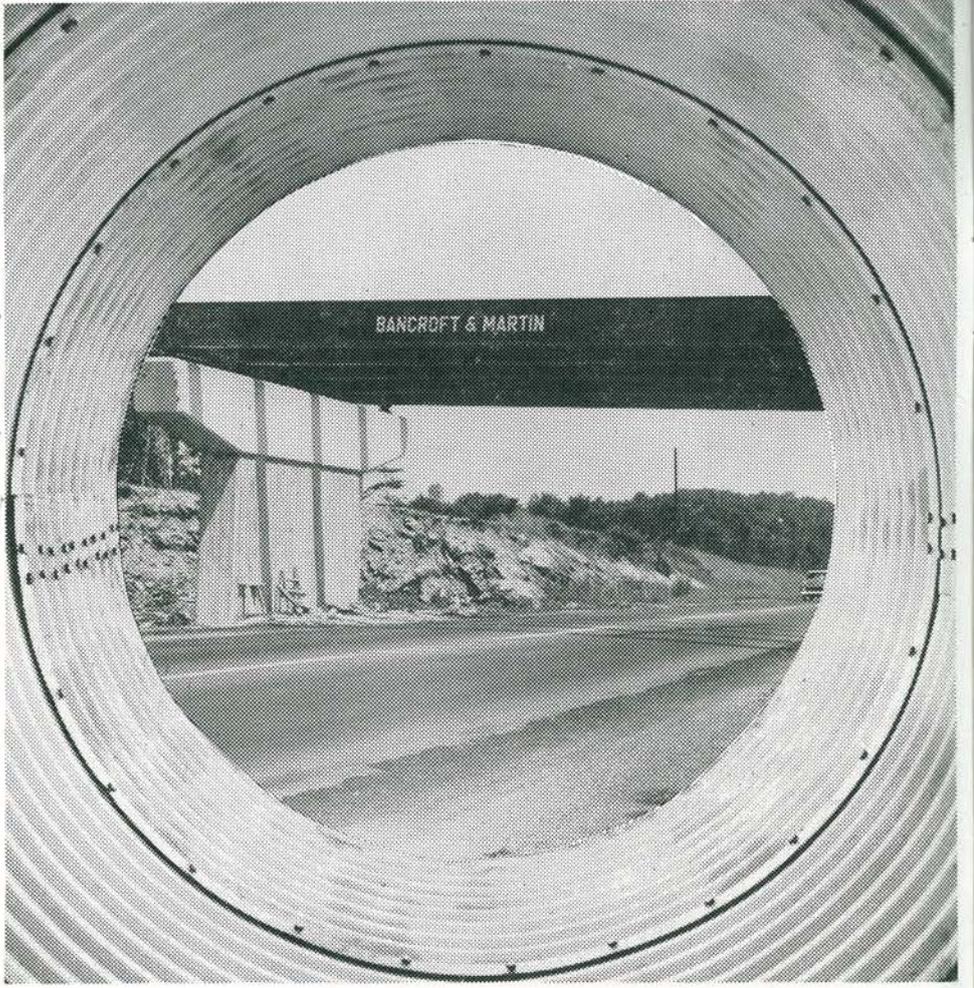


Workmen putting the finishing touches on one of the Turnpike's many reinforcing steel jobs.



Sections of the concrete pipe furnished by Bancroft & Martin for the Turnpike.

OUR PART IN THE MAINE TURNPIKE



Bancroft & Martin Rolling Mills, which has been building with Maine since 1863, is proud to have shared in the construction of the Maine Turnpike.

The Turnpike is the largest construction project in Maine's history. Since it facilitates transportation, it both benefits established businesses and will greatly stimulate industrial growth.

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SAFETY—In 1954, the Maine Turnpike was the safest toll highway in the nation. The factors which made this record possible were built into the extension. Easy grade, smooth curves, excellent visibility—they're all yours on the Turnpike.

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SPEED—Now, when you take the Maine Turnpike you'll enjoy New England's largest stretch of non-stop driving that means you can cut at least one hour off your normal traffic time between Augusta and Kittery.

Maine Turnpike Authority

Created by an act of the Maine Legislature April 17, 1941

A MESSAGE FROM THE EDITOR



REGINALD C. BARROWS
Editor

This souvenir edition of the Maine Trail commemorating the official opening of the Maine Turnpike Extension is the result of the combined efforts of a number of individuals.

Each page of this edition has been given the most careful study for its relative importance in our attempt to portray the significance of this extension to the future of the State of Maine.

Yet with the most considerate screening and constant revisions, we are humbly

aware that pictorially and descriptively, we can only scratch the surface presenting highlights of this greatest roadbuilding job in the history of our State.

Your editor reserved this all-too-limited space to express his sincere gratitude for the cooperation and support he has been given in the preparation of this edition.

He would like to emphasize that it was made possible only through the enthusiastic support of the advertisers whose advertisements you will read among the pages that follow.

Over the months, conferences with the Board of Governors, meetings with the Advisory Committee, an infinite number of telephone conversations and personal contact with high executives all along the Eastern seaboard are only a part of the total effort that went into this edition which we are now proud to offer you.

Lucius Barrows' history of the Maine Turnpike with its excellence in style and sparkling with the chronological events leading to the culmination of Joe Sayward's magnificent dream—Leroy Chace's descriptive analysis of the economic benefits of this extension to the State of Maine—John Burnham's revealing story of the important part played by the Maine Good Roads Association promoting the present extension—a pictorial description of the turnpike construction along with a list of the contractors on the job—Ralph Lewis' turnpike photographs, both aerial and land photos—Ted Bunker's beautiful night scene of the turnpike on our cover.

I would also like to express my appreciation for the help given me by the advisory committee chairmanned by Malcolm Dunlap, Auburn, Chester Bridge, Augusta, Lucius Barrows and John Burnham also of Augusta, and Williams B. Getchell, Jr., of Falmouth.

OUR COVER — Today's motorist associates the term "modern turnpike" with such ideas as the easy flow of day-time traffic at comfortably high but safe speeds, along with stretches of scenic beauty such as a superhighway affords.

We hope our cover will suggest the Maine Turnpike may also be a scenic drive in the evening hours, passing as it does the nearby lights of tiny villages and large cities.

—Drawing by Ted Bunker, Augusta

We are indebted to Mr. Getchell both as a member of our advisory committee and in his capacity as Executive Director of the Turnpike for his help in furnishing much of the factual material. And on the days when Mr. Getchell was in closed conference, the excellent cooperation of his assistant Frank Howe was very much appreciated.

And in the final days of this production, our thanks to the *Kennebec Journal* printers and the *Waterville Sentinel* engravers for their superb efforts in meeting our publication date.

NOTICE

At Press Time

The Demand For Extra Copies of this Edition
Has Exceeded All Expectations

Advertisers, Association Members and others who desire additional copies to send to business associates or friends are urged to send in their orders at the earliest possible date.

A limited number of copies will be available at 50 cents per copy.

One Free Copy plus the next 12 issues will be given to each application for membership to the Maine Good Roads Association

Membership Fee \$2.00 per year

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A Salute To Progress

THROUGH MAINE'S ROLLING COUNTRYSIDE

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A MODERN TURNPIKE HAS BEEN

EXTENDED INTO THE HEART OF

OUR STATE

WE ARE PROUD OF OUR PART

IN THE CONSTRUCTION

OF THIS GREAT ADVANCE

IN MODERN TRANSPORTATION

WE ARE GLAD TO EXTEND OUR

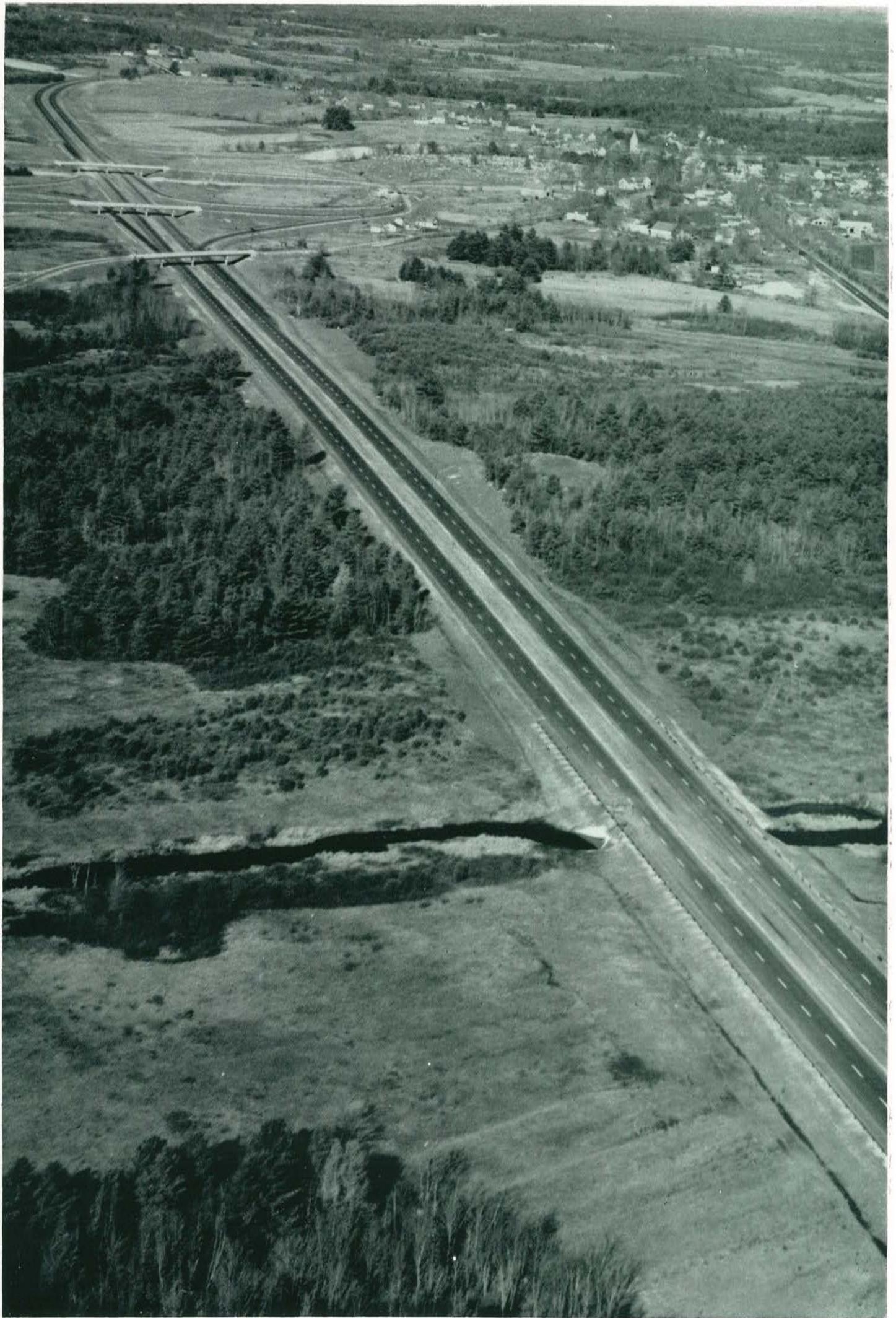
SINCERE CONGRATULATIONS

TO THOSE RESPONSIBLE FOR

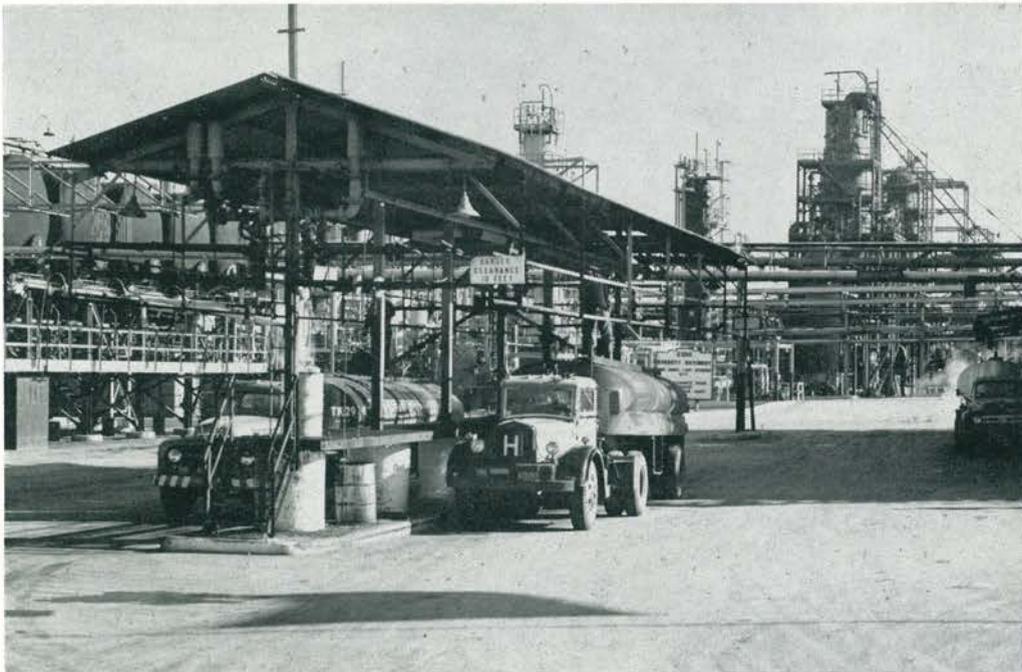
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A HISTORY OF THE MAINE TURNPIKE

By LUCIUS D. BARROWS, *Secretary and Treasurer*
Maine Turnpike Authority



THE \$75 MILLION AGREEMENT — Maine Turnpike Authority, Maine State Highway Commission, Bond Council and Investment Representatives meet at Augusta, Maine, April 23, 1953 to arrange sale of a \$75,000,000 issue of Maine Turnpike 4% bonds. The proceeds of this bond issue will be used to refinance the Kittery to Portland section and to build the Portland, Auburn, Lewiston, Gardiner, and Augusta extension together with a connection to U. S. Route 1 north of Portland. Pictured above, left to right back row, Harold B. Emery, State Highway Commissioner; Wm. B. Getchell, Jr., Executive Director, Maine Turnpike Authority; Tuthill Ketcham of Stifel, Nicholas & Co., Inc. of Chicago; Frank S. Naiman, Maine Turnpike Authority; Robie L. Mitchell of the firm of Mitchell & Pershing, Counsellors of New York City; George D. Varney, Counsel, Maine Turnpike Authority; Jerome C. L. Tripp of Tripp and Co., Inc. of New York City; and Robert Mitchell of the firm of Mitchell & Pershing, Counsellors of New York City. Front row, Lloyd B. Morton, Chairman, State Highway Commission and member of Maine Turnpike Authority; Lucius D. Barrows, Chief Engineer, State Highway Commission and Secretary and Treasurer, Turnpike Authority; Joseph T. Sayward, Chairman, Maine Turnpike Authority; Paul C. Thurston, and Charles W. Diggery, both members of the Maine Turnpike Authority. (State Highway Photo by Guy Nicholas)

Until quite recently, that is to say within the past fifteen or twenty years, turnpikes were hardly more than names to most of us, for very little of a historic nature had been written concerning them. When Maine became a State in 1820 it inherited five toll roads from Massachusetts: The First Cumberland Turnpike, in Scarborough; the Bath Bridge and Turnpike, from Brunswick to Bath; the Wiscasset and Woolwich; the Wiscasset and Augusta; and the Camden Turnpike. These were all organized under Massachusetts law during the years 1802 to 1805 which appears to have been a "Turnpike Era" for the Province of Maine.

First Turnpike Company

The new State of Maine evidently anticipated that

new corporations would be organized for building and operating turnpikes, or toll roads, for it adopted a comprehensive code of general laws which closely followed the practice in Massachusetts. Only one company, however, was formed by the Maine Legislature under these powers, the Milford and Princeton Turnpike Company in 1863. This company proposed to construct a turnpike "from some point on the road in Greenfield in the County of Penobscot, to near the depot of Lewy's Island Railroad in Princeton." In 1866 action was taken by the Legislature to help the Company to build its road. The sum of thirty thousand dollars was appropriated from the sale of public lands and

(Continued on Page 13)



Good until
2000 A.D.

You expect such public improvements as schools, hospitals, court houses, water works and sewers to serve 50 years or more with minimum maintenance. Highways need be no exception. Roads need not be built that must be rebuilt or resurfaced every few years and maintained at high annual cost. *Engineers can build concrete roads to last 50 years and more!*

Moreover, concrete usually costs less to build than other pavements designed for the same traffic. It costs less to maintain, too, as average cost records of state highway departments prove. Moderate first cost + low maintenance cost ÷ long life = **low annual cost.**

Concrete is safest too. Its gritty surface is highly skid-resistant, wet or dry. It reflects up to four times more light than dark pavements, giving you maximum visibility at night.

You pay for roads with your license fees and gasoline and oil taxes. If you want safe, durable, **low-annual-cost** roads urge your public officials to build them with concrete.

STOP AND CONSIDER, MR. AND MRS. MAINE TAXPAYER!

The modern "air-entrained" portland cement-concrete pavement on U. S. Route 1, between Towns of Yarmouth and Brunswick will, in the 21st century, be serving your children and your children's children. Also, as maintenance costs for concrete are 29% to 61% less than for other types of pavement, you have the best.

PORTLAND CEMENT ASSOCIATION 20 Providence Street, Boston 16, Massachusetts
A national organization to improve and extend the uses of portland cement and concrete through scientific research and engineering field work



The five members of the Maine Turnpike Authority. Left to right, Frank S. Naiman, Gardiner, Member; Paul C. Thurston, Bethel, Chairman; Lloyd B. Morton, Farmington, Vice-Chairman; Charles W. Diggery, Sanford, Member, and David H. Stevens, Hallowell, Member Ex Officio.

—Photo by Ralph Lewis.

MAINE TURNPIKE HISTORY

(Continued from Page 11)

timber with the provision that as fast as the corporation had expended thirteen thousand dollars of its own money, the State would contribute ten thousand dollars to continue the work. The name of the corporation was changed at this time to Granger Turnpike Company and its difficulties were reviewed by the Legislature in 1870. Certain sums had been set aside by the State on account of the Resolve of 1866, but not paid. In 1876 the State Treasurer under direction of the Legislature turned the funds back into the Treasury. It appears, therefore, that the only Turnpike Company ever formed in Maine under these early laws failed to carry out its plans.

With the coming of the railroads the day of construction and operation of toll roads, or turnpikes as they were called, was past.

Major Frederic J. Wood in his "Turnpikes of New England" reminds us that in many New England towns will be found an old road known locally as "the turnpike" or "the old turnpike," and that turnpikes as distinguished from the ordinary roads of the same period were those on which gates barred the traveler, and at which payment was demanded for the privilege of using the road. Dictionaries define turnpike as a gate, and sometimes as a turnstile. Early charters allowed the building of "turnpike-roads" and the erection of "turnpikes" across them. Usage over the years appears to have given the name "turnpike" to the road itself when gates were established on it for collection of tolls.

Toll Bridges

While the Legislature authorized the construction of several toll bridges between 1925 and 1940, as far as we know, no request has ever been made to the Legis-

lature to approve the organization of a private corporation to construct and operate a toll road since the granting of the charter to the Milford and Princeton Turnpike Company in 1863. In fact authority and direction to construct toll bridges, for many years past, has been granted by legislative action only to agencies or departments of the State.

It is interesting to note here that on April 27, 1939 President Roosevelt submitted to the Congress a report prepared by the U. S. Bureau of Public Roads entitled "Toll Roads and Free Roads" in which was discussed the feasibility of a system of transcontinental toll roads. The report concluded that a direct toll system on the six cross-country proposed superhighways studied, in their entirety would not be feasible as a means of recovering the cost. It stated, however, that among a few others a section of highway from a point near Boston to Portland, Maine, "approached feasibility." This is mentioned because Mr. Joseph T. Sayward in later years as Chairman of the Maine Turnpike Authority made frequent reference to it.

By 1940, when the Pennsylvania Turnpike was opened to traffic, the turnpikes in Maine had long since gone out of business and had been forgotten. All States had established state highway departments. The federal government since 1916 had been granting federal aid to states for construction of highways. All states, however, were finding it impossible to keep up with the rapid development of motor vehicles and the demands for more adequate highways. Areas of highway traffic congestion were fast developing. It was apparent that if these situations were to be corrected, it would be necessary to concentrate large expenditures for high cost construction on short sections of highway, and this was the situation which directed attention again to toll financing.

(Continued on Page 15)

On the Maine Turnpike and on Maine Highways



H. E. Sargent Finds New Performance and Dependability with the New Allis-Chalmers HD-16 and HD-21

HERB SARGENT of Stillwater recently purchased a new HD-16 and HD-21 for earth moving operations on his Maine road jobs. This prominent Maine contractor now knows first hand of the Allis-Chalmers ADVANCED BASIC DESIGN with such important features as its all-steel, Box-A main frame and one-piece steering clutch and final drive case . . . straddle-mounted final-drive gears with tapered roller bearings . . . unit

construction . . . simplified lubrication and service designed with better maintenance in mind. What's more, it is newly engineered throughout to provide big safety factors in all components . . . plus outstanding new features like the new Allis-Chalmers heavy-duty diesel engine, new "wrap-around" radiator guard, husky new transmissions, new true-dimension track, and many others.

EASTERN TRACTOR & EQUIPMENT CO.

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PORTLAND, MAINE



This picture shows a toll gate on an 1830 Turnpike

MAINE TURNPIKE HISTORY

(Continued from Page 13)

Many arguments have been presented for and against toll financing, but the fact remains that state laws nearly always require that state highway construction funds, particularly the proceeds of bond issues, be distributed on a state wide basis, and that the total revenue available to highway departments has not been sufficient to carry on the "must activities" and a program of so called super highway construction. The need of adequate highways at critical areas was and is immediate, and the ordinary or usual methods of financing highway construction have not been adequate to meet the demands.

Pennsylvania was the first to attempt to solve this particular problem by reinstatement of the toll method of financing. It is interesting to note that probably the first extensive turnpike to be completed in the United States was the Lancaster Turnpike in Pennsylvania extending from Philadelphia to Lancaster and opened to travel in 1794.

Concern for Route 1

The State Highway Department of Maine for some time previous to 1940 had been much concerned about the inadequate condition of U. S. Route 1 between Kittery and Portland. During the previous twenty years improvements had been made from year to year, consisting of widening for the most part, but no built-up sections had been by-passed and no highway grade separations had been provided at any of the important intersections between Kittery and Portland. No part of the road had been brought up to design standards necessary to adequately serve the prevailing high density traffic, nor did it seem possible to achieve all of the required improvements without relocating a substantial mileage. The State Highway Department had met with strong opposition to proposed relocations to by-pass built-up and congested areas, and had these proposed relocations prevailed, there was no adequate provision for controlled highway access to prevent the relocated sections from eventually becoming "built-up" and congested.

It was not believed possible to obtain popular support for amending the State Constitution to provide for an issue of State bonds to finance the construction of 45 miles of new high-cost highway between Kittery and Portland to relieve U. S. Route 1.

The Conference

Such were some of the conditions which were discussed at an informal conference of three gentlemen from York County one evening in February of 1941 during the session of the Legislature: Mr. George D. Varney, then Speaker of the House; Mr. George C. Lord of Wells, a member of the State Highway Commission; and the late Joseph T. Sayward, at that time Representative to the Legislature from Kennebunk. They had met in Mr. Varney's room at the Augusta House to discuss the Route 1 problem and were concerned that apparently no move was under consideration to provide for the much needed improvement. Mr. Sayward had seen the Pennsylvania Turnpike, just completed, and was a very good friend of the late Mr. Walter Jones then Chairman of the Pennsylvania Turnpike Commission. Mr. Sayward, and perhaps the others, were familiar with "Toll Roads and Free Roads" just previously published by the federal government, and had in their minds the statement that a section of Route 1 from "a point near Boston to Portland, Maine" had some traffic basis which approached justification for its construction as a toll road.

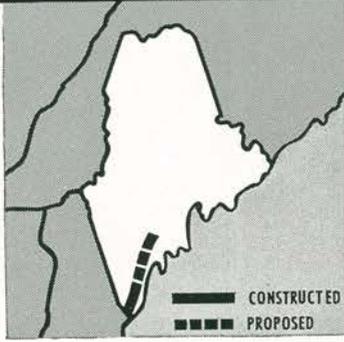
The Bill

The deadline for submitting legislative bills was drawing near, and Mr. Sayward remarked that if someone would prepare a bill to provide for building a toll road from Kittery to Portland, he would present it to the Legislature. Mr. Varney agreed to prepare such a bill. It was as simple as that, and that was how the Maine Turnpike was started.

The bill which Mr. Varney prepared was comparable in many of its provisions with the Pennsylvania Turnpike Act.

(Continued on Page 19)

ON THE SUPER HIGHWAYS



Extending the Maine Turnpike

Contractors using fleets of INTERNATIONAL TD-24 crawl- ers to complete 67.5 mile Portland to Augusta addition

With traffic on the present Maine Turnpike running 10 years ahead of estimates, the pressure is on to complete the 67.5-mile Maine Turnpike Extension from the Portland by-pass to the outskirts of Augusta.

And contractors all along the Turnpike Extension are off-setting a six weeks' delay due to rain in early summer by using fleets of big 155 drawbar horsepower INTERNATIONAL TD-24 crawlers to make the dirt fly . . . hauling dense scraper loads . . . push-loading as no other crawler can . . . towing 50-ton compactors . . . every bulldozing job on the right of way from pioneering to finish grading.

Match the production of these INTERNATIONAL earthmovers against your present equipment tomorrow by calling your International Industrial Distributor today for your on-the-job demonstration.



DIGGIN' IN FOR DEMATTEO. "After six weeks of rain it's mighty nice to see our TD-24s delivering 24 cubic yard payloads to help us get back on schedule" reports F. L. Kirby, superintendent for DeMatteo Construction Company, Quincy, Mass. Eight TD-24s are on the job.



PACIN' THE BIG DIPPERS. Latrobe Road Construction Co., Inc., Latrobe, Penn., uses three TD-24s on its subcontract with Savin and Supt. F. E. Crowell states, "The TD-24 is the only crawler, bar none, that's been able to keep ahead of our big shovel operations".



IT'S TD-24s 9 TO 5. The Savin Construction Corp., East Hartford, Conn., uses 9 INTERNATIONAL TD-24s on its 10.585 section of the Turnpike to move 2,000,000 cubic yards of earth and 90,000 cubic yards of rock. Three TD-24s shown compacting a fill near Portland.

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THE MAN OF THE YEAR



WILLIAMS B. GETCHELL, JR., *Executive Director*
MAINE TURNPIKE AUTHORITY

A special edition announcing the opening of the Maine Turnpike Extension would be incomplete without revealing some of the less-known human factors involved in bringing this project to final completion.

In the course of our pursuits, we could not help but gather definite impressions of the man who was directing operations on this Turnpike.

"Bill" Getchell possesses that rare ability to direct his thinking into minute-tight compartments. This ability to apply instant concentration to a succession of unrelated ideas and come up with the answers is in itself a rare experience to observe.

Coupled with this remarkable faculty is a driving energy at a pace that would pile most of us on the rocks in a short space of time.

Only those who work intimately with Bill realize the hours this man can find in one day. He doesn't follow the rulebook of modern executives—arriving at 9 a.m.

—leaving at 5 p.m. He reverses the arrival and departure times—more often arriving at 5 a.m. and departing after 9 p.m.

Maybe that is why he can always find time for the visiting newsman, photographer, or magazine writer.

Getchell received his Bachelor of Science degree in Engineering from the University of Maine in 1927.

Following his graduation he was an instructor in civil engineering at Lehigh University at Bethlehem, Pa. until 1931. He was first employed by the Maine State Highway Commission in 1923 and with the exception of his term as instructor at Lehigh, remained with the Department until March 1946 when he was appointed Executive Director of the Maine Turnpike.

He is a Registered Professional Engineer, a past President of the Maine Association of Engineers and a member of the Portland Rotary Club.



The above photo is part of a fleet of 33 International model RF-214 dump trucks which along with many other Internationals have performed an outstanding job in the construction of the Maine Turnpike Extension from Portland to Augusta.

Compliments of the

International Harvester Co.

SALES

Factory Motor Truck Branch

SERVICE

35 Bedford Street

Portland, Maine



LUCIUS D. BARROWS

MAINE TURNPIKE HISTORY

(Continued from Page 15)

The bill was enacted as Chapter 69 of the Private and Special Laws of 1941. It created the Maine Turnpike Authority consisting of four members appointed by the Governor with the advice and consent of the Council, and the Chairman of the State Highway Commission as a member ex officio. The members first appointed were for terms of 4, 6, 8 and 10 years, their successors to be appointed for terms of 10 years. The Governor was directed to name one of the appointed members as Chairman. It provided that an executive director and a secretary and treasurer should be elected by the Authority, and authority was extended to employ all other needed assistants.

The Authority was authorized and empowered to "construct, operate and maintain a turnpike at such location as shall be approved by the State Highway Commission from a point at or near Kittery in York County to a point at or near Fort Kent in Aroostook County—and to issue turnpike revenue bonds payable solely from tolls to pay the cost of such construction." Authority was also given to construct and operate integral operating units of the Turnpike.

The Authority was authorized to acquire, hold and dispose of personal property for its purposes, to purchase and lease real property, and to acquire real property by condemnation.

The Act provides that the bonds of the Authority shall not constitute a debt of the State of Maine or of any agency or political subdivision, and shall be payable solely from revenue of the Turnpike.

The Authority was authorized to fix and to revise from time to time tolls for the use of the turnpike.

Provision was made that bonds could be secured by a trust indenture by and between the Authority and a corporate trustee which could be any trust company or bank having the powers of a trust company within or outside of the State of Maine.

It is provided that, subject to any agreement with bondholders, all revenue from operation of the turnpike after deducting the expenses of the cost of the turnpike and operation and maintenance and the sums necessary to provide for the payment of principal and interest on the bonds of the Authority, shall be held and invested to establish trust funds for reserve and sinking funds for retirement of bonds.

State Will Inherit

The act further provides that when all bonds and interest shall have been paid or provision made for the same, the turnpike shall become the property of the State of Maine and the Authority shall be dissolved, and all revenue shall be paid to the Treasurer of the State as a part of the highway funds of the State. The Turnpike shall then be operated and maintained by the State Highway Commission.

The sum of \$10,000 was made available to the Authority for expenses in the interim between enactment of the law and the date money received from grants, bonds or revenue became available.

These are some of the provisions of the act which created the Maine Turnpike Authority.

In spite of the rather broad powers given the Maine Turnpike Authority, including the right of eminent domain, there appears to have been little comment in the Legislature at the time. The Legislative Record for 1941 discloses only the routine procedure. The Bill, "An Act Creating the Maine Turnpike Authority," presented by Mr. Sayward of Kennebunk, was referred to the Ways and Bridges Committee on February 19, 1941, and was passed to be enacted in the House on April 15, 1941, and in the Senate on April 16, 1941. It was approved on April 17, 1941, and became effective on July 26, 1941.

First Authority

Governor Sumner Sewall appointed the following gentlemen as members of the Maine Turnpike Authority:

Mr. Joseph T. Sayward of Kennebunk for the 10-year term,

Mr. Guy P. Gannett of Portland for the 8-year term, Mr. Charles W. Diggery of Sanford for the 6-year term, and

Mr. Paul C. Thurston of Bethel for the 4-year term. Mr. Stillman E. Woodman of Machias, Chairman of the State Highway Commission, became a member ex officio.

Mr. Joseph T. Sayward was designated Chairman of the Authority by Governor Sewall.

The first meeting of the Authority was held at the office of the State Highway Commission in Augusta on September 24, 1941. At this meeting Lucius D. Barrows of Augusta was elected Secretary and Treasurer pro tem and it was decided to confer with Mr. Walter A. Jones, Chairman of the Pennsylvania Turnpike Authority, for advice regarding procedure under the new act, and to make an inspection of the new Pennsylvania Turnpike. This inspection, and a visit with Mr. Jones, were made by Chairman Sayward, Mr. Thurston, Mr. Diggery and the Secretary, on October 13, 1941.

It soon was apparent that two things were absolutely needed before any bonds could be sold; first a traffic study and prediction of income by an engineering concern or group accepted as competent and experienced in making such studies; and second an estimate of the cost of construction of a modern express highway by

(Continued on Page 37)

The Dunlap Agency

Congratulations to the Contractors,
Equipment and Material Firms
For Their Accomplishments
In This Outstanding Project

MAINE'S LEADING BONDING SERVICE

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PORTLAND

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**STRUCTURAL CONCRETE
ASPHALT EMULSION**

for

**Portland-Augusta Extension
Maine Turnpike**

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INC.**

Consulting and Testing Engineers

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"Granite Lives Forever"

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We are happy to have
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of the Granite Required
on the
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TURNPIKE EXTENSION OPENS NEW HORIZONS IN MAINE LIVING

By L. M. CHACE

STEWART ASSOCIATES, INC., *Consulting Engineers*

One of the advances in the broad field of engineering in the past decade, has been the ever increasing emphasis on the need for the economic evaluation of large engineering projects, not only from a construction cost point of view, but the over-all economic advantages to be obtained over the years from the completed functioning project.

The Maine Turnpike running from the New Hampshire border to the Maine capital city of Augusta, a distance of some 106 miles is an example of a large engineering project which will play an important part in the economic life of the State of Maine in the years ahead.

A careful review of the facts leads one to an early conclusion that the economic advantages more or less fall into two categories, firstly, the direct or tangible advantages that are readily apparent, and secondly, the indirect or intangible benefits to the society of man. In the latter score, it will be impossible to forecast all the possible benefits. We can only base them on possibilities as they appear in the light of present day observations. History will undoubtedly record results that will be based on conditions that do not exist today.

The writer has taken the liberty of dividing this article into two parts, the first concerns the Maine Turnpike as a business entity within the State of Maine.

Direct Benefits

In the calendar year of 1954, 2,468,356 vehicles used the first section of the Turnpike from Kittery to Portland. Based upon surveys made by the Authority $2\frac{1}{2}$ persons per vehicle would be a fair average, meaning that approximately 6,000,000 persons used the facilities offered by this engineering project. The gross revenue from tolls amounted to \$1,730,708.20. Any business doing this annual volume cannot but play an important part in the economic life blood of any state. Out of this revenue \$341,014 was immediately paid out in the form of wages to employees and for supplies. In addition to the Turnpike revenue we have the service station and restaurant area where over 1,000,000 gallons of gasoline were sold. The taxes on this item alone added over \$70,000 in revenue to the State of Maine for roads other than the Turnpike which of course received none of this tax benefit. It is estimated from the toll tickets that the Turnpike from Kittery to Portland was traveled to the extent of over 100,000,000 vehicle miles. Dividing this by 15 as representing the average miles per gallon we come up with a figure of 6,666,000 gallons of gasoline consumed in traveling this distance. At the existing tax of seven cents per gallon, this represents a sum of over \$450,000 additional revenue to the State for gasoline expended on a road for which the State Highway Department is not required to expend one cent for repairs.

With the opening of the additional stretch of Turnpike to Augusta it is anticipated that the above figures will be doubled by the end of the first year of operation. Thus we can realize a gasoline tax revenue of nearly \$1,000,000 to help build sorely needed highways else-

where in the state. The figure for payroll and supplies will be well over a half million dollars. The additional new mileage will require the services of more employees. The Authority estimates it will require a total force of about 150 people to man the complete 106-mile facility. This does not include the people working in the concession areas.

It is reported by the Authority that a survey of registration shows that 60% of the cars on the present Turnpike are of out-of-state registry. This means that the residents of Maine are only paying 40% of the bill for this facility. It will be argued that perhaps these people would have traveled to Maine in any event. To some extent that is probably true. However, it is entirely possible that adverse publicity on the congestion encountered on U. S. Route 1 would have kept this figure down to a minimum. It is a fact that nearly 3,000,000 people did indeed come into Maine from other states. It would be a reasonable assumption that these out-of-state visitors stayed an average of three days, at a cost of \$10.00 per day per person. This means that the economy of Maine in 1954 received a shot in the arm of \$120,000,000 at the very least. If actual figures could be obtained the figure is more than likely to be over \$200,000,000.

A careful study of the above figures would seem to indicate that the direct benefit from the Maine Turnpike to the residents of Maine is a sum not to be considered lightly.

In addition to the above benefits to the state in general there are certain personal direct benefits to the Maine motorist who makes use of the Turnpike in his travels. According to statistics gathered in one of the Western states, a passenger vehicle will operate for approximately $\frac{3}{4}$ c per mile less on highways built to the standards of the Maine Turnpike. The experience of the Turnpike Authority in operating vehicles solely on the Turnpike and obtaining 50,000 miles to a set of tires, with no expense for front end adjustment or repairs, as compared to the experience of the average motorist driving on other roads in the state would seem to bear out the previous assertion.

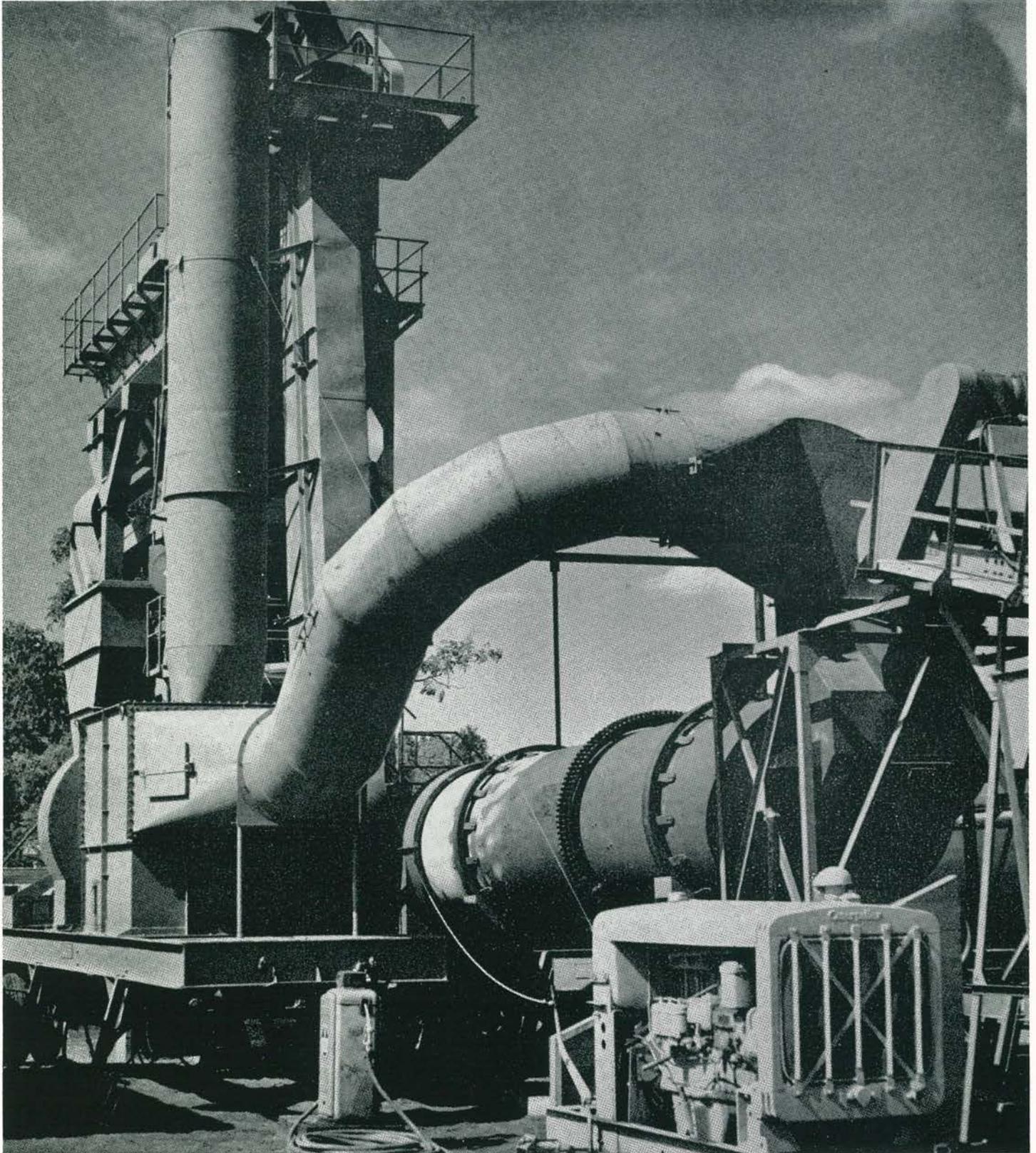
The direct benefit to the people of Maine generated by the Maine Turnpike in the form of wages, purchases and gasoline taxes places it near the top of the list of industries contributing to the general economy of the State.

Indirect Benefits

The early history of New England industry and commerce shows the importance of avenues of trade. In the beginning the coastal waters provided the means of the most rapid transportation of the times. One of the requisites for a successful town was that it must be a seaport, preferably with a harbor offering protection against the northeast and southeast storms that even today ravage our coast. To a person living in the late 17th and early 18th century it must have seemed well nigh impossible that such ports as Salem, Saybrook, Thomaston and others could ever be anything but prosperous.

(Continued on Page 23)

THIS PORTABLE PLANT PAVED 30 MILES OF THE
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TURNPIKE EXTENSION

(Continued from Page 21)

The next stage in commerce finds the development of towns on rivers capable of navigation. Thus the determining factor was again the means of transportation. Frontiers were pushed back as river boats carried the product of mill and farm to the larger, longer established cities by the sea. Overland transportation was still confined to travel by horseback along Indian trails. Water was still the prime medium for the mass transportation of merchandise. Boats traveled along the coast and up the rivers to the head of navigation. The Indian trail slowly gave way to rudimentary roads mainly for the transport of people. Goods still traveled by water. A community to thrive still had to locate on navigable waters.

By mid 19th century a new means for mass transportation of goods appeared on the scene, the railroad. Rivalry was keen between cities to have the new and wonderful medium run through their town. The business man of one hundred years ago was alert to the advantages offered by this new means of overland travel. No longer was it necessary to be located on water, thus a man could arrange his mill or mine where natural resources dictate. The early history of railroading is replete with anecdotes of the chicanery and double dealing rife between cities and towns to be assured of this wonderful new tool of commerce.

As factories and industries increased due to the low cost of manufacture at the source of materials and low cost mass transportation enabled people to buy the products of forest, farm and factory in ever increasing amounts, the country became prosperous. But to the sorrow of many promising communities they were bypassed by the railroad. Many became ghost towns or drifted into a sleepy backwash community.

The advent of the 20th century found man busily experimenting with a self propelled vehicle. The man in the street scoffed and remarked as to the unlikelihood of its ever replacing the horse. It did seem unlikely as the highways were either ankledeep in dust or mud and certainly during the winter no place for wheeled vehicles in the snow. The railroads and coastal shipping still transported the goods of commerce. The auto was still engaged in the private transport of people.

The motor truck received a work-out during World War I and convinced many that it had possibilities as a means of a quick and convenient method for the transportation of merchandise if it had a paved street to run on. The early Twenties saw the extension of paved streets beyond the city limits. The century old dirt road received a coat of armor that stood up in winter and summer. Line and grade still following the path of the horse, even to the thank-you-mam that formed a part of a rudimentary drainage system. The early farm roads had a tendency to follow boundary lines and to skirt natural obstructions. Abrupt right angle turns were the order of the day.

As the auto car and truck manufacturers made more durable and faster vehicles, these roads became a highway of death and delay to the motorist and despair to the persons responsible for their upkeep. Even with these obstacles the auto sounded the death knell to the interurban trolley system in less than 25 years. Trucks began to attract the perishable food trade away from the firmly entrenched railroad. By transporting merchandise from source to consumer with fewer handlings and greater speed the truck rapidly rose to capture a large segment of transportation. Now a plant

or farm need not be in close proximity to water or rail connections. In fact the truck in addition to helping kill the electric trolley car, played a major part in destroying the coastwise shipping lines, culminating in the death of that nearly century-old byword of the traveler and song, "The Old Fall River Line."

America On Wheels

The forward thinking man at the end of World War II saw America as a land of people on wheels. To accomplish this however, a highway different in conception from anything heretofore must be developed. To put America on wheels the highway must be fast and yet safe. A start was made on existing public roads. It soon became evident that the roadside development over a period of years was stifling the progress of the so called "super-highway."

With help from Federal agencies Pennsylvania constructed a model of the road of the future in the now famous Pennsylvania Turnpike. Far-sighted individuals in Maine began a campaign for a similar project in Maine. The result—The Maine Turnpike from Kittery to Portland. Its success has now resulted in a fine new extension to Augusta, a twin ribbon of black extending 106 miles through the heartland of Maine. As this major engineering achievement progresses across the map of Maine towards Bangor and beyond, one cannot but notice the strong resemblance to a sort of backbone tying the built up areas together.

A New Frontier

It is this new look to the map of Maine to which we now give consideration. Students of civilization trends have recently stated a belief that we in America are standing in the threshold of a new frontier in living. America is going on wheels as never before. It is anticipated that the East Coast of the United States will become within the next quarter-century, one continuous metropolitan city from Portland, Maine to south of the Mason-Dixon Line, one continuous strip of high speed expressway will form the Main Street of this great City. Feeder roads will push out from this backbone into the side areas for distances that the auto of the future can travel in about one-hour's time.

We of this generation are witnessing the evolution of a new concept in the arrangement of living, working, and playing. As the uncrowned leader of industrial progress from the first fulling mill to the latest attempt to wrest power from the tides, New England is lighting the way to the future. Maine people should be justly proud of its leadership in this bright new concept.

How can the Maine Turnpike help this new concept in living and what are its economic implications to the people of Maine? As the northerly end of this new Main Street, Maine offers the last remaining undeveloped recreational areas along the North Atlantic. Having more time to play and the means to get here quickly, means a mighty expansion of the vacation industry. Nature in Maine has things to offer that cannot be duplicated elsewhere. Down this new river of commerce will flow the products of Maine's farm and industry, all the while offering to the worker the balance of industry and recreation that the future Mr. and Mrs. America will demand.

Along the path of the Maine Turnpike lies some of the best undeveloped industrial and housing sites in North America. The fast build-up along Route 128 in Massachusetts in close proximity to major interchanges should furnish a key to the future of Maine. There are several spots along the Turnpike close to cities, which

(Continued on Page 25)

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TURNPIKE EXTENSION

(Continued from Page 23)

offer rail siding facilities, good water and fast trucking connections to larger cities.

One of the major factors in the development of the earlier mentioned Fall River Line, was the overnight delivery of freight from the mills of that area to New York. Overnight deliveries are now possible and practiced in Maine today.

Some criticism of the first section of the Turnpike was offered to the effect that it would funnel business away from established business areas along the public highways. It is to be noted that business is as good or better today than ever before with less congestion on the old highway. Motorists desiring to travel far upstate can do so. Their brother motorists wishing to stop in the downstate areas can now partake of its offerings.

As more people travel greater distances into the state, their places are taken by people from more distant areas. The Maine Turnpike thus helps the economy of areas beyond the direct contact of the road by making it possible for people to reach "Downeast" with ease and speed.

It is the future development along the path of the Turnpike which will prove to be the greatest contribution to the Maine economical scene. Portland is in a fine position to receive great benefit from the industrial development. It will of necessity require some readjustment in the thinking of municipal zoning. The city of the future is very apt to be a civic center, surrounded by a ring of homes, in turn ringed by modern well-landscaped factories and shopping centers bordering on the throughway.

Lewiston is already capitalizing on this new concept. A new industrial zone is growing practically overnight in the vicinity of the Lewiston interchange on the Turnpike. Auburn has a good potential in the area between the railroad and the Androscoggin River. Gardiner and Augusta are also well situated to take advantage of Turnpike developments.

Certainly the recent floods in the Northeast have pointed out the needless loss of life and property due to crowding along the route of a now obsolete means of colonial transportation. When man can select a direct transportation route along terrain not so liable to natural disaster, he will not be long in choosing to live and work along this same route. He is going to elect to live and work where the greatest offering of recreation in the form of more outdoor choices is available.

Industry is going to thrive where the offering is the greatest. Skilled labor, favorable working conditions, adequate transportation, all of which can be present on the Maine scene, can turn the tide of business development.

In addition to the above benefits outlined, there are the intangible assets of safety. The loss of life and property damage on the Nation's highways has been of major concern. It is impossible to assess the value of a human life in dollars and cents. Some safety leaders have expressed the opinion that one human life may be worth \$100,000 in cash value. Whatever the monetary value, it can never replace the suffering of the victim nor the heartache of his family and associates. The

Maine Turnpike has been designed and built with the constant aim of providing the utmost in safe driving.

One major economic advantage offered by the Turnpike is the release of State funds to build roads other than a direct non-access highway into the state for a distance of over 100 miles. Without the present Turnpike it would have been very necessary for the State to construct U. S. Route One into a comparable highway. To have done this would have taken the equivalent of the entire budget of the highway department for a period of five years or more. Naturally this would not take place unless the revenue devoted to highways was raised to double the present amount. The extreme difficulty encountered in the last legislature in raising the highway revenue by about 10% would be a good representation of how far a 100% increase would get.

Psychological Effect

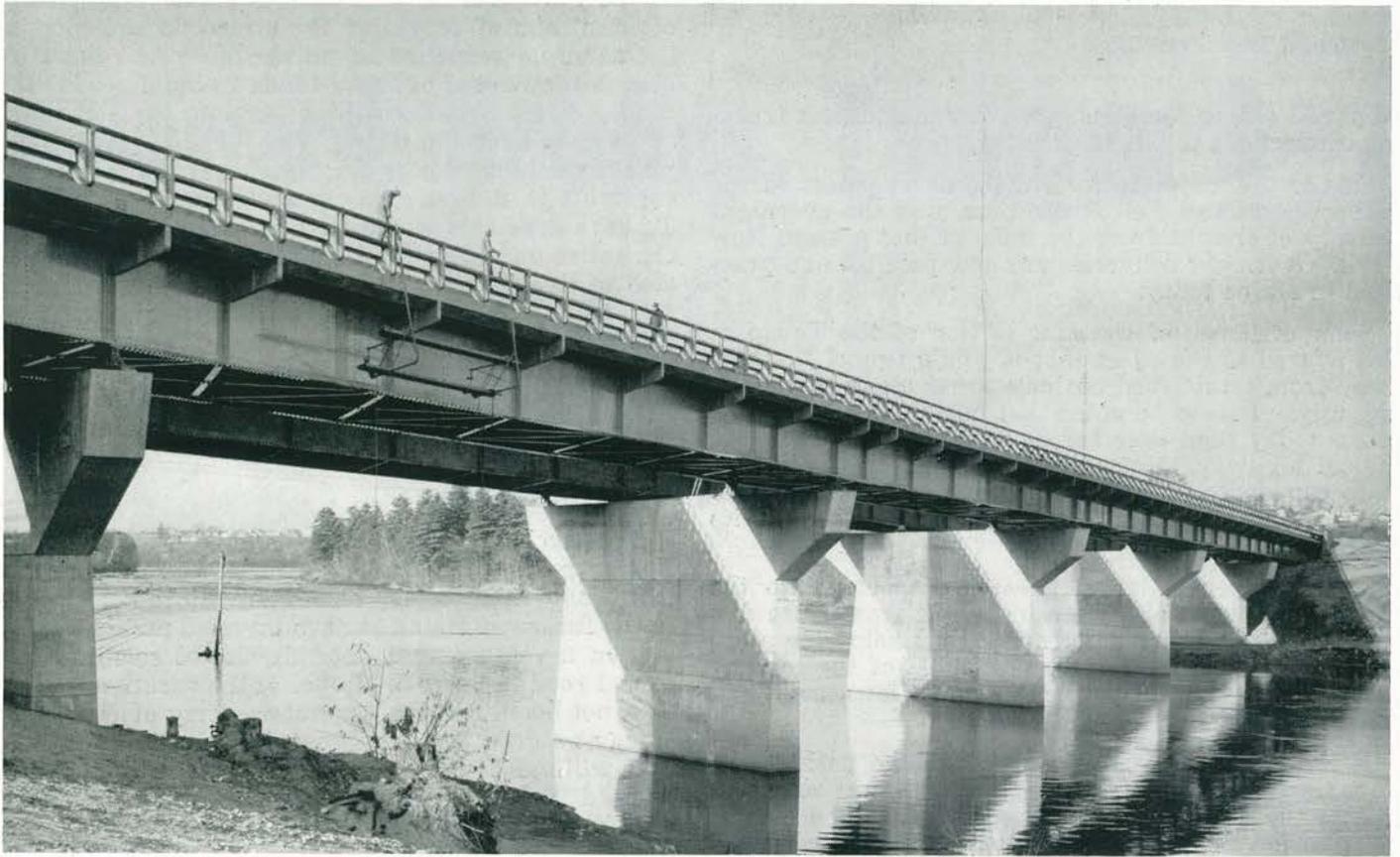
The psychological effect of the building of the Maine Turnpike on the business economy of Maine is one hard to evaluate in monetary terms. Investors must believe in the future of Maine to have invested millions of dollars in a venture that depends almost solely on continued good business in Maine. If the vacation business does not boom and the general economy of Maine continue at a good pace, the financial future of the Turnpike will indeed be precarious. The faith in Maine expressed in a large investment of this scope should indeed give renewed hope to the faint-hearted. After all this is a cold hard business and not based on any desire to place a modern expressway in Maine for the use of its inhabitants.

Business people, legislators and the man in the street in Maine should take this venture as a guide for their own acts in the future. Maine has a good business future in spite of the period of readjustment now going on in many communities. It will take vision, money and hard work to create the new order.

In conclusion it might be well to review the asset side of the ledger of economic advantages offered by the Maine Turnpike to the State of Maine. In the first place we have demonstrated that here is a vital, solvent enterprise, employing one hundred fifty people, spending a considerable sum of money each year in the business marts of the state. It is the means of generating a sizeable sum of money into the highway funds for use on other highways. It serves as a constant advertisement for the recreation industry in offering a sort of "red carpet" to the highly important tourist trade. It serves as a new "river" to carry the present day barges of commerce, laden with Maine-made products of the farm, forest and factory.

In the field of intangible benefits it offers a whole new horizon for better living. It opens up a new territory to factory sites, housing projects, shopping centers, all a part of the new "America on wheels." It serves as an inspiration in financing to the people interested in making Maine a better place in which to work, live and play.

The Maine Turnpike is a present day living example of the pioneering spirit that has always prevailed in the hearts and minds of the people of Maine. A fitting tribute to a State having "Dirigo" as its motto.



ANDROSCOGGIN RIVER BRIDGE AT LEWISTON, MAINE
carrying the Augusta Extension of the Maine Turnpike 6-span continuous plate girder
bridge, 845'-8" long

Structural Steel

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TURNPIKE BUILDERS DESERVE PRAISE OF MAINE CITIZENS

Construction of Extension — Story of Back-breaking Effort Blood, Sweat, Toil and Tears



THE LONGEST BRIDGE of the 91 bridges on the Maine Turnpike extension is the 846-foot structure over the Androscoggin River at Lewiston. Built by W. H. Hinman, Inc., North Anson, Maine.

The mighty earthmoving machines have ground to a halt. Many of their operators and engineering supervisors from distant states have departed to other great challenges.

Their tremendous achievement remains—a graceful 63-mile monument to the roadbuilding industry.

The completion of the Maine Turnpike Extension to Augusta is not only an engineering and administrative feat of great magnitude, but also a history-making achievement in highway construction for this State.

Motorists traveling between Portland and Augusta will have a safe modern four-lane divided highway of two 24-foot roadways plus eight-foot outside and five-foot inside shoulders. In addition a grassed depressed median strip of a width of 16 feet. Bridges will be a minimum of 30 feet for each roadway plus safety walks and guard rail.

This beautiful new highway leading into the heart of the inland recreation areas of Maine, as well as linking three major industrial areas, Portland, Lewiston-Auburn and Augusta, is designed for 60 miles per hour, the safe-considered speed for modern vehicles on this type of highway.

In addition to the Howard Johnson Restaurants and Esso Service Stations now serving the public on the original Kittery to Portland section of the Turnpike, added facilities on the extension scheduled to open early next year include snack bars and service stations at Cumberland on the southbound lanes, and at Litchfield on the northbound lanes.

Restaurants and service stations will operate on the northbound lanes in Cumberland and Gray and on the southbound lanes at Lewiston.

The new extension is expected to give the motorist

(Continued on Page 29)



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OF THE MAINE TURNPIKE OPENS
TO THE PUBLIC
AND IT'S A GREAT DAY FOR US TO KNOW
THAT THOUSANDS OF MOTORISTS
WILL ENJOY THE BENEFITS OF OUR PART
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Cement piers . . .

TURNPIKE BUILDERS

(Continued from Page 27)

better riding. Changes in design include a twenty-inch sand base to which is added 14 inches of gravel topped with four inches of macadam base course and a smooth three-inch bituminous concrete binder. The original section has a 30-inch base course with 7½ inches of bituminous concrete applied in three courses.

A depressed median strip on the extension will serve for better drainage and for easier snowplowing.

Contractors on this \$55 million road project faced not only the usual obstructions of terrain, deep deposits of marine clay which necessitated piles to depths of 246 feet under bridges in some sections, but also were unmercifully hampered in the early grading operations by over 100 days of relentless rain culminating in two severe hurricanes. The last eight months of 1954 showed a rainfall 14.4 inches above normal.

With heavy roadbuilding machinery running into the tens of millions of dollars, they kept them rolling through the hostile weather of the 1954 summer.



and a bridge is born

However, their stubborn defiance to these adverse conditions resulted in the opening of the extension in a little better than 60 days from the original schedule.

On many of the contracts, men and machines took advantage of good weather to work around the clock under floodlight systems stopping operations only a matter of hours on Sundays.

To the 2000 men employed directly in the construction, can be added hundreds more in Maine heavy equipment plants who also worked the night hours on many occasions to keep the big earth-moving equipment serviced with parts, proper maintenance and repairs.

To get a vague idea of the tremendous effort involved in this exploit, just take a look at the quantities of materials that went into this superhighway.

Twenty million cubic yards of earth, sand, gravel.

One million cubic yards of rock excavation.

One and a half million tons of crushed aggregate.

145 thousand barrels of Portland Cement.

200,000 linear feet or 38 miles of concrete and metal drainage pipe of all sizes.

Eleven and one-half million gallons of asphalt.

47 million pounds of steel.

Bituminous concrete, 350,000 tons.



plus bolted steel . . .

Grading quantities break down to 10 million cubic yards of earth excavation, a million cubic yards of rock excavation, another ten million yards of earth borrow plus the million and one half cubic yards of crushed aggregates.

Steel quantities were divided into 8,764,000 lbs. for some 35 miles of H-piles for bridges, 24,338,000 pounds of structural steel for the Androscoggin River bridge. Steel was purchased directly by the Maine Turnpike Authority. In addition to the steel H-piles approximately 12 miles of cast-in-place concrete piles were driven.

All bridge steel was erected using high strength bolts instead of rivets in order to cut erection time and costs.

In the 91 bridges on the new extension, there is a total length of 19,996 feet or 3.8 miles of bridge work.

The longest bridge on the extension is the 846-foot Androscoggin River bridge built by the W. H. Hinman Co., Inc. The second longest bridge is the 640 foot

(Continued on Page 33)

JAMES W. SEWALL COMPANY

Consulting Engineers

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OLD TOWN 7-4419

CIVIL

FOREST

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TIMBERLAND MANAGEMENT

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COMMONWEALTH 6-2878

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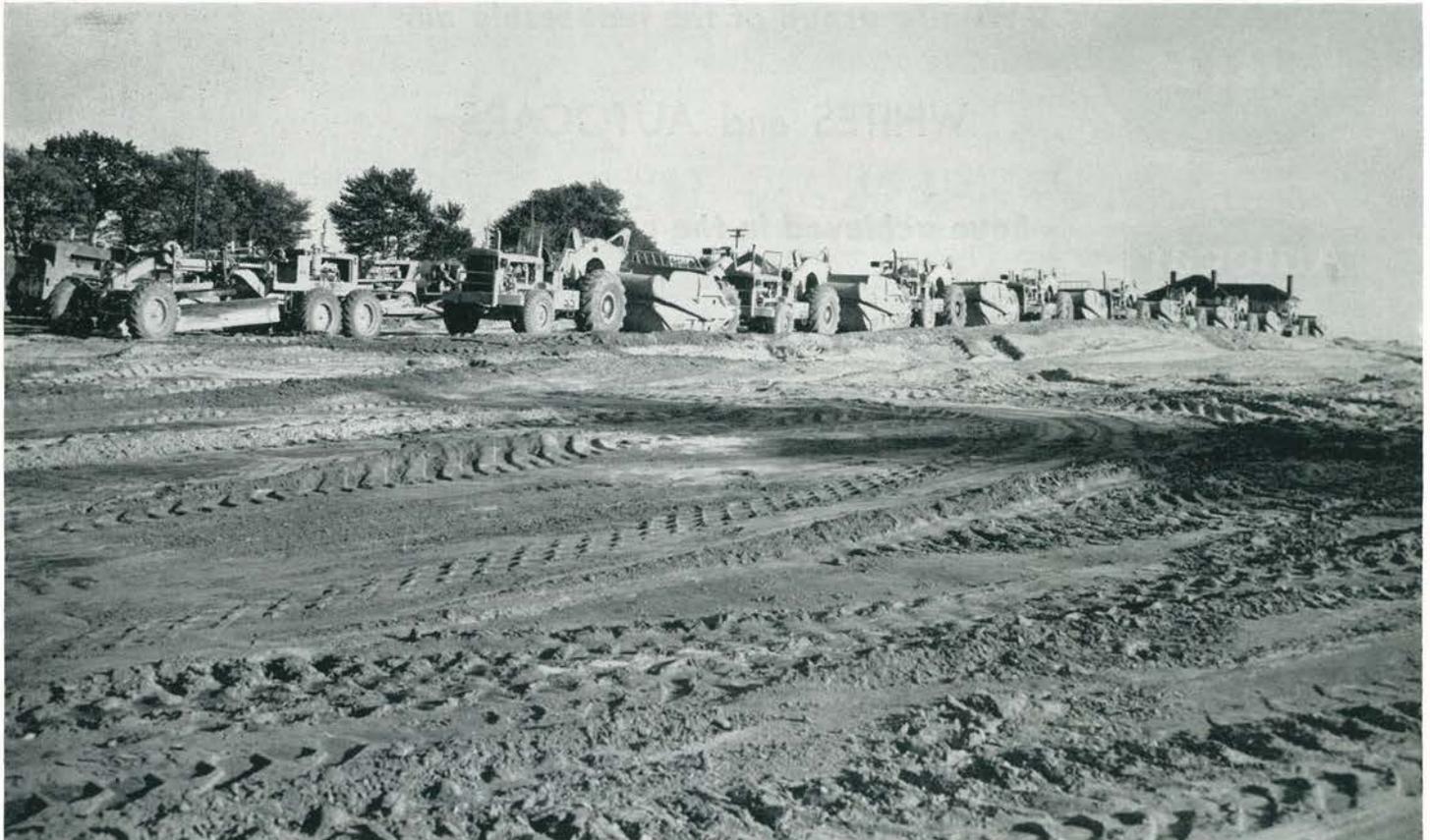
SNOW'S

106 Turner Street, Auburn, Me.
Kennebec & Preble Street, Portland, Me.

Surveys lead to clearing . . .



and then Caterpillars mass for the ground attack





One of a large fleet of trucks owned by G. A. Peterson Co. that poured 75,000 tons of transit-mix concrete on the Maine Turnpike Extension.

We are happy to have had the opportunity to supply Maine materials for this great project.

G. A. Peterson,
President

G. A. Peterson Co.

Transit-Mix Concrete

AUBURN, MAINE



We are proud of the leadership our

WHITES and AUTOCARS



have achieved in the construction of

THE MAINE TURNPIKE EXTENSION

THE HENLEY-KIMBALL CO.

380 FOREST AVE.

PORTLAND

MAINE



Good Roads . . .

TURNPIKE BUILDERS

(Continued from Page 29)

structure over Route 202 and the Maine Central Railroad tracks in Auburn.

Space will not permit us to describe the roles played by the engineering firms, survey outfits, contractors, material suppliers, heavy equipment dealers, and the several other firms who have contributed to the successful construction of this extension.

However, it must be remembered that the giant machines that build our modern highways today require great technical knowledge and highly skilled men to keep them properly serviced and on the job.

Maine equipment dealers who have furnished the many new vehicles required, and serviced these vehicles along with hundreds of others in their extensive service departments, have provided an indispensable contribution to this combined success.

Firms such as the Houghton-Arnold Corporation, Eastern Tractor & Equipment Company, Maine Truck-Tractor Co., N. A. Burkitt, Inc., Henley-Kimball Co.,



of big drainage pipe . . .

Snow's, Inc., Mack Motor-Truck Company and many other Maine equipment dealers have had an important part in this achievement.

The material suppliers also had their back-breaking moments to get out the materials needed to supply the gargantuan appetite of this mammoth highway.

Firms such as Bancroft & Martin Rolling Mills Co. who supplied all the concrete drainage pipe used on the extension as well as structural steel for 17 bridges along with orders for reinforcing steel and several other items, the Esso Standard Oil Co. whose refinery furnished millions of gallons of asphalt, Dragon Cement Company with thousands of barrels of Portland Cement, for the bridges, New England Metal Culvert Company, the Phoenix Bridge Company, the transit-mix outfits like G. A. Peterson, Blue Rock Quarry, and Doherty and Swearingen with two million gallons of asphalt emulsion for the turnpike shoulders, Main Line



require miles . . .

Fence Co. with guard rail and fencing materials, Hocking Granite and the H. E. Fletcher Granite Co. with granite curbing, crushed stone suppliers such as the Lewiston Crushed Stone and Gravel Co., and the millions of yards of gravel from pits owned by men like V. E. Dunn and Sons, and innumerable others have contributed vast amounts of materials for this tremendous task, and thereby earned a share of the credit in Maine's progress.

And everlasting credit goes to the Consulting Engineers, Howard, Needles, Tammen and Bergendoff, with Wright & Pierce, the James W. Sewall Co. and other firms whose men and their studies outlined the project for the builders.

Although the great project has reached completion to Augusta and the mass of roadbuilding machines come to a stop, we want to think it is only a temporary rest for all concerned and that we may see again in the near future, the names of the firms listed below in another great expansion of this tremendously important highway.

The Maine Trail salutes the builders of the Maine Turnpike Extension.

(Continued on Page 35)

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MAINE'S SUPERHIGHWAY

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Jack Cliff Doherty & Swearingen Corp.

Asphalt Emulsions

YARMOUTH, MAINE

It's a Natural . . .

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REACHING INTO MAINE'S
NATURAL BEAUTY
GRADED WITH GRAVEL FROM
MAINE HILLS

We are glad to have had a part
In the construction
Of this memorable extension
Of the Maine Turnpike

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Bond Brook Road Augusta, Maine

**We are Proud of our Share
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Then crushed rock . . .

TURNPIKE BUILDERS

(Continued from Page 33)

Contract No.	Prime Contractor	Sub-Contractor
202	H. E. Sargent, Inc. Stillwater, Maine 6.6 miles grading—Gray and New Gloucester	C. W. Bagley Augusta, Maine Cianchette Brothers, Inc. Pittsfield, Maine
203	Nello L. Teer Company Box 1131 Durham, North Carolina 13½ miles beginning at Portland toll plaza and extending to Falmouth with Route 1 spur at Falmouth and Spring Street, Portland. Fif-	W. H. Hinman, Inc. North Anson, Maine Norman E. Jackson Pittsfield, Maine Main Line Fence Co. Westbrook, Maine



before final paving

teen bridges on this section. Sublet to Ellis Snodgrass, Inc. (5) and W. H. Hinman, Inc. (10)

204 The Savin Const. Corp.
10 Village Street
East Hartford,
Connecticut

Grading—Falmouth to Route 26 intersection, Gray. 10½ miles.

Dewayne Shaw
Gorham, Maine
Ellis C. Snodgrass, Inc.
Portland, Maine

Main Line Fence Co.
Westbrook, Maine
Herbert Seamans
Skowhegan, Maine

206 The Savin Const. Corp.
10 Village Street
East Hartford,
Connecticut

Grading—Royal River, New Gloucester to Androscoggin River. 7¼ miles sublet to

Latrobe Const. Company
Latrobe, Pennsylvania
sublet to

Default Lumber Company
Auburn, Maine

Main Line Fence Co.
Westbrook, Maine



must be laid . . .

209 Yonkers Contracting Company
969 Midland Avenue
Yonkers, New York
10.8 miles Lewiston-Webster.

Leo Corriveau
Lewiston, Maine
Main Line Fence Co.
Westbrook, Maine
McKenzie Const. Co.
Renovo, Pennsylvania

210 M. DeMatteo Construction Co.
200 Hancock Street
Quincy, Massachusetts

Grading—Nine miles Webster to Litchfield

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Leo Corriveau
Lewiston, Maine
Main Line Fence Co.
Westbrook, Maine
F. F. Plummer Co.
Westbrook, Maine
W. E. Rogers & Sons, Inc.
Gardiner, Maine

(Continued on Page 36)

THE FINISHING TOUCHES



Call for guard rails . . .

TURNPIKE BUILDERS

(Continued from Page 35)

Contract No.	Prime Contractor	Sub-Contractor
211A	Campanella & Cardi Const. Co. 780 Jefferson Boulevard Hills Grove, Rhode Island 5.3 miles from Cobbosseecontee River to Farmingdale including Gardiner interchange.	Monroe B. Beebe Old Lyme, Connecticut
211B	H. E. Sargent, Inc. Stillwater, Maine 4.3 miles, Farmingdale, Hallowell, Augusta.	C. W. Bagley Augusta, Maine Main Line Fence Co. Westbrook, Maine
212	Cianchette Bros., Inc. Pittsfield, Maine Five bridges—Gray to New Gloucester.	Connerton & Justice 1305 Commonwealth Ave. Allston, Massachusetts



and seeding the slopes . . .

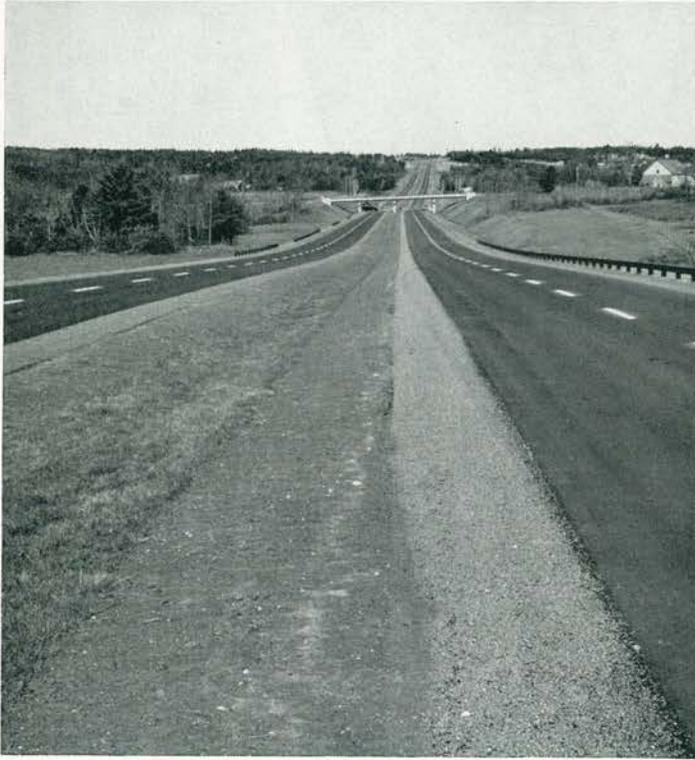
213	Savin Construction Corp. East Hartford, Connecticut Nine bridges from Cumberland to Gray.	
214	Consolidated Construction Co. North Attleboro, Massachusetts Nine bridges—New Gloucester to Auburn.	Auguste Brassard, Inc. Central Falls, R. I. C. L. Guild Const. Co. East Providence, R. I.
215	Theodore Loranger & Sons New Bedford, Massachusetts 19 Bridges from Bowdoin to Hallowell.	Owen J. McGarrahan Co. Cambridge, Massachusetts
216		
217	W. H. Hinman, Inc. North Anson, Maine 15 bridges—Lewiston to Bowdoin	Herbert E. Callahan, Inc. 33 Court Street Auburn, Maine Roy A. Leonard 543 Union Avenue Framingham, Massachusetts



strong rock shoulders . . .

218	Gil Wyner Company Malden, Massachusetts 13 bridges—Portland to Falmouth.	Barney Nager & Sons, Inc. Malden, Massachusetts (Painting) W. M. Hillson Company 1260 Second Street, S.W. Washington, D. C.
219	W. H. Hinman, Inc. North Anson, Maine Androscoggin River bridge.	Roy A. Leonard 543 Union Avenue Framingham, Massachusetts
220	W. H. Hinman, Inc. North Anson, Maine Augusta interchange.	Verrier Const. Company Portland, Maine

(Continued on Page 50)



. . . Result—a beautiful modern highway

MAINE TURNPIKE HISTORY

(Continued from Page 19)

a competent engineering firm of national reputation, showing that such a highway could be built and maintained, and the bonds retired over a reasonable period of time, all with the income from tolls and rental of concessions.

Between September of 1941 and October of 1944 the Authority devoted a great deal of effort to seeking ways and means of financing a traffic study covering the section between Kittery and Portland.

There was some hope on the part of the Authority of obtaining additional financial help from the highway fund of the State or the State Contingent Fund, or from agencies of the federal government, which did not materialize.

Conferences were held with representatives of the Pennsylvania Turnpike Commission, with Mr. Robie Mitchell, Attorney of New York, a native of Newfield, Maine, who was closely connected with the legal proceedings incident to the issuance and sale of Pennsylvania Turnpike bonds; with Parsons, Klapp, Brinkerhoff & Douglas, Consulting Engineers of New York; with Coverdale & Colpitts, Consulting Engineers of New York; with Governor Sewall; and others.

On March 31, 1944 Coverdale & Colpitts submitted a proposal to make a traffic survey of Section 1 of the Turnpike between Kittery and Portland for the sum of \$6,000 subject to certain help from the State Highway Department, to which the State Highway Commission agreed. (Mr. George W. Burpee of this firm is a native of Maine.)

At a meeting of the Authority on October 4, 1944, Chairman Sayward reported that he had attended a meeting of the Maine Development Commission on September 29 and had explained the need of funds for a traffic survey. He further reported that the Maine De-

velopment Commission had unanimously voted to make the sum of \$6,000 from its post-war survey fund available to the Maine Turnpike Authority to be used for a traffic report.

The Authority immediately voted to enter into an agreement with Coverdale & Colpitts for making this survey and traffic prediction. In the meantime, in 1943, the Public Roads Administration had agreed to enter into an agreement with the State Highway Commission covering an advance engineering survey project of a road from Kittery to Portland as a "relief" highway, with the understanding that if the road was later developed as a toll road, the federal government would be reimbursed for federal aid paid to the State. It was also agreed that the State would be reimbursed by the Authority for the cost of the survey. Under these conditions a survey for a new highway had been started.

Then after some three years of trying, with all of the attending disappointments and perhaps much wishful thinking, it appeared that the necessary preliminary work could be carried out.

During this period there was a change in the Authority. Mr. Guy P. Gannett resigned on February 7, 1942. Later, in 1945, Mr. Boyd N. Harrington of Patten was appointed by Governor Horace Hildreth to complete Mr. Gannett's term. Mr. Harrington qualified as a member on October 2, 1945.

Favorable Traffic Report

A favorable traffic report on the Kittery-Portland section of the proposed turnpike was submitted by Coverdale and Colpitts on April 9, 1945 and accepted.

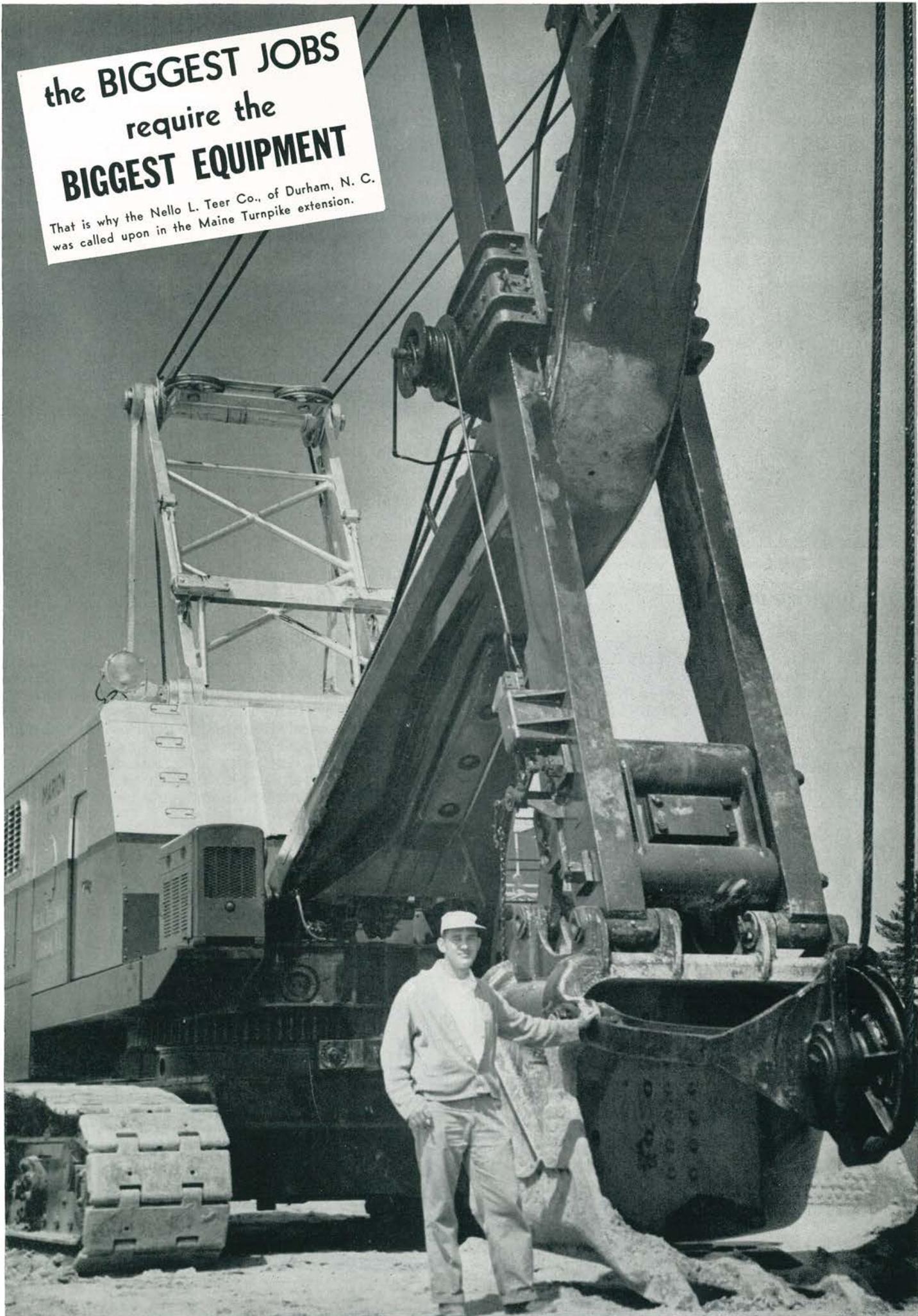
The Authority was without funds for engineering services and for legal services in connection with the legal and financial work required before bonds could be sold; and it is probable that the turnpike project could not have been carried out had it not been that the attorneys, bankers and engineers who finally became associated with the Authority, had faith in its eventual success, and were willing to furnish their services on the basis that payment to them would be contingent on the sale of the bonds.

At a meeting on May 23, 1945, the Authority considered the procedure and steps to be taken in the matter of financing construction of the Kittery-Portland section. At this time the members discussed the problem with Mr. Jerome C. L. Tripp, President of Tripp & Co., Inc., of New York who had been associated with the Maine-New Hampshire Interstate Bridge Authority in financing the Interstate Toll Bridge. With Mr. Tripp was Mr. Tuthill Ketcham representing the banking firm of Stifel, Nicolaus & Co. of Chicago. These gentlemen with the late Ernest L. Merrill of the State Highway Department had made an inspection of the proposed route surveyed by the State Highway Department, and Mr. Ketcham told the Authority that he and his associates would be willing to submit a financial proposal to finance construction, and also would be willing to advance funds in order to proceed at once with preliminary work, including legal services, in the preparation of a trust indenture, and consulting engineering services, at least in part, for preparing an estimate of cost, with the understanding that employment of engineering and legal services would be subject to approval of the Authority. Mr. Ketcham also informed the Authority that his group would be willing

(Continued on Page 39)

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require the
BIGGEST EQUIPMENT

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was called upon in the Maine Turnpike extension.



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NELLO L. TEER CO.
CONTRACTORS

DURHAM,
NORTH CAROLINA

MAINE TURNPIKE HISTORY

(Continued from Page 37)

to purchase the bonds under certain guaranteed conditions. A rough estimate of \$13,000,000 was used for the project cost.

No commitment was made by the Authority pending an investigation of the possibility of obtaining proposals from other financial groups, which were not forthcoming.

Varney Appointed

At a meeting on June 12, 1945, it was voted to employ Mr. George D. Varney of Kittery as Attorney for the Authority with the understanding that no fees would be paid unless the bonds were sold.

At this same meeting the Authority discussed the proposed project with Mr. Robie L. Mitchell of the law firm of Mitchell & Pershing, New York, who was acquainted with the financial groups and engineering firms, and who was most helpful with advice based on his long experience as an attorney.

At this time consideration was also given to the employment of Consulting Engineers, which was somewhat of a problem because it was necessary to select a firm which was not only competent, with an established reputation, but also one which was able and willing to finance the preliminary engineering work on a contingent basis that funds for the project would become available. Among others Mr. Ketcham recommended the engineering firm of Howard, Needles, Tammen and Bergendoff of New York and Kansas City.

On June 27, 1945, the Authority accepted a proposal submitted by Tripp & Co., Inc. and Stifel, Nicolaus & Co., Inc. They agreed to engage consulting engineers approved by the Authority and to advance to the engineers whatever preliminary fees were necessary to allow them to proceed promptly with plans and specifications for the work. They also agreed to engage a firm of nationally recognized municipal bond attorneys acceptable to the Authority to prepare the trust indenture and all proceedings leading to the issuance of bonds, and to make advances of whatever retainer fees were necessary, and further they agreed to purchase bonds in the amount of \$13,000,000, more or less, at a net interest cost of 2.95% subject to changes depending on the market. (Some of these conditions were changed in a modified agreement at the time the bonds were issued.)

On July 25, 1945 a contract was signed with Howard, Needles, Tammen & Bergendoff for furnishing engineering services, the terms being 6% of the construction cost.

Progress after the foregoing preliminary work was rapid: The Engineers on January 22, 1946 presented a revised estimate of \$15,000,000 for the project cost. Tripp & Co., Inc. and Stifel, Nicolaus & Co., Inc. presented a revised proposal on January 25, 1946 offering to purchase \$15,000,000 principal amount of Maine Turnpike Authority Turnpike Revenue Bonds to bear interest at the rate of 2½% per annum, to be issued under an indenture dated February 1, 1946 prepared by Masslich and Mitchell of New York City as Bond Counsel, to be entered into between the Authority and The First National Bank of Boston as Trustee, and the National Bank of Commerce of Portland, Maine, as Co-Trustee. Tripp & Co., Inc. and Stifel, Nicolaus & Co.,

Inc. agreed to purchase the bonds at 95¼ per cent of the proposal amount plus accrued interest to date of delivery of the bonds at The National City Bank in New York and to pay costs of issuing the bonds, including legal fees and printing of the indenture and bonds. This proposal was accepted by the Authority on the same date.

On February 6, 1946 By-Laws were duly adopted and a Resolution was adopted "Providing for the Issuance of \$15,000,000 Turnpike Revenue Bonds of The Maine Turnpike Authority and for the Execution and Delivery of a Trust Indenture Securing said Bonds." This resolution carried formal approval of The First National Bank of Boston as Trustee and the National Bank of Commerce of Portland as Co-Trustee, and ratified the contract for the sale of the bonds previously made by the Authority.

The First National Bank of Boston was appointed to act as Bond Registrar in connection with the registration and transfer of the Turnpike Revenue Bonds. The First National Bank of Boston, the National Bank of Commerce of Portland and the City Bank Farmers Trust Company in New York, were appointed as paying agents.

On January 22, 1946, Lucius D. Barrows was elected Secretary and Treasurer, and on February 6, 1946 Mr. Paul C. Thurston was elected Vice Chairman of the Authority.

Then on February 15, 1946, almost exactly five years since Mr. Sayward's Bill, "An Act to Create The Maine Turnpike Authority," was presented to the Legislature, Mr. H. S. Parker, Vice President of The First National Bank of Boston, Trustee, issued a certificate of Delivery and Payment certifying that 15,000 Maine Turnpike Authority Turnpike Revenue Bonds of the denomination of \$1,000 each, dated February 1, 1946 and maturing February 1, 1976, had been delivered to the purchasers upon the payment of \$14,302,083.33 which included the contract price of \$14,287,500 and accrued interest of \$14,583.33. And so the Authority was in business.

Getchell Named Executive Director

On February 28, 1946, Mr. Williams B. Getchell, Jr., at that time Right of Way Engineer for the State Highway Commission, was elected Executive Director. When the writer asked Mr. Getchell if he would consider accepting the position, he replied with characteristic enthusiasm, "I certainly would, that job is right up my alley," and all agree that it has been.

The cost of construction of the Kittery-Portland section was more than the estimated cost, and it was necessary to sell additional bonds in the principal amount of \$5,600,000. The interest rate was 2¾ per cent. Of this total, proceeds from the issue of \$5,000,000 in March of 1947 amounted to \$4,725,000 which with accrued interest of \$17,569.50 made the total \$4,742,569.50; and proceeds from an issue of \$600,000 in February of 1949 amounted to \$516,000 and accrued interest of \$320.82 brought the total to \$516,320.82. While these discounts may appear large, it must be remembered that there had been very little actual traffic experience up to this time and that they include the cost of issuing bonds, including legal and Engineering fees and printing.

(Continued on Page 41)



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PORTLAND, MAINE

MAINE TURNPIKE HISTORY

(Continued from Page 39)

The Kittery-Portland section was opened to traffic on December 13, 1947 when Mr. Sayward cut the ribbon at the Portland Toll House.

Mr. S. E. Woodman retired from the State Highway Commission in August of 1948 and Mr. Lloyd B. Morton of Farmington as the newly elected Chairman of the State Highway Commission became a member ex officio of the Maine Turnpike Authority.

Mr. Frank S. Naiman of Gardiner was appointed a member of the Authority by Governor Payne in February of 1950 to take the place of Boyd N. Harrington of Patten whose term had expired on August 20, 1947.

Almost immediately after Section 1 was opened to traffic, interest started to develop in an extension of the Turnpike to Augusta or Waterville and possibly to Bangor; and again the Authority was without funds which could be applied to paying for a traffic survey since all revenues accruing to the existing section were pledged to operation, maintenance, bond interest and bond retirement.

Maine Good Roads Association

The Maine Good Roads Association was active in support of an extension of the Turnpike, and at a meeting in December, 1949, a Committee was named to make a study of the feasibility of an extension. This Committee included Mr. George D. Varney of Kittery as Chairman, Mr. J. R. Cianchette of Pittsfield, Mr. Paul C. Thurston of Bethel, Mr. Bernal B. Allen of Auburn and Mr. F. Ardine Richardson of Strong.

A very complete report, dated February 1, 1950, was later submitted to the Association and made public. The Committee concluded that extension of the Maine Turnpike northerly would accelerate the development of the State, and that while there might be some question as to the feasibility of financing through toll revenues from the extension alone, the use of fuel taxes generated on Section 1 and the extension, together with toll revenues, would make possible the immediate extension at least to Augusta.

The Committee pointed out that the determination of the feasibility of an extension was essentially an engineering problem involving a careful analysis of traffic, route location and cost of construction.

It also said that, on the basis of its own findings, an engineering study was urgently needed and recommended that it be undertaken at the earliest possible time.

Later, in 1950, the State Highway Commission, under authorization of the Governor and Council, entered into a contract with Coverdale and Colpitts of New York to make a traffic survey covering a proposed route for an extension of the turnpike as far as Bangor. A report of this survey and study, made at a cost of \$30,000, was made to the Commission on May 11, 1950. Reimbursement to the State was made later by the Authority.

During 1951 and 1952 there were many conferences with the Engineers, the bankers, the Maine Good Roads Association and others regarding the proposed extension.

It was finally decided to extend the Turnpike to Augusta, following substantially the route studied by

the Maine Good Roads Association, including a spur of some 4 miles to U. S. Route 1 in Falmouth, a total distance of 66 miles.

Consulting Engineers

Howard, Needles, Tammen and Bergendoff were again employed to furnish engineering services for the extension. Based on their report and a revised report of Coverdale and Colpitts, it was decided to issue \$75,000,000 principal amount of Maine Turnpike Authority Turnpike Revenue Refunding and Extension Bonds with an interest rate of 4 per cent, the proceeds to be used for refunding the outstanding bonds on Section 1 and the construction of the Extension.

A new trust indenture (dated as of January 1, 1953) was prepared by Mitchell and Pershing in which The First National Bank of Boston was named as Trustee and the National Bank of Commerce of Portland was named as Co-Trustee.

On April 23, 1953, Tripp & Co., Inc. and Stifel, Nicolaus & Co., Inc. submitted an offer to purchase \$75,000,000 principal amount of the new 4 per cent bonds at a price of \$960.00 for each \$1,000 principal amount of bond, and the offer was accepted by the Authority.

At J. P. Morgan's

And so, all of the necessary resolutions having been duly adopted and all of the records and certificates having been completed and approved, Chairman Sayward, Executive Director Williams B. Getchell, Jr., Attorney George D. Varney and the Secretary, found themselves in the office of J. P. Morgan & Co., Inc., in New York on May 20, 1953 with a certificate signed by W. N. Burnett, Assistant Cashier of The First National Bank of Boston, certifying that \$75,000,000 Maine Turnpike Authority Turnpike Refunding and Extension Bonds, dated as of January 1, 1953, consisting of 75,000 4% coupon bonds in the amount of \$1,000 each, had been delivered to Tripp & Co., Inc. and Stifel, Nicolaus & Co., Inc. upon the payment of \$73,158,333.33 of which \$72,000,000 was the contract purchase price and \$1,158,333.33 represented accrued interest from January 1, 1953. Mr. Burnett also had the check in hand. And so the Augusta Extension became a reality.

On January 7, 1954, Mr. Sayward passed away at his home in Kennebunk. He had been Chairman of the Maine Turnpike Authority since its organization in 1941 and throughout the years had been tireless in his efforts to promote the construction of the Maine Turnpike which was the culmination of his great vision.

Mr. Lloyd Morton resigned from the State Highway Commission the last of December 1953 and later, in February of 1954, was appointed a member of the Maine Turnpike Authority to complete Mr. Sayward's term, which expired in September, 1961.

Mr. David H. Stevens, appointed by Governor Cross as Chairman of the State Highway Commission, became the member ex officio of the Maine Turnpike Authority on January 20, 1954.

On March 17, 1954, Governor Cross designated Mr. Paul C. Thurston, an appointed member, as Chairman of the Authority. Mr. Thurston was reappointed a member of the Authority by Governor Muskie in August, 1955, at the expiration of his second term, and was designated Chairman of the Authority by the Governor.

(Continued on Page 43)

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THE FINANCIAL PICTURE

MAINE TURNPIKE HISTORY

(Continued from Page 41)

The following has been added to give just a bit of the financial history of the first section and the provisions for the Extension:

A Distinction

The Maine Turnpike holds the distinction of being the first of the modern toll roads to be financed without aid from the government. While revenue from the first years of operation (1948 and 1949) was not sufficient, after deducting the cost of operation, to pay interest, adjustments of fares in accordance with the procedure established by the trust indenture and a continued upward trend in the use of Section 1 of the Turnpike produced favorable results.

By May 1, 1953 the requirements of the trust indenture of 1946 with respect to reserves had been fulfilled, and bonds in the amount of \$806,000 had been retired by purchase.

Following is a statement showing the original schedule of full length fares adopted on September 9, 1947 and revisions approved on February 17, 1949 and on June 21, 1951, following the direction of the trust indenture and recommendations of the Consulting Engineers:

MAINE TURNPIKE

SECTION 1—KITTERY-PORTLAND

FULL LENGTH FARES

	Adopted 9/9/47 Effective	Adopted 2/17/49 Effective	Adopted 6/21/51 Effective
Classification of Vehicles	12/13/47	5/1/49	5/1/52
1. Passenger Car	\$0.50	\$0.60	\$0.75
2. Passenger Car with Trailer	0.75	1.00	1.00
3. Motor Cycle	0.50	0.50	0.50
4. Trucks, 0- 7000 lbs. G.V.W.	0.50	0.60	0.75
5. Trucks, 7001-16000 lbs. G.V.W.	0.75	0.80	1.00
6. Trucks, 16001-32000 lbs. G.V.W.	1.00	1.00	1.25
7. Trucks, 32001-50000 lbs. G.V.W.	1.50	1.50	1.75
8. Busses Up To and Including 12 Passengers	1.00	1.00	1.00
9. Busses Up To and Including 13 Passengers or over	1.50	1.50	1.75

A record of traffic, income and cost of operation of Section 1 is included in the following table for the calendar years 1948 to 1954 inclusive:

	1948	1949
Vehicles	1,516,171	1,683,703
Net Fare Revenue	\$654,839.88	\$842,028.81
Other Revenue	14,955.90	29,625.70
Total Revenue	\$669,795.78	\$871,654.51
Cost of Operation	220,498.40	228,849.33
*Excess of Income	\$449,297.38	\$642,805.18

	1950	1951
Vehicles	1,936,446	2,157,933
Net Fare Revenue	\$1,008,484.52	\$1,179,775.19
Other Revenue	32,581.84	37,525.73
Total Revenue	\$1,041,066.36	\$1,217,300.92
Cost of Operation	273,654.19	287,881.77
*Excess of Income	\$767,412.17	\$1,166,940.58

	1952	1953	1954
Vehicles	2,295,127	2,389,731	2,468,351
Net Fare Revenue	\$1,464,184.14	\$1,604,819.63	\$1,670,521.45
Other Revenue	45,500.89	40,629.57	60,186.75
Total Revenue	\$1,509,685.03	\$1,645,449.20	\$1,730,708.20
Cost of Operation	342,744.45	339,768.31	341,014.29
*Excess of Income	\$1,166,940.58	\$1,305,680.89	\$1,389,693.91

(*Before deposits to reserves and payment of interest.)

From the above it will be noted that net income increased 160% in four years (1949-1952), an average of 40% annually, and that vehicular traffic increased 51% in the same four year period, or an average of about 13% annually.

The traffic survey is, of course, the foundation on which the financial structure of any toll highway must be built, and Coverdale and Colpitts early in February of 1953, by request, submitted a revised report to the bankers on estimated traffic and revenues for Section 1, Kittery to Portland; the Falmouth Spur; and the Extension to Augusta. This was in consideration of the proposed bond issue of \$75,000,000 for refunding and new construction.

The studies indicated that revenue from the heavier traffic on Section 1 would be needed to help support the Extension, and since income from tolls on Section 1, under the Trust Indenture of 1946, could be used only for the cost of operation and maintenance of Section 1 and for debt service in connection with the original bond issues, it was decided to refund the outstanding bonds for which the total was \$19,794,000. This, of course, had the effect of putting the road from Kittery to Augusta, including the Falmouth Spur, into one financial package and under a new trust indenture.

In estimating, it was assumed by the traffic engineers that the toll schedule for Section 1 would not be changed, and the toll schedule for the Falmouth Spur and the Augusta Extension would be based on the same classification of vehicles and on approximately the same toll rates per mile.

Four restaurants and service stations will be operated on the Extension and the restaurants and service stations at Kennebunk continued. It is estimated that revenue from these concessions will amount to 7% of toll revenues.

The following table shows the estimate of total traffic and estimated income from each section up to 1957:

Year	Total Vehicles	Existing Turnpike	Falmouth Spur	Augusta Extension	Total
1953	2,423,000	\$1,597,000	—	—	\$1,597,000
1954	2,568,000	1,693,000	—	—	1,693,000
1955	4,268,000	2,026,000	\$318,000	\$1,214,000	3,558,000
1956	5,162,000	2,244,000	468,000	1,788,000	4,500,000

(Continued on Page 46)

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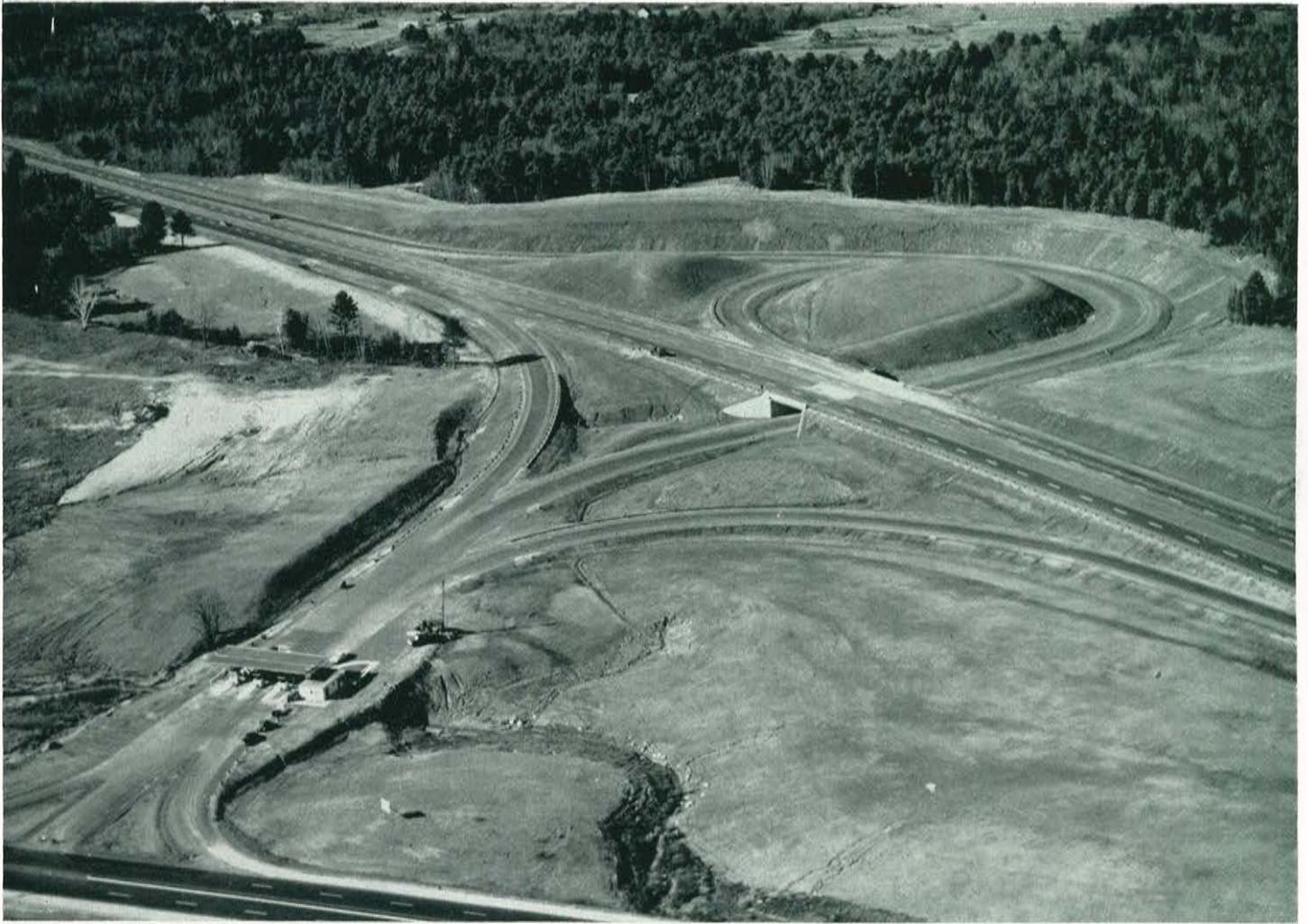
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MAINE TURNPIKE HISTORY

(Continued from Page 43)

	Revenue Concessions	Total Revenues
1953	\$ 43,000	\$1,640,000
1954	45,000	1,738,000
1955	227,000	3,785,000
1956	315,000	4,815,000

It was estimated that the totals of traffic and income from tolls for each year after 1956 would increase by an amount equal to 6% of the amounts shown for 1956 up to 1975 and then level off at the 1975 total each year, and that income from concessions would each year equal 7% of the total income from tolls.

These estimates were made on the assumption that the turnpike extension would be opened to traffic on June 1, 1955 and are subject to revision resulting from the delay in completion of the project.

The Trust Indenture requires for toll covenant purposes that beginning with 1959, after making the reserves for interest and maintenance, specified amounts shall be provided for retirement of bonds. These amounts vary from \$100,000 in 1959 to \$4,700,000 in 1988, the total being \$75,000,000. (The specified amounts are based on the assumption that no additional bonds will be issued under this Trust Indenture.)

The estimates indicate that, if no additional bonds are issued, the bonds could be redeemed by purchase or call by 1974.

As previously stated, on May 20, 1953, the Authority received \$73,158,333.33 representing the sale of \$75,000,000 of 4% bonds with accrued interest to May 20, 1953. The sum of \$19,794,000 was at once transferred to the Redemption Account to retire the principal amount of outstanding bonds. The Indenture provided that accrued interest on \$21,000,000 of the new issue from January 1, 1953 to May 20, 1953 be paid from proceeds of the new issue, and the sum of \$324,333.33 was transferred to the Bond Interest Account, leaving \$53,040,000 in the Extension Fund for construction including interest on \$54,000,000 of bonds during construction and for two interest paying dates beyond the estimated completion date of the project. To this should be added income from invested funds during construction, estimated to amount to \$1,250,000.

It has recently developed that additional financing may be required, perhaps around 5%, in order to complete the Augusta Extension. The increase in cost is due largely to the bad weather conditions which prevailed during the construction season of 1954, and in part to some added costs for work which was not anticipated. The coverage of principal and interest requirements during the life of the original issue of \$75,000,000, based on the estimates of income and obligations was 1.77. It is expected that an issue of additional bonds will not reduce the coverage to less than 1.70.

The question is frequently asked if the Turnpike will again be extended and when. Under existing conditions the Turnpike can be extended only when it can be shown by reliable traffic studies and reports that income from tolls will finance it.

A future extension can be made under the present Indenture (1953) after the present extended Turnpike has been in operation for at least 24 months provided the conditions and requirements set forth therein can be fulfilled. One of these conditions, and one which at

present appears difficult to meet, is that the percentage derived by dividing the sum of the average income for two years preceding the resolution to extend and the five year average of additional revenue resulting from the extension, as estimated by the traffic engineers by the amount of the maximum principal and interest requirements for any succeeding fiscal year shall be not less than 150 per centum. In determining the above revenue the costs of operation and deposits to the Reserve Maintenance Fund are deducted.

Provisions are also made for future extension under the 1953 Indenture by refunding the present bonds.

While the conditions to be met in respect of a further extension appear at this time to be difficult, we have to remember from past experience that motor traffic and its demands have increased beyond our dreams.

Frequent reference has been made to the Trust Indenture of the Maine Turnpike Authority to The First National Bank of Boston as Trustee and The National Bank of Commerce of Portland as Co-Trustee. It is the book of rules and regulations under which all operations are carried on. It is best defined by wording in the Official Statement dated April 23, 1953: The Trust Indenture "provides for the issuance of the bonds and of additional bonds under the limitations therein and sets forth and fully defines, among other things, the duties and responsibilities of all parties with respect to the construction of the Augusta Extension and any additional extensions, the custody and application of the proceeds of the bonds, the collection and disposition of revenues, the proper maintenance, repair and operation of the Turnpike, the conservation and application of all funds, the safeguarding of moneys on hand or on deposit, and the rights and remedies of the Trustee, the Co-Trustee and the holders of the bonds."

The Augusta Extension, after long months of discussion and planning and intensive construction efforts, is to be opened to traffic on December 13, 1955, exactly eight years after the opening of the Kittery-Portland Section.

In planning the financing and construction of the Turnpike, and in the administration of their duties, the members of the Maine Turnpike Authority have given freely and generously of their time, and served without compensation for their services until 1953 when the Legislature provided for a modest per diem allowance for attendance at meetings.

The Maine Turnpike Authority is an agency of the State. It is not a profit organization, its sole purpose being to provide a highway transportation service, not only for today, but for tomorrow's needs.

Maine Turnpike Fare Schedules Effective Dec. 13

Class	Type	*Full Length Fare
1	Passenger Car, Motorcycle and Bus less than 13 passenger	\$1.95
2	Passenger Car with Trailer	2.60
4	Truck 0 to 7000 lbs., G.V.W.	1.95
5	Truck 7000 to 16000 lbs., G.V.W.	2.60
6	Truck 16001 to 32000 lbs., G.V.W.	3.25
7	Truck 32001 to 50000 lbs., G.V.W.	4.65
9	Bus—13 passengers or over	4.65

* Full Length Fares—Kittery to Augusta.

MAINE GOOD ROADS ASSOCIATION HAD KEY ROLE IN MAINE TURNPIKE EXTENSION

By JOHN C. BURNHAM, *Director*, Special Services
Maine Highway Department

(Editor's Note: In describing the role played by the Maine Good Roads Association in the promotion of the present extension of the Maine Turnpike, the writer, Treasurer of our Association 13 of its 16 years' existence, might very well have included the part played by himself and A. R. Curtis in the drafting and adoption of the memorial presented.)

Large and important undertakings, of which the fifty-five million dollar Augusta extension of the Maine Turnpike is one of Maine's largest, do not just happen. The extension opening date is December 13, 1955. Its construction started some two years ago, but the real beginning was made in December 1949.

On December 5, 1949, the Board of Governors of the Maine Good Roads Association voted to recommend to its members the construction of the Maine Turnpike from Portland to Bangor.

Six years ago in December 1949 in accordance with a vote of the membership, President Roy U. Sinclair appointed George Varney of Kittery, J. R. Cianchette of Pittsfield, Paul Thurston of Bethel, F. Ardine Richardson of Strong, and Bernal Allen of Auburn as a study committee for determining the feasibility of a further extension of the Kittery-Portland section.

During the nine months from December 16, 1949 to September 9, 1950, the Study Committee developed and printed a report which was most encouraging and resulted in the following memorial being adopted by the Maine Good Roads Association at Rangeley Lakes Hotel on September 9, 1950.

MEMORIAL

To the Honorable Governor and
Council of the State of Maine:

We, your memorialist, the Maine Good Roads Association, in meeting assembled at Rangeley Lakes on September 9, 1950, respectfully present and petition your honorable body as follows:

WHEREAS, modern highways are of vital importance to the economy of the State of Maine and to its citizens; and

WHEREAS, the present section of the Maine Turnpike has proved its value as a much needed traffic artery; and

WHEREAS, the Maine Turnpike has materially contributed to the industrial development of Maine by providing safe and fast access to Maine's markets; and

WHEREAS, the Maine Turnpike has materially contributed to the present level of Maine's recreational business by providing safe and comfortable movement of traffic to Maine's vacation resorts; and

WHEREAS, the summer traffic, which has exceeded 25,000 vehicles per day between Kittery and Portland on some week ends could not have been accommodated without the Maine Turnpike and Maine citizens would have lost millions of dollars of recreational business income from thousands of vacationers who would have gone elsewhere; and

WHEREAS, the opening of the New Hampshire Turnpike this summer and the anticipated opening of a four-lane dual highway from the New Hampshire-Massachusetts line to Boston and points south by 1952

will greatly increase summer vacation traffic into Maine; and

WHEREAS, the anticipated increase in traffic into Maine resulting from improved highway facilities to our south cannot be safely and expeditiously handled by our present highway system north of Portland; and

WHEREAS, general highway funds are inadequate for the extension of four-lane controlled access highways north of Portland in the immediate future; and

WHEREAS, tolls paid on a toll highway constitute a new source of highway revenue; and

WHEREAS, untouched and unlimited vacation areas throughout Maine could be more readily reached by a safe, high-speed highway north of Portland; and

WHEREAS, the Maine Turnpike Authority has no funds for a traffic survey to determine the feasibility of an extension of the Turnpike north of Portland; now, therefore, be it

RESOLVED: that we, your memorialist, do hereby petition and urge the Governor and Council of the State of Maine to make funds available for an independent traffic survey by a nationally recognized firm of traffic engineers to determine where an extension of the Maine Turnpike should be located and to what point the traffic thereon would make such an extension feasible; and be it further

RESOLVED: that such a traffic survey be undertaken prior to the adjournment of the 95th Legislature so that the Legislature may take such action as it deems advisable.

MAINE GOOD ROADS ASSOCIATION

As an answer to the above memorial, the Governor and Council authorized the needed funds for employing an engineering firm to make a traffic survey to determine if income from tolls could be expected to liquidate the cost of an extension. When this survey was completed it clearly showed that the Maine Turnpike could be extended from Portland to Augusta and its cost liquidated by those who would use this highway.

The members and officers of the Maine Good Roads Association can well be proud of their part in making this extension possible and historians may some day place one stone among the milestones along the highway of Maine's economic advancement, dedicated to the part played by the Maine Good Roads Association.

On that stone, among other dates, may be inscribed December 16, 1949, the day when an Association composed of public spirited citizens voted to use its resources to determine whether or not the day had come when Maine's greatest highway transportation facility should be lengthened.

In Maine's highway history, December 1947 will be an important date because it marked the opening of the Kittery-Portland section of the Maine Turnpike. December 1955 will be another date to remember because it is the opening date of the Augusta extension. Another date of importance in the offing, is the day when Augusta will be the halfway mark along Maine's great traffic artery through which commerce flows to and from the heart of Maine.





The Maine Trail

TURNPIKE BUILDERS

(Continued from Page 36)

Contract No.	Prime Contractor	Sub-Contractor			
222	The Savin Const. Corp. 10 Village Street East Hartford, Connecticut Paving — Androscoggin River, Lewiston to Au- gusta.	Law Parker & Company Albany, New York Webster & Webster, Inc. East Hartford, Conn. Warren Brothers Roads Co. Cambridge, Massachusetts	224	Samuel Aceto & Co. Portland, Maine 225 Simonds Construction Co. Portland, Maine 226 J. R. Partridge Const. Co. Augusta, Maine	Sewage disposal Toll Houses Toll Houses Atlantic Roofing & Skylight Works Hamden & Howard Streets Boston 19, Massachusetts Cutler & Cutler, Inc. 186 Federal Street Portland, Maine Dave Collins 569 Webster Street Lewiston, Maine Hahnel Bros. Co. 42 Main Street Lewiston, Maine Lucky Painting Co. Belfast, Maine
221	Lane Construction Corp. Meriden, Connecticut to sublet Item 37— Sodding (Oct. 18) Paving — Scarboro to Androscoggin River in Auburn. Lane Construction Corp. Meriden, Connecticut	to Leon E. Gordon Pittsfield, Maine	227	J. R. Partridge Const. Co. Augusta, Maine Toll Houses	Atlantic Roofing & Skylight Works Hamden & Howard Streets Boston 19, Massachusetts Cutler & Cutler, Inc. 186 Federal Street Portland, Maine David Collins 569 Webster Street Lewiston, Maine Hahnel Bros. Co. 42 Main Street Lewiston, Maine Lucky Painting Co. Belfast, Maine
221	To sublet Item 34a Steel Beam Guard Rail; Item 34b Wire Cable Guard Rail; Item 34c End An- chorage for Wire Cable Guard Rail.	to The National Fence Co. Meriden, Connecticut			
222	Savin Construction Corp. East Hartford, Connecticut 11/19/54 to sublet a portion of Item 27 — Bituminous Concrete Mixture. Paving—Lewiston to Augusta.	to Warren Brothers Roads Co. Cambridge, Massachusetts approximate value \$546,045			

We Congratulate

THE MAINE TURNPIKE AUTHORITY

On the completion and opening
of the Augusta Extension and the
Portland By-Pass.

TRIPP & CO., INC.

STATE, MUNICIPAL AND PUBLIC REVENUE BONDS

40 Wall Street, New York 5





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