

OFFICIAL COUNCIL COPY

ANNUAL REPORT 1952



TRAFFIC ENGINEERING DEPT.
PROVIDENCE, RHODE ISLAND



CITY OF PROVIDENCE • RHODE ISLAND • Walter H. Reynolds • Mayor

TRAFFIC ENGINEERING DEPARTMENT

DWIGHT T. MYERS

Traffic Engineer

ROGER T. CHANDLER

Assistant Traffic Engineer

147 Fountain Street

January 22, 1953

Providence 3, R. I.

The Honorable Walter H. Reynolds
Mayor of Providence
The Honorable City Council
City Hall
Providence, Rhode Island

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Gentlemen:

We are hereby presenting for your consideration the Annual Report of your Traffic Engineering Department, covering the period from January 1, 1952, to January 1, 1953. This department was established by your adoption of Ordinance No. 592, approved October 21, 1948; and the department has been in active operation since March 1, 1949.

We are submitting this Report in order to inform you regarding specific traffic and transportation accomplishments during the past year. The Report shows how the taxpayers' money entrusted to our stewardship has been spent. In this connection it is significant to point out that much of the action program for the year of 1952, as outlined in the preceding Annual Report, has been carried out. The year has seen the successful conclusion of a considerably expanding traffic program. This program, outlined in detail in the Report, has been responsible for a considerable improvement in the general flow of traffic throughout the City. It is felt that despite the increase in the number of registered vehicles and the miles travelled per vehicle that we have at least kept abreast of the traffic problem and made marked inroads in the matter of accident prevention. Providence had the lowest fatality rate in its history the past year. Much of this accomplishment must certainly be attributed to the Police Department, and the Mayor's Traffic Safety Committee; the efforts of groups in the Providence Chamber of Commerce and other interested civic groups must be commended for their share in this major achievement.

Through your confidence in this department, as indicated by your approval of our various proposals, designation of authority to handle traffic control, provision of funds for personnel and materials, you have made possible the progress reported herein.

With your continued support in all these categories, we wish to assure you that you may expect numerous other improvements in the relieving of traffic congestion, transportation of persons and goods, and in traffic safety in the year to come.

IN CITY COUNCIL
FEB 19 1953

Respectfully submitted,

Dwight T. Myers
Traffic Engineer

RECORDED:
WHEN PREPARED IT IS CONSIDERED THAT
DTM/JMC COPY BE RECEIVED.

CLERK

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Cover Photograph - Nighttime View of the Roberts Expressway looking north from Wood Street.

Courtesy of the Providence Journal Company.

PART ITHE EXISTING TRAFFIC PROBLEM

The traffic flood is just beginning!

The annual report of the Traffic Engineering Department would not be complete without some gage by which the work of the department can be measured. One such gage is the size of the problem being tackled. An indication of the magnitude to which the traffic flood is likely to develop can be seen from the following graphs of motor vehicle registrations in the city and state, number of vehicles entering and leaving the central business district on a regular business day, the population trends of the city and state, and the volume of traffic using the Point Street Bridge.

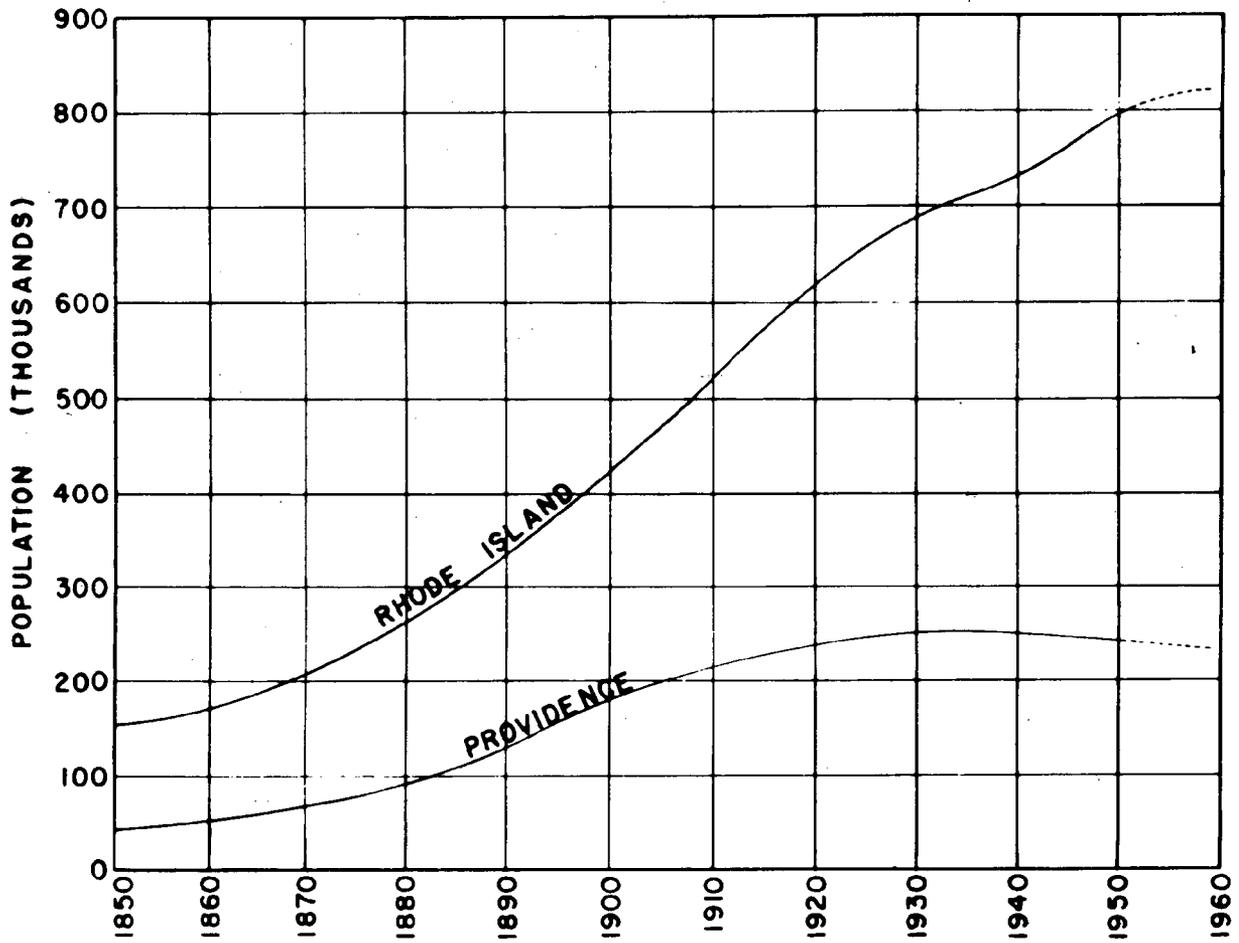
It is estimated that vehicle registrations in the state will be about 325,000 by 1960. (Figure 1) This is an increase of 48,200 vehicles over 1952. In Providence the number of registered vehicles is expected to be about 75,000 in 1960 or 7,000 more than the total registered in 1951.

The number of vehicles entering the downtown area of Providence has also been increasing. In 1945 on an average weekday, a total of 101,301 vehicles were observed entering and leaving the cordon area between 8 a.m. and 5 p.m. In 1952 this total had become 126,226. (Figure 2)

Similarly, the daily volume crossing the Point Street Bridge has shown an increase of 6,274 in five years; from 36,742 in 1947 to 43,016 in 1952. In view of the available space for these vehicles on the streets or in off-street parking facilities, these increases are very significant.

The population trends shown in Figure 1 indicate that some decentralization is taking place in Providence. If this trend continues, the vehicles used in commuting will further increase the traffic problem.

POPULATION TRENDS



MOTOR VEHICLE REGISTRATIONS

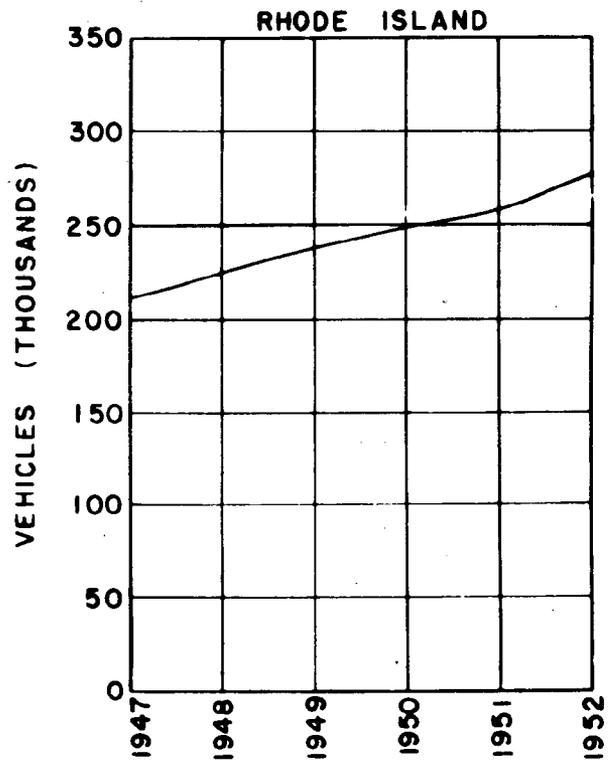
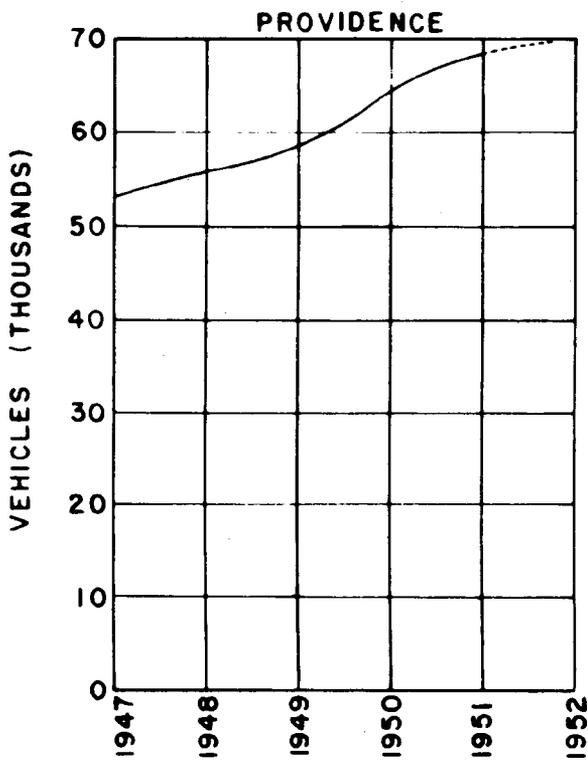
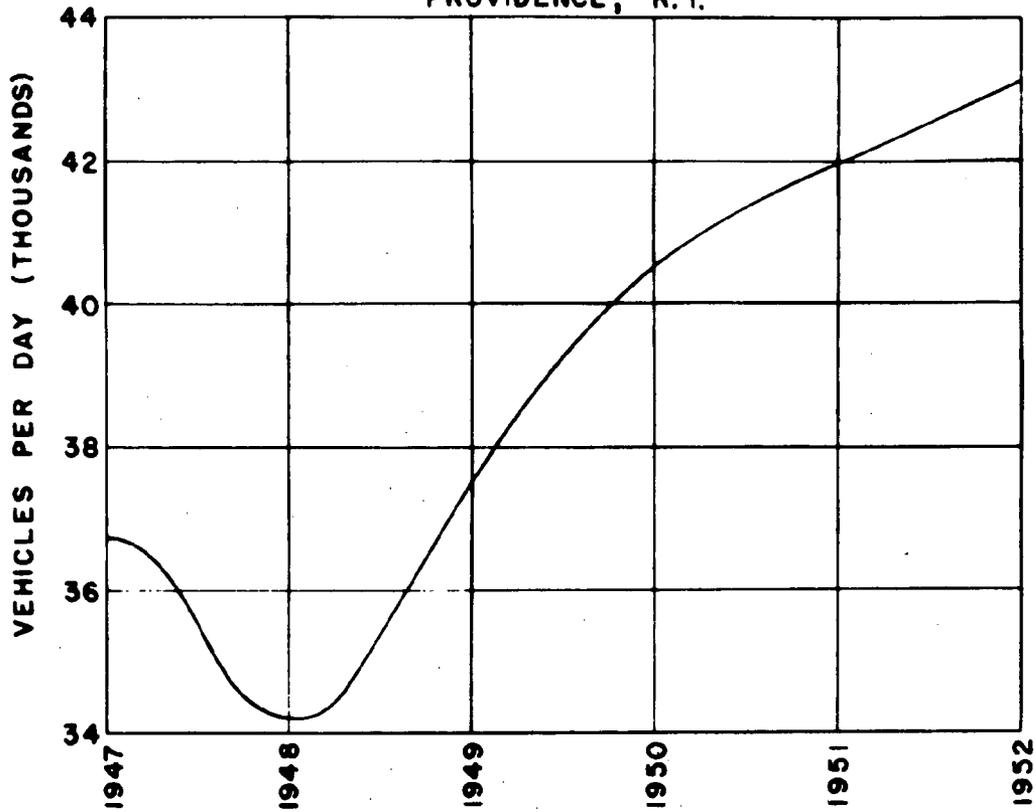


FIGURE NO. 1

ANNUAL AVERAGE DAILY TRAFFIC VOLUMES
POINT ST. BRIDGE
PROVIDENCE, R. I.



NUMBER OF VEHICLES ENTERING AND LEAVING
PROVIDENCE CENTRAL BUSINESS DISTRICT DAILY

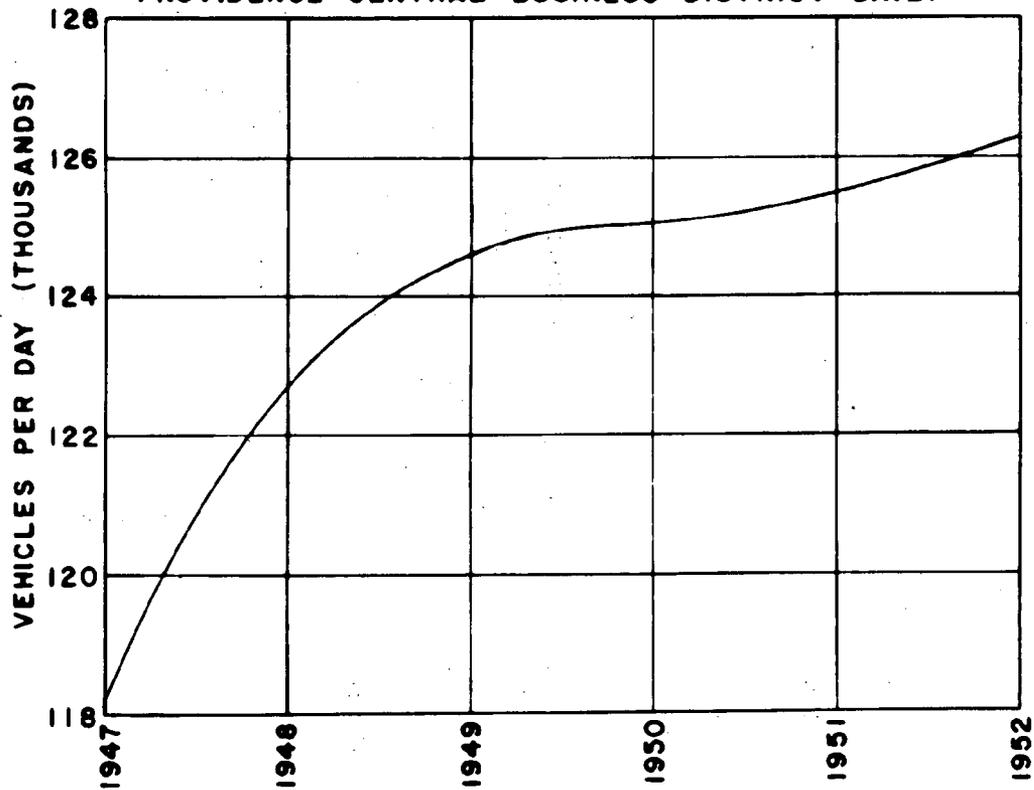


FIGURE NO. 2

PART II

TRAFFIC ENGINEERING DEPARTMENT ORGANIZATION

The importance of maintaining a good transportation system in the city and state cannot be emphasized too strongly. The economic life of the city and state are directly affected by the quality of the overall transportation system serving the area. It was in recognition of this fact that the Traffic Engineering Department was authorized by City Council Ordinance No. 592 on October 21, 1948. The department was activated on March 1, 1949 with the appointment of a Traffic Engineer and the reassignment of other personnel and the use of a separate budget.

GENERAL ORGANIZATION

The Traffic Engineer is appointed by and reports directly to the Mayor. The Traffic Engineering Advisory Committee is composed of members of the official city family and is available for consulting guidance. The members include:

Mayor Walter H. Reynolds, Chairman
John J. Cashman, Finance Director
William E. McCabe, City Solicitor
Warren A. Martin, Chief of Police
Charles F. McElroy, Director of Public Works
Peter J. Hicks, Jr., Public Service Engineer
John F. Brock, Chairman of City Council's
Committee of Public Works

The department is organized into two divisions under the Assistant Traffic Engineer, Roger T. Chandler. The Division of Traffic Planning and Design under Edwin F. Colby, is charged with the responsibility of making all surveys and studies necessary to produce plans for any traffic improvement. The Division of Traffic Control Devices under Robert L. Jaffe is responsible for the installation and maintenance of all traffic control devices installed

in the city. A breakdown of the department is shown on the following Organization Chart. (Figure 3)

A. DESCRIPTION OF DEPARTMENT OPERATION

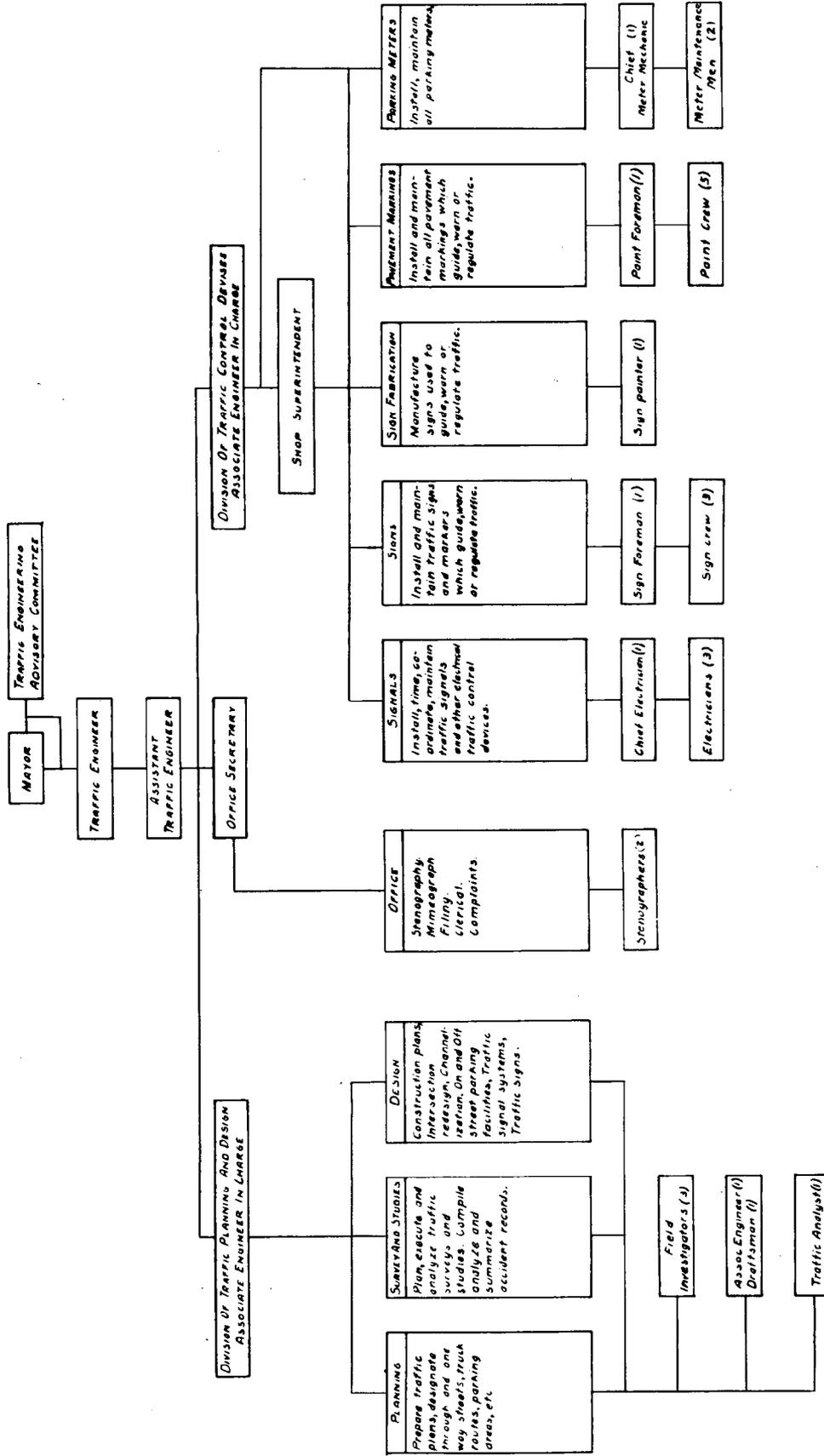
The initial step in formulating a traffic plan is an investigation. This is true whether it is a request from a citizen for a stop sign at an intersection or a major plan started by the department. After the field investigations, office analysis, and necessary drawings are complete, a traffic regulation is issued. (A sample letter is illustrated in Figure 4.) The regulation takes the form of a letter to the Commissioner of Public Safety with a distribution to the various persons concerned with the change as well as the newspapers and radio stations. After the shop personnel have completed the installation of the necessary control devices to effect the change (through the use of signs, signals, or paint), the Police Department is notified that the physical installation is complete and enforcement of the regulation may begin.

All the regulation changes are advertised once a month in one issue of a Providence newspaper in accordance with the provisions of City Council Ordinance No. 592.

B. DEPARTMENT BUDGET

A summary of the budget for the fiscal year October, 1951, to October, 1952, is given to indicate the major expenditures during the year.

CITY OF PROVIDENCE
TRAFFIC ENGINEERING DEPARTMENT



Approved: 1-16-51 *D. H. M. [Signature]*
Date: _____ Traffic Engineer
Revised: 12-20-52



CITY OF PROVIDENCE • RHODE ISLAND • Walter H. Reynolds • Mayor

TRAFFIC ENGINEERING DEPARTMENT

DWIGHT T. MYERS

Traffic Engineer

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Assistant Traffic Engineer

147 Fountain Street

Providence 3, R. I.

June 3, 1952

TR-WO-566

5/27/52

Commissioner John B. Dunn
Department of Public Safety
Police Headquarters
La Salle Square
Providence, Rhode Island

SUBJECT: STOP Control - Stewart and Pond Streets

Dear Commissioner Dunn:

At the request of Council Resolution No. 261, the Traffic Engineering Department has investigated the need for a STOP sign at Stewart and Pond Streets.

Results of this investigation show that the sight distance is restricted by four blind corners, the volumes are relatively high, and there have been seven crossing-maneuver accidents in the past 28 months. Therefore, it is hereby directed that STOP signs shall be erected on Pond Street requiring traffic on Pond Street to STOP for traffic on Stewart Street.

Very truly yours,

Dwight T. Myers
Traffic Engineer

EFC:EM

Copies to: Finance Director
Law Department
Mr. Del Guidice
Chief Martin
Capt. Burns
Capt. Farrelly

Judge Mackey
Mr. Vance
Mr. Doyle
Mr. Baron
Mr. Jaffe
Mr. Colby

W P R O
W J A R
W E A N
W R I B
W P J B

Item II

Maintenance materials for office and shop	\$ 5,000.00
Repair parts for traffic control equipment	2,500.00
Materials for sign construction and erection	4,000.00
Paint materials	18,000.00
Other items	<u>2,192.00</u>
	\$31,692.06

Item V

Parking meters	\$26,000.00
Snow plow	500.00
Scooter	420.00
Sign truck body	2,320.00
Jeep	1,530.00
Other items	<u>552.99</u>
	\$31,322.99

The total amount spent during the past fiscal years is indicated below:

Fiscal years - 1949-50	\$197,892.94
1950-51	\$256,929.83
1951-52	\$199,033.32

COOPERATION WITH OTHER DEPARTMENTS IN CITY GOVERNMENT

It is essential to the efficient operation of the transportation system in the city that close cooperation be continued between all the departments of city government having some responsibility in developing and maintaining the transportation system. The other departments most concerned are the Police, Public Works, City Plan Commission, and the Redevelopment Agency.

CIVIC AND BUSINESS ORGANIZATIONS

It is the function of this department to work closely with many business and civic organizations in operating the transportation system. Organizations such as the United Transit Company, the Chamber of Commerce, the Retail Board of Trade, the Rhode Island Truck Owners Association, the Automobile Club of Rhode Island are only a few of the many groups with which the department has repeated contact. Other groups such as the various business men's organizations are contacted frequently when they have a specific problem to discuss or the department wants to acquaint them with various proposals under consideration. This phase of the department's activity is important in expanding sound public relations among the various users of the transportation system.

Radio and television appearances have also been made to extend to the general public as far as possible, all available information concerning the plans and proposals of the department.

PART III

ACTIVITIES FOR 1952

"Making the best use of the existing streets" continues to be the basic philosophy governing the activities of the department. Although a major facility is being planned in the North-South Freeway, the basic transportation system will remain the existing street system. Therefore, everything that can be done to reduce the accident toll, relieve congestion, and maintain the existing control devices has been the goal for 1952. During the past year, these activities have taken the following form.

1. TRAFFIC CONSTRUCTION PROGRAM

The construction program of the department is comprised of those projects which were initiated and planned by department personnel. Money for the construction was contained in the capital budget of the Traffic Engineering program, and then transferred to the fiscal budget of the Public Works Department for contract award and execution.

A. Thomas Street

Through the help of the State Department of Public Works and the City Public Works Department, Thomas Street was widened and completely rebuilt. The corner at Benefit Street was widened materially as was the corner at North Main Street through the purchase of some land from the First Baptist Church Society. The completion of this project made it possible to signalize the intersection of Thomas



and North Main Streets and the intersection of Thomas, Benefit, Angell, and Waterman Streets; and at the same time made Waterman Street one way eastbound and Thomas Street one way westbound.

B. Schley Square

The Smith-Dibble report recommended making North Main Street one way north, and Canal Street one way south. To accomplish the interchange of traffic at the foot of Constitution Hill, a new intersection design was necessary. The plans sketched out by this department were submitted to the City Engineer. His department completed plans and specifications, and contracted for the improvement. This department contracted for the signalization of the intersections of North Main and Mill Streets, North Main and Smith Streets, and Smith and Canal Streets, as a part of the over-all project.

The accompanying photographs show two different views of the completed project. The view on the left was taken from Canal Street looking toward Constitution Hill, shows the new ramp which carries traffic from North Main Street to Mill and Canal Streets. The view on the right was taken from North Main and Smith Streets looking toward Constitution Hill and Mill Street.



C. Canal Street

At the same time Schley Square was being improved, Canal Street was widened and resurfaced in accordance with recommendations from this department. A new street lighting system was installed in connection with the paving work. With Canal Street resurfaced and Schley Square rebuilt, it was possible to reroute the transit vehicles on one way



Canal and North Main Streets, thereby completing a change in the vicinity of Memorial Square that was started on December 4, 1949.

D. Mifflin Square

For some years the intersection of Ashburton, Chalkstone, Conant and Black Streets has been the scene of considerable congestion at various times. It was recommended in the Smith-Dibble report that part of the City-owned land on the corner be used for highway purposes. A plan was drawn in this department for a recommended channelization island and was submitted to the Public Works Department for construction. The results of this completed project have been highly satisfactory.

E. Barry Square

For many years the channelization island at Weybosset, Chestnut, Broad and Empire Streets has been marked only with paint and movable standards. Through a plan recommended by this department, an island was constructed which increases the permanance of control at this intersection. The value of the island will increase still further when Weybosset Street is made one way.

F. Emmet Square

A curb cutback was completed at the corner of Gaspee and West Exchange Streets. This change facilitates the flow of vehicles from Gaspee Street into West Exchange Street.

G. Point Street Bridge

At the time the present Point Street Bridge was installed the approach roadways were constructed with sharp angle points in the curb lines at each end of the bridge. These angle points in the curb line forced the traffic to make wide sweeps on these corners and were contributing factors in many minor accidents. Upon the recommendation of this department, the Public Works Department cut both of these corners back as far as the structure of the bridge would permit. This improvement has improved the continuity of flow of traffic across Point Street Bridge tremendously.

H. Point Street Near Coro, Inc.

The curb line of Point Street near Coro, Inc., was built with a sharp angle point which had the effect of narrowing Point Street on this turn. Upon recommendation from this department, the curb was moved back several feet, thereby improving the movement of traffic past this location.

I. Point and Hospital Streets

In preparation for the rerouting of transit vehicles on Richmond and Chestnut Streets, it was necessary to reverse the direction of transit vehicles on Hospital Street. In order to make it possible for the trackless trolleys to negotiate the right turn from Hospital Street into Point Street, this corner was cut back materially.

J. Chestnut and Bassett Streets

The transit rerouting mentioned above also necessitated the

cutting back of the corner radius at the intersection of Chestnut and Bassett Streets.

The Total cost of these several projects is summarized to indicate the relatively small price paid for the traffic benefit received from the projects.

Project	Approximate Land Cost	Approximate Construction Cost
A. Thomas Street	\$12,000	\$27,962.15
B. Schley Square	3,000)	
C. Canal Street	No land taken)	
D. Mifflin Square	City Owned)--	61,276.25
E. Barry Square	No land taken)	
F. Emmet Square	Land donated	1,000.00
G. Point Street Bridge	No land taken	2,000.00
H. Point Street near Coro, Inc.	No land taken	500.00
I. Point & Hospital Streets	City Owned	1,000.00
J. Chestnut & Bassett Streets	No land taken	500.00
Total	<u>\$15,000</u>	<u>\$94,238.40</u>

2. STREET PAINTING

The use of paint to indicate the traffic lanes and crosswalk locations continues to be a major maintenance activity of the department. During the past year 4,162 gallons of reflectorized paint were used. This material was used on 89 different streets marking 68.4 miles of pavement. During the summer months, much of the work was done at night to avoid traffic congestion and tracking of the wet paint.

3. TRAFFIC SIGNS

The traffic signs used throughout the City were fabricated in the department sign shop. The signs fabricated were:

Reflectorized on wood blanks	546	
steel blanks	<u>218</u>	
		764
Painted on wood blanks	1317	
plastic blanks	501	
steel blanks	<u>1226</u>	
		<u>3044</u>
Total		3808

The reflectorized signs were made by using Scotchlite, a reflective sheeting, and the Scotchlite Vacuum Applicator. The painted signs were made by use of silk screens.

The sign installation and maintenance crews performed the following work during the year:

Signs installed	4809
Damaged or missing signs replaced	1075
Steel sign posts erected	1498
Movable standards placed	100
Parking meter posts reset	166

4. TRAFFIC SIGNALS

A. New Construction

During the past year the traffic signal system has been expanded by means of City contracts using the \$400,000.00 bond issue voted in November 1950 and by Federal and State Aid money. The following new locations were added or put under contract and construction started during 1952.

<u>LOCATION</u>	<u>TYPE OF IMPROVEMENT</u>	<u>METHOD ACQUIRED</u>
Atwells & Balbo	New Installation	Department Installation
Elmwood & Earl	" "	City Contract
Point & Richmond	" "	" "
Pocasset-Webster-Magnolia	" "	" "
Eddy & Richmond	" "	" "
Benefit & Wickenden	" "	" "
Smith & Canal	" "	" "
North Main & Smith	" "	" "
North Main & Mill	Rebuilt	" "
Waterman & North Main	New Installation	Federal Aid
Thomas & North Main	" "	" "
Thomas-Angell, Benefit-Waterman	" "	" "
Plainfield & Pocasset	" "	" "
Roberts Expressway & Hartford	" "	" "
Roberts Expressway & Plainfield	" "	" "
Roberts Expressway & Broadway	" "	" "
Roberts Expressway & Westminster	" "	" "

SIGNALS PRESENTLY UNDER CONTRACT TO BE COMPLETED IN 1953

<u>LOCATION</u>	<u>TYPE OF IMPROVEMENT</u>	<u>METHOD ACQUIRED</u>
Pine & Dorrance	New Installation	City Contract
Pine & Richmond	" "	" "
Pine & Chestnut	" "	" "
Pine & Beacon	" "	" "
Pine & Summer	" "	" "
Pine & Lockwood	" "	" "
Friendship & Lockwood	" "	" "
Friendship & Summer	" "	" "
Friendship & Beacon	" "	" "
Friendship & Richmond	" "	" "
Friendship & Dorrance	" "	" "
Westminster-Valley-Broadway	Rebuilt	Federal Aid
Westminster-Manton-Hartford	New Installation	" "

SUMMARY OF TRAFFIC SIGNALS OPERATING IN PROVIDENCE AS OF DECEMBER 1952

Locations controlled by City-owned vehicle-actuated equipment	-	42
Locations controlled by equipment leased from Automatic Signal Company	-	15
Total intersections controlled by vehicle-actuated equipment	-	57
Locations controlled by fixed-time equipment	-	64
Total signalized intersections	-	121

The Narragansett Electric Company power bill has been increasing steadily with the increase in the number of signalized intersections.

The power bill for the year for all 121 locations is approximately \$14,000.00.

An indication of the amount of equipment necessary to control an intersection as complex as George M. Cohan Boulevard, South Main Street, Wickenden, and Benefit Streets is shown in the photograph of the control cabinets recently installed.



B. ROUTINE MAINTENANCE

The department maintenance men had the responsibility of keeping all the traffic signal equipment in good operating condition twenty-four hours a day. In doing this, the work was divided into two classifications-- routine work, and trouble calls. The work done as routine maintenance was:

Signal heads painted	60
Steel poles painted	30
Control boxes painted	7
Neon pedestrian signals painted	5
Detector units replaced	13
Detector foundations rebuilt	12
All traffic signal head reflectors were cleaned twice.	
All fixed-time controllers were inspected and adjusted at least three times.	
All vehicle-actuated controllers and vehicle detectors were inspected and adjusted twice.	
The signal maintenance crew also did a complete signal installation job at the intersection of Atwells and Balbo Avenues.	

The trouble calls received during the year were as follows:

During normal working hours	281
Outside normal working hours	<u>232</u>
	513

Type of Trouble Found

Mechanical or electrical trouble in controller	216
Lamps burned out	132
No trouble found	93
Damaged equipment	53
Shorted cable	9
Miscellaneous troubles	<u>10</u>
	513

The average length of time a signal was out of service after the trouble call was received until the trouble was repaired was an hour and ten minutes.

The use of long-life lamps has so far indicated a saving in purchase cost of the lamps, and in reduced number of trouble calls. Studies in the further economies that can be made in signal lamp usage are continuing.

5. COMPLAINTS AND REQUESTS

Every person residing in or near Providence is effected in some manner by the traffic problems in the City. It is natural, therefore, that many citizens have registered complaints or requests with the Traffic Engineering Department. Many of these requests are inconsequential as far as the great majority of the motoring public are concerned, but they are of prime importance to the person making the request. Regardless of the importance of the request, it must be investigated and some action taken.

The following summary indicates the types of requests received by the department and the action taken:

BREAKDOWN OF COMPLAINTS AND REQUESTS

Parking Problems	228
Loading Zones	84
Stop Control	74
Yield Control	17
Intersection Control	10
One-way Streets	13
Traffic Signals	14
Miscellaneous	<u>66</u>
	Total 506
Requests Granted	32%
Requests Granted in part or alternate action	8%
Requests Not Granted	30%
Action Pending	29%
Closed, due to Temporary Nature	<u>1%</u>
	Total 100%

6. OFF-STREET PARKING

The department is firmly of the opinion that the problems facing

the City with regard to acquiring off-street parking space must be dealt with at the earliest possible time. The demand for parking space is continuing to increase in about the same proportion as the traffic volumes increase. To date this means that each year there is approximately a five per cent increase in the demand for space. Because the traffic volumes and the number of trips are increasing, it is apparent that parking space at the curb must be eliminated for vehicle movement. It is possible that the City is fast approaching a situation where it will be absolutely mandatory to remove parking completely in certain areas in order to provide for the efficient movement of vehicles in the traffic stream, especially mass transit vehicles. Because of this, it is therefore extremely important to prepare now for the future.

Early in January 1952 the City Council received a report submitted and signed by Mayor Reynolds and the Traffic Engineer recommending that a garage be built on the plots of ground surrounded by Washington, Fountain, Aborn, and Beverly Streets. The functional plan drawn by the consultants, Ramp Buildings Corporation of New York, provided for the inclusion of stores on the first floor of the structure. Later, it was the opinion of the City's Bond counsel that the enabling legislation in Rhode Island regarding off-street parking did not permit the construction of stores in a parking garage. In this particular garage, the inclusion of stores was the difference between the garage being a financial success or a financial failure. Because of this condition, and also because of the exorbitantly high cost per car space the plan for a garage at this location was abandoned. In April 1952, upon recommendation of the Traffic Engineer the City announced plans to build a garage on the plots of ground surrounded by Pine, Friendship, Page, and Garnet Streets. Final action on this garage was delayed for some time; and finally the plan was temporarily abandoned because of foreseen

difficulties in obtaining the site from its present owners.

The Traffic Engineering Department then reexamined practically every other possible site in the downtown business area to determine if any other site or sites were feasible. In almost every case the sites were unacceptable because of one or all of the following reasons:

- a. Too far away from the center of the parking demand.
- b. Geometrical shape of lot not suitable for garage construction.
- c. Exorbitant cost of obtaining site.

It is very probable that the planning for the original Pine, Friendship, Page, and Garnet site, now occupied by the Central Parking Lot, will be continued and recommendations made to proceed with construction in the very near future. The need for additional off-street parking space cannot be questioned. In 1950 the collaborative plan of the City Plan Commission, the Redevelopment Agency, and the Traffic Engineering Department indicated an additional 3,000 spaces were needed. Since that time, almost 1,000 spaces have been acquired, but the demand in the meantime has increased to such an extent that by the end of 1953 we will need an additional 450 spaces, making the net increase needed 2450 spaces.

Pershing Square
Parking Plaza

First Municipal
Off-street facility

314 metered spaces

Dedicated September, 1951



7. PARKING METERS

During the past year new meter installations have been made on part of Atwells Avenue and Broadway and also in front of the Post Office Annex.

This makes a total of 1659 meters in use.

Model C	-	101
Model E	-	403
Model GSL	-	851
Model GSL	-	<u>314</u>
Total		1659

The Model C meters are now 15 years old and are being replaced as fast as funds will permit.

During the past several years the department has concentrated on rehabilitating the parking meter system by means of replacing the very old meters with new, modern meters, and stepping up the level of maintenance efficiency. Two of the three meter maintenance men have now attended a course of instruction at the meter factory in Canton, Ohio. By adopting a program of constant meter attention over and above the reported trouble calls from the Police Department, we have been able to increase the efficiency of the meter system materially and thereby keep a maximum number of meters in operating condition. The department averages only six trouble calls per day throughout the year. Following is a list of the parking meter income from the time of installation to the present.

<u>Year</u>	<u>Net Revenues</u>	
1937	\$ 21,639.16	
1938	52,425.54	
1939	61,750.30	
*1947	41,245.20	*1940 through 1946 Parking Meters not in use.
1948	125,055.92	
1949	111,656.02	
1950	110,799.77	
1951	132,384.14	
1952	<u>158,345.64</u>	
	\$815,301.69	

8. CHANGES IN TRAFFIC REGULATIONS

A change in the traffic regulations requires an official letter to be sent to the Commissioner of Public Safety specifying the change as well as a legal advertisement in the local press for one edition at the end of each month. Last year a total of 567 regulations were issued as compared with a total of 457 the year before. A summary of these regulations are:

	<u>Established</u>	<u>Rescinded</u>
Parking Prohibited in Designated Places	62	35
No Parking to Corner	28	
No Parking Between Signs	10	2
No Parking 7 A.M. to 9 A.M.	1	1
No Parking 8 A.M. to 10 A.M.		3
No Parking 8 A.M. to 4 P.M.	75	
No Parking 8 A.M. to 6 P.M.	8	2
No Parking 4 P.M. to 6 P.M.		1
No Parking 4:30 P.M. to 6 P.M.		1
5 Minute Parking 8 A.M. to 6 P.M.		2
12 Minute Parking 8 A.M. to 6 P.M.	1	
15 Minute Parking 8 A.M. to 6 P.M.		2
30 Minute Parking 8 A.M. to 6 P.M.	3	1
30 Minute Parking 8 A.M. to Noon		1
One Hour Parking 8 A.M. to 6 P.M.	22	2
One Hour Parking 8 A.M. to 3 P.M.	2	2
One Hour Parking 8 A.M. to 4 P.M.	6	3
One Hour Parking 9 A.M. to 3 P.M.	2	2
One Hour Parking 9 A.M. to 4 P.M.	5	
Two Hour Parking 8 A.M. to 6 P.M.	16	1
Two Hour Parking 10 A.M. to 6 P.M.	1	
Three Hour Parking 8 A.M. to 6 P.M.	2	
No Standing Any Time	3	
No Standing 8 A.M. to 6 P.M.	1	1
No Standing 4 P.M. to 6 P.M.	11	4
No Standing 7 A.M. to 9 A.M.	6	3
No Standing 3 P.M. to 6 P.M.		6
No Standing to Corner	3	
No Stopping Standing to Corner	3	
No Left Turn	2	
Right Turn Any Time	1	
Traffic Signal Control	15	
Stop Control	33	11
Yield Control	72	1
One Way Streets	16	4

	<u>Established</u>	<u>Rescinded</u>
Bus Stops	16	15
Loading Zones	25	3
Taxi Stands	<u>3</u>	<u>4</u>
Total	454	113

Total Regulation Changes - 567

The effect of these regulation changes in combination with the construction program summarized previously constitute the basic traffic improvements instigated by this department during the past year.

9. EXTENSION OF PARKING PROHIBITIONS

With the increase in traffic volumes in the City, it was found necessary at certain key locations to adopt more stringent parking regulations during various parts of the day. These measures were taken only after their necessity had been definitely demonstrated. It is significant that the trend during the past several years has been to increase the number of locations where parking is prohibited. While it is desirable to provide off-street parking spaces, space for space for every one eliminated, it is more in the public interest to remove bottlenecks by prohibiting parking than to delay all action until off-street parking spaces are available.

To demonstrate the magnitude of this phase of the traffic problem, parking was prohibited at all times in 65 new locations compared to 55 locations the previous year. Parking was prohibited during various periods of the day in 27 locations last year as compared to 39 locations the year before. The reduction in locations controlled during certain periods of the day indicates that most of the major traffic arteries in the central business areas are now under some form of parking regulation.

10. ONE-WAY STREETS

One-way streets can be established only after City Council approval after recommendation by the Traffic Engineer. The following one-way streets were established during the year:

Burgess Street	From Cranston St. to Westminster St.
Canal Street	From Mill St. to Steeple St.
Chestnut Street	From Weybosset St. to Clifford St.
Garnet Street	From Friendship St. to Weybosset St.
Nolan Street	From Chalkstone Ave. to Bernon St.
North Main Street	From Steeple and Thomas Streets to Mill St.
Page Street	From Weybosset St. to Clifford St.
Richmond Street	From Clifford St. to Weybosset St.
Rounds Avenue	From Pontiac Ave. to Stadden St.
Service Road #1	From Hartford Ave. to Plainfield St.
Service Road #2, #3	From Plainfield St. to Westminster St.
Service Road #5	From Valley St. to Manton Ave.
Waterman Street	From North Main St. to Benefit St.
Wickham Street	From Broad St. to Lockwood St.

11. SCHOOL PROTECTION PROGRAM

A review was made of all public, private, and parochial schools throughout the City to determine the locations that additional parking prohibitions were necessary to provide an increased measure of safety in the vicinity of the schools. A total of 75 new regulations were established in connection with this program.

12. TRAFFIC ACTIVITIES INVENTORY

Each year a Traffic Activities Inventory Report is submitted to the National Safety Council by all member cities. These reports are composed of nine sections. The sections are a) Death and Injury Record, b) Traffic Ordinances, c) Accident Records, d) Traffic Engineering, e) Traffic Law Enforcement, f) Traffic Courts, g) School Traffic Safety Education, h) Public Information, and i) Safety Organization. The Safety Council grades each section of these reports by comparing the performance reported by a city in its respective population group. A review of these standings gives an indication of the effectiveness of the over-all traffic program in the city.

Providence received, in 1952, based on its 1951 record, the following citations:

- a) Providence tied with Rochester, New York, for first place in their population group for the best over-all highway safety program.
- b) Providence was first for the best traffic engineering program in its population group.
- c) Providence was first for the lowest death rate on highways in its population group.
- d) Providence was second for its pedestrian protection campaign in a separate contest sponsored by the American Automobile Association.

The purpose behind this inventory is to review in detail all phases of the traffic administration problem and then to compare the efforts of the city with the performance level of other cities in its class. An analysis of the inventory report is furnished the city so that the various categories can be appraised, judged, and programs planned for improvement.

The Traffic Engineering Department, since its inception, has used this method of self-analysis to help formulate traffic planning for the City. It is significant to note that in 1949 (the first year of reporting by the new department), the Traffic Engineering Department placed fourteenth in its class. In 1950 it was third, and in 1951 it was first.

13. TRAFFIC EDUCATION ACTIVITIES

The three "E"s of traffic administration--namely, enforcement, education, and engineering are generally recognized as the backbone of any good traffic control program. It is indeed difficult to place any one of the "E"s above the other in importance. But, good traffic engineering administration must necessarily concern itself with the other "E"s-- enforcement and education.

This department makes all needful rules and regulations regarding traffic, but it is becoming increasingly evident that the adherence to these rules and regulations by the public is very dependent upon the education of the public. Believing that the Traffic Engineering Department should take the lead in the over-all program, it officially arranged and directed the City's first traffic safety conference. The Metropolitan Traffic Safety Conference was held on October 9, 1952, and was attended by representatives of all the surrounding towns and cities in the metropolitan area. Some of the nation's leading experts in their fields headed the various panel discussions. They were Miss Marion Telford - Schools Panel; Mr. Franklin M. Kreml - Police Enforcement Panel; Mr. James P. Economos - Traffic Courts Panel; Mr. Wilbur S. Smith - Traffic Engineering and Planning Panel; and Mr. Edwin S. Smith - Public Organization Panel.

From this conference a new permanent organization was formed known as the Metropolitan Traffic Safety Organization and referred to as MeTSO. The secretarial and much of the promotional work of MeTSO is directed from this office in cooperation with Mr. Harry Pinkerson who is Chairman of Providence's Mayor's Traffic Safety Committee.

The traffic problem in Providence has become a community problem affecting all the cities and towns that border on Providence. If the

necessary improvements are made, the problem will be attacked from a broad community level. MeTSO forms the basis for this attack.

14. FREEWAY PLANNING

An important function of this department is to "make the best possible use of the existing streets", but an even more important function is to plan for major facilities that will bring lasting relief to traffic congestion. It has, therefore, been a responsibility of this department to cooperate with the other departments of the City and State, and with the consulting engineers, to plan the best possible freeway facility that can be built in the very near future. It is exceedingly important to the traffic vitality of the City that the planning and construction of such a facility be expedited.

15. HARRIS AVENUE - EAGLE STREET EXTENSION TO THE ROBERTS EXPRESSWAY

During the latter part of the construction of the Roberts Expressway, the traffic developments in the Olneyville area made it increasingly apparent that an extension to the Roberts Expressway would be needed in the immediate future. This department, therefore, made plans as to the form and location of such an extension. These plans were transmitted to the State Department of Public Works who sponsored the project with the Bureau of Public Roads. This project is now under contract and is scheduled for completion during 1953.

16. ROBERTS EXPRESSWAY

The Roberts Expressway in Olneyville was dedicated and opened to traffic during this past year. This department worked closely with the various agencies involved to insure that the project became an important part of the cities transportation system quickly and easily. This department was directly concerned with the installation of traffic signs, signals, and painting on the new facility and the adjacent streets.

17. TRAFFIC ACCIDENT ANALYSIS

The Traffic Accident Section of the Traffic Engineering Department has been keeping records of all reported motor vehicle accidents that have occurred in the City of Providence since January 1, 1950. These accident records are used for engineering purposes in analyzing the needs for changes in traffic control at specific locations particularly for investigations concerning warrants for stop control, yield control, and traffic signal control. Not only are these accident records essential in initiating a change in traffic control, but they are particularly helpful in evaluating such control after the control has been established. The accident history of a particular location offers the engineer an accurate gauge whereby he can prove the merits of various changes at his disposal.

This accident information is obtained by our personnel from several sources. During the year of 1952, the number and percentage of accidents received from each contributing source is as follows:

	<u>No.</u>	<u>Per Cent</u>
Providence Police Department	5694	77.8
United Transit Company	952	13.0
R. I. Department of Motor Vehicles	519	7.1
Yellow Cab Company	<u>156</u>	<u>2.1</u>
Totals	7321	100.0

The 7321 reported motor vehicle accidents occurring in 1952 in the City of Providence represents an increase of 9.6% over the number of reported motor vehicle accidents occurring in 1951. In turn, the accidents occurring in 1951 showed an increase of 12.4% over the accidents in 1950. These figures indicate that the accident rate is increasing.

Part of these increases can be attributed to changes in the Motor Vehicle Laws. In November, 1950, a state law went into effect that required the reporting of all accidents involving property damage of \$100

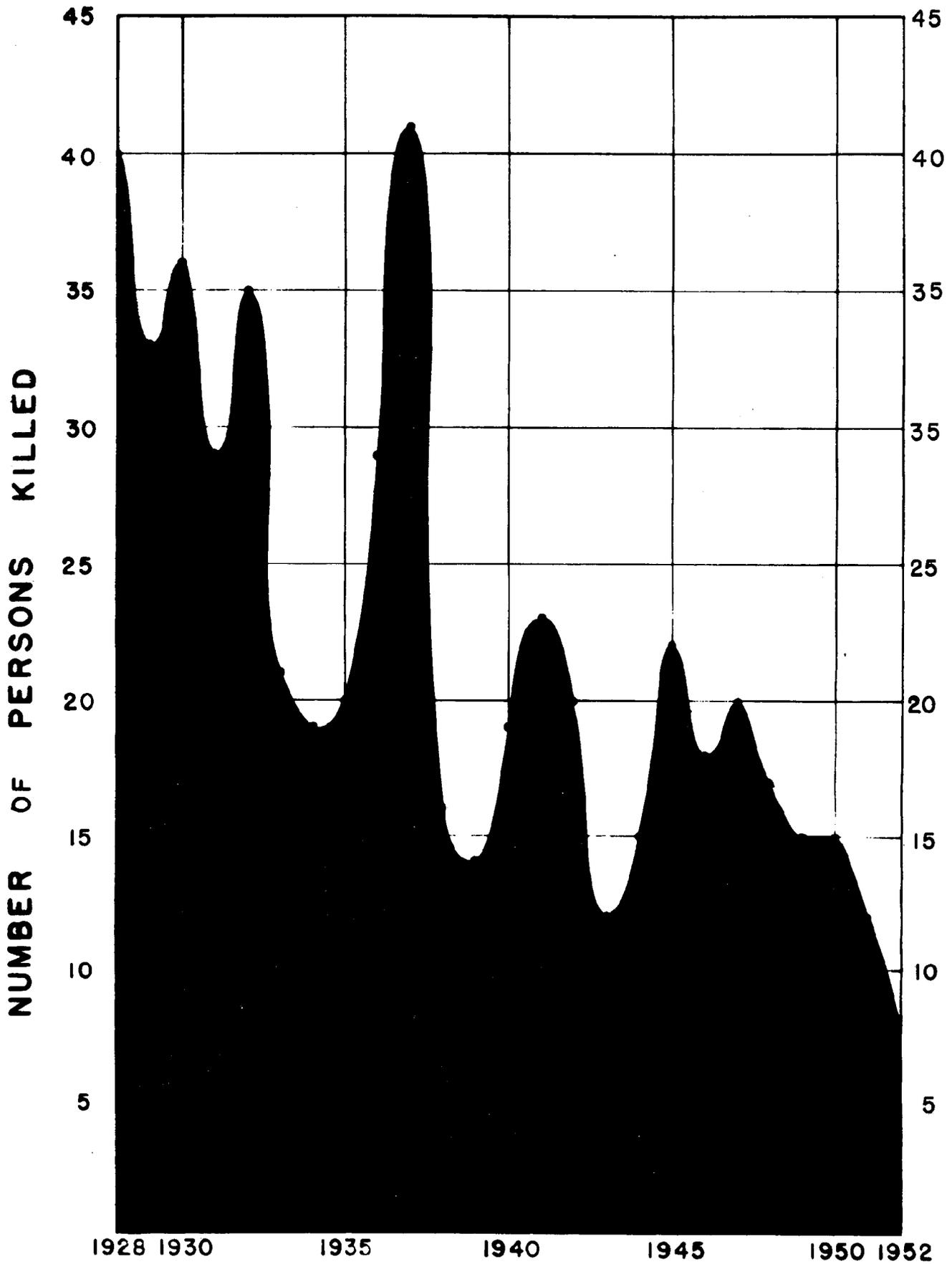


FIGURE NO. 5
**NUMBER OF HIGHWAY FATALITIES
 PER YEAR IN PROVIDENCE R. I.
 FROM 1928 TO 1952**

or more or any personal injuries to the nearest police authority. With the Financial Responsibility Law in effect as of January 1, 1953 a more complete reporting of accidents is expected. Better police enforcement and improved public education will also result in increased accident reporting.

Perhaps one of the best ways to illustrate the yearly increases in reported motor vehicle accidents is to convert the number and types of accidents into dollar values. Not only does this method give a good basis for comparison, but it also shows to what degree motor vehicle accidents mean in economic loss to the community. The following figures are based on average accident costs in Providence according to the National Safety Council:

1950

15 Fatalities @ \$11,500.00 each	\$172,500.00
1,693 persons injured @ \$425.00 each	\$719,525.00
4,395 Property damage accidents @ \$125.00 each	<u>\$549,375.00</u>
Total	\$1,441,400.00

1951

12 Fatalities @ \$11,500.00 each	\$138,000.00
1,392 persons injured @ \$425.00 each	\$591,600.00
5,287 Property damage accidents @ \$125.00 each	<u>\$660,875.00</u>
Total	\$1,390,475.00

1952

8 Fatalities @ \$11,500.00 each	\$ 92,000.00
1,857 persons injured @ \$425.00 each	\$789,225.00
5,822 Property damage accidents @ \$125.00 each	<u>\$727,750.00</u>
Total	\$1,608,975.00

Without a doubt, the most outstanding change in the accident picture in the City of Providence has been the amazingly low record of only 8 persons killed in motor vehicle accidents. Figure 5 shows the number of highway fatalities in the City of Providence from 1928 to 1952. As seen by this graph, the most recent years show a decided trend towards fewer highway fatalities with the all-time low being reached in 1952.

This trend in fewer persons killed on the highways is outweighed by the increased number of personal injury accidents which indicates the need for continuing and even increasing the activities of all public, private, and civic groups concerned with engineering, education, and enforcement resulting in greater safety on the City streets.

18. TRAFFIC COUNTING

An increased program of traffic counting was undertaken by the department during the year. This program was aided by the acquisition of a recording type traffic counting machine. It is only through a continuing program of gathering pertinent factual information that the magnitude of the traffic problem can be evaluated.

19. TRUCK PICK-UP AND DELIVERY

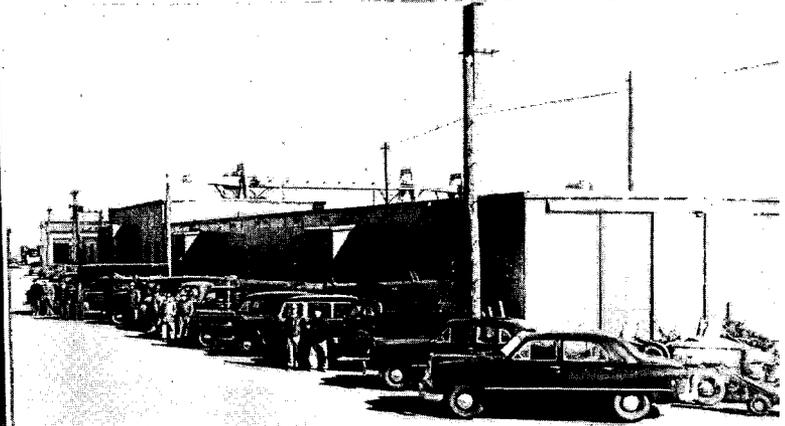
Due to the pressure of other departmental functions, the activity of this phase of the program was somewhat curtailed. Some specific problems relating to commercial pick-up and delivery were considered by the committee and action taken by the department. It is the intention of the department to continue this project in all parts of the City, wherever the problem becomes evident.

20. TRAFFIC SHOP MODERNIZATION

The capital improvement of the shop building which was contracted for in 1951 was completed during 1952. The completion of this project provided these major benefits:

- a) Motorized truck entrance doors.
- b) Insulated ceiling and exterior walls in office and central work area.
- c) Partition and doors between garage area and work area.
- d) Small stock storeroom.
- e) Extension of electrical shop.
- f) Caustic and rinse tanks for sign salvage.
- g) Zone control heating by thermostat control of motorized valves.
- h) Erection of benches and lighting to separate carpentry and painting activities.
- i) Storage bins for completed traffic signs.
- j) Interior painting.
- k) Repair of entrance vestibules.

A new sign truck body was designed by department personnel to fit the particular needs of the sign crew. The addition of this piece of equipment has increased the efficiency of the sign crew. The photograph (left) is a view of one side of the sign truck showing the various compartments. The photograph (right) shows the shop building and all the department vehicles and equipment.



21. BUS STOP PROGRAM

It has been the policy of this department to improve the bus stop facilities by restricting curb parking to provide space for the busses to load and unload at the curb. This policy was continued during the past year and will continue in the next year.

22. STATE ROUTE SIGNING

During the past year the department has maintained the colored route signing at a high level. At each junction throughout the City, colored informational signs have been installed indicating the direction to the next major city along the route. Continued maintenance and improvement will be required to guide visiting motorists through Providence.



PART IV

PLANNED PROGRAM OF TRAFFIC ACTIVITIES FOR 1953

1. General Objective

The policy for the coming year will continue to stress the principal of making the best use of the existing street system. It is imperative to obtain the maximum efficiency in the present street system at a minimum cost. While doing this, it will be equally important to work with all other agencies of government and citizens groups in planning and bringing about the construction of modern traffic facilities such as freeways at the earliest possible time.

2. Traffic Construction Program

It is the intention to submit a traffic construction program for 1953 which will be based largely on recommendations contained in the Smith-Dibble Traffic Transit Integration Study. This program will consist of the construction of channelization islands, certain curb cuts, and traffic signals in order to improve the flow of traffic and improve mass transit movement.

3. Off-Street Parking Program

It is regrettable that so much difficulty was encountered during 1952 in regard to building the city's first off-street municipal parking garage. It is believed that many of these obstacles encountered in the past can now be resolved, and early in 1953 recommendations will be made to the City Council concerning the adoption of action toward the construction of the first garage during the year. Further efforts to improve the whole off-street parking picture throughout the city will be continued. The goal in this respect will be to create the largest number of off-street parking spaces at the lowest possible fee.

4. Bus Stops

A continuation of the program to establish modern bus stops along the principal arterial highways such as Broad Street, Smith Street, Elmwood Avenue, Reservoir Avenue, North Main Street and other heavily travelled arteries.

5. Related Traffic Activities

Education of the public is of prime importance and one of the most important branches of good traffic control. Since this department makes all the traffic regulations, it is vitally interested in the education and enforcement phases of the work. During the year it is planned to make certain recommendations concerning changes in the traffic court procedure, traffic fines policy and the adoption of a more uniform traffic ticket by the enforcement officials. It will be the purpose of this department to aid these other agencies in achieving these improvements.