# MASSACHUSETTS HIGHWAY COMMISSION

1907

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#### FOURTEENTH ANNUAL REPORT

#### OF THE

## MASSACHUSETTS

## HIGHWAY COMMISSION,

FOR THE FISCAL YEAR ENDING NOVEMBER 30, 1906.

PART I. — STATE HIGHWAYS AND MOTOR VEHICLES. PART II. — SUPERVISION OF TELEGRAPH AND TELEPHONE COMPANIES.

#### JANUARY, 1907.



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APPROVED BY

THE STATE BOARD OF PUBLICATION.

## Commonwealth of Massachusetts.

To the Honorable Senate and House of Representatives of the Common wealth of Massachusetts in General Court assembled.

The undersigned commissioners, appointed under the provisions of chapter 476 of the Acts of 1893 and of chapter 474 of the Acts of 1900, herewith submit, in Part I., their fourteenth annual report, in accordance with the provisions of chapter 47 of the Revised Laws, and, in Part II., their first annual report relative to their supervision of telegraph and telephone companies, under the provisions of chapter 433 of the Acts of 1906, both reports being for the fiscal year ending Nov. 30, 1906.

> W. E. MCCLINTOCK. HAROLD PARKER. JOHN H. MANNING.

BOSTON, MASS., Jan. 1, 1907.



## PART I.

### ANNUAL REPORT OF THE MASSACHU-SETTS HIGHWAY COMMISSION.<sup>1</sup>

In accordance with the provisions of chapter 280 of the Acts of the year 1903 the commission has had the sum of \$450,000 for new work during the year.

Considerable sums allotted for expenditure during the year 1905 were actually disbursed during the year 1906, unavoidable delays having prevented the completion of several contracts.

Additional lay-outs were made during 1906, amounting to 253,021 feet (47.92 miles), bringing the grand total up to 3,539,535 feet (670.37 miles). The number of miles of road finished during the year was 45, making a total of about 655 miles of completed State highway at the end of the year 1906. On most of the remaining 15 miles laid out but not completed the work is in various stages of progress, although in a few instances no work will be done under the contracts before the coming spring.

Since the passage of the "small town" act, in 1900, 108.23 miles of road in the "small towns" have been improved.

#### MEETINGS OF THE COMMISSION.

The commission has held 79 meetings at its office in Boston during the past year, besides many others at different points in the State.

The regular county hearings, provided for in the statutes, have been held. The attendance at these hearings was small,

<sup>&</sup>lt;sup>1</sup> In accordance with the provisions of chapter 211 of the Acts of 1905 this report is made for the new fiscal year, ending Nov. 30, 1906.

and except in one or two of the counties but little interest was taken in them. There seems to be a feeling among the county and town officials that they should attend these hearings out of respect to the commission. They have but little to offer when they are there, and apparently do not feel repaid for their early start, long ride and long day's work.

#### CONTRACTS.

All work done by the commission must be done by contract, either with the town or city authorities, or, after due advertisement, with private contractors.

During the year 69 contracts for State highways were entered into, of which 19 were with town or city authorities and 50 with private individuals or corporations.

#### PETITIONS.

The total number of petitions for the location and construction of State highways up to the date of this report is 737.

During the year 1906, 29 new petitions were received. These petitions cover altogether 85.1 miles of road, and they are from 24 towns and 3 cities. The petitions received during the past year cover 72.1 miles of road not previously petitioned for.

#### STREET RAILWAYS.

There are at the present time street railways operating on State roads in 138 different cities and towns. In 8 of these municipalities there are two different companies.

The length of street railway track in the State on Sept. 30, 1906, according to the Massachusetts Railroad Commissioners, was 2,804 miles.

The relations between the highway commission and the officials of the different street railways operating along State roads, or roads which the commission proposed to take as State roads, have been almost without exception pleasant. The commissioners have used every effort to cause as little movement in line or grade of the street railway tracks as was consistent with good work, and the railway officials have frequently ungrudgingly made the changes asked for, often without awaiting the

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hearing required by law or the formal decree of the commission. In several instances the street railway companies have united with the commission in paying their full share of the cost of bridges when such new bridges were to be permanent structures and seemed necessary for joint occupancy.

#### COUNTY ASSESSMENTS.

In accordance with the provisions of the statutes, the several counties in which State roads are built are required to repay to the State one-quarter of the amount expended during the year. The time of this repayment may, if desired, extend over six years from the date of the assessment; but in several instances, including some of those in which the amount of the assessment is greatest, the counties have preferred to pay the entire sum due at the end of each year. The amount assessed upon the counties during the year 1906 was \$149,451.94.

#### Culverts and Bridges.

Most of the culverts and short bridges built during the past year have been of reinforced concrete.

The following bridges of reinforced concrete were built during the year: ---

Becket, .		A 28-foot span beam, over Walker Brook.
Hatfield, .		A 17-foot span beam, over Broad Brook.
Haverhill, .		A 13-foot span arch, over Hawkes Brook at Me-
		thuen line (under construction).
Huntington, .		A 21.5-foot span beam, over Roaring Brook
		(under construction).
Mansfield, .		An 18-foot span beam, over Rumford River (under
		construction).
Medway, .		A 10-foot span beam, over Chicken Brook (exten-
		sion).
North Brookfield	ł, .	A 12-foot span beam, over Moore's Brook.
Taunton-Dighton	n, .	A 35-foot span arch, over Three Mile River.
Wenham, .		A 12-foot span beam, over Miles River (cost paid
		by town of Wenham).

In the report of last year reference was made to disintegration in spots on the surface of five or six reinforced concrete abutments built in salt water. There has been no marked

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change in these abutments during the year. The concrete seems to have become thoroughly hard, and it is doubtful if any further disintegration takes place.

On all abutments of this material built during the year, a mortar made of a mixture of one part of cement to one part of sand has been used on the face to the depth of about one and one-half inches. This was placed by using a thin metal diaphragm separating the richer front mortar from the standard concrete, and withdrawing the diaphragm when the concrete was in place and before it had set appreciably.

The two bridges over the Weweantit River, near the dividing line between Wareham and Marion, built in 1901, and supported by cast-iron piles, show a still further settlement since they were raised last year. This settlement takes place under the electric street railway track, and may eventually require the driving of additional piles.

#### Construction.

No material change has been made during the past year in the method of building roads. On no State road has there been a failure of well-laid telfording foundations or any V-shaped drains.

The Legislature of 1903 appropriated \$2,250,000 for State road construction, and provided that \$450,000 should be available in each of the five succeeding years. The last installment of this appropriation will be used in 1907.

In carrying out its comprehensive plan of a system of main State roads the commission has been materially aided by these advance appropriations of stated amounts. With such advance appropriations the work can be better laid out, the engineering force can be better regulated and the various petitioners are better satisfied.

The commission respectfully recommends for the careful consideration of the Legislature the passage of an appropriation act in 1907, similar to the one of 1903, the first installment to be available in 1908. Such an act should also provide for the use of any unexpended balance of the appropriation made in 1903.

#### MAINTENANCE.

The law of 1900 requires a payment to the Commonwealth by each municipality in which State roads are built of the cost of maintenance of such roads but not exceeding \$50 for each mile of State road in the respective municipalities. The total cost of repairs between Nov. 30, 1905, and Dec. 1, 1906, was \$68,382.28. There will be paid back into the State treasury, on account of maintenance, the sum of \$27,531.22, or about 40.28 per cent. of the total cost.

There has been no change in the methods of maintaining the State roads. About the same roads are maintained by contract as last year. It has not seemed desirable or economical to increase the contract work, as those parts of the State which are difficult to care for by day work, on account of the peculiar condition of the labor market, are now maintained by contract. The conditions may be referred to here. It is a fact that in certain districts men cannot be had to care for the roads at the season of the year when they are most in need of care, because of more profitable employment elsewhere. The only way these roads can be cared for is by contract, thus insuring the repair man more or less steady employment throughout the year. While this method has proved very satisfactory in certain districts, it has been less successful in others, because of the greater opportunities for employment for man and beast in other lines of work, the tendency being for the contractor to neglect the road under contract, to the annoyance of the traveling public and to the detriment of the road itself.

The past year has been an exceedingly bad one for stone roads. The winter was open and the State roads were repeatedly frozen and thawed. The result was a weakened foundation in several instances, and a breaking of the bond of the surface in many other instances. Considerable work was necessary during the winter and still more in the spring to put the roads back into reasonably good condition. In addition to this, there were two quite extended dry spells which more or less disturbed the bond and caused loose stone to stand upon the surface. This last difficulty was remedied as far as was possible by the spreading of a thin coating of sand over the surface; but even this treatment, which had in previous years proved satisfactory, did not in all cases prevent the raveling out.

The change just made in the ending of the fiscal year from January 1 to December 1 reduced the maintenance appropriation for 1906 from \$70,000, the amount asked for, through inadvertence, to \$64,166.66. The suggested appropriation was based on the annual cost of maintenance per mile and the number of miles of State roads, and since but little repair work has ever or can ever be done in the month of December, on account of the weather, the appropriation should not have been reduced to the eleven months' basis.

The maintenance fund was still further reduced by the sum of approximately \$7,500, expended for the suppression of insect pests, such as the gypsy and brown-tail moths and the elmtree beetle. Acting on the advice of the Attorney-General, the commission carried on this work.

Owing to these unusual conditions and the extraordinary drafts upon the maintenance fund, the commission regrets to report that the State roads have not been kept up to the standard of excellence which the public demands and which the commission is anxious to maintain.

Perhaps the most important discovery of the year is the extraordinarily destructive effect upon stone roads of the large number of swiftly moving automobiles. Practically all the main roads are thus affected. It has been noted that the binder is swept from the road, the No. 2 stone ( $\frac{1}{2}$ -inch to  $\frac{1}{2}$ -inch size) is disturbed, in some instances standing on the surface and in other cases left in windrows along the roadside. The number of automobiles has rapidly increased during the year, and this increase will, in the opinion of the commission, continue indefinitely.

The commission is satisfied that a material change in the methods of maintaining stone roads must be made. While the old methods have proved satisfactory in the past, they fail under the present usage. The automobile has apparently come to stay, and it must be reckoned with. The commission believes that if the roads fail under the changed traffic they must be treated in a different manner, even if the cost of maintenance be largely increased. It must be borne in mind that this excessive wear of stone roads by automobiles is not confined to Massachusetts. Reports from the newspapers and from the United States office of public roads show that the same trouble is experienced in all parts of the United States.

The roads of England, France and other countries of Europe are also showing signs of destruction by the same agency. The commission has reports from different sources confirming the statements of the destructiveness of automobiles. Letters from Mr. Alexander G. Uptegraff and Mr. Cortlandt F. Bishop of Lenox, and from Mr. John Burnett of Boston, have been of great assistance to the commission in reaching a final conclusion as to the best treatment of stone roads to reduce to a minimum the destructive effect of automobiles. These letters describe the conditions and treatment in England and France. In those countries the use of tar is quite common and the results from its use are spoken of as good. The same material has been used successfully in some of the States of the Union. Experiments made with tar by the Metropolitan Park Commissioners on the Revere Beach boulevard, and by Mr. Charles W. Ross, Street Commissioner of Newton, on the Newton boulevard, have proved to be very successful. On these roads the dust has been laid, the raveling out prevented and the general destruction stayed.

The commission believes it is ready to treat this problem if the Legislature will make the needed appropriation. It is estimated that \$50,000 will be needed for this special work next year.

The commission recommends appropriations from the treasury of the Commonwealth of the following sums: for maintenance, \$70,000; for extraordinary repairs made necessary by automobiles, \$50,000; for the suppression of insect pests, \$10,000; subject to the provisions and limitations of section 16, chapter 47 of the Revised Laws.

#### "SMALL TOWN" WORK.

The good results accomplished under the "small town" act prove the wisdom of this enactment. The small towns appear to appreciate heartily the aid of the State, and almost without exception they make additions to the allotments made by the commission.

The standard of work and the methods of repairing the roads have continually improved since 1901. The wooden culverts are rapidly disappearing, being replaced by stone culverts or iron pipe. Water bars are becoming gradually removed; and in many towns the worn-out material that has washed into the gutter, instead of being scraped back into the centre of the road as formerly, is now discarded and new material substituted therefor, which is a better practice and more economical in the end. Better drainage facilities are provided, and outlets through the banks are now built for the quick removal of water from the roads. Ledge outcroppings and bowlders have been taken out, instead of being covered up with dirt, as was formerly too often the general custom.

Roads that prior to 1901 would have been tolerated without complaint will not answer now. The old system of repairing the roads in the spring and of doing no more work on them for the ensuing year is now looked upon with contempt. In many towns the people insist that the repairs shall be made when they are necessary, which, of course, is the only correct way.

Wherever there is any completed line of road improved under the "small town" act the loads have doubled in weight and the time necessary for a trip has been lessened considerably.

One small town has bought a stone crusher. This is a very encouraging feature, brought about by the "small town" enactment, and it will be the means of securing good roads where good gravel is entirely lacking.

#### LYNN ROAD.

On May 26, 1902, a special appropriation of \$100,000 was made for building a road on the sea side of the Boston, Revere Beach & Lynn Railroad, and extending from Saugus River to Commercial Street in the city of Lynn.

The embankment of this road, up to grade 12 above mean low water, was finished last year, the work having been done by Fred E. Ellis, contractor.

The contract for placing the ballast and broken stone, building guard rail, paving gutters and finishing the road ready for use was awarded to R. F. Hudson, contractor, on Jan. 30, 1906. Work was begun February 26, and finished June 30; and the road was opened to the public July 7, 1906.

There has been paid out on account of this road, under the Ellis and Hudson contracts, and including miscellaneous expenses, the following amounts, viz.: —

Ellis contract and miscellaneous items, .		\$72,198 95
Hudson contract and miscellaneous items,		27,800 70

Total, . . . . . . . . . . . . \$99,999 65

This amount is exclusive of land damages. These have not as yet been settled, but are under consideration.

The principal quantities on this work, under the Hudson, 1906 contract, are as follows, viz.: —

Cubic yards earth excavation,						46
Cubic yards gravel filling, .						5,134
Tons broken stone, .			•			6,152.025
Tons broken stone, screenings f	or si	dewal	ks,			269.65
Lineal feet 6-inch clay pipe, .						41.4
Lineal feet guard rail,						8,796
Stone bounds,				•		11
Catch basins,						11
1 0 1 1/						1,661
Square yards block-paved gutte	ers,			•		1,946.3
Cubic yards rock embankment,				•		1,682

The principal quantities under the Ellis and the Hudson contracts are as follows, viz.: —

Cubic yards excavation, .			46
Cubic yards earth and gravel filling,			78,708
Cubic yards rock embankment,			17,925
Square yards riprap,	. '		5,861
Portland cement concrete culverts,			3
Lineal feet 6-inch clay pipe, .			173.4
Tons broken stone,			6,152
Tons broken stone screenings for sid			269.65
Lineal feet guard rail, .			8,796
Square yards block-paved gutters,			1,946.3
Stone bounds,			11
Catch-basins,			11

The road from Revere Street, Revere, to the Saugus River, built under the direction of the Metropolitan Park Commission, was finished and opened to the public July 7, 1906. The city of Lynn is extending the road from Commercial Street, the end of the State highway, easterly into Lynn.

The completion of the Lynn section will provide a continuous drive over splendid roads from State and city park reservations on the south and west of Boston to the unsurpassed drives along the north shore.

STEAM ROAD ROLLERS AND STONE-CRUSHING MACHINERY.

The commission has now under its control 16 steam rollers and 2 portable stone-crushing plants.

The steam rollers were used 1,103.5 days on town work in 26 different towns. All requests by towns for work of this character were granted. The rollers were also used 225.5 days on State highway repair work, on 25 different roads; 272.5 days by towns contracting for the building of State roads, including the "small town" roads; 113 days by private contractors on State highway contracts; and 5 days on work done in connection with the laying of a telephone conduit on one of the State roads. The total number of days' work during the year was 1,719.5, an average of 107.5 days for each roller.

The total cost of maintenance for the year was \$2,468.96. Of this amount, \$1,725 was paid for practically rebuilding two of the rollers, Nos. 6 and 7, which have been in active service since 1896-97; and \$743.96 was expended for the ordinary repairs. Including the expense of supervision and inspection of the rollers, the average cost of such ordinary repairs has been  $981/_2$  cents per day for each roller in use.

The number of requests from town officials for the use of the rollers has been somewhat in excess of those in previous years.

One of the rollers purchased in 1896, and possibly two, will have to be sent to the shop this year for thorough repairs.

One of the portable stone crushers has been located in the town of Sandisfield, where it has done good service; the other was used in Carver and Hanson. The stone for 2.37 miles of stone road was crushed by these machines, a total of about 5,300 tons. The entire cost of operation, repairs and moving has been borne by the towns using the crushing machinery.

Mr. George E. Rayner, who had been employed for several years as inspector of steam rollers, resigned his position June 1. Mr. Ernest A. Spencer was appointed to the position so vacated, and began his duties July 2, 1906.

#### SURVEYS AND ENGINEERING OFFICE WORK.

During the year surveys for preliminary studies, estimates and lay-outs were made in 43 towns, a total length of 44.47 miles; and grade stakes for construction work were set in 101 towns for a length of 79.37 miles, part of these being for unfinished work in 1905.

Final surveys were made in 49 towns, a total length of 40.84 miles. Surveys for "small town" work were made in 32 towns, a total length of 14.79 miles; and about 6 miles of miscellaneous surveys were made for roads to be constructed by towns.

Plans, profiles and cross-sections were plotted of surveys in 59 towns, representing a length of 60.67 miles.

Lay-out plans have been made of roads in 70 towns, of a total approximate length of 47.78 miles. Plans to accompany decrees for street railway locations on State roads and for provisional locations have been made in 13 towns. Plans and profiles have been made for work under the "small town" act in 29 towns.

Preliminary estimates in 105 towns, representing 79.61 miles, have been made; and also final estimates in 63 towns, representing 53.39 miles.

A survey for a profile of the Newburyport turnpike, about 28 miles in length, has been made and the profile plotted.

It will be noted that surveys have been made for 6 miles of roads to be constructed by towns. Not only have these surveys been made, but, in many instances, the plans have been made, specifications drawn, the work advertised, bids opened, and the contract work generally supervised. The commission believes that by doing this kind of work it is rendering the most effective service for good roads, as it not only guides the local authorities, but increases the number of expert road builders.

#### TREE PLANTING.

The third year has passed since the systematic planting of trees along State highways was begun by the commission, and in all about 12,000 trees have been set out. The report of the forester (see Appendix I.) gives in detail the location and condition of these trees, and to that reference is made for such information.

The general plan of the commission, as stated in previous reports, has been followed, and the effect of lining the State roads with ornamental trees is beginning to be noticeable.

The cost of planting trees during the year (\$1.10 per tree) is somewhat more than last year, due largely to the additional cost of preparing the ground for receiving the trees. It has been found by the experience of former years that a slight additional cost in this respect is advisable. The cost of maintaining trees already planted including the cost of replacing dead or defective trees, has been approximately 16 cents per tree.

It is the purpose of the commission to use the native trees that grow along the roadsides wherever they are available, and to improve their condition and beauty by removing defective ones or by thinning them out where too thick for their successful development. It is not, however, the intention to destroy or injure the characteristic attractiveness of the New England roadsides, but to encourage the growth of the native shrubs and vines as well as trees, wherever such treatment is appropriate.

The nursery established by the commission has, by care and cultivation, become in all respects satisfactory. It is located on a gently sloping hillside, with a soil adapted to its usage. It is supplied with town water and is near the railroad station. The trees make excellent growth, and by means of it defective or sickly trees are saved.

The destruction of insect pests has been attempted under the general supervision of Mr. A. H. Kirkland, Superintendent for the Suppression of Gypsy and Brown-tail Moths, but paid for from the highway maintenance appropriation and under contracts with the commission. It is respectfully represented that this work might be more effectively carried on if the money

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were placed directly in Mr. Kirkland's hands, and his work done as a whole, and not as at present, where the responsibility is divided in the same territory.

#### AUTOMOBILE REGISTRATION.

The increase of the work in this department has been phenomenal. The commission has continued the policy of previous years, which is to have a sufficiently large clerical force to issue the licenses and certificates of registration with as little delay to the applicants as possible. At no time during the year has the work been more than two or three days behind.

Complete card indexes have been made, showing all licenses and certificates issued and the reports received from the district courts.

It is estimated that fully 15,000 persons called during the year either for papers or for information.

The following tabulation shows the number of registration certificates and licenses to operate issued in the year 1906, between January 1 and December 1, and the amount of the fees received for the same: —

Certificates of registration:						
Automobiles,			6,572 a	t \$2	00,	\$13,144 00
Motor cycles,			665 a	t 2	00,	1,330 00
Manufacturers and dealers,	·	•	151 a	t 10	00,	1,510 00
Licenses to operate:						
Ordinary operators, .			4,649 a	t 2	00,	9,298 00
Professional chauffeurs (new),			3,391 a	t 2	00,	·6,782 00
Professional chauffeurs (renew	ed),	•	2,043 a	t	50,	1,021 50
Total,						\$33,085 50

Approximately 12,922 number plates, weighing in the aggregate about  $6\frac{1}{2}$  tons, have been taken from their packing boxes and packed carefully in wrappers ready for delivery. About 3,000 of such packages have been sent off by express; and 5,434 badges for professional chauffeurs have been delivered.

There have also been issued 800 certificates and licenses to replace that number lost; and records have been made of 2,100 transfers of ownership, and many hundred permits for temporary number plates have been issued.

Under the provisions of the Acts of 1905, chapter 111, as amended by the Acts of 1906, chapter 412, section 5, it is required that courts and trial justices keep full records of every case in which a person is charged with a violation of any of the provisions of chapter 473 of the Acts of the year 1903, or any other act relative to automobiles or motor cycles, and to file certified copies of such records in the office of the commission. Under the law of 1905, 166 reports were filed between Jan. 1, 1906, and June 24, 1906, and between the latter date and Dec. 1, 1906, 847 reports were filed, - a total number of reports during the period covered by this report of 1,013. The copying of these reports entails a considerable amount of clerical work. A less technical and complete report would, in the opinion of the commission, be sufficient for all the purposes of the act, and an abstract of the record containing information as to the parties to the case, the nature of the offence, the date of the hearing, plea, judgment and the result, certified by the clerk of the court as a true abstract from the records of the court, would be sufficient for all ordinary purposes.

The commission therefore recommends that the law be so amended as to permit an abstract of the record to be filed instead of a certified copy of the full report, and that the abstract be made upon forms to be supplied by the commission, and to contain such information and particulars as the commission may deem necessary.

The copies of the court records received during the year, numbering 1,013, as before stated, were carefully filed and indexed. During that time 12 licenses and 6 certificates of registration were revoked because of convictions for reckless driving, intoxication, for operating so as to endanger the lives and safety of the public, or, after three convictions, for overspeeding.

During the year the commission has heard 36 complaints of careless or reckless driving, and has suspended or revoked 11 licenses and 4 certificates of registration, in addition to those just mentioned.

Many informal complaints have been investigated, and a large

number of cautionary notices have been sent to persons charged with overspeeding or other violations of the automobile laws.

In accordance with the provisions of chapter 353 of the Acts of the year 1906 the commissioners have established certain rules and regulations concerning the use and operation of motor vehicles. The commissioners believe that the present law is ample to control the operation of motor vehicles if it is wisely enforced. There is no uniformity among the different cities and towns in enforcing the law against reckless operating. Some of the towns make no attempt to enforce the law, although it is a matter of common knowledge that certain persons often drive recklessly. Other towns are making an honest effort to regulate the speed and are more or less successful in their efforts. But the really reckless operator, the man whose main idea seems to be to annihilate distance, is very rarely apprehended, as he apparently posts himself as to the location of "traps" and uses care upon roads that are watched.

The commissioners think it doubtful that the cities and towns will, unaided, succeed in accomplishing any permanent or general results. Reckless driving may be prevented on short, measured stretches of road, by watching and taking the time of all automobiles passing, but outside of these parts of roads, or even on them, unless they are guarded, there is no control of the speed.

The commissioners have given 4 hearings in towns where the selectmen have made special regulations governing automobiles. There seems to be a feeling among the officers of some towns that the passing of these special regulations is all that is required. No effort was made to enforce the law previous to the passage of the regulations, and in certain instances the opinion was expressed that nothing would be done later.

#### NEWBURYPORT TURNPIKE.

Chapter 93, Acts of 1906, authorized and directed the Massachusetts Highway Commission to make such studies and surveys of the Newburyport turnpike as shall determine the best future procedure of the State, and of the various towns through which it passes, relative thereto.

The commission has caused a survey of this road to be made

from its crossing of the Saugus Branch Railroad in Malden to its terminus in Newburyport, and an estimate of the cost of building.

The Newburyport turnpike was built under a charter granted by the General Court of 1803. It was to begin at the head of State Street in Newburyport and end at Malden bridge, and was "to be as nearly in a straight line as practicable." The company was authorized to erect gates and collect toll on all kinds of vehicles, and on all pedestrians and live stock. It was also required to keep the road in good condition, and to report all earnings, expenses and dividends annually to the Secretary of State.

No report of the receipts and expenses was ever made; hence it is impossible to learn anything as to the cost of building or maintaining this road. As far as can be learned by a careful search, the turnpike charter was never annulled.

Like most of the turnpikes, it was ordered to be built in as nearly a straight line as practicable. It was to be the main road between Boston and Newburyport, and over it were to pass the stages carrying through mail, freight and passengers. In its building no change of direction was made, either to avoid hills or to accommodate the population to the right or left of a straight line. The road served its purpose, probably, up to the time of the building of the railroads, but the changes thus brought about were so great that its usefulness as a through road no longer existed, and thereafter it simply served the comparatively few people living adjacent to it.

The Newburyport turnpike may be divided into three divisions; first, from Malden bridge to the crossing of the Saugus Branch Railroad; second, from the crossing of the Saugus Branch Railroad to Andover Street (east branch of the old Essex turnpike); third, from Andover Street to Newburyport. These three divisions will be discussed in detail.

#### First Division.

From Malden bridge to the Saugus Branch Railroad the road passes through the business centre of the city of Everett, and a fairly populous part of Malden, a district which has had a phenomenal growth during the past twenty-five years, and a

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growth which is apparently destined to continue. A doubletrack street railway occupies the centre of the way with its tracks; water pipes are laid under the surface throughout the entire distance, and sewer and gas pipes are laid for a greater part of the distance.

Under the complications that are sure to exist if the State maintains the roadway and the municipalities the different structures beneath the surface, it does not seem wise at the present time to lay out this part of the turnpike as a State road. Moreover, the board of aldermen of neither Everett nor Malden has petitioned to have the road so laid out.

#### Second Division.

The Newburyport turnpike from the Saugus Branch Railroad to Andover Street, passing through a part of Malden, Melrose, Saugus, Lynnfield, Peabody and Danvers, to Andover Street, is a much used and important main road leading to Boston. There appears to be no reason why it should not properly be laid out and maintained as a State road. It is one of the roads which, if petitioned for by the different boards of aldermen or selectmen, would be considered by the highway commission and laid out and built as a State road as fast as the available funds would permit.

#### Third Division.

The road from Andover Street to Newburyport is improperly laid out, the grades are excessive, the population along it is sparse, the villages on either side are provided with other roads better laid out, and there appears to be no reason why it should become a State road. No part of this division has been petitioned for as a State road by the selectmen of Danvers, Topsfield, Ipswich or Rowley. A short length in Newbury and the part of it in Newburyport have been petitioned for, but the highway commission, after numerous hearings and views, determined that the community as a whole would not be best served by building over the turnpike.

Following is an estimate of the cost of building divisions 2 and 3. No estimate has been made of the cost of building division 1. The plans and profiles, together with the details of the estimates, are on file in the office of the highway commission.

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Estimate of the Cost of Building the Newburyport Turnpike from the Crossing of the Saugus Branch Railroad to Newburyport, in Two Sections.

Section 1, from Saugus Branch Railroad to Andover Street in the town of Danvers, a distance of 52,400 feet, or 9.93 miles : ---

21,815 cubic yards earth excavation and	filling,			\$11,060 00
81,300 square yards shaping for broken	stone,			2,439 00
5,700 lineal feet guard rail, .		•		1,425 00
2,632 cubic yards rock excavation,				5,264 00
25,087 tons broken stone,				37,630 00
586 lineal feet pipe culverts, .				533 00
16 concrete culverts of varying sizes	, .			6,389 00
Engineering and incidentals,	• •	•	•	7,769 00
Total, :				\$72,509 00

Section 2, from Andover Street in the town of Danvers to Newburyport, a distance of 93,600 feet, or 17.73 miles : ---

143,420	cubic yards excavation and fillin	g,			\$66,213 00
163,386	square yards shaping for broken	ston	le,		4,902 00
50,150	lineal feet guard rail, .				12,537 00
5,010	cubic yards V drain, .				5,010 00
5,375	cubic yards rock excavation,				10,750 00
48,300	tons broken stone,				72,450 00
1,494	lineal feet pipe culverts,				1,723 00
27	concrete culverts of varying size	s,			31,262 00
	Bridge over Parker River, .				25,000 00
	Engineering and incidentals,				27,582 00
	Total,		۰.		\$257,429 00

An analysis of these estimates shows that the estimated cost per mile of work in section 1 is \$7,302, and in section 2, \$12,940.

A still further study shows the cost of different parts of the work to be per mile as follows: —

#### Section 2 : --

Excavation of	all	kinds a	nd f	illing,	· 40		\$5,172 00
Guard rail,							793 00
Broken stone,							
Culverts,							
V drain,							
Total cos	t pe	r mile,					\$12,940 00

#### Engineers and Clerks.

The engineering work of the commission during the past year has been under the general direction of Mr. Austin B. Fletcher, secretary of the Board.

Messrs. Andrew M. Lovis and Sidney A. Parsons, first and second assistant engineers, respectively, have had charge of the surveying parties and of the office engineering work.

Messrs. William R. Farrington, John A. Johnston, Frank H. Joyner, Franklin C. Pillsbury, Warren B. Wheeler and Charles H. Howes, division engineers, have had charge of construction work in the field. Mr. Wheeler left the service of the commission April 14, 1906, and was succeeded by Mr. Howes.

The following men have been employed as resident engineers of the first class: George R. Brown, Albert D. Dadley, Percival H. Everett, Lyman L. Gerry, Charles H. Howes (3 months), Howard C. Holden, Everell J. Nichols, Hiram D. Phillips, David H. Winslow and George R. Winslow (2<sup>1</sup>/<sub>2</sub> months).

The following men have been employed as resident engineers of the second class: William G. Addis, Daniel H. Dickinson, Martin W. Fisher, William P. Hammersley, Frank H. Morris, Charles H. Norton, C. Alden Welton and Wilbur T. Wilson (1<sup>1</sup>/<sub>2</sub> months).

The following men have been employed as resident engineers of the third class: Emory S. Bingham (9 months), George G. Blackmer (8 months), William G. Burns (4 months), George A. Curtis (5 months), Fred H. Cunningham (8 months), Louis T. C. Loring (8 months), George D. Marshall (9 months), W. A. Rowell (7 months), William M. Stodder (10 months), Charles S. Tinkham ( $4\frac{1}{2}$  months), Robert A. Vesper (9 months) and Arthur C. Downs ( $3\frac{1}{2}$  months). The following men have been employed on survey work: chiefs of party: Messrs. Emory N. Colburn, David W. Merrill, Harold R. Starbird and Fred M. Stuart. Transitmen: Messrs. Arthur L. Bridgham (1 month), Albert E. Ferguson (3 months) and E. M. Young (2 months). Rodmen: Messrs. Abram N. Ashline (5 months), William G. Burns (8 months), George A. Curtis (3 months), A. T. Edwards (7 months), Ralph W. Emerson (3½ months), Paul H. Heimer (2½ months), William J. Lumbert (3 days), Paul McClintock (2 months), Herbert C. Poore (2½ months), Leslie C. Whittemore (3 months) and Granville M. Willis (6 months).

The following men have been employed as draughtsmen and office assistants: Messrs C. Ridgley Brown, Fred H. Cunningham (4 months), Myron B. Hoyt (2 months), Arthur Larrabee, Louis T. C. Loring (4 months), Edward F. Odell (7 months), Arthur L. Southworth (1 month), James H. Taylor, Charles S. Tinkham (7½ months) and William N. Wade.

The following have been employed as stenographers for the division engineers: Mr. Ernest F. Shay, Mrs. Clara C. Joyner, Mrs. Katherine Meyer Horn, and Misses Elizabeth A. Riley and Alice G. Kingston.

Mr. Elting J. O'Hara has had charge of the work in the automobile department, under the direction of the secretary, and the following clerks have also been employed in that department during the past year: Helen C. Bridge (5 months), Mary E. Burke (3 months), Hannah F. Dowd (7 months), Inez M. Felt (6 months), Madison C. Lewis (2 months), Ethelyn B. Marlatte (5 months), Agnes L. Moulton ( $4\frac{1}{2}$  months), Ida L. Poore, Irving L. Redfield (7 months), Grace A. Robbins (3 months), Charles H. W. Woods ( $6\frac{1}{2}$  months) and Carl J. Youngren. George G. Mann was employed  $6\frac{1}{2}$  months and Douglass J. Haydock 4 months as messengers.

The clerical force employed has been as follows: John M. McCarthy, assistant to the secretary; Mary A. Riley, Nellie M. Barlow, Henrietta E. Briggs (4 months) and Hannah F. Dowd (5 months), stenographers; Edward A. Austin, accountant; Alice M. Worthen, copyist; Fred Fair and George F. Murdock, clerks.

Mr. George E. Rayner, employed as inspector of road-build-

ing machinery, resigned his position June 1, 1906. Mr. Ernest A. Spencer was appointed to this position and has served since July 2, 1906.

#### EXPENDITURES.

The following is a summary of the expenditures of the Massachusetts Highway Commission from Dec. 1, 1905, to Nov. 30, 1906: —

1	IOWN OR	CITY.			Year of Lay-out.	Amount.	Totals.
Bar	nstable (	Count	 hi				
Barnstable,	1010010		·9•		1905	\$147 30	
Brewster,			0	÷	1895	27 00	
Brewster.		÷			1896	27 00	
Brewster, .					1897	27 00	
Brewster.					1901	725 80	
Chatham.					1902	3 02	
Chatham.					1905	132 01	
Chatham, .					1906	419 45	
Dennis,					1895	39 89	
Dennis, .					1896	39 90	
Dennis,				:	1897	39 90	
Dennis,					1898	39 90	
Dennis, .					1906	6,021 17	
Eastham (1s	st).				1905	1,754 88	
Falmouth,	,				1904	76 22	
Falmouth (2	2d).				1905	3.299 26	
Falmouth,					1906	2,908 56	
Harwich, .					1903	35 42	
Orleans, .					1900	59 13	
Orleans, .					1902	59 13	
Orleans, .					1904	1.074 16	
Orleans, .					1905	1 71	
Truro, .					1906	6,131 96	
Wellfleet.			·		1904	59 72	
Yarmouth (	north).	•	•		1894	34 25	
Yarmouth (	north).	•	•	•	1895	34 26	
Yarmouth (	1  st (not	·th).	•	•	1896	17 13	
Yarmouth (			÷		1896	17 13	
							\$23,252 26
	kshire C	ounty	1.				
Adams, .	•	•	•	•	1897	\$33 17	
Becket, .		•			1906	4,858 18	
Cheshire, .				•	1899	58 83	
Cheshire, .		•			1900	58 84	
Cheshire, .	•				1901	58 84	
Cheshire, .	•	•	•	•	1902	58 84	
Amount	s carried	l foru	vard,			\$5,126 70	\$23,252 26

CONSTRUCTION EXPENDITURES.

TOW	N OR C	ITY.		Year of Lay-out.	Amount.	Totals.
Amounts b	rought	forward	!, .		\$5,126 70	\$23,252 26
Clarksburg,				1905	1,025 06	
Dalton, .	•	• •	•	1906	3,443 24	
Great Barringt		• •	•	1895	504 15	
Great Barringt	on,	• •	•	1896	3,551 33	
Hancock, .	•	• •	•	1895	116 81	
Hancock, .	•	• •	•	1897	116 82	
Hancock, .	•	• •	•	1898	116 82	
Hancock, .	•	• •	•	1899	-116 82	
Hinsdale, .	•	• •	•	1901	12 29	
Hinsdale, .	•	• •	•	1902	12 28	
Hinsdale, .	•		•	1903	35 13	
Lee,	•		•	1895 - 6	2,703 21	
Lee, .	•	• •	•	1900	41 61	
Lee (south),	•		•	1906	102 59	
Lee (west),			•	1906	15 66	
Lenox, .				1899	21 47	
Lenox, .				1900	21 47	
Lenox, .				1904	499 89	
Lenox, .				1905	53 32	
Lenox, .				1906	88 98	
North Adams,				1894	53 25	
North Adams,				1896	53 25	
North Adams,				1897	53 25	
North Adams,				1900	53 25	
North Adams,				1901	53 25	
North Adams,				1902	53 25	
North Adams,	- <u>-</u>			1903	53 25	
Pittsfield, .				1894	94 24	
Pittsfield, .				1898	94 23	
Pittsfield, .				1901	94 23	
Pittsfield, .				1902	94 23	
Pittsfield, .				1904	23 93	
Pittsfield, .				1905	83 06	
Pittsfield, .				1906	3,860 47	
Richmond,				1897	22 33	
Richmond,				1898	22 33	
Richmond,				1899	22 33	
Richmond,				1901	22 33	
Richmond.				1902	22 33	
Richmond,				1903	22 33	
Richmond,				1904	22 33	
Richmond,				1905	171 96	
Richmond,				1906	2,562 86	
Stockbridge,				1905	87 87	
Stockbridge,				1906	44 54	1
Amounts of	carried	forward			\$25,466 33	<b>\$23,</b> 252 26

CONSTRUCTION EXPENDITURES - Continued.

C	ONSTE	RUCTI	ION	EXPE	NDITURES	— Continued.	
TOWN	OR C	ITY.			Year of Lay-out.	Amount.	Totals.
Amounts bro	ought	forw	ard,			\$25,466 32	\$23,252 26
Williamstown,					1895	24 27	
Williamstown,			•		1896	24 28	
Windsor, .	•	•	•	•	1906	19 02	07 599 00
Bristo	l Cou	nty.					25,533 90
Acushnet, .					1901	\$53 97	
Attleborough,					1901	4 57	
-Attleborough,					1903	119 18	
Berkley,					1906	4,572 59	
Dartmouth,					1901	27 15	
Dartmouth,					1905	2,577 46	
Dighton.					1905-6	3,986 73	
Dighton (bridge) Freetown, .	).				1906	2,164 52	
Freetown					1903	28 56	
Mansfield, .	•	•	•	•	1906	3,048 21	
North Attleboro	110h	•	•	•	1894	916 30	
Norton, .	ag,	•	•	•	1906	3,550 49	
Rehoboth,	•	•	•	•	1906	2,531 61	
Somerset, .	•	•	•	•	1900	937 91	
Swansea, .	•	•	•	•	1905	5,896 83	
	•	•	•	•			
Taunton, . Taunton (bridge		•	•	•	1905		
Westport	),	•	•	•	1906	2,164 52	
Westport, . Westport, .	•	•	•	•	$\begin{array}{c}1894\\1898\end{array}$	125 86 11 63	
	•	•	•	•	1050		33,183 13
Dukes	Cour	nty.			1005		
Chilmark, .	•	•	•	•	1905	\$172 60	
Chilmark, .	•	•	•		1906	3,138 43	
West Tisbury,	•	•	•	•	1904	3,355 55	0.000 50
Essex	Cour	ntu.					6,666 58
Andover, .					1897	\$17 32	
Andover, .					1899	60 04	
Andover, .					1900	17 31	
Andover, .					$1900 \\ 1902$	17 31	
Andover, .				•	1902		
Beverly (1st),			•	·	1905		
Beverly (2d),	•	•	•	•	1905		
Beverly, .	•	•	•	•	1905	6,968 81	
Gloucester,	•	•	•	•	$1900 \\ 1905 - 6$	4,994 57	
Groveland,	•	•	•	•	1905-0 1905		
Haverhill, .	•	•	•	•	1905		
Methuen, .	•	•	•	•		2,433 30	
Newbury, .	•	•	•	•	1906	2,433 30	
Rockport, .	•	•	•	•	1905	2,149 24	
reception, .	•	•	•	•	1906	227 02	
Amounts car	ried ;	forwa	ırd,			\$21,664 42	\$88,635 87

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CONSTRUCTION EXPENDITURES - Continued.

TOWN OR CITY.		Year of Lay-out.	Amount.	Totals.	
Amounts brought forward,	•		\$21,664 42	\$88,635 8	87
Salisbury,		1904	228 46		
Salisbury,		1905	$228 \ 46$		
Saugus,		1906	2,108 90		
West Newbury,		1904-5	5,455 36		
West Newbury,	•	1906	4,019 84	00 707	
Franklin County.				33,705 4	<del>1</del> 4
Buckland,		1906	\$6 00		
Colrain,		1905	587 31		
Deerfield,		1905	1,583 50		
Deerfield,		1906	3,207 79		
Erving,		1899-0	4,742 81		
Greenfield,		1905	111 95		
Greenfield,		1906	4,192 40		
Montague,		1898	11 90		
Montague,		1899	11 90		
Montague,		1906	4,724 82		
Orange,		1894	74 24		
Orange,		1895	74 24		
Orange,		1897	74 24		
Orange,		1905	96 70		
Sunderland,		1906	3,567 95		
Whately,		1905	1,586 08		
Whately,	•	1906	1,729 77	26,383 6	60
Hampden County.				20,303 (	UC
Agawam,		1904	\$618 53		
Agawam,		1906	4,737 39		
Chicopee,		1906	2,705 77		
East Longmeadow,		1906	4,509 31		
Monson,		1905	6 61		
Palmer,		1905	7,293 14		
Palmer,		1906	5 83		
Russell,		1895	1 54		
Westfield,		1899	37 05		
Westfield,		1900	37 06	1	
Westfield,		1901	37 06		
Westfield,		1902	37 06		
Westfield,		1894-5	2,323 92		
West Springfield,		1905-6	2,697 98		
Wilbraham,	•	1904	350 48	05 202 7	-76
Hampshire County.				25,398	1 č
Granby,		1906	\$5,379 22	-	
Hadley,		1895	3,568 91		
Amounts carried forward,			\$8,948 13	\$174,123	64

CONSTRUCTION EXPENDITURES — Continued.

	CONST		1014		NDITURES	- Commuea.	
TOWN OR CITY.					Year of Lay-out.	Amount.	Totals.
Amounts l	brough	t foru	vard,			\$8,948 13	\$174,123 64
Hatfield, .					1906	5,061 35	
Huntington,	•		•	•	1906	2,368 83	
Northampton	(1st),		•	•	1905	815 03	
Northampton		•	•	•	1905	1,727 92	
Northampton,		•	•	•	1906	627 61	1000
Southampton,	•	•	•	•	1905	201 30	
Ware, .	•	•	••	•	1903	342 69	
Middl	lesex C	aunti	,				20,092 86
Ashby, .	coer C	ounty			1894	\$19 85	
Ashby, .		÷			1895	19 86	
Ashby, .					1896	19 86	
Ashby, .					1897	19 86	
Ashby, .					1898	19 86	
Ashby, .					1899	19 86	
Ashby, .					1900	3,808 57	
Bedford, .					1906	4,859 41	
Boxborough,		• .			1905	3,963 49	
Burlington,		•			1905	2,272 10	
Burlington,					1906	4,595 76	
Chelmsford,					1898	67 97	
Concord, .		•		•	1905	4,839 02	
Concord (bridg	;e),	•	•		1905	66 08	
Concord, .	•	•	•	•	1906	5,949 75	
Dracut, .	•	•	•	•	1905-6	9,441 08	
Framingham,	•	•	•	•	1904	548 75	
Framingham,	•	•	•	•	1905	1,388 04	
Holliston, .	•	•	•	•••	1906	1,821 91	
Hudson, .	•	•	•	•	1906	4,486 22	
Lowell (south)	, .	•	•	•	1897		
Marlborough,	•	•	•	•	1904	35 96	
Melrose, .	•	•	•	•	1906	4,217 78	
Natick, . Natick, .	•	•	•	•	1901	79 04	
North Reading	·	•	•	•	$\frac{1903}{1897}$		
North Reading	, ·	•	•	•	1897 1898		
North Reading	, ·	•	•	•	1898	19 05	
North Reading	, ·	•	•	•	1901	$     19 05 \\     19 05 $	
	, ·	•	•	•	$1904 \\ 1899$		
Reading, . Reading, .	·	•	•	•	1899		
Reading (1st),	·	•	•	•	1902 1904	18 88	
Reading (2d),			•	•	1904 1904	446 01	
Stoneham,			•	:	1897	17 92	
Stoneham,			÷		1900	35 86	
Stoneham,					1901	17 93	
Amounts c	arried	forw	ard,	•	• •	\$53,290 11	\$194,216 50

CONSTRUCTION EXPENDITURES — Continued.

### HIGHWAY COMMISSION. [Pub. Doc.

TOWN	OR C	ITY.			Year of Lay-out.	Amount.	Totals.
Amounts bro	ought	forwar	rd,			\$53,290 11	\$194,216 50
Tewksbury,	. *				1905	1,885 18	
Tewksbury,					1906	5,759 57	
Townsend,					1896	$16 \ 65$	
Townsend,.				•	1897	43 48	
Townsend,.	•		•	•	1898	16 64	
Townsend (1st), Townsend (2d),		•	•	•	1900	16 64	
Townsend (2d),	•	•	•	•	1900	16 64	
Townsend,.	•	•	•	•	1901	16 64	
Townsend,.	• •	•	•	•	1902	16 64	
Townsend,.	•	•	•	•	1906	5 56	
Tyngsborough,	•	•	•	•	1895	$\begin{array}{c} 6 & 25 \\ 6 & 25 \end{array}$	
Tyngsborough,	•	•	•	•	1896	$6\ 25$	61 006 25
Norfol	k Cou	ntu					61,096 25
Bellingham,					1904	\$456 97	
Bellingham (1st)	• ).		:		1905	578 65	
Bellingham (2d)	,				1905	6,897 27	
Bellingham,					1906	7,463 39	
Canton, .					1905	4,293 85	
Canton, .					1906	5,585 $61$	
Dover, .					1905	2,956 24	
Foxborough,					1905	352 87	
Franklin, .					1905	$979 \ 78$	
Needham, .					1905	955 59	
Norfolk, .				•	1895	$63 \ 13$	
Norwood, .	•			•	1895	8 35	
Norwood, .	•	•	•	•	1896	8 34	
Norwood, .	•		•	•	1897	8 34	
Norwood, .	•	•	•	•	1899	8 34	
Stoughton,	•	•	•	•	1905	2,020 33 17 23	
Walpole, .	•	•	•	•	1894	$\begin{array}{ccc}17&23\\17&24\end{array}$	
Walpole, .	•	•	•	•	$\begin{array}{c}1895\\1897\end{array}$	$17 24 \\ 17 24$	
Walpole, . Walpole, .	•	•	•	•	1897	$17 24 \\ 17 24$	
	•	•	•	•	1900	$17 24 \\ 17 24$	
Walpole, . Wellesley, .	•	•	•	•	1901	2796	
Westwood,	•	•	•	•	1899	18 06	
Wrentham,	•	•	•	:	1897	3875	
Wrentham,	•	•	•		1898	38 75	
Wrentham,					1902	38  75	
,							32,885 51
Plymou	th Co	unty.			1000		
Bridgewater,	•				1906	\$4,600 16	
Duxbury, .	•	•			1905	533 87	
Hanover, .	•	•	•	•	1906	19 96	
Amounts ca	rried	forwa	rd,			\$5,153 99	\$288,198 26

CONSTRUCTION EXPENDITURES — Continued.

CONSTRUCTION EXPENDITURES — Continued.								
TOV	VN OR (	NTY.		Year of Lay-out.	Amount.	Totals.		
Amounts	brought	forward,		• •	\$5,153 99	\$288,198_26		
Kingston, .				1905-6	7,157 30			
Middleborough	1 (1st),			1906	5,245 44			
Middleborough	ı (2d),	• •	•	1906	161 20			
Pembroke,	•	• •	•	1905	688 05			
Rochester,	•	• •	•	1903				
Rockland,	•	• •	•	1905	963 93			
Rockland,	•	• •	•	1906	2,994 00.			
Scituate, .	•	• •	•	1906	2,617 28			
Wareham,	•	• •	•	$\begin{array}{c}1901\\1905\end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			
Wareham, Wareham (1st	· ·	• •	•	1905				
Wareham (1st) Wareham (2d)		• •	•	1906	5,778 70 947 76			
(2u)	, .	• •	•	1300		37,300 81		
	ester Co	unty.				01,000 01		
Athol, .				1895	\$21 33			
Athol, .			•	1896	21 33			
Athol, .				1903	97 05			
Auburn, .				1895	51 96			
Auburn, .	•			1896	51 97			
Auburn, .	•			1897	51 97			
Auburn, .	•	• •		1898	51 97			
Auburn, .	•		•	1899	51 97			
Auburn, .	•	• •		1901	51 97			
Auburn, .	•	• •		1903	761 56			
Auburn, .	•	• •	•	1904	103 94			
Blackstone,	•	• •	•	1905	182 75			
Brookfield,	•	• •	•	1897	25 17			
Brookfield,	•	• •	•	1898	25 17			
Brookfield,	•	• •	•	1900	25 18			
Brookfield,	•	• •	•	1902	25 18			
Brookfield,	•	• •	•	1903	50 36			
Brookfield,	•	• •	•	1905	319 94			
Charlton, .	•	• •	•	1905	258 36			
Charlton, .	•	• •	•	1906	3,900 73			
Douglas (1st),	•	• •	•	1904	163 17			
Douglas (2d),	•	• •	•	1904	22 96			
Douglas, . Fitchburg,	•	• •	•	1905	$2,655\ 88$			
Fitchburg,	•	• •	•	$\frac{1895}{1900}$	$122 \ 60 \\ 29 \ 92$			
Fitchburg,	•	• •	•	1900	29 92 29 93			
Fitchburg,	•	• •	•	1901	29 93			
Fitchburg,	•	• •	·	1903	29 93			
Gardner, .	·	• •	•	1904	52 59			
Gardner, .	•	• •	•	1897	52 59 52 60			
Gardner, .	:		·	1897-8	4,714 38			
			•	1001 0	1,011.00			
Amounts of	carried	forward,			\$14,033 75	\$325,499 07		

CONSTRUCTION EXPENDITURES - Continued.

## HIGHWAY COMMISSION. [Pub. Doc.

TOWN O	R CITY.			Year of Lay-out.	Amount.	Totals.
Amounts broug	ht fori	vard,		••••	\$14,033 75	<b>\$325,499</b> 07
Grafton,				1905	3,282 80	
Harvard,	•	•	•	1905	116 39	
Holden,	•	•	•	1905	1,966 51	
Holden,	•	•	•	1894-6	8,346 07	
Lancaster, .	•	•	•	1905	494 52	
Leicester,	•	•	•	1896	19 03	
Leicester,	•	•	•	1898	19 04	
Leicester,	•	•	. (	1899	19 04	
Leominster, .		•	•	1901-2	7,792 67	
Milford,			•	1904	566 59	
Milford,				1905	$328 \ 64$	
Millbury,				1906	$5,426\ 18$	
North Brookfield,				1905	3,397 02	
North Brookfield,				1906	7,215 95	
Oxford,			• -	1906	7,031 90	
Phillipston, .				1904	277 06	
Princeton, .				1897	$27 \ 49$	
Princeton, .				1900	27 50	
Princeton, .				1902	27 50	
Princeton, .				1903	27 50	
Rutland,				1904	456 93	
Shrewsbury, .				1896	39 57	
Shrewsbury, .				1897	39 57	
Spencer,				1899	18 34	
Spencer,				1900	36 70	
Spencer,				1906	8.091 10	
Sturbridge, .				1897	294 13	
Sturbridge, .	-			1905	$571 \ 16$	
Southborough, .				1905	9,219 98	
Sterling,				1905	1,978 08	
Sterling,		÷		1906	13 14	
Templeton, .				1899	11 53	
Templeton, .				1901	11 53	
Templeton, .		÷		1902	11 54	
Templeton, .	•			1903	11 54	
Templeton, .				1905	2,660 94	
Warren,	•	•	. •	1896	30 82	
Warren,				1897	30 83	
Warren,				1898	30 83	
Warren,				1899	30 83	
Warren,				1900	30 83	
Warren,				1901	30 83	
Westborough, .				1903	44 80	
Westborough,				1906	2,740 45	
West Brookfield,				1899	42 82	
Amounts carrie	d form	and			\$86,921 97	\$325,499 07

CONSTRUCTION EXPENDITURES - Continued.

TOWN OR CITY.				Year of Lay-out.	Amount.	Totals.	
Amounts b	roug	ht fori	vard,			\$86,921 97	\$325,499 07
West Brookfiel	d.				1900	42 81	
West Brookfiel	d,				1901	42 81	
West Brookfiel	d,				1905	1,240 91	
Westminster,	<i>.</i>				1894	8 29	
Westminster,					1895	8 29	
Westminster,					1896	8 28	
Westminster,					1897	8 28	
Westminster,					1898	8 28	
Westminster,					1899	8 28	
Worcester,					1905	1,134 31	
							89,432 51
Total,.							\$414,931 58

CONSTRUCTION EXPENDITURES — Concluded.

#### REPAIR AND MAINTENANCE EXPENDITURES.

#### [Under chapter 36 of the Acts of 1905 and chapter 36 of the Acts of 1906.]

	PAID FRO	M REVENUE.		m + 1	
TOWN OR CITY.	Chapter <b>36</b> , 1905.	Chapter 36, 1906.	Amount.	Totals.	
Barnstable County.					
Barnstable,	\$23 51	\$311 31	\$334 82		
Bourne,	5 54	145 51	151 05		
Brewster,	46 88	$416 \ 02$	462 90		
Chatham,	3 71	180 71	184 42		
Dennis,	25 52	384 65	410 17		
Eastham,	4 20	139 42	143 62		
Falmouth, .	1 30	475 16	476 46		
Harwich,	24 35	490 01	514 36		
Orleans,	32 83	173 96	206 79		
Provincetown,	0.51	141 91	141 91		
Sandwich,	9 51	$   \begin{array}{cccc}     27 & 60 \\     482 & 57   \end{array} $	$\begin{array}{c} 37 \hspace{0.1cm} 11 \\ 483 \hspace{0.1cm} 57 \end{array}$	-	
Truro, Wellfloot	22 00	$\begin{array}{c} 483 & 57 \\ 312 & 69 \end{array}$			
Wellfleet, Yarmouth (north), .	$22 \ 00$ $23 \ 36$	232 24	255 60		
Yarmouth (south),	$12 \ 97$	$346 \ 46$	359 43		
raimoutin (south),	12 51	010 10			
	\$235 68	\$4,261_22	\$4,496 90	\$4,496 90	
Berkshire County.	*	* -)	,	. ,	
Adams,	1	\$14 47	\$14 47		
Becket,	\$5 50	82 57	88 07		
Cheshire,	5 25	$274 \ 71$	279 96		
Clarksburg,	-	145 89	145 89		
Dalton,	62 03	$123 \ 04$	185 07		
Great Barrington, .	27 00	539 60	566 60		
Hancock,	58 75	423 81	482 56		
Hinsdale,		168 57	168 57		
Lee,	99 00	282 90	381 90		
Lenox,	78 37	330 96	409 33		
North Adams,	$107 \ 70 \\ 155 \ 84$	$\begin{array}{ccc} 735 & 49 \\ 638 & 40 \end{array}$	$\begin{array}{r} 843 \ 19 \\ 794 \ 24 \end{array}$		
Pittsfield,	$155 84 \\ 88 00$	209 55	297 55		
Richmond, Stockbridge,	16 50	209 55 21 15			
Williamstown	10 00	292 99	292 99		
Windsor,	98 91	29 57	128 48		
	\$802 85	\$4,313 67	\$5,116 52	5,116 52	
Bristol County.					
Acushnet,	\$5 37	\$2,550 76	\$2,556 13		
Attleborough,	24 00	69 84	93 84		
Dartmouth,	17 98	653 75	671 73		
Dighton,	10.90	25 74	2574		
Easton,	$\begin{array}{c} 16 & 36 \\ 2 & 00 \end{array}$	$   \begin{array}{cccc}     26 & 47 \\     24 & 55   \end{array} $	$\begin{array}{ccc} 42 & 83 \\ 26 & 55 \end{array}$		
Fairhaven,	$     \begin{array}{c}       2 & 00 \\       1 & 40     \end{array} $	$24 55 \\ 247 11$	$20 55 \\ 248 51$		
Freetown, Mansfield,	$1 40 \\ 1 00$	$247 11 \\ 29 76$	$     \begin{array}{c}       248 & 51 \\       30 & 76     \end{array} $		
manshelu,	1 00	2910			
Am'ts carried for'd,	\$68 11	\$3,627 98	\$3,696 09	\$9,613 42	
,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,, ,,					

### REPAIR AND MAINTENANCE EXPENDITURES — Continued.

	PAID FRO	M REVENUE.		Totals.	
TOWN OR CITY.	Chapter 36, 1905.	Chapter 36, 1906.	Amount.		
Am'ts brought for'd,	\$68 11	\$3,627 98	\$3,696 09	\$9,613 42	
North Attleborough, . Norton, Raynham, Rehoboth, Seekonk, Somerset, Swansea, Taunton, Westport,	$ \begin{array}{c} 105 25 \\ - \\ 1 10 \\ 27 85 \\ 70 42 \\ 25 \\ - \\ 138 70 \\ 71 06 \\ \end{array} $	$\begin{array}{c} 133 & 02 \\ 92 & 83 \\ 32 & 99 \\ 100 & 49 \\ 181 & 58 \\ 400 & 93 \\ 49 & 23 \\ 140 & 55 \\ 4,140 & 85 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
Dukes County. Chilmark, Cottage City, Edgartown, Tisbury, West Tisbury,	\$482 74 \$14 40 101 90 14 46 32 16 23 83	\$8,900 45 \$19 93 117 84 103 65 101 26 205 50	\$9,383 19 \$34 33 219 74 118 11 133 42 229 33	9,383 19	
Essex County. Amesbury, Andover, Beverly, Essex, Gloucester, Gloucester, Hamilton, Hawrence, Lawrence, Merrimac, Methuen, Newbury, Newbury, Newburyport, North Andover, . Salem, Salisbury, Saugus, Swampscott, Wenham, West Newbury,	\$186 75 \$35 98 64 35 595 58 3 00 108 25 3 00 4 75 2 00 - 90 66 3 00 35 7 30 19 35 - - 80 71 85 83 57 9 03	$\begin{array}{c} \$548 \ 18 \\ \$144 \ 56 \\ 572 \ 19 \\ 1,473 \ 56 \\ 16 \ 41 \\ 365 \ 42 \\ 260 \ 92 \\ 572 \ 16 \\ 78 \ 16 \\ 78 \ 16 \\ 141 \ 78 \\ 144 \ 29 \\ 165 \ 94 \\ 932 \ 13 \\ 134 \ 08 \\ 73 \ 72 \\ 31 \ 92 \\ 3 \ 35 \\ 35 \\ 116 \ 88 \\ 76 \ 52 \\ 349 \ 87 \\ 210 \ 37 \\ 266 \ 55 \\ 266 \ 55 \\ \end{array}$	3734 93 3180 54 636 54 2,069 14 19 41 473 67 263 92 575 16 82 91 80 16 141 78 234 95 168 94 932 48 141 38 93 07 31 92 3 35 116 88 157 23 350 72 293 94 275 58	734 93	
	\$1,114 73	\$6,209 29	\$7,324 02	7,324 02	
Am't carried for'd,				\$27,055 56	

REP.	AIR AND	MAINTENANCE	EXPENDITURES (	Continued.
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	PAID FRO	M REVENUE.			
TOWN OR CITY.	Chapter 36, 1905.	Chapter 36, 1906.	Amount.	Totals.	
Am't brought for'd,			• • •	\$27,055 56	
Franklin County.Ashfield,.Buckland,.Charlemont,.Colrain,.Deerfield,.Erving,.Greenfield,.Montague,.Northfield,.Orange,.Shelburne,.Sunderland,.Whately,.	\$3 00 44 23 31 75 19 88 8 00 2 00 25 25 70 - 1 00 14 98 - -	$\begin{array}{c} \$208 & 61 \\ 362 & 69 \\ 141 & 13 \\ 181 & 20 \\ 171 & 93 \\ 156 & 08 \\ 37 & 79 \\ 201 & 87 \\ 3 & 00 \\ 1,190 & 60 \\ 178 & 44 \\ 53 & 45 \\ 143 & 98 \\ \end{array}$	$\begin{array}{c} \$211 \ 61 \\ 406 \ 92 \\ 172 \ 88 \\ 201 \ 08 \\ 179 \ 93 \\ 158 \ 08 \\ 63 \ 04 \\ 202 \ 57 \\ 3 \ 00 \\ 1,191 \ 60 \\ 193 \ 42 \\ 53 \ 45 \\ 143 \ 98 \end{array}$		
Hampden County. Agawam, Brimfield, Chester, Chicopee, East Longmeadow, . Monson, Palmer, Russell, Wales, Westfield, West Springfield, .		3,030 77 68 03 110 76 221 33 771 98 13 31 39 27 234 62 349 19 40 17 332 51 6 96 328 37	3,181 56 68 03 132 68 232 83 1,071 59 13 31 40 27 245 89 349 19 41 17 375 16 6 96 329 62	3,181 56	
Hampshire County. Amherst, Belchertown, Easthampton, Goshen, Granby, Hadley, Hatfield, Huntington, Southampton, South Hadley, Ware, Williamsburg,	\$390 20 \$2 00 2 00 20 55 80 97 1 75 11 86 - 28 98 3 14 13 50 3 55 49 85 \$206 15	\$2,516 50 \$35 62 39 76 154 81 83 70 175 98 225 56 29 45 154 65 183 36 65 47 549 74 238 80 133 41 \$2,070 31	\$2,906 70 \$37 62 41 76 175 36 164 67 177 73 237 42 29 45 154 65 212 34 68 61 563 24 242 35 183 26 \$2,288 46	2,906 70	
Am't carried for'd,	\$206 15	\$2,070-31	\$2,288 46	\$35,432 28	
Ant i curried for d,	• • •	· · ·	· · ·	00,102 20	

REPAIR AND MAINTENANCE I	EXPENDITURES — Continued.
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1	PAID FRO	M REVENUE.		
TOWN OR CITY.	Chapter 36, 1905.	Chapter 36, 1906.	Amount.	Totals.
Am't brought for'd,	• • •		• • •	\$35,432 28
Middlesex County.				
Acton,	\$32 04	\$110 64	\$142 68	
Ashby,	2  00	380 31	382 31	
Ashland,	50	10 04	10 54	
Bedford,	4 10		15 36	
Boxborough,	20 84	125 33	146 17	
Burlington, Chelmsford,	$\begin{array}{c} 31 \hspace{0.1cm} 07 \\ 37 \hspace{0.1cm} 55 \end{array}$	$566 00 \\ 94 21$	597 07 131 76	
Concord,	37 33 8 20	$     \begin{array}{r}       94 21 \\       275 55     \end{array} $	$   \begin{array}{c}     131 70 \\     283 75   \end{array} $	
Dracut,	8 <u>2</u> 0	9 19	28375 9 19	
Framingham,	1 90		3 00	
Groton,	3 00	7 59	10 59	
Hudson,		1 98	1 98	
Lexington,	3 50	750 51	754 01	
Lincoln,	3 00	2,151 67	2,154 67	
Littleton,	3 00	197 74	200 74	
Lowell,	$19 \ 67$	3,270 08	3,289 75	
Marlborough,	$58 \ 15$	1,395 94	1,454 09	
Melrose,	-	1 02		
Natick,	2 75	228 06	230 81	
Newton,	1 00	72 10	73 10	
North Reading,	$\begin{array}{r} 4 & 67 \\ 83 & 68 \end{array}$	306 36	311 03	
Stoneham,	$     \begin{array}{c}                                     $	$\begin{array}{c} 430 \hspace{0.1cm} 19 \\ 364 \hspace{0.1cm} 11 \end{array}$	$513 87 \\ 385 21$	
Sudbury, .	43 56	447 26	490 82	
Tewksbury,	1 20	135 34	136 54	
Townsend,	$18$ $\overline{17}$	168 16	186 33	
Tyngsborough,	60	1,858 38	1,858 28	
Watertown,	1 10	201 61	202 71	
Wayland,	$189 \ 19$	172 73	361 92	
Westford,	-	273 28	273 28	
Weston,	$107 \ 73$	$186 \ 41$	294  14	
Winchester,	84 27	635 00	719 27	
Woburn,	30 55	629 85	660 40	
	\$818 09	\$15,469 00	\$16,287 09	16,287 09
Nantucket County.	0.01			
Nantucket,	\$27 00	\$316 55	\$343 55	343 55
Norfolk County.				
Bellingham, .	\$ 50	\$87 04	\$87 54	
Braintree,	$12 \ 00$	33 23	45 23	
Canton,	1 00	45	1 45	
Cohasset,	2 00	116 22	118 22	
Foxborough,	1 00	39 50	40 50	
Franklin,	75 67	1 89	77 56	
Am'ts carried for'd,	\$92 17	\$278 33	\$370 55	\$52,062 92

R	EPAIR	AND	MAINTENANCE	F	XPENDITURES -	C	lontinued	
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	PAID FRO	M REVENUE.			
TOWN OR CITY.	Chapter 36, 1905.	Chapter 36, 1906.	Amount.	Totals.	
Am'ts brought for'd, Holbrook, Milton, Needham, Norfolk, Norwood, Plainville, Randolph, Stoughton, Walpole, Wellesley, Westwood, Weymouth, Wrentham,	$\begin{array}{c} \$92 \ 17 \\ 1 \ 00 \\ 1 \ 00 \\ -21 \ 30 \\ 13 \ 25 \\ 2,461 \ 77 \\ 1 \ 00 \\ -218 \ 90 \\ 2 \ 00 \\ -41 \ 50 \\ \end{array}$	278 33 107 78 35 08 2 59 54 67 157 28 44 63 640 63 20 85 173 26 443 14 105 09 93 82 390 49 156 32	37050 10878 3608 259 7597 17053 4463 3,10240 2185 17326 66204 10709 9382 39049 19782	\$52,062 92	
Plymouth County.Abington,Bridgewater,.Brockton,Duxbury,.Hingham,Kingston,.Lakeville,.Marshfield,.Mattapoisett,.Middleborough,.Pembroke,.Plymouth,.Rockland,.Scituate,.Wareham,.West Bridgewater,.	\$2,853 89 \$26 78 2 00 89 76 4 60 1 00 1 98 69 75 10 10 2 00 - 16 28 - 1 89 57 74 85 77	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{c} \$5,557 \ 85\\ 170 \ 13\\ 21 \ 78\\ 301 \ 94\\ 159 \ 49\\ 264 \ 23\\ 2 \ 63\\ 149 \ 41\\ 324 \ 20\\ 141 \ 45\\ 54 \ 13\\ 206 \ 23\\ 36 \ 26\\ 271 \ 10\\ 1,331 \ 93\\ 11 \ 11\\ 160 \ 78\\ 253 \ 74\\ 119 \ 71\\ 138 \ 24\\ \end{array}$	5,557 85	
Suffolk County. Chelsea, Revere,	\$380 65 \$71 28	\$3,737 84 \$99 50 95 19	\$4,118 49 \$99 50 166 47	4,118 49	
Worcester County. Athol, Auburn,	\$71 28 \$2 00 19 40	\$194 69 \$392 33 281 09	\$265 97 \$394 33 300 49	265 97	
Am'ts carried for'd,	\$21 40	\$673 42	\$694 82	\$62,005 23	

	PAID FROM	REVENUE.		Totals.	
TOWN OR CITY.	Chapter 36, 1905.	Chapter 36, 1906.	Amount.		
Am'ts brought for'd,	\$21 40	\$673 42	\$694 82	\$62,005 23	
Barre,	6 18	55 12	61 30		
Blackstone,	$14 \ 45$	$65 \ 26$	79 71		
Brookfield,	22 17	225 59	247 76		
Charlton,	50 10	$145 \ 38$	$195 \ 48$		
Douglas,	50	$5\ 52$	6 02		
Dudley,	5 60	173 93	179 53		
Fitchburg,	4 15	193 15	197 30		
Gardner,	2 00	282 89	284 89		
Grafton,	10 46	71 37	81 83		
Hardwick,	289	78 25	81 14	4	
Harvard,	11 50	26 60	38 10	-	
Holden,	24  70	237 40	$262 \ 10$		
Lancaster,	50 57	4 13	54  70		
Leicester,	22 54	342  14	364 68		
Leominster,	-	84 23	84 23		
Lunenburg,	5 69	53 43	59 12		
Milford,		8 53	8 53		
Millbury,	13 41	90 36	103 77		
New Braintree, .	_	11 50	11 50		
North Brookfield,	3 00	48 05	51 05		
Northborough,	14 96	197 82	212 78		
Oxford,	_	2 04	2 04		
Paxton,	16 50	135 88	152 38		
Phillipston,	-	23 85	23 85		
Princeton,	44 88	5 00	49 88		
Rutland,	26 88	45 37	72 25		
Shrewsbury,	89 87	421 90	511 77		
Southborough,	2 85	25  14	27 99		
Southbridge,	255	4 74	7 29		
Spencer,	8 61	105 67	114 28		
Sterling,	2 40	13 94	$16 \ 34$		
Sturbridge,	91 03	8 94	99 97		
Sutton,	5 35	40 14	45  49		
Templeton,	-	139 09	139 09		
Uxbridge,	13 50	49 47	62 97		
Warren,	73 58	316 49	390 07		
Westborough,	2 25	$25 \ 06$	27 31		
West Boylston, .	10 01	82 32	92 33		
West Brookfield, .	26 50	205 80	232 30		
Westminster,	2 00	568 80	570 80		
Worcester,	60 38	317 93	378 31		
	\$765 41	\$5,611 64	\$6,377 05	6,377 05	
Total,				\$68,382 28	

#### EXPENDITURES UNDER "SMALL TOWN" ACTS.

#### [Revised Laws, Chapter 47, section 17.]

	evised La	iws, C	hapter	47, sec	ction 1	(.]		
Avon,								\$407 00
Ayer,								925 00
Berlin,								544 00
Berlin, Bernardston,								72 00
Bolton,								544 00
Carlisle,								26 26
Carlisle, Chesterfield,								20 00
Cummington (two con	ntracts),							1,019 00
Easton,	•							1,600 00
East Bridgewater, .								700 00
Enfield,								600 00
Florida (two contract	s),							920 00
Gill								577 00
Gill, Granville,								1,000 00
Hampden,								390 00
Hanson (two contract	s)							2,192 00
Heath,	~),•							325 00
Leyden (two contract	.s)		•			·		568 00
Longmeadow, .	~);	·	•			·	·	150 00
Maynard (two contra						•	•	1,811 89
Medway (two contrac		•				•	•	2,000 00
Middleton (two contract								1,436 00
Mendon (two contrac		•	•		•	•	•	658 40
Millis,		•	•		• •	•	•	25 00
Monterey,		•	·	•	·	•	·	344 00
Monroe (two contract			•	·	•	•	•	824 00
Mount Washington,	·>),	•	•	•	i.	•	·	425 00
New Ashford, .	•	•	•	·	•	•	•	240 00
New Asilioru, .	·	•			•	•	•	132 67
New Marlborough,		•	•	•	•	•	•	1,080 00
Norwell,	•	•	•	•	•	•	•	140 00
Petersham,	•	•	•	•	•	•	•	
Plympton,	•	•	•	•	·	•	•	50 00
Provincetown, .	•	•	•	•		•	•	1,257 56
	•	•	•	•	•	•		440 00
Sandisfield,	•	•	•	•	•	•	•	804 00
Savoy,		•	•	•	•	•	•	616 00
Sheffield (two contrac		•	•	•	•	•	•	2,064 00
Sherborn (two contra		•	•	•	•	•	•	894 00
Shutesbury,	•	•	•			•	•	344 00
Tyringham,		•	•	•	•	•	•	443 00
Warwick (two contra		•	•	•	•	•	•	1,439 00
Wendell,					•			776 00
Amount carried f	orward,	•	•				•	\$30,823 78

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Amount broug	ht f	orward,	•	•		•		•	\$30,823 78
Westhampton,									
West Stockbridge,	·	•	•	•	·	•	•	•	700 00
Total, .									\$31,999 78

EXPENDITURES UNDER CHAPTER 384, ACTS OF 1903.

# Lynn State Highway Construction.

Payments for work done under contracts at Lynn, . . \$29,723 38

EXPENDITURES UNDER CHAPTER 93, RESOLVES OF 1906.

Survey of Newburyport Turnpike.

Expenses in	conne	ection	with	survey	r of	Newbu	rypor	t turn	1-
pike,									

#### GENERAL EXPENSES.

#### For Month of December, 1905.

	[Under	Chapt	ter 36,	Acts o	f 1903	5.]			
Salaries of commissi	oners,					\$708	35		
Salaries of clerical as	sistants a	and fi	rst an	id seco	nd				
assistant engineers	з, .					1,089	00		
Rent of offices, .						989			
Postage,						5	00		
Steam road rollers, 1							66		
Miscellaneous items	, includi	ng o	ffice	suppli	les,				
express charges,	telegram	s and	l mir	ior off	ice				
expenses,	•					17	92		
								\$2,822	51
Automobile reg	istration	:							
Salaries of clerks and			tants			\$385	00		

		 ·			*000	••
Sign boards and supplies	·, ·				$^{2}$	60
Miscellaneous items,	• •	•	•	•		25

387 85

\$3,210 36

#### Jan. 1 to Nov. 30, 1906.

#### [Under Chapter 36, Acts of 1906.]

Salaries of commissioners,		•			\$7,791 65
Travel of commissioners,					2,178 24
Salaries of clerical assistants a	nd	first and	secor	nd	
assistant engineers, .					13,088 69
Rent of offices,					4,283 67
Amount carried forward,					\$27,342 25

\$7 54

Amount brought forward,	\$27,342	25	
Printing and binding annual report,	1,068	48	
Printing, including postal cards and envelopes, .			
Office and typewriter supplies,			
Telephone, including tolls,			
Postage,			
Recording land takings and easements,	143		
Advertising hearings,	2 456	30	
Miscellaneous items, including express charges,		00	
car fares, telegrams and other minor office			
expenses,	307	62	
			\$34,078 70
Automobile registration, etc. :			
Salaries of clerks and clerical assistants, .	\$5,978	21	
	2,246		
Badges for professional chauffeurs,			
	235		
Printing, including postal cards and envelopes, .	1,871	35	
Postage,	10		
Sign boards and supplies,	384	70	
	811		
Rent of offices,Advertising,			
Miscellaneous items, including express charges.			
Miscellaneous items, including express charges, telegrams, car fares, due stamps and other			
telegrams, car fares, due stamps and other		79	
		79	13,446 08
telegrams, car fares, due stamps and other		79	13,446 08
telegrams, car fares, due stamps and other		79	13,446 08 
telegrams, car fares, due stamps and other		79	
telegrams, car fares, due stamps and other			\$47,524 78
telegrams, car fares, due stamps and other minor office expenses,	145 		\$47,524 78
telegrams, car fares, due stamps and other minor office expenses,	145  ENCY AP 906.] . \$271	 PROF 50	\$47,524 78
telegrams, car fares, due stamps and other minor office expenses,	145  ENCY AP 906.] . \$271	 PROF 50	\$47,524 78
telegrams, car fares, due stamps and other minor office expenses,	145  ency Ap 906.] . \$271 . 137	ргор 50 41	\$47,524 78
telegrams, car fares, due stamps and other minor office expenses,	145  ency Ap 906.] . \$271 . 137	PROF 50 41 92	\$47,524 78
telegrams, car fares, due stamps and other minor office expenses,	145  906.] . \$271 . 137 . 18 . 52	PROF 50 41 92 97	\$47,524 78
telegrams, car fares, due stamps and other minor office expenses,	145  906.] . \$271 . 137 . 18 . 52 . 6	50 41 92 97 84	\$47,524 78
telegrams, car fares, due stamps and other minor office expenses,	145  906.] . \$271 . 137 . 18 . 52 . 6	PROF 50 41 92 97	\$47,524 78
telegrams, car fares, due stamps and other minor office expenses,	145  906.] . \$271 . 137 . 18 . 52 . 6	50 41 92 97 84	\$47,524 78
telegrams, car fares, due stamps and other minor office expenses,	145 ENCY AP 906.] . \$271 . 137 . 18 . 52 . 6 . 37	50 41 92 97 84 70	\$47,524 78
telegrams, car fares, due stamps and other minor office expenses,	145 ENCY AP 906.] . \$271 . 137 . 18 . 52 . 6 . 37 . 37 . \$43	50 41 92 97 84 70 80	\$47,524 78
telegrams, car fares, due stamps and other minor office expenses,	145 ENCY AP 906.] . \$271 . 137 . 18 . 52 . 6 . 37 \$43 . 20	50 41 92 97 84 70 80 00	\$47,524 78
telegrams, car fares, due stamps and other minor office expenses,	145 ENCY AP 906.] . \$271 . 137 . 18 . 52 . 6 . 37 \$43 . 20 . 56	50 41 92 97 84 70 80 00 25	\$47,524 78
telegrams, car fares, due stamps and other minor office expenses,	145 ENCY AP 906.] . \$271 . 137 . 18 . 52 . 6 . 37 \$43 . 20 . 56	50 41 92 97 84 70 80 00	\$47,524 78

EXPENDITURES.

Amounts brought forward,	•	•	•	\$307	55	\$525 34
Office supplies,				3	50	
Printing, including postal cards a	and en	velope	s, .	438	25	
Sign boards and supplies,				189	75	
Advertising,				6	40	
-						$945 \ 45$

### \$1,470 79

EXPENSES CONNECTED WITH	TEL	EPHON	IE ANI	) Te	LEGRA	рн 8	SUPERVISION.
Salary of commissioners,							\$1,875 00
Salaries of clerical assistants,	•						616 $66$
Printing,							80 26
Office supplies,	•	•	•	•	•	•	139 48
							\$2,711 40
Summa	RY O	F Ex	PENDIT	TURE	S		
For construction,							\$414,931 58
For road repair and mainten	ance,	•					68,382 28
For construction under "sma	all to	wn"a	.cts,				31,999 78
For construction under chap	ter 10	00, Ac	ts of 1	903,			29,723 38
For expenditures under chap	oter 9	3, Res	solves	of 19	06,		7 54
For general expenses, inclu	ıding	auto	mobile	e reg	istrati	on,	
chapter 36, Acts of 1905,					•		3,210 36
For general expenses, inclu	iding	auto	mobile	e reg	istrati	on,	
chapter 36, Acts of 1906,			• *				47,524 78
For expenditures under defic							1,470 79
For expenses in connection	with	telep	hone	and	telegra	ph	
supervision,							2,711 40

\$599,961 89

W. E. McCLINTOCK, HAROLD PARKER, JOHN H. MANNING, Massachusetts Highway Commission.

#### APPENDIX A.

### TABLE SHOWING THE HIGHWAYS LAID OUT OR CONTRACTED CONSTRUCTIONS,

[In the last column the capital letters have the following significance: A, trap; top course trap; E, limestone; F, gravel; G, gravel and four-inch macadam; N, unsurfaced; O, stone from Cohasset quarry.]

							ROAD LAID OUT.
	TOWN	OR	CITY.		Year.		From —
1	Abington,			1900–1–3,			Brockton line,
2	Abington,			1905, .			Holbrook line,
3	Acton, <sup>2</sup>			1899-1900	<b>—1</b> —2,		Concord line to Littleton line, .
4	Acton (wes	t),		1901, .			Boxborough line,
5	Acushnet,			1901-3, .			Rochester line via Long Plain to
6	Acushnet,			1897, .			Rochester line. 1,500 feet from New Bedford line,.
7	Adams,			1897, .			Cheshire line,
8	Agawam,			1903-4, .			South End bridge at Connecticut
9	Agawam,			1906, .			River. Southerly end of 1904 lay-out, .
10	Amesbury,			1899-1901	-3-4,		Merrimac line,
11	Amesbury,			1906, .			Salisbury line,
12	Amherst,			1901-4, .			Hadley line,
13	Andover,			1895-6, .			Lawrence line,
14	Andover,			1897-9-19	900-2-3,		North Reading line,
15	Ashby,			1894-5-6-	-78-9,		Fitchburg line to Ashby post-office.
16	Ashfield,			1897-8, .			One mile north of Ashfield post- office.
17	Ashland,			1903, .			Southborough line,
18	Athol, .	•		1895—6, .			Orange line,
19	Athol, .			1902-3, .			Phillipston line,
20	Attleborou	gh,		1900–1–3,			North Attleborough line,
21	Auburn,			1895-6-7-	-8-9-190	1-3-4, .	Worcester line to Oxford line, .
22	Barnstable	(no	rth),	1899-1902	2, .		Sandwich line,
23	Barnstable	(so	uth),	1897-1901	l, .		Yarmouth line,
24	Barnstable	(we	est),	1904, .			Marston Mills,
25	Barre, .	١.		1897-9-19	900-2,		Ware River bridge to Barre Com-
							mon.

<sup>1</sup> 1900 section.

<sup>5</sup> 1897-9-1900 sections.

<sup>2</sup> Exclusive of 1,100 feet at railroad crossing.

<sup>6</sup> 1901-3 sections.

## APPENDIX A.

FOR BY THE COMMISSION, AND THE NATURE OF THE SEVERAL TO DEC. 1, 1906.

B, local field stone; C, local ledge other than trap; D, bottom course field stone, H, screened gravel; K, clay and four-inch macadam; M, clay and screened gravel;

ROAD LAID OU	JT.	Length	1	Widths.		Material of	
Direction.	Length (Miles).	con- structed (Miles).	Location (Feet).	Macadam (Feet).	Shoulders (Feet).	Road Surface.	
Easterly,	1.73	1.74	5060	15	1 3	в.	1
Easterly,	.48	.48	4050	15	-	В.	2
Northwesterly, .	3.71	3.71	50-50+	16	\$ 3	A-G.	3
Southeasterly, .	.72	.72	50	15	-	А.	4
Westerly and	2.80	2.80	40	15	-	в.	5
northerly. Northerly, .	.61	.61	50+	15	3	В.	6
Northerly, .	.57	.57	- 50	15	3	А.	7
Southerly, .	1.15	1.15	50-60+	15	-	А.	8
Southerly, .	.64	.64	50±	15	-	А.	9
Easterly,	2.24	2.24	505560	15	4 3	в.	10
Westerly,	.41	-	60-60+	15	-	C.	11
Northeasterly, .	.97	.97	50	15	-	А.	12
Southerly, .	1.22	1.22	66	18	. 3	D.	13
Northerly, .	2.98	2.98	60	15	5 3	B-C.	14
Northerly, .	3.58	3.58	50-66	20-18-15	53	в.	15
Northerly, .	1.61	1.61	50-70	-	-	H.	16-
Easterly,	1.47	1.47	50+	-	-	F.	17
Easterly,	1.61	1.61	50	. 17	3	A-D.	18
Northwesterly, .	1.49	1.02	50	- 15	-	в.	19
Southwesterly, .	2.66	2.66	66	<sup>6</sup> 18	-	A-F-G.	20
Southwesterly, .	5.26	5.26	50-50+	15-18	73	A-B-G.	21
Southeasterly, .	2.14	2.00	40-50	15	-	1899 B, 1902-	22
Westerly,	2.26	2.26	40-62	12-15-18	8 3	B-G. B.	23
Southerly, .	1.48	1.48	40	15	-	B.	24
Northwesterly, .	2.89	2.89	49.5-50+	15	۶ <u>ع</u>	A, 1902 B.	25

<sup>3</sup> 1899-1900 sections.

<sup>7</sup> 1895-6-7-8-9 sections.

4 1899 section.

<sup>8</sup> 1897 section.

InterfaceIsonesIsonesInterface16Bourne, 41897-8-1904,Cohasset Narrows, .17Bourne, 41903-5,Back River bridge, .18Boxborough,1897-9-1905,Acton line,19Braintree,1900-2,Quincy line,20Brewster,1895-6-7-1901, .Dennis line to Orleans line,21Bridgewater,1904-5, .Northerly end of 1905 lay-out,22Bridgewater,1897-9,Northerly end of 1905 lay-out,23Brinfield,1897-8, .Norson line,24Brinfield,1897-8,Wales line,25Brockton,1901-2,Wales line,26Brockton,1901-2,Abington line,27Brockton,1904,Kest Bridgewater line,28Brockton,1904,West Bridgewater line,29Brockfield,1905,Spencer line,29Brockfield,1897-8, 1900-4, .Brockfield village,31Buckland,1894-5-6-7-8-9-1900-3, .Shelburne Falls station,32Burlington,1903-4-5,Woburn line, .<	-			ROAD LAID OUT.
2       Becket,       .       1906,       .       Westerly end of 1905 lay-out,         3       Bedford,       .       1897-1902,       .       Lexington line,       .         4       Bedford,       .       1906,       .       Near Carlisle bridge,       .         5       Bedford,       .       1906,       .       Near Carlisle bridge,       .         6       Belchertown,       .       1902-5.       .       Noar depot,       .         7       Bellingham,       .       1904-5.       .       Wendon line,       .         9       Bellingham,       .       1906,       .       Lakeville line,       .         10       Berkley,       .       1906,       .       Lakeville line,       .         11       Beverly,       .       1905,       .       Manchester line,       .         12       Beverly,       .       1905,       .       Bellingham line to Woonsocke         14       Blackstone,       .       1907,       Bellingham line to Woonsocke       .         15       Backstone,       .       1905,       .       Bellingham line to Woonsocke         16       Bourne, <td< td=""><td></td><td>TOWN OR CITY.</td><td>Year.</td><td>From —</td></td<>		TOWN OR CITY.	Year.	From —
Jack Stress         Jask Stress         Jask Stress         Jask Stress           4         Bedford,         .         J903,         .         Carisle bridge,         .           5         Bedford,         .         J906,         .         Near Carlisle bridge,         .           6         Belentown,         .         J906,         .         Near depot,         .           7         Bellingham,         .         J902-5,         .         900 feet from Blackstone line,           8         Bellingham,         .         J906,         .         Franklin line,         .           9         Bellingham,         .         J906,         .         Lakeville line,         .           10         Berkley,         .         J905,         .         Mendon line,         .           11         Beverly,         .         J905,         .         Manchester line,         .           12         Beverly,         .         J906,         .         Connecting 1905 lay-outs,         .           13         Backstone,         .         J907-8-1004,         Cohaset Narrows,         .           14         Blackstone,         .         J907-8-1004,         Dennis	1	Becket,	1902-4-5,	Chester line,
Bedford,         1003,         Carlisle bridge,           5         Bedford,         1006,         Near Carlisle bridge,           6         Belchertown,         1900–1-2,         Near depot,           7         Bellingham,         1902–5,         Near depot,           8         Bellingham,         1904–5,         Franklin line,         .           9         Bellingham,         1906,         Handon line,         .           10         Berkley,         1906,         Handon line,         .           11         Beverly,         1906,         Handon line,         .           12         Beverly,         1906,         Manchester line,         .           13         Beverly,         1906,         Connecting 1905 lay-outs,           14         Blackstone,         1905,         Uxbridge line,         .           15         Blackstone,         1905,         Uxbridge line,         .           16         Bourne,         1905,         Back River bridge,         .           17         Bourne,         1907–2,         Bellingham line to Woonsockee line,           18         Boxborough,         1907–2,         Quincy line,         .           19	2	Becket,	1906,	Westerly end of 1905 lay-out, .
5       Bedford,       1906,       Near Carlisle bridge,         6       Belchertown,       1900–1-2,       Near depot,       Near depot,         7       Bellingham,       1902–5,       900 feet from Blackstone line,         8       Bellingham,       1904–5,       Franklin line,       .         9       Bellingham,       1906,       Handon line,       .         10       Berkley,       1906,       Lakeville line,       .         11       Beverly,       1905,       Manchester line,       .         12       Beverly,       1906,       Onnecting 1905 lay-outs,         13       Beverly,       1906,       Onnecting 1905 lay-outs,         14       Blackstone,       1905,       Uxbridge line,       .         15       Blackstone,       1905,       Uxbridge line,       .         16       Bourne,       1905,       Bolingham line to Woonsocke line,         17       Bourne,       1905,       Back River bridge,       .         18       Boxborough,       1907–2,       Quincy line,       .         19       Braintree,       1900–2,       Quincy line,       .         19       Braintree,       1904–5, <td< td=""><td>3</td><td>Bedford,</td><td>1897-1902,</td><td>Lexington line,</td></td<>	3	Bedford,	1897-1902,	Lexington line,
Belchertown,       1900-1-2,       Near depot,         7       Bellingham,       1902-5,       900 feet from Blackstone line,         8       Bellingham,       1904-5,       Franklin line,       .         9       Bellingham,       1906,       Mendon line,       .         10       Berkley,       1906,       Mendon line,       .         11       Beverly,       1905,       Manchester line,       .         12       Beverly,       1906,       Connecting 1905 lay-outs,       .         13       Beverly,       1906,       Connecting 1905 lay-outs,       .         14       Blackstone,       1905,       Connecting 1905 lay-outs,       .         15       Blackstone,       1905,       Bellingham line to Woonsocke line,       .         16       Bourne,       1907-5,       Beck River bridge,       .         17       Bourne,       1903-5,       Acton line,       .         18       Boxborough,       1909-2,       Quincy line,       .         19       Braintree,       1900-2,       Quincy line,       .         10       Braintree,       1900-2,       Quincy line,       .         12       Bridgewater, <td>4</td> <td>Bedford,</td> <td>1903,</td> <td>Carlisle bridge,</td>	4	Bedford,	1903,	Carlisle bridge,
7       Bellingham,       1902-5,       900 feet from Blackstone line,         8       Bellingham,       1904-5,       Franklin line,       .         9       Bellingham,       1906,       Mendon line,       .         10       Berkley,       .       1906,       Lakeville line,       .         11       Beverly,       .       1905,       Manchester line,       .         12       Beverly,       .       1905,       Manchester line,       .         13       Beverly,       .       1905,       Wenham line,       .         14       Blackstone,       .       1905,       Wenham line,       .         15       Blackstone,       .       1905,       Wohnstone,       .         15       Blackstone,       .       1905,       Wohnstone,       .         16       Bourne,       .       1907-2,       Wohnstone,       .         17       Bourne,       .       1907-2,       Acton line,       .         18       Boxborough,       .       1907-2,       Quiney line,       .         19       Braintree,       .       1900-2,       Pouns line to Orleans line,       . <t< td=""><td>5</td><td>Bedford,</td><td>1906,</td><td>Near Carlisle bridge,</td></t<>	5	Bedford,	1906,	Near Carlisle bridge,
Bellingham,       1904-5,       Franklin line,         9       Bellingham,       1906,       Mendon line,	6	Belchertown,	1900-1-2,	Near depot,
9       Bellingham, 1906,       Mendon line,         10       Berkley, 1906,       Lakeville line,         11       Beverly,	7	Bellingham,	1902–5,	900 feet from Blackstone line, .
10       Berkley,       .       1906,       Lakeville line,       .         11       Beverly,       .       1895-7-8,       Wenham line,       .         12       Beverly,       .       1906,       Manchester line,       .         13       Beverly,       .       1906,       Onnecting 1905 lay-outs,       .         14       Blackstone,       .       1899-1900-2,       .       Uxbridge line,       .         15       Blackstone,       .       1905,       .       Bellingham line to Woonsocke line,         16       Bourne,       .       1905,       .       Bellingham line,       .         17       Bourne, 4       .       1903-5,       .       Back River bridge,       .         18       Boxborough,       .       1903-5,       .       Acton line,       .         19       Braintree,       .       1900-2,       .       Quiney line,       .         20       Brewster,       .       1904-5,       .       Northerly end of 1905 lay-out,         21       Bridgewater,       .       1906,       .       Monson line,       .         22       Bridgewater,       .       1907-2,	8	Bellingham,	1904-5,	Franklin line,
11       Beverly,       .       1895-7-8,       .       Wenham line,       .         12       Beverly,       .       1905,       .       Manchester line,       .         13       Beverly,       .       1906,       .       Connecting 1905 lay-outs,       .         14       Blackstone,       .       1899-1900-2,       Uxbridge line,       .       .         15       Blackstone,       .       1905,       .       Bellingham line to Woonsocke line,         16       Bourne,       .       1903-5,       .       Bellingham line,       .         17       Bourne, 4       .       1903-5,       .       Back River bridge,       .         18       Boxborough,       .       1897-9-1905,       .       Acton line,       .       .         19       Braintree,       .       1900-2,       .       Quincy line,       .       .         20       Brewster,       .       1895-6-7-1901,       Dennis line to Orleans line,       .         21       Bridgewater,       .       1906,       .       Northerly end of 1905 lay-out,         22       Bridgewater,       .       1897-8-9,       .       Easton line,	9	Bellingham,	1906,	Mendon line,
12       Beverly,       .       1905,       .       Manchester line,       .         13       Beverly,       .       1906,       .       Connecting 1905 lay-outs,       .         14       Blackstone,       .       1899-1900-2,       Uxbridge line,       .       .         15       Blackstone,       .       1905,       .       Bellingham line to Woonsocke line,         16       Bourne,       .       1897-8-1904,       Cohasset Narrows,       .         17       Bourne, 4       .       1903-5,       Back River bridge,       .         18       Boxborough,       .       1897-9-1905,       Acton line,       .       .         19       Braintree,       .       1900-2,       Quincy line,       .       .         20       Brewster,       .       1895-6-7-1901,       Dennis line to Orleans line,       .         21       Bridgewater,       .       1904-5,       .       Northerly end of 1905 lay-out,         22       Bridgewater,       .       1906,       .       Northerly end of 1905 lay-out,         23       Brimfield,       .       1897-8-9,       Easton line,       .         24       Brinfield,	10	Berkley,	1906,	Lakeville line,
13       Beverly,       .       1906,       .       Connecting 1905 lay-outs,         14       Blackstone,       .       1899-1900-2,       Uxbridge line,       .         15       Blackstone,       .       1905,       Bellingham line to Woonsocke line,         16       Bourne,       .       1897-8-1904,       Bellingham line to Woonsocke line,         16       Bourne, 4       .       1903-5,       Back River bridge,       .         17       Bourne, 4       .       1903-5,       Acton line,       .       .         18       Boxborough,       .       1897-9-1905,       Acton line,       .       .         19       Braintree,       .       1900-2,       .       Quincy line,       .       .         20       Brewster,       .       1895-6-7-1901,       Dennis line to Orleans line,       .       .         21       Bridgewater,       .       1904-5,       .       Northerly end of 1905 lay-out,         22       Bridgewater,       .       1904-5,       .       Norscherly end of 1905 lay-out,         23       Brimfield,       .       1897-9,       .       Easton line,       .         24       Brimfield,	11	Beverly,	1895-7-8,	Wenham line,
14       Blackstone,       1899-1900-2,       Uxbridge line,         15       Blackstone,       1905,       Bellingham line to Woonsocke line.         16       Bourne,       1897-8-1904,       Cohasset Narrows,	12	Beverly,	1905,	Manchester line,
15       Blackstone,	13	Beverly,	1906,	Connecting 1905 lay-outs,
16       Bourne,       .       1897-8-1904,       .       Cohasset Narrows,       .         17       Bourne, 4       .       .       1903-5,       .       Back River bridge,       .         18       Boxborough,       .       .       1897-9-1905,       .       Acton line,       .       .         19       Braintree,       .       .       1900-2,       .       Quincy line,       .       .         20       Brewster,       .       .       1895-6-7-1901,       .       Dennis line to Orleans line,         21       Bridgewater,       .       .       1904-5,       .       Near Middleborough line,       .         22       Bridgewater,       .       .       1904-5,       .       Northerly end of 1905 lay-out,         23       Brimfield,       .       .       1904-5,       .       Monson line,       .       .         24       Brimfield,       .       .       1901-2,       .       Wales line,       .       .         25       Brockton,       .       .       1901-2,       .       Easton line,       .       .         26       Brockton,       .       1900,       .	14	Blackstone,	1899–1900–2,	Uxbridge line,
16       Bourne,       1897-8-1904,       Cohasset Narrows,       1         17       Bourne, 4       1903-5,       Back River bridge,       1         18       Boxborough,       1897-9-1905,       Acton line,       1         19       Braintree,       1900-2,       Quincy line,       1         20       Brewster,       1895-6-7-1901,       Dennis line to Orleans line,         21       Bridgewater,       1904-5,       Northerly end of 1905 lay-out,         22       Bridgewater,       1906,       Northerly end of 1905 lay-out,         23       Brimfield,       1901-2,       Northerly end of 1905 lay-out,         24       Brimfield,       1901-2,       Katon line,       1         25       Brockton,       1901-2,       Katon line,       1         26       Brockton,       1900,       Easton line,       1         27       Brockton,       1900,       Katon       Kest Bridgewater line,       1         28       Brookfield,       1902-3,       Kest Brookfield line,       1       1         29       Brookfield,       1905,       Brookfield line,       1       1         30       Brookfield,       1897-8, 1900-4,       Brookfiel	15	Blackstone,	1905,	
18       Boxborough,       .       1897-9-1905,       .       Acton line,       .         19       Braintree,       .       1900-2,       .       Quincy line,       .         20       Brewster,       .       1895-6-7-1901,       Dennis line to Orleans line,         21       Bridgewater,       .       1904-5,       Northerly end of 1905 lay-out,         22       Bridgewater,       .       1906,       Northerly end of 1905 lay-out,         23       Brimfield,       .       1901-2,       Northerly end of 1905 lay-out,         24       Brimfield,       .       1901-2,       Northerly end of 1905 lay-out,         25       Brockton,       .       1901-2,       Brockton line,       .         26       Brockton,       .       1900,       Brockton,       .         27       Brockton,       .       1904,       Brockton,       .         28       Brockfield,       .       1905,       Spencer line,       .         29       Brockfield,       .       1905,       Spencer line,       .       .         30       Brockfield,       .       1897-8, 1900-4,       Brockfield village,       .       .         31	16	Bourne,	1897-8-1904,	
19       Braintree,       .       1900-2,       .       Quincy line,       .       .         20       Brewster,       .       .       1895-6-7-1901,       .       Dennis line to Orleans line,         21       Bridgewater,       .       .       1904-5,       .       Near Middleborough line,       .         22       Bridgewater,       .       .       1906,       .       .       Northerly end of 1905 lay-out,       .         23       Brimfield,       .       .       1897-9,       .       .       Monson line,       .       .         24       Brimfield,       .       .       1897-8,-9,       .       .       Baston line,       .       .         25       Brockton,       .       .       1897-8,-9,       .       .       Baston line,       .       .       .         26       Brockton,       .       .       1900,       .       .       Abington line,       .	17	Bourne, <sup>4</sup>	1903-5,	Back River bridge,
20Brewster,1895-6-7-1901,.Dennis line to Orleans line,21Bridgewater,1904-5,Near Middleborough line,.22Bridgewater,1906,Northerly end of 1905 lay-out,23Brimfield,1897-9,Monson line,24Brimfield,1897-8-9,Easton line,25Brockton,1897-8-9,Easton line,26Brockton,1900,Abington line,27Brockton,1904,West Bridgewater line,28Brookfield,1902-3,West Brookfield line,29Brookfield,1905,Brookfield line,30Brookfield,1897-8, 1900-4,.Brookfield village,31Buckland,1894-56-7-89-91900-3,Shelburne Falls station,.32Burlington,1906,Northwesterly end of 1905 lay-out33Burlington,1906,Stoughton line,.34Canton,1906,Northerly end of 1905 lay-out,<	18	Boxborough,	1897-9-1905,	Acton line,
1       Bridgewater,       .       1904-5, .       .       Near Middleborough line, .         22       Bridgewater,       .       .       1906, .       .       Northerly end of 1905 lay-out, .         23       Brimfield, .       .       .       1897-9, .       .       Monson line, .       .         24       Brimfield, .       .       .       1901-2, .       .       Wales line, .       .         25       Brockton, .       .       .       1897-8-9, .       .       Easton line, .       .         26       Brockton, .       .       .       1897-8-9, .       .       Baston line, .       .         27       Brockton, .       .       .       1890, .       .       .       Abington line, .       .         28       Brockton, .       .       .       1902-3, .       .       .       West Bridgewater line, .       .         29       Brockfield, .       .       .       1905, .       .       .       Brockfiel village, .       .         30       Brokfield, .       .       .       1897-8-1900-4, .       Brockfiel village, .       .       .         31       Buckland, .       .       .       18	19	Braintree,	1900-2,	Quincy line,
22       Bridgewater,       .       1906, .       .       Northerly end of 1905 lay-out,         23       Brinfield, .       .       1897-9, .       .       Monson line, .       .         24       Brimfield, .       .       1901-2, .       .       Wales line, .       .         25       Brockton, .       .       1897-8-9, .       .       Easton line, .       .         26       Brockton, .       .       1897-8-9, .       .       Easton line, .       .         26       Brockton, .       .       1900, .       .       Abington line, .       .         27       Brockton, .       .       1902-3, .       .       West Bridgewater line, .       .         28       Brockfield, .       .       1902-3, .       .       Spencer line, .       .         29       Brockfield, .       .       1905, .       .       Spencer line, .       .         30       Brockfield, .       .       1897-8, 1900-4, .       Brookfield village, .       .         31       Buckland, .       .       1894-5-6-7-8-9-1900-3, .       Shelburne Falls station, .       .         32       Burlington, .       .       1903-4-5, .       .       Woburn lin	20	Brewster,	1895-6-7-1901,	Dennis line to Orleans line, .
23       Brimfield,       1897-9,       Monson line,         24       Brimfield,       1901-2,       Wales line,         25       Brockton,       1897-8,       Easton line,	21	Bridgewater,	1904-5,	Near Middleborough line,
24       Brimfield,       1901-2,       Wales line,         25       Brockton,       1897-8-9,       Easton line,         26       Brockton,       1900,       Abington line,	22	Bridgewater,	1906,	Northerly end of 1905 lay-out, .
25       Brockton, .       .       1897-8-9, .       .       Easton line, .       .         26       Brockton, .       .       1900, .       .       Abington line, .       .         27       Brockton, .       .       1904, .       .       .       West Bridgewater line, .       .         28       Brockfield, .       .       1902-3, .       .       .       West Brockfield line, .       .         29       Brockfield, .       .       1905, .       .       .       Brockfield village, .       .         30       Brockfield, .       .       1897-8, 1900-4, .       .       Brockfield village, .       .         31       Buckland, .       .       1894-56-7-8-9-1900-3, .       Shelburne Falls station, .       .         32       Burlington, .       .       1905, .       .       .       Woburn line, .       .         33       Burlington, .       .       1906, .       .       .       Northwesterly end of 1905 lay-out         34       Canton, .       .       1906, .       .       .       Northerly end of 1905 lay-out	23	Brimfield,	1897-9,	Monson line,
26       Brockton, .       .       1900, .       .       .       Abington line, .       .         27       Brockton, .       .       1904, .       .       .       West Bridgewater line, .       .         28       Brockfield, .       .       1902-3, .       .       .       West Brockfield line, .       .         29       Brockfield, .       .       1905, .       .       .       Brockfield village, .       .         30       Brockfield, .       .       1897-8, 1900-4, .       .       Brockfield village, .       .         31       Buckland, .       .       1894-56-7-8-9-1900-3, .       Shelburne Falls station, .       .         32       Burlington, .       .       1903-4-5, .       .       Woburn line, .       .         33       Burlington, .       .       1906, .       .       .       Northwesterly end of 1905 lay-out         34       Canton, .       .       1906, .       .       .       Northerly end of 1905 lay-out, .	24	Brimfield,	1901-2,	Wales line,
27Brockton,1904,West Bridgewater line,28Brockfield,1902-3,West Brookfield line,29Brookfield,1905,Spencer line,30Brookfield,1897-8, 1900-4,Brookfield village,31Buckland,1894-5-6-7-8-9-1900-3, .Shelburne Falls station,32Burlington,1903-4-5,Woburn line,33Burlington,1906,Northwesterly end of 1905 lay-out34Canton,	25	Brockton,	1897-8-9,	Easton line,
28       Brookfield, .       .       1902-3, .       .       West Brookfield line, .       .         29       Brookfield, .       .       1905, .       .       Spencer line, .       .         30       Brookfield, .       .       1897-8, 1900-4, .       Brookfield village, .       .         31       Buckland, .       .       1894-5-6-7-8-9-1900-3, .       Shelburne Falls station, .       .         32       Burlington, .       .       1903-4-5, .       .       Woburn line, .       .         33       Burlington, .       .       1906, .       .       Northwesterly end of 1905 lay-out         34       Canton, .       .       1906, .       .       Northerly end of 1905 lay-out,	26	Brockton,	1900,	Abington line,
29       Brookfield, .       .       1905, .       .       Spencer line, .       .         30       Brookfield, .       .       1897-8, 1900-4, .       .       Brookfield village, .       .         31       Buckland, .       .       1894-5-6-7-8-9-1900-3, .       Shelburne Falls station, .       .         32       Burlington, .       .       1903-4-5, .       .       .       Woburn line, .       .         33       Burlington, .       .       1906, .       .       .       Northwesterly end of 1905 lay-out         34       Canton, .       .       1906, .       .       .       Stoughton line, .       .         35       Canton, .       .       1906, .       .       .       Northerly end of 1905 lay-out, .	27	Brockton,	1904,	West Bridgewater line,
30       Brookfield,       1897-8, 1900-4,       Brookfield village,	28	Brookfield,	1902–3,	West Brookfield line,
31       Buckland,       1894-5-6-7-8-9-1900-3.       Shelburne Falls station,         32       Burlington,       1903-4-5,       Woburn line,         33       Burlington,       1906,       Northwesterly end of 1905 lay-out         34       Canton,       1905,       Stoughton line,         35       Canton,       1906,       Northerly end of 1905 lay-out,	29	Brookfield,	1905,	Spencer line,
32       Burlington, .       .       1903-4-5, .       .       Woburn line, .       .         33       Burlington, .       .       1906, .       .       .       Northwesterly end of 1905 lay-out         34       Canton, .       .       1905, .       .       .       Stoughton line, .       .         35       Canton, .       .       1906, .       .       .       Northerly end of 1905 lay-out, .	30	Brookfield,	1897-8, 1900-4,	Brookfield village,
33       Burlington,       1906,       Northwesterly end of 1905 lay-out         34       Canton,       1905,       Stoughton line,         35       Canton,       1906,       Northerly end of 1905 lay-out, .	31	Buckland,	1894-5-6-7-8-9-1900-3, .	Shelburne Falls station,
34       Canton,       .       .       1905,       .       .       Stoughton line,       .       .         35       Canton,       .       .       1906,       .       .       Northerly end of 1905 lay-out,	32	Burlington,	1903-4-5,	Woburn line,
35 Canton, 1906, Northerly end of 1905 lay-out,	33	Burlington,	1906,	Northwesterly end of 1905 lay-out,
	34	Canton,	1905,	Stoughton line,
36 Charlemont, 1897-8-9, Deerfield River bridge.	35	Canton,	1906,	Northerly end of 1905 lay-out, .
	36	Charlemont,	1897-8-9,	Deerfield River bridge,

### TABLE SHOWING THE HIGHWAYS LAID OUT OR

<sup>1</sup> 1897 section.

CONTRACTED	FOR	BY	THE	COMMISSION,	ETC.	- Continued.
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ROAD LAID OU	JT.	Length	1	Widths.			T
Direction.	Length (Miles).	con- structed (Miles).	Location (Feet).	Macadam (Feet).	Shoulders (Feet).	Material of Road Surface.	
Westerly, .	1.61	1.61	50	12	_	A, 1904–5 N.	1
Westerly,	.44	.30	50	-	-	N.	2
Northwesterly, .	1.07	1.07	50-60	15	1 3	В.	3
Southerly, .	.04	.04	50	-	-	N.	4
Southeasterly, .	.53	.53	50	15	-	А.	5
Westerly, .	1.37	1.37	50	15	-	A-G.	6
Northeasterly, .	1.11	1.11	35-50	15	-	В.	7
Westerly, .	1.71	1.71	50-66-50±	15	_	В.	8
Easterly,	.92	.92	45±	15	_	В	9
Northwesterly, .	.77	.77	40	15	-	В,	10
Southerly, .	2.01	2.01	50-60	18	3	1895–7 A,	11
Southwesterly, .	2.90	2.90	27-60	15-18	_	1898 C. A.	12
_	.77	.77	30-65	18	_	C.	13
Southeasterly, .	1.74	1.74	49.5-50+	15	2 3	A-G;	14
Southwesterly, .	.06	.06	42-46	15	_	В.	15
Easterly,	2.09	2.09	40-45+	15	. 3 3	в-С-О.	16
Southerly,	2.10	2.10	$60 \pm -60$	15	_	1903 B-G,	17
Westerly,	2.45	2.45	50-60	15	3-4	1905 B. B-F.	18
Southeasterly, .	1.06	1.06	66	18	3	A.	19
Easterly,	7.79	7.79	40-50-50+	15	3	В.	20
Northerly,	2.06	2.06	50-50+	15	_	В.	21
Northwesterly, .	.63	.63	45-50	15	_	в.	22
Southerly,	2.34	2.34	60-50	_	_	1897 H, 1899	23
Northerly,	1.63	1.63	50	_	_	F. F.	24
Easterly,	1.87	1.87	33	16	8.5	в.	25
Westerly,	.66	.66	50	15	3	В.	26
Northerly,	.66	.66	50-60	15	_	В.	27
Easterly,	.87	.87	50+-88-100	15	_	A-G.	28
Westerly,	.39	.39	55-60	15	_	B.	29
Easterly,	2.24	2.24	50	15	3 3	А.	30
Westerly and	3.94	3.94		24-18-15-12	5 3	A-C.	31
southerly. Northerly and	2.82	2.82	40-50-60	15	_	в.	32
northwesterly. Northwesterly,	.98	.98	60	15	_	В.	33
Northerly,	.57	.57	60	15		в.	34
Northerly,	.84	.75	60	15		в.	35
Easterly,	.77	.77	50-42+	15	3	D.	36
			00 10 1		J	2.	

<sup>4</sup> Exclusive of 275 feet at railroad.

<sup>5</sup> Not on 1903 section.

TABLE	SHOWING	THE	HIGHWAYS	LAID	OUT	OR
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			ROAD LAID OUT.
	TOWN OR CITY.	 Year.	From —
1	Charlton,	1901-2,	Charlton depot to Charlton City, .
2	Charlton,	1905,	Near Charlton City,
3	Charlton,	1906,	Easterly end of 1905 lay-out,
4	Chatham,	1899–1901–2,	Depot Street,
5	Chatham,	1905,	Harwich line,
6	Chatham,	1906,	Connecting 1902 and 1905 lay-
7	Chelmsford,	1898 <b>-9-</b> 1901,	outs. Lowell line to North Chelmsford,.
8	Chelmsford,	1903-4,	Lowell line toward Chelmsford
9	Chelsea,	1901-4,	Centre. Lewis Street,
10	Cheshire,	1899–1900–1–2,	Farnham's station, Boston & Al-
11	Chester,	1899-1900-1-2-4-5, .	bany railroad. Becket line,
12	Chicopee,	1897-8-9,	Springfield line,
13	Chicopee,	1902–3–4–5,	Near Chicopee River bridge,
14	Chicopee,	1906,	Northerly end of 1905 lay-out, .
15	Chilmark,	1905,	Near Beetlebung corner,
16	Chilmark,	1906,	Near Beetlebung corner,
17	Clarksburg,	1905,	North Adams line,
18	Cohasset,	1897-8-1900,	Near Hingham line,
19	Cohasset,	1902–3,	Beechwood Street to Scituate line,.
20	Colrain,	1898–1901–5,	Shelburne line,
21	Concord,	1897-8,	Lincoln line,
22	Concord,	1900–5,	Acton line,
23	Concord,	1906,	Southeasterly end of 1905 lay-out,
24	Cottage City, .	1894-5-6,	Sengekontacket bridge,
25	Dalton,	1895-6-1903-4,	Pittsfield line,
26	Dartmouth,	1898-9-1900-1-3-5, .	Near Westport line to New Bed-
27	Deerfield,	18945,	ford line. South Deerfield station to Sunder- land bridge.
28	Deerfield,	1900-1-2-3,	Cheapside bridge,
29	Deerfield,	1904-5,	South Deerfield village,
30	Deerfield,	1906,	Northerly end of 1905 lay-out, .
31	Dennis (north), .	1895-6-7-8,	Yarmouth line to Brewster line, .
32	Dennis (south), .	1900–1–2–4,	Bass River bridge,
33	Dennis,	1906,	Easterly end of 1904 lay-out to
34	Dighton (north), .	1902–3,	Harwich line. Dighton line to Rehoboth line, .
35	Dighton (south), .	1905,	Near Three Mile River bridge, .
36	Dighton,	1906,	Three Mile River bridge,

<sup>1</sup> 1899 section.

<sup>2</sup> 1898-9 sections.

CONTRACTED FOR BY THE	COMMISSION, ETC.	-Continued.
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ROAD LAID OU	JT.	Length	1	Vidths.		Material of	
Direction.	Length (Miles).	con- structed (Miles).	Location (Feet).	Macadam (Feet).	Shoulders (Feet).	Road Surface.	
Southerly, .	1.91	1.91	50	15	-	B.	1
Easterly,	.31	.31	50	15		B.	2
Southeasterly, .	.53	.53	50	15	-	В.	3
Westerly,	1.69	1.69	50	15-12	13	A-0.	4
Easterly,	1.35	1.35	50–55	15	-	0.	5
-	.99	.99	50–55	15	-	0.	6
Westerly,	1.44	1.43	50	18-15	2 3	A.	7
Southwesterly, .	1.27	1.27	60	18	-	0.	8
Southwesterly, .	.96	.96	66	24	-	А.	9
Northeasterly, .	2.60	2.60	50-50+	15	33	1899-1900 A-G,	10
Easterly,	3.25	3.25	40–50	15-12	33	1901–2 F. A, 1905 D.	11
Northerly, .	.92	.92	50-55-60	20	4-3	А.	12
Northerly, .	1.85	1.85	50+-60-84-	18	-	A.	13
Northerly, .	.40	. 35	100–50 50	15	-	A.	14
Southwesterly, .	1.13	1.13	40	12	-	В.	15
Northeasterly, .	1.67	1.67	40±	12	-	в.	16
Northeasterly, .	.60	. 60	50	15	-	D.	17
Easterly,	1.73	1.73	50-50+	15	3	B-D.	18
Southerly, .	.55	. 55	47-60+-70	15	-	C.	19
Northerly, .	2.13	2.13	40-50-50+	-	-	H, 1905 F.	20
Northwesterly, .	1.47	1.47	50	15	3	B.	21
Southeasterly, .	1.50	1.50	50-60	15	-	A-G.	22
Southeasterly, .	.63	. 63	60	15	-	А.	23
Northerly, .	2.37	2.37	50	15	3	В.	24
Easterly,	2.55	2.55	70-50-57-60-	15	4 3	A.	25
Easterly,	4.53	4.53	62-66 80-80+-75	18	-	В.	26
Southeasterly, .	1.53	1.53	30	15	3	А.	27
Southerly	1.43	1.43	50	15	-	А.	28
Northerly, .	.87	.87	50-83-50-70	15	· _	А.	29
Northerly, .	.41	. 41	70±	15	-	А.	30
Northeasterly, .	4.27	4.27	40-50-65	15	3	В.	31
Easterly,	2.40	2.40	40-45-50-50+	15	-	A-0.	32
Easterly,	.82	.82	40±	15	-	0.	33
Southwesterly, .	1.56	1.56	47.5-66	15	-	В.	34
Southwesterly, .	.29	. 29	40–50	-	-	В.	35
Westerly,	.09	.09	40	15	-	в.	36
		1		1			

<sup>3</sup> 1899-1900 sections.

## HIGHWAY COMMISSION.

[Pub. Doc.

			IABLE SHOWING I	THE HIGHWAIS LAID OUT OR
				ROAD LAID OUT.
_	TOWN OR CITY.		Year.	From —
1	Dighton,		1906,	Southerly end of 1905 lay-out, .
2	Douglas,		1902-4,	Sutton line at Manchaug,
3	Douglas,		1905,	Main Street,
4	Dover,		1905,	Charles River bridge,
5	Dracut,		1905,	Near Lowell line on Methuen
6	Dracut,		1906,	Road. Northeasterly end of 1905 lay-out,
7	Dudley,		1902-4,	1,400 feet from Webster line,
8	Dudley,		1906,	Southwesterly end of 1904 lay-out,
9	Duxbury,		1894-5-7-9-1903-5, .	Marshfield line,
10	Eastham,		1903,	Wellfleet line,
11	Eastham,		1904-5,	About one mile from Orleans line,.
12	Eastham,		1906,	Orleans line,
13	Easthampton, .		1895-6,	Northampton line,
14	Easthampton, .		1900-1,	Clark Street at foot of Mount Tom,
15	East Longmeadow,		1904,	East Longmeadow village, .
16	East Longmeadow,		1906,	Westerly end of 1904 lay-out, .
17	Easton,		1900,	Brockton line,
18	Edgartown,		1897-9-1900-1-2-3, .	Cottage City line,
19	Erving,		1898-9-1900,	Town Hall to Orange line, .
20	Essex,		1902–3,	Essex River,
21	Fairhaven,		1894-5,	Mattapoisett line,
22	Falmouth,		1904,	Bourne line to Woods Hole,
23	Falmouth,		1905,	East Falmouth village,
24	Falmouth,	. )	1906,	Westerly end of 1905 lay-out, .
25	Fitchburg,		1894-5,	Westminster line,
26	Fitchburg,		1897,	Lunenburg line,
27	Fitchburg,		1900-1-3-4,	Ashby line,
28	Foxborough, .		1901–2,	Mansfield line,
29	Foxborough, .		1905,	Wrentham line,
30	Framingham, .		1904-5,	Southborough line via Pleasant
31	Franklin,		1905,	Street. Bellingham line,
32	Freetown,		1902–3,	New Bedford line to Lakeville line,
33	Gardner,		1897-8,	Templeton line,
34	Gardner,		1900-1,	Westminster line,
35	Gloucester,		1894-5-8-1905,	Manchester line to "cut" bridge,.
36	Gloucester,		1906,	Northerly end of 1905 lay-out, .
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TABLE SHOWING THE HIGHWAYS LAID OUT OR

<sup>1</sup> Not on 1903-5 sections.

<sup>2</sup> Experiment in oiling road.

No. 54.]

CONTRACTED	FOR	BY	THE	COMMISSION,	ETC.	— Continued.
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ROAD LAID OF	UT.	Length		Widths.		Material of	-
Direction.	Length (Miles)	con- structed (Miles).	Location (Feet).	Macadam (Feet).	Shoulders (Feet).	Road Surface.	
Southwesterly, .	.13	.10	40-50	15	-	в.	1
Southeasterly, .	1.60	1.60	40+-50	15	-	B.	2
Southeasterly, .	.54	.54	50	15 -	-	В.	3
Westerly, .	.99	.99	40	-	-	F.	4
Northeasterly, .	.97	.97	50	15	-	B.	5
Northeasterly, .	.26	.26	50	15	-	в.	6
Westerly,	1.05	1.05	66	15	-	A-G.	7
Southwesterly, .	.65	-	-	-	-	-	8
Southerly, .	3.86	3.86	30-40-50	15	1 3	B-C-O-G.	9
Southerly, .	.78	78	40	15	-	K.	10
Northerly, .	1.73	1.73	50–50±	15	-	B 1905 <sup>2</sup>	11
Northerly, .	.87	-	50	-	-	-	12
Southwesterly, .	1.32	1.32	40	15	3	А.	13
Southerly, .	1.10	1.10	49.5	15	3	А.	14
Northwesterly, .	.59	.59	49.5	15	-	А.	15
Northwesterly, .	.46	.46	49.5	15	-	А.	16
Southwesterly, .	.80	.80	70	15	3	B-G.	17
Southerly,	2.42	2.42	<b>50</b> –66	15	33	В.	18
Easterly,	2.04	2.04	50-50+	15	-	А.	19
Easterly and	.35	.35	36–50	15	-	А.	20:
westerly. Westerly,	1.45	1.45	30	15	3	В.	21
Southerly, .	11.64	11.64	40±	15	-	· B.	22
Southwesterly, .	.55	.55	45-50	15	-	0.	23
Southwesterly, .	.35	.35	45±	15	-	0.	24
Easterly,	.97	.97	50	15	3	А.	25
Westerly,	.61	. 61	50	18-15	3	D.	26
Southerly, .	2.56	2.56	50-50+	15	-	в.	27
Northerly, .	1.82	1.82	50	15	-	B-G.	28-
Easterly,	1.02	1.02	60	15	-	в.	29
Southeasterly, .	2.42	2.42	40-52-40-50	15	-	B.	30
Easterly,	.73	.73	40-50	15	-	B.	31
Northerly, .	3.19	3.19	50-50+	15	-	B-G.	32
Easterly,	2.37	2.37	$50\pm$	15	-	· A-G.	33
Northwesterly, .	.98	.98	60	15	-	A-N.	34
Northeasterly and	3.34	3.34	50-40-40+	15	3	С-В.	35
northerly. Northerly,	.10	.10	65	15	-	в.	36
						1	1

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\* 1897-9\_sections.

## HIGHWAY COMMISSION.

[Pub. Doc.

							ROAD LAID OUT.
	TOWN O	R CI	TY.		Year.		From —
(1	Goshen,				1894-5,		Williamsburg line,
2	Grafton,				1897–9–1900–5,		Millbury line,
3	Granby,				189419025, .		South Hadley line,
4	Granby,				1906,		Easterly end of 1905 lay-out,
-5	Great Barrin	$\mathbf{gton}$	, .		1894-6-7-1902,		Housatonic River bridge,
6	Greenfield, 2			•	1899-1900-2, .		Washington Street,
7	Greenfield,				1903,		Silver Street,
8	Greenfield,				1905,		One mile from town section on Colrain Road.
9	Greenfield,				1906,		Northerly end of 1903 lay-out, .
10	Groton,				1901–2,		Near Nashua River at Pepperell
11	Groveland,				1900–1–2–1905,		line. Merrimac River bridge to West
12	Hadley,				1894 to 1904, .		Newbury line. Connecticut River to Amherst line,
13	Hamilton,				1899–1900, .		Ipswich line,
14	Hancock,				1895-6-8-9, .		Pittsfield line to New York line, .
15	Hanover,				1906,		Pembroke line,
16	Hardwick,				1897-1901, .		New Braintree line,
17	Harvard,				1900-1905, .		Woodchuck Hill to Harvard Com-
18	Harwich,				1899-1900-1-2-3,		Dennis line to Chatham line, .
19	Hatfield,				1901,		Northampton line,
20	Hatfield,				1906,		Northerly end of 1901 lay-out, .
21	Haverhill,				1899,		River and Maxwell streets, .
22	Haverhill,				1902,		Kenoza Road,
23	Haverhill,				1906,		Methuen line at Hawkes Brook, .
24	Hingham,				1894,		Weymouth Back River,
25	Hingham,				1896-7,		Near Cohasset line,
26	Hinsdale,				1901-2-3, .		Dalton line,
27	Holbrook,				1894-6-1902, .		Weymouth line,
28	Holden,				1894-5-6-7, .		Jefferson village,
<b>2</b> 9	Holden,				1898-1900, .		Worcester line,
30	Holden,				1905,	•	Rutland line,
31	Holliston,				1906,		Milford line,
32	Hudson,				1906,		Brigham Street via Washington
33	Huntington,				1895-6,		Street. Russell line,
34	Huntington,				1903,		Near railroad crossing,
35	Huntington,				1906,		Westerly end of 1903 lay-out,
36	Kingston,				1905,		Duxbury line,

#### TABLE SHOWING THE HIGHWAYS LAID OUT OR

ROAD LAID OUT

52

## APPENDIX A.

No. 54.]

CONTRACTED FOR BY THE COMMISSION, ETC. - Continued.

ROAD LAID OU	JT.	Length	V	Vidths.		Material of	T
Direction.	Length (Miles).	con- structed (Miles).	Location (Feet).	Macadam (Feet).	Shoulders (Feet).	Road Surface.	
Northwesterly, .	1.91	1.91	50	15	3	В.	1
Southeasterly	2.05	2.05	50	15	13	A–B–G.	2
and southerly. Northeasterly, .	1.46	1.46	36–50	· 15	13	А.	3
Easterly,	. 51	.51	50	15	-	А.	4
Easterly,	3.41	3.41	40-50-70	18–15	1 3	1894-6-7 A,	5
Easterly,	1.33	1.33	49.5-50	. 18–15	3 3	1902 F. A.	6
Northeasterly, .	.41	.41	50	15	-	А.	7
Northerly, .	.26	.26	50	-	-	F.	8
Northeasterly, .	.43	.43	50	15	-	А	9
Southeasterly, .	1.38	1.38	50	15	-	A-G.	10
Northeasterly, .	1.73	1.73	50–57	15	-	А.	11
Easterly,	4.69	4.69	50-82.5-66±	15	4 3	А.	12
Southwesterly, .	1.44	1.44	50-60	15	3	В.	13
Westerly,	3.23	3.23	50	15	-	C-F	14
Northwesterly, .	1.17		4050	-	-	-	15
Northerly, .	.82	.82	50	15	3	А.	16
Westerly,	1.58	1.58	• 60–50	15	-	в.	17
Easterly,	5.10	5.10	40-40±	15	3 3	A-0-G.	18
Northeasterly, .	.39	. 39	50	15	-	А.	19
Northerly, .	.33	.33	50	15	- 1	А.	20
Westerly,	2.08	2.08	70	15		в.	21
Northeasterly, .	1.07	.91	50–60	15	-	в.	22
Northerly, .	.55	-	66±	-	-	-	23
Easterly,	1.42	1.42	34	-	-	F.	24
Westerly,	1.23	1.23	50-33+	15	3	D.	25
Southeasterly, .	1.02	1.02	50–50+	15	-	А.	26
Northwesterly, .	1.75	1.75	50	15	\$ 3	B-G.	27
Southeasterly, .	2.70	2.70	30-49.5	18-15	3	в.	28
Northerly, .	1.06	1.06	50	15	3–5	в.	29
Easterly,	.52	.52	50	15	-	в.	30
Northeasterly, .	.70	.30	49.5	15	-	в.	31
Southerly, .	.78	.78	40±	15	-	в.	32
Westerly,	1.01	1.01	50+	15	3	А.	33
Westerly,	.53	.53	50	15	-	A-G.	34
Northwesterly, .	.46	• .40	50	15	-	· A.	35
Southerly, .	. 68	.68	44-50	-	-	0.	36

<sup>3</sup> 1899–1900 sections.

<sup>4</sup> 1895-6-7-8-9 sections.

<sup>5</sup> 1894-6 sections.

_		TABLE SHOWING	THE HIGHWAYS LAID OUT OR
			ROAD LAID OUT.
	TOWN OR CITY.	Year.	From —
1	Kingston,	1906,	Southerly end of 1905 lay-out, .
2	Lakeville,	1901-2,	One-half mile from Middleborough
3	Lancaster,	1902,	line. Clinton line to Sterling line,
4	Lawrence,	1896,	Methuen line,
5	Lee,	1894-5-6,	Lee Park to Strickland House, .
6	Lee,	1900,	Lenox line to Lee village,
7	Lee,	1906,	Lenox line, Stockbridge Street, .
8	Lee (south),	1906,	Stockbridge line, Main Street, .
9	Leicester, <sup>1</sup>	1894-5-6-8-9,	Worcester line to Spencer line, .
10	Lenox,	1899-1900-1,	Lee line to Lenox village,
11	Lenox,	1904–5,	Lenox village to Pittsfield line, .
12	Lenox,	1906,	Lee line via Kemble Street,
13	Leominster,	1901–2,	Sterling line,
14	Lexington,	1895-6-7-8,	Massachusetts Avenue,
15	Lexington,	1900,	Bedford line,
16	Lincoln,	1895-6-7,	Concord line to Lexington line, .
17	Littleton,	1902-3-4,	Acton line via Great Road, .
18	Littleton,	1902,	Westford line to Great Road, .
19	Lowell (Boulevard), .	1897,	Tyngsborough line,
20	Lowell (Princeton Street),	1897-8,	Chelmsford line,
21	Lunenburg,	1898-9-1900-1-3,	Fitchburg line,
2 <b>2</b>	Lynn,	1899,	Saugus River to Sea Street,
23	Mansfield,	1901,	Foxborough line,
24	Mansfield,	1906,	Mansfield line,
25	Marion,	1894-5-1901,	Marion village to Wareham line, .
26	Marion,	1897-9-1901-2,	Marion village to Mattapoisett, .
27	Marion,	1903,	Marion village to Rochester line, .
28	Marlborough (east), .	1897-1902-3-4,	Sudbury line to Hosmer Street, .
29	Marlborough (west), .	1897-9-1900-1,	Northborough line,
30	Marshfield,	1894-6-8-9-1901-2-4,	Duxbury line,
31	Mattapoisett,	1894-5,	Fairhaven line,
32	Mattapoisett,	1900–1–3,	Marion line to Ned Point Light
33	Melrose,	1906,	Road. Saugus line at Upham Street,
34	Merrimac,	1897-8-9,	Near Haverhill line,
35	Merrimac,	1901–3,	Amesbury line, .
36	Methuen,	1896-1900-1-2,	Lawrence line,

TABLE SHOWING THE HIGHWAYS LAID OUT OR

<sup>1</sup> Exclusive of portion through Leicester Centre.

<sup>6</sup> 1894-6-8-9 sections.

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<sup>2</sup> 1898-9-1900 sections.

<sup>7</sup> 1896 section.

No. 54.]

CONTRACTED	FOR	BY	THE	COMMISSION,	<b>Е</b> ТС. —	Continued.
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ROAD LAID OUT.		Length		WIDTHS.		Material of		
Direction.		Length (Miles).	con- structed (Miles).	Location (Feet).	Macadam (Feet).	Shoulders (Feet).	Road Surface	
Southerly,	.	.34	.34	44-72.5	15	-	0.	1
Southwesterly,	.	3.57	3.57	45-50	15	-	B-G.	2
Northerly, .		1.25	1.25	49.5	18	-	А.	3
Southerly, .		.27	.27	50	18	7	C.	4
Easterly, .		1.98	1.98	35-40-50	24-15	3	D.	5
Southerly, .		1.26	1.26	50	15	3	D.	6
Southerly, .		1.02	-	50-60	-	-	F.	7
Easterly,		.90	-	50±	15	-	D.	8
Westerly,		4.87	4.87	39-53-55-67+	24-18-16-15	3-5-5.5	1894 <b>-5-6</b> D.	9
Northerly, .		2.28	2.28	60-66-56±	15	3	D.	10
Northerly, .		3.00	3.00	50+-60-64-100	15	-	B.	11
Northerly, .		2.20	-	60 to 80	-	-	F.	12
Northerly, .		2.18	2.18	50	15	-	F-0.	13
Westerly,		3.45	3.45	50-50+	15	3	В.	14
Southeasterly, .		.85	.85	50	15	3	В.	15
Southeasterly, .		2.06	2.06	50	15	3	-	16
Northerly, .		2.13	2.13	40-50-62	-	-	F.	17
Southwesterly, .		.32	.32	50	-	-	F.	18
Easterly,		.97	.97	60	15	3	D.	19
Easterly,		1.34	1.34	$50\pm$	18	6	D.	20
Easterly,	-	2.72	2.72	50-50+	15	2 3	D. 1903 B-G.	21
Northeasterly, .		.90	.90	70	34	-	A.	22
Southeasterly, .		.72	.72	50	15	-	B-G.	23
Northerly, .		. 49	.35	40–50	15	_	В.	24
Northeasterly, .		1.59	1.59	40-50-65	15	33	В.	25
Westerly,		1.84	1.84	405055	15	4 3	В.	26
Northwesterly, .		2.14	2.14	4050	15	-	В.	27
Westerly,		3.10	3.10	40-50-60	15	\$ 3	в.	28
Easterly,		2.41	2.41	50-65	15	5-4-3	В.	29
Northerly,		4.00	4.00	30-40-45-50	15	6 3		30
Easterly,		1.16	1.16	30	15	3	В.	31
Westerly,		2.05	2.05	40-50	15	-	В.	32
Westerly,		. 39	.39	49.5	15	- 1	В.	33
Northeasterly, .		.92	.92	. 50-50+	15	4-3	в-с.	34
Southwesterly, .		1.20	1.20	50-60	15	-	в-с.	35
Northeasterly, .		2.63	2.63	50	15	7 3	С-В.	36
	1				1			

<sup>3</sup> 1894-5 sections.

<sup>4</sup> 1897-9 sections.

<sup>5</sup> 1897 section.

TABLE SHOWING THE HIGHWAYS LAID OUT OR

20       New Braintree,       .       1897,       .       .       Hardwick line to Ware line         21       New Braintree,       .       1903,       .       .       Hardwick line to Ware line         21       New Braintree,       .       1903,       .       .       New Braintree village,         22       Newbury,       .       .       1899-1900-1-2-4-5,       .       Newburyport line via Oldy Rowley line,         23       Newbury,       .       .       1906,       .       .       Parker River bridge section         24       Newburyport,       .       1896-7-8,       .       West Newbury line,       .         25       Newton,       .       1901,       .       .       Needham line,       .         26       Norfolk,       .       1895,       .       .       Norfolk line to Wrentham         27       North Adams,       .       1894-6-7,       .       Williamstown line,       .         28       North Adams,       .       1900-1-2-3,       .       Boston & Maine railroad b       Adams line,         29       North Andover,       .       1900-2-4,       .       .       Lawrence line,       . <th></th>	
2Middleborough,.1894-5-6-7-8-1902-3,Nemasket River to Roches3Middleborough,.1906,.Bridgewater line at T River.4Middleborough,.1904-5,.Railroad bridge on Everent5Milford,.1904-5,.Highland Avenue via Wes to Hopedale line.6Millbury,.1902,.Worcester line to Grafton I7Millbury,.1900-3-4,Worcester line,.8Millbury,.1906,.Sutton line,.9Milton,.1899-1900,Neponset River at Granite10Monson,.1894,Railroad bridge,.11Monson,.1901-5,Palmer line to Brimfield lin12Montague,.1905,.Connecticut River bridge to field.14Montague,.1905,.Connecticut River bridge to field.15Nantucket,.1906,.Easterly end of 1904 lay-ou16Natick,.1901,.Wetlesley line to Union Sq17Natick,.1903,.Sherborn line to Cemetery18Needham,.1905,.Charles River bridge, C20New Braintree,1903,.New Braintree village,21Newbury,.1899-1900-1-2-4-5,Newburyport line via Old Rowley line,22Newbury,.1896,23 <td></td>	
3Middleborough,1906,Bridgewater line at T River.4Middleborough,1906,Railroad bridge on Everett5Milford,1904-5,Highland Avenue via West to Hopedale line.6Millbury,1902,Worcester line to Grafton in7Millbury,1900-3-4,Worcester line,8Millbury,1906,Sutton line,9Milton,1899-1900,Neponset River at Granite10Monson,1894,Railroad bridge,11Monson,1901-5,Palmer line to Brimfield lin12Montague,1905,Gonacticut River bridge to field.13Montague,1905,Gonacticut River bridge to field.14Montague,1906,Easterly end of 1904 lay-or15Nantucket,1894-5-6-7-9-1900-1-3,First mile stone to Siascon16Natick,1901,Wellesley line to Union Sq17Natick,1903,Sherborn line to Cemetery18Needham,1901,Newton line,20New Braintree,1897,Hardwick line to Ware line21New Braintree,1903,Parker River Bridge section22Newbury,1896-1900-1-2-4-5,Newburyport line via Old Rowley line.23Newbury,1906,Parker River Bridge section24Newbury,1896-7-8,West Newbury line,25Newton,1901,Needham line,26Norfolk,1895,Norfolk line to Wrentham </td <td>Brook, .</td>	Brook, .
4Middleborough,1906,Railroad bridge on Everett5Milford,1904-5,Highland Avenue via West6Millbury,1902,Worcester line to Grafton 17Millbury,1906,Sutton line,8Millbury,1906,Sutton line,9Milton,1899-1900,Neponset River at Granite10Monson,1894,Railroad bridge,11Monson,1901-5,Palmer line to Brimfield lin12Montague,1898-9-1904,Third Street hear L Street ners Falls.13Montague,1905,Connecticut River bridge to field.14Montague,1906,Easterly end of 1904 lay-or15Nantucket,1901,Wellesley line to Union Sq16Natick,1901,Newton line,18Needham,1905,Charles River bridge, C Street,19Needham,1905,Charles River bridge, C Street,20New Braintree,1897,Hardwick line to Ware line, Rowley line,21Newbury,1899-1900-1-2-45, Rowley line,Newburyport, Rowley line,22Newbury,1896-7-8,West Newbury line, Parker River Dridge section24Newbury,1896,Norfolk line to Wrentham25Newton,1901,Needham line,26Norfolk,1894-6-7,Williamstown line,27North Adams,1901-1-2-3,Adams line,28North Adams,1900-1-2-4,Weilliamstow	ter line,
4Middleborough,1906,Railroad bridge on Everett5Milford,1904-5,Highland Avenne via West6Millbury,1902,Worcester line to Grafton I7Millbury,1900-3-4,Worcester line,8Millbury,1906,Sutton line,9Milton,1899-1900,Neponset River at Granite10Monson,1894,Railroad bridge,11Monson,1901-5,Palmer line to Brimfield line12Montague,1905,Connecticut River bridge to field13Montague,1906,First mile stone to Siascon14Montague,1906,Easterly end of 1904 lay-or15Nantucket,1894-5-6-7-9-1900-1-3,First mile stone to Siascon16Natick,1901,Wellesley line to Union Sq17Natick,1903,Sherborn line,18Needham,1905,Charles River bridge, C19Needham,1905,Street,19New Braintree,1897,Hardwick line to Ware line,21New Braintree,1903,Parket River bridge, C22Newbury,1896-7-8,West Newbury line,23Newbury,1906,Parket River bridge section24Norfolk,1901,Norfolk line to Wrentham25Newton,1901,Needham line,26Norfolk,1895,Norfolk line to Wrentham27North Adams,1900-1-2-3,Adams line,28 </td <td>Faunton</td>	Faunton
6Millbury,1902,Worcester line to Grafton7Millbury,1900-3-4,Worcester line,8Millbury,1906,Sutton line,9Milton,1906,Neponset River at Granite10Monson,1899-1900,Neponset River at Granite10Monson,1901-5,Palmer line to Brimfield lin12Montague,1905,Palmer line to Brimfield lin12Montague,1905,Connecticut River bridge to field.14Montague,1906,Easterly end of 1904 lay-or15Nantucket,1906,Easterly end of 1904 lay-or16Natick,1901,Wellesley line to Union Sq17Natick,1903,Sherborn line,18Needham,1905,Charles River bridge, C Street.20New Braintree,1897,Hardwick line to Ware line21New Braintree,1903,New Braintree village,22Newbury,1906,Parker River bridge section23Newbury,1906,Parker River bridge section24Newbury,1906,Parker River bridge section25Newton,1901,Needham line,26Norfolk,1895,Norfolk line to Wrentham27North Adams,1900-1-2-3,Boston & Maine railroad b Adams line,28North Adams,1900-1-2-4,Lawrence line,29North Adams,1900-1-2-4,Lawrence line,	Street,
6Millbury,.1902,.Worcester line to Grafton 17Millbury,.1900,-3-4,.Worcester line,.8Millbury,.1906,.Sutton line,.9Milton,.1899-1900,.Neponset River at Granite10Monson,.1894,.Railroad bridge,11Monson,.1901-5,.Palmer line to Brimfield lin12Montague,.1905,.Palmer line to Brimfield lin13Montague,.1905,.First Street hear L Street ners Falls.14Montague,.1906,.Easterly end of 1904 lay-or15Nantucket,.1906,.First mile stone to Siascon16Natick,.1901,.Wellesley line to Union Sq17Natick,.1903,.Sherborn line to Cemetery 118Needham,.1905,.Hardwick line to Ware line19Needham,.1905,.Hardwick line to Ware line20New Braintree,.1897,.Hardwick line to Ware line21New Braintree,.1903,.Newburyport line via Old22Newbury,.1890-1-2-4-5,Newburyport line via Old23Newbury,.1906,.Parker River bridge section24Newbury,.1896-7-8,.West Newbury line, <t< td=""><td>t Street</td></t<>	t Street
8Millbury,.1906,.Sutton line,9Milton,.1899–1900,.Neponset River at Granite10Monson,.1894,.Railroad bridge,11Monson,.1901-5,Palmer line to Brimfield In12Montague,.1898-0-1904,Third Street hear L Street ners Falls.13Montague,.1905,.14Montague,.1905,.15Nantucket,.1894-5-6-7-9-1900-1-3,16Natick,.1901,.17Natick,.1903,.18Needham,.1905,.19Needham,.1905,.19Needham,.1903,.19New Braintree,.1897,.19New Braintree,.1897,.19New Braintree,.1903,.20New Braintree,.1903,.21New Braintree,.1903,.22Newbury,23Newbury,24Newbury,25Newton,26Norfolk,.1896-7-8,.27North Adams,.1901,.28North Adams,.1901,.29North Adams,.1901,.29North Adams,	line, .
9Milton,.1899–1900,.Neponset River at Granite10Monson,.1894,Railroad bridge,11Monson,.1901-5Palmer line to Brimfield lin12Montague,.1898-0-1904,.Third Street hear L Street13Montague,.1905,14Montague,.1906,.Eastreet hear L Street15Nantucket,.1906,.Eastreet near L Street16Natick,.1906,.Eastreet near L Street17Natick,.1901,.Wellesley line to J1904 lay-or18Needham,.1901,.Wellesley line to Union Sq17Natick,.1903,.Sherborn line to Cemetery Street18Needham,.1905,.Charles River bridge, C20New Braintree,.1897,.Hardwick line to Ware line21New Braintree,.1903,.New Braintree village,22Newbury,1890-1900-1-2-4-5,Newburyport line via Old Rowley line,23Newbury,1906,.24Newbury,1896-7-8,West Newbury line,25Newton,1895,.26Norfolk,.1895,.Norfolk line to Wrentham27North Adams,.1900-1-2-3,<	
10Monson,1894,Railroad bridge,11Monson,1001-5,Palmer line to Brimfield lin12Montague,1898-9-1904,Third Street hear L Street13Montague,1905,Third Street hear L Street14Montague,1906,Easterly end of 1904 lay-or15Nantucket,1894-5-6-7-9-1900-1-3,First mile stone to Siascon16Natick,1901,Sherborn line to Cemetery18Needham,1901,Newton line,19Needham,1905,Charles River bridge,19Needham,1905,Charles River bridge,20New Braintree,1897,Charles River bridge,21New Braintree,1903,New Braintree village,22Newbury,1899-1900-1-2-4-5,Newburyport line via Old Rowley line,23Newbury,1906,Parker River bridge section24Newbury,1901,Needham line,25Newton,1901,Needham line,26Norfolk,1991,Needham line,27North Adams,1894-6-7,Williamstown line,28North Adams,1900-1-2-3,Boston & Maine railroad b Adams line,29North Andover,1900-1-2-4,Lawrence line,	
11Monson,.1901-5,Palmer line to Brimfield International Intern	bridge,
12Montague,.1898-9-1904,.Third Street hear L Street ners Falls.13Montague,.1905,14Montague,.1906,.Easterly end of 1904 lay-or15Nantucket,.1894-5-6-7-9-1900-1-3,First mile stone to Siascon16Natick,.1901,.Wellesley line to Union Sq17Natick,.1903,.Sherborn line to Cemetery 1018Needham,.1905,.Charles River bridge, C19Needham,.1905,.Charles River bridge, C20New Braintree,.1897,.Hardwick line to Ware line,21New Braintree,.1903,.New Braintree village,22Newbury,.1899-1900-1-2-4-5,Newburyport line via Old: Rowley line,23Newbury,.1906,.Parker River bridge section24Newburyport,.1896-7-8,.West Newbury line,25Newton,.1901,.Needham line,26Norfolk,.1895,.Norfolk line to Wrentham27North Adams,.1894-6-7,.Williamstown line,28North Adams,.1900-1-2-3,.Boston & Maine railroad b Adams line,29North Andover,.1900-2-4,.Lawrence line,.	
13Montague,.1905,.ners Falls. Gonnecticut River bridge to field.14Montague,.1906,Connecticut River bridge to field.14Montague,.1906,Easterly end of 1904 lay-or15Nantucket,.1894-5-6-7-9-1900-1-3,First mile stone to Siascon16Natick,.1901,.Wellesley line to Union Sq17Natick,.1903,.Sherborn line to Cemetery 118Needham,.1905,.Charles River bridge, C19Needham,.1905,.Charles River bridge, C20New Braintree,.1897,.Hardwick line to Ware line21New Braintree,.1903,.New Braintree village,22Newbury,.1899-1900-1-2-4-5,Newburyport line via Oldr Rowley line,23Newbury,.1906,.Parker River bridge section24Newburyport,.1896-7-8,.West Newbury line,25Newton,.1901,.Needham line,.26Norfolk,.1895,.Norfolk line to Wrentham27North Adams,.1894-6-7,.Williamstown line,28North Adams,.1900-1-2-3,.Boston & Maine railroad b Adams line,29North Andover,.1900-2-4,.Lawrence line,.	ne, .
13       Montague,	et, Tur-
14Montague,1906,Easterly end of 1904 lay-or15Nantucket,1894-5-6-7-9-1900-1-3,First mile stone to Siascon16Natick,1901,Wellesley line to Union Sq17Natick,1903,Sherborn line to Cemetery18Needham,1901,Newton line,19Needham,1905,Charles River bridge, C20New Braintree,1897,Hardwick line to Ware line21New Braintree,1903,New Braintree village,22Newbury,1899-1900-1-2-4-5,Newburyport line via Old Rowley line,23Newbury,1906,Parker River bridge section24Newburyport,1896-7-8,West Newbury line,25Newton,1901,Needham line,26Norfolk,1895,Norfolk line to Wrentham27North Adams,1894-6-7,Williamstown line,28North Adams,1900-1-2-3,Lawrence line,29North Andover,1900-2-4,Lawrence line,	Green-
16Natick,1901,Wellesley line to Union Sq17Natick,1903,Sherborn line to Cemetery 118Needham,1901,.Newton line,.19Needham,1905,Charles River bridge, C20New Braintree,.1897,.Hardwick line to Ware line21New Braintree,.1903,.New Braintree village,22Newbury,1899-1900-1-2-4-5,Newburyport line via Old Rowley line.23Newbury,1906,24Newburyport,.1896-7-8,.West Newbury line,25Newton,1901,.Needham line,26Norfolk,.1895,.Norfolk line to Wrentham27North Adams,.1900-1-2-3,.Boston & Maine railroad b Adams line.28North Andover,.1900-2-4,.Lawrence line,.	ut, .
17Natick,.1903,.Sherborn line to Cemetery18Needham,.1901,.Newton line,.19Needham,.1905,.Charles River bridge, C20New Braintree,.1897,.Hardwick line to Ware line21New Braintree,.1903,.New Braintree village,22Newbury,.1899-1900-1-2-4-5,Newburyport line via Old Rowley line,23Newbury,.1906,.Parker River bridge section24Newburyport,.1896-7-8,.West Newbury line,25Newton,Norfolk,.26Norfolk,1895,.Norfolk line to Wrentham27North Adams,.1894-6-7,.Williamstown line,28North Adams,.1900-1-2-3,.Boston & Maine railroad b Adams line,29North Andover,.1900-2-4,	set, .
18       Needham,       .       1901,       .       Newton line,       .         19       Needham,       .       1905,       .       Charles River bridge, Construction         20       New Braintree,       .       1897,       .       Hardwick line to Ware line,         21       New Braintree,       .       1903,       .       New Braintree village,         21       New Braintree,       .       1903,       .       New Braintree village,         22       Newbury,       .       1899-1900-1-2-4-5,       Newburyport line via Old Rowley line,         23       Newbury,       .       1906,       .       Parker River bridge section         24       Newburyport,       .       1896-7-8,       .       West Newbury line,       .         25       Newton,       .       1901,       .       Needham line,       .       .         26       Norfolk,       .       1895,       .       Norfolk line to Wrentham         27       North Adams,       .       1894-6-7,       .       Williamstown line,       .         28       North Adams,       .       1900-1-2-3,       .       Boston & Maine railroad b Adams line,       .	uare, .
19       Needham,       .       1905,       .       .       Charles River bridge, Construction         20       New Braintree,       .       1897,       .       .       Hardwick line to Ware line         21       New Braintree,       .       1903,       .       .       New Braintree village,         22       Newbury,       .       1899–1900–1–2-4–5,       .       Newburyport line via Olds         23       Newbury,       .       1906,       .       .       Parker River bridge section         24       Newburyport,       .       1896–7–8,       .       West Newbury line,       .         25       Newton,       .       1901,       .       Needham line,       .       .         26       Norfolk,       .       1895,       .       Norfolk line to Wrentham         27       North Adams,       .       1894–6-7,       .       Williamstown line,       .         28       North Adams,       .       1900–1–2–3,       .       Boston & Maine railroad bradams line,         29       North Andover,       .       1900–2–4,       .       .       Lawrence line,       .	Street,.
20       New Braintree,       .       1897,       .       .       Hardwick line to Ware line         21       New Braintree,       .       1903,       .       .       Hardwick line to Ware line         21       New Braintree,       .       1903,       .       .       New Braintree village,         22       Newbury,       .       .       1899-1900-1-2-4-5,       .       Newburyport line via Oldy Rowley line,         23       Newbury,       .       .       1906,       .       .       Parker River bridge section         24       Newburyport,       .       1896-7-8,       .       West Newbury line,       .         25       Newton,       .       1901,       .       Needham line,       .         26       Norfolk,       .       1895,       .       Norfolk line to Wrentham         27       North Adams,       .       1894-6-7,       .       Williamstown line,       .         28       North Adams,       .       1900-1-2-3,       .       Boston & Maine railroad b       Adams line,         29       North Andover,       .       1900-2-4,       .       .       Lawrence line,       .	
20New Braintree,1897,Hardwick line to Ware line21New Braintree,1903,New Braintree village,22Newbury,1899-1900-1-2-4-5,New Braintree village,23Newbury,1896-7-8,Parker River bridge section24Newburyport,1896-7-8,West Newbury line,25Newton,1901,Needham line,26Norfolk,1895,Norfolk line to Wrentham27North Adams,1894-6-7,Williamstown line,28North Adams,1900-1-2-3,Lawrence line,29North Andover,1900-2-4,Lawrence line,	hestnut
22Newbury,.1899-1900-1-2-4-5,Newburyport line via Old Rowley line.23Newbury,.1906,.Parker River bridge section24Newburyport,.1896-7-8,.West Newbury line,25Newton,1901,.Needham line,26Norfolk,1895,.Norfolk line to Wrentham27North Adams,.1894-6-7,.Williamstown line,28North Adams,.1900-1-2-3,.Boston & Maine railroad b Adams line.29North Andover,.1900-2-4,	в, .
23Newbury,.1906,.Rowley line. Parker River bridge section24Newburyport,.1896-7-8,.Parker River bridge section25Newton,.1901,.Needham line,.26Norfolk,1895,Norfolk line to Wrentham27North Adams,.1894-6-7,Williamstown line,.28North Adams,.1900-1-2-3,Boston & Maine railroad b29North Andover,.1900-2-4,Lawrence line,.	
24Newburyport,.1896-7-8,West Newbury line,25Newton,1901,Needham line,.26Norfolk,1895,Norfolk line to Wrentham27North Adams,1894-6-7,Williamstown line,.28North Adams,1900-1-2-3,Boston & Maine railroad b Adams line,.29North Andover,1900-2-4,	town to
25       Newton,       .       1901,       .       .       Needham line,       .         26       Norfolk,       .       1895,       .       .       Norfolk line to Wrentham         27       North Adams,       .       1894-6-7,       .       .       Williamstown line,         28       North Adams,       .       1900-1-2-3,       .       .       Boston & Maine railroad b         29       North Andover,       .       1900-2-4,       .       .       Lawrence line,       .	n, .
26       Norfolk,       .       1895,       .       .       Norfolk line to Wrentham         27       North Adams,       .       1894-6-7,       .       .       Williamstown line,         28       North Adams,       .       1900-1-2-3,       .       .       Boston & Maine railroad b         29       North Andover,       .       1900-2-4,       .       .       Lawrence line,       .	
27North Adams,.1894-6-7,Williamstown line,28North Adams,1900-1-2-3,Boston & Maine railroad b Adams line,29North Andover,1900-2-4,Lawrence line,.	
28       North Adams,       .       1900-1-2-3,       .       .       Boston & Maine railroad b         29       North Andover,       .       1900-2-4,       .       .       Lawrence line,       .	line, .
29 North Andover, 1900-2-4, Lawrence line,	
29 North Andover, 1900-2-4, Lawrence line,	ridge to
	• •
30 Northampton, 1894, Hadley bridge, .	
31 Northampton, 1897-8-9-1900-5, Easthampton line, .	
32 Northampton, 1905, Smith Ferry Road to R. Road.	eservoir
33 Northampton, 1906, Northerly end of 1905 lay-	out, .
34 North Attleborough, . 1894-5-6-7-9, Bruce Avenue to Attleb	borough
35 Northborough (east), . 1897-8, Marlborough line, .	
36 Northborough (west), . 1900-2-4, Shrewsbury line, .	

<sup>1</sup> 1894 section.

<sup>6</sup> 1900 section.

<sup>2</sup> 1895-6-7-8-9 sections.

<sup>7</sup> Exclusive of 1905 section.

# APPENDIX A.

CONTRACTED FOR BY THE COMMISSION, ETC. - Continued.

ROAD LAID OUT.				WIDTHS.		Material of	
Direction.	Length (Miles).	con- structed (Miles).	Location (Feet).	Macadam (Feet).	Shoulders (Feet).	Road Surface.	
Southerly, .	.07	-	50	_	-	-	1
Southeasterly, .	8.98	8.98	50	15	17-5-23	B-G.	2
Southerly, .	`.72	.72	5055	15	-	В.	3
Northerly, .	1.40	1.40	50±	15	-	B.	4
Northeasterly, .	1.75	1.75	50-50+	15	-	B.	5
Southeasterly, .	.78	.78	50	15	-	A-G.	6
Southerly, .	1.61	1.61	50	15	-	А.	7
Northeasterly, .	.59	.59	$50\pm$	15	-	B.	8
Southeasterly, .	.87	.87	49.5-82.5	24	4	А.	9
Northerly, .	.93	.93	36	15	3	А.	10
Southeasterly, .	.39	. 39	50	15	_	А.	11
Easterly,	2.48	2.48	60	15	3 3	A-C.	12
Northeasterly, .	1.07	-	50-60	_	2	-	13
Southeasterly, .	.75	.70	60	15	-	в. '	14
Easterly,	6.48	6.48	66	15-12	4 3	B-E-G.	15
Westerly,	1.14	1.14	60-70	15-18-20	-	A-G.	16
Easterly,	2.06	2.06	60	15	-	D-G.	17
Westerly,	1.00	1.00	60-86	22	-	в.	18
Northerly, .	1.04	1.04	50	15	- 1	C.	19
Southerly, .	.17	. 17	50	15	3	А.	20
Northerly, .	.22	.22	$50\pm$	-	_	F.	21
Southerly and	4.08	4.08	50-60-66-70-80	15	5 3	1899-1900-1-	22
southwesterly.	. 15	.15	-95-50-60 $60\pm$	-	-	2-4 B, 1905 F.	23
Easterly,	1.75	1.75	60-66+-75+	15	3	C.	24
Easterly,	1.03	1.03	45-86	22	-	А.	25
Southwesterly, .	1.45	1.45	50	15	. 3	В.	26
Easterly,	1.69	1.69	30-66	15	3	D.	27
Southerly, .	2.32	2.09	50-65	15	6 3	A, 1903 N.	28
Southeasterly, .	1.68	1.68	60-66	15	6 3	A-D.	29
Southwesterly, .	.56	.56	40	20	3	C.	30
Northerly, .	1.47	1.47	$50-50 \pm$	15	7 3	А.	31
Southwesterly, .	.86	.86	66	-	-	N.	32
Northeasterly, .	1.04	.80	50-66	15	-	А.	33
Southwesterly, .	3.60	3.60	36-66	24-18-15	3	1894-5, B, 1896	34
Southwesterly, .	1.33	1.33	66	15	4-3	-7-9 F. B.	35
Easterly,	2.19	2.19	66	15	6 3	В.	36

<sup>3</sup> 1898-9 sections. <sup>4</sup> 1894 to 1900 sections, inclusive. <sup>5</sup> 1899-1900 sections.

-			ROAD LAID OUT.
	TOWN OR CITY.	Year.	From —
1	Northborough (south), .	1897,	Westborough line,
2	North Brookfield,	1905,	Junction of Ward and Gilbert streets.
3	North Brookfield,	1906,	Southerly end of 1905 lay-out, .
4	Northfield,	1901–2,	Near Mill Brook,
5	North Reading, <sup>1</sup> .	1897-8-1901-3,	Andover line to Reading line, .
6	Norton,	1903,	Village to near railroad station, .
7	Norton,	1906,	Mansfield line,
8	Norwood,	1897-9,	Walpole line,
9	Norwood,	1895–6,	Westwood line,
10	Orange,	1894-5-7,	Athol line,
11	Orange,	1900-1-3-4-5,	Erving line,
12	Orleans,	1900-1-4,	Brewster line to Eastham line, .
13	Orleans,	1903-4-5,	$1\frac{1}{2}$ miles from Shattuck's Corner,.
14	Oxford,	1906,	Auburn line,
15	Palmer,	1899–1900–1,	Tennyville to Monson line, .
16	Palmer,	1905,	Near Quaboag River bridge, .
17	Paxton,	1895-6-7-8-1902, ·	Worcester line,
18	Pembroke,	1905,	North River bridge at Hanover
19	Phillipston,	1897-8-1902-4,	line. Athol line,
20	Pittsfield,	1894-8-1901-2,	Hancock line, . <sup>.</sup>
21	Pittsfield,	1897,	Dalton line,
22	Pittsfield,	1904-5,	South Mountain Road to Lenox
23	Pittsfield,	1906,	line. Westerly end of 1897 lay-out, .
24	Plainville,	1894-5,	North Attleborough line to Wren-
25	Plymouth,	1894-5-6-7-8-1902-4,	tham line. Manomet village,
26	Princeton,	1897-1900-2-3,	Princeton depot,
27	Provincetown,	. 1901–3,	Truro line to Allerton Street,
-28	Quincy,	1899,	Chubbuck Street to Fore River
29	Quincy,	1902,	Braintree line,
30	Quincy,	1904,	Randolph line to Milton line, .
31	Randolph,	1902–3,	Quincy line,
32	Raynham,	1901–2–3,	Taunton line to Raynham village, .
33	Reading,	1899-1900,	Stoneham line,
34	Reading,	1902–3,	North Reading line,
35	Rehoboth,	1895-6-9-1903-5,	Seekonk line,
36	Rehoboth,	1906.	Easterly end of 1905 lay-out,

### TABLE SHOWING THE HIGHWAYS LAID OUT OR

<sup>1</sup> Exclusive of 1 200 feet at railroad crossing. <sup>2</sup> 1897-8 sections. <sup>3</sup> 1894-8 sections.

## APPENDIX A.

No. 54.]

CONTRACTED FOR BY THE COMMISSION, ETC. - Continued.

ROAD LAID OU	JT.	Length		Material of			
Direction.	Length (Miles).	con- structed (Miles).	Location (Feet).	Macadam (Feet).	Shoulders (Feet).	Road Surface.	
Northwesterly, .	. 42	.42	50	15	3	B.	1
Southerly, .	.50	.50	49.5	15	-	А.	2
Southerly, .	52	.52	49.5	15	-	А.	3
Southerly, .	1.16	1.16	70-135-156-160	15	-	А.	4
Southerly, .	2.31	2.31	66	15	2 3	С-В.	5
Easterly,	.72	.72	40	15	-	В.	6
Southerly, .	.50	.50	50	15	-	В	7
Northerly, .	1.03	1.03	40-50-60	15	3	.В.	8
Southerly, .	1.02	1.02	40-50-67	15	3	В.	9
Westerly,	2.18	2.18	30-49.5	17	35	D-A.	10
Easterly,	2.61	2.61	50–50±	15	-	B-A-G.	11
Northeasterly, .	1.98	1.98	50-50+	15	-	В.	12
Southeasterly and	2.16	2.16	50-45	12	-	B-G.	13
southerly. Southwesterly, .	.79	.85	50	15	-	В.	14
Southeasterly, .	2.52	2.52	$50\pm$	15	3	G-A.	15
Easterly,	1.73	1.73	50	-	-	N.	16
Northwesterly, .	3.60	3.60	50-65-70	15	3–5	B.	17
Southerly, .	.33	.33	50	15	-	В.	18
Easterly,	1.95	1.95	50	12	2 3	А-В.	19
Easterly,	2.38	2.38	405060	15	8 3	А.	20
Westerly,	.76	.76	50	15	-	A-G.	21
Southerly, .	1.58	1.58	50-100-55-60	15	-	В.	22
Southwesterly, .	.48	.45	50-66	15	-	А.	23
Northerly, .	1.81	1.81	26-50	15	3	B.	24
Northerly, .	5.05	5.05	40-40+-50-112	15	4 3	B.	25
Easterly,	2.23	2.23	50	15	5 3	В	26
Westerly,	1.10	1.10	33–50	15	-	B-O-G.	27
Southeasterly, .	.49	. 49	63–66	32	-	А.	28
Northerly, .	.57	.53	66	15	-	B.	29
Northerly, .	1.23	1.23	52-66	15	- 1	B.	30
Southeasterly, .	1.38	1,38	66	15	-	B.	31
Northeasterly, .	1.48	1.48	40-40+	15		0.	32
Northerly, .	1.07	1.07	66	15-18	3	В	33
Southerly, .	2.67	2.67	66	15-18	-	B.	34
Easterly,	3.51	3.51	60-50+-50-54	15	6 3	B-G.	35
Easterly,	.66	.60	50-60	15	-	B.	36

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<sup>4</sup> 1894 to 1898 sections inclusive. <sup>5</sup> 1897 section. <sup>6</sup> 1895-6-9 sections.

			ROAD LAID OUT.
TOWN OR C	ITY.	Year.	
			From —
Revere, .		1897-8,	Boston line,
Revere, .		1899,	Saugus line,
Richmond, .		1897-8-9-1901-2-3-4-5, .	Boston & Albany railroad section, .
Richmond, .		1906,	Northerly end of 1905 lay-out, .
Rochester, .		1903,	Marion line to Acushnet line, .
Rockland, .		1902,	Abington line,
Rockland, .		1905,	Hanover line,
Rockland, .		1906,	Connecting previous lay-outs,
Rockport, .		1902,	Near Gloucester line,
Rockport, .		1906,	Southerly end of 1902 lay-out to
Rowley, .		1905,	Gloucester line. Newbury line,
Russell, .		1894-5-6-7-8-9,	Westfield line to Huntington line,.
Rutland, .		1904,	Holden line,
Salem, .		1901,	Swampscott line,
Salisbury, .		1904–5,	Town Creek,
Sandwich, .		1897-8-1900-2, .	Barnstable line,
Saugus, .		1899,	Fox Hill bridge to Revere line, .
Saugus, .		1906,	Melrose line,
Scituate, .		1894-5-1900-3, .	Gannett's Corners,
Scituate, .		1906,	Gannett's Corners to Cohasset line,
Scituate, .		1906,	Southerly end of 1903 lay-out, .
Seekonk, .		1900–1–2–4,	Rehoboth line to Rhode Island line.
Shelburne, .		1894-5-6-7,	Dille Ginestite Galasia line
Shrewsbury,		1895-6-7-8-9-1900-4,	Worcester line to Northborough line.
Somerset, .		1895-6-7-9-1900-1-2,	
Somerset, .		1903-4,	Slade's, Ferry bridge to Swansea line.
Southampton,		1905,	Easth amount on line
Southborough,		1902-5,	Westborough line,
Southbridge,		1902,	Charlton line,
South Hadley,		1895-7-8-9-1900, .	Granby line to South Hadley Falls.
South Hadley,		1903-4,	G 11 II Han to Couth Hadler
Spencer, .		1897-1900-1,	Leicester line,
Spencer, 4, 5 .		1906,	Brookfield line, .
Sterling, .		1897-8,	Near town hall,
Sterling, .	, · ·	1905,	Lancaster line,
Sterling, .		1906,	Leominster line,
	Revere,.Revere,.Richmond,.Richmond,.Rochester,.Rockland,.Rockland,.Rockland,.Rockland,.Rockland,.Rockland,.Rockland,.Rockland,.Rockport,.Rockland,.Rockland,.Rockland,.Rockport,.Rowley,.Salem,.Salisbury,.Sandwich,.Saugus,.Soituate,.Scituate,.Seekonk,.Shelburne,.Southampton,Southborough,Southbridge,South Hadley,Spencer, 4, 5.Sterling,.	Revere,       .       .       .         Richmond,       .       .       .         Rochester,       .       .       .         Rochester,       .       .       .         Rockland,       .       .       .         Rockport,       .       .       .         Rokeport,       .       .       .         Rokeport,       .       .       .         Rowley,       .       .       .       .         Rutand,       .       .       .       .         Salem,       .       .       .       .         Saugus,       .       .       .       .         Saugus,       .       .       .       .         Soituate,       .       .       .       .         Scituate,       .       .       .       .         Shelburne,       .       .       .       .	Revere,         1897-8,           Revere,         1899,           Richmond,         1897-8,           Richmond,         1897-8,           Richmond,         1906,           Rochester,         1903,           Rochadd,         1902,           Rockland,         1905,           Rockland,         1905,           Rockland,         1906,           Rockland,         1906,           Rockport,         1906,           Rockport,         1906,           Rowley,         1905,           Rowley,         1905,           Rowley,         1905,           Russell,         1904,           Salem,         1901,           Salisbury,         1897-8-1900-2,           Salagus,         1897-8-1900-2,           Saugus,         1897-8-1900-2,           Saugus,         1906,           Scituate,         1906,           Scituate,         1906,           Scituate,         1906,           Scituate,         1906,           Scituate,         1906,           Somerset,         1905,           Somerset,         1903-4,           South

#### TABLE SHOWING THE HIGHWAYS LAID OUT OR

<sup>1</sup> 1894–5 sections.

<sup>2</sup> 1897-8-1900 sections.

<sup>3</sup> 1895-6-7-9 sections.

CONTRACTED	FOR	BY	THE	COMMISSION,	ЕТС. —	Continued.
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ROAD LAID OU	T.	Length	v	VIDTHS.	1	Material of	_
Direction	Length (Miles).	con- structed (Miles).	Location (Feet).	Macadam (Feet).	Shoulders (Feet)	Road Surface.	
Northeasterly, .	.58	.58	44-50	24	3	А.	1
Southwesterly, .	.67	.67	71	22	2	А.	2
Northerly, .	3.16	3.16	50-66-50	-	-	F.	3
Northerly, .	.34	.34	50		-	F.	4
Westerly,	5.27	5.27	33–62	15	3	в.	5
Northeasterly, .	1.00	1.00	50	15	-	В.	6
Easterly,	.91	.91	50–58	15	-	B.	7
-	.44	.44	$50\pm$	15	-	В.	8
Northerly, .	.32	.32	$50\pm$	15	-	А.	9
Southerly, .	.62	Partly	$50\pm$	-	-	-	10
Southeasterly, .	.13	graded. .13	50-82	-	-	N.	11
Northeasterly, .	6.66	6.66	50	15	1 3	1894–5 A, 1896– 7–8–9 F.	12
Northwesterly, .	1.16	1.16	50–59	15	-	7-8-9 F. B	13
Northerly,	.13	.13	60+	-	-	F	14
Northerly and	1.45	1.45	50-99-66	21-15	-	А.	15
southerly. Westerly,	2.83	2.83	50	15	2 3	0-В.	16
Southerly, .	1.60	1.60	71±	22	2	A.	17
Southeasterly, .	. 19	.19	49.5	15	-	B.	18
Southeasterly, .	2.52	2.52	30-40-50	15	1 3	A-B-C.	19
Northwesterly, .	.37	.37	30-48	<b>1</b> 5	-	B.	20
Southerly, .	.73	.60	40±	15	-	В	.21
Westerly,	2.76	2.76	60	15-20	-	B-A.	22
Northeasterly, .	2.16	2.16	30–50	18-15	3	B-A.	23
Northeasterly, .	4.86	4.86	50-65-66	18-15	3	В.	24
Northerly, .	4.50	4.50	40-50-60	18-15	3 3	B.	25
Northwesterly, .	1.89	1.89	45-60	15	-	B.	26
Southwesterly, .	.66	.66	50	-	-	F.	27
Easterly,	1.89	1.89	$50\pm-40-50$	15	-	1902 F, 1905	28
Southwesterly, .	.91	.91	50	-	-	B. F.	29
Southwesterly, .	2.42	2.42	36–50	15	3	А.	30
Southerly, .	2.71	2.71	49.5-60-64-110	15	_	. A.	31
Westerly,	1.60	1.60	50-58-60	15	4-3	B.	32
Easterly,	.84	.84	50-60	15	-	P.	33
Southwesterly, .	1.29	1.29	50	15	3	А.	34
Westerly,	.65	.65	49–50	15	-	А.	35
Southerly, .	. 40	-	45-50	-	_	-	36
	1.	U			1		

<sup>4</sup> Exclusive of 178 feet at Seven Mile River.

<sup>5</sup> Hassam pavement.

TABLE SHOWING THE HIGHWAYS LAID OUT OR

-				ROAD LAID OUT.
	TOWN OR CI	TY.	Year.	From —
1	Stockbridge,		1905,	Lee line at South Lee, .
2	Stockbridge,		1906,	Lee line at East Street,
3	Stoneham, .		1897-8,	South Street,
4	Stoneham, .	• . •	1900–1,	Reading line,
5	Stoughton, .		1902–3,	Canton line to Lincoln Street, .
6	Stoughton, 1.		1904–5,	Easton line to Walnut Street, .
7	Sturbridge, .		1897-1903-4,	Fisk Hill Road,
8	Sudbury, .		1897-8-1900-1-2-3, .	Marlborough line to Wayland line,
9	Sunderland, .		1897-1903-4,	Connecticut River bridge,
10	Sunderland, .		1906,	Southerly end of 1904 lay-out, .
11	Sutton, .		1899–1901–2,	Millbury line,
12	Sutton, .		1903-4,	Douglas line at Manchaug, : .
13	Swampscott,		1897-1900-1,	Salem line to Burrell Street,
14	Swansea, .		1903,	Somerset line,
15	Swansea, .		1903,	Myles River bridge,
16	Swansea, .		1906,	Northerly end of 1903 section, .
17	Taunton, .		1895-6-8-9-1900-1, .	Dighton line on Winthrop Street,.
18	Taunton, .		1905,	Near Three Mile River bridge, .
19	Taunton, .		1906,	Three Mile River bridge,
20	Templeton, .		1899-1901-2-3,	Gardner line at Otter River, .
21	Templeton, .		1905,	Junction of Main and Maple
22	Templeton, .		1906,	streets. Westerly end of 1905 lay-out, .
23	Tewksbury, .		1900-1-2-3-4-5,	Lowell line,
24	Tewksbury, .		1906,	Southerly end of 1905 lay-out to
25	Tisbury, .		1894,	Southerly end of 1905 lay-out to Wilmington line. Vineyard Haven to West Tisbury
26	Townsend, .		1896-7-8-9-1900-1, .	line. Groton line,
27	Truro,		1895,	Wellfleet line to Kelley's Corner, .
28	Truro,		1906,	Kelley's Corner,
<b>2</b> 9	Tyngsborough,		1895-6,	Tyngsborough bridge to Lowell
30	Uxbridge, .		1897-8-1901-3,	Blackstone line,
31	Wales, .		1901,	Brimfield line,
32	Walpole (south),		1894-5-7-1900,	Norfolk line,
33	Walpole (north),		1897-8-1900,	Norwood line,
34	Ware,		1897-9-1900-3,	New Braintree line,
35	Wareham, .		1896-1901,	Weweantit River bridge, Marion
36	Wareham, .		1906,	line. Near High Street on Marion Road,

<sup>1</sup> Exclusive of 250 feet at railroad bridge.

<sup>2</sup> 1897 section.

CONTRACTED	FOR	BY	THE	COMMISSION,	ЕТС. —	Cont	tinued.
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ROAD LAID OUT.		Length	WIDTHS.			Material of	
Direction.	Length (Miles).	con- structed (Miles).	Location (Feet).	Macadam (Feet).	Shoulders (Feet).	Road Surface.	
Easterly,	.55	.55	50	15	-	А.	1
Southwesterly, .	2.24	-	5065	-	-	-	2
Northerly, .	.57	.57	60–66	15	7–5	B.	3
Southerly, .	1.01	1.01	66	15	-	B-G.	4
Southerly, .	1.16	1.16	60	15	-	B.	5
Northerly, .	2.14	2.14	60–66	15	-	B.	6
Northwesterly, .	1.39	1.39	5050+	15	<sup>2</sup> 4-3	В.	7
Easterly,	5.11	5.11	49.5-50-60	15	33	B, 1903 A.	8
Southeasterly, .	.98	.98	50	15	2 3	А.	9
Southeasterly, .	. 23	.23	50	15	-	А.	10
Southerly, .	1.46	1.46	50	15	-	В	11
Northerly, .	.82	.82	50–50±	15	-	В.	12
Southwesterly, .	1.49	1.49	$50-60-64-50 \pm$	18-20	_	1897 F, 1900-1	13
Northwesterly, .	.31	.31	50-65	15	-	B-G.	14
Easterly and	.80	.80	40-50-55	15	-	B-G.	15
westerly. Northwesterly, .	1.44	1.44	50-60	15	-	В.	16
Easterly,	2.94	2.94	40-66	15	3	В.	17
Northeasterly, .	1.04	1.04	40-50	- 15	-	B.	18
Northerly, .	.03	.03	40	15	-	B.	19
Westerly,	2.00	2.00	50	15	-	A-G.	20
Westerly,	.59	.59	$50\pm$	15	-	А.	21
Southwesterly, .	.51	-	50	-	-	-	22
Southeasterly, .	5.83	5.83	$5050\pm$	15	-	А-В.	23
Southeasterly, .	.74	.74	50	15	-	А.	24
Southwesterly, .	1.93	1.93	50	15	3	В.	25
Northwesterly, .	4.69	4.69	505560	15	3	B-A-F-G.	26
Northerly, .	2.36	2.36	40	10-15	-	K-M.	27
Northerly, .	.80	.80	40±	12	-	К.	28
Southeasterly,	2.95	2.95	60	15	3	A-D.	29
Northwesterly, .	2.18	2.18	$50-50\pm$	15	-	D-A, 1903	30
Southwesterly, .	1.04	1.04	- 50±	-	-	F. F.	31
Northerly, .	2.60	2.60	50	15	3	С-В.	32
Southerly, .	1.94	1.94	50	15	3	В.	33
Southerly, .	2.28	2.28	50	15	3	А.	34
Northeasterly, .	.71	.71	50	15	3	В.	35
Southwesterly, .	1.10	1.10	50	15	-	0.	36

<sup>3</sup> 1897-8-1900 sections.

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	TOWN OD OF	Y	ROAD LAID OUT.
	TOWN OR CITY.	Year.	From —
1	Wareham,	1898-1901,	Cohasset Narrows bridge,
2	Wareham,	1905,	Parker's Mills,
3	Wareham,	1906,	South Wareham village,
4	Warren,	1896–7–8,	West Warren,
5	Warren,	1899–1900–1,	Warren to West Brookfield line,
6	Watertown,	1895-6,	Waltham line,
7	Wayland, <sup>2</sup>	1897-1900-3,	Weston line to Sudbury line, .
8	Wellesley,	1901,	Natick line to Blossom Street, .
9	Wellfleet,	1903,	Eastham line,
10	Wenham,	1897-1901-3,	Beverly line to Hamilton line, .
11	Westborough,	1897,	Northborough line,
12	Westborough,	1903,	Southborough line,
13	Westborough,	1906,	Southwesterly end of 1903 section,
14	West Boylston,	1897-8,	Worcester line,
15	West Bridgewater, .	1900-1-2-4,	Brockton line to Bridgewater line,
16	West Brookfield,	1899,	Ware line to Ware line,
17	West Brookfield,	1899–1900–1,	Brookfield line,
18	West Brookfield,		Warren line,
19	Westfield,	1894-6-8-9,	West Springfield line,
20	Westfield,	1898-9-1900-1-2,	Russell line,
21	Westford,	1902–3,	Littleton line,
22	Westminster,	1894-5-6-7-8-9,	Fitchburg line,
23	Westminster,	1903,	Gardner line,
24	West Newbury,	1895-6-7,	Newburyport line,
25	West Newbury,	1903-4-5,	Groveland line,
26	West Newbury,	1906,	Easterly end of 1905 lay-out,
27	Weston,	1898–9,	Wayland line to near Stony Brook,
28	Westport,	1894-6-7-8,	Dartmouth line,
29	West Springfield,	1895–6,	Top of Tatham Hill,
30	West Springfield,	1905,	Top of Tatham Hill,
31	West Springfield,	1906,	Westerly end of 1905 lay-out,
32	West Tisbury,	1895-6-7-1904,	Tisbury line to Chilmark line, .
33	Westwood,	1899–1900,	Norwood line to Dedham line, .
34	Weymouth,	1894,	Holbrook line to Abington line, .
35	Weymouth,	1895–6–7,	Fore River to Back River, .
36	Weymouth,	1903-4,	Broad Street via Washington
			Street.

TABLE SHOWING THE HIGHWAYS LAID OUT OR

<sup>1</sup> 1899-1900 sections. <sup>2</sup> Exclusive of 1,500 feet at railroad crossing and Sudbury River.

65

CONTRACTED FOR BY THE COMMISSION, ETC. - Continued.

Direction.	1	Length WIDTHS.			Material of		
2.1.0000011	Length (Miles).	con- structed (Miles).	Location (Feet).	Macadam (Feet).	Shoulders (Feet).	Road Surface.	
Westerly,	1.82	1.82	$50-40 \pm$	15	3	B.	1
Northwesterly, .	1.02	1.02	3050	-	-	-	2
Northwesterly, .	.18	.18	50	15	-	0.	3
Easterly,	1.89	1.89	49.5-50	15	3-4	A.	4
Easterly,	1.41	1.41	49.5	15	1 3	A-G.	5
Easterly,	.85	.85	36	27	3-4	A-B.	6
Westerly,	2.58	2.58	49.5-50-66-99	15	3	B.	7
Easterly,	1.18	1.18	52-60-70	15	-	A-G.	8
Northerly, .	, 4.23	4.23	4050	15-12		K.	9
Northerly, .	1.75	1.75	5060	18-15	-	А.	10
Southeasterly, .	.76	.76	50	15	3	в.	11
Southwesterly, .	1.46	1.46	50	_	-	F.	12
Southwesterly, .	.82	.70	50	-	-	F.	13
Northerly, .	1.55	1.55	50	15	3	1897 H, 1898	14
Southerly, .	3.16	3.16	$50-55\pm-60\pm-$	15	-	А-Н. В.	15
Southwesterly, .	.15	.15	115 50	15	3	A.	16
Northwesterly, .	1.51	1.51	50	15	-	A.	17
Easterly, .	1.01	1.01	50-89	15	-	A.	18
Westerly,	2.22	2.22	50	18-15	3	A.	19
Easterly,	3.59	3.59	50-50+	18-15	3 3	А.	20
Northerly, .	3.25	3.25	4050	-	-	F.	21
Southwesterly, .	3.00	3.00	50-60	15	3	D-C.	22
Easterly,	2.25	2.25	66±	-	_	F.	23
Westerly,	2.24	2.24	50110	15	- 3-4.5	A-D.	24
Northeasterly, .	1.00	1.00	$50-50\pm$	15	-	1903 A, 1904–5 B.	25
Northeasterly, .	.38	.38	$50\pm$	15		В. В.	26
Easterly,	3.15	3.15	50	18	-	C-B	27
Easterly,	4.25	4.25	66–80	18	3	С-В.	28
Easterly,	1.17	1.17	50-135	18	3	A. '	29
Westerly,	.57	.57	50	15	-	А.	30
Westerly,	. 19	. 19	50	15	- }	А.	31
Southwesterly, .	5.35	5.35	40-40+-50	15-12-10	4 3	В.	32
Northerly, .	1.05	1.05	45-55-60	15	3	B.	33
Easterly,	.25	. 25	50	15	3	в.	34
Easterly,	1.75	1.75	50-125	15-18	3	в.	35
Southerly, .	2.80	2.80	50-60-80	15-12	-	B-F.	36

<sup>3</sup> 1898-9-1900 sections.

4 1895-6-7 sections.

				ROAD LAID OUT.		
	TOWN OR CITY.		Year.	From —		
1	Whately, <sup>1</sup> .		1899–1901–2–3–4–5, .	Deerfield line,		
2	Whately,	•	1906,	Southerly end of 1905 lay-out to		
3	Whitman,		1894-5-6,	Hatfield line. Brockton line,		
4	Wilbraham, <sup>2</sup> .	•	1894-5-6-1901-3-4, .	Springfield line to Palmer line, .		
5	Williamsburg, .		1896-8-1901-3,	Goshen line,		
6	Williamstown, .		1895-6-8-1903,	North Adams line,		
7	Winchester,		1899–1900,	Arlington line to Woburn line, .		
8	Windsor,		1897-1902-3,	Cummington line,		
9	Windsor,		1906,	Peru Street via Main Road, .		
10	Woburn, '		1900-1-2,	Winchester line to Burlington line,		
11	Worcester,		1896-7,	Paxton line,		
12	Worcester,		1897-1903,	Holden line,		
13	Worcester,		1900–5,	West Boylston line,		
14	Wrentham,		1899–1900–1,	Plainville line,		
15	Wrentham,		1897-8-1902,	Norfolk line,		
16	Yarmouth (north),		1894-5-6,	Barnstable line to Dennis line, .		
17	Yarmouth (south),	•	1895-6-7,	Barnstable line to Bass River bridge.		

TABLE SHOWING THE HIGHWAYS LAID OUT OR

<sup>1</sup> Exclusive of 375 feet at railroad crossing and 800 feet at railroad bridge.

<sup>5</sup> 1897 section.

4 1900 section.

## APPENDIX A.

No. 54.]

ROAD LAID OU	JT.	Length				Material of	
Direction.	Length (Miles).	con- structed (Miles).	Location (Feet).	Macadam (Feet).	Shoulders (Feet).	Road Surface.	
Southerly, .	3.61	3.61	$5050\pm$	12	-	- A.	1
Southerly, .	.28	.28	50	12	-	А.	2
Easterly,	1.70	1.70	45	18	4	В.	3
Easterly,	4.81	4.81	$507950\pm$	15	33	A-G.	4
Southeasterly, .	2.65	2.65	50	15	-	B <b>-</b> F, 19 <b>03</b> N.	5
Westerly,	1.95	1.95	50-60-70	15	3	A-D.	e
Northeasterly, .	1.96	1.96	50	15-20-21	-	C.	7
Westerly,	.98	.98	$5050\pm$	-	-	F.	8
Southeasterly, .	.79	-	60	-	-	-	9
Northwesterly, .	2.03	2.03	40–50	15	4 3	GС-В.	10
Southeasterly, .	1.35	1.35	50	15	3	В.	11
Southerly, .	1.50	1.50	50	15	3	В.	12
Southwesterly	1.22	1.22	50	15	3	А.	13
and southerly. Northerly,	2.21	2.21	50	15	5 3	в.	14
Southeasterly, .	1.86	1.86	50	15	3	B-A.	15
Easterly,	3.71	3.71	40-60	15	3	В.	16
Easterly,	5.09	5.09	40	15	3	B-C.	17

CONTRACTED I	FOR	BY	THE	COMMISSION,	ЕТС. —	Concluded.
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<sup>2</sup> Exclusive of 1,763 feet at Wilbraham village.

<sup>3</sup> 1894-5-6 sections.

## HIGHWAY COMMISSION.

[Pub. Doc.

APPENDIX B.

Table showing Towns and Cities in which Work has been done during the Year 1906, and the RESIDENT ENGINEERS ON SUCH WORK, TOGETHER WITH DATES OF BEGINNING AND ENDING.

te ding.	. 12 . 17 . 17 . 18 . 18 . 17 . 17
of En	Sept Oct. Oct. Sept Sept Dec. Dec. July June May June Aus. Dec. Dec. Dec. Dec. Dec. Dec. Dec. Dec
of ling.	28 11,7,7,4,5,3,1,5,7,4,4,0,1,1,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5,5
Date Begin	Aug. Sept. Aug. July July July July April April April April April April April April Nov. Nov.
ract.	900 900 900 900 900 900 900 900 900 900
of Cont	227,00121,7220,4212222,286,110,249,110 227,0121,7124,112,4212,20,4212,222,286,112,4212,4212,220,4212,223,286,122,223,260,122,223,223,260,122,223,223,223,223,223,222,223,222,223,222,223,222,223,222,223,222,223,222,223,222,223,222,223,222,223,222,223,222,223,222,223,222,2
Date o	Sept. July July July July July July May Ray Sept. Sept. Sept. July April Sept. Sept. Sept.
neer.	ey,
t Engi	Addis, Addis, Bingham, Everett, Addis, Addis, Rowell, Rowell, Rowell, Rowell, Winslow, Winslow, Winslow, Winslow, Winslow, Winslow, Winslow, Stodder, Winslow, Stodder, Biodde
Residen	Addi Bingha Ever Addi Ever Addi Ever Addi Addi Addi Addi Addi Addi Addi Add
	W. G. Addis, W. G. Addis, F. R. Bingham, P. H. Everett, W. G. Addis, W. A. Rowell, R. A. Yesper, D. H. Winslow, D. H. Winslow, Geo. A. Curtis, W. M. Stodder, W. M. Stodder, W. M. Stodder, W. M. Stodder, D. H. Winslow, D. H. Winslow, D. H. Winslow, W. M. Stodder, D. H. Winslow, W. M. Stodder, W. G. Burns,
Lay-ot	1897, 1906,1
unty.	
Çõ	den, ssex, ssex, kk, kk, tk, uth, uth, tk, tsex, ater, ater, den,
	Bristol, Bristol, Hampden, Middlesex, Bristol, Berkshire, Norfolk, Norfolk, Norfolk, Norfolk, Norfolk, Plymouth, Middlesex, . Bristol, Bri
OR CITY.	
	· · · · · · · · · · · · · · · · · · ·
TOWN	
	Acushmet, Acushmet, Acushmet, Astaby, Astaby, Astaby, Bedford, Bedford, Bellingham, Berkley, Berkley, Berkley, Barkley, Barkley, Barkley, Barkley, Barkley, Barkley, Canton, Canton, Chathan, Chathan, Chicopee,
	Acushne Acushne Agawam Attheby, Attheby, Becket, Becket, Bellinghi Bellinghi Bellinghi Berkley, Beverly, Beverly, Beverly, Beverly, Canton, Conton, Chathart
	TOWN OR CITY. County. Lay-out. Resident Engineer. Date of Contract. Beginning. of Ending.

8230,827,427,127,227,227,227,227,227,227,227,227,2
August Angle August Angle August Angle August Angle August
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1905, 1906,
Mar. 30, June 19, May 10, May 13, May 13, May 15, May 15, June 26, June 26, June 26, June 26, June 28, June 28, June 12, June 12, June 12, June 12, June 12, June 28, March 6, May 16, Mar 15, Mar 28, Mar 16, Mar 28, Mar 28,
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sley, sley, ', 'ann, '
L. T. C. Loring, E. J. Nichols, W. A. Yesper, W. A. Rowell, Chas, H. Howes, L. L. Gerry, W. P. Hammersle, W. M. Stodder, E. J. Nichols, R. A. Vesper, R. A. Vesper, R. A. Vesper, R. A. Vesper, R. A. Vesper, P. H. Ewertt, F. H. Ewertt, F. H. Ewertt, F. H. Cunninghum, C. A. Welton, L. L. Gerry, L. L. Gerry, L. L. Gerry, L. L. Gerry, L. L. Gerry, L. L. Gerry, C. A. Welton, D. H. Winslow, P. H. Ewertt, W. A. Rowell, H. E. H. Bevertt, P. H. Bevertt, P. H. Bevertt, P. H. Bevertt, W. A. Rowell, H. B. Bevertt, P. H. Bevertt, P. H. Bevertt, W. A. Rowell, H. B. Bevertt, P. H. Bevertt, W. A. Rowell, H. B. Bevertt, B. H. Bevertt, B. H. Bevertt, B. H. Bevertt, B. H. Bevertt, B. H. Bever
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d, d, lid, lid, (south), n, (bridge), is, (bridge), is, is, is, rength
Chilmark, Concord, Concord, Concord, Concord, Deerfield, Deerfield, Deerfield, Douglas, (south), Dighton, (bridge), Dighton, (bridge), Dighton, (bridge), East Longmeadow Erving, Franhuy, Carathon, Grachouth, Franhuy, Grachouth, Franhuy, Grachouth, Grachouth, Franhuy, Grached, Gracher, Grach

APPENDIX B.

TOWN OR CITY.								
	County		Lay-out.	Resident Engineer.	Date of Contract.	Date of Beginning.	Date of Ending.	
•	Middlesex, .	•	1897, .	G. D. Marshall,	3, 1	June		
• • •	Essex,	•	1899, .	Frank H. Morris, .	30, 1	Feb.		
• • •	Bristol,	•	1906, .	G. D. Marshall,	11, 1	Oct.		
	Middlesex, .	•	1906, .	Frank H. Morris, .	22, 1	July		
Middleborougu (180),	Plymouth .	•	1900, .	Howard C. Holden,	1 C 1 C	Sont		
· · · · · · · · · · · · · · · · · · ·	Worcester.	•••	1906	C. A. Welton.	. July 17, 1906.	Aug. 9.	Det. 27.	
• •	Franklin,		1906, .	L. L. Gerry,	4,1	Oct.		
•	Norfolk, .	•	1905, .	M. W. Fisher, .	8, 8,	Oct.		
North Brookfield,	Worcester,	•	1906, .	A. D. Dadley,	12, 1	July		
Northampton,	Hampshire,	•	1906,	E. S. Bingham,	14, 1	Aug.		
• • •	Bristol,	•	1906, .	G. D. Marshall,	28, 28,	Sept.		
•	W orcester,	•	1900, ·	C. A. Welton,	20, 1	Juity		
•	Plymonth .	•	1905	H. C. Holden	7, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	Inne.		
• •	Worcester,		1904,	L. T. C. Loring.	17, 1	May		
•	Berkshire,		1906, .	G. R. Brown,	11, 1	Sept.		
• • •	Bristol,	•	1906, .	H. C. Holden,	5, 1	Sept.		
• • • •	Bristol, .	•	1906, .	G. A. Curtis, .	5, 1	Oct.		
• • • •	Berkshire, .	•	1906, .	G. R. Brown, .	12, 1	Sept.		
•	Plymouth, .	•	1903,	W. G. Addis,	19, 1	Sept.		
•	Plymouth,	•	1905,	W. P. Hammersley,	21, 1	April		
• • • • •	Flymouth,	•	1906,	D. H. Dickinson,	, i 1, i 2, i 1, i 2, i 2, i 2, i 2, i 2, i 2, i 2, i 2	Sept.		
•	Mr. J. J.	•	1906,	Frank H. Morris, .	1 F 2 G	Inov.		
•	middlesex,	•	1900	TT C II J	1	Aut		L-
•	Plumouth,	•	1006	C a Tultonen,	 - -	Aug.		
Somerset-Surgers	Erymouth,	•	1006 ·	W C Addie .	1°,	Mow		
Southborough.	Worcester.	•	1905.	C. A. Welton.	12, 1	Mar.		
• •	Worcester,	•••	1906,	C. A. Welton.	11, 1	Sept.		
•	Wonoocton		1001					

TABLE SHOWING TOWNS AND CITHES IN WHICH WORK HAS BEEN DONE. ETC. - Concluded.

22,22,22,22,22,22,22,22,22,22,22,22,22,
May Sept. Oct. May Oct. June June June June Oct. June Oct.
12,4,7,9,5,5,6,5,7,7,7,6,5,7,1,3, 2,4,7,9,7,7,7,7,6,5,7,1,3,2,2,1,3,2,2,2,2
April Aug. July Aug. May. May. May. May. May. May. May. May
1905, 1905,
$\begin{smallmatrix} & 33, \\ & 13, \\ & 21, \\ & $
Aug. June July July July May Sept. July Sept. Sept. June June June June
·····
H. Dickinson, man L. Gerry, G. Holden, J. Nichols, H. Howes, ank H. Morris, P. Hammersley, P. Hammersley, P. Hammersley, D. Marshall, C. Holden, G. Holden, H. Dickinson, C. Holden, H. Norton, H. Norton, H. Norton, H. Howes, I. Gerry, L. Gerry,
1905, 1906, 1906, 1906, 1905, 1906,
••••••
Norfolk, Franklin, Bristol, Bristol, Worcester, Middlesex, Plymouth, Plymouth, Plymouth, Plymouth, Randen, Essex, . Hamplen, Franklin, Franklin,
•••••
••••••
toughton, underland, wansea, wansea, wansea, wansea, wanton (bridge), empleton, ewkbury, vrgsborough, fareham, vareham, vareham, vestborough, vest Newbury, vest Newbury,

APPENDIX B.

# APPENDIX C.

SHOWING CONTRACT PRICES ON

				Ez	CAVATI	ON.	- u o	Yard).
	TOWN OR CITY.	Contract Number.	Contractor.	All Kinds (Cubic Yard).	Borrow (Cubic Yard).	Ledge (Cubic Yard).	Portland Cement C crete Masonry.	Shaping (Square Y
1	Agawam,	1017	Amos D. Bridge,	\$0 40	\$0 45	- 1	\$8 00	\$0 03
2	Ashby,	1010	Richmond F. Hudson, .	1-	-	-	-	-
3	Athol,	1041	Fred E. Ellis,	60	75	\$2 00	$\begin{array}{c} 11 & 00 \\ 19 & 00 \end{array}$	{ 03
4	Attleborough, .	1032	Lane Quarry Co.,	-	- •	-	-	-
5	Becket,	1001	Michael L. Camarco, .	\ 42 450	{ 47	1 50	11 50	-
6	Bedford,	1024	John A. Gaffey,	50	60	2 00	-	03
7	Bellingham,	989	Town,	45	50	1 50	8 00	03
8	Berkley,	1019	Luigi C. Carchia, .	35	60	2 50	10 00	02
9	Beverly,	972	John A. Gaffey,	40	60	1 15	-	02
10	Bridgewater,	990	Richmond F. Hudson, .	35	70	1 00	8 00	03
11	Burlington,	1039	Richmond F Hudson, .	70	70	2 00	10 00	03
12	Canton	1022	William Shea & Son, .	50	50	1 75	8 00	03
13	Charlton,	1011	Richmond F Hudson, .	50	60	2 00	9 00	03
14	Chatham,	1014	Town,	25	30	-	-	021
15	Chicopee,	1042	City,	40	1 17	1 75	8 00	03
16	Chilmark,	1015	Town,	30	50	2 50	12 50	03
17	Concord,	998	Town,	50	50	2 00	10 00	03
18	Dalton,	982	Olin T. Benedict, .	-	-	-	-	-
19	Deerfield,	1028	William N. Flynt Gran- ite Co.	40	50	-	8 00	03
20	Dennis,	984	William Sears,	25	35	-	8 00	021
21	Dighton,	1025	Magee, Macomber & Co.,	40	45	2 00	7 00	02 <del>1</del>
22	East Longmeadow,	1003	William N. Flynt Gran- ite Co.	45	40	2 00	10 00	03
23	Erving,	1004	Fred E. Ellis,	-	í – 1	-	-	-
24	Falmouth,	1040	Charles H. Thomas, .	70	25	1 00	-	03

<sup>1</sup> Rubble masonry.

<sup>5</sup> Eight-inch clay.

<sup>9</sup> Fifteen-inch clay.

<sup>2</sup> Rip-rap.<sup>6</sup> Ten-inch clay.

<sup>10</sup> Stone from Cohasset quarry.

### APPENDIX C.

#### STATE ROADS DURING 1906.

BR	OKEN CONE.	I	PIPE CUI	VERTS (PI	er Linea	ь Гоот	·).	ot).	(Lineal	nder- 1 b i c			T
			CLAY.			IRON.		l Fo	Liı	or U C u		lach)	
Local (Ton).	Trap (Ton).	Twelve-inch.	Eighteen- inch.	Twenty-four- inch.	Twelve-inch.	Eighteen- inch.	Twenty-four- inch.	Fencing (Lineal Foot).	Side Drains ( Foot).	Stone Filling for Under- drains (per Cubic Yard).	Bounds (Each).	Catch-basins (Each).	
-	\$2 10	\$0 70	-	-	\$2 00	-	-	\$0 25	-	-	\$1 50	\$25 00	1
\$1 85	-	-	-	_ (	-	-	-	-	-	-	-	-	2
1 85	-	80	-	-	2 25	-	-	80	\$0 55	2 <b>\$</b> 1 25	2 00	-	3
390	2 30	-	-	-	-	-	- 1	-	- 1	-	-	-	4
-	-	-	-	-	-	-	- 1	30	-	-	2 00	-	5
-	2 15	-	-	-	- 1	-	-	27	-	1 00	2 00	-	6
1 30	-	75	-	-	2 00	- )	-	25	-	-	1 50	- 1	7
1 35		<sup>5</sup> 60	<sup>6</sup> \$0 75	-	-	1 - 1	-	23		60	2 00	25 00	8
-	71 55	<sup>6</sup> 60	-	-	-	-	-	-	-	86 <b>0</b>	1 00	20 00	9
1 35	-	560	-	-	-	-	-	30	-	75	2 00	-	10
1 45	- 1		2 00	-	- 1	\$3 50	-	30	-	-	2 50	35 00	11
1  55	- 3	<sup>9</sup> 1 25	-	-	- 1	-	-	25	-	-	2 00	-	12
1 45	-	70	-	-	2 00	-	-	30	-	70	2 00	-	13
-	101 95	560	-	-	-	-	-	60	- 1	1140	75	20 00	14
-	2 30	75	1 25	<sup>12</sup> \$0 50	2 00	-	-	25	-	- 1	1 50	-	15
1 80	-	555	<sup>9</sup> 1 20	-	131 25	-	-	26	1163	85	2 10	25 00	16
-	1 85	75	1 50	· 660	-	-	-	30	-	-	2 00	25 00	17
-	1 94	-	-	-	-	-	-	- 1	-	-	-	-	18
-	1 85	75	<sup>6</sup> 65	-	2 50	- 1	-	30	-	-	1 50	25 00	19
- 19	102 20	70	⁵50	-	- 1	-	-	22	-	1140	1 50	20 00	20
1 50	-	75	⁵50	-	2 50	-	-	25	-	65	1 50	25 00	21
-	180	-	-	-	2 50	-	-	35	-	65	1 50	-	22
-	1 98	-	- 1	-	-	-	-		-	-	-	-	23
-	2 75	-	-	-	-	-	-	-	-	-	2 50	30 00	24

<sup>3</sup> Broken stone from "stack."

<sup>4</sup> Excavation for bridge foundations.

<sup>7</sup> Stone from city of Beverly crusher. <sup>11</sup> Clay hardening. <sup>12</sup> Twelve-inch clay to be relaid.

<sup>8</sup> Cobble stone gutters. <sup>13</sup> Eight-inch iron.

## HIGHWAY COMMISSION. [Pub. Doc.

SHOWING CONTRACT PRICES ON

=				1				
				Ex	CAVATI	ON.	Con	Yard).
		er.		(Cubic	bic	ic		
	TOWN OR CITY.	Contract Number	Contractor.		(Cub	Cubic	rtland Cement crete Masonry.	(Square
		tet N		Kinds ard).	v ()	).	nd (	
		ontre		All Kin Yard)	Borrow Yard).	Ledge Yar	Portland crete A	Shaping
_		Ö		P	<u> </u>	L)	P.	52
1	Gardner,	1012	Fred E. Ellis,	-	-	-	-	-
2	Granby,	991	Lane Construction Corp.,	\$0 45	\$0 50	\$1 50	\$8 00	\$0 03
3	Greenfield,	999	Town,	50	45	1 75	8 00	03
4	Hadley,	1013	Lane Construction Corp.,	-	-	-	-	-
5	Hanover,	1050	Edward J. Rourke, .	45	50	-	8 00	03
6	Hatfield,	1018	Town,	} <sup>40</sup> <sub>360</sub>	40	1 75	10 00	03
7	Haverhill, <sup>4</sup>	1026	James E. Watkins, .	-	-	-	-	-
8	Holden,	973	Worcester Broken Stone	60	-	- 0	-	-
9	Holliston,	1033	Co. W. H. Mague Co., .	45	65	2 00	10 00	03
10	Hudson,	1029	Worcester Broken Stone	49	59	1 50	9 00	03
11	Huntington, .	1034	Co. Lane Construction Corp.,	45	60	2 00	$\left\{ \begin{array}{c} 10 & 00 \\ 68 & 00 \end{array} \right\}$	{ 03
12	Lee,	985	Olin T. Benedict, .		-	-	-	-
13	Lee (south), .	1044	Michael L. Camarco, .	42	62	1 50	8 50	03
14	Lee-Stockbridge, .	1045	John W. Polcaro, .	50	75	1 00	8 00	-
15	Lenox,	1048	William N. Flynt Gran-	55	-	1 50	8 00	÷
16	Lynn,	971	ite Co. Richmond F. Hudson, .	589	-	-	-	-
17	Mansfield,	1035	Edward J. Rourke, .	60	60	<sup>3</sup> 1 50	10 00	03
18	Melrose-Saugus, .	987	Fred E. Ellis,	45	50	2 50	$\begin{array}{c} 9 & 00 \\ 155 & 50 \end{array}$	{ 03
19	Middleborough, .	992	Town,	40	1 00	2 00	8 00	03
20	Middleborough, .	99 <b>3</b>	Town,	40	1 00	2 00	8 00	03
21	Millbury,	1016	Town,	45	50	1 50	8 00	03
22	Montague,	1030	Town,	45	50	-	8 00	03
23	Northampton, .	1021	Bruno & Milano,	35	60	1 75	7 50	02
24	North Brookfield, .	994	Town,	50	45	1 50	10 00	03
25	Norton,	1027	Edward J. Rourke, .	40	60	1 50	10 00	03
26	Oxford,	1005	Worcester Broken Stone	41	51	1 25	7 50	02
27	Pittsfield,	1036	Co. D. Hammond & Brother,	50	63	-	- 1	02
28	Rehoboth,	988	Town,	35	40	2 00	8 00	021
29	Richmond,	995	Town,	45	50	2 00	7 00	-
30	Rockland,	1020	Town,	40	50	2 00	9 00	03
-					<u> </u>			

13 Rip-rap.

 1 Ten-inch clay.
 2 Fifteen-inch clay.
 3 Excavation for bridge foundations.

 7 Rock embankment.
 8 Eight-inch clay.
 9 Telford foundation.

 12 Six-inch clay.
 13 Rip-rap.
 14 Granite block gutter paving.

<sup>12</sup> Six-inch clay.

<sup>8</sup> Eight-inch clay to be relaid.

BROF	KEN NE.	P	IPE CUL	VERTS (PE	r Lineal	Foot).	. 3	ot).	eal	bic			F
			CLAY.		n	RON.		l Foc	(Linea]	c u		ach).	
Local (Ton).	Trap (Ton).	Twelve-inch.	Eighteen- inch.	Twenty-four- inch.	Twelve-inch.	Eighteen- inch.	Twenty-four- inch.	Fencing (Lineal Foot).	Side Drains ( Foot).	Stone Filling for Under- drains (per Cubic Yard).	Bounds (Each).	Catch-basins (Each)	
-	\$2 28	_ 1	_	_	_ 0	_	-	-	-	_	_	- 1	1
-	2 25	\$0 75	-	_	\$2 25	-	-	\$0 30	-	- 1	\$2 00	- 1	2
-	1 75	75	-	-	2 50	-	-	25	-	- 3	1 50	-	3
-	1 95	-	-	- /	-	-	-	- 1	-	- 1	-	- 1	4
\$1 60	-	75	\$1 50	$\left\{ {}^{1\$0}_{21} {}^{65}_{25} \right.$	2 25	-	-	25	-	\$0 80	2 00	\$25 00	5
-	1 75	-	-	-	-	- 1	-	25	-	-	2 00	-	6
-	-	-	-	-	_	-	-	-	-	-	-	- 1	7
1 22	-	-	-	-	- 1	-	-	-	5\$0 60	80	-	-	8
1 55	-	70	-	-	2 50	-	-	33	-	-	2 00	30 00	9
1 44	-	80	2 00	$\left\{ \begin{array}{c} {}^{170} \\ {}^{21} 00 \end{array} \right.$	} -	-	-	30	-	-	2 00	25 00	10
-	1 90	75	<sup>1</sup> 65	- 1	2 00	-		30	-	-	1 50	-	11
-	2 29	-	-	- (		-	-	-	-	-	-	-	12
1 65	1 95	95	-	-	2 75	-	-	42	755	95	2 00	25 00	13
-	-	1 00	2 00	- )	2 00	\$3 50	-	30	<sup>5</sup> 1 55	1 25	2 00	25 00	14
-	-	1 00	<sup>8</sup> 80	$\left\{ {\begin{array}{*{20}c} {}^{1}1 & 00 \\ {}^{2}1 & 25 \end{array} \right.$	{ 2 50	3 50	-	<sup>5</sup> 1 50	{ <sup>9</sup> 50 1075	1 20	2 00	25 00	15
<sup>11</sup> 2 00	1 60	1250	-	-	-	-	-	23	131 25	<sup>14</sup> 2 00	2 00	25 00	16
1 60	-	75	-	-	-	-	-	27	-	-	2 00	25 00	17
1 25		70	1 50	${ \begin{array}{c} 160 \\ 290 \\ 11 \\ 21 \\ 10 \end{array} }$	} -	-	-	28	-	-	2 00	28 00	18
1 25	-	70	<sup>8</sup> 60	1 160	} 161 75	-	-	25	-	85	1 50	25 00	19
1 25	-	70	<sup>1</sup> 60	$\left\{ \begin{array}{c} {}^{21} 10 \\ {}^{850} \end{array} \right.$	\$ 161 75	-	-	25	-	85	1 50	25 00	20
1 40	-	75	1 00	-	2 00		-	25	-	80	1 50	-	21
1 55	-	75	-	-	2 25	-	-	25	-	-	1 50	20 00	22
-	2 00	70	-	-	2 00	-	-	25	-	60	2 00	-	23
-	2 00	75	-	-	2 00	-	-	30	-	85	2 00	-	24
1 65	- 1	75	<sup>2</sup> 1 25	-	-	-	-	25	-	-	2 00	25 00	25
1 34	-	80	-	-	2 00	-	-	25	-	75	2 00	-	26
-	1 90	-	-	-	-	-	-	25	-	-	2 00	25 00	27
1 43	-	75	<sup>1</sup> 65	<sup>2</sup> 1 25	-	-	-	25	-	75	1 50	25 00	28
-	-	70		-	2 00	-	-	25	171 25	75	2 00	-	29
1 75	-	75	850 \ 1840	21 25	2 00	-	-	25	-	-	1 50	25 00	30

#### STATE ROADS DURING 1906 — Continued.

<sup>4</sup> Lump sum, \$5,219.53.

<sup>10</sup> Cobble stone gutters.

<sup>15</sup> Rubble masonry.

<sup>5</sup> Gravel.

<sup>6</sup> Cement masonry.

<sup>11</sup> Broken stone screenings for sidewalks.
 <sup>16</sup> Ten-inch iron.
 <sup>17</sup> Screened gravel.

# HIGHWAY COMMISSION. [Pub. Doc.

-					_			
				Ex	CAVATIO	DN.	Con-	Yard).
	TOWN OR CITY.	Contract Number.	Contractor.	All Kinds (Cubic Yard).	Borrow (Cubic Yard).	Ledge (Cubic Yard).	Portland Cement ( crete Masonry.	Shaping (Square Yard)
1	Rockport,	1046	Luigi C. Carchia, .	\$0 50	\$0 70	\$2 00	\$10 00	\$0 02
2	Scituate,	1008	W. H. Mague Co., .	40	60	1 50	10 00	021/2
3	Spencer,	1037	Town,	40	45	1 75	8 00	03
4	Sterling,	1047	Richmond F. Hudson, .	55	-	3 00	10 00	03
5	Sunderland,	996	Town,	40	50	1 75	8 00	03
6	Swansea,	1009	Herbert E. Cushing, .	30	50	2 00	7 00	02
7	Taunton-Dighton,4.	983	Magee, Macomber & Co.,	-	-	-	-	-
8	Tewksbury, ·	1038	Fred E. Ellis,	60	67	1 50	10 00	03
9	Truro,	978	Town,	25	630	-	9 00	-
10	Wareham (Marion),	986	Lane Quarry Co.,.	30	45	-	8 00	021
11	Wareham,	1023	Lane Quarry Co.,	60	70	-	-	03
12	Westborough, .	1031	Town,	45	65	1 75	8 00	-
13	Westfield,	981	Lane Construction Corp.,	-	- /	-	- 1	-
14	West Newbury, .	997	Collins & O'Neil,	40	60	2 25	10 00	03
15	Whately,	1006	William N. Flynt Gran- ite Co.	40	-	-	-	03

SHOWING CONTRACT PRICES ON

<sup>1</sup> Eight-inch clay.

<sup>8</sup> Ten-inch clay.

<sup>2</sup> Blind drains.

<sup>6</sup> Sand.

BRC	OKEN ONE.	Pn	PE CUL	VERTS (P	er Lini	eal Fo	от).	oot).	(Lineal	r Under- Cubic			
			CLAY.			IRON.		I F	T	1 8		ach)	
Local (Ton).	Trap (Ton).	Twelve-inch.	Eighteen- inch.	Twenty-four- inch.	Twelve-inch.	Eighteen- inch.	Twenty-four- inch.	Fencing (Lineal Foot).	Side Drains ( Foot).	Stone Filling for drains (per Yard).	Bounds (Each).	Catch-basins (Each).	
\$1 50		\$1 00	\$1 50	-	-	\$4 50	-	\$0 30	-	-	\$2 50	-	1
1 40	- (	80	<sup>1</sup> 60	-	\$2 00	- 1	-	25	-	\$0 75	2 00	-	2
-	\$2 10	75	1 00	-	2 00	-	-	25	²\$0 30	90	1 50	-	3
1 75	-	80	-	-	2 25	-	-	30	-	85	2 00	\$35 00	4
-	2 00	75	-	-	2 50	-	-	25	-	-	1 50	30 00	-5
1 25	-	70	150	<sup>3</sup> \$1 00	-	-	-	30		-	1 50	30 00	6
-	-	-	-	-	-	-	-	-	- 1	-	-	- 3	7
-	2 20	<sup>5</sup> 65	2 00	-	-	-	-	30	- 1	-	2 00	30 00	8
-	72 55	75	565	<sup>2</sup> 50	-	-	-	25	-	<sup>8</sup> 1 30	1 00	25 00	9
-	72 05	150	-	-	-	-	-	22	- 3	-	1 50	22 00	10
-	72 05	-	-	-	-	-	-	-	-	-	1 50	-	11
-	- 1	75	-	-	2 00		-	25	<sup>9</sup> 65	95	1 75		12
-	1 43	-	-	- 1	-	-	-	-	- 1	-	-	-	13
1 55	-	60	555	-	- 1	-	-	30	-	-	2 25	25 00	14
-	2 00	-	-	-	-	-	-	-	-	-	2 00	-	15

### STATE ROADS DURING 1906 — Concluded.

<sup>3</sup> Fifteen-inch clay.

<sup>7</sup> Stone from Cohasset quarry.

<sup>4</sup> Lump sum, \$5,150.40.

<sup>8</sup> Clay. <sup>9</sup> Gravel.

## APPENDIX D.

### STATEMENT OF CLAIMS AGAINST THE COMMISSION. [As required by section 5, chapter 18 of the Revised Laws.]

NAME.	Residence.	Nature of Claim.
Barnes, George H., Barnes, Wm., 2d,	Marlborough, }	Damages caused by construction of State road at Mariborough.
Bennett, J. C., .	Lynn,	Damages caused by taking of land at Lynn.
Brennan, Ann M., .	Westport, .	Damages due to alleged accident on State road at
Brown, Mary,	Westfield, .	Westport. Damages due to alleged accident on State road in Russell.
Chase, Charles A., .	Somerset, .	Damages caused by drainage conditions on State
Coleman, Martin W.,	Richmond, .	road in Somerset. Damages due to construction of State road at Richmond.
Crowell, T. H., <sup>1</sup> .	Somerville, .	Damages caused by construction of State road at Chatham.
Daly, Julia M., <sup>1</sup> .	Abington, .	Damages caused by construction of State road at
Donovan, J. H., <sup>1</sup> .	Natick,	Abington. Damages due to construction of State road at
Green, Arthur E., .	Westfield, .	Natick. Damages due to alleged accident on State road
Griffin, John, et al., .	Natick,	at Russell. Damages due to construction of State road at Natick.
Merriam, Harriet M.,.	Millbury, .	Damages due to construction of State road at
Pierce, Alice,	Topsfield, .	Millbury. Damages due to alleged accident on State road at Wenham.
Salem Savings Bank,.	Salem,	Damages caused by taking of land at Lynn.
Seabury, Phœbe W.,	Dartmouth, .	Damages due to construction of State road at Dartmouth.
Sullivan, John, .	Westfield, .	Damages due to alleged accident on State road at
Sullivan, Kate, .	Millbury, .	Russell. Damages due to construction of State road at
Warren, Alice E. M., <sup>1</sup>	Auburn,	Millbury. Damages due to construction of State road at
Williams, Frank, .	Boston,	Auburn. * Damages due to alleged delays in furnishing mate-
Williams, Joseph, .	Somerset, .	rials for State highway construction at Beverly. Damages due to construction of State road at Somerset.

<sup>1</sup> The municipality is defending the action.

### APPENDIX E.

Cost per Mile of Road (Sections completed during the Year 1906).<sup>1</sup>

TOWN	OR	CITY.		Square Yards.	Miles.	Cost per Mile.
Agawam,				6,667	.644	\$7,250 80
Auburn,				12,810	1.456	5,349 16
Bellingham, 1905,				6,425	.730	8,601 33
Bellingham, 1906,				8,117	.922	7,157 12
Bellingham-Blackst	one,			2,013	. 229	6,630 39
Berkley,				6,742	.766	5,684 39
Beverly, <sup>2</sup> .				8,102	.767	7,524 42
Boxborough, <sup>3</sup> .				9,590	1.090	4,855 94
Bridgewater, .				5,500	.625	6,290 70
Burlington, .				8,600	.977	6,476 21
Canton,				5,000	.568	7,409 23
Charlton,				4,604	. 529	7,880 47
Chilmark,				11,736	1.667	4,982 04
Concord, 1905, .				8,523	.969	9,976 74
Concord, 1906, .		•		5,557	.632	7,950 69
Dennis,				7,255	.824	6,241 71
Douglas,				4,704	. 534	8,059 57
Dover, <sup>3</sup>				8,654	.989	5,740 90
Dracut,				10,833	1.231	6,684 66
East Longmeadow,				4,015	. 456	8,315 83
Framingham, .				11,228	1.276	4,133 98
Grafton,				4,400	. 500	8,363 86
Granby,				4,461	. 507	9,300 98
Greenfield, .				3,917	. 445	8,106 45
Groveland,				2,488	. 283	9,526 08
Hatfield,				- 2,917	.332	9,163 64
Holden,				4,583	. 521	9,701 34
Hudson,		• •		6,732	.765	5,658 99

Exclusive of cost of bridges and engineering charges.
 Macadam 18 feet in width.

<sup>3</sup> Gravel road.

TOWN OR C	EITY.			Square Yards.	Miles.	Cost per Mile.
Kingston,				8,943	1.016	\$6,040 19
Lancaster-Sterling, .				8,743	.995	5,436 82
Melrose-Saugus,				5,167	.587	10,876 32
Middleborough,				6,345	.721	7,163 37
Millbury,				5,167	.587	8,918 19
Needham,			•	9,150	1.040	4,080 36
North Brookfield, .			• ]	4,583	.521	10,157 57
Oxford,				7,470	849	7,730 27
Palmer, <sup>1</sup>				7,470	.849	4,239 32
Richmond, <sup>1</sup>				2,997	.341	7,495 54
Rockland,				3,882	. 441	6,486 30
Southborough,				9,975	1.133	6,872 71
Stoughton,				11,667	1.327	5,699 16
Sunderland,				2,000	.227	13,345 <b>41</b>
Swansea,				12,687	1.442	4,072 61
Templeton,		. *		5,167	.587	7,670 87
Tewksbury,				6,540	.743	9,037 69
Truro, <sup>2</sup>				5,609	. 797	6,572 32
Wareham, 1905, .				8,937	1.016	4,553 75
Wareham, 1906 (Marion),				9,692	1.101	5,461 87
Wareham, 1906, .				1,562	.178	5,790 79
West Newbury, 1904–5,				6,558	.745	7,906 72
West Newbury, 1906, .				3,333	.380	9,327 71
West Springfield, .				6,667	.758	6,354 45
Whately, 1905, <sup>8</sup> .				5,704	.810	6,360 03
Whately, 1906,				1,964	. 279	5,555 49
Totals,				354,152	40.704	-
Average cost per mile,.						\$6,742 74

COST PER MILE OF ROAD, ETC. - Concluded.

<sup>1</sup> Gravel road. <sup>2</sup> Broken stone and clay construction. <sup>3</sup> Macadam 12 feet in width.

### APPENDIX F.

#### MAINTENANCE.

Table showing the Amounts expended for Repairs and Maintenance and the Cost per Mile per Year on Each Road finished previous to 1906; also the Number of Miles of Road under Maintenance and the Amounts to be assessed upon Municipalities for Maintenance under Chapter 47 of the Revised Laws.

TOWN OR	CITY	•	Expended to 1906.	Expended in 1906.	Totals.	Total Cost per Mile per Year,	Expended per Mile in 1906.	Length under Main- tenance (Miles).	Arnount to be assessed on Cities or Towns.
Abington,			\$285 01	\$170 13	\$455 14	\$52 62	\$77 05	2.208	<b>\$110 40</b>
Acton, .			878 61	142 68	1,021 29	39 60	32 20	4.431	142 68
Acushnet,			1,285 31	2,556 13	3,841 44	221 92	752 91	3.395	169 75
Adams,			508 26	14 47	522 73	100 91	25 47	.568	14 47
Agawam,			19 89	68 03	87 92	26 24	37 94	1.793	68 03
Amesbury,			730 12	180 54	910 66	107 39	80 49	2.243	112 15
Amherst,			286 85	37 62	324 47	78 19	38 74	.971	37 62
Andover,			1,845 03	636 54	2,481 57	86 28	151 84	4.192	209 6 <b>0</b>
Ashby, .			3,051 37	382 31	3,433 68	102 68	10 70	3.571	178 55
Ashfield,			1,582 21	211 61	1,793 82	137 98	131 59	1.608	80 4 <b>0</b>
Ashland,			100 30	10 54	110 84	31 22	7 15	1.473	10 54
Athol, .			5,721 02	394 33	6,115 35	330 02	177 30	2.224	111 20
Attleborough,	,		729 50	93 84	823 34	63 82	35 39	2.651	93 84
Auburn,			2,388 54	300 49	2,689 03	81 60	57 09	5.263	263 15
Barnstable,			1,708 59	334 82	2,043 41	78 56	58 80	5.694	284 70
Barre, .			711 20	61 30	772 50	45 76	21 20	2.891	61 30
Becket,			169 64	88 07	257 71	73 42	54 90	1.604	80 <b>20</b>
Bedford,			210 02	15 36	225 38	33 74	13 75	1.117	15 36
Belchertown,			426 18	41 76	467 94	71 11	30 48	1.370	41 76
Bellingham,			19 20	87 54	106 74	35 46	29 12	3.006	87 54
Beverly,			5,544 62	2,069 14	7,613 76	326 91	364 28	5.680	284 00
Blackstone,	•	•	632 56	79 71	712 27	75 45	45 78	1.741	79 71

Table show	<i>wing</i>				nepuns	, ea. –	- Contin	ueu.
TOWN OR CI	TY.	Expended to 1906.	Expended in 1906.	Totals.	Total Cost per Mile per Year.	Expended per Mile in 1906.	Length under Main- tenance (Miles).	Amount to be as- sessed on Cities or Towns.
Bourne,		\$559 01	<b>\$151 0</b> 5	\$710 06	\$49 65	\$36 11	4.182	\$151 05
Boxborough, .		318 98	146 17	465 15	40 69	59 58	2.453	122 65
Braintree, .		77 11	45 23	122 34	24 81	42 62	1.061	45 23
Brewster, .		3,733 45	462 9 <b>0</b>	4,196 35	80 14	59 45	7.786	389 30
Bridgewater, .		124 28	21 78	146 06	35 19	8 09	2.689	21 78
Brimfield, .		1,459 95	132 68	1,592 63	64 29	33 45	3.966	132 68
Brockton, .		1,030 89	301 94	1,332 83	67 93	94 77	3.186	159 <b>30</b>
Brookfield, .		894 62	247 76	1,142 38	72 03	70 68	3.505	175 2 <b>5</b>
Buckland, .		3,368 44	406 92	3,775 36	128 32	103 43	3.934	196 <b>70</b>
Burlington, .		248 01	597 07	845 08	138 76	211 57	2.822	141 <sup>-</sup> 10
Canton, .		· -	1 45	1 45	5 00	2 55	.568	1 45
Charlemont, .		3,577 90	172 88	3,750 78	590 67	225 39	.767	38 35
Charlton, .		239 69	195 48	435 17	55 72	71 08	2.750	137 <b>50</b>
Chatham, .		841 21	184 42	1,025 63	92 98	45 67	4.038	184 <b>42</b>
Chelmsford, .		764 50	131 76	896 26	<b>70</b> 96	48 61	2.710	131 76
Chelsea, .		20 97	99 <b>50</b>	120 47	46 15	172 14	.578	28 90
Cheshire, .		860 41	279 96	1,140 37	81 45	107 88	2.595	129 75
Chester, .		1,408 49	232 83	1,641 32	143 85	71 75	3.245	162 25
Chicopee, .		6,225-39	1,071 59	7,296 98	593 25	387 27	2.767	138 35
Chilmark, .		7 28	34 33	41 61	22 49	12 26	2.799	34 33
Clarksburg, .		-	145 89	145 89	243 15	242 74	.601	30 05
Cohasset, .		332 94	118 22	451 16	32 34	51 82	2.281	114 05
Colrain, .		964 55	201 08	1,165 63	101 09	94 27	2.133	106 65
Concord, .		834 26	283 75	1,118 01	70 76	78 23	3.627	181 35
Cottage City,		3,757 15	219 74	3,976 89	158 12	92 71	2.370	118 50
Dalton, .		4,212 22	185 07	4,397 29	241 60	<b>7</b> 2 <b>40</b>	2.556	127 80
Dartmouth, .		538 46	671 73	1,210 19	62 60	147 95	4.540	227 00
Deerfield, .		4,920 63	179 93	5,100 56	221 23	47 02	3.826	179 93
Dennis, .		3,573 24	410 17	3,983 41	78 89	54 71	7.497	374 85
Dighton, .		77 23	25 74	102 97	18 75	15 55	1.655	25 74
Douglas, .		395 84	6 02	401 86	85 86	2 83	2.125	6 <b>0</b> 2
Dracut, .			9 19	9 19	35 34	7 46	1.231	9 19
Dudley,.		439 20	179 53	618 73	185 24	170 98	1.050	52 50
Duxbury, .		1,371 45	159 49	1,530 94	68 40	41 29	3.862	159 49
		1		1				N

Table showing the Amounts expended for Repairs, etc. — Continued.

## APPENDIX F.

Table showi	ng the $A$	Amounts e	expended	for	Repairs,	<i>etc.</i> —	Continued.
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TOWN OR CITY.	Expended to 1906.	Expended in 1906.	Totals.	Total Cost per Mile per Year.	Expended per Mile in 1906.	Length under Main- tenance (Miles).	Amount to be assessed on Cities or Towns,
East Longmeadow,.	\$20 84	\$13 31	\$34 15	\$22 76	\$12 77	1.042	\$13 31
Eastham,	831 51	143 62	975 13	230 52	88 11	1.630	81 50
Easthampton, .	1,377 95	175 36	1,553 31	78 25	73 58	2.383	119 15
Easton,	166 32	42 83	209 15	43 84	53 47	.801	40 05
Edgartown,	621 63	118 11	739 74	56 51	48 88	2.416	118 11
Erving,	1,246 70	158 08	1,404 78	104 99	77 33	2.044	102 20
Essex,	105 27	19 41	124 68	109 36	55 61	.349	17 45
Fairhaven,	727 45	26 55	754 00	46 54	18 32	1.449	26 55
Falmouth,	190 79	476 46	667 25	29 78	39 10	12.184	476 46
Fitchburg,	4,353 33	197 30	4,550 63	181 44	47 91	4.118	197 30
Foxborough,	106 57	40 50	147 07	17 36	14 27	2.838	40 50
Framingham, .	-	3 00	3 00	1 94	2 59	1.155	3 00
Franklin,	-	77 56	77 56	110 80	106 39	.729	36 45
Freetown,	201 28	248 51	449 79	43 12	77 82	3.193	159 65
Gardner,	2,299 36	284 89	2,584 25	103 66	84 88	3.356	167 80
Gloucester,	4,031 19	473 67	4,504 86	191 69	137 45	3.446	172 30
Goshen,	2,762 01	164 67	2,926 68	141 65	86 35	1.907	95 35
Grafton,	758 23	81 83	840 06	70 00	43 97	1.861	81 83
Granby,	1,698 68	177 73	1,876 41	2 <b>0</b> 0 68	90 26	1.969	98 45
Great Barrington, .	7,691 02	566 60	8,257 62	280 10	166 10	3.411	170 55
Greenfield,	523 32	63 04	586 36	64 86	25 83	2.440	63 04
Groton,	251 76	10 59	262 35	47 70	7 66	1.382	10 59
Groveland,	208 87	263 92	472 79	76 87	153 17	1.723	86 15
Hadley,	4,110 34	237 42	4,347 76	143 44	50 63	4.689	234 45
Hamilton,	721 89	575 16	1,297 05	141 59	399 13	1.441	72 05
Hancock,	5,760 49	482 56	6,243 05	227 51	149 30	3.232	161 60
Hardwick,	398-38	81 14	479 52	85 93	99 07	.819	40 95
Harvard,	193 65	38 10	231 75	48 27	24 08	1.582	38 10
Harwich,	1,421 05	514 36	1,935 41	78 86	100 89	5.098	254 90
Hatfield,	88 74	29 45	118 19	67 53	75 90	.388	19 40
Haverhill,	6,687 13	82 91	6,770 04	377 99	26 33	3.148	82 91
Hingham,	1,212 17	264 23	1,476 40	54 35	99 40	2.658	132 90
Hinsdale,	97 63	168 57	266 20	70 61	165 75	1.017	50 85
Holbrook,	685 35	108 78	8 794 13	8 57 25	62 12	1.751	87 55
					<u></u>		

Hudson,-11118330258.76519Huntington,.6,15645154656,3111056298100611.537768Kingston,263263101122581.01622Lakeville,.34586149449527331241853.5701494Lancaster,.133325470248<02476043<761.24954<77Lawrence,.1,5968280161,676986654630022.267133Lee,8,44391381908,82581304861177623.2331621Leicester,.13,384943646813,749623224575254.8462423Leominster,2,2177754012,374786469175<714.2912445Locell (north), <th></th> <th>ing</th> <th>ine Amou</th> <th></th> <th>nueu jor .</th> <th></th> <th>, etc. —</th> <th>- Contin</th> <th>uea.</th>		ing	ine Amou		nueu jor .		, etc. —	- Contin	uea.
Hudson,       .       .       1       98       1       98       33       00       2       58      765       1       9         Huntington,       .       6,156       45       154       65       6,311       10       562       98       100       61       1.537       76       8         Kingston,       .       .       2       63       2       63       10       11       2       58       1.016       2       6       3       10       11       2       58       1.016       2       6       1.44       445       27       33       12       41       85       3.570       144       4       44       445       27       33       12       41       85       3.570       144       4       44       43       6       43       76       3.243       162       1       1.249       5.473       162       1       1.249       1.412       1.424       3       162       1       1.62       1.67       1.33       162       1       1.62       1.6       1.6       1.6       1.6       1.6       1.6       1.6       1.6       1.6       1.6       1.6	TOWN OR CIT	Y.	Expended to 1906. Expended in 1906.		Totals.	Cost per Year.	per	Length under Main- tenance (Miles).	to on vns.
Huntington,6,156 45154 656,311 10562 98100 611.53776 8Kingston,-2 632 6310 112 581.0162 6Lakeville,.345 86149 41495 2733 1241 353.570149 44Lancaster,.193 3254 70248 0247 6043 761.24954 7Lawrence,.1,596 8280 161,676 98665 46300 22.26713 3Lee,8,443 91381 908,825 81304 86117 763.243162 1Leicester,.13,384 94364 6813,749 62322 4575 254.846242 3Leominster,.2,217 37409 332,626 70159 2977 625.273263 60Leominster,.1,620 77754 012,374 7864 69175 714.291214 55Lincoln,.1,100 322,154 673,254 90160 181,045 952.060103 0Littleton,276 48200 74477 2268 6676 732.616130 8Lowell (north),.472 32Lynn,.5 04141 78146 82166 84180 84.78439 2Marsfield,Marsfield,	Holden,		\$1,981 17	\$262 10	\$2,243 27	\$62 85	\$61 20	4.282	\$214 10
Kingston,26326310112281.01626Lakeville,.3458614944927331241453.5701494Lancaster,.19332547024802476043761.249547Lawrence,.1,5968280161,676866654630022.267133Lee,8,44391381908,8258130486117763.2431621Leicester,.13,384943646613,749623224575254.846243Leominster,.2,21737409332,6267015929777625.2732636Leominster,.35992842344415479138672.178842Lincoln,.1,60022,154673,25499160151,045952.0601030Lowell (north),.47232 </td <td>Hudson, .</td> <td></td> <td>-</td> <td>1 98</td> <td>1 98</td> <td>33 00</td> <td>2 58</td> <td>.765</td> <td>1 98</td>	Hudson, .		-	1 98	1 98	33 00	2 58	.765	1 98
Lakeville,.345 86149 41495 2733 1241 853.570149 42Lancaster,.193 3254 70248 0247 6043 761.24954 77Lawrence,.1,596 8280 161,676 98665 46300 22.26713 3Lee,8,443 91381 908,825 81504 86117 763.243162 12Leicester,.13,384 94364 6813,749 62322 4575 254.846242 33Lenox,.2,217 37409 332,626 70150 2977 625.273263 66Leominster,.359 9284 23444 15477 9188 672.17884 22Lexington,.1,620 77754 012,374 7864 69175 714.291214 55Lincoln,.1,00 322,154 673,254 99160 181,045 952.060103 08Lowell (north),.472 32Lowell (south),.8,918 133,289 7512,680 20628 351,428 462.653132 60Lowell (east),Lunenburg,.1,415 1859 121,474 3093 5421 712.72259 12Lynn,50 4141 78146 82166 84180 84.78439 20Marion,96 15 <td< td=""><td>Huntington, .</td><td></td><td>6,156 45</td><td>154 65</td><td>6,311 10</td><td>562 98</td><td>100 61</td><td>1.537</td><td>76 85</td></td<>	Huntington, .		6,156 45	154 65	6,311 10	562 98	100 61	1.537	76 85
Lancaster,193 3254 70248 0247 6043 761.24954 7Lawrence,1,566 8280 161,676 98665 46300 22.26713 3Lee,.8,443 91381 908,825 81504 86117 763.243162 10Leicester,.13,384 94364 6813,749 62322 4575 254.846242 33Lenox,.2,217 37409 332,626 70150 2977 625.273268 62Leominster,.359 9284 23444 1547 9138 672.17884 23Leington,.1,620 77754 012,374 7864 69175 714.291214 55Lincoln,.1,600 77754 012,374 7864 69175 714.291214 55Lincoln,.1,620 77754 012,374 7864 69176 732.616130 85Lowell (north),.472 32Lowell (south),.8,918 183,289 7512,680 20628 351,428 462.653132 60Lowell (east),Lunenburg,.1,415 1859 121,474 3093 5421 712.72250 11Lynn,Marifold, <td>Kingston, .</td> <td></td> <td>-</td> <td>2 63</td> <td>2 63</td> <td>10 11</td> <td>2 58</td> <td>1.016</td> <td>2 63</td>	Kingston, .		-	2 63	2 63	10 11	2 58	1.016	2 63
Lawrence,1,596 8280 161,676 98665 46300 22.26713 3Lee,.8,443 91381 908,825 81 $504$ 86 $117$ 76 $3.243$ $162$ 1Leicester,.13,384 94 $664$ 68 $13,749$ 62 $322$ 45 $75$ 25 $4.846$ $242$ 3Lenox,. $2,217$ 37 $409$ 33 $2,626$ 70 $159$ 29 $77$ 62 $5.273$ $2636$ 6Leominster,. $359$ 92 $84$ 23 $444$ 15 $47$ 91 $38$ 67 $2.178$ $84$ 22Lexington,. $1,620$ 77 $754$ 01 $2,374$ 78 $64$ 69 $175$ 71 $4.291$ $2.145$ Lincoln,. $1,100$ 32 $2,154$ 67 $3,254$ 99 $160$ 18 $1,045$ 95 $2.060$ $103$ 0Littleton,. $2764$ 8 $200$ 74 $477$ 22 $68$ 66 $73$ 2 $2.616$ $130$ 8Lowell (south),. $8,918$ 13 $3,289$ 75 $12,680$ 20 $628$ 35 $1,428$ 46 $2.653$ $132$ 6Lowell (east),Lunenburg,. $1,415$ 18 $59$ 12 $1,474$ 30 $93$ 54 $21$ 71 $2.722$ $591$ 1Lynn,Marino,Marino, </td <td>Lakeville, .</td> <td></td> <td>345 86</td> <td>149 41</td> <td>495 27</td> <td>33 12</td> <td>41 85</td> <td>3.570</td> <td>149 41</td>	Lakeville, .		345 86	149 41	495 27	33 12	41 85	3.570	149 41
Lee,       .       8,443 91       381 90       8,825 81       304 86       117 76       3.243       162 1         Leicester,       .       13,384 94       364 68       13,749 62       322 45       75 25       4.846       242 3         Lenox,       .       2,217 37       409 33       2,626 70       159 29       77 62       5.273       263 6         Leominster,       .       359 92       84 23       444 15       47 91       38 67       2.178       84 22         Lexington,       .       1,602 77       754 01       2,374 78       64 69       175 71       4.291       2.145 5         Lincoln,       .       1,00 32       2,154 67       3,254 99       160 18       1,045 95       2.060       103 0         Littleton,       .       <	Lancaster, .		193 32	54 70	248 02	47 60	43 76	1.249	54 70
	Lawrence, .	•	1,596 82	80 16	1,676 98	665 46	300 22	.267	13 35
Lenox,2,217 37409 332,626 70159 2977 625.273263 6Leominster,.359 9284 23444 1547 9138 672.17884 2Lexington,.1,620 77754 012,374 7864 69175 714.291214 5Lincoln,.1,100 322,154 673,254 99160 181,045 952.060103 0Littleton,.276 48200 74477 2268 6676 732.616130 8Lowell (north),.472 32Lowell (south),.8,918 133,289 7512,680 20628 351,428 462.653132 6Lowell (east),Lynn,.5 04141 78146 82166 84180 84.784Marsheld,Marion,Mariheld,Marino,Marino,Marino,<	Lee,		8,443 91	381 90	8,825 81	304 86	117 76	3.243	162 15
Leominster, $359\ 92$ $84\ 23$ $444\ 15$ $47\ 91$ $38\ 67$ $2.178$ $84\ 2$ Lexington, $1,620\ 77$ $754\ 01$ $2,374\ 78$ $64\ 69$ $175\ 71$ $4.291$ $214\ 57$ Lincoln, $1,100\ 32$ $2,154\ 67$ $3,254\ 99$ $160\ 18$ $1,045\ 95$ $2.060$ $103\ 00$ Littleton, $276\ 48$ $200\ 74$ $477\ 22$ $68\ 66$ $76\ 73$ $2.616$ $130\ 87$ Lowell (north), $472\ 32$ $3,289\ 75$ $12,680\ 20$ $628\ 35$ $1,428\ 46$ $2.653$ $132\ 67$ Lowell (south), $8,918\ 13$ $3,289\ 75$ $12,680\ 20$ $628\ 35$ $1,428\ 46$ $2.653$ $132\ 67$ Lowell (east), $        -$ Lunenburg, $1,415\ 18$ $59\ 12$ $1,474\ 30$ $93\ 54$ $21\ 71$ $2.722$ $59\ 12$ Lynn, $ 50\ 4$ $141\ 78$ $146\ 82$ $166\ 84$ $180\ 84$ $.784$ $39\ 27$ Marion, $986\ 15$ $324\ 20$ $1,310\ 35$ $36\ 34$ $58\ 21$ $5.569$ $278\ 47$ Marshfield, $ 1,119\ 39$ $141\ 45$ $1,260\ 84$ $52\ 40$ $35\ 37$ $3.999$ $141\ 47$ Matapoisett, $700\ 15$ $54\ 13$ $844\ 28$ $37\ 17$ $16\ 88$ $3.206$ $54\ 13$ Metrose, $ 102$ $1049\ 40$ $79\ 28$ $100\ 72$ $2.122$ $106\ 13$ Middleborough, $974\ 60$ <td>Leicester, .</td> <td></td> <td>13,384 94</td> <td>364 68</td> <td>13,749 62</td> <td>322 45</td> <td>75 25</td> <td>4.846</td> <td>242 30</td>	Leicester, .		13,384 94	364 68	13,749 62	322 45	75 25	4.846	242 30
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Lenox,		2,217 37	409 33	2,626 70	159 29	77 62	5.273	263 65
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Leominster, .		359 92	84 23	444 15	47 91	38 67	2.178	84 23
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Lexington, .		1,620 77	754 01	2,374 78	64 69	175 71	4.291	, 214 55
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Lincoln, .		1,100 32	2,154 67	3,254 99	160 18	1,045 95	2.060	103 00
Lowell (south),       8,918 13       3,289 75       12,680 20       628 35       1,428 46       2.653       132 6         Lowell (east),       -	Littleton, .		276 48	200 74	477 22	68 66	76 73	2.616	130 80
Lowell (east), $   -$	Lowell (north),		472 32	)				1	
Lunenburg,.1,4151859121,47430935421712.722591Lynn,50414178146821668418084.784392Mansfield,67363076981229734272.720307Marion,98615324201,31035363458215.5692784Mariborough,761271,454092,2153637826375.5212760Marshfield,70015541384428371716883.206541Mattapoisett,102102340022.58.3951<0	Lowell (south),		8,918 13	3,289 75	12,680 20	628 35	1,428 46	2.653	132 65
Lynn,.50414178146821668418084892Mansfield, <td< td=""><td>Lowell (east),</td><td></td><td>-</td><td>}</td><td></td><td></td><td></td><td></td><td></td></td<>	Lowell (east),		-	}					
Mansfield,. $67$ 36 $30$ 76 $98$ 12 $29$ 73 $42$ 72 $.720$ $30$ 7Marion,.986 15 $324$ 20 $1,310$ 35 $36$ 34 $58$ 21 $5.569$ $278$ 4Marlborough,761 27 $1,454$ 09 $2,215$ 36 $87$ 84 $263$ 37 $5.521$ $276$ 0Marshfield,. $1,119$ 39 $141$ 45 $1,260$ 84 $52$ 40 $35$ 37 $3.999$ $141$ 44Mattapoisett,.790 15 $54$ 13 $844$ 28 $37$ 17 $16$ 88 $3.206$ $54$ 13Melrose,102 $102$ $34$ 00 $2$ 58 $.395$ $10$ 0Merrimac,. $814$ 05 $234$ 95 $1,049$ 00 $79$ 28 $110$ 72 $2.122$ $106$ 10Methuen,. $3,262$ 70 $168$ 94 $3,431$ 64 $191$ 92 $64$ 30 $2.627$ $131$ 32Middleborough,.974 60 $206$ 23 $1,180$ 83 $26$ 13 $23$ 01 $8.959$ $206$ 23Milford,853 $8$ 53 $4$ 87 $4$ 88 $1.745$ $8$ 54Millbury, $36$ 07 $985$ 80 $89$ 53 $30$ 32 $1.328$ $40$ 27Monson,Montague,Milton,	Lunenburg, .		1,415 18	59 12	1,474 30	93 54	21 71	2.722	59 12
Marion,       .       986 15       324 20       1,310 35       36 34       58 21       5.569       278 4         Marlborough,       .       761 27       1,454 09       2,215 36       87 84       263 37       5.521       276 0         Marshfield,       .       1,119 39       141 45       1,260 84       52 40       35 37       3.999       141 45         Mattapoisett,       .       790 15       54 13       844 28       37 17       16 88       3.206       54 13         Melrose,       .       -       102       102       34 00       2 58       .395       1 00         Merrimac,       .       3,262 70       168 94       3,431 64       191 92       64 30       2.627       131 5         Middleborough,       .       974 60       226 23       1,180 83       26 13       23 01       8.959       206 2         Milford,       .       -       8 53       8 53       4 87       4 88       1.745       8 5         Millbury,       .       331 70       103 77       435 47       52 72       34 79       2.982       103 7         Milton,       .       2,460 71       36 08       2,496 79       487 65	Lynn,		5 04	141 78	146 82	166 84	180 84	.784	39 20
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Mansfield, .		67 36	30 76	98 12	29 73	42 72	.720	30 76
Marshfield,1,11919141451,26084524035373.99914144Mattapoisett,79015541384428371716883.206541Melrose,10210234002258.39510Merrimac,.81405234951,049007979211022.1221061Methuen,.3,26270168943,431641919264302.6271313Middleborough,.97460206231,18083261323018.9592062Milford,8538534874481.74588Millbury,.331701037743547527234792.9821037Milton,.2,4607136082,49679487654142.8713660Monson,91369202571,11626792281742.478123133	Marion, .		986 15	324 20	1,310 35	36 34	58 21	5.569	278 45
Mattapoisett,       .       790 15       54 13       844 28       37 17       16 88       3.206       54 13         Melrose,       .       -       1 02       1 02       34 00       2 58       .395       1 0         Merrimac,       .       814 05       234 95       1,049 00       79 28       110 72       2.122       106 10         Methuen,       .       3,262 70       168 94       3,431 64       191 92       64 30       2.627       131 3         Middleborough,       .       974 60       206 23       1,180 83       26 13       23 01       8.959       206 23         Milford,       .       -       8 53       8 53       4 87       4 88       1.745       8 5         Millbury,       .       331 70       103 77       435 47       52 72       34 79       2.982       103 7         Milton,       .       2,460 71       36 08       2,496 79       487 65       41 42       .871       36 0         Monson,       .       945 53       40 27       985 80       89 53       30 32       1.328       40 2	Marlborough,		761 27	1,454 09	2,215 36	87 84	263 37	5.521	276 05
Melrose,       -       1       02       1       02       34       00       2       58	Marshfield, .		1,119 39	141 45	1,260 84	52 40	35 37	3.999	141 43
Merrimac,       .       814 05       234 95       1,049 00       79 28       110 72       2.122       106 1         Methuen,       .       3,262 70       168 94       3,431 64       191 92       64 30       2.627       131 5         Middleborough,       .       974 60       206 23       1,180 83       26 13       23 01       8.959       206 23         Milford,       .       -       8 53       8 53       4 87       4 88       1.745       8 5         Millbury,       .       331 70       103 77       435 47       52 72       34 79       2.982       103 7         Milton,       .       2,460 71       36 08       2,496 79       487 65       41 42       .871       36 0         Monson,       .       945 53       40 27       985 80       89 53       30 32       1.328       40 27         Montague,       .       913 69       202 57       1,116 26       79 22       81 74       2.478       123 5	Mattapoisett,		790 15	54 13	844 28	37 17	16 88	3.206	54 13
Methuen,       .       3,262 70       168 94       3,431 64       191 92       64 30       2.627       131 3         Middleborough,       .       974 60       206 23       1,180 83       26 13       23 01       8.959       206 23         Milford,       .       -       8 53       8 53       4 87       4 88       1.745       8 53         Millbury,       .       331 70       103 77       435 47       52 72       34 79       2.982       103 77         Milton,       .       2,460 71       36 08       2,496 79       487 65       41 42       .871       36 00         Monson,       .       945 53       40 27       985 80       89 53       30 32       1.328       40 27         Montague,       .       913 69       202 57       1,116 26       79 22       81 74       2.478       123 54	Melrose, .		-	1 02	1 02	34 00	2 58	.395	1 02
Middleborough,       .       974 60       206 23       1,180 83       26 13       23 01       8.959       206 23         Milford,       .       -       8 53       8 53       4 87       4 88       1.745       8 53         Millbury,       .       331 70       103 77       435 47       52 72       34 79       2.982       103 7         Milton,       .       .2,460 71       36 08       2,496 79       487 65       41 42       .871       36 05         Monson,       .       .945 53       40 27       .985 80       89 53       30 32       1.328       40 27         Montague,       .       .913 69       202 57       1,116 26       .79 22       .81 74       2.478       123 5	Merrimac, .		814 05	234 95	1,049 00	79 28	110 72	2.122	106 10
Milford,       .       -       8       53       8       53       4       87       4       88       1.745       8       5         Millbury,       .       331       70       103       77       435       47       52       72       34       79       2.982       103       7         Milton,       .       .       2,460       71       36       08       2,496       79       487       65       41       42       .871       36       02         Monson,       .       .       945       53       40       27       985       80       89       53       30       32       1.328       40       2         Montague,       .       .       .       .       .       913       69       202       57       1,116       26       .	Methuen, .		3,262 70	168 94	3,431 64	191 92	64 30	2.627	131 38
Millbury,       .       331 70       103 77       435 47       52 72       34 79       2.982       103 7         Millbury,       .       .       2,460 71       36 08       2,496 79       487 65       41 42       .871       36 0         Monson,       . <td>Middleborough,</td> <td></td> <td>974 60</td> <td>206 23</td> <td>1,180 83</td> <td>26 13</td> <td>23 01</td> <td>8.959</td> <td>206 23</td>	Middleborough,		974 60	206 23	1,180 83	26 13	23 01	8.959	206 23
Millbury,       .       331 70       103 77       435 47       52 72       34 79       2.982       103 7         Milton,       .       .       2,460 71       36 08       2,496 79       487 65       41 42       .871       36 0         Monson,       .	Milford, .		-	8 53	8 53	4 87	4 88	1.745	8 53
Monson,         .         945         53         40         27         985         80         89         53         30         32         1.328         40         27           Montague,         .	Millbury, .		· · ·	103 77	435 47	52 72	34 79	2.982	103 77
Monson,         .         945 53         40 27         985 80         89 53         30 32         1.328         40 23           Montague,         . </td <td>Milton, .</td> <td></td> <td>2,460 71</td> <td>36 08</td> <td>2,496 79</td> <td>487 65</td> <td>41 42</td> <td>.871</td> <td>36 08</td>	Milton, .		2,460 71	36 08	2,496 79	487 65	41 42	.871	36 08
Montague, 913 69 202 57 1,116 26 79 22 81 74 2.478 123 9				40 27	985 80	89 53	30 32	1.328	40 27
					1,116 26	79 22	81 74	2.478	123 90
			3,318 96	343 55			53 02	6.479	323 98

Table showing the Amounts expended for Repairs, etc. - Continued.

# No. 54.] APPENDIX F. 85

Table showing	the Amou	nts expe	nded for	Repairs	, etc. —	- Contin	ued.
TOWN OR CITY.	Expended to 1906.	Expended in 1906.	Totals.	Total Cost per Mile per Year.	Expended per Mile in 1906.	Length under Main- tenance (Miles).	Amount to be as- sessed on Cities or Towns.
Natick,	\$140 60	\$230 81	\$371 41	\$35 88	\$72 12	3.200	\$160 00
Needham,	70 29	2 59	72 88	16 56	2 60	.995	2 59
New Braintree, .	94 90	11 50	106 40	53 75	28 96	.397	11 50
Newbury,	559 29	932 48	1,491 77	95 44	220 39	4.231	211 55
Newburyport, .	1,115 27	141 38	1,256 65	87 14	80 60	1.754	87 70
Newton,	24 65	73 10	97 75	18 65	70 83	1.032	51 60
Norfolk,	514 59	75 97	590 56	40 72	52 24	1.454	72 70
North Adams, .	8,985 64	843 19	9,828 83	355 35	210 37	4.008	200 40
North Andover, .	776 08	93 07	869 15	102 73	49 24	1.890	93 07
North Brookfield, $\cdot$	-	51 05	51 05	221 95	49 90	1.023	51 05
Northampton, .	1,517 25	212 34	1,729 59	105 46	73 49	2.889	144 45
North Attleborough.	2,185 53	238 27	2,423 80	68 76	66 24	3.597	179 85
Northborough, .	588 36	212 78	801 14	37 29	53 51	3.976	198 80
Northfield,	299 72	3 00	302 72	63 86	2 59	1.157	3 00
North Reading, .	379 25	311 03	690 28	52 13	134 66	2.310	115 50
Norton,	891 46	92 83	984 29	468 70	129 28	.718	35 9 <b>0</b>
Norwood,	1,116 88	170 53	1,287 41	69 10	83 18	2.050	102 50
Orange,	2,588 30	1,191 60	3,779 90	124 70	248 40	4.797	239 85
Orleans,	426 39	206 79	633 18	50 09	49 91	4.143	206 79
Oxford,	-	2 04	2 04	68 00	2 59	.786	2 04
Palmer,	1,013 59	245 89	1,259 48	78 66	57 99	4.240	212 00
Paxton,	6,766 30	152 38	6,918 68	199 61	42 36	3.597	152 38
Pembroke,	-	36 26	36 26	139 46	103 60	.350	17 50
Phillipston,	1,212 80	23 85	1,236 65	126 83	12 22	1.951	23 85
Pittsfield,	4,278 14	794 24	5,072 38	180 31	167 88	4.731	236 55
Plainville,	29 88	44 63	74 51	20 58	24 71	1.806	44 63
Plymouth,	3,650 66	271 10	3,921 76	97 92	53 98	5.022	251 10
Princeton,	564 92	49 88	614 80	58 00	22 37	2.229	49 88
Provincetown, .	165 51	141 91	307 42	78 22	128 77	1.102	55 10
Quincy,	119 66	3,102 40	3,222 06	448 47	1,352 98	2.293	114 65
Randolph,	211 91	21 85	233 76	51 48	15 79	1.383	21 85
Raynham,	138 63	34 09	172 72	30 09	23 08	1.477	34 09
Reading,	859 88	• 513 87	1,373 75	98 26	137 54	3.736	186 80
Rehoboth,	1,061 41	128 34	1,189 75	58 12	36 52	3.514	128 34

HIGHWAY COMMISSION. [Pub. Doc.

Table showing			110000 701	nopatre	,	- Contin	iucu.
TOWN OR CITY.	Expended to 1906.	Expended in 1906.	Totals.	Total Cost per Mile per Year.	Expended per Mile in 1906.	Length under Main- tenance (Miles).	Amount to be as- sessed on Cities or Towns.
Revere (east), .	\$982 95	\$166 47	\$3,009 21	\$329 95	<b>\$133 3</b> 8	1.248	\$62 40
Revere (west), .	1,859 79	)					480.48
Richmond,	1,395 91	297 55	1,693 46	108 34	94 07	3.163	158 15
Rochester,	150 59	1,331 93	1,482 52	96 45	252 73	5.270	263 50
Rockland,	28 50	11 11	39 61	9 61	4 71	2.354	11 11
Rockport,	65 00	31 92	96 92	77 53	99 13	.322	16 10
Rowley,	-	3 35	3 35	27 91	25 57	.131	3 35
Russell,	10,482 14	349 19	10,831 33	180 88	52 47	6.655	332 75
Rutland,	7 45	72 25	79 70	68 70	62 28	1.160	58 00
Salem,	2 60	35	2 95	4 33	2 63	.133	35
Salisbury,	9 30	116 88	126 18	74 66	180 77	1.447	72135
Sandwich,	3,041 28	37 11	3,078 39	150 53	13 15	2.822	37 11
Saugus,	2,227 63	157 23	2,384 86	229 31	87 73	1.792	89 60
Scituate,	1,313 32	160 78	1,474 10	88 58	63 90	2.516	125 80
Seekonk,	132 81	252 00	384 81	38 71	91 40	. 2.757	137 85
Shelburne,	4,364 52	193 42	4,557 94	205 59	89 58	2.159	107 95
Shrewsbury,	5,785 22	511 77	6,296 99	180 11	105 34	4.858	242_90
Somerset,	1,574 57	401 18	1,975 75	49 76	57 75	6.946	347 30
Southampton, .	4 23	68 61	72 84	104 05	104 11	.659	32 95
Southborough, .	10 81	27 99	38 80	19 30	14 77	1.895	27 99
Southbridge,	49 48	7 29	56 77	13 98	8 01	.909	7 29
South Hadley,	4,290 95	563 24	4,854 19	179 32	109 96	5.122	256 10
Spencer,	270 74	114 28	385 02	42 44	71 38	1.601	80 05
Sterling,	890 17	16 34	906 51	84 17	8 38	1.949	16 34
Stockbridge,	3 53	37 65	41 18	61 46	68 57	.549	27 45
Stoneham,	776 74	385 21	1,161 95	111 29	243 49	1.582	79 10
Stoughton,	258 21	173 26	431 47	65 97	52 45	3.303	165 15
Sturbridge,	295 12	99 97	395 09	67 53	72 49	1.379	68 95
Sudbury,	1,101 59	490 82	1,592 41	58 95	95 97	5.114	255 70
Sunderland,	309 20	53 45	362 65	103 31	47 05	1.136	53 45
Sutton,	603 74	45 49	649 23	61 71	19 94	2.281	45 49
Swampscott,	1,789 04	350 72	2,139 76	197 57	235 38	1.490	74_50
Swansea,	48 <b>50</b>	49 23	97 73	<sup>.</sup> 29 43	19 26	2.556	49 2 <b>3</b>
Taunton,	1,400 90	279 25	1,680 15	69 42	69 63	4.010	200_50

Table showing the Amounts expended for Repairs, etc. - Continued.

Table showing	the Amo	unts expe	naed for	Repair	s, etc. –	- Contir	nued.
TOWN OR CITY.	Expended to 1906.	Expended in 1906.	Totals.	Total Cost per Mile per Year.	Expended per Mile in 1906.	Length under Main- tenance (Miles).	Amount to be as- sessed on Cities or Towns.
Templeton,	\$548 53	<b>\$139 0</b> 9	\$687 62	\$69 31	\$53 72	2.589	<b>\$</b> 129 <b>45</b>
Tewksbury,	447 06	136 54	583 60	33 46	23 40	5.483	136 54
Tisbury,	1,407 65	133 42	1,541 07	70 46	69 09	1.931	96 <u></u> 55
Townsend,	1,279 26	186 33	1,465 59	53 10	39 80	4.681	186 33
Truro,	1,501 99	483 57	1,985 56	109 15	153 02	3.160	158 00
Tyngsborough, .	1,398 42	1,858 98	3,257 40	117 25	631 87	2.942	147_10
Uxbridge,	664 55	62 97	727 52	52 41	28 93	2.176	62 97
Wales,	207 52	41 17	248 69	55 14	39 58	1.040	41 17
Walpole,	1,766 72	662 04	2,428 76	61 28	145 88	4.538	226 <b>_90</b>
Ware,	704 47	242 35	946 82	68 25	106 20	2.282	114 10
Wareham,	1,087 65	253 74	1,341 39	73 30	54 54	4.652	232 60
Warren,	2,034 07	390 07	2,424 14	97 98	118 20	3.300	165 00
Watertown,	1,709 01	202 71	1,911 72	221 26	238 48	.850	42 50
Wayland,	960 57	361 92	1,322 49	82 60	140 22	2.581	129 <b>05</b>
Wellesley,	112 08	, 107 09	219 17	35 92	91 06	1.176	58 80
Wellfleet,	886 18	334 69	1,220 87	126 25	79 10	4.231	211 55
Wenham,	566 6 <u>0</u>	293 94	860 54	85 70	167 58	1.754	87 70
Westborough, .	280 73	27 31	308 04	34 41	12 57	2.172	27 31
West Boylston, .	1,291 96	92 33	1,384 29	110 39	59 45	1.553	77 65
West Bridgewater, .	505 31	119 71	625 02	45 48	37 88	3.160	119 71
West Brookfield, .	402 22	232 30	634 52	58 32	86 84	2.675	133 75
Westfield,	5,908 42	375 16	6,283 58	139 91	64 62	5.805	290 25
Westford,	623 65	273 28	896 93	73 51	84 18	3.246	162 30
Westminster, .	4,569 56	570 80	5,140 36	158 89	108 78	5.247	262 35
West Newbury, .	3,789 59	275 58	4,065 17	180 59	74 12	3.718	185 90
Weston,	1,091 97	294 14	1,386 11	62 86	93 31	3.152	157 60
Westport,	5,271 63	4,211 91	9,483 54	229 01	990 10	4.254	212 70
West Springfield, .	1,185 00	6 96	1,191 96	100 58	3 64	1.911	6 96
West Tisbury, .	1,327 87	229 33	1,557 20	47 48	42 88	5.348	229 <b>33</b>
Westwood,	418 02	93 82	511 84	76 96	89 60	1.047	52 3 <b>5</b>
Weymouth,	1,066 00	· 390 49	1,456 49	62 64	81 38	4.798	239 9 <b>0</b>
Whately,	328 63	143 98	472 61	38 39	<b>3</b> 9 9 <b>0</b>	3.608	143 98
Whitman,	1,005 83	138 24	1,144 07	63 31	81 46	1.697	84 8 <b>5</b>
Wilbraham,	1,527 15	329 62	1,856 77	66 07	68 44	4.816	240 80

Table showing the Amounts expended for Repairs, etc. - Continued.

TOWN OR CITY.	Expended to 1906.	Expended in 1906.		Cost per Mile	Expended per Mile in 1906.	Length under Main- tenance (Miles).	Amount to be assessed on Cities or Towns.
	Exp	Exp	Totals.	Total	Exp in	Leng	Amc
Williamsburg, .	\$1,093 69	\$183 26	\$1,276 95	<b>\$75</b> 64	\$69 <b>0</b> 7	2.653	\$132 65
Williamstown, .	5,363 36	292 99	5,656 35	323 58	150 17	1.951	97 55
Winchester,	1,504 51	719 27	2,223 78	173 46	368 47	1.952	97 6 <b>0</b>
Windsor,	320 50	128 48	448 98	90 88	130 04	.988	49 40
Woburn,	856 07	660 40	1,516 47	157 14	324 84	2.033	101 65
Worcester,	5,730 52	378 31	6,108 83	252 95	85 20	4.440	222 00
Wrentham,	1,628 73	197 82	1,826 55	43 34	48 34	4.092	197 82
Yarmouth (north), .	2,322 07	255 60	2,577 67	67 88	68 78	3.716	185 80
Yarmouth (south), .	4,828 18	- 359 43	5,187 61	107 20	70 72	5.082	254 10
Totals,	\$352,194 71	\$68,382 28	\$420,576 99	-	-	633.037	\$27,531 22

Table showing the Amounts expended for Repairs, etc. - Concluded.

APPENDIX G.

## APPENDIX G.

STATEMENT SHOWING THE NUMBER OF PETITIONS RECEIVED AND THE LENGTH OF WAY PETITIONED FOR, THE LAY-OUTS MADE AND THEIR LENGTH AND DISTRIBUTION IN THE VARIOUS COUNTIES OF THE COMMONWEALTH.

	PETITIONS RECEIVED.				PETITIONS SITUATED IN -			LAY-OUTS MADE IN			f -outs.
COUNTIES.	County.	City.	Town.	Totals.	Cities.	Towns.	Totals.	Cities.	Towns.	Totals	Number of Lay-outs.
Barnstable, Berkshire, Bristol, Dukes, Franklin, Hampden, Hampshire, Middlesex, Nantucket, Norfolk, Suffolk, Worcester, Totals,	$ \begin{array}{r} - \\ 15 \\ 2 \\ 3 \\ 1 \\ 1 \\ 12 \\ - \\ - \\ - \\ - \\ 42 \\ \end{array} $	$     \begin{bmatrix}             - & - & - & - & - & - & - &$	$\begin{array}{r} 40\\ 48\\ 41\\ 5\\ 50\\ 54\\ 277\\ 42\\ 83\\ 1\\ 44\\ 55\\ 6\\ 128\\ \hline 624\\ \end{array}$	$\begin{array}{r} 40\\ 69\\ 49\\ 7\\ 71\\ 55\\ 34\\ 47\\ 113\\ 1\\ 49\\ 60\\ 7\\ 135\\ \hline 737\\ \end{array}$	$     \begin{array}{r}             \hline             22 \\           $	$ \begin{array}{r} 15\\26\\17\\5\\25\\17\\17\\17\\17\\12\\42\\24\\24\\24\\254\\286\end{array}$	15 28 19 5 32 17 20 18 49 1 25 25 25 3 56 313	$     \frac{-2}{21} \\     \frac{-1}{7} \\     \frac{-1}{11} \\     \frac{-1}{11} \\     \frac{-1}{12} \\     \frac{-1}{22} \\     \frac{-1}{2}$	$ \begin{array}{r} 14\\14\\16\\5\\16\\13\\11\\12\\29\\1\\19\\18\\1\\41\\\hline210\end{array}$	$ \begin{array}{r}     14 \\     16 \\     17 \\     5 \\     23 \\     13 \\     12 \\     13 \\     14 \\     12 \\     13 \\     34 \\     1 \\     20 \\     19 \\     2 \\     43 \\ \end{array} $	85 76 77 22 87 71 68 62 120 12 73 66 6 197 1,062

NUMBER OF PETITIONS RECEIVED, ETC. - Concluded.

	Lenc	THS		LENGTHS LAID OUT								
COUNTIES.	PETITION	ED FOR.	1894-1	905.	190	96.	TOTAL	LS.				
	Feet.	Miles.	Feet.	Miles.	Feet.	Miles.	Feet.	Miles.				
Barnstable, Berkshire, . Bristol, . Dukes, . Essex . Franklin, . Hampden, . Hampden, . Middlesex, . Nantucket, . Norfolk, . Plymouth, . Suffolk, . Worcester, .	 $\begin{array}{c} 647,711\\ 678,287\\ 7(62,260\\ 121,043\\ 1,018,250\\ 593,139\\ 566,270\\ 496,368\\ 1,482,539\\ 34,185\\ 627,517\\ 979,890\\ 56,375\\ 1,712,999 \end{array}$	$\begin{array}{c} 122.67\\ 128.46\\ 144.37\\ 22.92\\ 192.85\\ 112.34\\ 107.25\\ 94.01\\ 280.78\\ 6.47\\ 118.85\\ 185.59\\ 10.68\\ 324.43\\ \end{array}$	$\begin{array}{c} 373,952\\ 208,436\\ 247,941\\ 69,699\\ 238,710\\ 171,535\\ 199,077\\ 149,653\\ 459,195\\ 34,211\\ 228,744\\ 335,194\\ 11,644\\ 558,523\\ \end{array}$	70.83 39.48 46.96 13.20 45.21 32.49 37.70 28.34 86.97 6.48 43.32 63.48 2.21 105.78	$\begin{array}{c} 20,232\\ 44,299\\ 21,748\\ 8,802\\ 17,136\\ 11,266\\ 14,292\\ 12,385\\ 26,399\\ -\\ -\\ 9,320\\ 37,341\\ -\\ 29,801 \end{array}$	$\begin{array}{r} 3.83\\ 8.39\\ 4.12\\ 1.67\\ 3.25\\ 2.13\\ 2.71\\ 2.35\\ 5.00\\ -\\ 1.76\\ 7.07\\ -\\ 5.64\end{array}$	$\begin{array}{c} 394,184\\ 252,735\\ 260,689\\ 78,501\\ 255,846\\ 182,801\\ 213,369\\ 162,038\\ 485,594\\ 34,211\\ 238,064\\ 485,594\\ 34,211\\ 238,064\\ 372,535\\ 11,644\\ 588,324\\ \end{array}$	$\begin{array}{c} 74.66\\ 47.87\\ 51.08\\ 14.87\\ 48.45\\ 34.62\\ 40.41\\ 30.69\\ 91.97\\ 6.48\\ 45.09\\ 70.55\\ 2.21\\ 111.42\end{array}$				
Totals, .	9,776,833	1,851.67	3,286,514	622.45	253,021	47.92	3,539,535	670.37				

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Showing the Work done under the "Small Town" Act since its Passage in 1900.

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Section

		ALLOTMENTS, 1		LENG	LENGTHS BUILT (FEET).	EET).	
TOWNS.	Previous to 1906.	In 1906.	Total to Nov. 30, 1906.	Previous to 1906.	In 1906.	to Nov. 30, 1906.	Types of Roads.
Barnstable County.				3			
Eastham,	\$196 00	I	\$196 00	1,150	T	1,150	Graded only.
Provincetown,	1,300 00	2 \$1,257 56	3 2,557 56	2 5,280	I	5,280	Macadam.
Wellfleet,	1,653 00	1,	1,653 00	2,250	I	2,250	Broken stone and clay.
Berkshåre County.	\$3,149 00	\$1,257 56	\$4,406 56	8,680	I	8,680	
Alford,	\$677 00	I	\$677 00	2,928	I	2,928	Gravel.
Egremont,	1,916 00	I	1,916 00	4,256	J.	4,256	Gravel.
Florida,	1,648 00	\$488 00	2,136 00	3,100	600	3,700	Gravel.
Lanesborough,	1,474 00	4 528 00	2,002 00	4,614	I	4,614	Gravel road and 15-foot steel-concrete
Monterey,	1,312 00	1	1,312 00	9,620	I	9,620	Gravel.
Mount Washington,	00 292	3	00 292	1,000	I	1,000	Gravel road and bridge repairs.
New Ashford,	325 00	120 00	445 00	1,100	<sup>2</sup> 1,500	2,600	Gravel road and culvert repairs.

## HIGHWAY COMMISSION.

Gravel.	Gravel road and culvert repairs.	Gravel.	Macadam.	Gravel.	Grading and gravel.	Grading and macadam.	Grading and gravel.	Gravel.		Macadam.	Macadam.		Gravel.	Gravel.	Gravel and macadam.	Gravel.	Macadam.	Gravel.	-	<ol> <li>In many instances the towns have contributed sums in addition to the allotments of the commission, thus making it possible to improve a greater length road. The lengths shown as built represent the total length improved with all the money available.</li> <li>Built with 1905 and 1906 allotments.</li> <li>The town contributed an equal amount.</li> <li>Town contributed \$2,000.</li> </ol>
14,850	6,200	6,105	10,208	7,250	8,532	3,590	4,620	5,650	95,723	14,700	3,750	18,450	4,000	1	5,687	6,700	2,150	7,625	26,162	thus making
2,250	I	I	1,943	1,250	1,400	200	1	1,450	11,093	6 14,700	I	14,700	1	I	I	2 3,100	1	1	3,100	commission, zailable.
12,600	6,200	6,105	8,265	6,000	7,132	2,890	4,620	4,200	84,630	1	3,750	3,750	4,000	1	5,687	3,600	2,150	7,625	23,062	the allotments of the comr l with all the money availa 4 Work not yet begun. Frown contributed \$2,000
4,328 00 ₹	1,768 00	1,391 00	5 4,092 00	2,980 00	4,088 00	1,717 00	1,788 00	2,432 00	\$33,839 00	3 \$8,000 00	2,200 00	\$10,200 00	\$3,000 00	3 416 00	<sup>3</sup> 1,350 00	2,244 00	1,948 00	2,484 00	\$11,442 00	<ol> <li>In many instances the towns have contributed sums in addition to the allotments of the commiss of road. The lengths shown as built represent the total length improved with all the money available.</li> <li>Built with 1905 and 1906 allotments.</li> <li>The town contributed an equal amount.</li> </ol>
1,056 00	1	4 312 00	804 00	616 00	1,000 00	443 00	1	700 00	\$6,067 00	4 \$4,000 00	,	\$4,000 00	I	7 \$416 00	I	514 00	1	1	\$930-00	s in addition length impro
3,372 00 📱	1,768 00	1,079 00	3,288 00	2,364 00	3,088 00	1,274 00	1,788 00	1,732 00	\$27,772 00	\$4,000 00	2,200 00	\$6,200 00	\$3,000 00	1	1,350 00	1,730 00	1,948 00	2,484 00	\$10,512 00	tributed sums sent the total
•	•	•	•	•	•	•	•	•		•	•		•	•	•	•	•	•	, <u> </u>	e con repres
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								•	Count	. •		Count								ces the us show und 190 outed
ugh,		•		•		•	•	dge,	Bristol County.		•	Essex County.								instan length 1905 a contril
rlboro	•	•	ıld,	•	•	.,mı	ton,	ockbri	1	•	•		·		WD,	. , n	۲	•		aany i The t with town
New Marlborough,	Otis, .	Peru, .	Sandisfield,	Savoy,	Sheffield,	Tyringham,	Washington,	West Stockbridge,		Easton,	Norton,		Danvers,	Essex,	Georgetown,	Middleton,	Salisbury,	Topsfield,		<ol> <li>In many instances the towns have control of road. The lengths shown as built repres 2 Built with 1905 and 1906 allotments.</li> <li>The town contributed an equal amount.</li> </ol>

HE DWALL LOWN ALL - DURING CO.	LENGTHS BUILT (FEET).	Total to         Previous to         In 1906.         In 1906.         to Nov. 30,         Types of Roads.		\$1,265 00 5,500 - 5,800 Gravel.	3,252 00 5,800 - 5,800 Gravel.	1,439 00 5,200 - 5,200 Gravel road and bridge repairs.	1,397 00 4,400 - 4,400 Grading and gravel.	1,415 00 2,250 - 2,250 Gravel.	2,488 00 4,774 1,100 5,874 Gravel.	3 1,909 00 8,600 - 8,600 Gravel.	1,328 00 3,000 4 700 3,700 Gravel.	2,060 00 1,980 - 1,980 Gravel.	1,703 00 3,700 900 4,600 Gravel.	1,534 00 4,100 1,000 5,100 Gravel.	2,727 00 2,100 8 2,350 4,450 Gravel.	3,386 00 5,800 5,800 Grading and gravel.	\$25,903         57,504         6,050         63,554	\$3,444 00 8,400 - 8,400 Grading and gravel.	680 00 2,850 - 2,850 Gravel.	4,223 00 5,997 - 5,997 Crading and gravel.
WORK DONE UNDERN NAME	ALLOTMENTS. <sup>1</sup>	Previous to In 1906.	•	<b>\$</b> 809 00 2 <b>\$</b> 456 00	3,252 00 -	1,439 00 -	1,397 00 -	1,031 00 2 384 00	2,008 00 480 00	1,909 00 -	1,328 00 -	1,452 00 608 00	1,263 00 440 00	1,190 00 344 00	1,999 00 728 00	2,650 00 6 736 00	\$21,727 00 \$4,176 00	\$3,444 00 -	- 00 089	3.423 00 6 \$800 00
· ·		TOWNS.	Franktin County.	Bernardston,	Conway,	Gill,	Hawley,	Heath,	Leverett,	Leyden,	Monroe,	New Salem,	Rowe,	Shutesbury,	Warwick,	Wendell,	II ampden County.	Blandford,	East Longmeadow,	Granville

WORK DONE UNDER THE "SMALL TOWN" ACT - Continued.

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# HIGHWAY COMMISSION. [Pub. Doc.

	01	•••						111		<b>T</b> .1.	· <b>L</b> .			1.			-	
Gravel.	l. I	Macadam and 128 feet concrete culvert.	Gravel.	Gravel.	Grading and 40 feet concrete culvert.		Gravel.	Gravel.	Gravel.	Gravel.	Gravel.	Gravel.	Gravel road and underdrains.	Grading and gravel.	Gravel.	Gravel.		
25,265	1	1,425	1,750	3,450	3,000	52,137	2,725	6,595	5,560	200	1,800	1,650	1,883	2,330	8,013	5,000	36,256	d for.
2,720	I	1	I	1,850	1	4,570	975	1,295	3,110	1	I	I	I	I	2,635	I	8,015	300. et contracte
22,545	1	1,425	1,750	1,600	3,000	47,567	1,750	5,300	2,450	200	1,800	1,650	1,883	2,330	5,378	5,000	28,241	<sup>9</sup> Town contributed \$600. <sup>10</sup> Includes \$400 not yet contracted for.
7 2,008 00	164 00	<sup>8</sup> 1,200 00	808 00	1,240 00	1,645 00	\$15,412 00	\$2,120 00	2,503 00	<sup>9</sup> 1,200 00	728 00	800 00	1,572 00	1,640 00	1,366 00	12 2,087 00	2,733 00	\$16,749 00	31
528 00	s 164 00	1	I	640 00	I	\$2,132 00	\$580 00	539 00	600 00	6 248 00	1	I	2 340 00	1	476 00	1	\$2,783 00	906 allotments
1,480 00	1	1,200 00	808 00	600 00	1,645 00	\$13,280 00	\$1,540 00	1,964 00	00 009	480 00	10 800 00	11 1,572 00	1,300 00	1,366 00	1,611 00	2,733 00	\$13,966 00	<ul> <li>Built with 1905 and 1906 allotments.</li> <li>Work not yet begun.</li> </ul>
•	•	•	•	•	•		•			•	•	•	•	•	•	•	•	3uilt w Vork n
·	·	•	·	•	· •		•	•	•	•	•	•	•		•	•		5 I 1. 6 I
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•	•	•	•	•		Hampshire County.	•	•.	•	•			•			•		91. ot con
·	•	•	•	•	•	hsqmi	•	•	•	•	·	·	•	•	•	•		page but n
Hampden, .	Holland, .	Longmeadow,	Montgomery,	Southwick, .	· Tolland,	H	Chesterfield,	Cummington,	Enfield, .	Greenwich, .	Middlefield,	Pelham, .	Plainfield, .	Prescott, .	Westhampton,	Worthington,		<ul> <li><sup>1</sup></li> <li><sup>1</sup> See note on page 91.</li> <li><sup>5</sup> Built with 1905 and 1</li> <li><sup>2</sup> Work begun but not completed.</li> </ul>

<sup>7</sup> Town contributed \$1,750. <sup>8</sup> Town contributed \$3,800.

<sup>4</sup> Built with 1905 allotment. <sup>3</sup> Town contributed \$1,396.

<sup>11</sup> Includes \$800 contracted for and under which work has been begun but not completed.
<sup>12</sup> Town contributed \$1,360.

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No. 54.]

APPENDIX H.

Continued
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UNDER
DONE
WORK

Macadam.	Gravel.		Macadam.	Macadam.	Macadam.	Macadam.	Macadam.	Macadam.	Gravel.	Gravel.	Gravel.	Macadam.		Gravel.	Gravel.	Gravel.	Gravel.	Town contributed \$2,000.         9         Includes a balance of \$319.18 not yet contracted for.           Town contributed \$966.30.         10 Town contributed \$3,564.           Built with 1905 and 1906 allotments.         11 Town contributed \$3,389.           Expended for surfacing 2,956 feet of road previously graded.         12 Town contributed \$1,500.
2,600	2,700	19,680	16,785	6,250	3,750	2,827	15,554	2,640	8,980	20,471	9,878	19,027	106,162	3,160	7,025	9,925	2,100	<ul> <li><sup>9</sup> Includes</li> <li><sup>10</sup> Town col</li> <li><sup>11</sup> Town col</li> <li><sup>12</sup> Town col</li> </ul>
7 4,800	I	4,800	I	I	t	I	7 7,250	I	I	I	I	I	7,250	I	I	I	J.	ly graded.
2,800	2,700	14,880	16,785	6,250	3,750	2,827	8,304	2,640	8,980	20,471	9,878	19,027	98,912	3,160	7,025	9,925	2,100	ad previous
\$ 2,980 00	1,516 00	\$7,661 00	3 \$6,732 00	3 4,142 87	1,360 00	3 2,368 00	10 5,592 00	200 00	11 2,080 00	2,848 00	1,430 00	4,500 00	\$31,752 87	\$2,044 00	12 2,424 00	2,634 00	1,560 00	0. allotments. ,950 feet of ro
\$1,000 00	2 508 00	\$1,508 00	4 \$1,500 00	8 700 00	t	I	1,106 00	t	t	t	t	t	\$3,306 00	I	t	4 \$496 00	2 520 00	<ul> <li>Town contributed \$2,000.</li> <li>Town contributed \$966.30.</li> <li>Town contributed \$966.30.</li> <li>Built with 1905 and 1906 allotments.</li> <li>Expended for surfacing 2,950 feet of</li> </ul>
1,980 00	1,008 00	\$6,153 00	\$5,232 00	3,442 87	1,360 00	<sup>9</sup> 2,368 00	4,486 00	200 00	2,080 00	2,848 00	1,430 00	4,500 00	\$28,446 87	\$2,044 00	2,424 00	2,138 00	1,040 00	<ul> <li><sup>6</sup> Town contr</li> <li><sup>6</sup> Town contr</li> <li><sup>7</sup> Built with</li> <li><sup>8</sup> Expended f</li> </ul>
•			•	•	•	•	•	•	•	•	•	•		•	•	•	•	ount.
•	•		•	•	•	•	•	•	•	•		•		•	•	•	·	aal am
•	•	Countu.	•				•				•		County.	•	•		·	d an equal completed.
•	•	outh C		•	•	•	•		•	•	•	•		•	•	•	•	e 91. egun. buted t not c
		Plumouth		water,									Worcester	n,				on pag vyet bu contri un but
Medway,	Millis, .		Carver,	East Bridgewater,	Halifax,	Hanover,	Hanson,	Lakeville,	Norwell,	Pembroke,	Plympton,	Rochester,		Ashburnham,	Berlin,	Bolton,	Boylston,	<ol> <li>See note on page 91.</li> <li>Work not yet begun.</li> <li>The town contributed an equal amount.</li> <li>Work begun but not completed.</li> </ol>

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TOWNS.	Previous to         In 1906.         Nov. 30, 1906.         Nov. 30, 1906.         In 1906.         Nov. 30, 1906.	ALLOTMENTS. <sup>1</sup> In 1906.	Total to Nov. 30, 1906.	LENG Previous to 1906.	LENGTHS BULL (FEET).	EET). Total to Nov. 30, 1906.	Types of Roads.
Worcester County Concluded.							
Brookfield,	I	00 006\$	2 \$900 00	I	2,500	2,500	Macadam.
Dana,	\$769 00	1	00 692	2,900	1	2,900	Gravel.
Hubbardston,	2,280 00	\$ 805 00	4 3,085 00	5,650	1	5,650	Gravel.
Mendon,	2,464 00	1	2,464 00	12,925	I	12,925	Gravel.
Oakham,	1,352 00	536 00	1,888 00	4,780	1,100	5,880	Gravel and macadam.
Petersham,	3,960 00	1	3,960 00	6,135	I	6,135	Gravel.
Rutland,	1,804 00	1	1,804 00	2,581	I	2,581	Gravel and macadam.
Winchendon,	4,000 00	1	§ 4,000 00	9,210	I	9,210	Gravel.
	\$24,275 00	\$3,257 00	\$27,532 00	66,391	3,600	69,991	
<sup>1</sup> See note on page 91.		<sup>3</sup> Work begu	<sup>3</sup> Work begun but not completed.	ipleted.	19	L'he town co	<sup>6</sup> The town contributed an equal amount.

Work done under the "Small Town" Act - Concluded.

96

<sup>4</sup> Town contributed \$2,000.

<sup>2</sup> Town contributed \$2,400.

To Nov.	LENGTHS BUILT (FERT) In 1906. 11,093 14,700 4,570 8,015 10,592 4,800 7,250 3,600 3,600		Total to Nov. 30, 1906. \$4,406 56 33,839 00 10,200 00 11,442 00 25,903 00 15,412 00 15,412 00 33,935 19 7,661 00 31,752 87 27,532 00	SUMMARY. Allotaentes In 1906. \$1,257 56 6,067 00 4,000 00 930 00 930 00 2,783 00 2,783 00 9,589 72 1,506 00 3,306 00 3,257 00	ن ن						Countries.			Barnstable, Berkshire, Bristol, . Essex, . Hampaden, Hampahire, Middlesex, Norfolk, Plymouth, Worcester,
571,477	73,770	497,707	\$218,832 62	\$39,006 28	\$179,826 34	•	•	•	·			•		Totals,
69,991	3,600	66,391	27,532 00	3,257 00	24,275 00	•	·	•						Worcester,
106,162	7,250	98,912	31,752 87	3,306 00	28,446 87	•	·	•	•					Plymouth;
19,680	4,800	14,880	7,661 00	1,508 00	6,153 00	•	·	·	•	•				Norfolk,
74,682	10,592	64,090	33,935 19	9,589 72	24,345 47	·	·	•						Middlesex,
36,256	8,015	28,241	16,749 00	2,783 00	13,966 00	•	·	•	·	•				Hampshire,
52,137	4,570	47,567	15,412 00	2,132 00	13,280 00	•	•	•	•			•		Hampden,
63,554	6,050	57,504	25,903 00	• 4,176 00	21,727 00	•	•	·	•	•	•			Franklin,
26,162	3,100	23,062	11,442 00	930 00	10,512 00	·	·	•		•				Essex, .
18,450	14,700	3,750	10,200 00	4,000 00	6,200 00	·	•	•	•					Bristol, .
95,723	11,093	84,630	33,839 00	6,067 00	27,772 00	·	·	·			·			Berkshire,
- 8,680	1	8,680	\$4,406 56	\$1,257 56	\$3,149 00	•	•	•	•			•	•	Barnstable,
Total to Nov. 30, 1906.	In 1906.	Previous to 1906.	Total to Nov. 30, 1906.	In 1906.	Previous to 1906.					TES.	LNUOC			
c).	ENGTHS BUILT (FEET	е <b>Т</b>		ALLOTMENTS.										
1				SUMMARY.										

APPENDIX H.

#### APPENDIX I.

#### REPORT OF FORESTER.

CLINTON, MASS., Dec. 13, 1906.

To the Massachusetts Highway Commission.

GENTLEMEN: — The year just closing has been a favorable one for the planting of shade trees. The loss among those planted in the spring was very small. Our planting in Brewster of 534 trees was remarkable in the fact that but 1 tree died and all made a good growth.

The trees planted in the nursery were the most successful of any we have had, so that those set out this fall are likely to succeed, as they were supplied with an abundance of fibrous roots. Had the 1905 trees had the same conditions, our cost of maintenance would have been lessened, but the effect of the very dry season of last year still manifested itself this year; after this there will probably be little trouble from that source.

The dying back among the soft wooded trees was due to the very unusual warm weather of last January, which started the sap, and the trees were not sufficiently established to withstand the severe freezing that followed. These trees were cut back in the early summer, and the result was a vigorous growth from the roots that will soon make a good showing.

The spraying of the trees on the Cape was very successful in Dennis and Brewster in keeping down the fall web worm, which was so plenty last year. In some sections on the Cape the elmleaf beetles are at work, but they can be easily kept in check by spraying, and as we now have an outfit there, the expense is very light.

One of the encouraging features of the work is the interest which individuals are showing in the State trees, and the example that they are following in setting out trees on other roads. They are also thinning out the native growth and allowing selected trees to

remain. The result of their co-operation with the commission in their efforts will make the roads of our State still more attractive.

The conditions at the nursery are very much improved by an increased fertility of the soil, together with a good water supply.

New trees planted in 1906,				2,511
Total planted in last three years,				9,657
Trees replaced in 1906,				1,011
Trees on hand in nursery, .				924
Small trees on hand in nursery,		• •		1,129

Ground was prepared this fall for 365 trees that are to be planted in the spring.

The cost of planting the new trees this year, including the cost of tree and every expense connected therewith, has been \$1.10 each. The cost of the maintenance of trees planted previous to this year has been \$0.16 per tree, and including the cost of replaced trees, \$0.20.

Respectfully submitted,

E. W. BREED.

# HIGHWAY COMMISSION. [Pub. Doc.

1	Totale.	111 112 113 113 113 113 113 113 113 113
	Ріале.	111111111111111111111111111111111111111
	Lombardy Poplar.	
	White Poplar.	
	Carolina Poplar.	111811151118H M H 11111111111 M M
	.паА пээтЭ	· · · · · · · · · · · · · · · · · · ·
	.daA эзіdVI	
	Pin Oak.	<sup>∞</sup> <sup>∞</sup>         -     -     -
	Laurel-leafed Willow.	11141113111181111411811111H
aced.	Golden. Willow.	
Replaced.	.slqsM stidW	88 89 90 1111111111111111111111111111111
	Sugar Maple.	20 11 11 11 11 11 11 11 11 11 11 11 11 11
	Могway Марle.	500 500 500 500 500 500
	Elm.	223 233   1224   122   1
	TOWN.	
	CITY OR	• • • • • • • • • • • • • • • • • • • •
	CIJ	skfield,
		Ashby, Athol, Athol, Andover, Andover, Brookfield, Dronkfield, Dronkfield, Brookfield, Bratck, Natack, Nartock, Norfolk, Norfolk, Norfolk, Norrolk,

SHOWING THE VARIETIES AND DISTRIBUTION OF SHADE TREES PLANTED IN 1906.

PIN OAKS IN STATE NURSERY-SUMMER OF 1906.

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.

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No. 54.]

SHOWING THE VARIETIES AND DISTRIBUTION OF SHADE TREES PLANTED IN 1906 - Concluded.

APPENDIX I.

101

Small trees on hand: white maple, 138; pin oak, 592; willow, in variety, 385; white poplar, 14.

linden, 79.

1	Totals.	27 146 191 191 191 285 284 284 284 284 284 284 284 285 284 285 284 285 284 285 284 285 285 284 285 285 285 285 285 285 285 285 285 285	Totals,       1,126       614       35       228       35       130       175       98       5       15       2511         On hand: white maple, 280; ash-leafed maple, 178; laurel-leafed willow, 48; pin oak, 90; white ash, 17; oriental plane, 182; black locusts, 50;
	.nəbri.I	า เ เ เ เ เ ซ เ เ เ เ เ เ เ	15 ; black le
-	Сагојіпа Роріаг.	1111111100111111	5 lane, 182
	.лаА пээтЭ	1186111111111111111	98 Driental p
	.daA. эзіdW	20 22 55 27 1 1 1 2 20 20 20 20 20 20 20 20 20 20 20 20 20	175 ash, 17; c
	Pin Oak.	149 149 1141	180 15 white :
nting.	Laurel-leafed Willow.	23	35 in oak, 9(
	Golden. Willow.	20 20 20 20 20 20 20 20 20 20 20 20 20 2	228 0W, 48; p
New Planting.	Sugar Maple:	111111118	35 afed will
	Могway Марle.	75 54 54 110 110 224 16 11	614 laurel-le
	.mlə	106 346 346 346 37 320 320 32 32 32 32 32 32 32 32 32 32 32 32 32	1,126 ple, 178;
		•••••	 leafed ma
			ash-l
	'N.		280;
	t TOWN		aple,
	CITY OR	· · · · · · · · · · · · · · · · · · ·	
	CIJ		whi
		Adams, Adams, Adams, Athol, Athol, Athol, Cheshire, Cheshire, Cheshire, Cheshire, Dennis, Dennis, Dennis, North Adams (south), North Adams (south), North Adams (west), Pittsfield (west), Stockfridge, West Brookfridie, West Brookfridie, West Brookfridie, West Brookfridie, Williamstown,	Totals, On hand:

## APPENDIX J.

## Appropriations.

Appropriations for the Construction and Repair of State Highways.

1894, chapter	497,	section a	8,			. •	\$300,000 00
1895, chapter	347,	section 3	3,				400,000 00
1896, chapter	481,	section	3,				600,000 00
1897, chapter	340,	section	1,				800,000 00
1898, chapter	539,	section	1,			÷.,	400,000 00
1899, chapter					•		500,000 00
1900, chapter	442,	section	1,				500,000 00
1901, chapter	269,	section	1,	•			500,000 00
1902, chapter	246,	section	1,	•		•	500,000 00
1903, chapter	280,	section	1,				1 2,250,000 00
Total,							\$6,750,000 00

Appropriations for the Salaries and Expenses of the Commission, paid from the Treasury of the Commonwealth.

1898, chapter 497, section 1,				\$14,300 00
1899, chapter 367, section 1,			• -	28,500 00
1900, chapter 141, section 1,				28,500 00
1901, chapter 451, section 1,				33,750 00
1902, chapter 67, section 1,				33,750 00
1903, chapters 14 and 485, sectio	on 1, .			<sup>2</sup> 43,950 00
1904, chapters 19 and 461, sectio	n 1, .			<sup>2</sup> 39,300 00
1905, chapters 36, 431 and 480, s	section	1,		<sup>2</sup> 46,150 00
1906, chapters 36 and 140, sectio	n 1, .			<sup>2</sup> 49,514 14

Appropriations for Maintenance, paid from the Treasury of the Commonwealth.

1903, chapter 280, section 2,					\$40,000 00
1904, chapter 316, section 1,		÷ .			50,000 00
1905, chapter 36, section 1,					60,000 00
1906, chapter 36, section 1,	•			•	64,166 66

<sup>1</sup> To cover expenses of construction for a period of five years.

<sup>2</sup> Includes expenses of automobile department.

# PART II.

# FIRST ANNUAL REPORT

OF THE

# MASSACHUSETTS HIGHWAY COMMISSION,

FOR THE

FISCAL YEAR ENDING NOVEMBER 30, 1906,

ON

COMPANIES ENGAGED IN THE TRANSMISSION OF INTELLIGENCE BY ELECTRICITY.

CHAPTER 433, ACTS OF 1906.

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# ANNUAL REPORT OF THE MASSACHUSETTS HIGHWAY COMMISSION CONCERNING COM-PANIES ENGAGED IN THE TRANSMISSION OF INTELLIGENCE BY ELECTRICITY.

In accordance with the provisions of chapter 433 of the Acts of 1906, the commission, in July, assumed its supervisory duties over the companies engaged in this Commonwealth in the transmission of intelligence by electricity.

Inasmuch as under the law the first annual returns of the several companies are not required to be made before Oct. 1, 1907, the commission has not deemed it wise to make any special effort to include statistics in detail in this report concerning the capital, volume of business or physical plant of the companies. It is the intention to report, in a general way only, the names of the companies engaged in the business and the extent of their service to the people of the Commonwealth. Such statistics were obtained from the files of the Secretary of the Commonwealth, from the reports of the companies to their stockholders, and by correspondence with the officials of the companies and with the officials of each city and town in the Commonwealth.

The act before referred to requires the Tax Commissioner to assess each year upon each company its proportionate share of the sum appropriated by the Legislature for the expenses of the commission, said assessment to be based upon the gross earnings of the company in the Commonwealth. At the request of the Tax Commissioner, the commission furnished to him schedules of the gross earnings of the several companies, made from the sworn statements of the principal officials of the companies. A copy of these schedules will be found in Appendix A.

In the following discussion it has been deemed best to treat the telephone companies and the telegraph companies separately.

## TELEPHONE COMPANIES.

Few of those who daily use the telephone realize the important part it now plays in the business and social life of the State and nation, or understand how rapid has been its growth.

The fact that human speech could be transmitted over a wire was first announced by Prof. Alexander Graham Bell in 1876. The first telephone exchange was established in New Haven, Conn., in 1878. In the early part of 1880 there were 61,000 telephones in use.

The telephone plant and business of the United States in 1902, according to the special census of that year, was as follows: —

Miles of wire,				• •	4,850,486
Number of subscribers, .					2,178,366
Number of telephones of all ki	nds,				-2,315,297
Number of public exchanges,					10,361
Number of employees,					78,752
Number of messages or talks,					5,070,554,553
Capital stock authorized, par	value,				\$384,534,066
Total revenue,					86,825,536
Operating expenses and fixed	charg	es, .			65,164,771
Dividends,		· •			14,982,719
Net surplus,					6,678,046
Total assets,			1.		452,172,546
Total capital stock and outsta	nding	; bonds,			348,031,058
	-		-		

Summary of All Telephone Systems.

It will be noted, in studying these returns, that during the twenty-six years between 1876 and 1902 the telephone was introduced and had grown so as to have 4,850,486 miles of wire, 2,315,297 instruments were in use, assets of the companies to the value of \$452,172,546 had accumulated, and over 5,000,000,000 messages were sent over the wires during the last year of the period.

Massachusetts has not been behind the other States of the Union in introducing and using the telephone, as is shown by these same census returns.

The number of miles of wire in 1902 per station (or subscriber) for the United States was 2.15, for Massachusetts 2.67. The number of local messages per station per day for the United

# No. 54.] TELEPHONE COMPANIES.

States was 6.7, for Massachusetts 5.5. The number of longdistance messages per station per year for the United States was 53.9, for Massachusetts 101.7. The number of stations per switch board for the United States was 224, for Massachusetts 411.

A study of the above analysis shows that the length of wire per station was 24 per cent. greater in Massachusetts than the average for the United States; that the number of stations per switch board was 83 per cent. greater; and that the number of long-distance messages was 89 per cent. greater. The number of local messages per station was 18 per cent. less in Massachusetts than the average of the United States.

From the greater length of line per subscriber, it is apparent that the telephone lines were more widely diffused in Massachusetts than the average. While the local messages were less than the average, the long-distance messages were much in excess, and it would seem that the business interests fully appreciate the importance of the speed and certainty of this means of communication.

The exact census of telephones for the present year is not taken. The returns called for by chapter 433 of the Acts of 1906 will not be made until next year; hence, the figures showing growth are not available. But it can be stated, with a reasonable degree of certainty, that the growth since 1902 has been even greater than it was for any previous period of four years.

At the present time there are only 6 towns in the Commonwealth without telephone service. The population of these towns is 1,095, out of a total population of 3,003,680.

The New England Telephone and Telegraph Company, including the Southern Massachusetts Telephone Company, which it owns, and the Providence Telephone Company of Massachusetts have public pay stations or subscribers in all but 12 of the municipalities of the State. The population thus served is 2,999,290. These companies are allied with the American Telephone and Telegraph Company, which owns a controlling interest in the stock of the companies and generally dictates their policy.

The Providence Telephone Company of Massachusetts serves the towns of Attleborough, Blackstone, North Attleborough, Plainville and Seekonk. These towns have a total population of 29,583.

Of the 12 municipalities not served by the last-named companies, 6, as already noted, have no telephone service. The other 6 are served as follows: —

Hancock, by the Columbia and Rensselaer County Telephone Company.

Richmond, by the Richmond Co-operative Telephone Company. Hawley and Heath, by the Heath Telephone Company. Leyden, by the Bernardston & Gill Telephone Company.

Leverett, by the Highland Telephone Company.

The Heath Telephone Company serves the towns of Ashfield, Buckland, Charlemont, Colrain, Conway, Deerfield, Hawley, Heath, Rowe and Shelburne. All of these towns, with the exception of Heath and Hawley, are also served by the New England Telephone and Telegraph Company.

The Highland Telephone Company serves the towns of Leverett, New Salem, Shutesbury and Wendell. All of these towns, with the exception of Wendell, are also served by the New England Telephone and Telegraph Company.

The Public Telephone Company, owned by Dr. C. F. Lane, serves the towns of Chilmark, Cottage City, Edgartown, Gay Head, Tisbury and West Tisbury. These towns are also served by the New England Telephone and Telegraph Company.

The city of New Bedford has the service of both the New England Telephone and Telegraph Company and the Automatic Telephone Company of New Bedford, there being 3,072 subscribers to the first and 1,093 subscribers to the second.

The city of Fall River has the service of both the New England Telephone and Telegraph Company and the Fall River Automatic Telephone Company, there being 3,158 subscribers to the first and 1,135 subscribers to the second.

The following additional towns are served by the New England Telephone and Telegraph Company, and also by private lines or by co-operative telephone companies or associations: —

Barnstable and Yarmouth, by the Cape Cod Telephone Company.

Bernardston and Gill, by the Bernardston & Gill Telephone Company.

Bolton, by the Bolton Telephone Company.

Chelmsford, by the Chelmsford Telephone Company.

Deerfield, by Lyman B. Wise.

Granby, by the Granby Telephone and Telegraph Company of Massachusetts.

Ipswich, by the Carpenter & Bailey Telephone Company.

Littleton, by the Littleton Telephone Association.

Norton, by the Farmers' Mutual Telephone Company.

Oakham, by the Oakham and Coldbrook Springs Telephone Company.

Orleans, by the Orleans Telephone Company.

Rochester, by R. McGilvray.

Rowley, by the Carpenter & Bailey Telephone Company.

Royalston, by S. C. French.

West Brookfield, by Dr. C. E. Perkins.

West Stockbridge, by the W. H. Losty Telephone Line, West Stockbridge Mutual Telephone Company, State Line Co-operative Telephone Company No. 12, and State Line Mutual Telephone Company No. 7.

Williamsburg, by the Citizens' Independent Telephone Company.

In this last group of telephone organizations, the Cape Cod Telephone Company is an independent company and covers in part ground covered by the New England or Southern Massachusetts Telephone Company. The others are private lines or rural lines operating in territory not served by the New England Telephone and Telegraph Company.

There are 4 mutual or assessment organizations, as follows: ---

Chelmsford Telephone Company of Chelmsford. Farmers' Mutual Telephone Company of Norton. Raymond McGilvray of Rochester. Otter River Telephone Company of Otter River, Templeton.

The company known as "the Raymond McGilvray" of Rochester constructed and maintain the lines by subscription. Each party interested owns his telephone. There are 11 subscribers.

The Farmers' Mutual of Norton was built and equipped by selling of stock in shares of the value of \$25. It is maintained by an annual assessment of about \$6. There are no dividends paid on account of stock. There are 20 subscribers. The following companies report no earnings in Massachusetts, and the reasons may be simply stated: —

American Bell Telephone Company. (This company has been replaced so far as actual operation is concerned by the American Telephone and Telegraph Company.)

American Telephone and Telegraph Company of Massachusetts. New England Telephone and Telegraph Company of Massachusetts.

These companies have Massachusetts charters for securing franchises and purchasing real estate in the State, the operations under the franchises being conducted under contracts or agreements by their respective parent companies, the American Telephone and Telegraph Company and the New England Telephone and Telegraph Company.

The Deerfield Valley Telephone and Telegraph Company and Charlemont Telephone Company have become a part of the New England Telephone and Telegraph Company.

The Valley Telephone Company has become a part of the Highland Telephone Company.

The Hampden Automatic Telephone Company, Home Automatic Telephone Company, Lawrence Independent Telephone Company, Metropolitan Home Telephone Company, Nantucket Telephone Company and Puritan Telephone Company have for various reasons not reached the point of transmitting intelligence by electricity.

The following companies and organizations are reported as being out of business, or, so far as the Highway Commission can ascertain, have no office and are not doing business. The commission would recommend that their charters or organizations be annulled.

NAME OF COMPANY.	Office.	Date of Charter or Organization.
Agawam Telephone Company, . Blandford Telephone Company, Citizens' Telephone and Tele- graph Company. Drawbaugh Telephone and Tel- egraph Company.	Rowley, Blandford, . Worcester, . 	Organized Sept. 23, 1905. Organized Jan. 6, 1887. Organized June 5, 1900. Chartered, chapter 149, Acts of 1894.

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NAME OF COMPANY.	Office.	Date of Charter or Organization.
Eastern Telephone Company, The. Globe Telephone Company, . Gloueester Automatic Tele- phone Company. Old Colony Automatic Telephone Company. Old Colony Automatic Tele- phone Company. States Telephone and Telegraph Company. Worcester Telephone Company, South Berkshire Independent Telephone and Telegraph	Rowley, Lowell, Boston, Lawrence, . Plymouth, . - Worcester, . Great Barrington,	No report found. Organized Aug. 12, 1899. Organized March 29, 1898. Organized Sept. 1, 1880. Organized March 2, 1903. Chartered, chapter 149, Acts of 1878. Organized June 27, 1899. Organized June 16, 1902.

## TELEGRAPH COMPANIES.

It is not clear just what the intent of the act is which places all companies engaged in the transmission of intelligence by electricity under the supervision of the Massachusetts Highway Commission.

The 11 telegraph companies which report their gross earnings resulting from business within the Commonwealth may well be divided into two distinct classes; first, those companies which deal directly with the public, and maintain offices and equipments for receiving and sending messages; second, those companies which do not appear to maintain such offices, and so deal with the general public.

Inasmuch as the returns from the different companies are not required to be made before next year, the commission has not deemed it wise to make any effort to obtain the detailed statistics of physical plant, capital or business for this report, but rather to report in a general way the names of companies engaged in the business, and to what extent they serve the people of the Commonwealth as a whole.

A greater part of the information which the commission has was obtained in reply to a circular letter sent to the officers of each city and town in the Commonwealth. This circular contained the following questions: —

a. Does the Western Union Telegraph Company furnish telegraph service in your municipality?

b. Does the Postal Telegraph-Cable Company furnish telegraph service in your municipality? c. Does any person, partnership, association or corporation, other than those enumerated above, furnish telegraph service in your municipality?

Replies were received from every city and town in the Commonwealth. These replies seem to indicate that there are 3 companies doing the telegraph business of the State, viz., the Western Union, Postal Telegraph-Cable and Martha's Vineyard Telegraph companies. If there are others they have not been reported.

The Western Union Telegraph Company has offices and equipment for receiving and sending messages in each of the 33 cities and in 228 out of the 321 towns. An arrangement between the telegraph and telephone companies extends this service to several towns, by telephone from the nearest telegraph office.

The Postal Telegraph-Cable Company of Massachusetts has offices and equipment for receiving and sending messages in 25 out of the 33 cities, and in 18 of the larger towns. So far as present information goes, the Postal Company has no offices in any city or town of the Commonwealth where there is no Western Union office.

The Martha's Vineyard Telegraph Company operates in the county of Dukes County, and has offices in Cottage City and Tisbury. This company connects with the Western Union Telegraph Company at Woods Hole, their cable crossing Vineyard Sound and landing on Pasque Island, a part of the town of Gosnold.

Of the 11 telegraph companies reporting their earnings in the Commonwealth, 2 are owned by the Western Union Telegraph Company, viz., the American District Telegraph Company (of Maine) and the Mutual District Messenger Company of Boston.

The total gross earnings of these 11 companies amount to \$308,029.34. Of these gross earnings, the Western Union Telegraph Company and its allied companies, the Postal Telegraph-Cable Company of Massachusetts and the Martha's Vineyard Telegraph Company, receive \$182,206.51.

The nature of the business of the other companies, except the

Marconi Wireless Telegraph Company, with gross earnings amounting to \$125,822.83, is not definitely known, and cannot be until the returns of next year are made.

There are 13 telegraph companies that report no earnings. Four of these are owned by the Western Union Telegraph Company, and their earnings are included in the return of that company. The 4 companies are: —

American Rapid Telegraph Company of Massachusetts. American Union Telegraph Company. Franklin Telegraph Company. Gold and Stock Telegraph Company.

Two of these companies report that they are not engaged in the transmission of intelligence by electricity, viz., the Municipal Fire and Police Telegraph Company and the United States Fire and Police Telegraph Company.

The cable of the French Telegraph Cable Company lands at Orleans, and all its messages are taken from or delivered to the Western Union Telegraph Company.

The American De Forest Wireless Telegraph Company reports that it is doing no business in Massachusetts.

The Ocean Telegraph Company extends from the office in Duxbury to connect with the cable of the Anglo American Telegraph Company, three miles out to sea. This company secured the franchise and real estate for the Cable Company, and the messages of that company are received and sent over the wires and cables.

The business of the Postal Telegraph Company is done by the Postal Telegraph-Cable Company of Massachusetts.

The Atlantic Telegraph Company of Massachusetts and the Stock Quotation Company do not appear to do business in Massachusetts.

The following telegraph companies could not be reached, and letters sent to their offices were returned uncalled for. The commission would recommend that their charters be annulled by legislative act. Baltimore & Ohio Telegraph Company, incorporated June 15, 1884.

Bankers' and Merchants' Telegraph Company of Massachusetts, incorporated Nov. 3, 1883.

Boston & Cape Cod Marine Telegraph Company, chapter 120, Acts of 1856.

Boston Multiplex Telegraph Company, incorporated Feb. 1, 1884. Boston & Portland Telegraph Company, chapter 61, Acts of 1850.

Cape Cod Telegraph Company, chapter 348, Acts of 1855.

Commercial Telegraph Company, chapter 252, Acts of 1852.

New England Printing Telegraph Company of Massachusetts, incorporated Aug. 13, 1890.

The charters of the Electro Pneumatic Despatch Company and American Typewriter Telegraph Company, both Maine corporations, have apparently been surrendered.

> W. E. MCCLINTOCK, HAROLD PARKER, JOHN H. MANNING, Massachusetts Highway Commission.

APPENDIX A.

Showing Certain Information concerning the Gross Earnings of the Several Telegraph and Telephone Companies, as furnished to the Tax Commissioner of the Commonwealth.

### COPY.

Nov. 7, 1906.

Hon. WILLIAM D. T. TREFRY, Commissioner of Corporations and Tax Commissioner, State House, Boston, Mass.

DEAR SIR: — At your request, in order that you may apportion the sum appropriated in 1906 for the additional salaries and expenses of the Massachusetts Highway Commission, under the Acts of 1906, chapter 433, as provided in section 3 of said act, the Massachusetts Highway Commission herewith submits a schedule of the gross earnings of the several companies known to be engaged in the transmission of intelligence by electricity in this Commonwealth, together with two other schedules giving certain data resulting from the investigation.

In most cases, the gross earnings shown have been sworn to by the principal officials of the companies. In some cases, and then only when the companies or individuals, with perhaps one exception, are known to be doing a very small and almost insignificant business, the earnings shown in the schedule are not supported by sworn statements. In every case the Board has attempted to get sworn returns on regular forms like the blank which is enclosed, but in the few instances above referred to it has thus far failed.

The commissioners believe that to get the sworn statements in these few cases it would be necessary to summon the officials of the companies before the Board, and that the result which would be secured by this expensive process would not be commensurate with the expense involved, particularly as it is understood that any inaccuracies or omissions in this year's list may be corrected next year. The Public Telephone Company, Charles F. Lane, manager, of Vineyard Haven, whose business is, perhaps, the largest of any of the companies or individuals which have not made sworn returns, has been summoned to appear before the Board for examination.

In Schedule III. will be found a list of certain companies which the commission has utterly failed to get into communication with. It is probable that all of these concerns have ceased to do business.

The returns show the total gross earnings of the telephone companies to be \$7,132,545.60, and those of the telegraph companies to be \$308,029.34.

By order of the Massachusetts Highway Commission,

(Signed)

A. B. FLETCHER,

Secretary.

## SCHEDULE I.

Showing the Gross Earnings of the Several Companies, etc., engaged in the Transmission of Intelligence by Electricity in Massachusetts, Nov. 7, 1906.

Telephone Companies.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY. Presi- dent, Frederick P. Fish; Treasurer, William R. Driver. Address, Boston.		
Gross earnings for year ending Dec. 31, 1905,	\$339,701	93
AUTOMATIC TELEPHONE COMPANY OF NEW BEDFORD. President, Francis T. Akin; Treasurer, Frederic Taber. Address, New Bedford.		
Gross earnings for year ending March 1,	27,274	13
BOLTON TELEPHONE COMPANY, THE. President, J. N. Pardee; Treasurer, Guy T. Emerson. Address, Bolton.		
Gross earnings for six months ending July 1,	131	63
CAPE COD TELEPHONE COMPANY. President, F. Percy Goss; Treasurer, Arthur G. Guyer. Address, Hyannis.		*0
Gross earnings for year ending Aug. 31, 1905,	2,475	53
CARPENTER & BAILEY TELEPHONE COMPANY. Sole owners, Almon E. Carpenter, Albert E. Bailey. Address, Rowley.		
Gross earnings for year ending June 30, 1906,	465	00
CITIZENS INDEPENDENT TELEPHONE COMPANY, THE. Presi- dent, A. S. Hills; Treasurer, Byron Loomis. Address, Haydenville.		
Gross earnings for year ending February 1,	300	00
COLUMBIA & RENSSELAER TELEPHONE AND TELEGRAPH COMPANY. President, A. S. Haight; Treasurer, M. J. Fowler. Address, West Lebanon, N. Y.		
Gross earnings for year ending July 1, 1906,	100	00
Amount carried forward,	\$370,448	22

Amount brought forward,	\$370,448	22
<ul> <li>FALL RIVER AUTOMATIC TELEPHONE COMPANY. President, Edward B. Jennings; Treasurer, Bradford D. Davol. Address, Fall River.</li> <li>Gross earnings for year ending March 31, 1906,</li> </ul>	30,383	59
FLAGG, LEVI W. <sup>1</sup> Owner, Levi W. Flagg. Address, New Salem.		
Gross earnings for year ending Oct. 1, 1906,	74	00
FRENCH, S. C. <sup>1</sup> Owner, S. C. French. Address, Royalston. Gross earnings (per year, approximate),	5	00
GRANBY TELEPHONE AND TELEGRAPH COMPANY OF MASSA- CHUSETTS, THE. President, George F. Eastman; Treasurer, W. A. Taylor. Address, Granby.		
Gross earnings for year ending Jan. 15, 1906,	1,052	74
HEATH TELEPHONE COMPANY. President, W. E. Kinsman; Treasurer, H. Newell. Address, Shelburne Falls. Gross earnings for year ending October 1,	7,115	76
HIGHLAND TELEPHONE COMPANY. President, Rawson King; Treasurer, Willard Putnam. Address, New Salem.		
Gross earnings for year ending July 1, 1906,	613	49
LITTLETON TELEPHONE ASSOCIATION. President, Frank B. Priest; Treasurer, J. Melom Hartwell. Address, Littleton.		
Gross earnings for year ending July,	410	00
LOSTY, W. H., TELEPHONE LINE. Owner, W. H. Losty. Address, West Stockbridge.		00
Gross earnings for year ending June 30, 1906,	226	80
MASSACHUSETTS TELEPHONE AND TELEGRAPH COMPANY, THE. President, Fred Jones; Treasurer, William Shirden. Address, Boston.		
Gross earnings for year ending Dec. 31, 1905,	2,654	79
MILLER'S FALLS, MASS., TELEPHONE EXCHANGE. Owner, E. M. Partridge. Address, Miller's Falls.	1,669	80
Gross earnings for year ending July 1,		
Amount carried forward,	\$414,654	28

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APPENDIX A.

Amount brought forward,	\$414,654	28
NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY. President, Thomas Sherwin; Treasurer, William R. Driver. Address, Boston. Gross earnings for year ending Dec. 31, 1905,	6,179,565	11
	0,179,000	11
NORTH ASHBURNHAM TELEPHONE COMPANY. Manager, Herbert J. Blanchard. Address, Ashburnham. Gross earnings for year ending July 31, 1906,	118	00
NORTHFIELD FARMS TELEPHONE COMPANY. Owners, O. L. Leach, C. H. Green. Address, Northfield Farms. Gross earnings for year ending Feb. 1, 1906,	- 94	60
	51	00
NORTH ORANGE TELEPHONE COMPANY. President, Leslie H. Woodbury; Treasurer, Leslie H. Woodbury. Ad- dress, North Orange.		
Gross earnings for year ending Jan. 1, 1907,	204	00
OAKHAM & COLDBROOK SPRINGS TELEPHONE COMPANY. President, F. S. Conant; Treasurer, Harry B. Parker. Address, Oakham.		
Gross earnings for year ending June 1, 1906,	650	58
ORLEANS TELEPHONE COMPANY. Owner, Henry K. Cum- mings. Address, Orleans.		
Gross earnings for year ending Dec. 31, 1905,	226	64
PEOPLES TELEPHONE COMPANY, THE. President, Cornelius A. Parker; Treasurer, Henry C. Attwell. Address, Boston.		
Gross earnings for year ending Jan. 1, 1906,	6,473	22
PROVIDENCE TELEPHONE COMPANY OF MASSACHUSETTS. <i>President</i> , Thomas Sherwin; <i>Treasurer</i> , Robert W. Devonshire. Address, Boston.		
Gross earnings for year ending Nov. 30, 1905,	31,752	35
PUBLIC TELEPHONE COMPANY. <sup>1</sup> Owner, Charles F. Lane. Address, Vineyard Haven.		
Gross earnings (per year, approximate),	1,700	00
RICHMOND CO-OPERATIVE TELEPHONE COMPANY. Presi- dent, Frederic A. Clement; Treasurer, John R. Ayer. Address, Richmond.		
Gross earnings for year ending Feb. 20, 1906,	666	63
Amount carried forward.	\$6.636.105	41

<sup>1</sup> No sworn statement received.

Amount brought forward,	\$6,636,105	41
SOUTHERN MASSACHUSETTS TELEPHONE COMPANY. Presi- dent, Thomas Sherwin; Treasurer, William R. Driver. Address, Boston. Gross earnings for year ending Dec. 31, 1905,	496,010	22
STATE LINE MUTUAL TELEPHONE COMPANY NO. 7. Presi- dent, John Howes; Treasurer, Milton E. Sprague. Address, West Stockbridge.		
Gross earnings for year ending July 1, 1906,	6	00
STATE LINE CO-OPERATIVE TELEPHONE COMPANY NO. 12. President, H. C. Kinne; Treasurer, H. C. Kinne. Ad- dress, State Line.		0.0
Gross earnings for year ending Dec. 6, 1905,	28	00
WEST STOCKBRIDGE MUTUAL TELEPHONE COMPANY. Presi- dent, Cyrus W. Sprague; Treasurer, James S. Moore. Address, West Stockbridge.		
Gross earnings for year ending July 1, 1906,	395	97
	\$7,132,545	60
Telegraph Companies.	<i>\$1,102,010</i>	00
AMERICAN DISTRICT TELEGRAPH COMPANY (OF MAINE). President, R. C. Clowry; Treasurer, M. T. Wilbur. Ad- dress, Boston.		
Gross earnings for year ending June 30, 1906,	\$13,334	83
COMMERCIAL CABLE COMPANY, THE. President, Frederick H. Putt; Treasurer, Edward C. Platt. Address, Boston. Gross earnings for year ending June 30, 1906,		09
Commercial Union Telegraph Company of Massachu- setts, The. <i>President</i> , William H. Baker; <i>Treasurer</i> , Thomas E. Fleming. Address, Boston.		
Gross earnings for year ending Dec. 31, 1905,	15,507	14
MARCONI WIRELESS TELEGRAPH COMPANY OF AMERICA. President, John W. Griggs; Treasurer, Frank Newman. Address, New York City. Gross earnings for year ending June 30,	1 101	10
MARTHA'S VINEYARD TELEGRAPH COMPANY. President, H. G. Haddon; Treasurer, J. H. Wentworth. Address, Boston.		
Gross earnings for year ending September 30,	6,972	37
Amount carried forward,	\$74,306	53

120

Amount brought forward,	\$74,306	53
MIXER BROTHERS. Owners, J. Frank Mixer, William A. Mixer. Address, Boston Gross earnings for year ending June 30, 1906,	12,987	60
MUTUAL DISTRICT MESSENGER COMPANY OF BOSTON. President, R. C. Clowry; Treasurer, M. T. Wilbur. Address, Boston.		
Gross earnings for year ending May 31, 1906,	45,821	58
NEW ENGLAND TELEGRAPH COMPANY. President, William H. Baker; Treasurer, Charles P. Bruch. Address, Boston.		
Gross earnings for year ending Dec. 31, 1905, .	6,030	55
POSTAL TELEGRAPH-CABLE COMPANY OF MASSACHUSETTS. President, William H. Baker; Treasurer, Thomas E. Fleming. Address, Boston.		
Gross earnings for year ending Dec. 31, 1905,	21,537	70
UNITED TELEGRAM COMPANY. President, Charles F. Parker; Treasurer, Jere A. Downs. Address, Boston.		0.5
Gross earnings for year ending Oct. 31, 1905,	52,805	35
WESTERN UNION TELEGRAPH COMPANY. President, R. C. Clowry; Treasurer, M. T. Wilbur. Address, New York City.		
Gross earnings for year ending Dec. 31, 1905,	94,540	03
	\$308,029	34

Amounts to be assessed on Companies, etc., on Basis of \$6,875 (Appropriated, Acts of 1906, Chapter 536), Nov. 7, 1906.

Coeff.=	6,875	= 0.000924.
00011	7,440,574.94	

Companies, etc.	Gross Earnings.	Assessment.
American Telephone and Telegraph Company, Automatic Telephone Company of New Bed-	\$339,701 93	\$313 87
ford,	27,274 13	. 25 20
Bolton Telephone Company, The,	131 63	12
Cape Cod Telephone Company,	2,475 53	2 28
Carpenter & Bailey Telephone Company, .	465 00	43
Citizens Independent Telephone Company, The,	300 00	28
Columbia & Rensselaer Telephone and Tele-		
graph Company,	100 00	09

Telephone Companies.

Telephone	Companies —	Concluded.
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Companies, etc.	Gross Earnings.	Assessment.
Fall River Automatic Telephone Company, .	\$30,383 59	\$28 06
Flagg, Levi W.,	74 00	07
French, S. C.,	5 00	-
Granby Telephone and Telegraph Company of Massachusetts, The,	1,052 74	96
Heath Telephone Company,	7,115 76	6 57
Highland Telephone Company,	613 49	56
Littleton Telephone Association.	410 00	38
Losty, W. H., Telephone Line,	226 80	21
Massachusetts Telephone and Telegraph Com-	0.054 50	0.45
pany, The,	2,654 79	2 45
New England Telephone and Telegraph Com-	1,669 89	1 54
pany,	6,179,565 11	5,709 92
North Ashburnham Telephone Company,	118 00	
Northfield Farms Telephone Company,	94 60	09
North Orange Telephone Company,	204 00	19
North Orange Telephone Company, Oakham & Coldbrook Springs Telephone		
Company,	650 58	60
Orleans Telephone Company,	226 64	21
Peoples Telephone Company, The,	6,473 22	5 98
Providence Telephone Company of Massa- chusetts,	31,752 35	29 34
Public Telephone Company,	1,700 00	1 57
Richmond Co-operative Telephone Company,	666 63	61
Southern Massachusetts Telephone Company,	496,010 22	458 31
State Line Mutual Telephone Company No. 7,	6 00	-
State Line Co-operative Telephone Company		
No. 12,	28.00	03
West Stockbridge Mutual Telephone Com-	205 07	07
pany,	395 97	37
Telegraph Companies.		
American District Telegraph Company (of		
Maine),	13,334 83	12 32
Commercial Cable Company, The,	37,371 09	34 53
Commercial Union Telegraph Company of	15 505 14	14.99
Massachusetts, The,	15,507 14	14 33
Marconi Wireless Telegraph Company of America,	1,121 10	1 04
Martha's Vineyard Telegraph Company,	6,972 37	6 44
Mixer Brothers,	12,987 60	12 00
Mutual District Messenger Company of	,	
Boston,	45,821 58	42 33
New England Telegraph Company,	6,030 55	5 57
Postal Telegraph-Cable Company of Massa-	01 707 80	10.00
chusetts,	21,537 70	19 90
United Telegram Company,	52,805 35 94,540 03	48 79 87 35
Western Union Telegraph Company,	94,040 03	01 33

## SCHEDULE II.

Companies, etc., which have reported no Gross Earnings in Massachusetts, Nov. 7, 1906.

### Telephone Companies.

American Bell Telephone Company. American Telephone and Telegraph Company of Massachusetts. Blandford Telephone Company.<sup>1</sup>,<sup>2</sup> Charlemont Telephone Company. 1, 3 Chelmsford Telephone Company.<sup>1</sup>,<sup>4</sup> Citizens' Telephone and Telegraph Company.<sup>1</sup>,<sup>5</sup> Deerfield Valley Telephone and Telegraph Company. Farmers Mutual Telephone Company. Hampden Automatic Telephone Company. Home Automatic Telephone Company. Lawrence Independent Telephone Company. McGilvray, Raymond, Rochester, Mass. Metropolitan Home Telephone Company.<sup>1</sup>,<sup>6</sup> Nantucket Telephone Company. New England Telephone and Telegraph Company of Massachusetts. Old Colony Automatic Telephone Company.<sup>1</sup>,<sup>7</sup> Otter River Telephone Company. Puritan Telephone Company. South Berkshire Independent Telephone and Telegraph Company of Massachusetts. Valley Telephone Company. <sup>1</sup>, <sup>8</sup> Wise, Lyman B., Deerfield, Mass. Worcester Telephone Company. 1, 9

<sup>1</sup> No sworn statement received.

<sup>&</sup>lt;sup>2</sup> C. B. Hayden, president, states that the company has been out of business for some years.

<sup>&</sup>lt;sup>3</sup> L. W. Sears, president, states that this company has been sold out to the Deerfield Valley Telephone and Telegraph Company.

<sup>&</sup>lt;sup>4</sup> Said to be a co-operative company with no earnings.

<sup>&</sup>lt;sup>5</sup> F. W. White, clerk, states that the company has done no business.

<sup>&</sup>lt;sup>6</sup> W. N. Akers, president, states that the company is at organizing stage only.

<sup>&</sup>lt;sup>7</sup> A. Atwood, president, states that the concern is out of business.

<sup>&</sup>lt;sup>8</sup> J. W. Watson states that this concern is now controlled by the Highland Telephone Company.

<sup>&</sup>lt;sup>9</sup> Henry F. Harris, president, states that the concern is out of business.

#### Telegraph Companies.

American Rapid Telegraph Company of Massachusetts. <sup>1</sup> American Typewriter Telegraph Company. <sup>2</sup>, <sup>3</sup> American Union Telegraph Company. <sup>2</sup>, <sup>4</sup> American DeForest Wireless Telegraph Company. <sup>2</sup>, <sup>5</sup> Atlantic Telegraph Company. <sup>1</sup> Franklin Telegraph Company. <sup>1</sup> French Telegraph Company. <sup>2</sup>, <sup>6</sup> Gold and Stock Telegraph Company. <sup>1</sup> Municipal Fire and Police Telegraph Company. <sup>2</sup>, <sup>7</sup> Ocean Telegraph Company. <sup>8</sup> Stock Quotation Company. <sup>2</sup>, <sup>8</sup> United States Fire and Police Telegraph Company. <sup>2</sup>, <sup>7</sup>

<sup>1</sup> Sworn certificate filed by officers of Western Union Telegraph Company states that the gross earnings of this concern are included in the gross earnings of the Western Union Telegraph Company.

<sup>2</sup> No sworn statement received.

<sup>3</sup> R. P. Elliott states that the concern is out of business.

<sup>4</sup> C. F. Ames, superintendent, Western Union Telegraph Company, says the concern was absorbed by the Western Union Telegraph Company.

<sup>4</sup> Letter received stating that the company is not now engaged in business in the Commonwealth.

<sup>1</sup> H. Osborne, superintendent, states that this company has no earnings in Massachusetts.
 <sup>7</sup> W. W. Bowes, assistant treasurer, Gamewell Fire Alarm Telegraph Company, says

this company is not engaged in transmission of intelligence, etc., in Massachusetts.

<sup>8</sup> E. B. Pillsbury, superintendent, Postal Telegraph-Cable Company, says there is no such company.

<sup>9</sup> Wm. H. Hurst, president, says company has no earnings in Massachusetts.

## SCHEDULE III.

Companies, etc., from which no Information as to Gross Earnings has been secured (Letters returned, Parties not found), Nov. 7, 1906.

Telephone Companies.

Agawam Telephone Company, Rowley, Mass. Drawbaugh Telephone and Telegraph Company. Eastern Telephone Company, The, Rowley, Mass. Globe Telephone Company. Gloucester Automatic Telephone Company. Merrimack Valley Telephone Company. States Telephone and Telegraph Company.

### Telegraph Companies.

Baltimore & Ohio Telegraph Company. Bankers and Merchants Telegraph Company of Massachusetts. Boston Multiplex Telegraph Company. Boston & Cape Cod Marine Telegraph Company. Boston & Portland Telegraph Company. Cape Cod Telegraph Company. Commercial Telegraph Company. Electro-Pneumatic Dispatch Company. New England Printing Telegraph Company of Massachusetts.

## APPENDIX B.

#### ACTS OF 1906, CHAPTER 433.

AN ACT RELATIVE TO THE SUPERVISION BY THE MASSA-CHUSETTS HIGHWAY COMMISSION OF ALL COMPANIES ENGAGED IN THE TRANSMISSION OF INTELLIGENCE BY ELECTRICITY.

Be it enacted, etc., as follows:

SECTION 1. The Massachusetts highway commission shall have general supervision of all companies engaged in the transmission of intelligence by electricity within this Commonwealth, and shall make all necessary examinations and inquiries and keep themselves informed as to the compliance of all such companies with the provisions of law. None of said commissioners shall be in the employ of or own any stock in any company engaged in the transmission of intelligence by electricity in this Commonwealth, or be in any way, directly or indirectly, pecuniarily interested in the manufacture or sale of any article or commodity used by such companies, or for any purpose connected with the business of transmission of intelligence by electricity, nor shall he be connected with, or in the employ of any person, partnership, association or corporation which finances any such company. Each member of said commission shall receive from the Commonwealth annually fifteen hundred dollars in addition to the compensation now provided by law.

SECTION 2. Said commission may expend in the performance of its duties under this act for necessary statistics, books, stationery, clerical, travelling and incidental expenses, a sum not exceeding six thousand dollars annually.

SECTION 3. All sums of money annually appropriated for the additional salaries and expenses of the Massachusetts highway commission required by this act shall be apportioned

The Massachusetts highway commission to have supervision of companies transmitting intelligence by electricity, etc.

Compensation.

Expenses.

Amount of expenses to be apportioned by the tax commissioner, etc.

## APPENDIX B.

by the tax commissioner among the several companies engaged in the business of transmission of intelligence by electricity within the Commonwealth; and on or before the first day of July in each year he shall assess upon each of said companies its share of such sums in proportion to its gross earnings in this Commonwealth for the year last preceding the year in which the assessment is made; and such assessment shall be collected in the same manner as taxes upon corporations.

SECTION 4. Said commission shall annually, on or before Annual report. the first Wednesday in January, transmit to the secretary of the Commonwealth a report to the general court of all proceedings under the provisions of this act during the period covered by the report, together with such suggestions as to the condition or conduct of companies engaged in the transmission of intelligence by electricity as the said commission may deem expedient.

SECTION 5. Upon complaint in writing relative to the ser- Hearing to be given in vice or charges for service in, to or from any city or town in complaint the Commonwealth as rendered or made by any company service, etc. engaged therein in the transmission of intelligence by electricity, signed by the mayor of the city or the selectmen of the town, or by twenty customers of the company, the commission shall notify the company by leaving at its office or place of business in such city or town a copy of the complaint, and shall thereupon, after notice, give a public hearing to the complainant or complainants and to the company, and after the hearing may make such recommendations concerning the reduction, modification or continuation of such charges for service, or concerning improvements in the quality of the service, or concerning such other matters in the premises as the commission shall deem just and proper. Any such recommendations shall be transmitted in writing by the commission to the company complained of, and a report of the proceedings and of the result thereof shall be included in the annual report of the commission, together with a statement of the action, if any, which the company has taken on the recommendation.

SECTION 6. If a company engaged in the transmission of The attorney-general to take intelligence by electricity violates or neglects in any respect proceedings in certain cases. to comply with the provisions of any law, said commission etc. shall give due notice thereof in writing to such company and

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to the attorney-general, who shall take such proceedings thereon as he may deem expedient.

SECTION 7. The supreme judicial court or the superior court shall have jurisdiction in equity, upon the application of said commission, to enforce all lawful orders of the commission and all provisions of law herein contained.

SECTION 8. Every company engaged in the business of the transmission of intelligence by electricity within the Commonwealth shall annually, on or before the first day of October in each year after the year nineteen hundred and six, submit to said commission a report of its doings for the year ending on such date or dates preceding as said commission may designate, which report shall be in such form and detail as the commission may from time to time prescribe, and shall be called the "Annual Return." Such return shall be sworn to by the treasurer and by the chief accounting officer of such company, and shall include a statement of its business, receipts and expenditures within the Commonwealth during the vear, its dividends paid out and declared, the amount of its authorized capital and its indebtedness and financial condition, on such date or dates as said commission may designate. SECTION 9. Any company engaged in the business of the

transmission of intelligence by electricity within the Commonwealth neglecting to make the annual return required by the preceding sections shall, for the first fifteen days or portion thereof during which such neglect continues, forfeit five dollars a day; for the second fifteen days or any portion thereof, ten dollars a day; and for each day thereafter a sum not exceeding fifteen dollars a day. If any company unreasonably refuses or neglects to make such return, it shall, in addition thereto, forfeit not more than five hundred dollars for each offence. All forfeitures recovered under the provisions of this act shall be paid into the treasury of the Commonwealth.

SECTION 10. In addition to the annual return required by section eight, every such company shall at all times, upon request, furnish to the said commission any information required by the commission concerning the condition, management and operation of its business within the Commonwealth, or concerning its rates or charges or the facilities afforded by

Supreme judicial court to have jurisdiction.

Annual returns to be made, etc.

Penalty for neglect to make return.

Companies to furnish information, etc. it to the public therein, and shall comply with all lawful orders of said commission; and the commission may at all reasonable times have access to the books of such company.

SECTION 11. Every company engaged in the business of Books and accounts. the transmission of intelligence by electricity within the Commonwealth shall keep its books and accounts covering the business done within the Commonwealth in a form approved by said commission.

The word "company" shall include every The word SECTION 12. person, partnership, association and corporation engaged in defined. the business of the transmission of intelligence by electricity.

SECTION 13. In all investigations made by the board, and Witnesses may be sumin all proceedings before it, any member thereof may summon moned, etc. witnesses in behalf of the Commonwealth, and may administer oaths and take testimony. The fees of such witnesses for attendance and travel shall be the same as for witnesses before the superior court, and shall be paid by the Commonwealth upon the certificate of the board filed with the auditor.

SECTION 14. This act shall take effect on the first day of When to take July, nineteen hundred and six.

Approved May 31, 1906.

'company "

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Municipanties in which work was	done	aur	ing	1900,	•	•	•	•	•	'	00
		N.									
No have not trans at the										10	41
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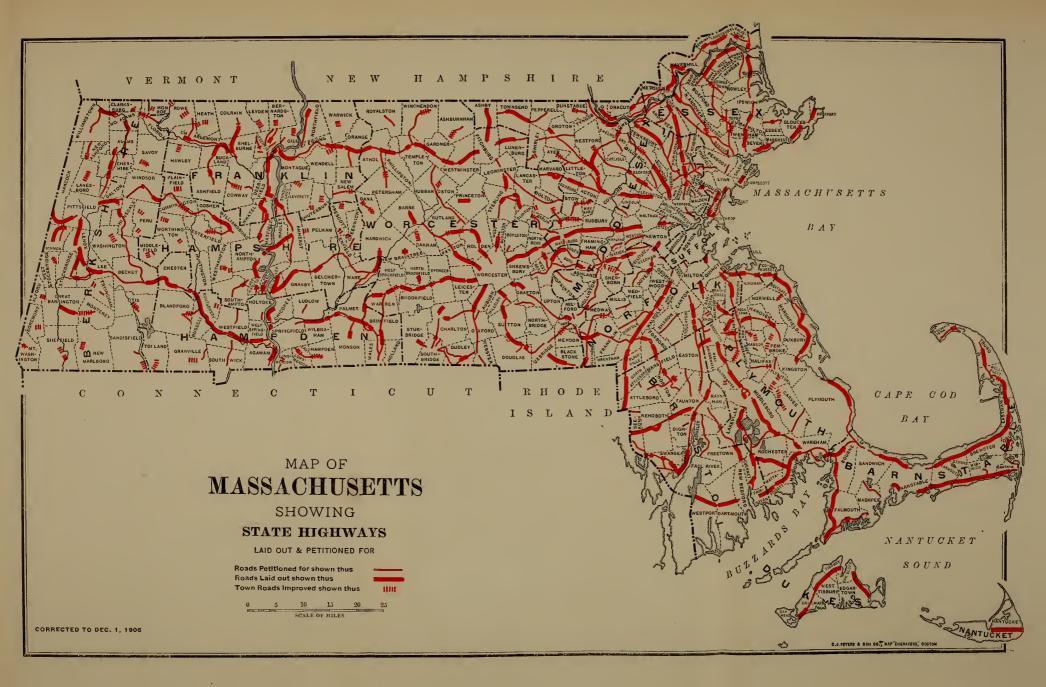
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