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HOUSE No. 1985

The Commonwealth of Massachusetts. 500 985

EXECUTIVE DEPARTMENT, BOSTON, June 5. 1911.

To the Honorable Senate and House of Representatives.

I transmit herewith a report by Mr. Walter Webster on the Metropolitan Park Commission.

The pending annual appropriations for this Commission aggregate over \$685,000, all of which is for its regular work and does not include additional purchases of land or "extraordinary expenses." The two chief items are \$370,000 and \$189,000 for the yearly expenses of the reservations and the parkways, respectively.

The Metropolitan Park System represents a capital outlay of over \$18,000,000, mainly spent for the purchase of land and its improvement. Including interest on this debt, the total yearly cost to the tax payers is over a million dollars. The entire direct state tax is less than five million dollars.

Considering the large costs of our necessary public institutions, hospitals, asylums, schools, prisons, etc., and the general running expenses of the State Government, I cannot believe that the tax payers of the state intended that the park systems should ever absorb so large a proportion of the public funds; nor do I believe that it is either necessary or expedient to keep on indefinitely increasing the area and the annual expenses of these reservations.

For example, the Metropolitan Reservations now comprise 9,400 acres, consisting mostly of woodlands, intersected by wood roads and foot paths. The cost to the state represents \$40 per acre each year for up-keep and expenses as shown by the figures given, not including the interest charges.

The high cost of labor is assigned as a reason for this, but from Mr. Webster's analysis of costs, it is obvious that

the annual labor charge of \$105,000 is only \$11 per acre and he recommends reducing this. He says that "the labor item has a constant tendency to grow larger and larger in an almost imperceptible way and that when the force is once increased it is almost never reduced." The same criticism may justly be made of all the other expenses.

In comparing the pending appropriations with those of 1910 it should be noted that there is a net increase of only \$12,000, including all the newly added expenses of the Charles River Dam, which amount to \$91,000 and which were previously disbursed under a separate Commission. On the surface, therefore, these figures show, as stated by Mr. Webster, a reduction of nearly \$80,000 this year in the annual expenses of the Parks and Boulevards. However, when we take account of last year's extraordinary expenses, such as the costs of new buildings and the \$59,000 cost of repairing the damages by storm at Winthrop, this apparent saving is wiped out. In fact, the requests for appropriations this year taken item by item, for police, labor, wages, and even for engineering costs, are uniformly higher than last year, aside from the added expenses of the Charles River Basin.

In my judgment the Metropolitan Parks represent a dangerously heavy outlay of money. Almost the entire present Metropolitan Parks property was acquired prior to 1901 but during the ten years since then, the running expenses have piled up at a startling rate. The same is true of the Parkways (to maintain which an additional annual expense of \$189,000 is incurred). These are thirty-one miles in total length, with an area of 864 acres. These are mainly boulevards with a strip of parkway on either side. Their average width is (from figures given) 200 feet, including that of the roadway. To maintain each mile of such parkway costs per annum (on the average of this year's request for money) over \$6,000. For comparison I may say that the whole cost of constructing the State highways in the Metropolitan District has been but \$17,000 a mile.

I believe that the general public is getting very little return for the immense and increasing outlay. As an instance

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the yearly costs of the item of road repairs are now over five times (per square yard) what they were five years ago. This increase is almost wholly due to high-speed automobiles and I cannot see why the automobile owners should have these pleasure roads kept up for their use at public expense.

For example, the annual costs of policing these public spaces are \$173,700. A far larger police force is required in summer than in winter, largely on account of automobile travel. Yet the force is kept up through the winter and kept partially occupied in cheap, manual labor, such as cutting wood, notwithstanding the immense sums paid directly for labor.

The general situation may be summed up in the language of Mr. Webster's report: —

“The regular park boulevard has been converted into an aristocratic highway and the public is paying the bills.”

This comment is all the more striking because of the notably conservative character of the report.

A somewhat parallel situation is revealed by the Charles River Basin, now maintained under the Metropolitan Park Commission. This enclosed water park was built by the people at a cost of over \$4,000,000; it is supported by the people for public use at an estimated cost, this year, of over \$90,000; yet in the last annual report of the Chairman of the Metropolitan Park Commission we read that the Commission has proceeded slowly in popularizing the Basin because of the “plainly expressed disinclination of property owners in the neighborhood of the Basin to have its present clean-shaven, formal look, and the uninterrupted vista from their houses, interfered with.”

In the same line I regret the necessity of reporting that a section of the Blue Hills Reservation, along its southerly edge, in Canton on Turnpike Street, is not marked as public land but is permitted to appear as private property, occupied in part by a privately maintained polo ground, hennery and piggery.

I earnestly recommend that no additional purchases of land and no more elaborate engineering improvements on

land already purchased be made, until the present public investment in these parks is made more serviceable to the public itself; and until the annual costs to the public are reduced by increasing the license fees on pleasure automobiles and applying these funds directly to the up-keep of these parks and boulevards. With over 30,000 automobiles now owned in this state, a very moderately increased tax on them would remove this present excessive burden of up-keep from the general public, and the very moderate remaining public expense would represent only a fair price for the use the people make of these public lands.

Mr. Webster recommends certain reductions in expenses, such as reducing the police appropriation by \$10,000; the labor item by \$10,000 and the cost of lighting by \$5,000. I believe these reductions are feasible and request that they be made. If this is done as a start I feel sure that further reductions can be made annually, but I believe that it is of much greater importance to enact a law which will provide for collecting larger automobile fees and thus put the heavy costs of maintaining the parkways directly on those who use them most.

The pending regular appropriations for the Commission amount to \$370,597.96 for the reservations; \$189,483 for the parkways; \$26,500 for the Nantasket Beach Reservation; and \$6,512 for the Wellington Bridge. Last year the appropriations (excluding cost of damage by storm at Winthrop and other special costs) were \$363,142.96; \$174,507, \$24,300, \$6,512 respectively, or a total of \$24,631 less than the present requests. I approve for the current year only these same amounts of last year, and also approve the pending request for the Charles River Basin of \$91,975, representing expenses previously borne by a separate Commission which is now discontinued.

There are also pending special appropriations for engineering work, amounting to \$60,000. I cannot approve these at this time but will report upon them in connection with other engineering work now under investigation in the Metropolitan area.

EUGENE N. FOSS.

The Commonwealth of Massachusetts.

REPORT ON METROPOLITAN PARK COMMISSION.

By WALTER A. WEBSTER.

To His Excellency EUGENE N. FOSS, *Governor of Massachusetts.*

I herewith transmit to you my report covering my investigation of the current expenditures of money under the supervision of the Metropolitan Park Commission.

The immense field covered by this commission has necessitated a great deal of detail work and consequent delay. The commission itself and its subordinates have been very courteous and have done all in their power to aid me.

I make a number of concrete recommendations, involving a saving in the maintenance of the park system of \$30,000 per annum:—

For labor,	.	.	.	.	.	.	.	.	.	.	\$10,000
For police,	.	.	.	.	.	.	.	.	.	.	10,000
At Nantasket,	.	.	.	.	.	.	.	.	.	.	5,000
For lighting,	.	.	.	.	.	.	.	.	.	.	5,000

I also make the following recommendations:—

That the jurisdiction of the bridge between Cambridge and Boston be taken from the park commission and treated similarly to the other bridges between Cambridge and Boston.

That the commission annually print in its report an itemized statement of its expense fund, showing its receipts.

That Charles River Basin be popularized.

That the advisability of placing the employees on the Charles River Basin under the civil service requirements be considered.

That a special automobile license be required in the metropolitan area.

That the State highways in the metropolitan area be placed under the jurisdiction of the Metropolitan Park Commission.

That if additional revenue is raised that the price of bathing be decreased.

I also at this time recommend that the annual report of the commission be properly indexed on account of the difficulty of readily finding information without it.

I file herewith as supplementary to the main report a statement of facts regarding a polo ground and shooting stand on the Blue Hills Reservation.

In general, I have found this commission to be an excellent administrative body. Its plan of organization is excellent and its work is done economically.

It is difficult to compare the work of this commission with other departments of the Commonwealth in many respects, as the work is so entirely different, but it can be fairly said that the overhead costs, so called, and the administrative expenses are less than in any other department, in proportion to the volume of work done. The commission has held its own in this respect from year to year.

Respectfully submitted,

WALTER A. WEBSTER.

REPORT.

HISTORICAL RÉSUMÉ.

The Metropolitan Park Commission was born in 1892, when, by chapter 342 of the Acts of that year, a commission of three was authorized to “consider the advisability of laying out ample open spaces for the use of the public in the towns and cities in the vicinity of Boston.”

The result was the act establishing a Metropolitan Park Commission, chapter 407 of the Acts of 1893. This act provided for five commissioners, and provided that they should serve without compensation. They were given power “to acquire, maintain, and make available to the inhabitants of said district open spaces for exercise and recreation.” The district originally comprised 12 cities and 25 towns, and at the present time comprises 13 cities and 26 towns. Chapter 407 started the acquirement of reservations.

Boulevard or parkway construction was authorized by chapter 288 of 1894, and is a distinct act from the reservation act of 1892, being supplementary thereto. These two acts formulated into law the concrete conception of an entire park system covering the whole metropolitan area with the various sections connected by boulevard, or highways of first-class construction.

Revere Beach was added to the system by chapter 483 of the Acts of 1894, while Charles River was first authorized to be improved by chapter 509, Acts of 1894.

Nantasket Beach was acquired by chapter 464 of the Acts of 1899, and Cohasset and Hull were added to the metropolitan park system by reason of this taking. The last great acquisition was the Charles River Basin, which became a part of this system in 1910, but which had been in process of construction by a separate commission since 1904.

A great many other legislative acts have been passed authorizing the acquisition of new territory or the improvement of old, while various persons, by will, have made splendid gifts of land to this system.

In 1893 the park system was represented by 991½ acres, consisting of the Beaver Brook Reservation of 59 acres, and a fragment of Blue Hills, containing 932½ acres.

In 1894 Middlesex Fells, with 1,583 acres, was added; Stony Brook, with 475 acres, together with 3,000 more acres in Blue Hills, making a total of 6,070 acres.

In 1895, 85 acres were acquired at Revere Beach; 188 acres on Charles River; 3 acres at King's Beach, and 24 acres at Hemlock Gorge. The holdings at Blue Hills were also increased, and so were those in Middlesex Fells.

In 1896 the only material increase in area was that in Middlesex Fells, 137 acres.

In 1897 there was very little increase, except at Charles River, where 57 acres were added.

In 1898 Blue Hills took on 545 more acres; Charles River, 310 acres; and the West Roxbury parkway, of 156 acres, was added.

In 1899 there was a substantial increase again: Mystic River, with 290 acres; Neponset River, with 920 acres; Winthrop Shore, with 16 acres, and Nantasket Beach, with 3 acres, being added. This brought the total acreage up to 9,279.

In 1900 the increase was very slight. Quincy Shore was acquired, with 38 acres, as was also Lynn Shore, with 4 acres, while Nantasket Beach was enlarged.

In 1901 Hart's Hill was acquired, with 23 acres.

In 1902, 1903, 1904, 1905, down to date, further acquisitions to the reservations were limited to the acquirement of land contiguous to existing possessions.

The boulevard or parkway system (as distinct from the foregoing which relates to the park system, or reservations) was a negligible quantity in 1893 and 1894, and really only started in 1895, when the parkways, exclusive of streets acquired, amounted to 111½ acres. Each succeeding year

from this time on witnessed parkway takings, which connected the principal park areas with one another and which were a valuable addition to the beaches and riverways, so that in the current year there are 31.687 miles of parkway, embracing an acreage of 864.16.

The acquirement of large areas for park purposes has practically ceased, and except for necessary additions to the existing system it is doubtful if the acreage will materially increase, unless perhaps in isolated spots or by reason of some extraordinary movement of public opinion.

ORGANIZATION.

The Metropolitan Park Commission consists of five members, who supervise and pass upon all acquirements, construction, purchases, permits and the acts of the departments and of the division superintendents. It is the executive head of the park system. The chairman receives a salary of \$4,500 per year, and is the active head of the commission. The other members receive no salary, but are entitled to \$600 per year for expenses. The secretary is the recording and executive officer of the Board. All records and property are in his charge, and he is responsible for all money received to the account of the Board, and is under bonds to the amount of \$10,000. The present secretary is also law officer of the Board, under authority from the Attorney-General, and as such has charge of law matters and settlement of claims generally, except in trial of cases arising out of takings, enforcement of restrictions, and other matters which are handled directly by the Attorney-General. He has general supervision of the office and its various departments, of the police and the several division superintendents and their work.

The assistant secretary, who is also the purchasing agent, acts as secretary in the absence of the secretary. He has charge of the purchasing department, of inspections, inventories, and the discarding of materials, tools and other property which are no longer useful.

The Board divides itself into sub-committees, the chair-

man being a member of every sub-committee. These sub-committees divide up the vast territory, in order that careful supervision may be exercised over all of the area. In the present Board Mr. Whitney and Mr. Casas are a sub-committee for the Blue Hills section, which includes the Stony Brook Reservation and also Furnace Brook and Quincy Shore. Mr. Curtis and Mr. Casas are the committee on Revere Beach, Charles River Basin, Lynn and Nahant. Mr. Skillings and Mr. Casas look after the Middlesex Fells area, while Mr. Benton and Mr. Casas look after the upper portion of Charles River and that section.

The members of these sub-committees act only under vote of the Board, but they come together frequently for inspection, conference and advice.

The Board prepares and presents to the Legislature annual estimates for maintenance appropriations, and after the appropriations are made apportion them to the work.

The Board elects its chairman, appoints the secretary and other employees of the general office, selects all experts and special advisers, division superintendents, police and other employees, except laborers, and passes upon all contracts above \$25 in amount, but individually makes no purchases, contracts or appointments.

A chief engineer, with eleven assistants, two clerks, a chauffeur and occasional other assistants are at the general office. There is also a paymaster, and a small force of clerks, messengers and a telephone operator divided among the departments of records and files, accounts and general office work.

Special and expert assistants, such as architects, landscape architects, consulting engineer, appraisers, and those who assist in estimating values of real estate and obtaining options for its purchase, are employed as necessity requires.

The salary paid to the chairman of this Board of \$4,500 per year does not seem to me to be excessive, considering the vast range of his executive duties, and is less than the salary paid to commissioners and other officials of the Common-

wealth, the city of Boston and the national government who do less work than he is required to do, and in many cases work of a less important nature.

The \$600 per year received by the other four commissioners is not a salary, for many years ago they declined a salary, when there is little doubt that the Legislature would have granted them from \$3,000 to \$4,000 each per year had they desired to accept it. This nominal money is intended to offset actual expenses incurred by them in the performance of their duties.

I have attended two full meetings of the Board and I find that these meetings start at 2 every Wednesday afternoon and last until 5.30 and sometimes 6 o'clock. The Board is businesslike in its transactions, and expedites business with great facility, passing on more matters than the ordinary board would do in a like time. The chairman devotes his entire time to his work, and the other commissioners devote quite a few hours of their time to their work in addition to the time spent at meetings.

The secretary, who receives \$4,000 per year, is a lawyer of considerable ability, who devotes his entire time to this work, and who with the chairman constitutes the real executive force. He has ample work to do, and it is difficult to see how his services could be obtained for a smaller sum, which is reasonable when the importance of his work is considered.

The assistant secretary has had his pay raised the current year from \$1,500 to \$2,000. This in my judgment is a reasonable increase, as he passes opinion on the purchase of upwards of \$200,000 worth of materials per year, besides attending to his other duties. He appears to be a competent young man, and has worked his way up in this office from a small beginning. I am inclined to think that a position of this nature is worth more rather than less money.

The personnel of the office force seems to be excellent. They seem to have plenty of work to do, and I should not recommend any cut in this force or in their pay.

The reservations and parkways are grouped into seven divisions, under and directly administered by six superintendents, as follows:—

Blue Hills Division:—

- Blue Hills Reservation and Parkway.
- Neponset River Reservation and Parkway.
- Stony Brook Reservation.
- Quincy Shore Reservation.
- Furnace Brook Parkway.

Middlesex Fells Division:—

- Middlesex Fells Reservation and Parkway.
- Mystic Valley Parkway.
- Lynn Fells Parkway; Hart's Hill.
- Alewife Brook.
- Fresh Pond Parkway.

Revere Beach Division:—

- Revere Beach Reservation and Parkway.
- Revere Beach bath-house.
- Nahant Beach bath-house.
- Nahant Beach Parkway.
- Lynn Shore Reservation.
- Winthrop Shore Reservation.
- Lynn Way.

Charles River Division:—

- Riverside Section.
- Speedway Section.
- Hemlock Gorge.

Charles River Basin Division.

Beaver Brook Division.

Nantasket Beach Division.

The superintendent of a division is the executive head of his division. The police are under him and so are the foremen and laborers, carpenters, firemen, engineers, employees of bath houses, etc. He is generally a captain or lieutenant of the Metropolitan Police Department. He may expend only such money as is apportioned to his division by the Board, and must keep proper books of account for petty receipts, for all expenditures and all property in charge, and for all the acts of the police and employees assigned to them.

The highest price superintendent is Herbert W. West of

Revere, who receives \$45 per week as salary, and a house free of rent and other conveniences which are valued at \$10 per week. In my judgment this man is underpaid rather than overpaid. He acts as police captain over 32 or 33 men, is the executive over the superintendent of the bath-house at Revere, which employs a huge force in the summer time. He also is over the Lynn bath-house, and I may say that at the Revere bath-house they manufacture all of the bathing suits used not only at Revere and Nahant but also at Nantasket. They also repair them there. In addition to this they run a large laundry. Beside that, Charles River Basin, the West Boston bridge, which is under the entire jurisdiction of the park system, comes under Superintendent West. He is on duty all of the time except when he is sleeping, and this is accounted for because the house that is furnished to him is in the Revere Beach Reservation; and the park commissioners believe it to be an advantage for the superintendent to live on the reservation, because it keeps him there and saves time in transit to and from his home. It is a responsible position, and in this, and in several other instances, the commission cannot be accused of undue extravagance in paying salaries to some of its subordinates holding executive positions.

The highest price superintendents elsewhere receive \$5 a day, and the lowest price one, at Beaver Brook, receives \$24.50 per week.

The pay of these men is substantially what it has been for the past ten years, the aggregate salaries for superintendents increasing from \$8,936 in 1901 to \$10,634 in 1911, although their duties have vastly increased.

PROPERTY OF COMMISSION.

The chief property item under the jurisdiction of this commission is land, of which there is an acreage of 10,-294.77. This amount is divided as follows:—

	Acres.
Reservations,	9,430.61
Parkways,	864.16

The reservations, itemized, are as follows:—

	Acres.
Blue Hills,	4,906.43
Middlesex Fells,	1,898.09
Neponset River,	921.95
Charles River,	673.76
Stony Brook,	463.72
Mystic River,	291.57
Revere Beach,	67.40
Nantasket Beach,	25.59
Beaver Brook,	58.33
Hart's Hill,	22.97
Hemlock Gorge,	23.06
King's Beach and Lynn Shore,	22.89
Winthrop Shore,	16.83
Quincy Shore,	38.02
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	9,430.61

The parkways, itemized, are as follows:—

	Acres.
Blue Hills,	83.65
Middlesex Fells,	78.66
Revere Beach,	127.31
Mystic Valley,	91.76
West Roxbury,	72.37
Neponset River,	74.52
Fresh Pond,	12.40
Lynn Fells,	7.63
Furnace Brook,	89.13
Nahant Beach,	69.24
Lynn Way,	4.98
Winthrop,	5.47
Alewife Brook,	146.99
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	864.16

The commission has under its jurisdiction 12.7 miles of seashore and beach holdings and 51.56 miles of river frontage, reckoning this frontage as one bank.

The riverbank frontage is as follows:—

	Miles.
Charles River,	27.56
Mystic River,	8.16
Neponset River,	15.84

The seashore and beach holdings are as follows:—

	Miles.
Lynn Shore,	1.50
Nahant Beach,	3.92
Revere Beach,	2.74
Winthrop Shore,	1.08
Nantasket Beach,	1.02
Quiney Shore,	1.81
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	12.07

The buildings under the commission are as follows, and number 186:—

Division headquarters and sub-stations, stables, garages, workshops, work sheds and work buildings, sanitariums, refectories, superintendents' and other dwelling houses, bandstands, boat-houses, bath-houses, hotels, cafés, laundries, power-houses and leased buildings.

These buildings are plain but substantial structures. Some of the police stations or division headquarters are somewhat ornamental, but are not built extravagantly. Even the ornamental structure known as the bath-house at Lynn is serviceable, and not by any means too large or roomy. The Board in its construction of buildings has been reasonably economical. They are built of durable material, generally brick or re-enforced concrete, and the maintenance charges are very slight. The hotel and café was acquired when the Nantasket Beach section became a part of the park system in 1899. The buildings at Nantasket are chiefly wooden, except those built by the commission itself, which are of brick, and they cover a great extent of territory.

The income from the rentable property at Nantasket Beach just about balances the expenditures made necessary by wear, tear and upkeep, and although it is not essential for the purposes of this report, it is my opinion that the price paid for the property at Nantasket Beach was certainly very liberal, and in my judgment excessive, although this is a matter that the Legislature is responsible for and not the

Park Commission. Generally speaking, the commission has been very careful in the construction of its buildings, for they are especially designed to last for a long time, and of such a nature as to incur but little expense for repairs or alterations for many years to come, the maintenance charges being limited in the main to cleaning, painting and ordinary light repairs.

The commission has 37 bridges under its control, as follows:—

Drawbridges,	.	.	.	.	.	.	.	.	.	.	.	4
Re-enforced concrete bridges,	.	.	.	.	.	.	.	.	.	.	.	8
Steel bridges,	.	.	.	.	.	.	.	.	.	.	.	9
Wooden bridges,	.	.	.	.	.	.	.	.	.	.	.	5
Foot bridges,	.	.	.	.	.	.	.	.	.	.	.	11
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Some of these bridges are of very substantial construction, especially the bridge between Cambridge and Boston, which was turned over to this commission as a part of the Charles River dam property. I recommend that the jurisdiction of this bridge, so far as everything but the dam is concerned, be taken away from the Park Commission and be treated for bridge purposes the same as the other bridges between Cambridge and Boston. It is an anomalous position to force upon a Park Commission jurisdiction over the main traffic bridge between Cambridge and Boston, in close proximity to railway freight sheds, and over which thousands of heavily laden wagons and trucks pass each weekday, to say nothing of a continuous stream of trolley cars and pedestrians. This necessitates the constant presence of a traffic squad of park policemen, who, as bridge policemen, are performing laborious duties that properly belong to the policemen of the city of Boston or Cambridge, and whose compensation is much larger than the park policemen. This is a matter for the Legislature to determine at some time, as it is unfair for the metropolitan park district to bear the entire burden of maintaining this bridge when it is devoted entirely to commercial

purposes. It is true that under the present metropolitan parks apportionment Boston bears .60987 and Cambridge .04897 of the total cost of the maintenance of this bridge, but in fairness to the park district Cambridge and Boston, between them, should pay the entire cost.

The commission has under its control 74 culverts, 7 dams, 60 tide-gates, 16 floats and landings, 1,945 catch-basins, 1,345 street lights, 2.81 miles of seawall, and a police signal system.

The commission is a manufacturer of bathing suits, maintaining a factory that runs through the winter in the second story of the bath-house at Revere Beach. They do their work economically, and I find that the cost of manufacturing jerseys, trunks, stockings and other bathing clothing is less, by a considerable amount, than the purchase of the same goods under competition in the open market. I commend this particular work. They have a modern, up-to-date plant; the wages paid the employees are reasonable, the quality of goods is excellent and the work done is entirely satisfactory.

The commission maintains and operates its own laundries, the principal duties of which are the cleaning and drying of bathing suits. The equipment is modern and first class, and the work done seems to be satisfactory. The man in charge of the manufacturing at Revere during the winter is also in charge of the bath-house during the summer. His salary is \$1,300 per year, which is not high by any means, considering his efficiency and the nature of work, and the large number of employees under him.

The sanitariums number 22, and have a tendency to continually increase in number and size, owing to the increasing patronage of the reservations. They are well built, clean, and kept in first-class condition.

The work headquarters and stables in some places have cost more than is actually necessary for the use to which they are put, but the reason for this is entirely satisfactory, as structures on the parkways should be built with an eye to the æsthetic character of the surroundings, and therefore stable yards have been enclosed and small courtyards maintained, with this end in view.

The commission, it may be said, also maintains its own paint and carpenter shops, and does most of its work of this nature.

COST OF PARK SYSTEM.

The total cost of the metropolitan park system, exclusive of appropriations charged to maintenance or other moneys credited to maintenance, and constituting what corresponds to the capital charges in a private corporation, amounts to \$18,899,250.96. This amount represents money borrowed, with the credit of the Commonwealth of Massachusetts behind it, and charged to the cities and towns in the metropolitan park area. It is subdivided as follows:—

Metropolitan parks loan fund, Series I., . . .	\$8,982,612 85
Metropolitan parks loan fund, Series II., . . .	5,093,591 70
Charles River Basin loan,	4,123,046 41
Nantasket Beach loan,	700,000 00
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	\$18,899,250 96

Loan Fund No. 1 originated under chapter 407 of the Acts of 1893, and represents the money spent for acquiring the reservations and improving them for park purposes. It represents the money paid for land takings, the development of the land afterwards, and the incidental law, engineering and architectural expenses, together with the fees paid real estate and other experts in settlements of claims and in the trial of suits for damages. The Revere Beach and Nahant Beach bath-houses are included in this.

Loan Fund No. 2 originated under chapter 288 of the Acts of 1894, and represents the money spent for boulevards and parkways and incidental expenditures similar to those above described.

The loan funds are almost entirely exhausted and will be so this current year.

Until 1900 all expenses of maintenance, interest and sinking funds were paid out of the loan funds according to the requirements of a special statute. This was because a definite arrangement to apportion the expenses and repayments

among the cities and towns in the district was not put into effect until 1900. Since that time, by virtue of chapter 419 of the Acts of 1899, it is provided that in the year 1900 and in every fifth year thereafter commissioners be appointed to determine and make award of the proportions in which each of the cities and towns of the district shall pay to meet the expenses of the park system. An apportionment was made in 1900, in 1905 and again in 1910. The apportionment takes into consideration the maintenance charges and the interest and sinking fund requirements. In the year 1910 the cost under this apportionment for the entire district was as follows: —

Parks,	\$884,169 06
Boulevards,	214,797 26
Nantasket,	55,586 09
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	\$1,154,552 41

In the apportionment of 1910 there will be added to this the charges against the Charles River Dam and Basin.

The total amount of money asked for last year in the way of appropriations was \$672,561.96, so that the difference between this amount and the apportionment amount represents the fixed charges on the district for interest and sinking fund requirements.

One apportionment is made for parks, one for boulevards, one for Nantasket Beach, and two different apportionments for the Charles River Dam and Basin.

The itemized statements, showing specifically how the loan funds have been spent, is contained in the commissioners' report for 1910, and I therefore do not append it here.

EXPENSE FUND.

The expense fund is not contained in the reports of the Park Commissioners, other than the mentioning of a few gross amounts. I recommend that in future reports of the Park Commissioners an itemized statement be printed of the expense fund, in order that the public may be informed

about it. As it now stands this information can only be obtained from the books of the commission itself. This is a very important matter, as the expense fund in 1910 amounted to \$88,316.32.

The expense fund is made up as follows:—

Receipts from bath-houses.
 Receipts from rentals.
 Receipts from fines and other police sources.
 Receipts from the sale of buildings and materials.

The receipts from the bath-houses are used for the repair, maintenance and operating expenses of the bath-houses, and incidental structures and conveniences. The bath-houses have always been self-supporting, a charge being made that slightly more than offsets the cost of running them.

The receipts from rentals are used for repairs and improvements in the buildings from which they have been derived.

The receipts from the fines and police sources are generally expended for police signal systems and other police expenses of an extraordinary nature.

The receipts from sales are generally expended for such matters as might otherwise have been properly paid for out of the loans, and are intended to replace capital spent.

The bath-house receipts for 1910 were as follows:—

Revere Beach,	\$36,547 50
Nantasket Beach,	9,561 05
Nahant Beach,	6,441 95
	<hr/>
	\$52,550 50

The principal receipts from rentals were as follows:—

Buildings:—

Blue Hills,	\$100 00
Nantasket,	8,600 00
	<hr/>
	\$8,700 00

Land:—

Blue Hills,	475 00
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Houses: —

Blue Hills,	\$698 00	
Middlesex Fells,	664 60	
Charles River,	481 40	
Nantasket,	87 50	
		<hr/>
		\$1,931 50

Ducts: —

Charles River Basin,	242 62	
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Roller-coaster, etc.: —

Nantasket,	1,993 00	
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Boat-house sites: —

Charles River,	\$1,024 00	
Blue Hills,	60 00	
Middlesex Fells,	10 00	
		<hr/>
		1,094 00

Transits: —

Engineering department,	24 00	
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Pastures: —

Blue Hills,	\$255 00	
Charles River,	25 00	
		<hr/>
		280 00

Boats: —

Blue Hills,	399 40	
		<hr/>
		\$15,139 52

The receipts from court fines, principally automobilists guilty of overspeeding, were \$8,641.40.

The receipts from the sale of material were principally as follows: —

Wood,	\$1,507 50
Grass,	499 00
Horses and sheep,	335 00
Loam and sand,	277 80
Pipe,	1,017 19
Old lumber,	205 00
Old metal and rags,	210 62
Lunch stand privileges,	739 69
Photographic privilege,	300 00
Street railway locations,	1,813 74
Steam, Nantasket,	2,224 30
Transits,	250 00
Second-hand motor cycles,	420 00

From the foregoing it will be seen that the commission sells quite a quantity of old material.

There are many small items, amounting to a few hundred dollars all told, that I have not included in the above table, and I have itemized it in this report because they are not itemized in the commissioners' report, although the expenditures from the expense fund are all carefully itemized in their report, with infinite detail.

From my inspection of the different places in the park system and from looking at their expense books, I would say that the local division superintendents are very economical in turning into cash everything that is sold. They account even for items amounting to but a few cents.

APPROPRIATIONS FOR MAINTENANCE.

All comparative statistics given under this head will represent the total cost of maintenance in each department, whether the same was charged to loan funds or to appropriations. Prior to this year everything was divided, and it is only by a consolidation of accounts that we get at the real cost of everything, from a maintenance standpoint.

The total appropriations for 1910 were . . . \$672,561 96
The total appropriations asked for 1911 are . . . 685,067 96

The appropriation items are divided as follows:—

	1900.	1911.
Reservations,	\$444,142 96	\$370,597 96
Parkways,	194,507 00	189,483 00
Nantasket Beach,	26,900 00	26,500 00
Wellington Bridge,	7,012 00	6,512 00
Charles River Basin (new),	—	91,975 00
	<hr/>	<hr/>
	\$672,561 96	\$685,067 96
		672,561 96
		<hr/>
Increase,		\$12,506 00

The increased appropriations are as follows:—

Reservations:—

General office salaries, . . .	\$450 00	
Engineering department, . . .	2,390 00	
Police department,	4,500 00	
Labor, teaming and keep of horses,	6,655 00	
Supplies and miscellaneous ex-		
penses,	300 00	
	<hr/>	\$14,295 00

Parkways:—

General office salaries, . . .	\$450 00	
Engineering department, . . .	2,390 00	
Police,	2,900 00	
Labor, teaming and keep of horses,	8,253 50	
Lighting,	1,032 50	
Water or its equivalent, . . .	250 00	
Supplies and miscellaneous ex-		
penses,	1,100 00	
	<hr/>	16,376 00
Nantasket Beach, police,		2,200 00
Charles River Basin (new),		91,975 00
		<hr/>
		\$124,846 00

The decrease in appropriations is as follows:—

Reservations:—

Lighting,	\$30 00	
Gypsy moth work,	6,810 00	
	<hr/>	\$6,840 00

Special appropriations made in 1910 for specific things,
but not made in 1911:—

Sanitary, Revere Beach, . . .	\$16,000 00	
Bear Hill Tower,	6,000 00	
Damage by storm,	59,000 00	
	<hr/>	81,000 00

Parkways, gypsy moth work, 1,400 00

Special appropriation made in 1910 for specific things,
but not made in 1911:—

Resurfacing Blue Hills, . . .	\$5,000 00	
Sidewalks, Middlesex Fells, . .	5,000 00	
Resurfacing Mystic valley, . .	10,000 00	
	<hr/>	20,000 00

Nantasket Beach, special appropriations made in 1910
for specific things, but not made in 1911:—

Incinerator,	\$1,000 00
Painting,	1,600 00

\$2,600 00

Wellington Bridge, installation motor, 1910, . . .	500 00
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\$112,340 00

Increase 1911 over 1910,	\$124,846 00
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Decrease 1911 over 1910,	112,340 00
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Net increase,	\$12,506 00
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From the above table it will be noted that there would have been a decrease of almost \$80,000 in the cost of the maintenance of the park system in 1911, as compared with 1910, had it not been for the burden imposed for the first time in the shape of the Charles River Dam, which means a new increase of \$91,975 for maintenance, and this will be a permanent addition.

COMMISSIONERS' SALARIES.

The salaries of the commissioners remain the same in 1911 as in 1910, the total amount asked for being \$6,900, itemized as follows:—

Chairman of the Board,	\$4,500 00
Four commissioners, each \$600,	2,400 00

\$6,900 00

This compensation has remained unchanged since it was fixed by statute and agreed upon in 1900. By the system of bookkeeping followed by the commission, one-half of this is charged to reservations and one-half to parkways. I have already commented on these salaries and recommend no reduction in them.

GENERAL OFFICE SALARIES.

The increase in 1911 over 1910 is \$900, the reason for this increase being the added burden of the Charles River Basin, which entails extra work. The total salaries asked for in the general office this year amount to \$13,690. This is the total expense for clerks, messengers, bookkeepers, stenographers, purchasing agent, paymaster and telephone operator. This amount has increased but very little in ten years, the amount in 1901 being \$11,800. It has varied a few hundred dollars from year to year, and is now less than what it was in 1907, when the salaries paid were \$14,270.

The salaries paid are not excessive, considering the work done. The paymaster receives \$1,200 a year, and is busy every weekday, and in the summer time is compelled occasionally to work overtime. The number of employees at different times aggregates more than 1,000, and a large number of them are permanently employed. In order to pay them he is compelled to travel about the entire district.

The first clerk, or what I might call the head bookkeeper and head of the office, receives \$1,200 per year, and has been in the employ of the commission since 1893. The second clerk receives \$1,150 per year, and has been employed since 1895. The other clerks and stenographers are paid as follows: one at \$780 per year, one at \$660, six at \$600.

These salaries, in my judgment, are reasonable, and as a matter of fact are probably less, in proportion to the volume of work done, than any department of the State. This is accounted for in part by the fact that most of the office force are women.

EXTRA CLERICAL ASSISTANCE.

The amount asked for in 1911 is \$500, the same as in 1910. This item represents a total charge of \$1,000, one-half being credited to reservations and one-half to parkways. It is a permanent charge due to the great rush of work in the summer time, when the bath-houses are in full operation, with their several hundred employees and attendants.

GENERAL OFFICE SUPPLIES AND MISCELLANEOUS EXPENSES.

The amount asked for is \$13,600, the same as in 1910. The principal items under this head are as follows:—

Rent, lighting and care of offices,	\$6,000 00
Telephones,	1,650 00
Stationery and printing,	1,300 00
Annual report,	1,060 00
Travelling expenses,	770 00
Postage,	720 00
Maps and books,	400 00
Filing cabinets, cards, etc.,	370 00

There are many smaller items, like typewriter supplies, office repairs, recording of papers, towel supply, in addition.

The rent represents a five-year lease, together with the charge for care of offices and of cost of lighting the same. The offices are located in the Congregational Building, 14 Beacon Street, and comprise the entire fifth floor, containing 4,579 square feet, with 398 square feet on the fourth floor. In addition to this they have considerable corridor space on the fifth floor. This charge does not appear to be excessive.

Under the telephone item is charged the switchboard and telephone operator, who receives \$468 per year.

The travelling expenses are accounted for by the vast area of the system that necessitates the use of public conveyances. It is also necessary at times to hire carriages. It is difficult to see how any reduction can be made in this item.

There are various items charged to this account, like a safe purchased last year and other material, that aggregate to a substantial total, but still not excessive under the circumstances.

LAW DEPARTMENT.

This department will no longer appear as a separate item, for on the first of this year Mr. Woodbury, the old secretary, resigned, and his place was taken by Mr. Rogers, who merged his legal duties with his new position as secretary of the Board. The item appears in the estimate this year because it was given to the printer before the old secretary resigned.

This item called for \$4,280 per year, \$3,500 representing the salary of Mr. Rogers and \$780 the salary of Miss Noble, who acted as stenographer and clerk for him. Miss Noble will still continue to act in the office, as the legal work requires a clerk of experience, there being thousands of deeds and memoranda of land takings and other data requiring it. Her salary will in the future be credited to general office salary.

BAND CONCERTS.

This is a fixed appropriation of \$25,000 made by special act of the Legislature, and under the provisions of the act free band concerts are given every day, after July 3d, except Mondays, until Labor Day, at Revere Beach and Nantasket Beach, both in the afternoon and evening. Concerts are also given at various places all over the reservation, and at frequent intervals. All told, there are over 300 concerts each year, and the price paid therefor is much less than the price paid for similar music by the city of Boston.

LABOR, TEAMING AND KEEP OF HORSES.

This item is very large and calls for \$185,063 for 1911 as against \$150,058 for 1910. The difference is chiefly accounted for by an additional appropriation for Charles River Basin of \$20,100.

This item includes the salaries of the superintendents, of the different divisions, and all labor, teams and cost of keep of horses and automobiles.

The increase has been enormous during the past ten years, being only \$57,051 in 1901. The commissioners account for this large increase, first from the fact that as the reservations were gradually put into condition for park purposes there has been an immense amount of work necessary to keep the system in good condition. The wear and tear on the roads is enormous, due chiefly to increased automobile travel. The underbrush must be removed in the larger areas, and all this entails the employment of a large body of laborers. Second, in 1901 the rate of wages was \$1.80 per day for each laborer; in 1911 it is \$2. In 1901, the working day was

nine hours, while now it is eight hours. This is all matter of statute, which all public bodies must follow. The result is that 70 men employed in 1901 at a cost of \$37,800, working nine hours a day at the rate of \$1.80 per day, represented an amount of work that would now cost \$52,500. This matter will be relatively more expensive if the Legislature increases the pay of laborers to \$2.25 per day, as contemplated seriously now.

There are 46 horses under the control of the commission, some of them doing police duty and therefore of an exceptionally good breed. The others are devoted to the ordinary work. The prices paid for hay and grain and horse supplies are not excessive, and no serious criticism can be made about the cost of the horse item.

The system of employing labor is to keep a large permanent force of laborers always on hand, as there is a large amount of work to be done both winter and summer. During the summer time, however, a large number of laborers are taken on as occasion warrants, some of them working but a few days and some for the entire summer.

The efficiency of the labor employed has been to me a most difficult problem. I find on the one hand a criticism that quite a few of the permanent force of laborers are not overburdened with work during the winter season, and that in general they could work harder than they now do. On the other hand, the laborers themselves and their friends believe them to be much harder worked than are the city laborers in adjoining cities and towns. As compared with the city of Boston, I believe this to be true, and from personal observation, both on the part of myself and assistants, I believe that in some sections, at least, of the park area these men do a reasonable day's work.

This item does not include the employees of the gypsy moth work, but are men who are engaged in the repair of the roads, cleaning up the brush and doing the labor incident to park work.

All work of an ordinary nature is done by the park force directly under the direction of the division superintendent, and, in the case of the large division, under the supervision

of a foreman. If the work is of an important nature, requiring technical skill, the engineering force of the Park Commission is called on for aid, and the work is then supervised by the chief engineer or by one of his assistants.

The very important work and a large part of the construction work, or work in the nature of new construction, is let out to contractors, and the job given to the lowest bidder. For the bulk of the work done now, however, the regular force of laborers is employed. It is undeniable that the roads are now subjected to a terrific wear and tear by reason of the constantly increasing automobile traffic. So, too, the average attendance on the reservations themselves has jumped ahead by leaps and bounds, so that the bulk of the increase in the labor item is readily accounted for.

I recommend, however, that instead of an allowance of \$185,063 being made for labor, teaming and keep of horses only \$175,000 be allowed. This will take into consideration the \$20,100 increase due to Charles River Basin, and at the same time will allow practically \$5,000 more than in 1910. I do this because it is my belief that the labor item has a constant tendency to grow larger and larger in an almost imperceptible way, and because when the force is once increased it is almost never reduced. This reduction will not be a hardship, for the chief saving can be made during the winter, and by doing away with idleness. This will effect a net saving of \$10,063.

WATERING OR ITS EQUIVALENT.

This item calls for an appropriation of \$37,200 for 1911, as against \$36,950 for 1910. As a matter of fact, there is very little street watering done at the present time in the park system. Instead, the surface of the road is treated by calcium chloride, tarvia, asphalt oil, liquid asphalt, asphaltolene, and other tar and oil products. This not only keeps the dust down, but is a surface treatment that is absolutely necessary to preserve the roads when they are subjected to harsh automobile travel. The cost of doing this seems to be reasonable, and I must commend the commission for the admirable condition of its roads, which are on a par with any in this part of the country. This excellence of road mainte-

It is clearly apparent that the Park Commission bore more than its share of this work because of the fact that the moths started in close proximity to Middlesex Fells. It is claimed, however, by the commission that they now have the moths and other insect pests, like the elm-tree beetle and the San José scale, under complete control.

The appearance of the trees and foliage in the reservations is excellent, and gives every appearance of being carefully looked out after. The commission has a large outfit to fight the pests, and their carts from which they pump have a radius of action of 1,000 feet. This enables them to work to great advantage from the roads, and with such a long line of hose there are but few sections in the entire park system inaccessible. For this reason any comparison of the cost of the work done with similar work performed by the State Forester is unfair, on account of the greater difficulties attendant upon attempted moth extermination in the wilder and more isolated sections of the State. It is manifestly a different proposition to spray trees largely from the road in reservations where roads are common than it is in vast tracts of forest where only foot-paths and trails exist.

So, too, the commission, from an æsthetic standpoint, following the opinion of landscape architects, has reduced the undergrowth, brush and weeds, to great advantage to themselves. This renders their work easier than in places that are practically impassable.

There has been a great improvement in the methods and apparatus used in the past few years, and the men are more experienced. The result has been a decided decrease in expense, and the outlay, I am informed, should be steadily reduced in each year to come. As the work already done has greatly benefited the tree growth, and as the commission apparently have this work well in hand, and as they have made a decided reduction in their appropriations, both in 1910 and 1911, I recommend no further reduction than that asked for by the commission.

NANTASKET BEACH.

This item calls for \$26,500 in 1911, as against \$26,900 in 1910. The reduction of \$400, which is credited to maintenance, is, however, not a real reduction, for in 1910 the appropriation called for the construction of an incinerator at a cost of \$1,000, to burn rubbish, and a special charge of \$1,600 for painting. There has been a real increase, instead, of \$2,200 for police service. The police force here consists of a sergeant and thirteen men in summer, and a sergeant and six men in winter. The necessity for this increase of \$2,200 is not entirely clear to me, for it seems as though the Metropolitan Park Commission was doing considerable police work that should be attended to by the town of Hull, especially, and in part by Cohasset and Hingham.

There is a large summer colony in this vicinity, and as the town of Hull permits the sale of intoxicating liquor there are numerous disorderly and drunken persons who find their way to the park reservation; and of the arrests that are made in this vicinity the bulk of the offenders are incarcerated in the metropolitan lock-up, and not in those of the local towns, although the whole of the Nantasket Beach Reservation occupies but 25.59 acres, and the shore line is but 1.02 miles.

In my judgment this appropriation for police should either be materially cut down, and the police force diminished, or the town of Hull should bear at least \$5,000 of this police expense, with a still further amount if the pressure of police business warrants.

Before Nantasket Beach was acquired by the act of 1899, the town of Hull was compelled to bear the entire cost of the policing of Nantasket Beach, and Cohasset and Hingham took care of the overflow. So, too, the town of Hull has saved a great deal of money in street lighting, as the lighting on the beach strip is borne by the commission. It is true that Hull gained some benefit, previously, from the taxable income of the hotel, café and other beach properties, but to-day it is an absurdity to only tax Hull for less than one four-hundredth of the cost of maintaining Nantasket

Beach, when the city of Boston is paying a tax for the same thing of almost 61 per cent. In other words, Boston is paying in taxes for the maintenance of Nantasket Beach Reservation this year \$16,103.52, while Hull is paying \$63.60. Even the city of Cambridge is paying twenty times as much as Hull.

This recommendation is apparently drastic on Hull, but inasmuch as the entire Nantasket steamboat traffic is dumped on the metropolitan park property, and as the chief amusement enterprises, which pay large sums in taxes to Hull, are located in close proximity to the reservation, and as the very policing itself gives a feeling of security to women and children, the growth of the town of Hull has been facilitated and its taxable income greatly increased. It also receives the benefit of the licenses for the sale of alcoholic liquor, which is one of the chief causes of the extra policing, while the Park Commission receives none of this license money whatsoever.

The only argument that can be used against Hull paying for extra policing is the fact that Hull, in common with the other cities and towns in the metropolitan park area, pays a tax for the maintenance of the whole park system, and for interest and sinking fund requirements on the bonds issued for the same. This tax that Hull pays amounted in 1910 to \$2,354.19, and, with the addition of the Charles River Basin, Hull this year will pay between \$2,600 and \$2,700. The total tax income in Hull is about \$130,000 per annum, so that practically 2 per cent. of the tax income of Hull goes to the support of the metropolitan park system.

This argument is met by the fact that Boston for the year 1911 will be assessed for its share of the metropolitan assessment, including Charles River Basin, a total sum in excess of \$800,000, which is $2\frac{2}{3}$ per cent. of the total tax income.

As a matter of fact Hull is a special beneficiary by reason of the Nantasket Beach taking. She employs but four policemen during the winter, and but eleven during the busiest time of the summer. Her policemen make but few arrests,

and the chief burden falls on the fourteen patrolmen of the metropolitan park system.

The park system, in strict theory, should confine its police duties to its small area, and should not be compelled to do the bulk of the police work for Hull. Hull will suffer no particular hardship, for her citizens make free use of the admirable toilet and sanitary facilities of the park system, and the town in this respect is saved much money by not being compelled to maintain such facilities itself.

WELLINGTON BRIDGE MAINTENANCE.

This bridge is a part of an old turnpike road that was put under control of the park system in 1904, under a statute that provided that the Park Commission pay one-half of its cost and the local cities and towns pay the other half. The one-half that the park system must pay in 1911 is \$6,512, which is \$500 less than in 1910. The reason for the extra expense in 1910 was the cost of a motor that was installed at that time.

It is a natural inquiry as to why it should cost \$13,024 to maintain Wellington Bridge, as the water travel is very light through there, but the answer is that it is a navigable stream that is spanned, and therefore provision must be made to open the bridge if necessary at any hour of the day or night. This necessitates three shifts of drawtenders and employees, for the State law will not permit them to work more than eight hours per day. The men, as a matter of fact, do but very little work, except for a period of about four hours each twenty-four, but the law being as it is, no reduction in this item can be recommended.

MATEER PENSION.

This is a fixed charge each year upon the reservation maintenance fund, and was provided for by special act of the Legislature to provide an income for the mother and young child of a brave policeman who lost his life while rescuing others from drowning.

CHARLES RIVER BASIN.

The basin was handled, until 1910, by a special commission of its own. It was then transferred to the Park Commission. This enterprise of itself is of large size, and represents a bond issue of \$4,125,000. Until within a few months the work done was in the nature of construction work, and not maintenance, so that comparisons from a maintenance standpoint cannot be made. It is undeniable that there was a surplus of employees in this department under the old commission, and that the executive force drew considerable money for doing very little work. This condition of affairs, however, I believe to have been done away with by the Park Commission.

This item calls for an expenditure of \$91,975 for 1911 for maintenance. This is a large sum of money, but it seems to be a necessary expense. The public do not patronize this basin to any appreciable extent, and it would appear that a vast sum of money has been spent in a way that does not appeal to the mass of the people. It is a legacy, however, that the Park Commission inherited, and they must take conditions as they find them.

For the current year the maintenance charges can at best be only approximated, and I do not recommend any reduction at this time, although I believe that conditions here could be carefully studied during the coming year to advantage.

The chief charge is for police and labor. The labor charge I do not believe to be excessive. In fact, from personal observation on the part of myself and assistants we believe the laborers to earn all the money they receive. The police item is very important, on account of the dangerous condition of the river during the winter time, and because Boston and Cambridge are now relieved from doing police duty in this section.

The construction work is not entirely done, but will be practically finished this summer, and then the problem of maintenance will be the entire problem.

Although not strictly within the province of this investiga-

tion, I call your attention to the fact that the provisions of the civil service law do not apply to the employees at the Charles River Basin, and it would seem to be a subject to be inquired into. The good of the service would seem to demand that these employees be now placed on the civil service list. If the civil service means anything, and is right in theory, an exception cannot be made in this instance.

The Park Commission has shown that it has a firm grasp upon the importance of the situation here, and under the circumstances, before making an exhaustive report on the subject of the Charles River Basin, I recommend that they be allowed to carry into execution the plans that they have been formulating. I would recommend that if possible they popularize the use of this basin, and devise some way by which the common people may avail themselves of this splendid open space, that now seems to be an excellent backyard for Beacon Street and an excellent rowing place for a few.

POLICE.

This item is a very important one and the appropriations for 1911 call for \$173,700, as against \$132,600 for 1910. The bulk of this increase is accounted for by the addition of Charles River Basin, which adds \$31,500 that was not previously included. The increase in Nantasket is \$2,200; in the parkways, \$2,900, and in the reservations \$4,500 over 1910.

The charge for policing has practically quadrupled in ten years. The charge against the reservations in 1901 was \$33,600; in 1911, \$87,200 is asked for. The charge against the boulevards in 1901 was \$12,000; in 1911, \$40,000 is asked. The bulk of the increase in the number of policemen can be readily accounted for by the growth of the park system, both in increase of area and in use by the general public. There were 40 policemen employed in 1901, and 110 in 1910. The increase has been gradual, except in 1910, when 25 were added, on account of Charles River Basin.

Increase in Pay. — A considerable increase must be at-

tributed to the fact that the policemen have had their pay increased by legislative enactment from 50 cents to 75 cents per man per day. On the average, this amounts to an increase of over 20 per cent. The men have also, by statute, been allowed one day off in thirty, in addition to their regular vacations. This means an increase of over .7 per cent.

It should be noted that this has caused an increase not only in the money paid for police maintenance but also in the number of men employed.

Under police expense is included the cost of the signal systems and police telephones, also the cost of uniforms and equipment.

The personnel of the force in the main seems to be excellent and the mental caliber of the men high. They are apparently well trained for their chosen work and are somewhat in the nature of a miniature army. This leads up to the interesting question of whether the entire force should be retained all the year round, or whether part should be retained during the quiet winter months and an auxiliary force in addition during the summer.

In the early years a permanent force, in the true sense of the word, was not retained. A small number of men was employed during the winter and a large number taken on during the summer. The commissioners claim that there was great difficulty under this system in retaining good men and in obtaining good men when required. They also state that the amount of police force required in the winter gradually increased by reason of the increased use of ponds and rivers for skating, and the use of the roads for sleighing, and because the automobiles use the roads almost the entire year. The provision for one day off in thirty also made a considerable difference, because the men do not get this day off during the busy summer months, but have them bunched together during the winter. The vacations also take place during the late fall and early winter, and each of the force is allowed two weeks.

It is also stated that the men are drilled and taught revolver practice under a military officer, and emergency

instruction under a physician. Quite a number of the men act as painters, carpenters, and perform lines of manual labor other than police work during the winter time. The men have agreed to this because their hours are unlimited as policemen, whereas as mechanics they work only eight hours a day and six days per week. The question of determining how many policemen, if any, should be laid off during the winter months has been more or less perplexing to me. I find that a large force is required at Revere during the summer, and that only a nominal force is required during the winter; the same thing is true, to a less extent, of Nantasket. The men are shifted in the fall to some of the reservations where more people go than during the summer, but during the winter it seems to me that there is a surplus of men.

I am reluctant to recommend too sweeping a reduction in the size of the winter force, not only because of the reasons above given, but because I believe the men to be greatly overworked on many days during the summer, and it is only fair that this matter be taken into consideration.

Reduction of Force. — I recommend, therefore, a reduction of \$10,000 in the total police appropriations for 1911, this reduction not to include my recommendation about Nantasket Beach or the bridge at Charles River Dam. If this reduction be made I recommend that the Park Commission apportion their appropriations over the parks and boulevards in a way that will seem proper. I also recommend that the number of men to be laid off by them be left entirely to the discretion of the commission, both as to when and how, and whom. From my examination it would appear that the reservations could stand a diminution in the size of the police force during the winter.

Special Automobile Tax or License. — I recommend that a special license be taken out by all automobiles desiring to use the roads under the control of the Metropolitan Park Commission, or the local park roads under the control of the cities and towns in the metropolitan park area. I recommend that this annual license fee be \$5 in the case of

motor vehicles of 30 horse power or less, and \$10 where the horse power is greater than this.

This should yield an annual revenue of at least \$150,000, there being almost 32,000 automobiles in the State at the present time, a large percentage of which are frequent users of our park area.

Reasons for License. — The park roads were originally designed for horse-drawn vehicles, and in the early days were not subjected to a very heavy traffic. The result was that the wear and tear upon the park roads was so light that prior to and including 1905 the average cost of the maintenance of all formal roads constructed by the commission and of the roads in its care and control was *1.7 cents per square yard per year*.

In 1906 the effects of automobile traffic began to show, and the work of maintenance included some tar surfacing. This brought the cost of maintenance for 1906 to *2.2 cents per square yard* for the year.

In 1907, with the increased number of automobiles, the cost went up to *2.6 cents per square yard*.

Averaging 1909 and 1910 together, and including therein repair and maintenance, reconstruction, resurfacing and all the expenses made necessary by a most extraordinary automobile traffic, the average cost amounted for the parkways and formal roads to *8.726 cents per square yard*, this item including labor and material.

Extraordinary Automobile Traffic on Parkways. — There have been weeks during the summer when over 60,000 vehicles have passed over the metropolitan parkways and roads. Of this number 74 per cent. have been automobiles and 26 per cent. horse-drawn vehicles.

This, however, is very misleading, for these statistics include highways and old turnpike roads now part of the park system for brief stretches, and therefore used for commercial travel. The real test, therefore, comes on the use of the park roads that are used for pleasure riding.

Revere Beach Parkway is a typical example. This parkway runs from Middlesex Fells to the border of Lynn, and

is $5\frac{1}{4}$ miles in length. I had statistics carefully compiled regarding this parkway on Thursday, May 18, 1911, and I found that the following vehicles passed over Wellington Bridge and came or went via the Revere Beach Parkway:—

Horse-drawn vehicles,	.	.	.	.	.	.	.	.	.	11
Automobiles,	.	.	.	.	.	.	.	.	.	867

These figures were taken between the hours of 7 A.M. and 9 P.M.

This means that 79 automobiles passed over this parkway on that day to every one horse-driven vehicle.

On the same day the following vehicles came to or from the Revere Beach Parkway and passed through the Middlesex Fells Parkway:—

Horse-drawn vehicles,	.	.	.	.	.	.	.	.	.	15
Automobiles,	.	.	.	.	.	.	.	.	.	456

On the same day there was the following traffic over Saugus River Bridge, 5 miles from where the previous figures were taken:—

Horse-drawn vehicles,	.	.	.	.	.	.	.	.	.	43
Automobiles,	.	.	.	.	.	.	.	.	.	1,185

the ratio here being 29 to 1.

On Sunday, May 21, 1911, there was the following traffic over Saugus River Bridge:—

Horse-drawn vehicles,	.	.	.	.	.	.	.	.	.	167
Automobiles,	.	.	.	.	.	.	.	.	.	3,867

a ratio of 24 to 1.

There are very few places in the park system where the proportion of automobiles as to horse-drawn vehicles is not at least 4 to 1. There can be only one interpretation from these figures. Many of our park roads and boulevards, constructed at an expense running into the millions, are, in practice, thoroughfares devoted almost entirely to the use of

automobilists. Therefore, why should not the automobilists pay a large part of the cost. Pedestrians in some sections are scarcely seen, and what few horse-driven vehicles pass over the road do but little harm. The touring car not only damages the roadbed itself, but for the protection of women and children, and, indeed grown-up men, a large squad of policemen is required at every intersecting street of any importance, so that the chief increase in the metropolitan police system can be directly attributed to the increased use of the automobile. There are 34 policemen at Revere Beach during the summer, and their chief duty is the regulation of the automobile traffic in the roadways. All through the park system the officers are compelled to keep a sharp lookout in order to prevent overspeeding, and it is my opinion that if the automobile was not in existence the police bill for the metropolitan system would be from \$40,000 to \$50,000 less.

In the matter of street lighting the same thing is true. Many thoroughfares located in isolated sections would be unfrequented were it not for the automobiles. This necessitates an extra cost for lighting, as the automobilists are different from the old-fashioned traveller, in that they use the park roads at all hours of the day and night.

The regular park boulevard has been converted into an aristocratic highway, and the public is paying the bills. The parks belong to all of the people, and it is unfair that our wealthy citizens, fortunate enough to own automobiles, should permit this burden to fall almost entirely upon the people.

This license fee will yield enough revenue to offset a large part of the expense due directly to the automobile. This expense cannot be computed merely from the cost of maintaining, policing and lighting these roads, for if there be boulevards costing \$5,000,000 to build, the ordinary income of that \$5,000,000, invested at $3\frac{1}{2}$ per cent. interest, would yield \$175,000 per year. The automobilists should not be expected to pay the entire burden of the boulevards, but they should pay a reasonable proportion.

If the Legislature will authorize the issuance of these

licenses, the Park Commission will then be in a position to popularize its system in a way never thought possible by them, for by the expenditure of a few extra thousand dollars each year it will be possible to reduce the price of bathing at the beaches to 15 cents, and also to make special provision during certain hours for free bathing privileges to the poor, and especially to the women and children. As it is now, the bath-houses run by the commission are self-supporting; the people using them pay for the cost of maintenance. This is an added reason why the automobilists who entirely monopolize Revere Beach Parkway for vehicular purposes should be treated the same as those who use the bath-houses.

State Highways in Metropolitan District. — These highways are not now under control of the Park Commission. I recommend, however, for the purpose of better carrying out the licensing idea, that they all be placed under the control of the Park Commission. Their mileage in the district is 43.64; their cost was \$730,228.81. They are now under the control of authorities who do not commence to keep them in as good condition as the park roads are kept. It would not be necessary to treat them as boulevards but rather as first-class roads. If this were done it would prevent friction in the metropolitan area, and do away with any suggestion of unfairness such as at present exists. The automobile tax collected at the present time by the Highway Commission is of no benefit to the Metropolitan Park Commission, or to the local parkways in the metropolitan areas, including the city of Boston, and although these roads are used infinitely more than the State highways, they get nothing whatsoever from the motor fund tax now collected from automobilists, which last year amounted to the large total of \$374,789.94.

It is true that the State itself at the present time bears one-half of the cost of the boulevards, but this in no way affects the principle that the metropolitan district should receive something from the automobile, for the rest of the State receives it all, although they do not pay as much locally for their roads as what we do here.

Pro Rata Division of License Fees. — I suggest that the

license fees be distributed on a pro rata basis, to be arrived at in an impartial manner, among the cities and towns having parkways in this district, as well as to the Metropolitan Park Commission. This will treat the city of Boston and other places fairly. It will also be of great service, because no automobile could conceivably operate on any kind of a decent road in the entire metropolitan area for any length of time without using the park roads.

The automobile traffic of northeastern United States during the summer time is concentrated in the vicinity of Boston. The splendid roads and our beautiful suburbs are the magnet. If it is worth the while of thousands of automobile tourists to use our splendid roads they should pay for the privilege.

The fairness of my argument should be apparent when it is noted that the State Highway Commission at the present time collects a large tax for the benefit of the State highways, although those State highways, by their own statistics, are not used anywhere near as much by the automobiles as are the roads in the metropolitan district. The following table will demonstrate this conclusively:—

Percentage of Automobiles.

State highways, August, 42 per cent.; October, 35 per cent.

Boston parks, August, 77 per cent.; October, 73 per cent.

Metropolitan parks, August, 74 per cent.; October, 71 per cent.

Boulevards, May, 1911, Revere, 98 per cent.

City of Newton, October, 68 per cent.

Therefore, if the argument that the State Highway Commission used had an effect on the Legislature, these comparative facts should be more convincing.

There is a strong feeling in the community that our parks exist chiefly for the benefit of our well-to-do citizens. This has been by all odds the one criticism that I have heard above all others. Can it be wondered at when they get most of the privileges of the system, without paying any more therefor than the poor man, who tramps about on foot, or who takes the trolley to the outskirts of a reservation? The surest way

of proving to the people that they are not being unjustly treated is to place the burdens of the boulevards upon the people who use them.

LIGHTING.

This requires an increasingly larger sum each year, the amount for 1911 being \$47,122. This is an increase of \$6,000 over the year before, on account of Charles River Basin. This is about three times the amount required in 1901, although the cost per light has been reduced slightly since then.

In 1908 the number of lights was reduced because of a smaller appropriation made that year, but the experiment was not satisfactory; the public protested, and the full number of lights was restored in the appropriation of 1909.

I do not recommend a reduction in the number of lights. I do recommend, however, a careful study of the whole plan of lighting in the metropolitan park area, keeping the following particularly in mind:—

(1) Should all of the lights burn all night long in the summer?

(2) Should all of the lights burn all night long in the winter?

(3) Should some sections be lighted at all during the winter?

(4) Would not electricity and a moonlight schedule be satisfactory in some sections?

(5) Should the lights in the Charles River Basin burn all night?

A large part of the system is lighted by the Welsbach Company, with its system of self-generating lamps. This system has one great advantage because of its ornamental iron posts, without any overhanging wires to mar the æsthetic appearance of the boulevards. It is also reasonably cheap in price. The company have given great satisfaction to the commission, and at times they have not been satisfied with electric light service rendered to them.

I recommend a reduction in lighting of \$5,000. This can

be done without any inconvenience to the public and without lessening the number of lights in the park system. It is doubtful, however, if this amount can be saved in 1911, because almost the entire system is equipped with the Welsbach system and their contract runs until Dec. 1, 1911. When a new contract is made a saving can be effected by not burning the lights at all during the winter in the isolated sections. As it is now, in places like Quincy Shore, Revere Beach, and, in fact, the whole shore line, the lights are burned all night long, although at times the roads are practically impassable in winter. They can clearly be dispensed with entirely during the winter months in some places. So, too, they are unnecessary at any season of the year when the moon is full. And, again, during six months of the year the boulevards are not used by anybody but automobilists after 11 p.m., and the automobiles furnish their own light.

I can see no good reason for wasting light on Charles River Basin after 1 a.m.

Many of the State highways are not lit after 12 at night, and I find that almost every town in the metropolitan district burns electric lights on the average of six hours per night, and 26 or 27 nights per month, the price for this lighting being approximately the same as the Welsbach system.

ENGINEERING DEPARTMENT.

This department calls for \$18,780 for 1911, as against \$14,000 for 1910. This increase is due chiefly to the addition of Charles River Basin. This year there has been a readjustment of the engineering force, due to a theory that it is better to have three distinct parties of a transitman and two rodmen than to attempt to cover the work by a second assistant engineer, one transitman and three rodmen. The salary of the draughtsman this year was increased \$100, as he is an old employee, apparently a man of considerable ability.

A large part of the charge for engineers was formerly made to the loan fund and did not appear under maintenance,

whereas now the bulk appears under maintenance, and this year a stenographer receiving \$780, and a chauffeur receiving \$780, appear. The stenographer was formerly charged to the loan fund. The chauffeur is a new item.

The number of employees and the compensation paid to them, as a total, has decreased from year to year, because the large construction is now practically finished, so that the force as at present constituted is devoted almost entirely to maintenance, its constructive work being limited to necessary additions to the existing system and to repairs of an important nature.

I have prepared a detailed report on the engineering department, which may be referred to if desired.

SHOOTING STAND, BLUE HILLS RESERVATION.

This is a small affair located on Willow Point, Ponkapoag Pond, and belongs to a private club. It is located upon park land, which was given to the Commonwealth by the will of Henry L. Pierce in the year 1900, when he donated 540 acres as an outright gift to the park system, and a large tract of adjoining land, subject to a life estate given to the Aldrich family.

Ponkapoag Pond is a great pond of the Commonwealth, and as such the public has the privilege of using it. Only a small portion of its shores is publicly owned, and another shooting club is located upon the opposite shore on private land. The Willow Point stand is located in a locality rather inaccessible to the general public and very little visited.

This shooting club has been in continuous existence for probably eighty or a hundred years. Mr. Pierce used it at times, with the club members, and always gave them permission to use it. Mr. Pierce and members of the Aldrich family, who at his death were his principal private legatees, were members of the club, and the Aldrich family were probably the most frequent visitors there.

After the death of Mr. Pierce, when the Park Commission acquired this whole tract of land, the Park Commission con-

sidered the question of continuing it there, and consented to do so because it was stated to them, by responsible parties, that although Mr. Pierce had not formerly incorporated it in his will, as it was a matter of no great importance to him, he had nevertheless orally expressed a wish that the shooting stand should remain as long as the club and the Aldrich family wished. Mr. Augustus Hemenway, a neighbor of Mr. Pierce, and himself a large donor of land in the park system, was a member of the Park Commission for several years, and presumably was in touch with conditions in this vicinity, as he was a close friend of Mr. Pierce. The commission state that at that time they felt bound to respect the wishes of Mr. Pierce, provided that the public sustained no injury thereby.

The club also claimed ownership in the land upon which it is located. This contention may or may not have been strong, but apparently had some foundation. The upshot of the whole matter was that the attorney for the club and the commission came together, and the commission allowed the club to be a tenant at sufferance on this location, with the express understanding that whenever public necessity or convenience required its removal the club would move.

I recommend that the commission, to the best of its judgment, determine whether they consider that public necessity and convenience call for its removal at this time.

Public opinion in the vicinity of Ponkapoag seems to be divided. Those nearest to the shooting lodge seem to have no complaint to make, and state that they have heard of no complaint. In the town of Canton, however, which is located near by, there are quite a few people who seem to be of the opinion that this privilege should no longer continue.

POLO FIELD, BLUE HILLS RESERVATION.

This field is located on park land at the extreme end of the Blue Hills Reservation, near Ponkapoag. It has been in existence for about six years, and was constructed by Mr. Joseph B. Crocker, who lives on land immediately con-

tiguous to the polo field, and by others interested with him. He made a proposition to the Park Commission that he be allowed to develop an unused field into a polo field. He and his associates were to bear the entire cost of construction and afterwards the entire cost of maintenance. The Park Commission assented to this proposition, with the express understanding that as it was located on public ground the public should have the privilege of playing polo there also, and that in case of conflicting dates the matter should be adjusted by the commission.

The polo field has never been used by the general public, and no complaints have been made by persons desiring to play horse polo. It is alleged, however, that boys in the neighborhood on several occasions have desired to play baseball here when the field was not being used for polo purposes, and have been stopped from so doing.

If there be no facilities for playing baseball near by, and there is a genuine public demand for it on this portion of the reservation, the commission, at a very slight expense, can provide a field for the boys, so that there need be no conflict between baseball players and polo players.

There seems to be a genuine public sentiment against the way the polo ground has been managed. It was believed by many local residents, until recently, that the polo field was on private property. Even officers on the reservation believed this.

A no-trespassing sign was posted on the park land at the very edge of the polo field, and a number of different local residents state that they have been ordered off while witnessing games. The Park Commission, when this matter was called to their attention by me, immediately took steps to remedy the matter, and in the future signs will be posted in this vicinity informing the public as to the whereabouts of park property, that the public may have the use of it.

The polo field is located on a piece of park property that is between two tracts of privately owned land. The result has been that the public were ignorant, except in a few in-

stances, of its being park property. A secretive policy regarding its real ownership seems to have been pursued by some of those using the polo field.

Various complaints seem to exist in this section that this field has been used for the benefit of a favored few. As the Park Commissioners state, however, that no complaints were ever made to them, and that they have never been put on notice regarding these alleged occurrences, it seems to be a matter that they are competent to handle now that they are fully informed as to local sentiment.

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