# MAINE STATE LEGISLATURE

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# PUBLIC DOCUMENTS

OF THE

# STATE OF MAINE

BEING THE

# REPORTS

OF THE VARIOUS

# PUBLIC OFFICERS. DEPARTMENTS AND INSTITUTIONS

FOR THE YEAR 1920

VOLUME 2



## EIGHTH ANNUAL REPORT

OF THE

# STATE HIGHWAY COMMISSION

OF THE

## STATE OF MAINE

From January 1, 1920, to December 31, 1920

#### STATE OF MAINE

OFFICE OF STATE HIGHWAY COMMISSION,

Augusta, Maine, January 1, 1921.

To His Excellency, the Governor, and the Honorable Council:

We have the honor to present the eighth annual report of the State Highway Commission from January 1, 1920, to December 31, 1920.

W. M. AYER, Chairman, P. J. DEERING, F. A. PEABODY,

State Highway Commission.

#### To the Honorable Governor and Council:

The year 1920 was the most difficult year for prosecuting construction work that has ever been experienced. In the judgment of this Commission 10 other like period will ever be encountered. Realizing that the citizens of Maine, by their votes in September, 1919, had endorsed the State highway program by the overwhelming majority of about five to one on the question of increasing the State bond issue for state highway construction, this Commission felt it incumbent upon them to carry on their program of state highway construction, notwithstanding the general difficulties.

In order to make sure of their judgment on the question of proceeding, it was felt wise to take advice from the best minds in the state and to that end the Commission prepared and sent out to persons representing various interests the following letter:

"You are undoubtedly aware from statements made by members of this Commission at public meetings and from press reports of the same, that we had planned to construct one hundred and fifty miles of state highway during the coming season. Surveys for more than that mileage have been made and every effort has been made to have plans completed for this whole mileage in time for letting contracts. A considerable percentage of the jobs are now ready to take bids on and several of them have already been advertised for bids.

"It is becoming increasingly apparent that the prices to be bid for highway work are to be high in comparison with anything we have ever known. In formulating our judgment as to what roads are worth to the tax payers of this state, we would appreciate an expression of your opinion on this matter.

"To this end may we ask you to give careful consideration to the following questions and answer them so they may be in our hands Monday, May 3.

"Question 1: The prices for highway construction during 1919 were from one hundred to one hundred and twenty-five per cent higher than the prices of similar construction in 1914, 1915 and 1916. Are we warranted in paying more for improved roads this year than we did last year? If your answer is yes, what percentage of increase over 1919 prices do you think the state ought to pay?

"Question 2: Wages for common labor on highways in 1919 ran from thirty-five cents to fifty cents per hour. What, in your judgment, should be the top price per hour for common labor this year?

"Question 3: The wages for teams in 1919 were generally from \$6.00 to \$7.50 per day, usually \$6.50 or \$7.00 for nine hours. What, in your judgment, should be a top price for teams for nine hours' work during 1920?

"This circular letter is being sent to a list of citizens who are known to be vitally interested in the highway program of the state, and we shall very much appreciate a prompt reply to these questions so that we may have the best judgment of the state in guiding us in formulating our policy for this season.

Yours very truly,

W. M. AYER, Chairman, P. J. DEERING, F. A. PEABODY,

State Highway Commission.

These letters were sent to the members of the legislature of 1919, to all candidates for the legislature which will meet in 1921, to a selected list of farmers furnished by the Department of Agriculture, to all county commissioners, to the members of the Republican State Committee, the Democratic State Committee, the directors of the Maine Automobile Association, to

the mayors of all cities and to a list of business men furnished by the chambers of commerce of Lewiston, Bangor, Waterville and Portland.

On June 24, 1920, a canvass of replies was made with the following results:

	Yes	No
Members of Legislature	55	30
Candidates for Legislature	88	71
Farmers	21	26
County Commissioners	17	9
Republican State Committee	2	5
Democratic State Committee	5	3
Mayors	10	2
Chambers of Commerce	66	22
Maine Automobile Association	$\mathbf{I}'\mathbf{I}$	4
	275	172

With the above information at hand, there seems to be no question about the desire on the part of the public that state highway work should be prosecuted.

The Commission used what they considered to be reasonable endeavor to get a program of state highway work under way. A few contracts were let but several jobs were advertised twice and no bids received. It then became apparent to the Commission that it was useless to attempt to let any considerable sized jobs and thereafter the policy was followed of putting under construction sections of state highway where on account of shutting down of industrial plants labor and teams could be secured and competent superintendents and foremen could be found to direct the work.

In this way a limited mileage of state highway work was accomplished.

Due to the extreme shortage of labor which prevailed during 1918 and 1919, many towns were forced to lay over their joint funds for state aid road work, so that in 1920 there was available the accumulation of several years' funds in many towns. It was possible in most of the towns to secure labor for state aid work and during the year a large amount of work was done.

As has been true during the two preceding years, the amount of maintenance work has not been as much as this Commission believes ought to be done but lack of funds have necessitated holding work to a minimum. As will be seen by a study of the detailed report of maintenance operations, some \$300,000 was expended more than the year's available funds. We desire to call attention once more to the statement so often made by this Commission, that in our judgment it is absolutely necessary that provision should be made for the proper maintenance of all roads heretofore constructed. If such provision cannot be made, our construction program ought to be stopped at once.

Operations under the state and county aid for bridges act were restricted during the year like all other construction work but every bridge was built that it was possible to get under construction.

Early in the year it was found that it would be absolutely necessary to have some suitable place for housing and repairing the trucks and other road building equipment furnished to the state by the government free of charge. An inventory of the equipment so far received shows that it is valued at about one million dollars. This matter was gone into very thoroughly with the governor and council, several locations were looked over and the project having been approved by the governor and council, it was finally concluded to construct a garage and machine shop at the city gravel pit lot in Augusta, which is very handy to the State House. Contract was let for this work in May and it is expected that it will be completed in February, 1921. The estimated cost of the building is \$220,000.

By the end of the season it was apparent that material, prices and labor costs would be much lower in 1921 than they have been for several years. We believe it will be possible to carry out a good construction program during the coming season.

Respectfully submitted,

W. M. AYER, Chairman, P. J. DEERING, F. A. PEABODY,

State Highway Commission.

## MAINE STATE HIGHWAY COMMISSION

## Financial Statements, 1920

#### MAINTENANCE AND ADMINISTRATION

#### CREDITS

Permit to open highways. Tarvia sold Tar barrels returned Allowance on freight Refund of 1919 patrol overpaid Rental portable camps Patrol maintenance for 1918 from towns. Patrol maintenance for 1919 from towns. Patrol maintenance for 1920 from towns. Patrol maintenance for 1918 and 1919 (not deposited) Patrol maintenance for 1920 (not deposited) Patrol maintenance overpaid Transferred from improvement state roads J. F. Transferred from highway loan fund. Transferred from improvement state roads J. F. Balance unapportioned 1919. \$1,733 04 Balance unapportioned 1920. \$1,733 04	\$237 67 4,462 75 70 80 195 54 856 40 2,954 31 6,406 48 226,665 08 380 28 2,443 13 1,110 30 71 01 22 89	
Transferred from registration of automobiles Transferred from mill tax highway fund. Transferred from interest on bonds Transferred from automobile fees 1920-1921. Transferred from contingent fund	$100 \ 40$ $72,189 \ 90$ $65,264 \ 29$	
Available funds		\$949,516 52
EXPENDITURES.		
Administration.		
Salaries of Commissioners Salary of Chief Engineer Salaries of Assistants Salaries of Clerks and Stenographers Salaries of Engineers Expenses of Commissioners Expenses of Chief Engineer Expenses of Assistants Expenses and wages of supervisors Office furnishings Office stationery and supplies Telephone and telegraph service Printing and binding annual report General printing account Drafting room supplies Incidental expenses Postage Commissioner's automobile State map	\$4,999 98 6,990 39 17,113 04 11,650 10 605 95 1,735 66 1,005 82 4,121 54 2,890 06 1,888 57 2,558 55 1,938 94 297 99 2,556 60 1,915 47 100 77 1,467 65 2,256 19 ,732 80	
Total administration charges		\$66,826 07
MAINTENANCE.		
Overdraft January 1, 1920       \$5,118 54         * Auto bureau (Secretary of State's office)       40,741 41         * Auto bureau (Attorney General's office)       15,125 28         Portable camps       141 25         Erecting signs       1,296 84         Color bands       244 21         Transfer to improvement state roads J. F       110 61         Transfer to highway loan fund       14 00         Transfer to mill tax highway fund       394 57         Refund on 1919 patrol overpaid       1,368 16		<b>\$</b> 64,554 <b>8</b> 7

<sup>\*</sup>This expense not under supervision of State Highway Department.

tate aid highway improved	024 86 107 58 057 14 580 58 142 01	815,312 1
own funds not deposited but expended under super-		
vision of department		2,823 4
otal expenditures for maintenance and administra- tion in 1920 OTE:—Funds expended for maintenance patrol in 1920 as follows: tate funds		\$949,516
otal amount expended for maintenance of roads in 1920	312 17	
para Dec. 01, 1/20		\$2,823 4
HIGHWAY LOAN FUND		\$2,823 4
		\$2,823 4
CREDITS  eccipts from sale of bonds	and	\$2,000,000 (18,600 (56,278 117,759 211,425 (
CREDITS  eccipts from sale of bonds	and	\$2,000,000 ( 18,600 ( 56,278 1 17,759 2 11,425 ( 20,971 1
HIGHWAY LOAN FUND  CREDITS  eccipts from sale of bondseccipts from premiums on bonds.eccipts from Federal Aid "H" Vassalboro.eccipts from Federal Aid "H" Winslow.eccipts from Federal Aid "Q" Richmondeccipts from other sources for most part from cement bags.  ransfers, Memorial Bridge ransfers, Paris State Aid	and	\$2,000,000 ( 18,600 ( 56,278 i) 17,759 2 11,425 ( 20,971 i) 1,162 i 102 2
CREDITS  eccipts from sale of bonds eccipts from premiums on bonds eccipts from Federal Aid "H" Vassalboro. eccipts from Federal Aid "H" Winslow. eccipts from Federal Aid "Q" Richmond. eccipts from other sources for most part from cement accement bags ransfers, Memorial Bridge	and	\$2,000,000 ( 18,600 ( 56,278 1 17,759 2 11,425 ( 20,971 1 1,162 1

#### **EXPENDITURES**

\$2,128,065 69

Labor and material	\$1,269,665	15
Engineering and inspection	30,220	02
Advertising	655	22
General expense of right of way	1,360	
Surveys	6,962	
Plans and computations	10,330	
Depreciation on road machine	100	
Transfer from paint account		
Transfer from State Aid (payrolls)		
Miscellaneous transfers	57	
Motor transport deficit transferred	38,467	
Cost of new state garage	157,043	
Guard rails	269	
Expense of issuing bonds	2,776	
Balance to 1921	609.580	97
	\$2,128,065	69

## IMPROVEMENT STATE ROADS J. F.

CREDITS	
Unexpended balance Jan. 1, 1920	<b>\$1</b> 35,345
Appropriation, 1920	500,000
Appropriation, 1920	29,380
Unapportioned balance 1919	1,733
Cities and towns appropriation deposited	167,211
under supervision of department	253,994
Transferred from third class highway fund	936
maintenance	110
highway loan fund	525
state aid construction of bridges	202
Lagrange special resolve	400
miscellaneous	108
	<b>\$1,089,948</b>
EXPENDITURES	
Labor and material	\$908,772
Engineering	4,722
Inspection	11,048
Transfer of cement to highway loan fund	1.054
payrolls to highway loan fund	274
miscellaneous	195
R. S. 1916	1.733
Unapportioned balance 1920 to maintenance	156
Balance to 1921	161,989
	<b>\$1</b> ,089,948

## STATE AID CONSTRUCTION OF BRIDGES

CREDITS.		
Unexpended balance Jan. 1, 1920	\$106,165 100,000	
State's appropriation 1920	500,000	
premiums on bonds	4.650	
Transfers from special resolves	18.163	
Credit on cement, cement bags and lumber (Alna-Newcastle)	535	
Cement bags (Belfast)	2.054	
Cement Shephards River Bridge (Brown-	2,001	00
	357	27
field) Cement and lumber (Crystal)	383	
Cement (Frenchville)	827	
Cement (Frenchville) Lumber sold (Mount Desert)	1.761	
Cement bags (Trescott)	254	
Lumber sold (Whiting)	27	
Engineering charges paid by Westbrook	199	
Miscellaneous credits	207	
Counties appropriation	145.676	37
Towns appropriation	146,111	97
Transferred from Madawaska-Edmundston	125	30
State Aid	93	80
Miscellaneous accounts	16	16
· · · · · · · · · · · · · · · · · · ·	\$1,027,610	34
EXPENDITURES.		
Labor and material	\$576,812	43
Engineering	15,787	
Advertising	182	88
Refund to Cumberland county (Westbrook)	11.829	
Transfer from Porter State Aid	264	
Expense of issuing bridge bonds	836	
Appropriation 1920 lapsed	100,000	
Balance to 1921	321,897	39
	\$1,027,610	34

## SPECIAL RESOLVES

CREDITS

CREDITS	
Unexpended balance from previous years.  Appropriation, Chap. 170-171 (less claims). City of Eastport, claim. Town of Abbot, claim Penobscot county, claim Lincoln county, claim Webster plantation, claim North Yarmouth Academy Grant, Chap. 127 Towns appropriation deposited Counties appropriation deposited Towns appropriation deposited Towns appropriation deposited but expended under direction of the department	\$43,467 88 87,000 00 1,600 00 2,413 18 794 57 2,087 43 2,000 00 1,000 00 3,785 39 2,000 00
<del>-</del>	\$159,227 16
EXPENDITURES	
Labor and material, Chap. 170-1919 (Roads)	\$21,728 93 16,460 40 37,832 12
127-1919 Engineering Chap., Chap. 170-1919 (Roads)	1,702 59 259 58
Chap. 170-1919 (Bridges) Chap. 171-1919 Chap. 127-1919	89 80 778 57 2 87
Madawaska-Edmundston	2,032 48 15,656 85
Lagrange resolve used with State Aid.  Morrill resolve used with State Aid.	2,000 00 800 00
City of Eastport, claim	1,600 00
Town of Abbot, claim Penobscot county, claim	2,413 18 794 57
Lincoln county, claim Webster plantation, claim	2,087 43 2,000 00
Towns appropriation expended under direction of department, Balance to 1921, 1917 resolves.	13,078 71 2,582 95
lapsed, 1917 resolves	2,113 23
to 1921, Chap. 170-1919lapsed, Chap. 170-1919	12,159 12 $15,388 16$
to 1921, Chap. 171-1919	2,360 52 3,010 56
to 1921, Chap. 127 (No. Yarmouth Academy grant)	294 54

\$159,227 16

## THIRD CLASS HIGHWAY FUND

CREDITS	
Appropriation Town's part transfer cancelled	\$192,480 8 160 5
Transfer inspection charges Blaine State Aid	2 0
Cities and towns appropriation, not deposited but expended under direction of State Highway Commission	7,896 8
_	\$200,540 2
EXPENDITURES	
Labor and material	\$190,220 0
Inspection Transferred to State Aid Balance to equalization fund	2,300 9 936 3
Balance to equalization fund	7,082 7
	\$200,540 2
MEMORIAL BRIDGE LOAN	
CREDITS	
Receipts from sale of bonds	\$500,000 00 4,650 00
Total	\$504,650 0
EXPENDITURES	
Engineering	\$6,692 1
Advertising	261 50 570 0
Balance to 1921	\$7,523 64 497,126 3
	\$504,650 0
MOTOR TRANSPORT & EQUIPMENT	Γ
CREDITS	
Treasurer's advices as received for truck rentals, stock	
issued, etc. Journal transfer, depreciation charge on road machine Deficit transferred to highway loan fund	\$180,412 1 100 0
Deficit transferred to highway loan fund	38,467 3
	\$218,979 5
EXPENDITURES	
Audited vouchers	\$218,642 6
Journals—express bills from maintenance and administration transferred	324 1
Journals—miscellaneous	12 7
	\$218,979 5

## BATH STATE FERRY

Total expenditures (including property charges)	\$205,164 07 41,622 99
Appropriated by legislature	\$163,541 08 10,000 00
Appropriated by council order	\$153,541 08 60,000 00
Less refund on water bill	\$93,541 08 23 66
Transferred from State Contingent Fund	\$93,517 42

## Jan. 1—Oct. 1, 1920. (Old rates)

·	Opening No.	Closing No.	No. Sold.	Rate	Amount.
Single fare.  1 Horse team (round trip).  2 Horse team (nound trip).  1 Horse team (hay) (round trip).  2 Horse team (hay) (round trip).  2 Horse team (hay) (round trip).  Hac  Oil team.  Auto, Including driver.  Oxen & driver.  Extra Yoke Oxen.  Team tickets (5 round trips).  Foot tickets (6 single trips).  Auto tickets (5 round trips).  Workmen's tickets.  High school (per term).  Special trips.  Miscellaneous.  Freight.  Oil barrels.	15,332 4,371 1,334 1,025 158 369 97,585 251 2,838 18,397 2,397 17,736	17, 787 4, 937 1, 509 1, 101 167 435 133, 929 141 260 3, 415 23, 713 2, 972 22, 155	2,455 566 175 76 9 66 36,344 19 5:7 5,316 657 4,419	. 25 . 35 . 50 . 35 . 60 . 50 . 15 1.00 . 25 2.00 . 36 2.50	613.75 198.10 61.25 38.00 3.15 39.60 18,172.00 1,329.00 1,314.00 1,590.84

#### DAILY REPORT OF TICKET SALES.

Oct. 1, Dec. 31, 1920.

	Opening No.	Closing No.	No. Sold.	Rate	Amount
Single passenger Passenger tickets, 12 trips One horse team Two horse team Automobile Auto truck Oil truck Cow Automobile, 10 trips Single Horse team, 30 trips Single horse team, 20 trips Single horse team, 10 trips Two horse team School tickets Special trip, Sunday P. M. Special trip	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	57,175 6,562 2,913 558 11,306 205 40 133 3 6 6 2 13 4 32 489	1 12	. 60 . 25 . 35 . 50 . 75 . 60 . 15 7 . 00 7 . 50 6 . 00 3 . 50 4 . 50 . 25 . 10	336.60 728.00 194.95 5,652.50 153.00 23.40 19.80 14.00 42.00 42.00 13.50 7.75 48.80

*Cost of franchise, including real estate and boat "Hocko" \$10,000 00 (00,000 00) Cost of steamer "Governor King" (Nathan Hale) 60,000 00 (00,000 00) Cost of renovating steamer:  Insurance during renovating 1,137 50 Machinery—labor 2,797 60 material 2,604 11 Hull—labor 6,472 12 material 3,087 59 (00 for ew slips:  Labor 20,288 73 Material 20,638 47 Engineering 328 70 To F. W. Cariton, use of plant 6,900 00 New coal staging and piling around wharf 5,511,765 88 (00 for extending the surface of the
Mock"   \$10,000 00
Cost of renovating steamer:   1,137 50
Cost of renovating steamer:   1,137 50
Insurance during renovating   1,137 50     Machinery—labor   2,797 60     material   2,604 11     Hull—labor   6,472 12     material   3,087 59     Cost of new silps:   20,288 73     Material   26,638 47     Engineering   328 70     To F. W. Carlton, use of plant   6,900 00     New coal staging and piling around wharf   1,511 06     State
Machinery—labor material       2,797 60 2,797 60 2,797 60 2,604 11 4 11 11 11 11 11 11 11 11 11 11 11
material     2,604 11       material     6,472 12       material     3,087 59       Cost of new slips:     20,288 73       Material     26,638 47       Engineering     328 70       To F. W. Carlton, use of plant     6,900 00       New coal staging and piling around wharf     1,511 06       \$151,765 88       OPERATING EXPENSES.       Wages:     Jan. 1-Dec. 31, 1920.
Hull—labor 6,472 12 material 3,087 59  Cost of new slips: Labor 20,288 73 Material 26,638 47 Engineering 328 70 To F. W. Carlton, use of plant 6,900 00 New coal staging and piling around wharf 1,511 06  OPERATING EXPENSES.  Vages:  Jan. 1-Dec. 31, 1920.
Cost of new slips:  Labor
Labor
Material 26,638 47 Engineering 328 70 To F. W. Carlton, use of plant. 6,900 00 New coal staging and piling around wharf 1,511 06  S151,765 88  OPERATING EXPENSES.  Vages: Jan. 1-Dec. 31, 1920.
Engineering 328 70 To F. W. Carlton, use of plant
New coal staging and piling around wharf
\$151,765 88  OPERATING EXPENSES.  Jan. 1-Dec. 31, 1920.
OPERATING EXPENSES.  Jan. 1-Dec. 31, 1920.
Wages: Jan. 1-Dec. 31, 1920.
Wages:
Wages:
Chorr of "Hoakomook" 911 EEO 07
Crew of "Hockomock"         \$11,550 67           Crew of "Governor King"         9,238 98           Coal:         ***
"Hockomock"
"Governor King"
Water 673 68
Light
Oil
"Hockomock"
"Governor King" 2.044 65
Coal shed 66 00
General expense
Machinery—Labor
Material 348 54
Hull—Labor
Material
Machinery—Labor
Material 591 92
Hull—Labor 6 50
Material
Ferry Slips—Labor
\$53,398 19

<sup>\*</sup>Cost of franchise appropriated by legislature of 1919. †Cost of steamer paid from State contingent fund.

# COST OF CONSTRUCTING NEW STATE GARAGE 1920 RECAPITULATION

To Jan. 1, 1921.	
Plans, computations and supervision	\$1,390 19
Expense of right of way	1 32
Lahor	<b>54,168 02</b>
Material	87,548 10
Contractor's commission	7,757 57
Truck rentals and supplies	4,678 16
Land	1,500 00
Total to Jan. 1, 1921	\$157,043 36
COST IN DETAIL.	
T. F. Moreau, contractor, estimate 1-12 incl	\$85,177 58
Concrete Steel Co., reinforcing steel	11.142 28
Corrugated Bar Co., reinforcing steel	13,801 24
Purinton Bros. Co., cement, coal and lime	5,219 39
Maine Central Railroad Co., freight	7,389 02
Pittsburgh Testing Laboratory	13 86
*M. J. Connolly, dynamite	1,500 00
Emery-Waterhouse Co., shovels	58 05
Brooks Hardware Co., dynamite	40 80
Transfer from stock, 22 tarpaulins	220 00
Transfer cement from Alna-Newcastle bridge originally charged	044 =0
to latter Pittsburgh Plate Glass Co	211 72
Fittsburgh Plate Glass Co	1,385 00
Truck rentals	3,546 66
Gas, oil and grease	$\begin{array}{c} 1,131 & 50 \\ 2.454 & 81 \end{array}$
Charles S. Chase Co., cement	2,816 25
Detroit Steel Products Co., window sash	3,441 57
E. Corey & Co., reinforcing steel.	366 72
Congr & Co., Telliforting Steel	935 43
Cooper & Co., cement  Bethlehem Steel Bridge Corp., structural steel	9.889 87
Malcolm & Dyer Co., heating apparatus	2.274 80
Purchase of land from city of Augusta	1,500 00
The Berlin Const. Co., structural steel	1,075 00
S. Blaisdell, posts	60 30
Plans, computations and supervision	1,390 19
Expense of right of way	1 32

**\$157,04**3 **36** 

<sup>\*</sup>Charged to this account in error, transfer made to stock account Jan. 20, 1921.

## 1920 RECAPITULATION.

Appropriation.	Adminis- tration.	Engineer- ing.	Inspec- tion.	Advertis- ing.	General expense and right of way.	Labor and material	Special appro. (Miscel- laneous.)	Total expendi- ture under supervision of department.
Administration Maintenance appropriation Maintenance Sec. 17. Maintenance State Aid Highways Maintenance State Highways State Highway Construction (Loan) Expense of Issuing Highway Bonds Motor Transport and Equipment State Aid Highways Construction State Aid Construction Bridges (Loan) Expense of Issuing Bridge Bonds Third Class Highways Special Appropriations *Memorial Bridge (Loan) Expense of Issuing Memorial Bridge Bonds Bath State Ferry New State Garage Totals  *Construction not started. To be under direction		\$47,513 80 	11,048 90 2,300 99 - - - - - - - - - - - - -	\$655 22 - - 182 88 - - - - - - - - - - - - - - - - - -	1 32	\$59,436 33 3,924 86 345,285 43 431,454 37 1,269,665 15 218,979 24 908,772 39 576,812 43 190,220 07 77,724 04 	\$2,776 73 - - 836 63 8,895 18 - - - -	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
Fxpense for Auto bureau (Secretary of State) and Ins Supervision Charges.	spectors (At	torney Gene	ral) not und	er control of		ommission.		<b>\$55</b> ,866 69
Administration Engineering Inspection Advertising General Expense and right of way		\$66,826 07 79,597 70 47,997 40 838 10 1,361 33 \$196,620 60	State F Motor State A State A Third C Special Bath St	ighway Con Transport and id Highway id Construct class Appropriation ate Ferry	struction nd Equipment Construction Bridges	ntn		1,269,665 $218,979$ $54$ $908,772$ $39$ $576,812$ $43$ $190,220$ $07$ $77,724$ $04$ $204,835$ $37$
Supervision charges .0443 of net construction Supervision charges .0423 of gross expenditure								\$4,442,761 83

#### STATE HIGHWAYS

State Highway Construction in 1920 comprises unfinished work of previous years and new work undertaken during the year. Complete information with regard to work extending over more than one year may be obtained by consulting previous annual reports.

A brief description of work done is given, showing the location, length, width, thickness and type of surfacing.

The table of expenditures is supplementary to that of previous years. Expenditures for surveys are usually indicative of work to be done in the year following such expenditures. Contracts are shown in detail, giving quantities, unit prices and amounts paid.

The mileage table shows County, Town, Type of construction, method of work, and a summary of the several types of surface.

The length of road shown in this table is approximate whenever the work was not completed during the year, but in such cases was arrived at by percentage of work done, rather than actual miles of finished road.

#### STATE HIGHWAY "B."

Westbrook. Federal Aid Project No. 26. Bids were called for and rejected. A contract was entered into with A. D. Bridge's Sons, Inc., for building this section of bituminous road, 3.92 miles long, 18 feet wide and 6 inches in thickness. The location begins at the City of Portland line and extends to the Windham town line. Length completed, 2.39 miles. The estimated percentage of work done, including additional grading and culverts, is 55%. Expenditures \$114,599.94.

South Thomaston. The work begun in 1919 was extended 0.62 miles during 1920 under the direction of John S. Gardner by day labor to the St. George line. The width is 21 feet and depth of gravel surface is 8 inches. In addition to this several culverts were completed on the section built in 1919. Expenditures \$8,075.56.

St. George. The work of previous years was extended to the South Thomaston line by day labor under John S. Gardner, completing 0.56 miles of gravel surface with grading and drainage. Expenditures from State Highway Loan Fund, \$6,007.99. From State Aid Joint Fund \$1,241.89.

#### STATE HIGHWAY "E"

Falmouth. Federal Aid Project No. 9. A contract was awarded to Forgione & Romano Co. of Portland for building 4.72 miles of cement concrete road 18 feet wide, 7 inches thick on the sides and 9 inches thick in the center. The location begins at the City of Portland line and extends to the Cumberland town line. Some work was done on grading but no concrete pavement was laid. The work is about 5% completed. Expenditures \$18,211.17.

Cumberland. Federal Aid Project No. 10. The contract for Falmouth with Forgione & Romano Co. includes the building of 2.52 miles of cement concrete road of the same dimensions in Cumberland beginning at the Falmouth town line and extending to the Gray Town line. Of this 1.34 miles of pavement was laid, or 59% of the total length. Expenditures \$65,951.63.

Winthrop. The work done in previous years was extended to Winthrop Village, and consisted of grading, drainage and bituminous macadam surface 21 feet wide and 6 inches deep with stone base for the entire length of 2,700 feet or 0.51 miles. The work was performed by E. J. Rourke by contract. Expenditures \$15,667.02.

#### STATE HIGHWAY "F."

Wilton. Federal Aid Project No. 18. This work was advertised for bids which were rejected and work was done by day labor under the direction of W. H. Doran. The type of surface

is gravel. The length of this section is 3.94 miles, extending from the Farmington line southerly. Some grading has been done and metal culverts delivered but no surfacing has been placed. The work is about 13% completed. Expenditures \$14,814.17.

Farmington. Federal Aid Project No. 19. Bids were called for on this project and rejected. The work was then done by day labor in connection with the work in Wilton and consisted of rather heavy grading, drainage and gravel surface. The length surfaced was 2.69 miles, 18 feet wide and 7 inches deep. The top course of fine gravel was deferred until the Wilton section is ready to be finished sometime during 1921. This work is 75% completed. The location of this project is from the Wilton town line northerly. Expenditures \$48,881.37.

#### STATE HIGHWAY "G"

Augusta. On this highway, beginning at the Grange Hall where it leaves the more direct road to Oakland, grading and gravel surfacing has been done for about one mile. The work was not finished when the season closed. Expenditures \$7,799.50.

Sidney. From the Augusta line toward the Belgrade line grading and gravel surfacing was carried on for about a mile, but the work was not completed on account of wet weather making truck hauling impracticable. Expenditures \$6,587.57.

Belgrade. Federal Aid Project No. 23. Beginning at the Sidney line and extending through Belgrade village to the Oakland line plans have been prepared and a project agreement made with Federal Government to build a bituminous macadam road. The bituminous material has been purchased and distributed along the highway and is available for immediate use in 1921. Expenditures \$34,973.23.

Oakland. Federal Aid Project No. 22. From the Belgrade line to the compact section of road in Oakland, plans have been prepared and an agreement made with the Bureau of Public roads for a bituminous macadam road. The bituminous material has been purchased and distributed. Expenditures \$10,519.25.

#### STATE HIGHWAY "H"

Vassalboro. Federal Aid Project No. 3 a. On this highway for which the contract was awarded to A. D. Bridge's sons, Inc. in 1919, progress was made from the Augusta line northerly toward Winslow, a distance equivalent to 5.80 miles although the actual miles of road surfaced was 4.00, the difference being accounted for by additional grading, drainage and culverts. Expenditures \$174,681.91.

Sandy Bay. The last half mile in this township ending at the Canada Line is almost impassable on account of steep grades and ledges, to avoid which a new line was laid out with the understanding that the Canadian Government will cooperate in reducing the grades and thereby obtaining a gradual ascent by going around the hill. Work on the new line was carried on during a part of the season while the weather conditions would permit, and as soon as the work is done on the Canada side a very decided improvement will be accomplished. The type of surface is gravel. The work was done by day labor under the direction of James H. Murtha. Expenditures \$24,129.02.

## STATE HIGHWAY "J."

Newport. Federal Aid Project No. 14. The work to be done in Newport was advertised for bids and readvertised, but none were received, upon which it was carried on by day labor under the supervision of J. W. Luce and 4.71 miles, the entire length, was graded, drained and suitable foundation laid for building a bituminous macadam surface. The bituminous material has been purchased and delivered. Stone has also been hauled to the crusher locations anticipating an early start in 1921. The location begins just outside the village or compact secton and extends to the Corinna town line. Expenditures \$82,609.32.

Corinna. Federal Aid Project No. 15. The work done was a continuation of that in Newport consisting of grading, drainage and foundation, also the purchase and delivery of bituminous material. This work was also advertised for bids and none were received. Expenditures \$12,727.80.

Dexter. Federal Aid Project No. 16. This section of road was advertised for bids without success. About one-half mile of grading has been done but the bituminous material for a bituminous macadam surface has been delivered. Expenditures \$13,945.69.

Foxcroft. A gravel road 2.06 miles in length 21 feet wide was practically completed from the village to the Guilford line connecting with the improved road. The work was done by day labor, under the direction of A. C. Dutton. Expenditures \$24,530.06.

#### STATE HIGHWAY "K"

Greenbush. About one mile of gravel road was built by H. A. Day on the day labor basis, thus improving one of the worst sections in this town. Expenditures \$9,659.04.

Enfield. Federal Aid Project No. 4. Late in the season of 1919 a contract was made with M. Seretto, the lowest bidder, for building a gravel road from the bridge across the Penobscot River, northerly to the Lincoln line. The length is 7.05 miles of which 4.51 miles was graveled 21 feet wide and from 8 inches to 12 inches deep, extending southerly from the Lincoln line. The southerly end will be completed in 1921. Expenditures \$70,424.33.

Mattawamkeag. Early in the season gravel surfacing was continued on this section of road, which was completed about July 1st. Expenditures \$9,508.26.

Sherman. Federal Aid Project No. 6. This work was advertised but no bids were received. It was therefore undertaken by force account under the direction of A. H. Hill. The length under construction is 4.29 miles. Grading and drainage were accomplished, an equivalent of 0.45 miles, but no work was completed. The type of surface will be gravel. Expenditures \$5,244.42.

Crystal. Federal Aid Project No. 6. The length under construction is 1.58 miles. With the same forces as in Sherman, 1.27 miles of gravel road with suitable foundation was built. No bids were received for this work. Expenditures \$33,343.19.

Island Falls. Federal Aid Project No. 7. This work was advertised for bids and a contract was made with Murtagh

Hughes of Bangor for building 3.50 miles of gravel road of which 1.84 miles is in Island Falls and 1.66 miles in Dyer Brook, width 21 feet, depth 8 inches. At the end of the season 1.36 miles had been completed which is about 39% of the work. Expenditures—Island Falls, \$3,337.60; Dyer Brook, \$32,010.45. The excavation on this work contained a large quantity of rock. Dyer Brook. Federal Aid Project No. 7. (See Island Falls.)

Houlton. Federal Aid Project No. 24. This work was advertised for bids and a contract was awarded to the Greenwood Construction Co. of Skowhegan for building 3.31 miles of gravel road from the compact section of the town to the town line of Littleton, width 21 feet, depth 8 inches. The work was 74% completed at the end of the season, or about 2.46 miles. Expenditures \$46,978.20.

Van Buren. The work done in this town was about 3 miles of gravel road by day labor under the supervision of Joseph Martin and was not quite completed at the end of the season. The location is between the B. & A. crossing and the town line of Grand Isle. The width is 21 feet and the depth is 8 inches. Expenditures \$18,623.25.

Fort Kent. About 0.8 miles of gravel road was completed by day labor under the direction of Joseph Martin. Expenditures \$9,747.57.

#### STATE HIGHWAY "M"

Dedham. Gravel road construction was continued from Lake House Hill to the foot of Mann Hill, about 2 miles, by day labor under the direction of H. C. Schoppe. The width is 21 feet and the depth is 8 inches. Expenditures \$43,325.28. This section contained an unusual amount of rock excavation.

#### STATE HIGHWAY "N"

Sullivan. A gravel road was built by day labor under the direction of A. P. Havey. The length is 0.48 miles, width 21 feet, and depth 8 inches. Expenditures \$12,585.97.

Gouldsboro. A gravel road 0.64 miles in length, 21 feet wide and 8 inches in depth was built by day labor under S. E. Coffin. Expenditures \$8,974.95.

Cherryfield. A gravel road 0.50 miles in length was built by day labor under Harland Schoppe. The width is 21 feet and depth 8 inches. Expenditures \$11,856.72.

Jonesboro. A gravel road 1.22 miles long was built by day labor under W. J. Mawhinney. The width is 2 feet and the depth is 8 inches. Expenditures \$6,651.32.

Pembroke. Federal Aid Project No. 5. This work was advertised and readvertised but no bids were received. A contract was made with J. H. Stalford to build 4.65 miles of gravel road in Perry and 0.53 miles in Pembroke, which was completed during the year. The work consisted of a large amount of grading, rock excavation and bridges which brought the cost far above the average for gravel road construction. The width is 21 feet and depth is 8 inches. Expenditures—in Pembroke, \$30,480.25; in Perry, \$142,193.13.

Perry. Federal Aid Project No. 5. (See Pembroke.)

## STATE HIGHWAY "Q"

Topsham. Federal Aid Project No. 28. A contract was made with E. J. Rourke of Abington, Massachusetts, for building 1.31 miles of bituminous macadam road from Topsham Village northerly to the forks leading to Lisbon Falls. About one mile was completed, besides additional grading and foundation. The width of the macadam is 18 feet, total width, 23 feet, and depth is 8 to 10 inches. Expenditures \$39,386.60.

#### STATE HIGHWAY "S"

Oxford. Federal Aid Project No. 34. This work was advertised for bids which were rejected and a contract was made with the Hassam Paving Company for building 3.99 miles in Oxford and .58 miles in Norway of cement concrete road 18 feet wide, six inches thick on the sides and 8 inches thick in the center, with sand-clay shoulders on each side 2½ feet wide. Of this, 1.11 miles of surface was completed, and the total length graded. The usual labor difficulties prevailed throughout construction besides inadequate railroad facilities which considerably delayed starting the work. The grading was heavy and the work includes one large concrete culvert. Expendi-

tures—in Oxford \$67,536.57; in Norway, \$1,528.68. Work was about 24% completed at the end of the year.

Norway. Federal Aid Project No. 34. (See Oxford).

Woodstock. About 0.1 of a mile of gravel road was built by day labor under G. W. Q. Perham. Expenditures \$1,051.64.

#### STATE HIGHWAY "Y"

Surry. A gravel road 0.45 miles in length was built by day labor under Fred B. Marden toward filling the gap between tween other sections of improved road. The width is 21 feet and the depth, 8 inches. Expenditures \$5,784.63.

## "E" FALMOUTH—4.72 MILES

## CONTRACTOR—FORGIONE & ROMANO, FIDELITY BLDG.,

## PORTLAND, MAINE

## 5% Completed

Item.	Estimated Quantities.	Price bid.	Amount.	Actual Quantities.	Amount.
2 3 4 5 6 10	220.36 C. Y. "B" Concrete	7 50 1 50 3 25 3 25 4 50 1 73 35 00 35 00 35 00 1 75 1 90 100 00 3 25 5 00 1 50	4,170 00 1,372 50 1,372 50 10,910 25 2,856 75 3,721 50 85,977 54 5,426 05 5,572 00 2,012 15 432 00 100 00 1,625 00 1,625 00 7,406 00 2,112 60 7,712 60	50 C. Y.	\$580 00 375 00 - - - - - - - - - - - - - - - - - -

#### STATE HIGHWAY COMMISSION

## "E" CUMBERLAND—2.52 MILES

# Contractor—Forgione & Romano, Fidelity Bldg.,

## PORTLAND, MAINE

## 59% Completed

Item.	ESTIMATED QUANTITIES.	Price bid.	Amount.	Actual Quantities.	Amount.
1 2 3 4 4 5 6 6 10 11 6 17 18 19 22 24 25 7 30 33 4 35	26,588 S. Y. Con. Pavement. 82.09 C. Y. "A" Concrete. 145.44 C. Y. "B" Concrete. 70.30 C. Y. "C" Concrete. 130 L. F. 12 inch pipe. 130 L. F. 16 inch pipe. 28 L. F. 18 inch pipe. 58 L. F. 24 inch pipe. 125 C. Y. Stone V-drain. 119 C. Y. Side Underdrain. 425 S. Y. Cobble gutters.	7 50 1 50 3 00 3 25 4 50 1 73 35 00 35 00 1 50 1 75 1 90 2 25 3 25	465 00 1,290 00 5,085 00 6,318 00 1,651 00 891 00	154 C. Y. 2,003 C. Y. 724 C. Y. 1,463 C. Y. 402 C. Y. 14,210 S. Y. 31,43 C. Y. 35,65 C. Y.	1,306 50 24,583 30 1,100 05 1,247 75 - 178 50 53 20 130 50 346 78

## "H" VASSALBORO—9.35 MILES

Contractor—Amos D. Bridge's Sons, Inc., Hazardville, Ct. 62% Completed

Item.	Estin	ESTIMATED QUANTITIES. Pr		Actual Quantities.	Amount.	
2 3 4 6 7 8 9 11 12 13 14 15 16 17 18 21	23,593 570 4,750 600 18,134 4,589 126 255 50 600 4 384 1,000 1,774 9,76 9,7	C. Y. Earth excavation C. Y. Rock excavation C. Y. Borrow C. Y. Stone V-drain C. Y. Stone Base C. Y. Stone Base C. Y. Gravel sub-base C. Y. Gravel sub-base C. Y. "B" Concrete C. Y. "B" Concrete C. Y. "B" Concrete L. F. 12 inch pipe L. F. 12 inch pipe L. F. 18 inch pipe L. F. 18 inch pipe L. F. 18 inch pipe C. Y. Side Underdrains L. F. Wd. Guard rail C. Y. Gravel Road S. Y. 2½ in. Mac. Sur, Gal. Hot. Bit. Material S. Y. Cobble Paving G. M. Surface C. Y. Reconstructed Stone Base	12 00 1 00 2 00 1 25 1 50 1 75	2, 280 0 8, 312 5 2, 700 0 81, 603 0 18, 356 0 4, 590 0 4, 590 0 4, 600 0 282 0 4, 500 0 1, 064 4 3, 904 0 53, 446 8 12, 382 5 8, 630 7	01 616.9 C. Y. 01 1,038 C. Y. 02 9,665 C. Y. 03 6,787 C. Y. 04 133.42 C. Y. 05 1,104 L. F. 07 1,104 L. F. 08 1 L. F. 09 1,104 L. F. 00 1,104	2,467 60 1,816 50 43,492 50 27,148 00 2,668 40 5,544 00 8 00 675 50 561 60 516 60 1,900 00 18,883 40 6,167 00

## "K" ENFIELD—7.05 MILES

Contractor—M. Seretto, 3 Tremont Row, Boston, Mass. 64% Completed

Item.	ESTIMATED QUANTITIES.	Price bid.	Amount.	Actual Quantities.	A mount	
1 2 3 5 7 8 9 11 12 14 15 16 17 18 21	10 C. Y. Cement Masonry 550 L. F. 12inch Culvert. 130 L. F. 16 inch Culvert. 182 L. F. 18 inch Culvert. 116 L. F. 24 inch Culvert. 100 C. Y. Side Underdrain	7 00 1 55 3 25 3 25 27 50 25 00 1 20 1 00 1 00 1 25 1 65 1 00 75	350 00 3,797 50 845 00 24,375 00 1,430 00 120 00 550 00 130 00 227 50 191 40 100 00 750 00	253 C. Y. 1,604 C. Y. 6,534 C. Y. 113.49 C. Y. 182 L. F. 80 L. F. 130 L. F. 54 L. F. 175.6 C. Y.	2,486 20 21,235 50 1,119 <b>2</b> 5	

# "K" ISLAND FALLS & DYER BROOK—3.69 MILES Contractor Murtagh Hughes, 105 Third St., Bangor, Me, 39% Completed

Item.	Estimated Quantities.		Amount.		tual tities.	Amount.
1 14, 490 2 2 593 3 2,970 4 5,384 5 71.22 22 208 23 48 24 28 25 28 26 12 27 35 4,080	C. Y. Earth excav C. Y. Rock excav C. Y. Borrow. C. Y. Gravel Base C. Y. Gravel road C. Y. "B" Concrete L. F. 12 inch pipe. L. F. 14 inch pipe. L. F. 16 inch pipe. L. F. 18 inch pipe. L. F. 18 inch pipe. L. F. 20 inch pipe. L. F. 24 inch pipe. L. F. 24 inch pipe. L. F. Wd. Guard rail.	7 00 1 80 3 00 3 10 30 00 1 00 1 25 2 00 2 00 2 00	4,151 00 5,346 00 16,152 00 12,331 80 2,136 60 208 00 110 00 576 00 24 00 52 00	2,040 605 323 930 - 32 98 62 164	C. Y. C. Y. C. Y. C. Y. L. F. L. F. L. F. L. F.	\$14,999 40 14,280 00 1,089 00 

## "K" HOULTON—3.31 MILES

Contractor Greenwood Construction Co., Skowhegan, Me. 74% Completed

Item.	ESTIMATED QUANTITIES.	Price bid.	Amount.	Actual Quantities.	Amount.
1 2 3 4 5 6 10 17 18 22 24 25 32 35 37	5,725 C. Y. Earth excav	7 00 1 80 3 00 3 75 3 00 3 50 35 00 30 00 1 20 1 60 1 80 3 75 75	5,250 00 1,630 80 2,796 00 8,478 75 25,042 50 1,018 50 2,296 50 194 40 217 60 216 00	673.0 C.  242.6 C.  2,208.1 C.  74.0 C.  5,204 C.  202 L.  184 L.  144 T.  937.0 C.	7. 4,711 00 727 80 7. 8,280 38 7. 222 00 18,214 00 F. 242 40 F. 294 40 F. 259 20 7. 55 13

## STATE HIGHWAY COMMISSION

## EXPENDITURES ON STATE HIGHWAYS FROM STATE HIGH

				En	GINEERING AN	D Advertis	ING		I	ABOR
Highway.	Type of surface	Town.	Surveys.	Plans and com- putations.	Advertising.	Engineering and inspection.	General expense and right of way.	Total.	Grading.	Drainage.
A		Wells	_	_		-	_	=	_	3,095 3
В	В. М.	Windham Westbrook	45 83 43 57	559 07 216 25	10 67 23 66	87 10 1,669 C0		702 67 1,952 48	30,830 52	1,843 7
c		Yarmouth Brunswick		-	-		- 11 02	- 11 02	_	- '
D	Gr. Gr.	Thomaston	- - -		- - -	- - - 6 14	-	- - 6 14	73 50 - 2,427 43 2,215 90	- - - 527 82
	C. C. C. C.	Falmouth Cumberland	45 37 20 19	784 24 324 26	12 97 12 97	744 34 3,416 83	-	1,586 92 3,774 25	1,153 00 10,329 08	8,253 0
Е	В.М.	Gray	30 30 33 85 19 43 6 85 -	826 95 750 58 151 24 72 34 -	23 63 10 67 10 66 - -	220 40 - 15 38 56 19 - -	- - - - -	1,101 28 795 10 196 71 135 38 - -	- - 3,883 55 - -	- - 1,333 04
F	Gr. Gr.	Turner Livermore Jay Wilton Farmington	41 44 , 13 28 374 79 8 20 6 12	42 - 687 72 413 08	13 44 13 42 - 14 97 14 97	19 33 - 273 07 847 46	325 75 325 00	74 63 26 70 374 79 1,309 71 1,606 63	6,102 34 24,524 03	- 1,708 78 6,783 18
G	Gr. Gr. B. M. B. M.	Augusta Sidney Belgrade Oakland	225 78 254 57 10 34 8 11	2 02 42 130 85 105 18	- - -	- 24 48 23 08	- - - -	227 80 254 99 165 67 136 37	2,158 57 1,788 00	367 23 575 03
н		Vassalboro. Winslow airfield. Skowhegan. Sandy Bay	32 65 - 44 57 47 32 -	40 43 - 193 48 424 62 -	- - - -	2,353 48 2 40 - - 117 67	100 00 - - -	2,426 56 102 40 238 05 471 94 117 67	34,000 87 - - - 16,754 04	67,434 18
I_		Burnham Newport*		, <del>-</del>	_				422 88	37 <b>2</b> 4
		Newport	23 41	654 15 496 59	24 64 38 44	2,814 62 470 17	191 84 25 20	3,708 66	22,325 56	30,595 07
J	В. М.	Corinna  Dexter Foxcroft	1 18 1 81	461 51 -	138 69	77 62 332 15	20 16	1,031 58 699 79 332 15	2,263 69 7,689 70 7,568 81	8,075 44 2,979 00 3,812 15

# WAY LOAN FUND, JANUARY 1, 1920, TO DECEMBER 31, 1920.

ANI	MATERIALS						CREDIT.	
Culverts.	Surfacing.	Guard rails.	Bridges.	Camp and provisions.	Total.	Amount Approved for Payment.	Explanation	Amount.
· -	10 60	-	-	-	3,095 39 10 60	3,095 39 10 60		
9,205 09	70,337 12	431 02	-	-	112,647 46	702 67 114,599 94	Apportioned by State†	121,770 35 54,945 79
66 69	-	- -		-	66 69	66 69 11 02		
81 00 - 842 87 3,258 13	180 50 - 4,594 46	- 145 30 -	1,170 68	- - 75 50	335 00 1,170 68 8,075 56 6,001 85	335 00 1,170 68 8,075 56 6,007 99		
1,051 00 3,384 66	14,370 25 40,202 94		50 00 7 69		16,624 25 62,177 38	18,211 17 65,951 63	Apportioned by State† App't'd by State†	122,813 99 57,013 70
2,718 60 - - 606 57 -	25 77 15 77 15 77 9,610 63 1,399 66 503 07	- - 97 85 -	- - - -	- - - -	2,744 37 15 77 15 77 15,531 64 1,399 66 503 07	810 87	Credit from Con't App't't by State† App't'd by State† App't'd by State†	8,842 62 161,178 92 132,800 00 31,400 00
3,494 69 4,093 70	2,161 65 11,683 43	- - - - 190 40	- - 37 03	- - - -	- - 13,504 46 47,274 74		App't'd by St <b>a</b> te† App't'd by St <b>a</b> te†	51,214 74 31,663 72
245 84 878 40 - -	4,800 06 3,091 15 34,807 56 10,382 88	- - - -	- - - -	- - -	7,571 70 6,332 58 34,807 56 10,382 88	7,979 50 6,587 57 34,973 23 10,519 25	·	
10,111 41 78 00 - - 717 23	57,046 97 - - - 6,053 98	490 07 - - - 123 00	- - - -	3,171 85 - - 363 10	172,255 35 78 00 - 24,011 35	174,681 91 180 40 238 05 471 94 24,129 02	Federal Aid Federal Aid	56,278 15 17,759 26
	= -		-		460 12 1,633 81	460 12 1,633 81		
6,160 75 211 05	17,954 53 1,143 64	161 40	2,203 35 2 40	-	78,900 66 11,696 22	·	Apr't'd by State† Trans. from Sp. Res App't'd by State†	92,421 29 2,500 00 138,816 00
2,488 40 2,049 06	$^{15\ 77}_{9,622\ 75}$	73 03 67 07	-	1,078 07	13,245 90 24,197 91	13,945 69 24,530 06	Trans. from Sp. Res	2,500 00 84,375 87

## Expenditures on State Highways from State High

				Engi	NEERING ANI	ADVERTISE	NG		LA	BOR
Highway.	Type of surface.	Town.	Surveys.	Plans and computations.	Advertising.	Engineering and inspection.	General expense and right of way.	Total.	Grading.	Drainage.
	Gr.	Bangor. Veazie Orono Greenbush Enfield	192 84 103 09 684 83	-		266 74 3,611 72		192 84 103 09 684 83 266 74 3,962 76	3,431 97 24,796 93	519 3 19,269 9
K	Gr. Gr. Gr. Gr. Gr. Gr.		750 01 202 86 169 21 142 77 - - - 75 86 325 50 - - 9 28 177 67 333 90	- 228 43 - 91 28 169 20 96 90 244 02 289 08 17 01 	23 68 23 63 23 66 67 12 10 66 16 38 1 75 4 19	903 77 577 54 1,670 52 2,007 23	5 00	750 01 374 63 771 69 142 77 1,018 68 770 40 1,834 54 2,261 91 445 97 342 51 1 75 6 75 9 19 126 05 177 67 713 41	2,801 26 17,649 25 1,296 00 26,035 56 17,235 95 - - 4,975 83 3,686 44	2,975 69 
L		BelfastStockton Springs	89 95 333 09	376 23 26 46	24 66	31 58 19 96		522 42 379 51	_	-
M	Gr.	Dedham	98 29	114 78		166 53	-	379 60	31,113 95	4,468 2
N	Gr. Gr. Gr. Gr. Gr.	Sullivan. Gouldsboro. Cherryfield. Jonesboro. Dennysville. Pembroke. Perry. Calais	18 20 26 25 25 00 41 18 - 28 00 657 67	- - - - - - 110 11 44 23	- - - - - 24 05 48 57	57 01 28 83 201 41 50 99 7 69 927 09 1,666 69 87 25	-	75 21 55 08 226 41 92 17 7 69 951 14 1,853 37 789 15	5,860 23 5,892 80 7,636 14 2,504 91 - 21,604 10 56,477 74	1,445 48 136 00 26 28 197 29 
Q	В. М.	Livermore Hartford Canton Topsham Bowdoinham Richmond Farmingdale Hallowell	28 03 6 77 58 57 16 21 2 90 337 74 61 29	37 69 2 21 13 06 253 37 31 63	- - - - - - -	208 25 31 13 50 00	-	65 72 2 21 19 83 520 19 47 34 84 53 337 74 61 29	11,779 64 - 288 80	2,212 80 - - - - - -
	C.C. C.C. Gr.	Oxford Norway Woodstock	3 60 30 38	318 46 123 99	10 66 10 66	2,666 66 215 64	- - -	2,995 78 353 89 30 38	22,809 27 976 00 263 23	- - 574 33
Y	Gr.	Surry	45 99	-		57 09	-	103 08	2,773 00	1,088 63
z		Lisbon Topsham	537 79 9 16	447 40	-	11 65 43 07		996 84 52 23		
_		Totals	6,962 84	10,330 94	655 22	30,220 02	1,360 01	49,529 03	448,400 47	191,883 44

## WAY LOAN FUND, JANUARY 1, 1920 TO DECEMBER 31, 1920

AND	MATERIALS.						CREDIT.	
Culverts.	Surfacing.	Guard rails.	Bridges.	Camp and provisions.	Total.	Amount Approved for Payment.	Explanation	Amount.
- - 468 18 5,407 84	4,972 80 16,986 81	- - - -	-	- - - - -	9,392 30 66,461 57	,	Cr. on Gr. used by M. Soretto	- 8,726 40
- 438 80 - 842 30 1,271 20 593 55 1,469 80 1,126 00 - - - 1,895 43 - 153 95	8,216 02 604 23 7,735 31 2,674 70 16,303 60 - - - 8,680 14 3,018 23 50 72	-		917 61 628 44 3,121 96 - - - - - - - - - - - - - - - - - - -	9,133 63 4,472 73 32,324 51 2,567 20 30,175 91 44,716 29 1,126 00  - 18,497 20 9,034 16 50 72	142 77 33,343 19 3,337 60 32,010 45 46,978 20 1,571 97 342 51 1 75 6 75 9 19	App't'd by State† App't'd by State† App't'd by State† App't'd by State†	46,903 18 33,447 10 21,950 25 65,949 38
		<u>-</u>		-			App't'd by State†	61,394 14
645 60 1,747 12 849 79 1,544 90 562 97 776 00 23,407 07	3,046 18 2,041 28 2,390 22 3,294 03 5,382 57 44,851 62	253 50 303 25 32 80 - 1,737 84 7,908 19	108 50 - - - - 272 69	      	42,945 68 12,510 76 8,919 87 11,630 31 6,559 15 29,529 11 140,339 76	43,325 28 12,585 97 8,974 95 11,856 72 6,651 32 7 69 30,480 25 142,193 13 789 15	App't'd byState†	42,127 64
3,748 02 3 10	125 95 449 99		-		38,866 41 1,225 11	47 34	App't'd by State† Federal Aid	22,169 21 11,425 03
4,403 61 198 79	37,327 91 - 183 70	- - -	- - -	· -	64,540 79 1,174 79 1,621 26	67,536 57 1,528 68 1,051 64	App'r'd by State†	87,127 81
248 00	1,571 92	-	-		5,681 55	996 84	Trans.towns State aid App't'd to this Ac.	700 19
103,545 16	497,393 22	12,497 94	3,857 45	10,453 66	1,269,665 15	52 23		1,570,214 73

#### STATE HIGHWAY COMMISSION

#### MISCELLANEOUS EXPENDITURES.

	Plans Computations. & supervision.	Fx rense of Right of way.	Total.	Labor	Material	Contractors Commission.
Expense of issuing Bonds.  Garage Guard Rails, Value of paint on hand.	1,300 19	- 1 32 -	1,391 51 -	54,055 31 -	87,548 10 269 05	7,757 57 -
Totals	1,390 19	1 32	1,391 51	54,055 31	87,817 15	7,757 5

<sup>\*</sup>See State Aid Table for distribution

C. C. Cement Concrete B. M. Bituminous Macadam Gr. Gravel

#### MISCELLANEOUS EXPENDITURES.

Truck rentals and supplies.	Camp and provisions.	Land.	Total.	Amount approved for Payment.	
4,678 16	112 71	1,500 00	2,776 73 155,651 85 269 05	2,776 73 157,043 36 269 05	
4,678 16	112 71	1,500 00	158,697 6?	100,089 14	

<sup>†</sup>Amount set aside by State to cover Federal Aid as required by Bureau of Public Roads, but not considered as credits in this table.

## STATE HIGHWAYS CONSTRUCTED.

1914-1920, Inclusive.

County.	High- Work done.		TYPE OF C	Length-		
		Town.	Contract.	Force Acc't.	miles	
Androscoggin	EESSEESEZEE	1914 1914 1915 1915-1916 1916 1916 1917 1917 1918 1919	Greene . Leeds . Poland No. 1 Poland No. 2 Greene No. 2 Lewiston . Mechanic Falls Greene . Lisbon . Auburn .	Gravel Macadam Grav. & Mac. Gravel Gravel Bit. Mac. Bit. Mac.	Gravel Gravel Gravel Gravel	2.27 1.45 3.65 2.10 1.80 2.60 2.60 1.69 0.50 4.17 0.30 23.1
Aroostook	KKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKKK	1914-1915 1914-1915 1915- 1916 1916 1916 1917 1918 1920 1920 1920 1920 1920 1920	New Limerick Houlton Presque Isle Caribou Ludlow Smyrna Bridgewater Blaine Molunkus Monticello Sherman Crystal Island Falls Dyer Brook Houlton Van Buren Fort Kent	Gravel	Gravel	6. 69 2. 72 6. 02 5. 48 0. 24 6. 55 3. 41 2. 32 2. 25 0. 45 1. 27 1. 36 2. 46 3.00 .80 45.66
Cumberland	A A B B C C C C C B B A C C B E E	1915 1915 1915 1915 1914—1915 1914—1915 1914—1915 1914—1915 1916 1916 1916 1920 1920	Scarboro No. 1 So. Portland Raymond Windham Falmouth Cumberland Yarmouth Freeport Brunswick Bridgton Bridgton Scarboro No 2 Brunswick Westbrook Falmouth Cumberland	Concrete Concrete  Pit. Mac. Bit. Mac. Bit. Mac. Bit. Mac. Bit. Mac. Concrete Bit. Mac. Concrete Concrete	Sand-Clay Sand-Clay Gravel Bit. Mac.	5.47 2.09 8.200 4.05 3.16 3.12 7.56 2.98 1.08 0.50 0.64 4.59 2.39 1.49 42.1
Franklin	F F F F F F F F	1914-1915 1914-1915 1915 1916 1916 1917 1918 1918 1920 1920		Gravel Gravel	Gravel Gravel Gravel Gravel Gravel Gravel Gravel Gravel	3.62 3.44 4.66 1.40 0.41 0.78 0.52 0.25 1.00 2.02 18.10
Hancock	M M M M M M N M M N M	1915 1915 1915 1914-1915 1916 1916 1917 1917 1917 1919 1920 1920 1920	Dedham Ellsworth Trenton Dedham Ellsworth Sullivan Trenton Flisworth Sullivan Trenton Flisworth Dedham Sullivan Gouldsboro Surry	Gravel Gravel Gravel Gravel	Gravel	2. 23 0. 91 0. 77 6. 02 1. 35 1. 23 0. 66 0. 57 1. 25 2. 00 0. 48 0. 48 0. 44 0. 45 22. 31

# STATE HIGHWAYS CONSTRUCTED—Continued.

	High- Work			TYPE OF C	Length-	
County.	Y. way. done. Town. Contract.		Contract.	Force Acc't.	miles	
Kenneber	EEE L QGG L HE L EGGH	1914-1915 1914-1915 1915 1916 1916 1917 1917 1917 1918 1918 1918 1920 1920 1920	Clinton Gardiner Waterville Oakland Benton Winslow Winthrop Benton Winthrop Augusta Sidney	Grav. & Mac Gravel Macadam Gravel Gravel Bit. Mac. Bit. Mac. Bit. Mac. Bit. Mac.	Gravel Gravel Gravel Gravel	4 .88 1 .86 2 .08 4 .89 4 .55 1 .84 1 .41 0 .35 3 .50 4 .35 0 .44 0 .51 1 .00 1 .00
Knox	D D D D D D D	1914-1915 1915 1915 1916 1917 1917 1918 1919 1920 1920	Warren Thomaston Thomaston Thomaston Thomston Thomston spur So. Thomaston spur Camden So. Thomaston spur So. Thomaston St. George	Gravel	Gravel Gravel Gravel Gravel Gravel Gravel Gravel Gravel	5.86 1.28 0.36 0.12 0.59 1.80 2.44 0.68 0.62 0.56 14.3
Lincoln	D D D D D	1914-1915 1914 1916 1917 1917-1918 1917 1918	Wiscasset Waldoboro Damariscotta Edgeomb Newcastle Nobleboro Nobleboro	Gravel Gravel Gravel Gravel Gravel		3.94 7.09 3.22 1.06 3.63 2.67 0.63 22.2
Oxford	Ваквавава	1914 1915 1915 1916 1916 1917–1918 1918 1920 1920 1920	Fryeburg. Oxford. Woodstock Bethel. Woodstock Greenwood Woodstock Oxford. Norway. Woodstock	Gravel Sand-Clay Gravel Concrete Concrete	Gravel Gravel Gravel Gravel Gravel	7.41 3.77 0.52 4.38 0.44 1.28 0.32 1.11 - 0.10 19.3
Penobscot	I I I I I M M I J J K K K J J J K K K J J K K K	1914 1914-1915 1914-1915 1915 1915 1915 1915 1916 1916 1916 1917-1918 1918 1919 1920 1920 1920 1920	Newport Etna. Carmel. Hermon No. 1 Brewer. Holden No. 1 Hermon No. 2 Garland Dexter. Holden No. 2 Newport Dexter Lincoln Mattawamkeag Mattawamkeag Newport Corinna Dexter Gerenbush Enfield.	Gravel Gravel Gravel Gravel Gravel Gravel Gravel Gravel Gravel	Gravel Gravel Gravel Gravel Bit. Mac. Bit. Mac. Bit. Mac. Gravel Gravel	1.59 3.08 4.93 1.09 0.44 2.67 3.08 1.22 0.11 1.00 0.17 2.26 5.30 2.82 1.68 3.00 0.44 4.01 1.00 0.44 1.00 0.44 4.01 1.00 1.00
Piscataquis	J J J	1914-1915 1915-1916 1916 1920	Dover . Monson . Guilford . Foxeroft .	Gravel	Gravel	6.72 2.27 3.20 2.06 14.2

# STATE HIGHWAYS CONSTRUCTED—Concluded.

	High-	Work		Туре ог	Length-	
County.	way. done.		Town.	Contract.	Force Acc't.	miles
Sagadahoc	DQQCQXQQQQ	1914 1916 1917-1918 1917 1917-1918 1917-1918 1918 1918 1918 1918	Woolwich Richmond Bowdoinham Bath Richmond Topsham Bowdoinham Bowdoin Topsham Topsham	Bit. Mac. Bit. Mac. Bit. Mac. Bit. Mac.	Bit. Mac. Bit. Mac. Gravel	5.65 0.56 6.05 2.38 5.24 6.54 1.44 2.26 0.57 1.00 31.69
Somerset		1915 1914-1915 1914-1916 1916 1916 1917 1917 1917 1918 1918 1920	Fairfield Norridgewock Madison Fairfield No. 2 Palmyra Detroit Pittsfield No. 1 Pittsfield No. 2 Embden The Fcrks Sandy Bay Sandy Bay	Gravel Gravel Gravel Gravel Gravel Gravel Gravel	Gravel Gravel Gravel Gravel	2 29 5 61 1 08 1 88 2 56 6 16 0 82 0 32 0 05 2 01 0 50 26.13
Waldo	I D L L D I	1914 1914–1915 1915–1916 1915 1916 1916	Burnham Northport Searsport Prospect Lincolnville Burnham	Gravel Gravel Gravel	Gravel	Bridge 7.65 2.53 0.34 3.50 2.53 16.55
Washington	ZZZZZZZZZZZZZ	1914 1915 1916 1916 1917 1918 1920 1920 1920 1920	Whiting. Edmunds No. 1 Edmunds No. 2 Cherryfield Edmunds Jonesboro Cherryfield Jonesboro Pembroke Perry	Gravel Gravel Gravel	Gravel Gravel Gravel Gravel	9.22 1.95 2.00 3.01 1.46 1.97 0.50 1.22 0.53 4.65 26.55
York	A A A A A	1914 1914 1914 1914 1916 1916	York. Wells Kennebunkport Biddeford Saco No. 1 Saco No. 2	Gravel Concrete	Bit. Mac. Bit. Mac. Gravel	4.15 2.08 0.83 1.20 2.44 1.04 11.74
Somerset	State a	ıd 1916	Jackman-Reckwood clearing and grubbing			22.2
	Special	resolves. 1916	Jackman-Long Pond, grading			8.93

#### SUMMARY.

Gravel	
Macadam	
Concrete	
Sand-Clay	
Bituminous Macadam	
Gravel and Macadam	
Clearing and Grubbing	22.21
Grading	8.93

445.60

#### STATE AID ROAD WORK

Including Expenditures from January 1, 1920 to
December 31, 1920

The total expenditure on account of state aid road construction for the year 1920 amounted to \$960,402.22. Against this total cost the sum of \$534,579.59 was paid from state appropriations; \$142.44 was paid from funds received from the sale of material and \$4,473.66 was paid from funds received from railway companies on account of track paving and freight adjustments; a total of \$421,206.53 was paid by towns, cities and counties.

Of the total cost \$4,722.37 was paid for engineering, \$11,048.90 for inspection and \$944,630.95 was expended for labor and material.

Of the amount paid from state appropriations, \$389,904.61 was paid from the appropriation for the improvement of state roads for 1920; \$117,802.52 was paid from unexpended balances of state aid apportionments brought forward from previous years; \$22,376.96 was paid from apportionments from the third class highway fund; \$2,800.00 was expended from appropriations made under special resolves; \$61.69 was paid from funds transferred from the bridge fund and \$1,633.81 was paid from funds transferred from the state highway loan fund.

Two apportionments, amounting to \$1,107.89, from the 1920 appropriation and one unexpended balance from the 1919 appropriation were transferred to the state highway loan fund. A payment of \$1,640.59 was paid to one city from its 1920 apportionment in reimbursement for funds advanced by the city in 1919 in anticipation of the joint fund for 1920. The above amounts transferred to other appropriations were expended on construction together with additional funds from the

appropriations to which they were transferred and in the same towns to which the original state aid apportionments were made.

The above amounts, transferred, and the payment of \$1,640.59, as shown above, are not included in the total cost of construction work or in the payment of state aid against this cost.

Applications for state aid were received from 505 towns, including townships, counties and cities. Of this number the joint funds for two towns were transferred to the state highway loan fund; the unexpended balances of joint funds for 70 towns have been carried over to 1921, including towns which failed to begin any work in 1920, those which did not complete the work and those towns which failed to file pay-rolls and bills on work which was completed.

Settlements have been made with 433 towns on account of the 1920 work.

Of the towns which carried joint funds from previous years over to 1920, ten joint funds from 1919, one joint fund from 1918 and two joint funds from 1917 were combined with the 1920 joint funds and reported with the 1920 work. In addition to the above, 28 towns have completed 1919 work, the report of which includes the expenditure of three joint funds from 1918, and two towns have completed 1918 work.

In 52 towns apportionments from the third class highway fund, amounting to \$22,376.96 were expended with the state aid road joint funds. In two towns appropriations made under special resolves, amounting to \$2,800.00, were expended with state aid road joint funds.

Three towns made appropriations and applied for state aid under Chapter 154, P. L., 1917. The total state aid apportioned to these towns amounted to \$31,176.00.

Two towns on the Ossipee trail and five towns on the Pequawket trail, which made maximum appropriations under the provisions of Chapter 154, P. L., 1917 in 1918, again increased their appropriations in 1920 and applied for state aid under the provisions of Chapter 157, P. L., 1919. The total amount of state aid apportioned to these towns was \$40,130.61.

Seventy-five towns increased their appropriations in 1920 and applied for state aid under the provisions of section 21, Chapter 25 R. S.; the total state aid applied for amounted to \$238,560.70. After making the apportionments of state aid under section 20, of the above chapter and the apportionments under Chapter 154, P. L., 1917 and Chap-1919, the balance of the appropria-P. L.. tion for the improvement of state roads was not sufficient to permit of making full apportionments of state aid under Section 21; of the 75 towns which applied for state aid under Section 21, twenty-six towns had never received additional state aid prior to 1920; in order that these towns might receive maximum apportionments, the sum of \$29,380.00 was apportioned by the Governor and Council from the state contingent fund and fu'll apportionments were made to these 26 towns, preference being given to them as provided by law.

The total amount of the additional apportionments made to the above towns was \$70,311.12. No additional apportionments were made to the remaining 49 towns which increased their appropriations under Section 21, Chapter 25, R. S. These towns made additional appropriations amounting to \$119,465.00 against which no apportionment could be made.

A total of \$197,472.67 was needed in 1920 in addition to the appropriation of \$500,000.00 in order to make all apportionments of state aid to the various towns, counties and cities which made appropriations for state aid road improvement under the provisions of the law.

Unexpended balances from 1920 apportionments amounting to \$138,791.46 and \$19,362.77 from apportionments made prior to 1920, a total of \$158,154.23, have been carried over to 1921. In addition to the above balances, unexpended balances from town appropriations, amounting to \$5,264.12, are on deposit with the state. The above balances will be available for expenditure in 1921.

The total mileage of state aid roads completed in 1920 was 129.84.

# STATEMENT OF TOTAL EXPENDITURES ON STATE AID ROADS, 1920

Expended for engineering		\$4,722 11,048 944,630	90
Total expenditure on account of state aid road con- struction		\$960,402	22
Paid from apportionments of state aid	\$507,707 13		
Paid from third class highway fund	22,376 96		
Paid from special legislative appropriations	2,800 00		
Paid from state highway loan fund	1.633 81		
Paid from bridge fund	61 69		
Paid from funds received from sale of material	142 44		
Paid from funds deposited with state by railway	112 11		
companies	4.473 66		
Paid by cities, counties and towns	421,206 53		
Take by cities, countries and towns	121,200 00	\$960,402	22

The above expenditures do not include \$1,107.89 from the 1920 state aid fund and \$1.19 from the 1919 fund which were transferred to the state highway loan fund; also the sum of \$1,640.59 which was paid to the city of Rockland from the Rockland state aid apportionment in reimbursement for funds advanced by the city in 1919 in anticipation of the 1920 joint fund.

#### STATEMENT.

Of the Appropriations for the Improvement of State Roads for 1920.

Appropriated by State, Secs. 34-35, Chap. 25, R. S., 1916		\$500,000 00
fund		29,380 00
rescinded		792 72
Total amount available in 1920	\$388,398 08 70,311 12 31,176 00 40,130 61	\$530,172 72
Total apportionment of state aid		530,015 81
Unapportioned balance, December 31, 1920	٠-	\$156 91
Statement of Apportionments.		
Total apportionment of state aid for 1920 Unexpended balances from 1919 apportionments Unexpended balances from 1918 apportionments Unexpended balances from 1917 apportionments Unexpended balances from 1916 apportionments	\$96,799 50 38,032 17 1,984 20 350 61	\$530,015 81
Total, unexpended balances		137,166 48
Total, state aid apportionments for 1920	•	\$667,182 29
Expenditures.	,	
Expended from 1920 apportionments.  1920 apportionments, transferred Expended from 1919 balances.  1919 balance, transferred Expended from 1918 balances Expended from 1917 balances Expended from 1916 balances.	\$391,545 20 1,107 87 81,058 40 1 19 35,241 47 1,350 97 151 68	
Total payments and transfers		\$510,456 80
Unexpended balances of state apportionments on hand		\$156,725 49
state		5,264 12
Total balance on hand December 31, 1920  Due from towns		\$161,989 61 1,428 <b>7</b> 4
Balances carried over to 1921	\$138,791 46 15,739 91 2,790 70 633 23 198 93 5,264 12	\$163,418 35 \$163,418 35
•		Φτ.00'±TO 90

## SPECIAL RESOLVES

The work under special resolves in 1920 included the construction of 7.91 miles of gravel road, general repair work on roads, construction and repair of bridges, engineering and inspection work, and miscellaneous expenditures provided for by the resolves.

The total expenditures on account of this work amounted to \$101,282.52; of this amount the towns, cities and counties have expended \$18,864.10; the state has paid \$80,903.98 from special appropriations and \$1,514.44 from third class highway apportionments which were expended with the special resolves; the total state aid, therefore, amounted to \$82,418.42.

Of the above total expenditure, \$39,597.91 was expended for road construction; \$22,609.29 was expended for general repair work; \$2,997.23 was expended for bridge construction; \$13,552.97 was expended for bridge repairs; \$11,500.00 was expended on account of ferries; \$97.46 was expended for miscellaneous inspection work; \$2,032.48 was expended for engineering on the proposed Madawaska-Edmundston bridge, and \$8,895.18 was paid in settlement of claims as provided by the resolves.

On account of the above work \$3,163.30 was expended for inspection and engineering and \$77,724.04 was expended for labor and material on road and bridge work. The sum of \$20,395.18 was expended on account of ferries and settlement of claims.

In addition to the above payments, \$2,800.00 from appropriations under special resolves was expended with state aid road funds and \$5,000.00 was expended with state highway loan funds, the locations of the state aid roads and state highways being the same as specified in the resolves. The sum of \$13,750.00 from appropriations under special resolves was transferred to the bridge fund. The above amounts are reported with the state aid, state highway and bridge expendi-

tures and are not included with total expenditures under special resolves.

No expenditures were made from balances of special appropriations brought forward from 1917.

# STATEMENT OF TOTAL EXPENDITURES UNDER SPECIAL LEGISLATIVE RESOLVES

Expended for inspection on road construction \$479 68	
Expended for inspection on road repairs 463 88	
Expended for inspection on bridge construction 58 25	
Expended for inspection on bridge repairs 31 55	
Expended for inspection on Madawaska-Edmundston	
bridge 2,032 48	
Expended for miscellaneous inspection 97 46	
Total cost of engineering and inspection \$	3,163 30
Expended for labor and material on road construc-	.,
tion \$39,118 23	
Expended for labor and material on road repairs 22,145 41	
Expended for labor and material on bridge con-	
struction	
Expended for labor and material on bridge repairs 13,521 42	
Total cost of labor and material \$7	7,724 04
	0.00000
Paid on account of Merrymeeting Bay ferry	300 00
	1.200 00
	8,895 <b>1</b> 8
raid in settlement of claims	J,080 10
Total expenditures in 1920 on account of special	
resolves\$10	1,282 $52$
Paid by state, Chapter 171, Resolves of 1919 \$27,618 14	
Paid by state, Chapter 170, Resolves of 1919 40,547 90	
Paid by state, Chapter 127, Resolves of 1919 705 46	
Paid by state, Chapter 212, Resolves of 1919 10,000 00	
Paid by state, Chapter 137, Resolves of 1919 2,032 48	
Paid by state, third class highway fund 1,514 44	
Paid by cities, towns and counties	
\$10	1.282 52

# STATEMENT OF APPROPRIATIONS BY STATE UNDER SPECIAL RESOLVES OF 1919

			_
Appropriations:  Balance of appropriations for construction and repair of roads, Chap. 171 Appropriations under Chapter 170. Appropriation, Chapter 127 Balance of appropriation for Madawaska-Edmundston bridge Appropriation, People's Ferry Company, Chapter 212		\$32,989 89,645 1,000 4,615 10,000	18 00 43
Appropriation, 1 copies 1 city company, chapter 212		10,000	00
Total of appropriations made under special resolves		\$138,249	83
Expenditures: Road construction Repairs of roads Bridge construction Repair of bridges People's Ferry Company Merrymeeting Bay ferry Richmond-Dresden ferry Righmeeting, Madawaska-Edmundston bridge Miscellaneous inspection Claims Transferred to bridge fund Transferred to state highway loan fund Expended with state aid road funds.	\$28,228 45 19,204 58 1,497 23 9,598 60 10,000 00 1,500 00 2,002 48 97 46 8,895 18 13,750 00 5,000 00 2,800 00	<b>\$102,453</b>	98
Balance, December 31, 1920	•	\$35,795	25
Datance, December 61, 1020		фо <b>о, г</b> до	00

#### THIRD CLASS HIGHWAYS

## CHAPTER 263, P. L., 1919

Applications for apportionments of state aid from the third class highway fund were received from 482 towns including cities and townships. According to the terms of this act 155 towns were not eligible to receive an apportionment. Apportionments were made to 327 cities and towns.

The total amount of state aid applied for by the above 327 towns amounted to \$240,588.08 and as the total amount available for third class highways was \$192,480.84 (1-3 of a mill on the valuation of the state) it was necessary to scale all apportionments down to 80 per cent. The total apportionment to these 327 towns was \$192,470.46, leaving an unapportioned balance of \$10.38.

Of the 327 towns which received apportionments from the third class highway fund 252 towns expended the funds for construction work; 8 towns, in which the apportionments were small expended the money for repair work; in 52 towns the apportionments were expended with the state aid road joint funds; 2 towns expended the third class apportionments with special resolves and 13 towns failed to make expenditure or to send in pay-rolls before December 31 on work which was completed.

The total expenditure on third class highways amounted to \$169,403.50; of this amount \$2,300.99 was expended for inspection and \$167,102.51 for labor and material. Against this the total cost \$161,506.67 was paid from third class highway apportionments and \$7,896.83 was paid by cities and towns.

In addition to the above, third class highway apportionments amounting to \$22,376.96 were expended with state aid road joint funds and third class highway apportionments amounting to \$1,514.44 were expended with special resolves.

Unexpended balances from third class highway apportionments amounting to \$7,072.39 and \$10.38, a total of \$7,082.77,

were transferred to the equalization fund on December 31, 1920.

# STATEMENT OF TOTAL EXPENDITURES ON THIRD CLASS HIGHWAYS, 1920

Expended for inspection on construction work Expended for inspection on repair work Miscellaneous charges for inspection	\$2,234 87 31 10 35 02	
Total cost of inspection	\$164,088 13 3,014 38	\$2,300 99
Tetal cost of labor and material		167,102 51
Total expenditure Paid by state from third-class highway fund	\$161,506 67	\$169,403 50
Paid by cities and towns	7,896 83	<b>\$169,403 50</b>

In addition to the above expenditures the sum of \$22,376.96 was expended with state aid road joint funds and \$1,514.44 was expended with special resolves.

# STATEMENT OF THE APPROPRIATIONS FOR THIRD CLASS HIGHWAYS

Amount available for third-class highways		\$192,480 192 470	84 46
Unapportioned balance Total state aid apportioned Paid on construction work Paid on repair work Paid for miscellaneous inspection Expended with state aid road joint funds Expended with special resolves	\$158,451 79 3,019 86 35 02 22,376 96 1,514 44	\$10 \$192,470 \$185,398	46
Unexpended balances of apportionments Dec. 31, 1920		\$7,072	39

In accordance with Chapter 263, P. L., 1919, all balances from the third class highway fund on December 31, are added to the equalization fund.

# AUTOMOBILE FUND

Unexpended balances from apportionments made in 1913 and 1914 from the automobile fund, amounting to \$100.40, were brought forward from 1919. All of these balances were transferred in 1920 to the appropriation for maintenance and administration.

### SUMMARY OF EXPENDITURES ON 1920 STATE AID ROADS

INCLUDING EXPENDITURES UNDER CHAPTER 25, R. S., CHAPTER 154, P. L., 1917 AND CHAPTER 157, P. L., 1919 EXPENDITURES FROM JANUARY 1, TO DECEMBER 31, 1920.

Number of towns.	NATURE OF IMPROVEMENT.	Square yards.	Length feet.	Total cost.	Paid from State Aid Ap- portionments.	Paid from other State Appropriations.	Paid from funds deposited with State by Railway companies.	Paid from funds received from Sale of material.	Paid by cities- towns. counties.	Length miles.	Cost per mile.	Cost per Sq. yd.
9 3	Gravel Macadam Bituminous Macadam Concrete* Bridge	2,112 31,392 18,938	623,807 1,051 15,938 8,113	\$730,243 85 2,588 65 92,143 36 77,176 81 2,149 41	752 58	$\begin{array}{c} 421 & 44 \\ 1,340 & 76 \end{array}$	- 1	\$102 00 - - - -	\$288,307 19 1,414 63 53,236 35 55,237 20 700 00	0.20 3.02 1.54	\$6,181 17 12,943 25 30,511 00 43,115 53	\$1 23 2 93
435	Totals	-	648,914	\$904,302 11	\$474,439 02	\$26,392 06	\$4,473 66	\$102 00	\$398,895 37	122.90	-	-

<sup>2</sup> Towns which built bituminous macadam also constructed sections of gravel road.

<sup>2</sup> Towns when built bituminous macadam also constructed sections of gravel road.
33 Cities, towns and townships completed construction work in 1920.
40 Towns—Final settlements not made, joint funds carried over to 1921.
41 Towns—State apportionments expended on state highways and reported with same.
42 Cities, towns and townships received apportionments of state aid in 1920.
43 Concrete sections were constructed on city and village streets: Cost per mile figured on basis of with of 18 feet.
44 Cost per mile of each type of road includes culverts and bridges having a span of less than 12 feet, and all foundation and drainage work.
45 Of the above total cost, \$14,508.02 was expended for engineering and inspection and \$889,794.09 was expended for labor and materia.

## SUMMARY OF EXPENDITURES ON 1919 STATE AID HIGHWAYS

### JANUARY I, 1920 TO DECEMBER 31, 1920

No. of towns	NATURE OF IMPROVEMENT.	Cost of inspection.	Cost of Labor and Material	Tctal Cost.	Paid from State aid ap- portionments	Paid from other State appropriations.	Paid by Cities, towns and counties	Length- Miles.	Cost per Mile
	Gravel	\$229 27	\$42,250 37	\$42,479 64	\$25,568 46	\$480 40	\$16,430 78	7.27	\$5,843 14
28	Totals	\$229 27	\$42,250 37	\$42,479 64	\$25,568 46	<b>\$4</b> 80 40	\$16,430 78	. 7.27	-

## SUMMARY OF EXPENDITURES ON 1918 STATE AID HIGHWAYS

### JANUARY I, 1920 TO DECEMBER 31, 1920

No. of towns	NATURE OF IMPROVEMENT.	Cost of inspection.	Cost of Labor and Material	Total Cost.	Paid from State aid ap- portionments.		Paid by Cities, towns and counties	Length- Miles.	Cost per Mile
	Gravel		\$1,485 82	<b>\$</b> 1,485 82	\$823 30	-	\$662 52	0.39	\$3,809 80
1	Total	-	\$1,485 82	<b>\$1,485</b> 82	\$823 30	-	\$662 52	0.39	-

### **MISCELLANEOUS**

## SUMMARY OF EXPENDITURES FROM 1920, 1919, 1918 AND 1916 FUNDS

### JANUARY I, 1920 TO DECEMBER 31, 1920

Ітем.	Cost of Inspection	Cost of Labor and Material	Total Cost	Paid from State aid Apportionment	Paid from funds received from sale of Material	Paid by Cities-towns and counties
Expended from 1920 Funds. Expended from 1919 funds. Expended from 1918 funds. Expended from 1916 funds.	\$862 29 122 39 45 00 4 30	\$6,279 10 4,644 70 115 62 61 25	\$7,141 39 4,767 09 160 62 65 55	993 45 120 18	- \$40 44	\$1,440 06 3,773 64 4 16
Totals	<b>\$</b> 1,033 <b>9</b> 8	\$11,100 67	\$12,134 65	\$6,876 35	\$40 44	\$5,217 86

## Summary of Expenditures in 1920 Under Special Legislative Resolves January 1, 1920 to december 31, 1920

NATURE OF IMPROVEMENT	Cost of Engineering & Inspection	Cost of Labor and Ma- terial Claims- Ferries.	Total cost	Paid from Special resolves	Paid from Third class fund	Paid by Cities-towns and counties.	Length—miles.	Cost per Mile
Construct'n work, gravel			\$39,597 91		\$1,514 44	\$9,855 02		<b>\$</b> 3,568 70
Road repairs	463 88		22,609 29		-	3,404 71		-
Bridge construction		$\begin{bmatrix} 2,938&98\\13,521&42 \end{bmatrix}$	$\begin{array}{c} 2,997 & 23 \\ 13.552 & 97 \end{array}$			$1,500\ 00$ $3,954\ 37$	-	-
Bridge repairs	91 96	13,521 42	15,552 97	9,090 00	-	0,904 01	-	•
ton Bridge	2,032 48		2.032 48	2.032 48	_	_	_	_
Miscellaneous inspection			\$7 46			_	-	-
Ferries		11,500 00	11,500 00	11,350 00	- 1	150 00	-	-
Claims		8,895 18	8,895 18	8,895 18	-	-	-	-
Totals	\$3,163 30	\$98,119 22	\$101,282 52	\$80,903 98	\$1,514 44	\$18,864 10	7.91	-

# SUMMARY OF EXPENDITURES IN 1920 ON THIRD CLASS HIGHWAYS

#### JANUARY I, 1920 TO DECEMBER 31, 1920

No. of towns	NATURE OF IMPROVEMENT.	Cost of Inspection	Cost of Labor and Material	Total Cost.	Paid from Third class Fund.	Paid by Cities-towns And Counties.	Length—Miles	Cost per Mile
8	Road Construction—Gravel Road repairs Miscellaneous inspection	\$2,234 87 31 10 35 02	\$164,088 13 3,014 38	\$166,323 00 3,045 48 35 02	\$158,451 79 3,019 86 35 02	25 62		\$3,866 00 - -
260	Totals	\$2,300 99	\$167,102 51	\$169,403 50	<b>\$</b> 161,506 67	\$7,896 83	43.02	-

Towns expended third class highways apportionments with state aid road joint funds.
 Towns expended third class highway apportionments with special resolves.
 Towns failed to expend apportionment or to file payrolls before December 31, 1920.
 Towns not eligible for an apportionment under the provisions of Chapter 263, P. L., 1919.

Total number of applications received.

## GENERAL SUMMARY

## EXPENDITURES ON STATE AID HIGHWAYS—SPECIAL RESOLVES—THIRD CLASS HIGHWAYS

## JANUARY I, 1920 TO DECEMBER 31, 1920

	Cost of Engineering & Inspection	Cost of Labor and Material	Total Cost	Total payments From State Funds.	Funds deposited	Total payments Funds received From Sale of Material.	Cities-towns	Length—Miles
1920 State aid roads—. Completed	\$14,508 02 229 27 - 1,033 98 3,163 30 2,300 99	\$889,794 09 42,250 37 1,485 82 11,100 67 98,119 22 167,102 51		26,048 86 823 30 6,876 35 82,418 42	-	\$102 00 - - - 40 44 -	\$398,895 37 16,430 78 662 52 5,217 86 18,864 10 7,896 83	7.27 0.39 - 7.91
Totals	\$21,235 56	\$1,209,852 68	\$1,231,088 24	\$778,504 68	\$4,473 66	\$142 44	447,967 46	181.49

#### STATE AID BRIDGE CONSTRUCTION

During the year 1920, fifty-three new applications for State and County Aid for the construction of bridges were received by the Commission and there were twenty-three petitions continued from the previous year.

At the close of 1920, fourteen bridges had been placed under construction; petitions for twenty-seven other bridges had been acted upon favorably by the joint board, but no construction started because of failure of the towns to provide appropriations covering their portion of the cost of construction or because of labor and material conditions which indicated that construction in many cases should be postponed until another season; on fifteen petitions action was suspended for various reasons; eight petitions had been discontinued; and on twelve petitions no meeting of the joint board had been held.

The bridges in the following list were placed under construction:

Town.	County.	Contractor.	Estimated Cos t.	Description.
Ashland	Aroostook	Force Account	\$43,600 00	Big Machias RiverBridge; 2 concrete T-beamspans clear span length 55 ft. each; concrete piers and abutments; new loca- tion; 20 foot roadway.
Appleton	Knox	Edmond Cyr&Co.	22,000 00	McLains Mill Bridge; 2 concrete T-beam spans, clear span 50 ft. each; concrete piers and abut- ments; dry stone wing walls; 20 foot roadway.
Belfast	Waldo	Cyr Bros. Co Boston Bridge Works		

Town.	County	Contractor.	Estimated Cost.	Description.
Biddeford	York	Rendle Stoddard	135,000 00	Bradbury Bridge; 4 concrete T-beam spans, 2 of 55 ft. clear span, 2 of 21 ft. clear span; concrete piers, abutments, and retaining wall; 35 ft. roadway; Two 5 ft. sidewalks.
Brownfield	Oxford	Force Account	900 00	Bert Meadow Bridge; 9 foot concrete slab span on old stone abutments; 20 ft. roadway.
Brownfield	Oxford	Force Account	2,500 00	Ten Mile Brook Bridge 16  ft. concrete slab span concrete abutments; 20  ft. roadway.
Columbia Falls	Washington	Force Account	17,000 00	Pleasant River Bridge, concrete T-beam span, clear span length 40 ft.; concrete abutments con- nected with old stone retaining walls; 20 ft. roadway; one 4 ft. side-
Crystal	Aroostook	James H. Kerr	4,500 00	14 ft. concrete slab
Frenchville	Aroostook	Town of French- ville	9,700 00	span; concrete abut- ments; 20 ft. roadway. Gagnon Bridge; 12 ft. by 6 ft. concrete culvert 55 ft. 9 in. long; concrete end walls.
Harmony	Somerset	James H. Kerr	32,000 00	Mainstream Bridge; 2 con- crete T-beam spans, clear span length 50 ft each; concrete pier and abutments stone wing walls; 20 ft. roadway.
Limington	York	Force Account	·	Webster Stream Bridge; 16 ft. span concrete slab; on concrete abut- ments resting on pile cluster at each corner;
Porter	Oxford	Force Account	6,500 00	20 ft. roadway. Mill Brook Bridge; 20 ft. span concrete slab; con- crete abutments, stone wing walls; 20 ft, road-
Topsham	Sagadahoc	Edmond Cyr & Co	12,000 00	way 4 ft. sidewalk. Cathanee Bridge; con- crete T-beam span, clear span length 55 ft.; one new concrete abut- ment with one stone wing, other abutment capped with concrete;
Whiting	Washington	Force Account	17,000 00	Bynton & Estey Bridge concrete T-beam span, clear span length 30 ft.; concrete abutments; 19 ft. roadway.

The Belfast Lower Bridge, as noted, was accepted by the Bureau of Public Roads as Federal Aid Project No. 33, and approximately one-half of the total cost will be paid by the Government.

Expenditures were incurred on the following bridges, construction of which was begun in 1919 and in previous years. Although these bridges are practically completed, final settlement had not been made with the towns and counties concerned, at the end of the year 1920.

Town.	County	Name of Pridge.	
Ashland Beddington Dover Grand Isle Houlton Howland Lincolnville Mechanic Falls Old Town Richmond St. John Pl. Trenton	Washington Piscataquis Aroostook Aroostook Penobscot Waldo Androscoggin Penobscot Sagsdahoc	Little Machias River Bridge. Black's Tannery Fridge. South Mills Fridge. Cormier Brook Bridge. Pearce Brook Bridge. Piscataquis River Bridge. Duck Trap Bridge. Red Bridge. Gilman Falls Bridge. Mill stream Bridge. Sinclair Brook Bridge. Mt. Desert Bridge.	

The accounts for the following bridges were closed during 1920, and final settlement made with the towns and counties participating in the cost.

Town.	County.	Name of Bridge.	Total Cost
Macwahoc Marshfield Monticello Newry Norridgewock Perry Prospect	Knox Cumberland Aroostook Washington Aroostook Oxford Somerset Washington Waldo		3,215 23 20,808 70 9,172 33 4,812 92 35,248 71 5,823 42 9,987 74 15,956 99 1,442 46

By Chapter 251 of the Public Laws of 1919, the financial obligations of the state incurred during 1920 under the Law for State and County Aid in Bridge Construction were paid out of the appropriation of \$500,000 made for this purpose from the proceeds of the state highway and bridge loan authorized by this chapter.

The plans and specifications for the International Bridge over the St. John River between Madawaska, Maine, and Edmundston, N. B., were completed and bids were received for this work in August, 1920. The State of Maine had no specifically designated appropriation of sufficient amount to cover the State's portion of the cost of this bridge, and consequently all operations were suspended pending any action the 1921 legislature might take in the matter.

### MAINTENANCE WORK FOR 1920

Maintenance work during 1920 was performed generally by patrol maintenance. 494 patrolmen were employed in caring for 4,241.11 miles of road in 495 towns. Of this mileage 709.34 miles was improved state highway, 949.99 miles was improved state aid highway and the balance of 2,581.78 miles was unimproved road. There was also maintained by special arrangement with the towns 159.97 miles of improved state aid road.

A total expenditure for labor and material of \$765,073.18 was made on this work, including \$18,130.43 furnished by the state for road machine work. The state also furnished supervision and inspection for the work amounting to \$34,647.51, making the total gross expenditure chargeable to maintenance of \$799,720.69. Of this amount the state furnished \$562,252.74 and the cities and towns furnished \$237,467.95. The average expenditure per mile was \$181.71.

On the 709.34 miles of improved state highway, the expenditure for labor and material and supervision was \$374,085.26 or an average expenditure per mile of \$527.37. The expenditure on the 3,531.77 miles of other road under patrol was for labor, material and supervision \$399,306.29 or an average expenditure per mile of \$113.06.

#### EXPENDITU. S UNDER DIRECTION OF STATE HIGHWAY COMMISSION

#### 1913-1920

Year.	State highways.	State aid highways.	Third class highways.	*Registra- tion of Autos.	Mainten- ance.	Special resolves.	State aid Construction of bridges.	Special apportionments.	Miscel.	Adm.	Totals
1913 1914 1915 1916 1917 1918 1919	\$169,880 46 829,142 37 563,810 73 485,644 72 459,962 01 723,123 20 344,879 58 1,319,194 18	\$409,525 56 628,446 88 559,377 57 488,517 93 528,119 54 627,747 69 1,113,998 67 924,543 66	<b>\$</b> 192,521 06	\$155,002 83 16,877 07 10,439 38 821 61 261 43 496 60 840 00	\$90,886 46 169,777 64 288,450 52 494,349 40 634,299 34 780,795 20 874,748 50	\$103,071 97 102,285 64 76,950 51 144,957 19 125,247 94 49,850 44 **111,259 89 89,782 52	\$121,647 81 275,611 33 340,885 74		\$2,702 53 †33,585 38 †592,323 97	42,648 96 38,545 79 37,402 41 37,734 08 42,941 31 46,980 93	1,710,287 38 1,418,901 62 1,445,794 38 1,767,322 21 2,354 069 91 2,773,225 39
Totals	\$4,895,637 25	\$5,280,277 50	\$192,521 06	\$184,738 92	\$3,333,307 06	\$803,406 10	\$1,330,927 41	\$26,152 27	\$628,611 88	317,816 02	\$16,993,395 47

<sup>\*</sup>Fees apportioned by Governor and Council prior to July 1913.

†Motor transport and equipment.
memorial bridge bonds \$831.52;

\*\*Includes \$25,033.67 not deposited with State but expended under direction of State Highway Commission.

†Includes following: expense of issuing highway bonds \$2,776.73; motor transport and equipment, \$218,979.54; expense of issuing memorial bridge bonds \$831.52;

Bath State Ferry, \$205,164.00, State garage, \$157,043.36.

## APPROXIMATE ROAD MILEAGE

# 1913—1920

Түре.	State Highways.	State aid Highways.	Third class Highways.	Special Apportionments	Registration of Autos.	Special Resolves.	Totals.
Gravel Macadam Concrete Bituminous Macadam Gravel and Macadam Clearing and grubbing Grading Earth and Gravel Sand and clay Wood Block Granite Block	304.39 4.78 14.40 77.46 6.68 22.21 8.93	1,021.07 17.13 7.78 18.09	43.02	0.25 0.70 0.11	46.00	24.32 34.50	1,393.0 22.6 22.1 95.6 6.6 22.2 8.9 81.5 10.0 0.1 1.4 44.5
Totals	445.60	1,113.45	43.02	2.12	46.00	58.82	1,709.0

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