

ANNUAL REPORT OF THE CHIEF OF ENGINEERS, 1921

EXTRACT ✓

REPORT UPON THE CONSTRUCTION AND  
MAINTENANCE OF MILITARY AND POST  
ROADS, BRIDGES, AND TRAILS, ALASKA

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BOARD OF ROAD COMMISSIONERS  
FOR ALASKA



WASHINGTON  
GOVERNMENT PRINTING OFFICE  
1921

TERMINAL FACILITIES.

None.

EFFECT OF IMPROVEMENT.

The roads and trails constructed by the board have not only opened up to development nearly all sections of the Territory, but have effected large savings in freight charges. Data collected by the board since 1911 indicate that the annual saving in cost of transportation of freight due to the construction of roads by the board is in excess of \$2,000,000. It is doubtful, however, if anything like that amount of freight would have been transported without the roads, and the indirect loss which would have been occasioned by the restriction on output and development if the roads did not exist can not be estimated.

The use of automobiles is increasing rapidly. Approximately 90 per cent of the traffic on the main wagon roads is handled by motor, which has greatly increased the cost of road maintenance. The use of tractors for drawing freight, particularly on the sled roads of the interior, is a valuable new development.

*Recommended modification of project.*—None.

*References to published articles not previously reported.*—The Military Engineer, January–February, 1921, pages 1–12, "The Roads of Alaska," by James G. Steese, president, Alaska Road Commission, 9,000 words, illustrated.

PROPOSED OPERATIONS.

In last year's report was set forth a program of road and trail development to meet immediate needs and to cover a period of 10 years. Three classes of road building operations are involved:

- (a) Maintenance of existing mileage for the 10-year period..... \$2,000,000
- (b) About 700 miles of new construction largely resulting from improvement to wagon road standard of existing sled roads or trails and maintenance of same through the 10-year period... 7,000,000
- (c) Development roads, the value or location of which is not yet fixed..... 1,000,000

An estimate was submitted for the fiscal year ending June 30, 1922, of \$955,000 to initiate the work. This estimate was based on the following requirements:

- Item I. For repair and maintenance of 904 miles of wagon road, 519 miles of sled road and 678 miles of trail, as per detailed statement,<sup>1</sup> necessary to hold existing system and prevent further deterioration..... \$370,000
- Item II. For improvement of intermediate sections of routes included in Item I above, necessary to enable existing through routes to be utilized throughout by the same class of traffic..... 303,000
- Item III. For new construction necessary to raise the classification of existing routes, provide additional mileage, and for surveys and reconnaissance, 640 miles in order of importance as listed<sup>1</sup>..... 282,000

Only \$425,000 was provided by the act of June 30, 1921. With this amount, substantial progress is being made in the rehabilitation

<sup>1</sup> Detailed statement omitted.

of the existing system. Little can be done to meet the pressing need for improvement and extension, especially in providing urgently needed feeder roads, now nearing completion, without appropriations.

The Government railroad is operating at an annual deficit of over \$1,000,000, not including operation charges. When it is completed this deficit will be \$2,000,000 annually. This board has been endeavoring to provide relief in the way of feeder lines to the Government. One-third of its expenditures for the construction of routes immediately tributary to the Government routes constitute a substantial portion of the remainder on routes which will also indirectly contribute traffic. The Government on each side of the railroad constitutes a substantial portion of the Territory of Alaska. For the board to provide other five-sixths of the Territory and to produce a large number of producing districts would be a matter to be disposed by specific law.

Of the \$10,000,000 estimated for the next five years for improvements or new construction needed, have been initiated two years ago at the time of the report. Vigorous efforts should now be made to complete the work in the next five years, or the eventuality of increased and development of the Territory. The approaching completion of the Government's more liberal coal and oil leasing and water development activity in Alaska and have been an attitude toward the Territory on the part of the Government. In order to handle the entire road program and to realize the greatest eventual economy the following appropriations are required each year:

Fiscal year.	
First (1923)	.....
Second (1924)	.....
Third (1925)	.....
Fourth (1926)	.....
Fifth (1927)	.....
Total for first 5 years.....	
Sixth (1928)	.....
Seventh (1929)	.....
Eighth (1930)	.....
Ninth (1931)	.....
Tenth (1932)	.....
Total for second 5 years.....	
Total for 10 years.....	

The annual maintenance of the complete system nearly as can be estimated at this time, with that time, however, Alaska should have de

TERMINAL FACILITIES.

EFFECT OF IMPROVEMENT.

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tted.

of the existing system. Little can be done, however, to meet the pressing need for improvement and extensions of the system, especially in providing urgently needed feeders to the Government railroad, now nearing completion, without much greater annual appropriations.

The Government railroad is operating its completed sections at an annual deficit of over \$1,000,000, not including interest and amortization charges. When it is completed this deficit will jump to nearly \$2,000,000 annually. This board has been besieged for years to provide relief in the way of feeder lines to stimulate traffic. This it has endeavored to do to the best of its ability from its very limited funds. One-third of its expenditures for the current fiscal year were on routes immediately tributary to the Government railroad, and a substantial portion of the remainder on routes which, when completed, will also indirectly contribute traffic. The country within 100 miles on each side of the railroad constitutes only about one-sixth of the Territory of Alaska. For the board to disregard the claims of the other five-sixths of the Territory and to abandon its extensive mileage into producing districts would be a manifest neglect of duty imposed by specific law.

Of the \$10,000,000 estimated for the next 10 years, \$7,000,000 is for improvements or new construction needed at once. Work should have been initiated two years ago at the close of the war period. Vigorous efforts should now be made to complete the bulk of this work in the next five years, or the eventual cost will be greatly increased and development of the Territory will be delayed.

The approaching completion of the Government railroad and the more liberal coal and oil leasing and water power laws have all stimulated activity in Alaska and have been an earnest of a more liberal attitude toward the Territory on the part of the Federal Government. In order to handle the entire road and trail project with the greatest eventual economy the following amounts should be appropriated each year:

Fiscal year.	Working season.	Amount.
First (1923).....	1922	\$1,200,000
Second (1924).....	1923	1,500,000
Third (1925).....	1924	1,600,000
Fourth (1926).....	1925	1,400,000
Fifth (1927).....	1926	1,100,000
Total for first 5 years.....		6,800,000
Sixth (1928).....	1927	900,000
Seventh (1929).....	1928	750,000
Eighth (1930).....	1929	600,000
Ninth (1931).....	1930	500,000
Tenth (1932).....	1931	450,000
Total for second 5 years.....		3,200,000
Total for 10 years.....		10,000,000

The annual maintenance of the completed system thereafter, as nearly as can be estimated at this time, will cost about \$450,000. By that time, however, Alaska should have developed to such an extent

as to take over the major portion of this burden as a part of her own interior development.

A very important point in connection with these appropriations is the fact that the working season is a very short one and the end of the fiscal year occurs just as the work is well launched. Preparations for this work must be started months before and in most cases supplies must be shipped in and hauled over the snow during the previous winter. Money appropriated on June 30, 1921, for the fiscal year 1922, will actually be nearly all spent during the summer of 1921. It must all be spent before July 1, 1922, hence the appropriation for 1923 should be available before that fiscal year actually begins. Work can not be economically started after July 1 nor stopped and then started up again. For this reason, each annual appropriation should be immediately available and remain available until expended. In addition, authority should be given to incur in advance of actual operation, obligations of about half a million dollars, to be met by the appropriation of the following fiscal year to provide for alternate years when the long session frequently does not pass the Army appropriation until June, or even August.

Estimate for fiscal year ending June 30, 1923.

Object of expenditure.	Estimated, 1923.	Appropriated, 1922.
For the construction, repair and maintenance of military and post roads, tramways, ferries, bridges, and trails, Territory of Alaska, to be expended under the direction of the Board of Road Commissioners, described in Section 2, of an act entitled, "To provide for the construction and maintenance of roads, the establishment and maintenance of schools and the care and support of insane persons in the District of Alaska, and for other purposes," approved January 27, 1905, as amended by the act approved May 14, 1906, and to be expended conformably to the provisions of said act as amended, to be immediately available and to remain available until expended.....	\$1,200,000	\$425,000

It is proposed to distribute the funds requested for the fiscal year 1923 approximately as follows:

Estimate of funds, 1923.

Name of route.	Mileage.	Amount.
<b>Southeastern Alaska:</b>		
Skagway-White Pass.....	13.5	\$10,000
Haines-Chilkat.....	47.5	25,000
Sitka-Indian River.....	8.0	5,000
Juneau Local Roads.....	7.0	17,000
Juneau-Eagle River.....	33.0	5,000
Unuk River Boundary.....	22.0	10,000
Taku Landing Boundary.....		
	131.0	75,000
<b>Southwestern Alaska:</b>		
Seward-Kenai Lake.....	14.0	5,000
Mile 29-Sunrise-Hope.....	70.0	20,000
Talkeetna-Cache Creek.....	42.0	100,000
Alaska Peninsula.....	37.0	25,000
Knik-Willow Creek.....	44.0	20,000
Cold Bay Road.....	25.0	15,000
Anchorage-Eagle River.....	10.0	10,000
Rainy Pass Trail.....	300.0	5,000
Palmer-Mile 26.....	11.0	5,000
	553.0	210,000

BOARD OF ROAD COMMISSIONERS

Estimate of funds, 1923—Cont

Name of route.
Valdez-Chitina-Fairbanks.....
Copper River Valley:
McCarthy-Nizina.....
Mile 39-Katalla.....
Gulkana-Chistochina.....
Strelina-Kuskulana.....
Yukon District:
Fairbanks-Fort Gibbon.....
Fairbanks Local Roads.....
Chatanika-Circle.....
Trails.....
Ruby-Poorman.....
Ophir-McGrath.....
Lignite-Kantishna.....
Rampart-Hot Springs.....
Fort Yukon-Circle.....
Earle-40 mile-70 mile.....
Nome District:
Existing roads and trails.....
Davidson's Landing-Candle.....

SUMMARY.

Southeastern.....
Southwestern.....
Richardson Road.....
Copper River Valley.....
Yukon Valley.....
Seward Peninsula.....
Total.....
Average per mile, \$229.14.

ECONOMIC PROGRESS.

The resources of the Territory, in spite of the value of products to date, are yet only in the development. Important resources still exist basic products of the Territory, that is, minerals. The continued development and production of fisheries is certain. With increase in population development in agriculture. The rarely by will always be notable in the markets of the world. Minerals are being produced in the following: Copper, gold, silver, coal, lead, tin, platinum, iron, and petroleum. The high prices, now being an obstacle in the continued working and development of the great placer deposits in Alaska. has continued in southeastern Alaska, but undoubtedly decreased prices and the return of new mines are to be expected in the interior. Kuskokwim at Nixon Forks has made substantial interest and with the completion of the Government in the past year. The deposits of the Kantishna development can be looked for. The mining of

portion of this burden as a part of her own  
 int in connection with these appropriations is  
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 us follows:

Estimate of funds, 1923.

Name of route.	Mileage.	Amount.
.....	13.5	\$10,000
.....	47.5	25,000
.....	8.0	5,000
.....	7.0	3,000
.....	33.0	17,000
.....	.....	5,000
.....	22.0	10,000
.....	.....	.....
.....	131.0	75,000
.....	.....	.....
.....	14.0	5,000
.....	70.0	20,000
.....	42.0	100,000
.....	37.0	25,000
.....	44.0	20,000
.....	25.0	15,000
.....	10.0	10,000
.....	300.0	10,000
.....	11.0	5,000
.....	.....	.....
.....	553.0	210,000

Estimate of funds, 1923—Continued.

Name of route.	Mileage.	Amount.
Valdez-Chitina-Fairbanks.....	465	\$250,000
Copper River Valley:		
McCarthy-Nizina.....	20 0	25,000
Mile 39-Katalla.....	40 0	5,000
Gulkana-Chistochina.....	40.0	40,000
Strelna-Kuskulana.....	16 0	5,000
.....	116.0	75,000
Yukon District:		
Fairbanks-Fort Gibbon.....	148.0	10,000
Fairbanks Local Roads.....	82.0	20,000
Charanika-Circle.....	130.0	90,000
Trails.....	1,700.0	15,000
Ruby-Poorman.....	90.0	60,000
Ophir-McGrath.....	40.0	50,000
Lignite-Kantishna.....	75.0	100,000
Rampart-Hot Springs.....	60.5	50,000
Fort Yukon-Circle.....	80.0	25,000
Eagle-40 mile-70 mile.....	79.5	50,000
.....	2,485.0	470,000
Nome District:		
Existing roads and trails.....	1,352.0	20,000
Davidson's Landing-Candle.....	155.0	100,000
.....	1,487.0	120,000

SUMMARY.

Southeastern.....	131.0	\$75,000
Southwestern.....	553.0	210,000
Richardson Road.....	465.0	250,000
Copper River Valley.....	116.0	75,000
Yukon Valley.....	2,485.0	470,000
Seward Peninsula.....	1,487.0	120,000
Total.....	5,237.0	1,200,000

Average per mile, \$229.14.

ECONOMIC PROGRESS.

The resources of the Territory, in spite of the imposing aggregate  
 value of products to date, are yet only in the beginning of their de-  
 velopment. Important resources still exist untouched among the  
 basic products of the Territory, that is, minerals and forest products.  
 The continued development and production of Alaska's wonderful  
 fisheries is certain. With increase in population will come substan-  
 tial development in agriculture. The rarely beautiful furs of Alaska  
 will always be notable in the markets of the world.

Minerals are being produced in the following order of value:  
 Copper, gold, silver, coal, lead, tin, platinum, paladium, marble, gyp-  
 sum, and petroleum. The high prices, now happily over their peak,  
 were an obstacle in the continued working and the further develop-  
 ment of the great placer deposits in Alaska. Lode mining of gold  
 has continued in southeastern Alaska, but under the same handicap.  
 With decreased prices and the return of miners to Alaska, lode  
 mines are to be expected in the interior. One lode mine in the  
 Kuskokwim at Nixon Forks has made substantial progress during  
 the past year. The deposits of the Kantishna are again exciting  
 interest and with the completion of the Government railroad, de-  
 velopment can be looked for. The mining of copper has continued,

can be hoped for with the present net. Coal is being mined and used in the Matanuska region and at along the railroad. Oil is being and under the new leasing law great old oil prospects of Alaska, notably Alaska Peninsula. The total mineral reaches the vast sum of \$460,000,000. g of great mineral resources, making

of canned salmon is the principal quantities of halibut, cod, herring, and ported. The fisheries are principally north Pacific and Bristol Bay. Eco-sale of the cheaper grades of canned seriously affected the canning industry scussion of these economic conditions port. However, it is certain that a in volume and so choice in quality as l persist and be a continued source of

er resources, production from which tant. The spruce and hemlock on the and southwestern Alaska are of prime stands of spruce are found in the in-Cottonwood is also found widely dis-ber is not of high quality, it is used t market exists for it. With the de-ter powers of especially southwestern rable growth of the wood pulp indus-small mill began operating in south-1921. With the establishment of the a will come the substantial prosperity industry.

ning has been made in Alaska. Where o the farmer, potatoes, turnips, rutar-ies and the hardier cereals are readily ve been shipped to the Yukon Valley. d, consequently, a more extensive mar-likely to be extended. Farm products exported for sale in the United States. Alaska farm lands is therefore inexor-astries of the Territory, chiefly mining further development of Alaska's min-a market, at all comparable with those ided.

s a substantial progress; herds are es-nsinsula and in the lower Yukon and old-storage plants have been established y two thousand carcasses were exported which reindeer moss is found, as well caribou now existing in Alaska, give ve growth of the reindeer herds. The ide a valuable food supply to the pres-

ent interior population. Moose, caribou, mountain sheep, goats, ducks, geese, wild swan, grouse, and ptarmigan are found in nearly all parts of the Territory.

The fur production, stimulated by the unusually high prices during the war, reached a large total value. Mink, muskrat, lynx, ermine, fox, and otter reached the outside market from Alaska and are always distinguished by their rare beauty. Seal, formerly produced from the Pribilof Islands, has been in recent years completely protected. Beaver and marten are still protected and have increased very considerably.

#### COMMERCIAL STATISTICS.

The commerce of the Territory, while suffering a decline amounting to more than \$1,000,000 in value, shows a much better condition of trade than that during the last year, when the slump was over seventeen million from that of 1918. The balance of trade in the Territory's favor is about \$1,500,000 more than in 1919. A more stable condition is noted in that the imports and exports have been about the same for the last two years.

#### Total commerce of Alaska for the calendar year of 1920.

##### IMPORTS.

Merchandise from the United States.....	\$36, 876, 855
Merchandise from foreign ports.....	1, 512, 118
Gold and silver from foreign ports.....	29, 500
<b>Total imports.....</b>	<b>38, 418, 473</b>

##### EXPORTS.

Merchandise to the United States.....	60, 929, 241
Merchandise and gold and silver to foreign ports.....	1, 539, 735
Domestic gold and silver to United States.....	7, 413, 751
Foreign gold and silver to United States.....	28, 695
<b>Total exports.....</b>	<b>69, 911, 422</b>
<b>Grand total, exports and imports.....</b>	<b>108, 329, 895</b>

#### Financial summary.

Amount expended on all projects to June 30, 1921, including receipts from sales, etc.:	
During fiscal years 1905-1920.....	\$5, 213, 072. 36
Fiscal year 1918 (omitted in report).....	145. 20
By Treasurer United States.....	3, 068. 66
1908-9 and Orchard adjustment.....	19, 802. 10
Fiscal year 1921.....	569, 177. 10
	<b>\$5, 805, 265. 42</b>
Alaska special fund fiscal year 1920.....	101, 184. 56
Alaska special fund fiscal year 1921.....	97, 611. 98
	<b>198, 796. 54</b>
Total for new work.....	3, 727, 249. 69
Total for maintenance.....	2, 276, 812. 27
Total expended.....	<b>6, 004, 061. 96</b>
Balance available.....	537, 407. 13
<b>Grand total to be accounted for.....</b>	<b>6, 541, 469. 09</b>

## Appropriations to June 30, 1921:

Construction and maintenance of military and post roads, bridges, and trails, Alaska	\$3,830,000.00
Wagon roads, bridges, and trails, Alaska fund	2,422,871.88
Increase of compensation, military establishment	1,035.20
Receipts from sales, etc.	48,694.14
Refunds to Alaska fund	1,326.68
Refunds to Army appropriations	291.80
Reimbursement from Navy Department	3,976.19
Sales to accrue to Alaska fund	3,958.65
Funds contributed by Territory of Alaska for public roads, bridges, trails, and ferries, Alaska special fund	229,264.55
<b>Total</b>	<b>6,541,469.09</b>

Fiscal year ending June 30.	1917	1918	1919	1920	1921
Expended for improvement and new work	\$374,738.90	\$322,591.73	\$114,829.11	\$185,190.66	\$432,243.90
Expended for maintenance	202,009.00	274,573.65	184,195.15	173,410.59	234,545.18
<b>Total expended</b>	<b>576,747.90</b>	<b>597,165.38</b>	<b>299,024.26</b>	<b>358,601.25</b>	<b>666,789.08</b>
Appropriated by Army act	500,000.00	500,000.00	100,000.00	100,000.00	350,000.00
Allotted from Alaska fund	76,716.15	272,020.18	52,372.31	124,992.96	218,237.10
Contributed by Territory of Alaska				115,517.94	113,746.61
Increase of compensation, military establishment		* 145.20			940.00
<b>Total</b>	<b>576,716.15</b>	<b>772,165.38</b>	<b>152,372.31</b>	<b>340,510.90</b>	<b>682,923.71</b>

\* Includes \$145.20 omitted in 1918 report.

\* Omitted in 1918 report.

July 1, 1920, balance available	\$586,242.95
Amount appropriated by Army act approved June 30, 1921	425,000.00
Amount accrued to Alaska fund during fiscal year 1921	137,122.14
Amount contributed by Territory of Alaska	50,579.47
Receipts from sales, etc., during fiscal year 1921	4,311.65
Increase of compensation, military establishment, 1921	940.00

<b>Total resources</b>	<b>1,204,196.21</b>
June 30, 1921, amount expended during fiscal year, including receipts from sales, etc.:	
New work	\$432,243.90
Maintenance	234,545.18
	<b>666,789.08</b>

July 1, 1921, balance unexpended	537,407.13
July 1, 1921, outstanding liabilities	110,000.00

July 1, 1921, balance available	427,407.13
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Amount available from Army act approved June 30, 1921	425,000.00
Amount available from Alaska fund on June 30, 1921	77,980.47
Amount available from funds contributed by the Territory of Alaska, June 30, 1921	30,468.01
Receipts from sales, etc., during fiscal year 1921	3,958.65

Amount available for fiscal year ending June 30, 1922	537,407.13
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Amount (estimated) required to be appropriated for completion of existing project	* 10,000,000.00
Amount that can be profitably expended in fiscal year ending June 30, 1923:	

For new work	* 698,500.00
For maintenance	* 501,500.00

<b>Total</b>	<b>* 1,200,000.00</b>
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\* Exclusive of available funds.

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ANNUAL REPORT OF THE ALASKA  
FISCAL YEAR 1921REPORT UPON THE CONSTRUCTION  
AND MAINTENANCE  
AND POST ROADS, BRIDGES,  
AND OF OTHER ROADS,  
BRIDGES, FERRIES, TRAILERS,  
AND RELATED WORKS IN THE  
Territory of ALASKA.1921  
PART IIBOARD OF ROAD COMMISSIONERS  
FOR ALASKAWASHINGTON  
1921

of military and post roads,	\$3,830,000.00
ts. Alaska fund	2,422,871.88
tary establishment	1,085.20
	48,694.14
	1,326.68
ns	291.80
partment	3,976.19
	3,958.65
ry of Alaska for public roads,	
Alaska special fund	229,264.55
	6,541,469.09

1917	1918	1919	1920	1921
374,738.90	\$322,591.73	\$114,829.11	\$185,190.66	\$432,243.90
202,009.00	1274,573.65	184,195.15	173,410.59	234,545.18
576,747.90	1597,165.38	299,024.26	358,601.25	666,789.08
500,000.00	500,000.00	100,000.00	100,000.00	350,000.00
76,716.15	272,020.18	52,372.31	124,992.96	218,237.10
			115,517.94	113,746.61
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8 report.

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und on June 30, 1921	77,980.47
contributed by the Territory of	
-----	30,468.01
fiscal year 1921	3,958.65

-----	537,407.13
-------	------------

-----	10,000,000.00
be appropriated for completion of	
ended in fiscal year ending June	
-----	* 698,500.00
-----	* 501,500.00
-----	* 1,200,000.00

\* \* \* \*

ANNUAL REPORT OF THE ALASKA ROAD COMMISSION  
FISCAL YEAR 1921

REPORT UPON THE CONSTRUCTION  
AND MAINTENANCE OF MILITARY  
AND POST ROADS, BRIDGES, TRAILS;  
AND OF OTHER ROADS, TRAMWAYS,  
BRIDGES, FERRIES, TRAILS, AND RE-  
LATED WORKS IN THE TERRITORY  
OF ALASKA

1921  
PART II



BOARD OF ROAD COMMISSIONERS  
FOR ALASKA

WASHINGTON  
1921



TABLE I.

Expenditures by Alaska Road Commission from amounts appropriated by Army Acts and allotted from Alaska Fund for the fiscal years 1905-1920.

Account number.	Name of Route.	Mileage.				Expenditures.		
		Wagon road.	Sled road.	Trail.	Total.	Maintenance.	Construction.	Total.
1	Prince of Wales Island.....	4		7	11	\$ 10,833.90	\$ 44,815.88	\$ 55,649.78
2	Juneau-Eagle River.....	16		14	30	22,676.86	87,820.15	110,497.01
2A	Auk Bay Extension.....	2			2	2,300.30	41,985.83	44,286.13
2B	Mendenhall Glacier Extension.....	3			3			
3	Haines-Pleasant Camp.....	47½			47½	32,699.32	188,965.39	166,664.71
4A	Donnelly-Washburn.....		55		55	13,514.66	18,865.40	82,380.06
4B	Valdez-Ernestine.....	68			68	213,412.03	270,382.13	483,794.16
4C	Ernestine-Willow Creek.....	29			29	56,836.98	87,115.64	143,952.57
4D	Willow Creek-Gulkana.....	36			36	94,844.45	157,619.56	252,464.01
4E	Gulkana-Sourdough.....	21½			21½	51,522.19	90,890.71	142,402.90
4F	Sourdough-168 Mile Post.....	18			18	54,889.06	64,354.74	119,244.60
4G	168 Mile Post-Delta River.....	88			88	55,186.19	111,359.77	166,545.96
4H	Delta River-McCarty.....	73½			73½	192,171.81	214,020.38	406,192.19
4I	McCarty-Richardson.....	20½			20½	86,195.10	69,587.20	155,782.30
4J	Richardson-Salchaket.....	30			30	70,926.23	119,419.59	190,345.82
4K	Salchaket-Fairbanks.....	40			40	64,204.22	162,740.47	226,944.69
5	Ester-Fort Gibbon.....	24	148		148	28,266.68	64,408.13	83,669.51
6A	Willow-Creek-Tonsina.....	15			15	17,695.16	63,310.72	81,005.85
6B	Tonsina-Chitina.....	15			15	31,630.42	123,246.38	154,826.80
7A	Summit-Cleary.....	11			11	4,873.73	19,192.97	24,066.70
7B	Fox-Olness.....	18			18	4,761.86	21,950.84	26,702.20
7C	Summit-Fairbanks Creek.....	11			11	1,832.04	12,928.60	14,810.64
7D	Ester Creek.....	18			18	5,445.61	21,775.53	27,221.14
7E	Vault Creek.....	2			2	172.87	4,323.83	4,496.20
7F	Vault-Creek-Treasure Creek.....	1½			1½	29.09	1,350.00	1,379.09
7G	Fairbanks-Gilmore.....	13			13	6,646.85	11,204.29	17,851.14
7H	Little Eldorado Creek.....	1½			1½	111.59	3,779.24	3,890.83
7I	Gilmore-Summit.....	6			6	4,895.89	6,787.81	11,683.70
7J	Fairbanks-Chena Hot Springs.....			64	64	272.34	4,945.49	5,217.83
7K	Olness-Livengood.....		54		54	9.09	12,058.30	12,067.89
7L	Chena-Ester.....	4			4			
7M	Fairbanks-Tanana.....	3			3			

8	Nome-Council.....	57		25	82	56,323.91	79,557.16	135,386.07
9	Rampart-Eureka.....	6½	21		27½	9,858.34	27,424.04	37,282.38
10	Seward-Kenai Lake.....	14			14	26,352.77	36,864.66	63,217.43
10A	Seward-Radio.....	1			1		6,470.04	6,470.04
11A	Eagle-O'Brien Creek.....	17			17	11,132.10	53,862.61	64,994.71
11B	O'Brien Creek-Forty Mile.....		30		30	2,340.88	14,035.19	16,376.07
11C	Steel Creek-Jack Wade.....	2½			2½	346.50	4,632.50	4,979.00
11D	Canyon Creek-Walker's Fork.....		10		10		4,110.00	4,110.00
11E	Eagle-Seventy Mile.....			20	20	99.50	3,554.59	3,654.09
12	Mile 34-ANRR-Hope.....	31	9		40	16,239.03	27,953.63	44,192.66
13	Nome-Dexter.....							
13A	Nome-Bessie.....	3½			3½	19,760.21	26,790.80	46,551.01
13B	Bessie-Banner.....	3½			3½	8,388.98	14,372.53	23,261.51
13C	Bessie-Little Creek.....	1½			1½	3,526.41	1,733.98	5,260.39
13D	Bessie-Dry Creek.....	1½			1½	1,506.73	1,711.67	3,218.40
13E	Dry Creek-Newton.....	½			½	155.56	399.88	555.44
13F	Nome-Osborne.....	8			8	7,633.06	4,003.79	11,636.85
13G	Grass Gulch.....	2			2	338.94	786.79	1,125.73
13H	Center Creek.....	1½			1½	1,430.15	103.65	1,533.80
13I	Nome River.....	5			5	3,144.41	5,047.21	8,191.62
13J	Wonder-Flat Creek.....	2			2	2,633.22	170.50	2,803.72
13K	Bessie-Buster.....	7½			7½	6,855.23	7,915.47	14,770.70
14	Sitka-Indian River.....	3½			3½	2,252.94	7,337.72	9,590.66
15	Circle-Miller House.....	49			49	23,555.43	91,761.69	115,317.12
16	Chatanika-Miller House.....		81		81	6,886.68	14,208.94	21,095.62
17	Fort Gibbon-Kaltag.....			257	257	3,413.38	21,978.06	25,391.44
17A	Lewis Landing-Dishkaket.....			108	108		483.37	483.37
17B	Nulato-Dishkaket.....			90	90	250.00	485.88	735.88
18	Kaltag-Solomon.....			248½	248½	15,873.72	23,024.79	38,903.51

3	James-Pleasant Camp	3 1/2	55	55	13,514.66	18,865.40	32,380.06
4A	Donnelly-Washburn	63		63	213,412.03	270,332.13	483,794.16
4B	Valdez-Ernestine	29		29	56,836.93	87,115.64	143,952.57
4C	Ernestine-Willow Creek	36		36	94,844.45	157,619.56	252,464.01
4D	Willow Creek-Gulkana	21 1/2		21 1/2	51,522.19	90,830.71	142,402.90
4E	Gulkana-Sourdough	18		18	54,839.06	64,354.74	119,244.60
4F	Sourdough-168 Mile Post	38		38	55,156.19	111,359.77	166,545.96
4G	168 Mile Post-Delta River	73 1/2		73 1/2	192,171.31	214,020.38	406,192.19
4H	Delta River-McCarty	20 1/2		20 1/2	86,195.10	69,587.20	155,782.30
4I	McCarty-Richardson	30		30	70,926.23	119,419.59	190,345.82
4J	Richardson-Salchaket	40		40	64,204.22	162,740.47	226,944.69
4K	Salchaket-Fairbanks	148		148	29,266.68	64,493.13	83,669.51
5	Ester-Fort Gibbon	24		24	17,695.16	33,310.72	51,005.88
6A	Willow-Creek-Tonsina	15		15	31,550.42	128,246.38	154,826.50
6B	Tonsina-Chitina	11		11	4,878.73	19,132.97	24,066.70
7A	Summit-Cleary	18		18	4,751.86	21,950.84	26,702.20
7B	Fox-Olness	11		11	1,832.04	12,928.60	14,810.64
7C	Summit-Fairbanks Creek	13		13	5,445.61	21,775.53	27,221.14
7D	Ester Creek	2		2	172.37	4,323.83	4,496.20
7E	Vault Creek	1 1/2		1 1/2	29.09	1,350.00	1,379.09
7F	Vault-Creek-Treasure Creek	13		13	6,646.85	11,204.29	17,851.14
7G	Fairbanks-Gilmore	1 1/2		1 1/2	111.59	3,779.24	3,890.83
7H	Little Eldorado Creek	6		6	4,895.89	6,787.81	11,683.70
7I	Gilmore-Summit	64	64	64	272.34	4,945.49	5,217.83
7J	Fairbanks-Chena Hot Springs	54		54	9.09	12,058.80	12,067.89
7K	Olness-Livengood	4		4			
7L	Chena-Ester	3		3			
7M	Fairbanks-Tanana						

8	Nome-Council	57	25	82	56,328.91	79,557.16	135,386.07
9	Rampart-Eureka	6 1/2	21	27 1/2	9,858.34	27,424.04	37,282.38
10	Seward-Kenai Lake	14		14	26,362.77	36,864.66	63,217.43
10A	Seward-Radio	1		1		6,470.04	6,470.04
11A	Eagle-O'Brien Creek	17		17	11,132.10	53,582.61	64,994.71
11B	O'Brien Creek-Forty Mile		30	30	2,340.88	14,035.19	16,376.07
11C	Steel Creek-Jack Wade	2 1/2		2 1/2	346.50	4,632.50	4,979.00
11D	Canyon Creek-Walker's Fork		10	10		4,110.00	4,110.00
11E	Eagle-Seventy Mile			20	99.50	3,554.59	3,654.09
12	Mile 34-ANRR-Hope	31	9	40	16,239.03	27,953.63	44,192.66
13	Nome-Dexter						
13A	Nome-Bessie	3 1/2		3 1/2	19,760.21	26,790.80	46,551.01
13B	Bessie-Banner	3 1/2		3 1/2	8,888.98	14,372.53	23,261.51
13C	Bessie-Little Creek	1 1/4		1 1/4	3,526.41	1,733.98	5,260.39
13D	Bessie-Dry Creek	1 1/4		1 1/4	1,506.73	1,711.67	3,218.40
13E	Dry Creek-Newton	1 1/2		1 1/2	155.56	399.88	555.44
13F	Nome-Osborne	8		8	7,633.06	4,003.79	11,636.85
13G	Grass Gulch	2		2	338.94	786.79	1,125.73
13H	Center Creek	1 1/2		1 1/2	1,430.15	103.65	1,533.80
13I	Nome River	5		5	3,144.41	5,047.21	8,191.62
13J	Wonder-Flat Creek	2 1/2		2 1/2	2,633.22	170.50	2,803.72
13K	Bessie-Buster	7 1/2		7 1/2	6,855.23	7,915.47	14,770.70
14	Sitka-Indian River	3 1/2		3 1/2	2,252.94	7,337.72	9,590.66
15	Circle-Miller House	49		49	23,555.43	91,761.69	115,317.12
16	Chatanika-Miller House		81	81	6,886.68	14,208.94	21,095.62
17	Fort Gibbon-Kaltag			257	3,413.38	21,978.06	25,391.44
17A	Lewis Landing-Dishkaket			108		483.37	483.37
17B	Nulato-Dishkaket			90	250.00	485.88	735.88
18	Kaltag-Solomon	248 1/2		248 1/2	15,378.72	23,024.79	38,903.51
19	Kern Creek-Knik	86		86	3,615.73	23,205.15	26,820.88
19A	Kenai Lake Kern Creek	40		40			
19B	Mie 27-Mile 29	2		2			
19C	Kenai Lake- Mile 27 ANRR	7		7			
19D	Kern Creek Indian Creek						
20A	Knik-Susitna		30	30	629.59	7,807.85	8,437.44
20B	Susitna-Rainy Pass		127	127	579.49	27,730.41	28,359.90
20C	Rainy Pass-Tacotna		130	130	417.89	12,009.07	12,426.96
20D	Tacotna-Kaltag		145	145	38.60	29,547.98	29,586.58
20E	Susitna-McDougal		35	35			
20F	McDougal-Cache Creek		30	30	347.10	19,318.11	19,665.21
20G	Lake View R. H. McDougal		15	15			
21	Unalaklik-St. Michael		65	65	2,344.08	2,602.63	4,946.71
22	Hot Springs-Sullivan Creek	9		9	4,819.53	26,350.66	31,664.19
23A	Chatanika-Beaver		120	120		5,805.81	5,805.81
23B	Beaver-Chandalar		75	75	2,036.05	21,333.17	23,419.22
24	Mile 29 ANRR-Moose Pass	15	15	30	10,222.88	33,614.25	43,837.13
25A	Cripple River	12		12	3,033.67	2,957.97	5,991.64

TABLE I.—Continued.

Expenditures by Alaska Road Commission from amounts appropriated by Army Acts and allotted from Alaska Fund for the fiscal years 1905-1920.—Continued.

Account number.	Name of Route.	Mileage.				Expenditures.		
		Wagon road.	Sled road.	Trail.	Total.	Maintenance.	Construction.	Total.
25B	Penny River.....	1½			1½	205.05	1,076.03	1,281.08
25C	Nome-Wireless.....	½			½	156.23	755.06	911.29
25D	Mouth of Center Creek.....	2			2	4,498.62		4,498.62
25E	Submarine Paystreak.....	1			1	1,935.57	22,617.63	24,553.20
25F	Anvil-Glacier.....	3			3	4,334.08	7,328.86	11,662.94
25G	Snake River Extension.....	3			3	3,523.69	3,636.62	7,160.31
25H	Otter Creek.....	1½			1½	652.98	1,149.54	1,802.52
26	Candle-Candle Creek.....	5			5	4,446.43	20,199.60	24,646.03
27	Deering-Imachuk.....	25			25	3,396.34	17,754.69	21,151.03
28	Dahl Creek-Candle.....			140	140	1,284.88	4,944.97	6,229.85
29	Fort Gibbon-Koyukuk.....			100	100	1,024.65	8,142.11	9,166.76
30	Hot Springs Landing-Eureka.....	24			24	8,522.51	12,395.01	20,917.52
31	Salchaket-Caribou Creek.....		46		46	713.93	8,166.98	8,880.91
32A	Tacotna-Flat Creek.....			87	87	169.10	5,437.29	5,606.39
32B	Iditarod-Flat Creek.....	8			8	8,947.66	16,114.26	25,061.92
32C	Iditarod-Ophir.....			90	90			
33A	Otter Creek-Towpath.....			22	22		448.23	448.23
33B	Summit-Otter Creek.....	6			6	4,447.66		4,447.66
34	Iditarod-Dishkaket.....		30	68	98	100.00	4,730.98	4,830.98
35	Knik-Willow Creek.....	34	2		36	33,100.33	34,722.48	67,823.31
35A	Archangel Extension.....	2			2	1,133.35	1,134.00	2,267.35
35B	Mile 26½-Palmer.....	6	2		8		11,015.48	11,015.48
35C	Palmer-Matanuska River.....	3			3	2,670.83	22,641.75	25,312.58
36	Valdez-Mineral Creek.....			5	5		2,208.29	2,208.29
37	Topkok-Candle.....			141	141		816.56	816.56
38A	Ruby-Long Creek.....	30			30	23,486.33	143,695.76	167,182.09
38B	Long Creek-Cripple City.....			60	60	221.70	3,970.96	4,192.66
38C	Ophir-Cripple.....			50	50		699.00	699.00
38D	Tacotna-Ophir.....	7½		17½	25			
39	Juneau-Sheep Creek (Thane).....	3			3	16,214.93	25,590.13	41,805.06
40	Douglas-Gastineau Channel.....	2			2	1,527.40	11,917.72	13,445.12
41	Klery Creek.....	1			1	266.50	2,505.62	2,772.12
42	St. Michael-Kotlik.....			70	70	1,274.30	8.00	1,282.30
43	Petersburg-Scow Bay.....	5		1	6	5,968.56	2,203.03	8,171.65
44	Skagway Valley.....	2½			2½	2,320.83	7,082.42	10,303.30

45	Silver Bow Basin.....	4			4	16,027.90	2,026.37	18,054.27
46	Kantishna.....			76	76		571.63	4,571.63
47	Coldfoot-Wiseman.....		11		11		5,000.00	5,000.00
48B	Iliamna Bay-Iliamna Lake.....	10		2	12	328.50	6,303.27	7,137.77
49	Davidson's Landing-Taylor.....	24			24	198.29	5,713.17	5,911.46
50	Stikine River.....			10	10		2,256.75	2,256.75
51	Talketna-Cache Creek.....		47		47	254.50	4,634.52	4,889.02
52	Ketchikan-Ward's Cove.....						6,301.98	6,301.98
53	Eagle-Circle.....					206.00		206.00
54	Chisana-Nizina.....			78	78	500.00	3,349.11	3,849.11
55	Kenai Lake-Kenai.....			110	110		301.30	301.30
56	Tasuna.....						1,058.14	1,058.14
57	McCarthy-Nizina.....						26,277.66	26,277.66
58	Hyder-Salmon River.....						63.50	63.50
59	Fairbanks Bridge.....					330.30	54,449.30	54,829.60
60	Valdez Dike.....						56,065.98	56,065.98
61	Strelna-Kuskulana.....						5,086.13	5,086.13
62	Dime Creek Corduroy.....							
63	Brook's Terminal.....					2,368.45	6,611.46	8,979.91
64	Cripple-Lewis Landing.....			60	60			
65	Gulkana-Eagle.....			262	262			
66	Matanuska-Chickaloon.....			38	38		353.75	353.75
67	Penny River-Teller.....			70	70			
68*	Flagging Trails.....					40,927.29		40,927.29
69	Gastineau Channel Bridge.....						4,689.80	4,689.80
70	Miscellaneous surveys and reconnaissances.....						3,338.06	3,338.06

26	Deering-Inmachuk			140	140	1,024.65	8,142.11	20,917.52
27	Dahl Creek-Candle			100	100	8,522.51	12,395.01	8,880.91
28	Fort Gibbon-Koyukuk	24			24	713.93	8,166.98	5,606.39
29	Hot Springs Landing-Eureka		46		46	169.10	5,437.29	25,061.92
30	Salchaket-Caribou Creek			87	87	8,947.66	16,114.26	448.23
31	Tacotna-Flat Creek	8			8			4,447.66
32A	Iditarod-Flat Creek			90	90	100.00	4,730.98	4,830.93
32B	Iditarod-Ophir			22	22		34,722.48	67,823.31
32C	Otter Creek-Towpath	6			6		1,134.00	2,267.35
33A	Summit-Otter Creek		30	68	98	33,100.83	34,722.48	67,823.31
33B	Iditarod-Dishkaket	34	2		36	1,133.35	11,015.48	11,015.48
34	Knik-Willow Creek	2			2		22,641.75	25,312.58
35	Archangel Extension	6	2		8	2,670.83	2,208.29	2,208.29
35A	Mile 26½-Palmer	3			3		816.56	816.56
35B	Palmer-Matanuska River			5	5		143,695.76	167,182.09
35C	Valdez-Mineral Creek	3		141	141	23,486.33	3,970.96	4,192.66
36	Topkok-Candle	30			30	221.70	699.00	699.00
37	Ruby-Long Creek			60	60			41,805.06
38A	Long Creek-Cripple City			50	50			18,445.12
38B	Ophir-Cripple			17½	25		25,590.13	2,772.12
38C	Tacotna-Ophir	7½			3	16,214.98	11,917.72	2,772.12
38D	Janeau-Sheep Creek (Thane)	3			2	1,527.40	2,505.62	1,282.30
39	Douglas-Gastineau Channel	2			1	266.50	8.00	5,171.65
40	Klery Creek	1		70	70	1,274.30	2,203.09	10,303.30
41	St. Michael-Kotlik	5		1	6	5,968.56	7,082.42	
42	Petersburg-Scow Bay		2½		2½	2,320.83		
43	Skagway Valley							
44								

ALASKA ROAD COMMISSION.

45	Silver Bow Basin	4			4	16,027.90	2,026.37	18,054.27
46	Katishna			76	76		511.63	4,571.63
47	Goldfoot-Wiseman		11		11		5,000.00	5,000.00
48B	Iliamna Bay-Iliamna Lake	10		2	12	328.50	6,893.27	7,137.77
49	Davidson's Landing-Taylor	24			24	198.29	5,713.17	5,911.46
50	Stikine River			10	10		2,256.75	2,256.75
51	Talkeetna-Cache Creek		47		47	254.50	4,634.52	4,889.02
52	Ketchikan-Ward's Cove						6,801.98	6,801.98
53	Eagle-Circle					206.30		206.30
54	Chisana-Nizina			78	78	500.00	3,349.11	3,849.11
55	Kenai Lake-Kenai			110	110		301.30	301.30
56	Tasnuna						1,058.14	1,058.14
57	McCarthy-Nizina						26,277.66	26,277.66
58	Hyder-Salmon River						63.50	63.50
59	Fairbanks Bridge					380.30	54,449.30	54,829.60
60	Valdez Dike						56,065.98	56,065.98
61	Strelna-Kuskulana						5,086.13	5,086.13
62	Dime Creek Corduroy							
63	Brook's Terminal					2,368.45	6,611.46	8,979.91
64	Cripple-Lewis Landing			60	60			
65	Gulkana-Eagle			262	262			
66	Matanuska-Chickaloon			35	35		353.75	353.75
67	Penny River-Teller			70	70			
68*	Flagging Trails					40,927.29		40,927.29
69	Gastineau Channel Bridge						4,689.30	4,689.30
70	Miscellaneous surveys and reconnaissances						3,338.06	3,338.06
73	Marshall Road	3			3	65.00	4,982.75	5,047.75
74	Yukon-Koyukuk Reconnaissance							
	Sub-totals					1,586,534.68	3,350,303.92	4,936,838.60
71	Trucks							18,757.78
72	Office							257,475.98
	Grand total							\$5,213,072.36

\* See Table IV for mileage.

ANNUAL REPORT OF THE ALASKA ROAD COMMISSION. 11

12 ANNUAL REPORT OF THE ALASKA ROAD COMMISSION.

TABLE II.

F. Y.	Expenditures.			Mileage.			
	Army Act.	Alaska Fund.	Total.	Wagon road.	Sled road.	Trail.	Total.
1905		\$ 28,000.00	\$ 28,000.00*			133	133
1906	\$ 118,172.09	57,420.77	175,592.86*	76	132		208
1907	197,980.91	148,814.79	346,795.70†	90	251	119	460
1908	243,892.30	118,080.02	361,972.32†	236	14	13	313
1909	236,418.30	147,204.35	383,617.65†	263	24	205	497
1910	237,498.50	102,898.29	340,396.79†	39	86	201	326
1911	100,000.00	166,777.95	266,777.95	41	27	446	514
1912	150,001.23	167,302.49	317,303.72	29	65	445	539
1913	125,000.73	228,117.56	353,118.29	33	18	615	666
1914	153,173.94	170,688.37	323,862.31	26	-26 <sup>1</sup>	11	11
1915	128,339.28	157,915.84	284,755.12	14	-13 <sup>1</sup>	29	30
1916	165,011.73	135,708.89	300,720.62	17	51	-7 <sup>1</sup>	62
1917	500,081.75	76,716.15	576,747.90	60	-6 <sup>1</sup>	81	135
1918	325,000.00	272,020.18	597,020.18	26	50	55	131
1919	246,651.95†	52,372.31	299,024.26	25	-37 <sup>1</sup>	877	865
1920	132,423.73	124,992.96	257,416.69				
Totals	\$3,058,041.44†	\$2,155,030.92	\$5,213,072.36	1,031	636	3,223	4,890

\* To October 31st.  
 † To September 30th.  
 ‡ Includes \$3,976.19 reimbursement from Navy Department account Seward-Radio road.  
 ¶ Total congressional appropriations, \$3,055,000.00. Excess of \$3,041.44 due to following adjustments:  
 Additions:  
 Navy Department reimbursement.....\$3,976.19  
 Repayments, correction vouchers..... 291.80  
 \$4,267.99  
 Deductions:  
 Disbursing officer shortage.....\$1,226.55  
 Total addition.....\$3,041.44  
 And includes the following adjustments:  
 Additions:  
 Receipts sales.....\$48,694.14  
 Repayments, correction vouchers..... 1,326.68  
 \$50,020.82  
 Deductions:  
 Disbursing officer shortage.....\$18,575.55  
 Total addition.....\$31,445.27  
<sup>1</sup> Transferred to a different classification.

TABLE III.

Expenditures supervised by Alaska Road Commission from other sources.

(1)	(2)	(3)	(4)	(5)
Account number	Territory.	Department Agriculture	Total	Grand total, Table I included.
1	\$ 7,995.98	\$ 40,009.25	\$ 48,005.23	\$ 103,655.01
2A	14,870.66	27,123.35	41,994.01	86,280.14
4B				
4C			100,000.00 <sup>e</sup>	1,010,911.37
4D			30,700.63 <sup>e</sup>	
65				
7D	143.75		143.75	27,364.89
8	19,244.90		19,244.90	155,130.97
9	152.00		152.00	37,434.38
10	5,000.00	7,237.00	12,237.00	75,454.43
11A	800.80		800.80	65,795.51
13A	500.00		500.00	47,051.01
13B	254.00		254.00	23,515.51
13F	250.00		250.00	11,856.85
13I	130.75		130.75	8,322.37
13K	250.00		250.00	15,020.70

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TABLE III.—Contd.

(1)	(2)	(3)
Account number.	Territory.	Department Agriculture
15	4,598.63	
16	1,000.00	
22	2,974.18	
25A	100.00	
25G	89.00	
26	8,097.52	
27	2,000.00	
30	463.71	
38A	2,324.59	
43	1,500.00	11,644.14
45	2,000.00	
52	19,318.44	89,576.93
58		27,112.00
62	3,160.23	
63	2,542.34	
65 <sup>a</sup>		
68	1,423.03	
74		
Miscellaneous		
Totals	\$101,184.56	\$202,702.67
Total, Table I		
Total, Table III (Column 4)		
Grand total		

<sup>a</sup> Special appropriation f. y., 1901, master General by Major Abercrombie.  
<sup>b</sup> Special appropriations f. y., 1904-5, of Engineers prior to organization of Alaska.  
<sup>1</sup> Road tax, labor and local contributions.  
<sup>e</sup> Included with 4B, 4C and 4D.

TABLE IV.

68	Flagging Trails.
	Nome to Unalaklik.....
	Nome locals.....
	Unalaklik-St. Michael.....
	St. Michael-Kotlik.....
	Nome-Taylor.....
	Taylor-Arctic H. S.....
	Teller-Mary's Igloo.....
	Candle-Deering.....
	Candle-Keewalik.....
	Keewalik-Nazurik Channel (mouth of Kobuk River).....
	Kotzebue Riley Channel.....
	Kiana-Klery Creek.....
	Solomon-Casadepaga.....
	Isaacs Point-Dime Creek.....
	Keewalik to Mainland by Chamisso Island.....
	Dime Creek to Snyder's Cabin on Keewalik River.....
	Total.....

<sup>1</sup> In the table, page 2108 of annual report for 1,352 miles of flagged trails. This includes winter routes included in main Table I above. The 4,890 of Table I, therefore, is 712, including 100 m

NOTE—Each year many miles of trail are st is necessary for the guidance and safety of winter trails follow permanent routes; others are winter as conditions require. The foregoing additional m routes so staked where not enough work has been trail in main Table I above.

TABLE II.

Total.	Mileage.			Total.
	Wagon road.	Sled road.	Trail.	
\$ 28,000.00*			133	133
175,592.86*	76	132	208	208
346,745.70†	90	251	119	460
361,972.32†	286	14	13	313
383,617.65†	263	24	205	497
340,396.79†	39	86	201	326
266,777.95	41	27	446	514
317,308.72	29	65	445	539
353,118.29	33	18	615	666
323,862.31	26	-26 <sup>1</sup>	11	30
284,755.12	14	-13 <sup>1</sup>	29	62
300,720.62	17	51	-7 <sup>1</sup>	135
576,747.90	60	-6 <sup>1</sup>	81	131
597,020.18	26	50	55	131
299,024.26	25	-37 <sup>1</sup>	877	866
257,416.69				
\$5,213,072.36	1,031	636	3,223	4,890

ment from Navy Department account Seward  
tions, \$3,055,000.00. Excess of \$3,041.44 due to

bursement.....	\$3,976.19
ouchers.....	291.80
	\$4,267.99
re.....	\$1,226.55
	\$3,041.44
ing adjustments:	
	\$48,694.14
uchers.....	1,326.68
	\$50,020.82
e.....	\$18,575.55
classification.	\$31,445.27

TABLE III.

ised by Alaska Road Commission  
om other sources.

Fy.	Department Agriculture	Total	Grand total, Table I included.
1918	\$ 40,009.25	\$ 48,005.23	\$ 108,655.01
1919	27,123.35	41,994.01	86,280.14
		100,000.00 <sup>a</sup>	1,010,911.37
		30,700.63 <sup>b</sup>	
1920		143.75	27,364.89
1921		19,244.90	155,130.97
1922		152.00	37,434.38
1923		12,237.00	75,454.43
1924	7,237.00	300.80	65,795.51
1925		500.00	47,051.01
1926		254.00	23,515.51
1927		250.00	11,886.85
1928		130.75	8,322.37
1929		250.00	15,020.70

TABLE III.—Continued

(1)	(2)	(3)	(4)	(5)
Account number.	Territory.	Department Agriculture	Total.	Grand total. Table I included.
15	4,598.63		4,598.63	119,915.75
16	1,000.00		1,000.00	22,095.82
22	2,974.18		2,974.18	34,638.37
25A	100.00		100.00	6,091.64
25G	89.00		89.00	7,249.31
26	8,097.52		8,097.52	32,743.55
27	2,000.00		2,000.00	23,151.03
30	463.71		463.71	21,281.23
38A	2,324.59		2,324.29	169,406.98
43	1,500.00	11,644.14	13,144.14	21,315.79
45	2,000.00		2,000.00	20,954.27
52	19,318.44	89,576.93	108,895.37	115,697.95
58		27,112.00	27,112.00	27,175.50
62	3,160.28		3,160.28	3,160.28
63	2,542.34		2,542.34	11,522.25
65 <sup>a</sup>				
68	1,423.03		1,423.03	42,350.32
74			3,931.15 <sup>a</sup>	3,931.15
Miscellaneous			200,000.00 <sup>a</sup>	
Totals	\$101,184.56	\$202,702.67	\$638,519.01	\$2,349,303.23
Total, Table I.....				\$5,213,072.36
Total, Table III (Column 4).....				638,519.01
Grand total.....				\$5,851,591.37

<sup>a</sup> Special appropriation f. y., 1901, expended under Quarter-  
master General by Major Abercrombie.  
<sup>b</sup> Special appropriations f. y., 1904-5, expended under the Chief  
of Engineers prior to organization of Alaska Road Commission.  
<sup>c</sup> Road tax, labor and local contributions (est.).  
<sup>d</sup> Included with 4B, 4C and 4D.

TABLE IV.

68	Flagging Trails.	Mileage.		
		Perma- nent.	Sea- sonal.	Total.
	Nome to Unalaklik.....		76	76
	Nome locals.....		100	100 <sup>1</sup>
	Unalaklik-St. Michael.....		20	20
	St. Michael-Kotlik.....		25	25
	Nome-Taylor.....	115	25	140
	Taylor-Arctic H. S.....	10	7	17
	Teller-Mary's Igloo.....	20	32	52
	Candle-Deering.....	40		40
	Candle-Keewalik.....		8	8
	Keewalik-Nazurik Channel (mouht of Kobuk River).....		45	45
	Kotzebue Riley Channel.....		17	17
	Klana-Klery Creek.....	18		18
	Solomon-Casadepaga.....		34	34
	Isaacs Point-Dime Creek.....	34	16	50
	Keewalik to Mainland by Chamisso Island.....		35	35
	Dime Creek to Snyder's Cabin on Keewalik River.....		35	35
	Total.....	272	440	712 <sup>1</sup>

<sup>1</sup> In the table, page 2103 of annual report for 1920, expenditures are shown for 1,352 miles of flagged trails. This includes winter flagging of 740 miles of permanent routes included in main Table I above. The actual mileage in addition to the 4,890 of Table I, therefore, is 712, including 100 miles of Nome Locals.

NOTE—Each year many miles of trail are staked after snow has fallen. This is necessary for the guidance and safety of winter travel. Some of these staked trails follow permanent routes; others are winter cut-offs or vary from year to year as conditions require. The foregoing additional mileage includes routes or parts of routes so staked where not enough work has been done to warrant classification as trail in main Table I above.

REMARKS ON SUB-PROJECTS

*Route 1.* Turned over to the Department of Agriculture in co-operation with the Territory of Alaska, July 1, 1920. The funds of the Department of Agriculture are limited to projects in the Tongass and Chugach National Forests. This releases Alaska Road Commission funds for use in other parts of the Territory.

*Route 2.* (10 miles), Juneau to Duck River. Maintained and improved. Rehabilitation of balance begun.

*Route 2A.* Same remark applies as in Route 1.

*Route 2B.* Expenditure included in Route 2.

*Route 3.* Rehabilitation begun.

*Route 4A.* Maintained and improved.

*Route 4B.* Rehabilitation begun.

*Route 4C.* Rehabilitation begun.

*Route 4D.* Maintained and improved.

*Route 4E.* Maintained and improved.

*Route 4F.* Maintained and improved.

*Route 4G.* Maintained and improved.

*Route 4H.* Maintained and improved.

*Route 4I.* Maintained and improved.

*Route 4J.* Maintained and improved.

*Route 4K.* Maintained and improved.

*Route 5.* Includes \$13,000.00 from special appropriation fiscal year 1906. See Route 18. Maintained and improved.

*Route 6A.* Maintained and improved.

*Route 6B.* Maintained and improved.

*Route 7A.* Last expenditure in fiscal year 1917. Turned over to the Territory of Alaska.

*Route 7B.* Same remark applies as in Route 7A.

*Route 7C.* Same remark applies as in Route 7A.

*Route 7D.* Last expenditure in fiscal year 1919. Turned over to the Territory of Alaska.

*Route 7E.* Same remark applies as in Route 7A.

*Route 7F.* Same remark applies as in Route 7A.

*Route 7G.* Same remark applies as in Route 7A.

*Route 7H.* Same remark applies as in Route 7A.

*Route 7I.* Same remark applies as in Route 7A.

*Route 7J.* Last expenditure in fiscal year 1917. Rehabilitation begun.

*Route 7K.* Abandoned since const railway in favor of better route to Dunb

*Route 7L.* Expenditures included i

*Route 7M.* Expenditure included in

*Route 8.* Maintained and improved.

*Route 9.* Maintained and improved.

*Route 10.* Only 8 miles actually con of balance was turned over to the Dep in co-operation with the Territory of Alas ing 8 miles maintained and improved.

*Route 10A.* Turned over to the Nav

*Route 11A.* Maintained and improve

*Route 11B.* Last expenditure in fisca tion begun.

*Route 11C.* Maintained and improve

*Route 11D.* Last expenditure in fisca tion begun.

*Route 11E.* Last expenditure in fisca tion begun.

*Route 12.* Mile 34 to Lynx Creek to b  
*Route 24.* Balance maintained and impro

*Route 13.* Original route number fo designated 13A-13K.

*Route 13A.* Maintained and improve

*Route 13B.* Maintained and improve

*Route 13C.* Maintained and improve

*Route 13D.* Last expenditure in fisca tion begun.

*Route 13E.* Last expenditure in fiscal tion begun.

*Route 13F.* Maintained and improved

*Route 13G.* Last expenditure in fiscal tion begun.

*Route 13H.* Last expenditure in fis tained and improved.

*Route 13I.* Maintained and improved

*Route 13J.* Maintained and improved

*Route 13K.* Maintained and improved

*Route 14.* Last expenditure in fiscal tion begun.

*Route 15.* Maintained and improved.

*Route 16.* Maintained and improved.

*Route 17.* Maintained and improved.

*Route 17A.* Last expenditure in fiscal position not yet determined.

## SUB-PROJECTS

Department of Agriculture in  
of Alaska, July 1, 1920. The  
Agriculture are limited to projects  
National Forests. This releases  
for use in other parts of the

to Duck River. Maintained  
of balance begun.

plies as in Route 1.  
cluded in Route 2.

gun.

l improved.

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d improved.

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d improved.

00.00 from special appropriation

8. Maintained and improved.

nd improved.

nd improved.

iture in fiscal year 1917. Turned  
ka.

applies as in Route 7A.

applies as in Route 7A.

iture in fiscal year 1919. Turned  
ka.

applies as in Route 7A.

applies as in Route 7A,

applies as in Route 7A.

applies as in Route 7A.

applies as in Route 7A.

iture in fiscal year 1917. Rehabilitation

*Route 7K.* Abandoned since construction of Government  
railway in favor of better route to Dunbar.

*Route 7L.* Expenditures included in Route 7D.

*Route 7M.* Expenditure included in Route 7D.

*Route 8.* Maintained and improved.

*Route 9.* Maintained and improved.

*Route 10.* Only 8 miles actually constructed. Construction  
of balance was turned over to the Department of Agriculture  
in co-operation with the Territory of Alaska, July 1, 1920. Exist-  
ing 8 miles maintained and improved.

*Route 10A.* Turned over to the Navy Department.

*Route 11A.* Maintained and improved.

*Route 11B.* Last expenditure in fiscal year 1918. Rehabili-  
tation begun.

*Route 11C.* Maintained and improved.

*Route 11D.* Last expenditure in fiscal year 1909. Rehabili-  
tation begun.

*Route 11E.* Last expenditure in fiscal year 1918. Rehabili-  
tation begun.

*Route 12.* Mile 34 to Lynx Creek to be abandoned in favor of  
Route 24. Balance maintained and improved.

*Route 13.* Original route number for Nome local roads now  
designated 13A-13K.

*Route 13A.* Maintained and improved.

*Route 13B.* Maintained and improved.

*Route 13C.* Maintained and improved.

*Route 13D.* Last expenditure in fiscal year 1919. Rehabili-  
tation begun.

*Route 13E.* Last expenditure in fiscal year 1917. Rehabilita-  
tion begun.

*Route 13F.* Maintained and improved.

*Route 13G.* Last expenditure in fiscal year 1919. Rehabilita-  
tion begun.

*Route 13H.* Last expenditure in fiscal year 1917. Main-  
tained and improved.

*Route 13I.* Maintained and improved.

*Route 13J.* Maintained and improved.

*Route 13K.* Maintained and improved.

*Route 14.* Last expenditure in fiscal year 1919. Rehabilita-  
tion begun.

*Route 15.* Maintained and improved.

*Route 16.* Maintained and improved.

*Route 17.* Maintained and improved.

*Route 17A.* Last expenditure in fiscal year 1912. Final dis-  
position not yet determined.



*Route 17B.* Last expenditure in fiscal year 1914. Final disposition not yet determined.

*Route 18.* Last expenditure in fiscal year 1919. Includes \$22,000.00 from special appropriation in fiscal year 1906. See Route 5. Rehabilitation begun.

*Route 19.* Last expenditure in fiscal year 1917. All but 10 miles from Girdwood to Crow Creek has been abandoned since the construction of the Government railroad. Rehabilitation of this 10 miles begun.

*Route 19A.* Expenditure included in Route 19. Entire mileage abandoned since the construction of the Government railroad.

*Route 19B.* Same remark applies as in Route 19A.

*Route 19C.* Same remark applies as in Route 19A.

*Route 19D.* Same remark applies as in Route 19A. Mileage not reported.

*Route 20A.* Last expenditure in fiscal year 1918. To be abandoned in favor of shorter route, Susitna Station to Nancy, on the Government railroad.

*Route 20B.* Last expenditure in fiscal year 1918. To be maintained and improved.

*Route 20C.* Last expenditure in fiscal year 1918. Maintained and improved.

*Route 20D.* Maintained and improved.

*Route 20E.* Expenditure included in Route 20F. To be abandoned in favor of better route from Talkeetna.

*Route 20F.* Most of expenditure was for bridge across the Kahiltna River. Last expenditure in fiscal year 1917. Final disposition not yet determined.

*Route 20G.* Expenditures included in Route 20F. To be abandoned in favor of better route from Talkeetna.

*Route 21.* Last expenditure in fiscal year 1919. Rehabilitation begun.

*Route 22.* Maintained and improved.

*Route 23A.* Last expenditure in fiscal year 1913. Rehabilitation begun.

*Route 23B.* Last expenditure in fiscal year 1913. Rehabilitation begun.

*Route 24.* Maintained and improved.

*Route 25A.* Maintained and improved.

*Route 25B.* Last expenditure in fiscal year 1915. Rehabilitation begun.

*Route 25C.* Last expenditure in fiscal year 1916. Rehabilitation begun.

*Route 25D.* Last expenditure in fiscal year 1919. Rehabilitation begun.

*Route 25E.* Maintained and improved.

*Route 25F.* Maintained and improved.

*Route 25G.* Maintained and improved.

*Route 25H.* Last expenditure in fiscal year 1919. Rehabilitation begun.

*Route 26.* Maintained and improved.

*Route 27.* Maintained and improved.

*Route 28.* Maintained and improved.

*Route 29.* Last expenditure in fiscal year 1919. Final disposition not determined.

*Route 30.* Maintained and improved.

*Route 31.* Last expenditure in fiscal year 1919. Final disposition not determined.

*Route 32A.* Maintained and improved.

*Route 32B.* Last expenditure in fiscal year 1919. Rehabilitation begun.

*Route 32C.* Expenditure included in Route 32B. Rehabilitation begun.

*Route 33A.* Last expenditure in fiscal year 1919. Final disposition not yet determined.

*Route 33B.* Last expenditure in fiscal year 1919. Final disposition not yet determined.

*Route 34.* Last expenditure in fiscal year 1919. Final disposition not yet determined.

*Route 35.* Maintained and improved.

*Route 35A.* Last expenditure in fiscal year 1919. Rehabilitation begun.

*Route 35B.* Maintained and improved.

*Route 35C.* Most of expenditure was for bridge across Matanuska River. Maintained and improved.

*Route 36.* Last expenditure in fiscal year 1919. Rehabilitation over to the Territory of Alaska.

*Route 37.* Mileage is 154 over present route. Improved.

*Route 38A.* Maintained and improved.

*Route 38B.* Last expenditure in fiscal year 1919. Rehabilitation begun.

*Route 38C.* Last expenditure in fiscal year 1919. Rehabilitation begun.

*Route 38D.* Expenditures included in Route 38C. Maintained and improved.

*Route 39.* Maintained and improved.

*Route 40.* To be maintained and improved.

*Route 41.* Last expenditure in fiscal year 1919. Rehabilitation begun.

*Route 42.* Last expenditure in fiscal year 1919. Rehabilitation begun.

- Route 43.* Same remark applies as in Route 1.
- Route 44.* Maintained and improved.
- Route 45.* Maintained and improved.
- Route 46.* To be maintained and improved.
- Route 47.* Last expenditure in fiscal year 1917. Rehabilitation begun.
- Route 48.* Last expenditure in fiscal year 1919. To be rehabilitated.
- Route 49.* To be maintained and improved.
- Route 50.* Last expenditure in fiscal year 1918. No report on present status yet received.
- Route 51.* Trail only. Erroneously classified. Abandoned in favor of 40 mile road now under construction.
- Route 52.* Same remark applies as in Route 1. Length is 7 miles but not enough work done by Alaska Road Commission to take credit for any mileage.
- Route 53.* Preliminary reconnaissance only in fiscal year 1907. No mileage constructed.
- Route 54.* Last expenditure in fiscal year 1917. Rehabilitated.
- Route 55.* Last expenditure in fiscal year 1907. Only 16 miles of trail improved. Turned over to the Department of Agriculture in co-operation with the Territory of Alaska, July 1, 1920. The Quartz Creek Russian River section is now under construction.
- Route 56.* Last expenditure in fiscal year 1907. Abandoned as a result of the construction of the Copper River and Northwestern Railroad. This trail connected Valdez with Chitina via Marshall Pass, and was 114 miles long. This mileage was dropped years ago.
- Route 57.* For bridges across the Nizina River. Work on road was begun this year and corresponding mileage is noted under report of operations.
- Route 58.* Same remark applies as in Route 52. Length is eleven miles.
- Route 59.* No mileage involved. Maintenance continued.
- Route 60.* Not a road project but work authorized by special appropriation in 1915. Was performed by the Alaska Road Commission. No subsequent expenditure.
- Route 61.* For bridge across the Kuskulana River. The road was built by the operators themselves.
- Route 62.* No mileage reported. Included in Route 68. Maintained and improved.
- Route 63.* No mileage reported. Maintained and improved.
- Route 64.* Expenditures included in Route 38B. Final disposition not yet determined.
- Route 65.* No expenditures since 1905 and none by the Alaskan Road Commission. Gulkana to Chistochena (40 miles) to be rehabilitated. Final disposition balance not yet determined.

- Route 66.* Last expenditure in fiscal year 1917. 10 miles to Moose Creek have subsequently been constructed in the Territory of Alaska. The balance has been expended on the construction of the Government Railroad.
- Route 67.* Expenditures included in Route 68. Maintained and improved.
- Route 68.* Maintained and improved.
- Route 69.* Preliminary work and design only. No money allotted for construction.
- Route 70.* Not distributed to individual routes.
- Route 71.* Not distributed to individual routes.
- Route 72.* Not distributed to individual routes.
- Route 73.* Last expenditure in fiscal year 1917. Rehabilitation begun.
- Route 74.* See note to Table III. Mileage not yet determined.

ANNUAL MAINTENANCE

In table V is given a summary of maintenance work. It will be noted that the road mileage has been fairly consistent and that approximately half the sled road and trail flagging, has been practically abandoned or other causes.

TABLE V.

No expenditure since fiscal year	Wagon road.	
	Wagon road.	Sled road.
1905	.....	.....
1907	.....	.....
1910	.....	10
1911	.....	.....
1912	.....	.....
1913	.....	105
1914	.....	.....
1915	11½	.....
1916	6½	46
Total pre-war.....	9½	161
1917	67½	65
1918	2	30
1919	64	.....
Total war period.....	103½	95
Grand total.....	113	256
1920 report.....	1,081	686
1920 work on permanent route.....	918	380
Flagged trail (Table I).....	.....	.....
Flagged trail (Table II).....	.....	.....
Total 1920 work.....	918	380

NOTE—This table only takes account of complete work done. In addition, several hundred miles of sled road has been constructed in the main section of the main road and the Haines-Pleasant Camp (47½ miles) Road, where expenditures were inadequate to render them passable by the Territory during 1920.

applies as in Route 1. and improved. and improved. ained and improved. iture in fiscal year 1917. Rehabil- iture in fiscal year 1919. To be ained and improved. iture in fiscal year 1918. No report ed. Erroneously classified. Abandoned ow under construction. k applies as in Route I. Length is k done by Alaska Road Commission age. r reconnaissance only in fiscal year cted. diture in fiscal year 1917. Rehabil-

diture in fiscal year 1907. Only 16 Turned over to the Department of n with the Territory of Alaska, July k Russian River section is now under

diture in fiscal year 1907. Abandoned ction of the Copper River and North- rail connected Valdez with Chitina via 114 miles long. This mileage was

es across the Nizina River. Work on r and corresponding mileage is noted is. ark applies as in Route 52. Length

re involved. Maintenance continued. l project but work authorized by special Was performed by the Alaska Road ent expenditure. ge across the Kuskulana River. The rators themselves. ge reported. Included in Route 68. d.

re reported. Maintained and improved. ures included in Route 38B. Final mined. ditures since 1905 and none by the on. Gulkana to Chistochena (40 miles) inal disposition balance not yet deter-

Route 66. Last expenditure in fiscal year 1917. First 14 miles to Moose Creek have subsequently been improved by the Territory of Alaska. The balance has been abandoned since the construction of the Government Railroad.

Route 67. Expenditures included in Route 68. Maintained and improved.

Route 68. Maintained and improved.

Route 69. Preliminary work and design of bridge only. No money allotted for construction.

Route 70. Not distributed to individual routes.

Route 71. Not distributed to individual routes.

Route 72. Not distributed to individual routes.

Route 73. Last expenditure in fiscal year 1919. Rehabilitation begun.

Route 74. See note to Table III. Final disposition not yet determined.

ANNUAL MAINTENANCE WORK.

In table V is given a summary of conditions as to annual maintenance work. It will be noted that most of the wagon road mileage has been fairly consistently maintained, but that approximately half the sled road and trail mileage, exclusive of flagging, has been practically abandoned, due to lack of funds or other causes.

TABLE V.

No expenditure since fiscal year	Mileage.				
	Wagon road.	Sled road.	Trail.	Flagged trail.	Total.
1905			262		262
1907			110		110
1910		10			110
1911			22		22
1912			108		108
1913		105	188		293
1914	1 1/2		90		91 1/2
1915	1 1/2		5		6 1/2
1916	6 1/2	46			52 1/2
Total pre-war	9 1/2	161	785		955 1/2
1917	67 1/2	65	346		487 1/2
1918	2	30	477		509
1919	64		2		36
Total war period	108 1/2	95	825		1,023 1/2
Grand total	113	256	1,610		1,979
1920 report	1,081	636	3,223	1,452	6,342
1920 work on permanent route	918	380	1,613		2,911
Flagged trail (Table I)			740		740
Flagged trail (Table II)				712	712
Total 1920 work	918	380	2,353	712	4,363

NOTE—This table only takes account of complete routes upon which no work at all was done. In addition, several hundred miles of parts of routes, notably the Valdez-Willow Creech (92 miles) section of the main Valdez-Fairbanks Military Road and the Haines-Pleasant Camp (47 1/2 miles) Road, were completely abandoned or the expenditures were inadequate to render them passable. A few miles were maintained by the Territory during 1920.

The annual cost of maintenance of routes in Alaska varies considerably with the locality, the range of climate being greater than that of the United States, and the cost of labor varying greatly. The experience of this Board indicates that for all Alaska proper, average maintenance costs, including a fair allowance for floods, etc., are about as indicated in Table VI following:

TABLE VI.

Classification.	Mileage.	Annual Maintenance per mile.	Total
Wagon roads .....	1,031	\$250.00	\$257,750.00
Sled roads .....	636	25.00	15,900.00
Trails .....	3,223	10.00	32,230.00
Flagged trails .....	712	3.00	2,136.00
Totals .....	5,602	55.50	308,016.00

The above does not provide for any improvement or extensions. The intermediate, or interior, sections of many of the through routes need improvement to the same standard as the rest so that the entire route may be used throughout by the same traffic without the necessity of breaking loads. A certain amount of new work on extensions must be provided for each year to keep pace with developments. This has only been possible up to the present time at the expense of needed maintenance work.

CONDITION AT END OF FISCAL YEAR.

Table VII summarizes the status of the work of investigation and rehabilitation begun this year. The funds available enabled substantial progress to be made and the investigation should be practically completed during the current season.

TABLE VII.

Status.	Mileage.					Grand total.
	Wagon road.	Sled road.	Trail.	Total.	Flagging only	
1920 report .....	1,031	636	3,223	4,890	712	5,602
Turned over to other bureaus..	97		123	220		
Abandoned .....	15	101	243	359		1,271
Investigation incomplete .....	6	76	610	692		
Rehabilitation under way.....	913	459	2,247	3,619	712	4,331
New mileage.....	70	121	498	689	.....	689
1921 report.....	983	580	2,745	4,308	712	5,020

INSPECTION OF WORK.

The magnitude of the task and extent of territory covered by the wide-flung activities of this board may be realized from the fact that it would take two years of continuous traveling

with the best facilities available for a single complete inspection of the entire mileage is responsible.

Actually the President and Engineer 80% of their time in the field. They have at least once and have inspected most of the number of times. The Secretary and Disb been engaged in overhauling the property, methods and have started a tour of inspection offices to standardize methods and accounts

The President left Washington, D. C., and made the following trips involving means as indicated:

Conveyance.

- Railroad passenger train.....
- Railroad gas speeder.....
- Railroad freight train.....
- Railroad locomotive.....
- Ocean steamship.....
- Gasoline launch.....
- Automobile or truck.....
- On foot.....
- Dog team.....
- Horse sled.....
- Horseback.....
- Wagon.....

Total .....

TRIPS OF INSPECTION AND INVESTIGATION

Inclusive Dates.	Skeleton Itinerary.
Various.	Juneau local roads.
July 18, 1920, to Aug. 25, 1920.	Juneau, Skagway, Cordova, Valdez, Fairbanks, Roosevelt, Kantishna, Nenana, Healy, Banks, Valdez, Seward, Chickaloon, Palmetto, Matanuska, Wasilla, Willow Creek, Keetna, Anchorage, Seward, Cordova, Skagway, Juneau.
Sept. 8, 1920, to Sept. 11, 1920.	Juneau, Fort Wm. H. Seward, Haines, Valdez, Juneau.
Sept. 21, 1920, to Sept. 27, 1920.	Juneau, Lisianski Inlet, Chichagof, Sitka, Springs, Tenakee, Hoonah, Juneau.

THE ALASKA ROAD COMMISSION.

aintenance of routes in Alaska varies in degree, the range of climate being greater in the northern states, and the cost of labor varying accordingly. This Board indicates that for all Alaska maintenance costs, including a fair allowance for about as indicated in Table VI

TABLE VI.

	Mileage.	Annual Maintenance per mile.	Total
.....	1,031	\$250.00	\$257,750.00
.....	636	25.00	15,900.00
.....	3,223	10.00	32,230.00
.....	712	3.00	2,136.00
.....	5,602	55.50	308,016.00

provide for any improvement or extension, or interior, sections of many of the routes may be used throughout by the necessity of breaking loads. A certain number of extensions must be provided for each development. This has only been possible at the expense of needed maintenance

AT END OF FISCAL YEAR.

izes the status of the work of investigation begun this year. The funds available for progress to be made and the investigation completed during the current season.

TABLE VII.

Sled road.	Mileage.			Flagging only	Grand total.
	Trail.	Total.			
636	3,223	4,890	712	5,602	
101	123	220		1,271	
76	243	359			
	610	692			
459	2,247	3,619	712	4,331	
121	498	689	.....	689	
580	2,745	4,308	712	5,020	

INSPECTION OF WORK.

of the task and extent of territory covered by the activities of this board may be realized from the fact that it would take two years of continuous traveling

with the best facilities available for a single individual to make a complete inspection of the entire mileage for which the Board is responsible.

Actually the President and Engineer Officer spent about 80% of their time in the field. They have visited every district at least once and have inspected most of the major projects a number of times. The Secretary and Disbursing Officer have been engaged in overhauling the property, accounts and office methods and have started a tour of inspection of the district offices to standardize methods and accounts.

The President left Washington, D. C., on June 18, 1920, and made the following trips involving means of transportation as indicated:

Conveyance.	Mileage.
Railroad passenger train.....	17,455
Railroad gas speeder.....	225
Railroad freight train.....	111
Railroad locomotive.....	17
Ocean steamship.....	11,759
Gasoline launch.....	1,570
Automobile or truck.....	1,615
On foot.....	175
Dog team.....	168
Horse sled.....	132
Horseback.....	50
Wagon.....	52
Total.....	33,329

TRIPS OF INSPECTION AND INVESTIGATION.

Inclusive Dates.	Skeleton Itinerary.	Routes visited (in addition to miscellaneous investigations.)
Various.	Juneau local roads.	2, 2A, 2B, 39, 45, and 69.
July 13, 1920, to Aug. 25, 1920.	Juneau, Skagway, Cordova, Valdez, Fairbanks, Roosevelt, Kantishna, Nenana, Healy, Fairbanks, Valdez, Seward, Chickaloon, Palmer, Matanuska, Wasilla, Willow Creek, Talkeetna, Anchorage, Seward, Cordova, Skagway, Juneau.	Cordova - Eya k Lake, 4B, 4C, 4D, 4E, 4F, 4G, 4H, 4I, 4J, 4K, 56, 60, 7A, 7B, 7C, 7D, 7E, 7F, 7G, 7H, 7I, 7L, 7M, 59, 46, 10, 10A, 12, 19, 19A, 19B, 19C, 19D, 24, 35, 35A, 35B, 35C, 66, 51, Anchorage-Eagle River, and 44.
Sept. 8, 1920, to Sept. 11, 1920.	Juneau, Fort Wm. H. Seward, Haines, Wells, Juneau.	3.
Sept. 21, 1920, to Sept. 27, 1920.	Juneau, Lisianski Inlet, Chichagof, Sitka, Hot Springs, Tenakee, Hoonah, Juneau.	14.

and corduroy repaired. Total cost

*gh Road*.....(21½ miles)  
has cleaned, selected timber for the  
and distributed during the winter.  
quired on this route to make it excel-  
enditure, \$14,978.51.

*168 Road*.....(18 miles)  
oad was dragged, ditches cleaned,  
crew was established on this route.  
antial improvements to this portion  
is section has always been a very  
necessary to place a heavy gravel  
ke it passable in all seasons. Total

*River Road*.....(38 miles)  
upon this road, three miles of gravel  
two miles of regrading performed.  
he road thoroughly dragged. Sub-  
ceeded upon this road on the portion  
e it in thoroughly passable condition.  
n be performed this season with the  
ent now available. Total expendi-

*arty Road*.....(73½ miles)  
ough on this portion of the road early  
were made, slides removed, ditches  
he Relta River at Mile 222 was re-  
ded, one mile of gravel surfacing was  
rally excellent condition, the greatest  
avel surfaced. The heaviest expenses  
caused by the spring break-up. Total

*ison Road*.....(20½ miles)  
n this road during the entire season.  
lverts rebuilt, ditches opened, slides  
graded. General repairs were made.  
5.

*onsina Road*.....(24 miles)  
four times during the season. Gen-  
ery substantial work is required to  
ad up to the standard of that of the  
Road. Total expenditure \$8,891.84.

*Road*.....(15 miles)  
twice during the season, drainage was  
structed and graveling restored upon

two miles of the road. This route is now in excellent condition.  
Total expenditure \$21,308.62.

*Route 54—Chisana-Nizina Trail*.....( 78 miles)

This trail leads across Skolai Pass to the Chisana Mining  
District. Trail was staked during the winter. Total expen-  
diture \$400,000.

*Route 57—McCarthy-Nizina*..(4 miles of road and 7 miles of  
sled road)

Work upon this project was started during the summer of  
1920. One crew of men was worked during the entire season.  
This road extends from McCarthy, on the Copper River railroad,  
to the Nizina River. Three miles of road were constructed and  
five miles of clearing and grubbing performed. Timber from  
the bridge across the Nizina River was salvaged and will be  
used in constructing the new bridge. The Territory is co-oper-  
ating to the extent of \$25,000 in the construction of the bridge  
across the Nizina River. This road will lead to the bridge site  
and it is planned to complete the remainder of the road to the  
Nizina River during this season and start construction on the  
bridge across the river in the winter of 1921. This river cross-  
ing has been an appalling obstacle for many years to operators  
in the upper Chitina Valley. Total expenditure \$17,670.38.

*Route 61—Strelna-Kuskulana.*

The work of this Board upon this system of roads consisted  
in keeping open the bridge across the Kuskulana River. This  
bridge was subjected to attack during the summer and protective  
operations were gotten under way so that the bridge was saved  
and maintained in good condition. Territorial Board paid  
vouchers amounting to \$750, this Board paying the balance.  
Total expenditure \$1,197.31.

*Route 65—Chistochena-Eagle Trail*.....(222 miles)

Part of the old Valdez-Fort Egbert Trail. No expenditure  
during the fiscal year. To be examined this season.

*Route 65A—Gulkana-Chistochena*—(4 miles of road, 36 miles of  
trail.)

Work was started on this route, which is the inlet to the  
Slate Creek mining district, as well as the Nabesna district.  
Four miles of road were graded, one mile of side hill grading  
performed. The next work necessary on this route is the bridge  
across the Gakona River. Piling for this bridge was gotten out  
and delivered to the bridge site during the winter. Total ex-  
penditures \$2,581.32.

*Route 65B.—Chistochena-Slate Creek Trail*.....(40 miles)

Reconnaissance was made during the summer of 1920 in con-  
nection with Route 65A.

EXAMINATIONS AND SURVEYS

In response to petitions, reconnaissances are in progress or are contemplated as follows: Eagle-Gulkana, Kechumstuk-McCarthy, Paxsons-Valdez Creek, Chistochena-Nabesna-Chisana, Katalla-Yakataga, Katalla-Mile 39 (C. R. & N. W. R. R.) Chitina-Kotsina and McCarthy locals.

SOUTHWESTERN DISTRICT.

Summary of Roads.

Anton Eide, District Superintendent.

Sub-Project No.	Name of Route.	Wagon road.	Sled road.	Trail.	Total.
10*	Seward-Kenai Lake.....	8			8
10A <sup>c</sup>	Seward-Radio.....	1			1
19	Girdwood-Crow Creek.....	10			10
20A	Knik-Susitna.....			30	30
20B	Susitna-Rainy Pass.....			127	127
20C	Rainy Pass-Tacotna.....			130	130
20F	McDougal-Cache Creek.....			30	30
20H	Nancy-Susitna.....			25	25
24	Mile 29 ANRR-Sunrise.....	39			39
24A	Lynx Creek-Sixmile Creek.....	7			7
24B	Sunrise-Hope.....		9		9
35	Knik-Willow Creek.....	36			36
35A	Archangel Extension.....	2			2
35B	Mile 26½-Palmer.....	8			8
35C	Palmer-Matanuska River.....	1½			1½
35D	Fish-hook Extension.....	5			5
48	Iliamna Bay-Iliamna Lake.....	10		2	12
51	Talkeetna-Cache Creek.....	6	34		40
55 <sup>o</sup>	Kenai Lake-Kenai.....			110	110
75	Anchorage-Eagle River.....	5		5	10

\* Miles 9-14 of this route were turned over to the Department of Agriculture in co-operation with the Territory of Alaska, July 1, 1920.

<sup>c</sup> Turned over to the Navy Department to maintain and improve.

<sup>o</sup> Quartz Creek-Russian River section of this route was turned over to the Department of Agriculture in co-operation with the Territory of Alaska, July 1, 1920.

Route 10—Seward-Kenai Lake Road..... (8 miles)

This road was kept in a good state of repair. The road was dragged and graveled. In August the Resurrection River having cut into the approach to Resurrection Bridge, an additional span of 80 feet was added to this bridge. Total expenditure, \$4,439.30.

Route 19—Girdwood-Crow Creek Road..... (10 miles)

This road was re-located for a distance of one mile and put in a thorough state of repair. Total expenditure, \$936.50.

Route 20A—Knik-Susitna Trail..... (30 miles)

No expenditure during the fiscal year. Abandoned in favor of Route 20H.

Route 20B—Susitna-Rainy Pass Trail..... (127 miles)

Rehabilitation begun. Total expenditure, \$219.20.

Route 20C—Rainy Pass-Tacotna Trail..... (130 miles)

Rehabilitation begun. Total expenditure, \$209.50.

Route 20F—McDougal-Cache Creek.....

Reconnaissance to be made to determine necessity for rehabilitation. No expenditure during the fiscal year.

Route 20H—Nancy-Susitna Trail.....

No expenditure was charged to this route during the fiscal year. Reconnaissance was made and necessary work will be done in anticipation of next winter's traffic.

Route 24—Mile 29 ANRR-Sunrise Road.....

Includes old Moose Pass trail and Section 12, now partly abandoned. Work on this section of Route 12, now partly abandoned, removing windfalls, cleaning ditches and repairs, has been carried out. Total expenditure \$1,862.75.

Route 24A—Lynx Creek-Sixmile Creek Road.....

Includes this section of old Route 12. This section of road from Lynx Creek to Mile 34 on the C. R. & N. W. R. R. have been abandoned in favor of Route 24. No work was performed and cost was included.

Route 24B—Sunrise-Hope Sled Road.....

This route is a part of old Route 12. No work was performed during the fiscal year. To be rehabilitated during the fiscal year.

Route 35—Knik-Willow Road.....

This road is the important outlet of the Mining District. The entire road has now been widened and extended two additional miles. Operations are again beginning to be active and the presence of this road has been an important factor in the small but substantial mining district. Total expenditure \$893.44.

Route 35A—Archangel Extension.....

This road branches off at Mile 34 of Route 35 and extends through the next working section of Archangel Creek. Total expenditure \$495.17.

Route 35B—Mile 26½-Palmer Road.....

This road branches off at Mile 26½ of Route 35 and is planned to continue its improvement. Total expenditure \$800.00.

Route 35C—Palmer-Matanuska Road.....

It is planned to complete the improvement of this route. No expenditure during the fiscal year.

Route 35D—Fish-hook Extension.....

This road branches off at Mile 35 of Route 35 and crosses over the divide into the basin of Willow Creek. Construction is under way. No expenditure during the fiscal year.

THE ALASKA ROAD COMMISSION.

ROADS AND SURVEYS

Reconnaissances are in progress on the following routes: Eagle-Gulkana, Kechumstuk-McCreek, Chistochena-Nabesna-Chisana, Mile 39 (C. R. & N. W. R. R.) Chitina-Is.

STERN DISTRICT.

Inventory of Roads.

By District Superintendent.

Route.	Wagon road.	Sled road.	Trail.	Total.
.....	8			8
.....	1			1
.....	10			10
.....			30	30
.....			127	127
.....			130	130
.....			30	30
.....			25	25
.....				39
.....	39			7
.....	7			9
.....		9		36
.....	36			2
.....	2			8
.....	8			1 1/2
.....	1 1/2			5
.....	5			12
.....	10		2	40
.....	6	34		110
.....			110	10
.....	5		5	

Turned over to the Department of Agriculture in Alaska, July 1, 1920.

Department to maintain and improve.

Section of this route was turned over to the Department with the Territory of Alaska, July 1, 1920.

*Lake Road*..... (8 miles)

in a good state of repair. The road was in August the Resurrection River having Resurrection Bridge, an additional span on this bridge. Total expenditure, \$4,439.30.

*Row Creek Road*..... (10 miles)

graded for a distance of one mile and put in repair. Total expenditure, \$936.50.

*na Trail*..... (30 miles)

during the fiscal year. Abandoned in favor of

*iny Pass Trail*..... (127 miles)

in. Total expenditure, \$219.20.

*ass-Tacotna Trail*..... (130 miles)

un. Total expenditure, \$209.50.

*Route 20F—McDougal-Cache Creek*..... (30 miles)

Reconnaissance to be made to determine advisability of rehabilitation. No expenditure during the fiscal year.

*Route 20H—Nancy-Susitna Trail*..... (25 miles)

No expenditure was charged to this new route. A reconnaissance was made and necessary work will be done this season in anticipation of next winter's traffic.

*Route 24—Mile 29 ANRR-Sunrise Road*..... (39 miles)

Includes old Moose Pass trail and Sixmile Creek-Sunrise section of Route 12, now partly abandoned. General work in removing windfalls, cleaning ditches and repairing corduroy was carried out. Total expenditure \$1,862.75.

*Route 24A—Lynx Creek-Sixmile Creek Road*..... (7 miles)

Includes this section of old Route 12. The fifteen miles of road from Lynx Creek to Mile 34 on the Government Railroad have been abandoned in favor of Route 24. Routine maintenance work was performed and cost was included under Route 24.

*Route 24B—Sunrise-Hope Sled Road*..... (9 miles)

This route is a part of old Route 12. No expenditure during the fiscal year. To be rehabilitated this season.

*Route 35—Knik-Willow Road*..... (23 miles)

This road is the important outlet of the Willow Creek Mining District. The entire road has now been graveled and the road widened and extended two additional miles. Mining operations are again beginning to be active in this region and the presence of this road has been an important relief to this small but substantial mining district. Total expenditure \$21,893.44.

*Route 35A—Archangel Extension*..... (2 miles of road)

This road branches off at Mile 34 of Route 35. It is planned to extend this road through the next working season along Archangel Creek. Total expenditure \$495.17.

*Route 35B—Mile 26 1/2-Palmer Road*..... (8 miles)

This road branches off at Mile 26 1/2 of Route 35. It is planned to continue its improvement. Total expenditure, \$479.50.

*Route 35C—Palmer-Matanuska Road*..... (1 1/2 miles)

It is planned to complete the improvement of this important route. No expenditure during the fiscal year.

*Route 35D—Fish-hook Extension*..... (5 miles of road)

This road branches off at Mile 35 of Route 35 and will cross over the divide into the basin of Willow Creek. Its construction is under way. No expenditure reported to end of fiscal year.



*Route 48—Iliamna Bay-Iliamna Lake (10 miles of road and two miles of trail)*

To be rehabilitated and completed this season. No expenditures during the fiscal year.

*Route 51—Talkeetna-Cache Creek.. (6 miles road, 34 miles sled road).*

Work on this road was performed through co-operative agreement with the Territory. This road is a very important one and starting in May, first a careful location survey was made throughout. The road has been cleared the entire distance to Cache Creek. Five miles have been grubbed and partially graded. Bridges have been built throughout and with additional plant it is expected to prosecute this work to completion. This road it is hoped to be able to extend into the rich mineralized district of the upper Yentna Valley and later through Rainy Pass into the Kuskokwim. Expenditure: Federal funds, \$45,0126.77; Territorial funds, \$34,620.20.

*Route 55—Kenai Lake-Kenai Trail..... (110 miles)*

This route is under investigation and some improvement will be undertaken, if practicable, to afford relief to the important, though isolated, district based upon the town of Kenai. Total expenditure, \$96.00.

*Route 75—Anchorage-Eagle River.. (5 miles of road and 5 miles of trail.)*

This road, which is an important outlet to Anchorage and permits farmers in the vicinity to bring their products into town, was initiated this season. Five miles have been located and cleared. About one mile of grading has been done, the balance it is expected to grade this season. Total expenditure \$8,505.91.

EXAMINATIONS AND SURVEYS.

In response to petitions, reconnaissances are in progress or are contemplated as follows: Herendeen Bay Portage, Cold Bay-Becharof Lake, Geographic Harbor-Land of Ten Thousand Smokes, Kodiak locals, Iliamna Lake-Lake Clark, Kenai-Homer, Hope-Devil Creek-Moose Pass, Seldovia-McDonald Spit, Chulitna Ferry, Fish-hook Inn-Little Susitna River, Talkeetna-Iron Creek, Peter's Creek-Skwentna River-Rainy Pass, Kichatna River-Simpson Pass, and Quinhagak-Nushagak-Cold Bay.

YUKON DISTRICT

Hawley W. Sterling, Supervisor

Summary of Road

Sub-Project No.	Name of Route.	Wagon road.
4J	Richardson-Salchaket.....	30
4K	Salchaket-Fairbanks.....	40
5	Ester-Fort Gibbon.....	11
7A*	Summit-Cleary.....	11
7B*	Fox-Olness.....	13
7C*	Summit-Fairbanks Creek.....	11
7D*	Ester Creek.....	13
7E*	Vault Creek.....	2
7F*	Vault Creek-Treasure Creek.....	1 1/2
7G*	Fairbanks-Gilmore.....	13
7H*	Little Eldorado Creek.....	1 1/2
7I*	Gilmore-Summit.....	6
7J	Fairbanks-Chena Hot Springs.....	4
7L*	Chena-Ester.....	4
7M*	Fairbanks-Tanana Landing.....	3
9	Rampart-Eureka.....	6 1/2
11A	Eagle-O'Brien Creek.....	17
11B	O'Brien Creek-40 Mile.....	3
11C	Steel Creek-Jack Wade.....	2 1/2
11D	Canyon Creek-Walker's Fork.....	49
11E	Eagle-70 Mile.....	49
15	Circle-Miller House.....	3
16	Chatanika-Miller House.....	3
17	Fort Gibbon-Kaltag.....	24
17A	Lewis Landing-Dishkaket.....	9
17B	Nulato-Dishkaket.....	24
20D	Tacotna-Kaltag.....	8
22	Hot Springs-Sullivan Creek.....	8
23A	Chatanika-Beaver.....	6
23B	Beaver-Chandalar.....	30
29	Fort Gibbon-Koyukuk.....	32
30	Hot Springs Landing-Eureka.....	32
31	Salchaket-Caribou Creek.....	32B
32A	Tacotna-Flat Creek.....	32C
32B	Iditarod-Flat Creek.....	32D
32C	Iditarod-Ophir.....	38A
32D	Flat-Georgetown.....	38B
38A	Otter Creek-Towpath.....	34
38B	Summit-Otter Creek.....	38A
34	Iditarod-Dishkaket.....	38B
38A	Ruby-Long Creek.....	38C
38B	Long Creek-Cripple City.....	38D
38C	Ophir-Cripple.....	41
38D	Tacotna-Ophir.....	46
41	Klery Creek.....	47
46	Kantishna.....	53
47	Coldfoot-Wiseman.....	59
53	Eagle-Circle.....	63
59	Fairbanks Bridge.....	64
63	Brooks Terminal.....	76
64	Cripple-Lewis Landing.....	
76	Government Railroad-Valdez C.....	

\* Responsibility for maintenance of Fairbanks was assumed by the Territory of Alaska.

*Route 4J—Richardson-Salchaket Road*  
Using a tractor for motive power 400 feet of new road built and 350 cubic feet of gravel. A number of culverts were rebuilt. Total expenditure \$1,000.00.

*Route 4K—Salchaket-Fairbanks Road..*  
Substantial improvement was made during the season. The road was regraded and the banks to Mile 10. Temporary repairs were made. Driver bridge which will be built during the next season. The road was thoroughly dragged throughout the season.

... Lake (10 miles of road and two completed this season. No expendi-

... creek.. (6 miles road, 34 miles sled

performed through co-operative. This road is a very important. A careful location survey was made. The entire distance has been grubbed and partially built throughout and with additional work to completion. To extend into the rich mineral Yentna Valley and later thorough. Expenditure: Federal funds, \$34,620.20.

Trail..... (110 miles) investigation and some improvement made, to afford relief to the important based upon the town of Kenai.

River.. (5 miles of road and 5 miles

important outlet to Anchorage and ability to bring their products into season. Five miles have been located. The grade of grading has been done, the made this season. Total expenditure

ROADS AND SURVEYS.

... is, reconnaissances are in progress. Shows: Herendeen Bay Portage, Cold Chukchee Harbor-Land of Ten Thousand Miles, Lake-Lake Clark, Kenai-Homer, Pass, Seldovia-McDonald Spit, Chulitna-Little Susitna River, Talkeetna-Iron River-Rainy Pass, Kichatna River-Nushagak-Cold Bay.

YUKON DISTRICT.

Hawley W. Sterling, Superintendent.

Summary of Roads.

Sub-Project No.	Name of Route.	Wagon road.	Sled road.	Trail.	Total.
4J	Richardson-Salchaket.....	30			30
4K	Salchaket-Fairbanks.....	40			40
5	Ester-Fort Gibbon.....		148		148
7A*	Summit-Cleary.....	11			11
7B*	Fox-Olness.....	13			13
7C*	Summit-Fairbanks Creek.....	11			11
7D*	Ester Creek.....	13			13
7E*	Vault Creek.....	2			2
7F*	Vault Creek-Treasure Creek.....	1 1/2			1 1/2
7G*	Fairbanks-Gillmore.....	13			13
7H*	Little Eldorado Creek.....	1 1/2			1 1/2
7I*	Gillmore-Summit.....	6			6
7J	Fairbanks-Chena Hot Springs.....		64		64
7L*	Chena-Ester.....	4			4
7M*	Fairbanks-Tanana Landing.....	3			3
9	Rampart-Eureka.....	6 1/2	21		27 1/2
11A	Eagle-O'Brien Creek.....	17	13		30
11B	O'Brien Creek-40 Mile.....		30		30
11C	Steel Creek-Jack Wade.....	2 1/2			2 1/2
11D	Canyon Creek-Walker's Fork.....		10		10
11E	Eagle-70 Mile.....			20	20
15	Circle-Miller House.....	49			49
16	Chatanika-Miller House.....		81		81
17	Fort Gibbon-Kaltag.....			257	257
17A	Lewis Landing-Dishkaket.....			108	108
17B	Nulato-Dishkaket.....			90	90
20D	Tacotna-Kaltag.....			145	145
22	Hot Springs-Sullivan Creek.....	9			9
23A	Chatanika-Beaver.....			120	120
23B	Beaver-Chandalar.....		75		75
29	Fort Gibbon-Koyukuk.....			100	100
30	Hot Springs Landing-Eureka.....	24			24
31	Salchaket-Caribou Creek.....		46		46
32A	Tacotna-Flat Creek.....			87	87
32B	Iditarod-Flat Creek.....	8			8
32C	Iditarod-Ophir.....			90	90
32D	Flat-Georgetown.....			80	80
33A	Otter Creek-Towpath.....			22	22
33B	Summit-Otter Creek.....	6			6
34	Iditarod-Dishkaket.....		30	68	98
38A	Ruby-Long Creek.....	30			30
38B	Long Creek-Cripple City.....			60	60
38C	Ophir-Cripple.....			50	50
38D	Tacotna-Ophir.....		7 1/2	17 1/2	25
41	Klery Creek.....	1			1
46	Kantishna.....	32		76	108
47	Coldfoot-Wiseman.....		11		11
58	Eagle-Circle.....			190	190
59	Fairbanks Bridge.....				
63	Brooks Terminal.....		67		67
64	Cripple-Lewis Landing.....			60	60
76	Government Railroad-Valdez C.....		55		55

\* Responsibility for maintenance of Fairbanks local roads for the fiscal year was assumed by the Territory of Alaska.

Route 4J—Richardson-Salchaket Road..... (30 miles)

Using a tractor for motive power, the road was dragged, 400 feet of new road built and 350 cubic yards of gravel placed. A number of culverts were rebuilt. Total expenditure \$9,161.09.

Route 4K—Salchaket-Fairbanks Road..... (40 miles)

Substantial improvement was made on this route during the season. The road was regraded and graveled from Fairbanks to Mile 10. Temporary repairs were made to the Pile Driver bridge which will be built during next season. The road was thoroughly dragged throughout, gravel pits stripped

for grading the road this season. A steam shovel is being shipped to Fairbanks for this graveling and with the close of work during the present season this road should be in excellent condition. Total expenditure \$40,985.32.

*Route 5—Ester-Fort Gibbon Sled Road.....(148 miles)*

This route is in the main mail route to the westward, formerly extending from Ester siding to Fort Gibbon. Since the completion of the Government Railroad all traffic starts from Dunbar Station, a point on the Government railroad 18 miles north of Nenana. Grading was performed near the Tolovana River and along the Tanana near Baker. Open stretches across the Yukon were staked with tripods. Total expenditure, \$3,356.10.

*Route 7J—Fairbanks-Chena Hot Springs Sled Road..(64 miles)*

This route connects Fairbanks with the famous Chena River Hot Springs. The entire road is used by prospectors and miners in the upper Chena River mining district. The bridge over the Little Chena River was made; a thorough reconnaissance of the entire road was made during the winter. Total expenditure, \$507.75.

*Route 9—Rampart-Eureka Road (6½ miles wagon road, 21½ miles of sled road)*

The seasonal repairs upon this road was carried on by the Territory. The improvement of this road from the Yukon to the Tanana is contemplated. With this in view, a thorough reconnaissance was made with dog team during the winter.

*Route 11A—Eagle-O'Brien Creek..(17 miles of road, 13 miles of sled road)*

This road was generally maintained and repaired, culverts rebuilt, slides removed, drainage reconstructed. The road is in excellent condition now from Eagle to Mile 10. Very substantial work is necessary to extend this road to the mineral workings on Forty Mile. Total expenditure, \$4012.09.

*Route 11B—O'Brien Creek-40 Mile Sled Road.....(30 miles)*

To be rehabilitated this season. No expenditures during the fiscal year.

*Route 11C—Steel Creek-Jack Wade Road.....(2½ miles)*

Road was regraded and bridges repaired. Total expenditure \$21.65.

*Route 11D—Canyon Creek-Walker's Fork Sled Road..(10 miles)*

To be rehabilitated this season. No expenditures during the fiscal year.

*Route 11E—Eagle-70 Mile Trail.....(20 miles)*

Clearing was performed, bridges repaired, road in excellent condition as a summer pack trail. Total expenditure \$2,273.50

*Route 15—Circle-Miller House Road.....*

The entire road was dragged, ditches cleaned, culverts repaired, culverts rebuilt and in spite of occurring last summer, the road was in excellent condition. Total expenditure \$6,543.37.

*Route 16—Chatanika-Miller House Sled Road.....*

Repairs were made to bridges on this route during the month of December. Several small bridges were repaired. Total expenditure, \$1,548.71.

*Route 17—Fort Gibbon-Kaltag Trail.....*

This route is the main mail route to the westward from Gibbon. The work consisted in staking the route on the surface of the Yukon River. Considerable work was done to avoid open places and overflows and to improve the road. Total expenditure, \$500.00.

*Route 17A—Lewis Landing-Dishkaket Trail.....*

Reconnaissance to be made to determine condition of road. No expenditure during fiscal year.

*Route 17B—Nulato-Dishkaket Trail.....*

Reconnaissance to be made to determine condition of road. No expenditure during the fiscal year.

*Route 20D—Tacotna-Kaltag Trail.....*

Reconnaissance to be made to determine condition of road. No expenditure during the fiscal year.

*Route 22—Hot Springs-Sullivan Creek Road.....*

This road was maintained during 1920. Federal co-operation was made during the summer of 1920 in order to further this work. Total expenditure, \$1,000.00.

*Route 23A—Chatanika-Beaver Trail.....*

Rehabilitation to be begun this season. No expenditure during the fiscal year.

*Route 23B—Beaver-Chandalar Sled Road.....*

This important sled road was gone over during the summer of 1920. It is now in excellent condition as a sled road or a summer pack trail. Very little work is necessary to reconstruct it as a summer pack trail. Developments in the Chandalar mining district have been sufficiently investigated this summer to ascertain the feasibility of construction of this as a summer road is warranted. Total expenditure \$1,998.51.

son. A steam shovel is being traveling and with the close of this road should be in excellent 40,985.32.

*ed Road*.....(148 miles)  
 nail route to the westward, for-  
 ling to Fort Gibbon. Since the  
 Railroad all traffic starts from  
 the Government railroad 18  
 ng was performed near the Tolo-  
 ana near Baker. Open stretches  
 with tripods. Total expenditure,

*st Springs Sled Road*..(64 miles)  
 nks with the famous Chena River  
 is used by prospectors and miners  
 ing district. The bridge over the  
 e; a thorough reconnaissance of  
 ng the winter. Total expenditure,

*oad* (6½ miles wagon road, 21½

n this road was carried on by the  
 of this road from the Yukon to  
 With this in view, a thorough  
 dog team during the winter.

*reek*..(17 miles of road, 13 miles

maintained and repaired, culverts  
 age reconstructed. The road is in  
 Eagle to Mile 10. Very substantial  
 his road to the mineral workings on  
 re, \$4012.09.

*0 Mile Sled Road*.....(30 miles)  
 is season. No expenditures during

*k Wade Road*.....(2½ miles)  
 bridges repaired. Total expenditure

*Walker's Fork Sled Road*..(10 miles)  
 season. No expenditures during the

*Trail*.....(20 miles)

Clearing was performed, bridges rebuilt, and route put in excellent condition as a summer pack trail. Total expenditure \$2,273.50

*Route 15—Circle-Miller House Road*.....(49 miles)

The entire road was dragged, ditches opened, corduroy repaired, culverts rebuilt and in spite of the heavy forest fires occurring last summer, the road was maintained in excellent condition. Total expenditure \$6,543.37.

*Route 16—Chatanika-Miller House Sled Road*.....(81 miles)

Repairs were made to bridges on this road during the month of December. Several small bridges were rebuilt. Total expenditure, \$1,548.71.

*Route 17—Fort Gibbon-Kaltag Trail*.....(257 miles)

This route is the main mail route to points west of Fort Gibbon. The work consisted in staking the trail, chiefly on the surface of the Yukon River. Considerable staking in necessary to avoid open places and overflows and minimize the distance. Total expenditure, \$500.00.

*Route 17A—Lewis Landing-Dishkaket Trail*.....(108 miles)

Reconnaissance to be made to determine desirability of rehabilitation. No expenditure during fiscal year.

*Route 17B—Nulato-Dishkaket Trail*.....(90 miles)

Reconnaissance to be made to determine desirability of rehabilitation. No expenditure during the fiscal year.

*Route 20D—Tacotna-Kaltag Trail*.....(145 miles)

Reconnaissance to be made to determine desirability of rehabilitation. No expenditure during the fiscal year.

*Route 22—Hot Springs-Sullivan Creek Road*.....(9 miles)

This road was maintained during 1920 by the Territory. Federal co-operation was made during the summer of 1920 in order to further this work. Total expenditure, \$114.50.

*Route 23A—Chatanika-Beaver Trail*.....(120 miles)

Rehabilitation to be begun this season. No expenditure during the fiscal year.

*Route 23B—Beaver-Chandalar Sled Road*.....(75 miles)

This important sled road was gone over thoroughly during the summer of 1920. It is now in excellent condition as a winter sled road or a summer pack trail. Very heavy work would be necessary to reconstruct it as a summer road. The mineral developments in the Chandalar mining district are to be thoroughly investigated this summer to ascertain whether the construction of this as a summer road is worth while. Total expenditure \$1,998.51.

*Route 29—Fort Gibbon-Koyukuk Trail*.....(100 miles)

This route is the winter mail route for the Koyukuk and an important route of winter travel for the Kobuk Valley. The route was gone over and tripods re-established. Thorough reconnaissance will be made this summer to reestablish it throughout. This route is an important one and has fallen into bad condition during the war years. Total expenditure \$1,010.25.

*Route 30—Hot Springs Landing-Eureka Road*.....(24 miles)

This road was maintained by the Territory during the summer of 1920. Plans have been made for the rehabilitation of this road with the cooperation of the Territory during the present season. Total expenditure \$40.00.

*Route 31—Salchaket-Caribou Creek Road*.....(46 miles)

Reconnaissance to be made to determine advisability of rehabilitation. No expenditure during the fiscal year.

*Route 32A—Tacotna-Flat Creek Trail*.....(87 miles)

This is an important route to the Iditarod. Total expenditure during fiscal year \$353.50.

*Route 32B—Iditarod-Flat Creek Road*.....(8 miles)

To be rehabilitated this season. No expenditure during the fiscal year.

*Route 32C—Iditarod-Ophir Trail*.....(90 miles)

This trail is the main winter mail route to the Iditarod mining district. Its rehabilitation is under way. No expenditure during the fiscal year.

*Route 32D—Flat-Georgetown Trail*.....(80 miles)

Improvement authorized and reconnaissance under way. No expenditure reported up to end of fiscal year:

*Route 33A—Otter Creek-Towpath*.....(22 miles of trail)

Reconnaissance to be made to determine advisability of rehabilitation. No expenditure during the fiscal year.

*Route 33B—Summit-Otter Creek Road*.....(6 miles)

Reconnaissance to be made to determine advisability of rehabilitation. No expenditure during the fiscal year.

*Route 34—Iditarod-Dishkaket*..38 miles of sled road and 68 miles of trail)

Reconnaissance to be made to determine advisability of rehabilitation. No expenditure during fiscal year.

*Route 38A—Ruby-Long Creek Road*.....(30 miles)

This excellent road was maintained in good condition during the present season. It serves as an outlet to the Poorman and Long mining districts. General repairs were made, ditches cleaned. Total expenditure \$5,195.26.

*Route 38B—Long-Cripple Trail*.....

Six bridges were built upon this route. A road has been established as far as Poorman. Construction of a bridge across the Solatna River. A good summer trail will be provided. This route is an arterial route to the Kuskokwim. Total expenditure \$1,010.25.

*Route 38C—Ophir Cripple Trail*.....

To be improved during this season. No expenditure reported to end of fiscal year.

*Route 38D—Tacotna-Ophir* (7½ miles wagon trail)

In co-operation with the Territory, this road was gone over and again put under construction. A foreman was sent in to the district from equipment shipped from Seattle. Work was in spite of a shortage of men in the district. Reconnaissance was made in this district by the board during the winter, and as a result as necessary to complete this road during this season. This road is being shipped in from Seattle on the road serves an artery for a very productive mine. It is also a portage from the Kuskokwim to the Yukon. Total expenditure, \$9,510.73.

*Route 41—Klery Creek Road*.....

Reconnaissance was made during the winter. No expenditure reported till after the opening of navigation. Total expenditure \$56.50.

*Route 46—Kantishna*..... 76 miles of trail,

An effort was made during the season to improve the Kantishna Mining District. First, the dog sled trail to Kantishna was maintained in excellent condition. Second, an effort was made by small detours to maintain a trail from Kantishna Post Office to Roosevelt, the mouth of the Kantishna River, passable for sleds. This road is 32 miles long. The work was not completed. However, this work performed during the season provides considerable relief to this promising district. During the winter a very thorough reconnaissance was made by the engineer officer of this Board and as a result a route is under way for a summer and a winter route to the Government railroad to this district. In a such relief as may be possible with the small amount of money at the disposal of the board will be given. Total expenditure, \$15,020.00; Territory funds, \$2,865.77; Federal funds, \$12,163.78.

*Route 47—Coldfoot-Wiseman Sled Road*.....

Thorough reconnaissance is to be made during the present season in connection with routes 23B and 29. No expenditure reported to end of fiscal year.

## THE ALASKA ROAD COMMISSION.

*Kobuk Trail*.....(100 miles)  
mail route for the Koyukuk and an  
travel for the Kobuk Valey. The  
roads re-established. Thorough recon-  
summer to reestablish it throughout.  
one and has fallen into bad condition  
l expenditure \$1,010.25.

*Ending-Eureka Road*.....(24 miles)  
led by the Territory during the sum-  
been made for the rehabilitation of  
on of the Territory during the present  
\$40.00.

*Don Creek Road*.....(46 miles)  
made to determine advisability of  
future during the scal year.

*Creek Trail*.....(87 miles)  
route to the Iditarod. Total expendi-  
\$53.50.

*Creek Road*.....(8 miles)  
this season. No expenditure during the

*Wier Trail*.....(90 miles)  
winter mail route to the Iditarod min-  
tation is under way. No expenditure

*Mountain Trail*.....(80 miles)  
ized and reconnaissance under way. No  
to end of fiscal year:

*Towpath*.....(22 miles of trail)  
be made to determine advisability of re-  
liture during the fiscal year.

*Water Creek Road*.....(6 miles)  
be made to determine advisability of  
enditure during the fiscal year.

*Chukaket*..38 miles of sled road and 68  
be made to determine advisability of re-  
diture during fiscal year.

*Big Creek Road*.....(30 miles)  
l was maintained in good condition during  
t serves as an outlet to the Poorman and  
s. General repairs were made, ditches  
diture \$5,195.26.

*Route 38B—Long-Cripple Trail*.....(60 miles)

Six bridges were built upon this route. An excellent sled  
road has been established as far as Poorman. With the con-  
struction of a bridge across the Solatna River next winter a  
good summer trail will be provided. This route is an important  
arterial route to the Kuskokwim. Total expenditure, \$4,418.48.

*Route 38C—Orphir Cripple Trail*.....(50 miles)

To be improved during this season. No expenditure re-  
ported to end of fiscal year.

*Route 38D—Tacotna-Ophir* (7½ miles wagon road, 17½ miles trail)

In co-operation with the Territory, this road, started in 1917,  
was gone over and again put under construction this season.  
A foreman was sent in to the district from Fairbanks and  
equipment shipped from Seattle. Work was well prosecuted  
in spite of a shortage of men in the district during 1921. A  
reconnaissance was made in this district by the engineer officer  
of the board during the winter, and as a result work is planned  
as necessary to complete this road during this season. Equip-  
ment is being shipped in from Seattle on the first boat. This  
road serves an artery for a very productive mining district and  
is also a portage from the Kuskokwim to the Yukon River. Total  
expenditure, \$9,510.73.

*Route 41—Klery Creek Road*.....(1 mile)

Reconnaissance was made during the winter but report will  
not be received till after the opening of navigation. Total ex-  
penditure \$56.50.

*Route 46—Kantishna*..... 76 miles of trail, 32 miles of road)

An effort was made during the season to give some relief to  
the Kantishna Mining District. First, the dog trail from the  
railroad to Kantishna was maintained in excellent condition.  
Second, an effort was made by small detours to make the sled road  
from Kantishna Post Office to Roosevelt, the head of navi-  
gation on the Kantishna River, passable for summer traffic.  
This road is 32 miles long. The work was necessarily widely  
distributed. However, this work performed during the summer  
provides considerable relief to this promising lode district.  
During the winter a very thorough reconnaissance was made  
by the engineer officer of this Board and as a result surveys are  
under way for a summer and a winter route from Lignite on  
the Government railroad to this district. In addition to this,  
such relief as may be possible with the small funds of this  
board will be given. Total expenditure, \$15,029.55; Territorial  
funds, \$2,865.77; Federal funds, \$12,163.78.

*Route 47—Coldfoot-Wiseman Sled Road*.....(11 miles)

Thorough reconnaissance is to be made this summer in  
connection with routes 23B and 29. No expenditure up to end  
of fiscal year.

*Route 53—Eagle-Circle Trail.....(190 miles)*

This winter trail is to be reconnoitered during next season with the end in view of eliminating dangerous sections on the surface of the Yukon River.

*Rout 59—Fairbanks Bridge.....*

Flooring was repaired and some painting performed. Total expenditure \$1,602.57.

*Route 63—Brooks Terminal.....(67 miles of sled road)*

A small amount of work was done on this road during this year. To make substantial improvement in this district it is necessary to establish this route as a summer road as far as the Logjam, 27 miles. Plans are being made with this in view. Total expenditure, \$1,662.52.

*Route 64—Cripple-Lewis Landing Trail.....(60 miles)*

Reconnaissance to be made to determine advisability of rehabilitation. No expenditure during the fiscal year.

*Route 76—Government Railroad-Valdez Creek Sled Road (55 miles)*

Reconnaissance was made during the winter to determine the most feasible connection between the important Valdez Creek mining district and the Government railroad, soon to be completed. This route will supercede the old sled road from Valdez Creek to the southeast joining the Fairbanks-Chitina route at Gulkana. Total expenditure, \$575.62.

**EXAMINATIONS AND SURVEYS.**

In response to petitions, reconnaissances are in progress or are contemplated as follows: Circle-Fort Yukon, Caro-Coldfoot-Alatna, Koyukuk-Kobuk, Iditarod-Holy Cross-Akiak-Bethel Quinhagak, Kuskokwim Portage, Roosevelt-McGrath, and Nixon's Fork.

**NOME DISTRICT.**

Chas. D. Jones, Superintendent.

**Summary of Roads.**

Sub-Project No.	Name of Route.	Wagon road.	Sled road.	Trail.	Total.
8...	Nome-Council.....	57		25	82
8A...	Bonanza Ferry.....				
8B...	Safety Ferry.....				
18A...	Nome-Bessie.....	3 1/2			3 1/2
18B...	Bessie-Banner.....	3 1/2			3 1/2
18C...	Bessie-Little Creek.....	1 1/2			1 1/2
18D...	Bessie-Dry Creek.....	1 1/2			1 1/2
18E...	Dry Creek-Newton.....	1 1/2			1 1/2
18F...	Nome-Osborne.....	8			8
18G...	Grass Gulch.....	2			2
18H...	Center Creek.....	1 1/2			1 1/2
18I...	Nome River.....	5			5
18J...	Wonder-Flat Creek.....	2			2
18K...	Bessie-Buster.....	7 1/2			7 1/2
18...	Kaltag-Solomon.....			248 1/2	248 1/2
21...	Unalaklik-St. Michael.....			65	65
25A...	Cripple River.....	12			12

**NOME DISTRICT.—Cont**

Sub-Project No.	Name of Route.	Wagon road.
25B...	Penny River.....	1 1/2
25C...	Nome Wireless.....	1 1/2
25D...	Mouth of Center Creek.....	2
25E...	Submarine Pay Streak.....	1
25F...	Anvil-Glacier.....	3
25G...	Snake River Extension.....	3
25H...	Otter Creek.....	1 1/2
26I...	Sinrock Ferry.....	
26...	Candle-Candle Creek.....	6
27...	Deering-Inmachuk.....	25
28...	Dahl Creek-Candle.....	
37...	Topkok-Candle.....	
42...	St. Michaels-Kotlik.....	
49...	Davison's Landing-Taylor.....	24
62...	Dime Creek Corduroy.....	
67...	Penny River-Teller.....	
68...	Flagging Trails.....	
73...	Marshall Road.....	3
77...	Shelton Ferry.....	

*Routes 8, 8A and 8B—Nome-Council (of trail)*

This important road connects Nome is a summer mail route supplying all traffic between these towns. General location Bering Sea, through Fort Davis to Skookum Pass to the head of the Fox River to Council. Seasonal staking between and between Solomon and East Fork are The work consisted in repairing all part work was necessary in protecting the bridge from destruction by the Nome revetment of concrete was placed around while the work was costly, quick action bridge saved and the road kept open. work was done between Fort Davis and Cape the portion of the road around Cape Nome and Solomon the ferries were maintained East Fork extensive repair work was done duroy was repaired, gravel hauled upon in a thoroughly good condition. From very little work was done and this portion extensive repair work to make this important one. Territorial co-operation was had upon ture from Federal funds, \$18,350.98; expenditure from territorial funds, \$17,186.70.

*Route 13A—Nome-Bessie Road.....*

This is an important road leading to main artery for traffic from Nome to all a little work was done upon this road in the road was dragged and graveled and put condition throughout. Total expenditure,

rail.....(190 miles)  
 be reconnoitered during next season  
 eliminating dangerous sections on the  
 F.

re.....  
 and some painting performed. Total

t.....(67 miles of sled road)  
 work was done on this road during this  
 improvement in this district it is  
 route as a summer road as far as  
 plans are being made with this in view.  
 2.

anding Trail.....(60 miles)  
 made to determine advisability of  
 future during the fiscal year.  
 Railroad-Valdez Creek Sled Road

ade during the winter to determine  
 ion between the important Valdez  
 l the Government railroad, soon to  
 will supercede the old sled road from  
 east joining the Fairbanks-Chitina  
 penditure, \$575.62.

ONS AND SURVEYS.

is, reconnaissances are in progress or  
 s: Circle-Fort Yukon, Caro-Coldfoot-  
 Iditarod-Holy Cross-Akiak-Bethel  
 Portage, Roosevelt-McGrath, and

NOME DISTRICT.

Jones, Superintendent.

Summary of Roads.

Route.	Wagon road.	Sled road.	Trail.	Total.
	57		25	82
	3 1/2			3 1/2
	3 1/2			3 1/2
	1 1/4			1 1/4
	1 1/4			1 1/4
	3/2			3/2
	8			8
	2			2
	1 1/2			1 1/2
	5			5
	2			2
	7 1/2			7 1/2
			248 1/2	248 1/2
			65	65
	12			12

NOME DISTRICT.—Continued.

Sub-Project No.	Name of Route.	Wagon road.	Sled road.	Trail.	Total.
25B	Penny River.....	1 1/2			1 1/2
25C	Nome Wireless.....	1 1/2			1 1/2
25D	Mouth of Center Creek.....	2			2
25E	Submarine Pay Streak.....	1			1
25F	Anvil-Glacier.....	3			3
25G	Snake River Extension.....	3			3
25H	Otter Creek.....	1 1/2			1 1/2
25I	Sinrock Ferry.....				
26	Candle-Candle Creek.....	6			6
27	Deering-Inmachuk.....	25			25
28	Dahl Creek-Candle.....			140	140
37	Topkok-Candle.....			154	154
42	St. Michaels-Kotlik.....			70	70
49	Davison's Landing-Taylor.....	24	16		40
62	Dime Creek Corduroy.....				
67	Penny River-Teller.....			70	70
68	Flagging Trails.....			712	712
73	Marshall Road.....	3			3
77	Shelton Ferry.....				

Routes 8, 8A and 8B—Nome-Council (57 miles road, 25 miles of trail)

This important road connects Nome and Council and is a summer mail route supplying all the intermediate camps between these towns. General location is along the shore of Bering Sea, through Fort Davis to Solomon, then along Skookum Pass to the head of the Fox River, thence down Fox River to Council. Seasonal staking between Nome and Solomon and between Solomon and East Fork are included in Routes 68. The work consisted in repairing all parts of the road. Heavy work was necessary in protecting the Fort Davis Suspension bridge from destruction by the Nome River. A substantial revetment of concrete was placed around the abutment and, while the work was costly, quick action was necessary and the bridge saved and the road kept open. Heavy construction work was done between Fort Davis and Cape Nome in completing the portion of the road around Cape Nome. Between Cape Nome and Solomon the ferries were maintained. From Solomon to East Fork extensive repair work was done upon the road, corduroy was repaired, gravel hauled upon the roads and all put in a thoroughly good condition. From East Fork to Council very little work was done and this portion of the road requires extensive repair work to make this important road an excellent one. Territorial co-operation was had upon this road. Expenditure from Federal funds, \$18,350.98; expenditure from Territorial funds, \$17,186.70.

Route 13A—Nome-Bessie Road.....(3 1/2 miles)

This is an important road leading out of Nome and is the main artery for traffic from Nome to all adjacent creeks. Very little work was done upon this road in the last two years. The road was dragged and graveled and put in a thoroughly good condition throughout. Total expenditure, \$671.97.



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*Route 13B—Bessie-Banner Road*.....(3½ miles)

The bridge was replaced at Banner Valley Station and general repair work done over the entire road. Total expenditure, \$118.00.

*Route 13C—Bessie-Little Creek Road*.....(1¼ miles)

No expenditure reported on this road up to the end of the fiscal year.

*Route 13D—Bessie-Dry Creek Road*.....(1¼ miles)

No expenditure on this road up to the end of the fiscal year.

*Route 13E—Dry Creek-Newton Road*.....(½ mile)

Season repairs were made. Total expenditure, \$68.30.

*Route 13F—Nome-Osborne Road*.....(8 miles)

This important road requires extensive repair and reconstruction. A small amount of regrading was done during the past season but it is still not in good condition for travel. Total expenditure, \$123.35.

*Route 13G—Grass Gulch Road*.....(2 miles)

No expenditure reported on this road up to the end of the fiscal year.

*Route 13H—Center Creek Road*.....(1½ miles)

Expenditure, \$5.00

*Route 13I—Nome River Road*.....(5 miles)

Expenditure, \$24.20.

*Route 13J—Wonder-Flat Creek Road*.....(2 miles)

No expenditure reported on this road up to the end of the fiscal year.

*Route 13K—Bessie-Buster Road*.....(7½ miles)

This road was dragged and ditches cleaned and a number of culverts rebuilt. Total expenditure, \$284.16.

*Route 18—Kaltag-Solomon Trail*.....(248 miles)

The winter trail was gone over from the Unalaklik Creek to Bluff. Great damage was done to this trail in the fall of 1919. Throughout the trail stakes were straightened and missing ones replaced, bridges were built and the trail, which is a very important one, built up to its previous condition. Seasonal staking is included in Routes 68. Total expenditure, \$1,539.50.

*Route 21—Unalaklik-St. Michael Trail*.....(65 miles)

This trail was practically destroyed by a storm in the fall of 1919. A crew of four men working during the month of September, repaired it. The trail was gone over for its entire length, culverts and bridges rebuilt, nigger heads grubbed out, and four miles of new trail cut. All trail stakes were

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straightened and missing ones replaced under Routes 68.

*Routes 25A-H (inclusive)—Nome Local*

All of the roads west of Nome heading. The Sinrok Valley Road was repaired. The Cripple River Road had extensive repairs made in the Cripple River. Total expenditure \$381.20. The Submarine Paysandu Road was repaired. Total expenditure \$172.63. The bridge over Dry Creek was rebuilt and the road generally repaired. Total expenditure from federal funds \$279.50. Expenditure from territorial funds \$12.50. A foot bridge over the Sinrok Glacier Road was replaced by a tramway. Total expenditure for maintenance work was done on the Sinrok Valley Road. Total cost, \$256.00.

*Route 25I—Sinrok Ferry*

General maintenance and salary expenditure: Federal, \$162.75; Territorial, \$123.35.

*Route 26—Candle-Candle Creek Road*...

This road was completed to Pattersville. Four thousand feet of corduroy were placed. Ten culverts were built. The road was graded throughout. Expenditure from federal funds, \$1,800. Expenditure from Territorial funds, \$1,800.

*Route 27—Deering-Inmachuk Road*....

The entire road was gone over, and the entire length cut by grading side lines. Culverts were built and general repairs made. Expenditure from local funds, \$2,162. Expenditure from Territorial funds, \$4,640.56.

*Route 28—Dahl Creek-Candle Trail*.....

Stakes were straightened out and culverts rebuilt. Expenditure included under Routes 68.

*Route 37—Topkok-Candle Trail*.....

Stakes were straightened out and culverts rebuilt. Expenditure included under Routes 68.

*Route 42—St. Michael-Kotlik Trail*....

Stakes were straightened out and culverts rebuilt. Expenditure included under Routes 68.

*Routes 49—Davidson's Landing-Taylor*.....  
16 miles sled road).

Work on this road was done by cutting the first 24 miles leading from Davidson's Landing. Culverts and the road were rebuilt, ditches cleaned and the road graded. This is an important road, serving as a summer trail for operators reaching the coast from Imaruk Basin. Total expenditure

ad.....(3½ miles)  
l at Banner Valley Station and  
c the entire road. Total expendi-

k Road.....(1¼ miles)  
on this road up to the end of the

oad.....(1¼ miles)  
oad up to the end of the fiscal year.

m Road.....(½ mile)  
e. Total expenditure, \$68.30.

Road.....(8 miles)  
quires extensive repair and recon-  
of regrading was done during the  
in good condition for travel. Total

d.....(2 miles)  
l on this road up to the end of the

oad.....(1½ miles)

id.....(5 miles)

reek Road.....(2 miles)  
d on this road up to the end of the

oad.....(7½ miles)  
and ditches cleaned and a number of  
nditure, \$284.16.

Trail.....(248 miles)  
gone over from the Unalaklik Creek  
as done to this trail in the fall of  
stakes were straightened and missing  
built and the trail, which is a very  
to its previous condition. Seasonal  
s 68. Total expenditure, \$1,539.50.

ichael Trail.....(65 miles)  
ly destroyed by a storm in the fall of  
a working during the month of Sep-  
trail was gone over for its entire  
es rebuilt, nigger heads grubbed out,  
trail cut. All trail stakes were

straightened and missing ones replaced. Seasonal staking in-  
cluded under Routes 68.

Routes 25A-H (inclusive)—Nome Local Roads.....(24½ miles)

All of the roads west of Nome are comprised under this  
heading. The Sinrok Valley Road was maintained and exten-  
sive repairs made in the Cripple River Road. Total expendi-  
tures \$381.20. The Submarine Paystreak was extended one-  
fourth of a mile and the entire length cleaned and repaired.  
Total expenditure \$172.63. The bridge at the mouth of Center  
Creek was rebuilt and the road generally gone over. Expendi-  
ture from federal funds \$279.50. Expenditure from territorial  
funds \$12.50. A foot bridge over the Snake River on the Anvil-  
Glacier Road was replaced by a tram costing \$150.00. Repair  
and maintenance work was done on the Snake River extension.  
Total cost, \$256.00.

Route 25I—Sinrock Ferry.

General maintenance and salary of Ferryman. Total ex-  
penditure: Federal, \$162.75; Territorial, \$150.00.

Route 26—Candle-Candle Creek Road.....(6 miles)

This road was completed to Patterson Creek, six miles from  
Candle. Four thousand feet of corduroy was laid and surfacing  
placed. Ten culverts were built. The road was ditched and  
graded throughout. Expenditure from federal funds \$3,275.42.  
Expenditure from Territorial funds, \$1,899.59.

Route 27—Deering-Inmachuk Road.....(25 miles)

The entire road was gone over, numerous fords throughout  
the entire length cut by grading side lines as detours. A num-  
ber of culverts were built and general maintenance performed.  
Expenditure from local funds, \$2,162.77. Expenditure from  
Territorial funds, \$4,640.56.

Route 28—Dahl Creek-Candle Trail.....(140 miles)

Stakes were straightened out and replaced. Additional  
expenditure included under Routes 68. Expenditure \$168.00.

Route 37—Tophok-Candle Trail.....(154 miles)

Stakes were straightened out and replaced. Additional  
expenditure included under Routes 68. Expenditure, \$168.00.

Route 42—St. Michael-Kotlik Trail.....(70 miles)

Stakes were straightened out and replaced. Expenditure  
included under Routes 68.

Routes 49—Davidson's Landing-Taylor.. (24 miles wagon road,  
16 miles sled road).

Work on this road was done by contract and was confined  
to the first 24 miles leading from Davidson's Landing. Culverts  
were rebuilt, ditches cleaned and the road thoroughly gone over.  
This is an important road, serving as a winter sled route and  
summer trail for operators reaching the Kougarak mining dis-  
trict from Iमारuk Basin. Total expenditure, \$392.45.

*Route 62—Dime Creek Corduroy*.....

Corduroy was cut and delivered during the winter, to be placed this season. Total expenditure, \$6,221.27.

*Route 67—Penny River-Teller Trail*..... (70 miles)

Stakes were straightened out and replaced. Expenditure included under Routes 68.

*Routes 68—Flagged Trails*..... (672 miles)

Under this heading all expenditures for winter work is included. The expenditure includes the purchase of material for making flags, and the cost of straightening up all stakes and replacing the missing ones on the permanently staked winter trails around Nome, throughout the Seward Peninsula and connecting with the Yukon Valley. Many of the trails are only seasonal ones and are staked by the miners themselves to the creeks on which their workings occur. In these cases this board furnishes the material for staking and the miners did the work. Total expenditure, \$6,510.53, includes work on Routes 8, 18, 21, 28, 37, 42, and 67, a total of 740 miles, in addition to the following:

Name.	Dis- tance. Miles.	Perma- nent. Miles.	Sea- sonal. Miles.
Nome to Unalakleet.....	76	.....	76
Nome Locals.....	100	.....	100
Unalakleet to St. Michael.....	20	.....	20
St. Michael to Kotlik.....	25	.....	25
Nome to Taylor.....	140	115	25
Taylor to Arctic Hot Springs.....	17	10	7
Teller to Marys Igloo.....	52	20	32
Candle to Deering.....	40	40	.....
Candle to Keewalik.....	8	.....	8
Keewalik to Nazurik Channel (mouth of Kobuk River).....	45	.....	45
Kotzebue to Riley Channel.....	17	.....	17
Kiana to Klerly Creek.....	18	18	.....
Solomon to Casadepaga.....	34	.....	34
Isaacs Point to Dime Creek.....	50	34	16
Keewalik to Mainland by Chamois Island.....	35	.....	35
Dime Creek to Snyder's Cabin on Keewalik River.....	35	35	.....
Total .....	712	272	440

*Route 73—Marshall Road*..... (3 miles)

Entire road was rehabilitated and improvement begun. Total expenditure, \$715.25.

*Route 77—Shelton Ferry.*

Routine repairs. Total expenditure, \$150.00.

EXAMINATIONS AND SURVEYS.

The act of June 30, 1921 contains the following language: "Provided further that not to exceed \$10,000 of the foregoing amount shall be expended for a preliminary investigation and report on the feasibility, desirability and cost of the best and most practical connection between the Nome-Shelton system of communications and the coal deposits of the Kugruk River, Chicago Creek and the Keewalik mining district, whether by wagon road, sled road, tramway, trail or other means."

Report thereon will be submitted

In response to petitions, recommendations or are contemplated as follows: Teller Unalaklik, Haycock-Candle, Kiana-S Barrow and St. Michael-Fortuna Ledge

CONTRACTS IN F

None.

COMMERCIAL STA

A careful traffic census was begun in 1911. Comparing the expenditures for 1911 at the present rate with the cost of amount of freight at the rates prevailing constructed, a figure is obtained which saving to the community served by particular route in point.

Combining the saving for all the mission, the following table for 1911, compiled.

Year.	Expenditure for the year
1911.....	\$266,777.
1912.....	317,908.
1913.....	353,118.
1911-1913.....	937,199.

From this table it will be seen that years alone was almost three times that of roads to the end of 1913. Records for 1915 burned up in the fire of 1915. No census taken since war. A new census was inaugurated in 1915.

In the interior, the great cost of material and packing, together with the difficulty of getting it at all, constitutes the main obstacle to development of the district.

During the opening of new diggings a few years ago, beans, coffee, sugar, etc., were sold at \$1.50 per pound. The cost of most a dollar a pound, so that the origin of relatively little importance. And expenditures could not keep pace with the demand. Charges for transporting supplies from some mines about one hundred miles to the 40-Mile District were greater than the original plus the freight from the United States (Dawson is 1,700 miles from Seattle.)

The cost of transportation by the various routes in Alaska are shown in the following table.

...  
delivered during the winter, to be  
expenditure, \$6,221.27.

... Trail... (70 miles)  
... out and replaced. Expenditure

... (672 miles)

... expenditures for winter work is  
includes the purchase of material  
... of straightening up all stakes and  
... on the permanently staked winter  
... out the Seward Peninsula and con-  
... alley. Many of the trails are only  
... ed by the miners themselves to the  
... ngs occur. In these cases this board  
... taking and the miners did the work.  
... , includes work on Routes 8, 18, 21,  
... l of 740 miles, in addition to the

	Dis- tance. Miles.	Perma- nent. Miles.	Sea- sonal. Miles.
.....	76	.....	76
.....	100	.....	100
.....	20	.....	20
.....	25	.....	25
.....	140	115	25
.....	17	10	7
.....	52	20	32
.....	40	40	.....
.....	8	.....	8
.....	45	.....	45
.....	17	.....	17
.....	18	18	.....
.....	34	.....	34
.....	50	34	16
.....	35	.....	35
.....	35	35	.....
.....	712	272	440

... (3 miles)

... rehabilitated and improvement begun.  
... 15.25.

... al expenditure, \$150.00.

IONS AND SURVEYS.

1921 contains the following language:  
... at not to exceed \$10,000 of the fore-  
... ended for a preliminary investigation  
... lity, desirability and cost of the best  
... tion between the Nome-Shelton system  
... he coal deposits of the Kugruk River,  
... Keewalik mining district, whether by  
... amway, trail or other means."

Report thereon will be submitted when completed.  
In response to petitions, reconnaissances are in progress  
or are contemplated as follows: Teller-Wales, Golovin-Haycock-  
Unalaklik, Haycock-Candle, Kiana-Shungnak, Kotzebue-Point  
Barrow and St. Michael-Fortuna Ledge.

CONTRACTS IN FORCE.

None.

COMMERCIAL STATISTICS.

A careful traffic census was begun by the Commission in  
1911. Comparing the expenditures for freight on each route  
at the present rate with the cost of transporting the same  
amount of freight at the rates prevailing before the road was  
constructed, a figure is obtained which represents the economic  
saving to the community served by the construction of the  
particular route in point.

Combining the saving for all the routes built by the Com-  
mission, the following table for 1911, 1912, and 1913, has been  
compiled.

Year.	Expenditures for the year.	Total expend- itures for roads to end of year.	Economic saving to shippers.
1911.....	\$266,777.95	\$1,903,103.27	\$1,981,677.00
1912.....	317,303.72	2,220,406.99	2,141,688.00
1913.....	353,115.29	2,573,525.28	2,144,667.00
1911-1913.....	937,199.96	2,573,525.28	6,268,052.00

From this table it will be seen that the saving in these three  
years alone was almost three times the total expenditure for  
roads to the end of 1913. Records for succeeding years were  
burned up in the fire of 1915. No census was taken during the  
war. A new census was inaugurated Jan. 1, 1921.

In the interior, the great cost of moving freight by teaming  
or packing, together with the difficulty and uncertainty of moving  
it at all, constitutes the main obstacle to the growth and devel-  
opment of the district.

During the opening of new diggings in the Chisana region  
a few years ago, beans, coffee, sugar, hay, candles, bacon, grain,  
etc., were sold at \$1.50 per pound. The freight charges were al-  
most a dollar a pound, so that the original cost of the article was  
of relatively little importance. And even at that, the supply  
could not keep pace with the demand. Last summer the freight  
charges for transporting supplies from Dawson, in the Klondike,  
to some mines about one hundred miles away in the American  
40-Mile District were greater than the original cost of the supplies  
plus the freight from the United States to the Klondike.  
(Dawson is 1,700 miles from Seattle.)

The cost of transportation by the usual modes of transport  
in Alaska are shown in the following table:

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Route 62—Dime Creek Corduroy.....

Corduroy was cut and delivered during the winter, to be placed this season. Total expenditure, \$6,221.27.

Route 67—Penny River-Teller Trail..... (70 miles)

Stakes were straightened out and replaced. Expenditure included under Routes 68.

Routes 68—Flagged Trails..... (672 miles)

Under this heading all expenditures for winter work is included. The expenditure includes the purchase of material for making flags, and the cost of straightening up all stakes and replacing the missing ones on the permanently staked winter trails around Nome, throughout the Seward Peninsula and connecting with the Yukon Valley. Many of the trails are only seasonal ones and are staked by the miners themselves to the creeks on which their workings occur. In these cases this board furnishes the material for staking and the miners did the work. Total expenditure, \$6,510.53, includes work on Routes 8, 18, 21, 28, 37, 42, and 67, a total of 740 miles, in addition to the following:

Name.	Dis- tance. Miles.	Perma- nent. Miles.	Sea- sonal. Miles.
Nome to Unalakleet.....	76		76
Nome Locals.....	100		100
Unalakleet to St. Michael.....	20		20
St. Michael to Kotlik.....	25		25
Nome to Taylor.....	140	115	25
Taylor to Arctic Hot Springs.....	17	10	7
Teller to Marys Igloo.....	52	20	32
Candle to Deering.....	40	40	
Candle to Keewalik.....	8		8
Keewalik to Nazurik Channel (mouth of Kobuk River).....	45		45
Kotzebue to Riley Channel.....	17		17
Kiana to Klerly Creek.....	18	18	
Solomon to Casadepaga.....	34		34
Isaac's Point to Dime Creek.....	50	34	16
Keewalik to Mainland by Chamois Island.....	35		35
Dime Creek to Snyder's Cabin on Keewalik River.....	35	35	
Total.....	712	272	440

Route 73—Marshall Road..... (3 miles)

Entire road was rehabilitated and improvement begun. Total expenditure, \$715.25.

Route 77—Shelton Ferry.

Routine repairs. Total expenditure, \$150.00.

EXAMINATIONS AND SURVEYS.

The act of June 30, 1921 contains the following language: "Provided further that not to exceed \$10,000 of the foregoing amount shall be expended for a preliminary investigation and report on the feasibility, desirability and cost of the best and most practical connection between the Nome-Shelton system of communications and the coal deposits of the Kugruk River, Chicago Creek and the Keewalik mining district, whether by wagon road, sled road, tramway, trail or other means."

ANNUAL REPORT OF THE ALASKA ROAD COMMISSION.

Report thereon will be submitted when ready. In response to petitions, reconnaissance or are contemplated as follows: Teller-Walrus, Unalaklik, Haycock-Candle, Kiana-Shumway, Barrow and St. Michael-Fortuna Ledge.

CONTRACTS IN FORCE.

None.

COMMERCIAL STATISTICS.

A careful traffic census was begun in 1911. Comparing the expenditures for 1911 at the present rate with the cost of the amount of freight at the rates prevailing, constructed, a figure is obtained which represents the saving to the community served by the particular route in point.

Combining the saving for all the routes, the following table for 1911, 1912, 1913, and 1911-1913 compiled.

Year.	Expenditures for the year.
1911.....	\$266,777.95
1912.....	317,303.72
1913.....	353,118.29
1911-1913.....	937,199.96

From this table it will be seen that the roads alone was almost three times that of 1911 to the end of 1913. Records for 1914 were burned up in the fire of 1915. No census was taken in 1915. A new census was inaugurated in 1916.

In the interior, the great cost of moving material, together with the difficulty of getting it at all, constitutes the main obstacle to the development of the district.

During the opening of new diggings a few years ago, beans, coffee, sugar, etc., were sold at \$1.50 per pound. The cost of most a dollar a pound, so that the origin of relatively little importance. And it could not keep pace with the demand. Charges for transporting supplies from the coast to some mines about one hundred miles in the 40-Mile District were greater than the cost of plus the freight from the United States (Dawson is 1,700 miles from Seattle.)

The cost of transportation by the various routes in Alaska are shown in the following table.

Winter:	Per Ton-mile.
Bob-sled (sled road) .....	\$0.37
Double-ender (trail) .....	1.30
Dog-team (trail) .....	6.30
<b>Summer:</b>	
Truck (wagon road) .....	0.40
Wagon (wagon road) .....	1.23
Pack train (trail) .....	4.80
Man (no trail) .....	26.67 *

\* Average from very widely varying figures. At Lisianski Inlet, in Southeastern Alaska, last summer I observed lumber, pipe, tar paper, groceries, etc., being carried on the backs of Indians from the beach up a slippery mountain trail about 7,500 feet long to a new gold strike in a little basin at about 800 feet elevation at 4 cents per pound, or \$80.00 per ton—over 1 cent per ton-foot.

Railroad transportation cannot yet be regarded as a usual form for Alaska, and steamship rates are entirely arbitrary, depending upon competition. They, like the existing railroad rates, have been fixed by two factors only; 1st, the cost of hauling on some competing wagon road, sled road, or trail, where such competition exists (or, in the case of steamships, sometimes by competing steamer line); and 2nd, by the highest rate the freight can stand and be shipped at all.

The table shows the actual costs at the rates for teams, labor, food, forage, etc., prevailing in the great interior regions of Alaska. They are based also on the costs of hauling large quantities. On the south coast the comparative values are the same, but the actual values are about one-third less because of lower costs of above controlling elements.

#### ADDITIONAL OPERATIONS OF THE BOARD OR OF ITS MEMBERS.

The following additional duties have been imposed upon the members of the board by appropriate authority.

- (a) Effective April 1st, 1921, the Juneau, Alaska, engineer district was created by G. O. No. 1, War Department, Office of the Chief of Engineers, Washington, February 21, 1921. The President of the Board, in addition to his other duties, was appointed District Engineer; the other two members of the board were placed under the immediate orders of the District Engineer and the secretary and disbursing officer of the board was, in addition, designated as disbursing officer for the district. The Alaska district does not form a part of the Northern Pacific Division; the District Engineer reports direct to the Chief of Engineers. Detailed report of the operations of the Alaska District will be found on pages 948-54 inclusive, Report of Chief of Engineers. Expenditures since April 1st, 1921, and to include vouchers received and placed in the account, including June 30, 1921, were \$1602.50.
- (b) By par. 3, S. O. No. 55-0, War Department, Washington, D. C., March 9, 1921, and under the provisions of

Acts of Congress approved June 17, 1917, the President of the Board, in other duties, was detailed for consultation to intend the construction or repair of a road authorized by Congress in the Sitka District (includes the Territory of Alaska) directed to report by letter to the Secretary of War.

- (c) The president of the Board, at the time he was Commanding Officer, Fort Wm. H. Seward, made a special examination of the road and supplies the post and town of Haiyuk. The main crosses Chilcat Inlet at the mouth of the same name. The crossing is about 1/2 mile and the pipe-line is subjected to the cutting of an 18-foot tide a swell in the river and to the pounding of the ice. It has been subject to repeated breaks which have interrupted the entire water supply for weeks at a time.

His report and recommendations for the reconstruction of the line having been approved by the War Department, the Board was authorized to provide for the reconstruction of the work. Two thousand five hundred dollars of Quartermaster funds were allocated for the post finance officer in payment of the work. Close of the fiscal year the breaks were repaired, the water service restored and the reconstruction under way.

The board has maintained the closest relations with the Governor of Alaska and the Territorial Commissioners as well as with representative bureaus. At the last session of the Territorial Board a change was made in the co-operative road law for road work were appropriated, two special appropriations providing funds for operation of our Board, were addressed to the President and Congress for their activities. The following operations of this kind were carried out in whole or in part by the Territory:

- (a) \$128,079.99 of Territorial funds were allocated to the Treasurer of the United States and the Board. \$97,611.98 of this was expended during the fiscal year, leaving a balance of \$30,467.99. The Territorial Board has agreed to carry out the current season's work.
- (b) A special appropriation of \$25,000 for the Nizina River bridge on one of our most important projects. This money will be available on credit upon demand.
- (c) A special appropriation of \$30,000 for the purchase of the Seward Peninsula.

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EXPENDITURES IN DETAIL—FEDERAL APPROPRIATIONS AND "ALASKA" FUND.—Continued.

Acct.	Route.	Constuction.	Mainten- ance.	Total.
41.....	Klery Creek.....		56.50	56.50
45.....	Silver Bow Basin.....	1,115.84	1,200.00	2,315.84
48.....	Kantishna.....	10,000.00	2,163.78	12,163.78
49.....	Davidson's Landing-Taylor.....		392.45	392.45
51.....	Talkeetna-Cache Creek, first section.....	14,000.00	16.77	14,016.77
51.....	Talkeetna-Cache Creek, second section.....	13,000.00		13,000.00
51.....	Talkeetna-Cache Creek, third section.....	18,000.00		18,000.00
55.....	Kenai-Kenai Lake.....		96.00	96.00
57.....	McCarthy-Nizina.....	17,500.00	170.38	17,670.38
59.....	Fairbanks Bridge.....		1,602.57	1,602.57
61.....	Kuskulana Bridge.....	1,000.00	197.31	1,197.31
62.....	Dime Creek-Corduroy.....	6,000.00	221.27	6,221.27
68.....	Brooks-Dunbar.....	500.00	1,162.52	1,662.52
68A.....	Gulkina-Chistochina.....	2,500.00	81.32	2,581.32
68.....	Flagging Trails.....		6,510.53	6,510.53
73.....	Marshall Road.....		715.25	715.25
75.....	Anchorage-Eagle River.....	8,505.91		8,505.91
75.....	Government R. R.-Valdez Creek.....	574.62		574.62
77.....	Shelton Ferries.....		150.00	150.00
78.....	Valdez Depot.....		3,097.26	3,097.26
80.....	Kuskokwim Reconnaissance.....	60.00		60.00
100.....	Office.....	15,723.28	5,101.62	20,824.90
		\$348,526.79	\$220,650.31	\$569,177.10

EXPENDITURES IN DETAIL—FUNDS CONTRIBUTED BY THE TERRITORY OF ALASKA.

Acct.	Route.	Constuction.	Mainten- ance.	Total.
3.....	Haines-Pleasant Camp.....	\$ 6,000.00	\$ 398.20	\$ 6,398.20
8.....	Nome-Council.....	14,000.00	1,841.20	15,841.20
8A.....	Bonanza Ferry.....		1,075.87	1,075.87
8B.....	Safety Ferry.....		269.63	269.63
25.....	Nome locals.....	1,000.00	7,498.40	8,498.40
25D.....	Center Creek.....		12.50	12.50
25I.....	Sinrock Ferry.....		150.00	150.00
26.....	Candle-Candle Creek.....	1,800.00	99.59	1,899.59
27.....	Deering-Inmachuk.....	4,000.00	640.56	4,640.56
38D.....	Tacotna-Ophir.....	13,000.00	430.38	13,430.38
45.....	Silver Bow Basin.....	796.91		796.91
46.....	Kantishna.....	2,500.00	365.77	2,865.77
49.....	Kougarok.....	2,000.00	132.00	2,132.00
51.....	Talkeetna-Cache Creek.....	34,620.20		34,620.20
62.....	Dime Creek Corduroy.....	4,000.00	171.02	4,171.02
68.....	Flagging Trails.....		785.50	785.50
73.....	Marshall.....		24.25	24.25
Total.....		\$ 83,717.11	\$ 13,894.87	\$ 97,611.98
Grand total.....		\$432,243.90	\$234,545.18	\$666,789.08

DISTRIBUTION OF EXPENDITURES.

Salaries (superintendents and clerks).....	\$ 26,674.16
Wages (all other labor).....	308,716.55
Transportation (persons).....	5,668.66
Transportation (freight).....	40,983.12
Hire of animals (horses and dogs).....	36,999.88
Subsistence (persons, meals and beds).....	26,983.32
Provisions (all food supplies).....	64,097.86
Forage and care of animals (horseshoeing, veterinary supplies).....	25,488.50
Telegraph, telephone and postage.....	1,984.02
Fuel (coal and wood) and light.....	3,262.68
Construction material.....	46,776.32
Equipment, tools, camp equipage, wagons, harness, etc.....	46,541.22
Stationery and drafting supplies, maps, printing, cleaning and toilet articles.....	2,174.65
Rents (offices, postoffice boxes, barns or equipment).....	3,008.72
Motor vehicles, repairs, gas, operation, maintenance.....	26,466.46
Miscellaneous.....	1,812.46
\$666,789.08	

ANNUAL REPORT OF THE ALASKA RO

APPROPRIATIONS

1. Construction and Maintenance of Mi  
Bridges and Trails, Ala

Act of—

June 12, 1906...\$	150,000.00	Mar. 4, 1
June 20, 1906...	35,000.00 <sup>a</sup>	Aug. 29,
Mar 2, 1907...	250,000.00	May 2, 1
May 11, 1908...	250,000.00	July 9, 1
Mar. 3, 1909...	350,000.00	July 11,
Mar. 23, 1910...	100,000.00	June 5, 1
Mar. 3, 1911...	150,000.00	June 30,
Aug. 24, 1912...	125,000.00	
Mar. 2, 1913...	155,000.00 <sup>b</sup>	Total
Apr. 27, 1914...	125,000.00	

<sup>a</sup> For Fairbanks-Council survey.

<sup>b</sup> Includes \$55,000.00 for Valez dike.

2. Construction and Maintenance of W  
and Trails, "Alaska Fun

Act of Congress approved January 2  
by an Act approved May 14, 1906:

Fiscal year—	Fiscal
1905.....\$	28,120.56 1915 ...
1906.....	112,462.19 1916 ...
1907.....	115,259.29 1917 ...
1908.....	144,041.56 1918 ...
1909.....	108,713.67 1919 ...
1910.....	182,028.17 1920 ...
1911.....	122,843.40 1921 ...
1912.....	207,947.59
1913.....	173,171.07 Total .
1914.....	175,734.28

Proceeds from sales.....

Transfers from appropriations.....

Grand total.....

3. Increase of Compensation, Military

Fiscal year—	Fiscal y
1918.....\$	145.20 1920 ...
1919.....	1921 ...
Total ..	

of our Board and the approval of the Board. If and when purchased, the road is turned over to this Board for maintenance as a public tram and highway, subject to such regulations as this Board may impose. The Superintendent of this Board for South Alaska has been appointed Chairman and Secretary of the Board for the Third Division. The expenditures of Territorial funds have been made in accordance with this order. His operations will be audited by the Board and his vouchers examined by the Territorial Treasurer, following the same procedure as for Federal vouchers.

Mr. Kinnon, Assistant Superintendent for the Yukon District, has been appointed to the position and \$22,000 of Territorial funds are available for the same.

Work undertaken in connection with the road in the vicinity as follows, the actual cost of which is as follows:

City limits to Sitka-Indian River, to be reimbursed by City Council.  
 City limits to Wrangell-Oil Dock project, to be reimbursed by City Council.  
 Bridge across Skagway River opposite to connect with Skagway Valley, to be reimbursed by the Alpine

EXPENDITURES AND DISBURSEMENTS.

Checks received and placed in the account of the Board.

1920.....\$19,207.71

..... 55,166.06

..... 685,857.18

Fund..... 4,161.65

..... 150.00

\$764,542.60

and.....\$77,237.42

Treasurer of ..... 4,311.65

\$81,549.07

.....\$682,993.53

and statement below.. 666,789.08

and advances).....\$ 16,204.45

EXPENDITURES IN DETAIL—FEDERAL APPROPRIATIONS AND "ALASKA" FUND.

Acct.	Route.	Construction.	Maintenance.	Total.
2	Juneau-Duck Creek.....	1,269.52	155.00	1,424.52
2B	Mendelhall Glacier.....	\$ 5,088.40	\$ 4,000.40	\$ 9,088.80
2C	Eagle River Extension.....		360.00	360.00
3	Haines-Pleasant Camp, first section.....	18,159.50	5,420.41	18,579.91
3	Haines-Pleasant Camp, second section.....	14,000.00	5,420.00	19,420.00
4A	Donnelly Cut-off.....		1,080.00	1,080.00
4B1	Valdez-Comfort, first section.....	11,579.81	2,000.00	13,579.81
4B1	Valdez-Comfort, second section.....	10,000.00	2,000.00	12,000.00
4B2	Comfort-Canyon.....	7,512.60	1,200.00	8,712.60
4B3	Keystone Canyon, first section.....	15,063.00	700.00	15,763.00
4B3	Keystone Canyon, second section.....	17,000.00	500.00	17,500.00
4B4	Canyon-Wortmans, first section.....	12,000.00	600.00	12,600.00
4B4	Canyon-Wortmans, second section.....	11,673.41	600.00	12,273.41
4B5	Wortmans-Beaver Dam.....	1,000.00	8,119.09	9,119.09
4B6	Beaver Dam-Ernestine.....	1,000.00	2,515.75	3,515.75
4C	Ernestine-Willow Creek.....	4,047.94	6,000.00	10,047.94
4D	Willow Creek-Gulkana.....	7,296.47	12,000.00	19,296.47
4E	Gulkana-Sourdough.....	2,973.51	12,000.00	14,973.51
4F	Sourdough-Mile 168.....	1,985.92	3,600.00	5,585.92
4G	Mile 168-Delta River (M 204).....	6,544.28	8,000.00	14,544.28
4H	Delta River-McCarty.....	5,346.42	13,500.00	18,846.42
4I	McCarty-Richardson.....	4,582.05	8,000.00	12,582.05
4J	Richardson-Salchaket.....	3,161.09	8,000.00	9,161.09
4K	Salchaket-Fairbanks, first section.....	7,500.32	5,000.00	12,500.32
4K	Salchaket-Fairbanks, second section.....	9,400.00	4,000.00	13,400.00
4K	Salchaket-Fairbanks, third section.....	8,085.00	7,000.00	15,085.00
5	Ester-Fort Gibbon.....	500.00	2,856.10	3,356.10
6A	Willow-Cr. Tonsina.....	2,891.84	6,000.00	8,891.84
6B	Tonsina-Chitina, first section.....	5,150.30	5,000.00	10,150.30
6B	Tonsina-Chitina, second section.....	6,158.32	5,000.00	11,158.32
7J	Fairbanks-Chena Hot Springs.....		507.75	507.75
8	Nome-Council.....	12,000.00	6,350.98	18,350.98
9	Rampart-Eureka.....	577.30	2,439.30	3,016.60
10	Seward-Kenai Lake.....	2,000.00	4,012.09	6,012.09
11A	Eagle-O'Brien.....		21.65	21.65
11C	Steel Creek-Jack Wade.....		2,273.50	2,273.50
11E	Eagle-70 Mile.....		671.97	671.97
13A	Nome-Bessie.....		118.00	118.00
13B	Bessie-Banner.....		68.30	68.30
13E	Dry Creek-Newton.....		123.35	123.35
13F	Nome-Osborne.....		5.00	5.00
13H	Center Creek.....		24.20	24.20
13I	Nome River Extension.....		284.16	284.16
13K	Bessie-Buster.....		945.10	945.10
14	Sitka-Indian River.....	1,500.00	5,543.37	6,543.37
15	Circle-Miller.....	1,000.00	1,548.71	2,548.71
16	Chatanika-Miller.....		500.00	500.00
17	Fort Gibbon-Kaltag.....		1,539.50	1,539.50
18	Kaltag-Solomon.....		436.50	436.50
19	Girdwood-Crcw Creek.....	500.00	219.20	719.20
20B	Susitna-Rainy Pass.....		209.50	209.50
20C	Rainy Pass-Tacotna.....		1,862.75	1,862.75
22	Hot Springs-Sullivan.....		114.50	114.50
23B	Beaver-Chandalar.....		1,498.51	1,498.51
24	Mile 29 ANRR-Sunrise.....	500.00	381.20	881.20
25A	Cripple River.....		279.50	279.50
25D	Mouth of Center Creek.....		172.63	172.63
25E	Submarine Pay Streak.....		334.25	334.25
25F	Anvil Glacier.....		256.00	256.00
25G	Snake River Bridge.....		162.75	162.75
25I	Sinrock Ferry.....		2,275.42	2,275.42
26	Candle-Candle Creek.....	1,000.00	2,162.77	3,162.77
27	Deering-Inmachuk.....		168.00	168.00
28	Dahl Creek-Candle.....		1,010.25	1,010.25
29	Fort Gibbon-Koyukuk.....		40.00	40.00
30	Hot Springs-Eureka.....		353.50	353.50
32A	Tacotna-Flat Creek.....		4,893.44	4,893.44
35	Knik-Willow Creek, first section.....	4,893.44	6,000.00	10,893.44
35	Knik-Willow Creek, second section.....	5,000.00	6,000.00	11,000.00
35A	Archangel Extension.....	400.00	95.17	495.17
35B	Mile 26 1/2-Palmer Road.....	479.50		479.50
38A	Ruby-Long.....	1,000.00	4,195.26	5,195.26
38B	Ruby-Long.....	4,000.00	418.48	4,418.48
38D	Long-Cripple.....	8,000.00	1,510.73	9,510.73
39	Ophir-Tacotna.....	1,800.00	1,220.60	3,020.60
40	Juneau-Sheep Creek.....		176.33	176.33
	Douglas-Gastineau Channel.....			





