ANNUAL REPORT OF THE CHIEF OF ENGINEERS, 1922

EXTRACT V

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

BOARD OF ROAD COMMISSIONERS FOR ALASKA



WASHINGTON
GOVERNMENT PRINTING OFFICE
1922

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

Estimate of funds, 1924.

•			Items.		
Name of route.	Mileage.	I. Repair and main- tenance.	II. Improvement.	III. New construc- tion.	Total.
Southeastern Alaska: Haines-Pleasant Camp Porcupine extension. Douglas-Gastineau Channel Haines-Mud Bay Strawberry Point.	43 20 2 10 1½	\$11,500 5,000 1,000 2,500 500	\$20,000	\$33,000	\$64,500 5,000 1,000 2,500 500
Total	76½	20, 500	20,000	33,000	73, 500
Eagle subdistrict: Eagle-Fortymile Eagle-Seventymile Steel Creek-Chicken Canyon Creek-Walkers Fork. Eagle-Circle. Tanana Crossing-Chicken. Fourth of July-Nation.	47 20 18½ 10 190 102 10	10,000 2,000 3,700 2,500 1,900 1,400 2,500	30,000	10,000	50,000 2,000 3,700 2,500 1,900 1,400 2,500
Total	3971	24,000	30,000	10,000	64,000
Valdez district: Valdez-Willow Creek. Chitina-Willow Creek. Willow Creek Rapids. Valdez-Mineral Creek. Chisana-Nizina. McCarthy-Nizina. Strelna-Kuskulana. Gulkana-Tanana Crossing Chistochina-Slate Creek.	92 39 1391 101 78 16 16 180 40	46,000 19,500 69,750 2,550 7,800 8,000 4,000 1,800 4,000	10,000 3,000 10,000	20,000	46,000 19,500 69,750 2,550 7,800 38,000 7,000 31,800 4,000
•	611	163, 400	23,000	40,000	226, 400
Southwestern Alaska: Houston-Rainy Pass (Government rail-road). Knik-Willow Creek (Government rail-road). Alaska Peninsula. Talkeetna-Cache Creek (Government rail-road). Talkeetna-Iron Creek (Government rail-road). Anchorage-Eagle River (Government	152 53 40 40 47	2,000 26,500 10,000 10,000 3,000	7, 400 10, 000	10,000 10,000 80,000 20,000	2,000 43,900 30,000 90,000 23,000
railroad)	10	5,000		5,000	25,000 1,500
road)	36 15	18,000 7,500		10,000	234,400
	393	82,000	17, 400	135,000	234, 34
Fairbanks district: Fairbanks-Rapids (Government rail- road). Fairbanks-Chatanika (Government rail- road). Summit-Fairbanks Creek (Government railroad). Fairbanks-Ester Creek (Government railroad). Fairbanks-Chena Hot Springs (Govern- ment railroad). Chatanika-Circle (Government railroad). Chatanika-Beaver (Government rail-	130½ 30 11 13 64 130	62, 250 15, 000 5, 500 6, 500 6, 400 20, 000	10,000	10,000	62, 250 15, 000 5, 500 6, 500 26, 400 110, 000
road). Olnes-Livengood (Government-railroad). Beaver-Caro. Winter Trails.	120 54 75 165	12,000 5,400 7,500 4,650			12, 000 5, 400 7, 500 4, 630 255, 200
	792}	145, 200	80,000	30,000	

BOARD OF ROAD COMMISSIONER

Estimate of funds, 1924-Co

Name of route.	Mileage.	I. Rej
Nenana district:		
Dunbar-Fort Gibbon (Government rail- road) Dunbar-Brooks (Government railroad) Rampart-Eureka	121 63 27½	\$12, 6, 13,
Hot Springs Landing-Eureka. Hot Springs-Sullivan Creek. Roosevelt-Kantishna. Government raliroad-Kantishna (Government raliroad). Coldfoot-Wiseman.	24 9 34	12, 4, 17,
Moose Creek (Government railroad) Carlsons-Valdez Creek (Government rail-	85 11 13 6	8, 1, 4, 3,
road) Winter trails	55 716	5, 7,
	1,164}	94,
Kuskokwim district: Ruby-Poorman. Ophir-Tacotna.	59 23½	29, 11,
Tacotna Forks. Berrys Landing-Nixon Forks. Iditarod-Flat. Summit-Otter Creek. Poorman-Ophir (summer). Tacotna-Flat	11 12 8	2, 6, 4,
Flat-Crooked Crook (summer)	6 125 80 65	1,
Kalchagamut-Russian Mission Winter Trails	1,383	1, 13,
	1,8911	74,
Nome district: Nome-Council Nome Locals Candle-Candle Creek.	82 60}	21, 20, 3,
Davidsons Landing-Taylor Marshall Road Nome-Shelter	25 40 3	7. 15 1
Winter Trails	87 1,959	29 19
	2, 2621	117
SUMMARY.		
Southeastern Alaska. Eagle subdistrict Valdez district. Southwestern Alaska Fairbanks district Venana district Luskokwim district Vorne district.	76½ 397½ 611 393 792½ 1,164½ 1,891½ 2,262½	20 24 163 82 145 93 75

RECOMMENDED MODIFICATION None.

REFERENCES TO PUBLISHED ARTICLES N

"Road building in Alaska," by Col. before the Eighteenth Annual Convent Builders' Association, Chicago, Ill., Fel the association's "Proceedings," pages 2 by Maj. John C. Gotwals, the Military F

CHIEF OF ENGINEERS, U. S. ARMY, 1922.

listribute the funds requested for the fiscal year llows:

Estimate of funds, 1924.

		Items.					
	Mileage.	I. Repair and main- tenance.	main- prove- const		f. New astruc- tion.	Total.	
el	43 20 2 10 1½	\$11,500 5,000 1,000 2,500		\$20,000		\$33,000	\$64,740 5,000 1,000 2,500 500
	76 1	20,500	= ==	20,000	-	33,000	73,500
ork	47 20 18½ 10 190 102 10	10,000 2,000 3,700 2,500 1,900 1,400 2,50	<u> </u>	30,000		10,000	50,000 2,000 3,700 2,500 1,900 1,400 2,500
	3971	24,00	0	30,000	-	10,000	64,000
18	92 39 1391 102 78 16 16 180 40	46,00 19,76 69,76 2,55 7,80 8,00 4,00 1,80	ñ	10,000 3,000 10,000		20,000	46,000 19,500 69,750 2,550 7,500 38,000 7,000 31,500
	611	163, 4	00	23,000		40,000	226, 400
overnment rail- overnment rail-	152 53 40 40		00	7, 40 10, 00	0	10,000 10,000 80,000	2,000 43,900 30,000 90,000
lovernment rail-	٠ =٠	1	- 1			20,000	23,000
overnment rail- rnment railroad	36	18,0	000 500	· · · · · · · · · · · · · · · · · · ·		10,000	10,000 28,000 7,500
A CHARLES AND A	39	82,	000	17,4	00	135,000	234, 400
overnment rail	13		250 000				62,250
eek (Governmen	•• *	1 5,	500				5,500 6,500
Springs (Government railroad	i- 1	6 30 6 20	500 400 000	10,0 70,0)00)00	10,00 20,00	0 26, 400 110,000
overnment railroac	1).	20 12 54 5 75 7 85 4	,000 ,400 ,500 ,650				5, 400 7, 500 4, 650
	7	921 145	, 200	80,	000	30,00	00 250,200

Estimate of funds, 1924—Continued.

	!		Items.		
Name of route.	Mileage.	I. Repair and main- tenance.	II. Improvement.	III. New construction.	Total.
yenana district: Dunbar-Fort Gibbon (Government railroad). Dunbar-Brooks (Government railroad). Rampart-Eureka. Hot Springs-Landing-Eureka. Hot Springs-Sullivan Creek. Roosevelt-Kantishna. Government railroad-Kantishna (Government railroad). Coldfoot-Wiseman. Brooks-Terminal Moose Creek (Government railroad) Carlsons-Valdez Creek (Government rail-		\$12,100 6,300 13,750 12,000 4,500 17,000 8,500 1,100 4,000 3,000	\$20,000 20,000 10,000	.l	\$12,100 6,300 48,750 12,000 4,500 17,000 108,500 1,100 24,000 3,000
Carlsons-Valdez Creek (Government rail- road). Winter trails.	55 716	5,500 7,150	10,000	10,000	25, 500 7, 150
	1,164}	94,900	60,000	115,000	269,900
kuskokwim district: Ruby-Poorman. Ophir-Tacotna. Tacotna Forks. Berrys Landing-Nixon Forks. Jditarod-Flat. Summit-Otter Creek. Poorman-Ophir (summer). Tacotna-Flat. Flat-Crooked Creek (summer). Kalchagamut-Russian Mission. Winter Trails.	6 125 80 65	29,500 11,750 2,200 6,000 4,000 3,000 1,250 800 650 1,200 13,850	1,000	30,000 10,000 10,000	69,500 31,750 22,200 9,000 4,000 3,000 1,250 800 1,650 1,200 28,850
	1,891½	74, 200	49,000	50,000	173, 200
ome district: Nome-Council Nome Locals Candle-Candle Creek Deering-Inmachuk Davidsons Landing-Taylor Marshall Road Nome-Shelton Winter Trails	82 60½ 6 25 40 3 87 1,959 2,262½	21,000 20,700 3,000 7,500 15,000 1,500 29,000 19,600	10,000 1,500 25,000 19,600 56,100	30,000	21,000 20,700 3,000 7,500 55,000 3,000 54,000 39,200
SUMMARY.					
gutheastern Alaska. jaje subdistrict jadez district suthwestern Alaska hirbanks district sunan district sunan district sunan district sunan district sunan district	76½ 397½ 611 393 792½ 1,164½ 2,262½ 7,589	20,500 24,000 163,400 82,000 145,200 94,900 74,200 117,300	20,000 30,000 23,000 17,400 80,000 60,000 49,000 56,100	33,000 10,000 40,000 135,000 30,000 115,000 50,000 30,000	73,500 64,000 226,400 234,400 255,200 269,900 173,200 203,400

RECOMMENDED MODIFICATIONS OF PROJECT.

None.

REFERENCES TO PUBLISHED ARTICLES NOT PREVIOUSLY REPORTED.

"Road building in Alaska," by Col. James G. Steese, an address before the Eighteenth Annual Convention of the American Road Builders' Association, Chicago, Ill., February 9, 1921, published in the association's "Proceedings," pages 24-32; "The Alaskan trail," Maj. John C. Gotwals, the Military Engineer, January-February,

1922, pages 75-77, illustrated; "The trails of Alaska," by Maj. John C. Gotwals, the Penn State Engineer, March, 1922, pages 8-10, illustrated; "Roads and trails in Alaska," by Col. James Gordon Steese, Good Roads Magazine, March 1, 1922, page 121, illustrated; "Alaska" in 1922," by Col. James Gordon Steese, F. R. G. S., World Traveler, May, 1922, pages 11 and 64, illustrated.

COMMERCIAL STATISTICS.

Total commerce of Alaska for the calendar year of 1921.

IMPORTS.

Merchandise from the United States Merchandise from foreign ports	935, 013
Total imports	20, 209, 228
EXPORTS.	
Merchandise to the United States	1,478,272
Total exports	45, 745, 338
Grand total, exports and imports	65, 954, 566

The total imports for 1921 were about \$18,000,000 less and the total exports about \$4,000,000 less than those reported for the calendar year 1920. The decrease in imports was due to the fact that but few salmon canneries were in operation, also to the decline in all forms of lode mining, and also to the nearing completion of the Government railroad and the consequent decrease in shipments of construction materials.

With regard to the decrease in exports, the decrease of both copper production and development, owing to the low price of metals, contributed to the loss over 1920, as did the decline in production and value of canned fish, fish and whale oils, fertilizers, lead ore, marblepalladium, and platinum.

The value of Alaska's mineral output in 1921 was approximately \$16,000,000, as compared with \$23,000,000 in 1920. Minerals are being produced in the following order of value: Copper, gold, silver, coal.

gypsum, marble, lead, petroleum, palladium, and platinum.

The high prices, now happily over their peak, were an obstacle in great the continued working and the further development of the great Lode mining of gold has continued in placer deposits in Alaska. southeastern Alaska, but under the same handicap. With decreased prices and the return of miners to Alaska, lode mining is to be expected in the interior pected in the interior. One lode mine in the Kuskokwim at Nison Forks has made substantial. Forks has made substantial progress during the past year. The deposits of the Kantishna and the hosits of the posits of the Kantishna are again exciting interest and with the completion of the Gayamana and exciting interest and with the completion of the Government railroad development can be looked for. The mining of copper had be looked development can be looked for. The mining of copper has continued, but little further development of such mines can be have opment of such mines can be hoped for with the present condition of the copper market. Coal is being a sixty with the present condition of the copper market. the copper market. Coal is being mined and used locally from Eska and Chicksloon in the Matanuals. and Chickaloon in the Matanuska region and at Houston, Sullivan's, and Healy along the railroad. Oil is being I fields and under the new leasing law great int the old oil prospects of Alaska, notably in th the Alaska Peninsula. The total mineral pi date reaches the vast sum of \$75,000,000.

The fisheries are principally located on the Pacific and Bristol Bay. The production of principal product. However, large quantities ring, and whaling products are also exported making the sale of the cheaper grades of can possible has seriously affected the canning inc. year.

In forest products the timber resources, p has been slow, are very important. While A high quality, it is used extensively, and a small for it. With the development of the excellen pecially southwestern and southeastern Alaska the wood-pulp industry is to be expected. (operating in southeastern Alaska in January, 1 lishment of the pulp-paper industry in Alask stantial prosperity from a year-round operated

In agriculture a mere beginning has been ma potatoes, turnips, rutabaga, and other root cr hardier cereals are readily produced. A flour Fairbanks. With increased population and, c extensive market, the agriculture effort is likely

The reindeer industry shows a substantial established on the Seward Peninsula and in the Kuskokwim Valleys. Four cold-storage plants I on Seward Peninsula. Nearly 800 carcasses were

The fur production, stimulated by the unusuall the war, reach a large total value.

INVESTIGATION AND REPORT REQUIRED BY THE ACT OF JUNE 30, 1921.

In compliance with the following proviso com Congress approved June 30, 1921:

Provided further, That not to exceed \$10,000 of the f Frovided further, That not to exceed \$10,000 or expended for a preliminary investigation and report sirability, and cost of the best and most practicable compunications and the coal decompositions. None-Shelton system of communications and the coal de River Chit kiver, Chicago Creek, and the Keewalik mining districtional, sled road, tramway, trail, or other means.

The board had a preliminary reconnaissance management the Saw prospective routes of communications on the Sew last fall. Field work will be completed during the received the receiv Report thereon will be duly submitted when receive

ADDITIONAL DUTIES OF THE BOARI

At the request of the commanding officer of the H. Seward, Alaska, the president of the board n anination of the water main crossing Chilcat Inline book and submi the post and the town of Haines, Alaska, and subminecommunity tecommendations for the repair and reconstruction teport. War Department ar report was approved by the War Department ar

APPROPRIATIONS.

APPROPRIATIONS.	
enance, military and post roads, bridges Alaska.	
ent on p. 2105, Annual Report of the s, 1920.)	\$3, 370, _{000, 00}
	495 00
	$\substack{425,000,00\\465,000,00}$
	4, 295, 000, 00
asury, United States, account "Alaska	
ADS, BRIDGES, AND TRAILS, ALASKA FUND.	
al year 1921 51, Part II, Annual Report of the Alaska , fiscal year 1921.)	32, 422, 87 _{1, 88}
	97, 461, 62
	4, 213, 20
•	7 - 10. 20
	2, 524, 546, 70
f compensation, Military Establishment.	
·	\$145. 20
	~-~-
	940.00 $4,322.09$
	5, 407. 29
CONTRIBUTED FUNDS.	
s approved June 30, 1921, Alaska special fun	d.]
daska: approved April 21, 1919—Public roads,	
d ferries— 0	\$115, 517.94
	85, 746, 61
21, roads, etc.—	, - 40. 01
1	28, 000, 00
of Midne Disco Della	43, 237, 28
21, Nizina River Bridge— 2	5, 000, 00
21. shelter cabins—	5, 000, 00
21, shelter cabins—	6, 500, 00
	284, 001. 83
	220, 02
!	500.00
	500, 00
kagway	463. 75

0

1,683.77

ANNUAL REPORT OF THE ALASKA ROAD COMMISSION FISCAL YEAR 1922

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

1922 PART II

BOARD OF ROAD COMMISSIONERS FOR ALASKA

> JUNEAU, ALASKA 1922

ORT ALASKA ROAD COMMISSION.

, the nature of the work in Alaska adds to make comparisons with road work in the In the roads built here the cruising, clear struction of the road includes all work done to settled parts of the United States from with this the mileage cost of our roads can great deal of gratification.

harge at the beginning of the 1920 working poard has been engaged in overhauling the situation, rehabilitating or abandoning the llen into disrepair or disuse, and drawing up emprehensive plan of operations covering a brief resume of this situation as it has degiven.

ge of roads and trails constructed by the sixteen years of existence (1905-1920) aggresisting of 1031 miles of wagon road, 636 miles 3 miles of trail.

ne 712 miles of temporary trail have been Not all of this mileage has been maintained has been in disuse or practically impassable a small mileage has been superseded by other t transportation as will appear more in detail

utes included in this 5602 miles are enumerd IV, Annual Report for 1921. The following e status of the work of investigation and revo years ago. The funds available enabled subbe made and the investigation should be pracring the current season.

		MILE	AGE-		
Wagon Road 1,031*	Sled Road 636	Trail 3,223	Total 4,890	Flagging Only 712	Grand Total 5,602
252¼ 307	$\frac{271}{166}$	$1,105\frac{1}{2}$ $2,046\frac{1}{2}$	$\frac{1,628\%}{2,519\%}$	536	$\frac{2,1643}{2,519}$
1,5901/4	1,073	6,375	9,03814	1.248	10.2861
1141/2	9 73	146 1/2	270 5173		270 517
25½ 196½	73 3 25	$\substack{419\\750\frac{1}{2}}$	1,272	712	1,984
1,25334	666	5,059	6,97834	536	7,514
1591/4	96	1,931	2,18614		2,186
1,0941/2	570	3.128	4,7921/	536	5,328 bureau

During the past fiscal year the expenditures were distributed over the following mileage:

	Wagon Road	Sled Road	Trail	Flagged Trail	Total
Southeastern Alaska			25½ 368½		$\frac{136}{438}$
Valdez	$\substack{19\frac{1}{2}\\282}$	50	224		506
Southwestern Alaska		$\frac{40}{527}$	$\frac{199}{1.005}$		$\frac{386}{1.840}$
Kuskokwim	83 1/2		565		$648\frac{1}{2}$
Nome	211 34	27	1,1891/2	536	1,96414
i j	$1,162\frac{1}{4}$	644	$3,576\frac{1}{2}$	536	5.9183_{4}

The Board has expended the following funds since the beginning of road and trail development in the Territory:

FEDERAL APPROPRIATIONS:	
Alaska Fund, 1905-1920	\$2,155,030.92*
Army Acts, 1905-1920	3,058,041.44**
Increase of Compensation, 1918-1920	$ \begin{array}{ccc} & 145.20 \\ & 22.870.76 \end{array} $
U. S. Treasury Adjustments, 1905-1920 Alaska Fund, 1921-1922	391.266.29
Army Acts, 1921-22	776,807.34
Increase of Compensation, 1921-22	5,262.09
Total	\$6,409,424.04
CONTRIBUTED FUNDS:	
Territory of Alaska, 1920	\$ 101,184.56
Territory of Alaska, 1921-1922	
Miscellaneous, 1922	1,683.77
Total	\$ 277,885.60
Grand Total	\$6,687,309.64
*Includes the following adjustments:	
Appropriations	09 199 595 65
ADDITIONS:	
Receipts from sales	501920.82
Total	\$2,173,606.47
DEDUCTIONS:	
Disbursing officer shortage***	18,575.55
Net total	\$2 155 020 92
**Includes the following adjustments: Appropriations	22 OFF OUR IV.
	\$3,055,000.00
ADDITIONS:	
Navy Dept. reimbursement	4.267.99
Total	
DEDUCTIONS:	
Disbursing officer shortage***	1,226.55
Net Total	
***Defaulting officer was dismissed the service by G. O. Dept., Washington, D. C., Feb. 17, 1912.	No. 4. War

In addition to the above funds, disbursed through the $U.\ S.$ Treasury, the Board has supervised the expenditure of the following funds disbursed by other agencies:

Since assuming charge at the beginning of the 1920 working season, the present board has been engaged in overhauling the entire road and trail situation, rehabilitating or abandoning the projects which had fallen into disrepair or disuse, and drawing up a progressive and comprehensive plan of operations covering a period of years. A brief resume of this situation as it has developed will now be given.

The total mileage of roads and trails constructed by the board during its first sixteen years of existence (1905.1920) aggregates 4890 miles, consisting of 1031 miles of wagon road, 636 miles of sled road, and 3223 miles of trail.

In addition, some 712 miles of temporary trail have been flagged as required. Not all of this mileage has been maintained year by year; some has been in disuse or practically impassable for many years and a small mileage has been superseded by other routes or methods of transportation as will appear more in detail below.

The specific routes included in this 5602 miles are enumerated in Tables I and IV, Annual Report for 1921. The following table summarizes the status of the work of investigation and rehabilitation begun two years ago. The funds available enabled substantial progress to be made and the investigation should be practically completed during the current season.

STATUS			MILI	EAGE-		
	Wagon Road	Sled Road	Trail	Total	Flagging Only	Grand Total
1920 Report	1,031	636	3.223	4,890	712	5,602
ADDITIONS:				ø		
Reclassification New Mileage		$\begin{array}{c} 271 \\ 166 \end{array}$	$^{1,105\frac{1}{2}}_{2,046\frac{1}{2}}$	$\frac{1,628\%}{2,519\%}$		$2,164\frac{34}{2}$ $2,519\frac{1}{2}$
Grand Total	1,5901/4	1,073	6,375	9,0381/4	1,248	10,28614
DEDUCTIONS:						
Turned over to other bureausAbandoned Reclassification	25½	73 325	$146\frac{1}{2}$ 419 $750\frac{1}{2}$	$270 \\ 517\frac{1}{2} \\ 1,272$	712	270 517 ¹ 2 1,984
Net Total	1,253%	666	5,059	6,97834	536	7,51434
No Work 1922	15914	96	1,931	2,18614		$2,186\frac{14}{4}$
1922 Report*	1,0941/2	570	3,128	4,7921/2	536	5,32812

*Exclusive of sub-projects subsequently turned over to other bureaus-

ANNUAL REPORT ALASKA RO.

During the past fiscal year the exp over the following mileage:

	Road	Ē.
Southeastern AlaskaEagle	$110\frac{1}{2}$ $19\frac{1}{2}$	
Valdez	282	•••
Southwestern Alaska Yukon	30.8	Į
Kuskokwim Nome	$83\frac{1}{2}$ $211\frac{3}{4}$	•••
1	,1621/4	-6

The Board has expended the follow ning of road and trail development in the

FEDERAL APPROPRIATIONS: Alaska Fund, 1905-1920 Army Acts, 1905-1920 Increase of Compensation, 1918-1920 U. S. Treasury Adjustments, 1905-1920 Alaska Fund, 1921-1922 Army Acts, 1921-22 Increase of Compensation, 1921-22 Total

CONTRIBUTED FUNDS:

Grand Total *Includes the following adjustments: Appropriations

ADDITIONS:

Receipts from sales ... Repayments, voucher corrections

Total DEDUCTIONS:

Disbursing officer shortage***

Net total **Includes the following adjustments: Appropriations

ADDITIONS:

Navy Dept. reimbursement Repayments, voucher corrections Total

DEDUCTIONS:

Disbursing officer shortage***

Net Total

****Defaulting officer was dismissed the S Dept., Washington, D. C., Feb. 17, 1912.

In addition to the above funds, (Treasury, the Board has supervised th ing funds disbursed by other agencies:

r ALASKA ROAD COMMISSION.

e nature of the work in Alaska adds to ake comparisons with road work in the the roads built here the cruising, clearction of the road includes all work done settled parts of the United States from this the mileage cost of our roads can eat deal of gratification.

ge at the beginning of the 1920 working d has been engaged in overhauling the tuation, rehabilitating or abandoning the into disrepair or disuse, and drawing up rehensive plan of operations covering a f resume of this situation as it has de-

of roads and trails constructed by the teen years of existence (1905-1920) aggreng of 1031 miles of wagon road, 636 miles iles of trail.

712 miles of temporary trail have been t all of this mileage has been maintained been in disuse or practically impassable nall mileage has been superseded by other ansportation as will appear more in detail

v, Annual Report for 1921. The following tatus of the work of investigation and reears ago. The funds available enabled submade and the investigation should be practice that the current season.

		МІСЕ	AGE-	Tile main a	Grand
Wagon	Sled	Trail	Total	Flagging Only	Total
Road 1,031*	Road 636	3,223	4,890	712	5,602
2521/4	271	1,1051/2	1,62834	536	$\frac{2,16434}{2,51912}$
307	166	$2,046\frac{1}{2}$	$2,519\frac{1}{2}$		
1,5901/4	1,073	6,375	9,0381/4	1,248	10,28614
1141/	9	1461/2	270		270 51712
114½ 25½ 196½	73 325	419 750½	$517\frac{1}{2}$ $1,272$	712	1,984
1,25334	666	5,059	6,97834	536	7,51484
1591/4	96	1,931	$2,186\frac{1}{4}$	· ·······	2,18614
1,0941/2	570	3,128	4,7921/	536	5,32812
	bsequent	ly turne	d over	to other	bureaus.

ANNUAL REPORT ALASKA ROAD COMMISSION.

During the past fiscal year the expenditures were distributed over the following mileage:

	Wagon Road	Sled Road	Trail	Flagged Trail	Total
Southeastern Alaska Eagle	$110\frac{1}{2}$ $19\frac{1}{6}$	50	$\frac{25 \frac{1}{2}}{368 \frac{1}{2}}$		136 438
Valdez Southwestern Alaska	282	40	224 199		506 386
Yukon Kuskokwim		527	1,005 565		1,840 6485
Nome	211 34	27	1,189 1/2	536	1,964 1/4
	$1,162\frac{1}{4}$	644	3,576 1/2	536	$5,9183_{4}$

The Board has expended the following funds since the beginning of road and trail development in the Territory:

FEDERAL APPROPRIATIONS:	
Alaska Fund, 1905-1920	en 155 020 008
Army Acts, 1905-1920	
Increase of Compensation, 1918-1920	145.20
II S Treasury Adjustments 1905-1920	22.870.76
Alaska Fund, 1921-1922	391,266.29
Army Acts, 1921-22	776,807.34 5.262.09
Increase of Compensation, 1921-22	
Total	\$6,409,424.04
CONTRIBUTED FUNDS:	
Territory of Alaska, 1920	\$ 101.184.56
Territory of Alaska, 1921-1922	175,017.27
Miscellaneous, 1922	1,683.77
Total	\$ 277,885.60
Grand Total	\$6 687 309 64
orana rotat	
*Includes the following adjustments:	
Appropriations	\$2,123.585.65
ADDITIONS:	
Receipts from sales\$48,694.14	
Repayments, voucher corrections 1,326.68	50,020.82
Total	89 150 COC 45
2 2 122	\$2,113,600.41
DEDUCTIONS:	
Disbursing officer shortage***	18,575.55
Net total	\$2 155 030 92
**Includes the following adjustments:	
Appropriations	\$3,055,000.00
ADDITIONS:	
Navy Dept. reimbursement\$3,976.19	
Repayments, voucher corrections	4.267.99
Total	\$3 059 267 99
DEDUCTIONS:	
Disbursing officer shortage***	. 1,226.55
Net Total	.\$3,058,041.44
***Defaulting officer was dismissed the service by G. O. Dept., Washington, D. C., Feb. 17, 1912.	No. 4, War

Dept., Washington, D. C., Feb. 17, 1912.

In addition to the above funds, disbursed through the U.S. Treasury, the Board has supervised the expenditure of the following funds disbursed by other agencies:

urning to snow with the lowest winter temerior on the other hand, receives light rain; the long winter of the interior, clear days; prevail, and with the light snow fall exprovided for winter sledding.

aska is essentially a country of bold relief.

nd from the coast the exceedingly rugged assed. Then one drops into a semi-interior nding to the main Alaska Range. The main great heights and after passing it one enters er valley of the Yukon. Even within this encountered everywhere, rising into elevation mountainous. This diverse topography controls slope.

e coastal country contain a very dense growth k timber. In the interior the usual timber appearing, and in addition cottonwood and my places. The glaciers, resulting from the the Coast Range, are a conspicuous feature m and are likewise encountered on the south ange and to some extent on the north slope, created by the seasonal melting of these he most annoying obstacles encountered in

commerce of Alaska, this Territory is, and y a producer of raw materials, metals or and in addition on the coast, fish. Furs are portions, but are a very important element Alaska and are distinguished by their rare kets of the world. Efforts continue to prothe unsettled prices of the last two years lopment difficult. Oil prospecting has conhigh hopes exist for the bringing in of a high grade refining paraffine base oil found evelopments, chiefly in the Matanuska fields , have made progress. The production of in important item of local production in the Area. It is improbable, in view of the exiling for ocean shipping from our west coast ough the Panama Canal to the east coast, be exported for sale to our Pacific States. aly directed to the production of the hardier has continued and is of high value for local ension of the agricultural effort, of course, population engaged in mining or other local

With the above outline, the character of the commerce existing between the United States and Alaska can be readily seen. Alaska is essentially an overseas country based on the ports of our Northwest states. Its population is maintained by the shipment of raw materials to the Northwest states in exchange for which indispensables, chiefly foodstuffs and manufactured articles. are sent to Alaska.

GENERAL TRANSPORTATION PROBLEM.

The traffic movement based on the commerce of Alaska and complying with the exactions of climate and topography, gives the key to the solution of the transportation problems of Alaska. As a basis for all this traffic, the first element is that of the ocean going ships plying from Seattle, or other Northwest ports, to the ports in Alaska. From these vessels material and personnel are distributed, first by railroads, of which three are in operation, i. e., the White Pass and Yukon from Skagway to Whitehorse, the main artery serving the Yukon Territory; second, the Copper River & Northwestern Railway from Cordova to the Kennecott Copper Mines; and third, the recently constructed Government Railroad from Seward, on the Gulf of Alaska, to Anchorage at the head of Cook Inlet, and thence along the Susitna Valley crossing the Alaska Range through Broad Pass to Nenana on the navigable waters of the Tanana River, and thence to Fairbanks, the center of the Fairbanks mining district and the interior terminus of the Valdez-Fairbanks wagon road. From the ports established in Alaska to the interior, great service is rendered in addition by the splendid interior waterways of the Yukon, Kuskokwim, Tanana and Koyukuk, in the distribution of supplies. While these rivers are open only five months in the year, the service they render is and always will be extremely important.

With the above two means of communication enters into service the wagon roads, sled roads and trails, constructed by this Board. In respect to railroads, however, the service rendered by wagon roads is of immensely more importance than that performed in our prairie states. No such general development will follow the construction of a railroad in Alaska as followed the construction of the railroads through the prairie states of the West. following the great period of American railroad construction. In our Western agricultural states, farms at once became accessible to the great Eastern markets, though located as far as fifty miles from the main railroad line after the construction of the same. On the other hand, it is practically impossible to proceed with wheeled vehicles anywhere in Alaska without some form of prepared wagon road. The need for some form of overland transportation is met at lesser cost in many parts of Alaska by the use of sled roads or trails. These provide a means of penetrating inrainfall, occasionally turning to snow with the lowest winter temperatures, and the interior on the other hand, receives light rain and snow fall. During the long winter of the interior, clear days with low temperatures prevail, and with the light snow fall excellent conditions are provided for winter sledding.

In topography, Alaska is essentially a country of bold relief. As one proceeds inland from the coast the exceedingly rugged coast range is first passed. Then one drops into a semi-interior of rolling country, extending to the main Alaska Range. The main Alaska Range rises to great heights and after passing it one enters the great interior river valley of the Yukon. Even within this valley rolling hills are encountered everywhere, rising into elevations which are almost mountainous. This diverse topography continues almost to the Arctic slope.

The forests of the coastal country contain a very dense growth of spruce and hemlock timber. In the interior the usual timber is spruce, hemlock not appearing, and in addition cottonwood and birch are found in many places. The glaciers, resulting from the very heavy snowfall on the Coast Range, are a conspicuous feature of that mountain system and are likewise encountered on the south slope of the Alaska Range and to some extent on the north slope. The glacier streams, created by the seasonal melting of these glaciers, are one of the most annoying obstacles encountered in our road construction.

In respect to the commerce of Alaska, this Territory is, and always will be, chiefly a producer of raw materials, metals or metalliferous minerals, and in addition on the coast, fish. Furs are produced in lesser proportions, but are a very important element in the commerce of Alaska and are distinguished by their $ra^{r\ell}$ beauty in the fur markets of the world. Efforts continue to p^{ro} duce wood pulp, but the unsettled prices of the last two years have made such development difficult. Oil prospecting has continued vigorously and high hopes exist for the bringing in of 2 producing field of the high grade refining paraffine base oil found in Alaska. The coal developments, chiefly in the Matanuska fields and near Healy River, have made progress. The production of both fields has been an important item of local production in the Government Railroad Area. It is improbable, in view of the extremely low rates prevailing for ocean shipping from our west coast to the Orient and through the Panama Canal to the east coast. that Alaskan coal can be exported for sale to our Pacific States Agricultural effort, mainly directed to the production of the hardief. cereals and root crops, has continued and is of high value for local consumption. The extension of the agricultural effort, of course rests upon increased population engaged in mining or other local industries.

With the above outline, the chaing between the United States and Alaska is essentially an overseas cour Northwest states. Its population ment of raw materials to the Northwhich indispensables, chiefly foodstuare sent to Alaska.

GENERAL TRANSPORT

The traffic movement based on complying with the exactions of clim key to the solution of the transport: a basis for all this traffic, the first going ships plying from Seattle, or ports in Alaska. From these vesse distributed, first by railroads, of which the White Pass and Yukon from Ska artery serving the Yukon Territory; Northwestern Railway from Cordo Mines; and third, the recently con from Seward, on the Gulf of Alaska. Cook Inlet, and thence along the S aska Range through Broad Pass waters of the Tanana River, and th of the Fairbanks mining district an Valdez-Fairbanks wagon road. From aska to the interior, great service splendid interior waterways of the and Koyukuk, in the distribution of are open only five months in the y and always will be extremely impo

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SPORT ALASKA ROAD COMMISSION.

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TRAFFIC MOVEME

A traffic census was conducted three year. Due to the poor communications, rep not now complete. Such fragmentary rep ceived show a very gratifying reaction from by this Board, and an astonishing aggregate lying in remote sections. Of those reporte Cache Creek Road and sled road show a t 1,866 persons through the year. The freigh by this tonnage through the year upon the to \$50,000, or more than the cost of all new within the year by this Board. Upon the Road a traffic of 1,178 tons and 2,188 pers traffic has been a very valuable one for th and without the road construction already $p\boldsymbol{\varepsilon}$ tically non-existing. Upon the Rainy Pass opened for mail and passenger service throu persons journeyed. The cost of this trip this trail with dog teams would amount in th expended in transportation alone on this ti the expenditure of increased amounts in a ditions on this important trail will be retur traffic and reduced cost per-person. Upo Road a traffic of 800 tons and 577 persons far cry from these roads in the old settled the Kobuk Valley in the far north. Yet upo along the Kobuk River at Kiana, a traffic persons was shown. This latter traffic me over-emphasized as bringing out the service ing life in the far northern portions of Alas

DETAILED OPERATIONS BY

winter dog trails.

The nature of the construction work pioneer cruising and blazing of pack trails ing well graded gravel roads. In Southea centers of population of Southwestern and several hundred miles of road exist, well su and meeting adequately the increased motor A considerable amount of work is constant ing portions of old roads, involving regrae gravel surfacing. The condition of roads he to improve by thawing and drying out fro this reason, the carrying along of construct periods has not always been a disadvantag tion and clearing of the right-of-way and t

accessible country and of bringing them into a stage of development warranting the heavier cost of construction of a located and graded wagon road. This form of development has been successfully carried out by this Board, the dog trail and sled road permitting entry into an area at low cost and being later improved into a summer road if the development warrants it. It is this carefully guided expenditure upon roads and trails in all the area of Alaska capable of providing traffic for the Government Railroad, that is necessary before that great federal endeavor can receive all of the traffic with which this great Territory can provide it. To enable all of this traffic to reach the railroad, eventually it will be found that an amount very nearly equalling the cost of the Railroad will have been spent upon wagon roads, trams, sled roads and other means of overland transportation within the Territory.

REGIONS OF ALASKA.

Our problems are outlined by reviewing the physical features of Alaska and the lines of communication already established. The portion of Alaska now under development naturally divides itself in this way into the following districts:

First, Southeastern Alaska, embracing the islands and coastal mainland east of the 141st meridian. This region is served almost entirely by water borne commerce and little new construction is necessary except in providing short tributary roads to the coast towns.

Second, Copper River Valley, embracing Cordova, Valdez and Kennecott, and penetrated by the Copper River Railroad with the Valdez-Fairbanks road serving as a tributary.

Third, the Susitna Valley, including the country traversed by the Government Railroad in the Susitna Valley and on the Kenai Peninsula, including Seward, Anchorage, and the Matanuska coal fields. The Alaska Peninsula and Kodiak Island, served by boats based on Seward, are closely attached in development to this region and are included therein.

Fourth, the Kuskokwim Valley, including the lower Yukon Valley and that of the Kuskokwim. This region is very meagerly provided with transportation means and the most important project of this Board aims at its relief and attachment to the Government Railroad.

Fifth, the Yukon, including Fairbanks and the Yukon, Koyukuk and Tanana Valleys. This rich placer mining district is of high importance for development and if producing quartz mines can be added to the placer mining production, an important tonnage will be produced for the Government Railroad.

Sixth, Nome, including the Seward Peninsula and the Arctic slope of Alaska. This region is served by summer roads of minor importance and throughout by highly important winter dog trails.

EAGLE SUB-DISTRICT.

Supervised from the Juneau Office.

Fred Price, Foreman in Charge.

This sub-district includes the territory east of the 144th meridian between the Yukon and Tanana Rivers. There are thirteen sub-projects in this district affording communication between Eagle and the Seventymile country to the north and northwest and the Fortymile country to the south and southwest. With the completion of these sub-projects by the United States and the extension of the Dawson-Miller Creek Road by Canada to the International Boundary, there will be provided a through route for wheeled traffic from Eagle to Dawson, the main distributing center for the Klondike and Yukon Territory. Eagle, or Fort Egbert, nearby, is the northern terminus of the Valdez-Fort Egbert trail and telegraph line, the original American route to the Yukon.

SUMMARY OF ROADS.

Sub	37.				
Project No.	Name of Route	Wagon Road	Sled	Trail	Total
	Deals OFF C		Road		Miles
11A 11B	Eagle-O'Brien Creek	. 17			17
11C	O'Brien Creek-Fortymile		30		30
11D	Steel Creek-Jack Wade	. 21/2		$11\frac{1}{2}$	14
iiE	Canyon Creek-Walker's Fork	•	10	12	22
11F	Eagle-Seventymile Steel Creek-Chicken	•		20	14 22 20 29
11G	Steel Creek-Moose Creek	· ·	4.0	29	29
îîĤ	Liberty Cabin-Steel Creek	•	10	0.1	10
53	Eagle-Circle	-		21	21
65D	Ketchumstuk-Tanana Crossing.			190	190
65E*	Chicken-Ketchumstuk	•		67 35	67
86	Fourth of July-Nation	•		10	10
87	Woodchopper Creek			8.	8
	The state of the s			_ 0 .	•
	Totals	191/2	50	40314	473
*No	expenditure during fiscal year.	/2	- "	/2	210

ROUTE 11A--EAGLE-O'BRIEN CREEK (17 MILES WAGON ROAD)

This is the first section of the Eagle-Fortymile route and is improved to wagon road standard.

During the past season, it was generally maintained and repaired, culverts rebuilt, slides removed, and drainage reconstructed. Light grading was performed in American Creek Canyon.

Expenditure \$4,516.62.

ROUTE 11B-O'BRIEN CREEK-FORTYMILE (30 MILES SLED ROAD).

This sled road, an important supply artery for the Fortymile, was cleared of windfalls and brush.

Expenditure \$353.50.

ANNUAL REPORT ALASKA ROA

ROUTE 11C—STEEL CREEK-JACK WAD! 111/2 MILES TRAIL).

A small amount of work was perfor over the divide leading to Jack Wade fro Expenditure \$57.75.

ROUTE 11D—CANYON CREEK-WALKE SLED ROAD AND 12 MILES TI

General maintenance work. Expenditure \$500.00.

ROUTE 11E-EAGLE-SEVENTYMILE

General maintenance on completed of new trail constructed.

Expenditure \$500.00.

ROUTE 11F-JACK WADE-CHICKEN......

Guiding signs were erected and the t Expenditure \$300.00.

ROUTE 11G-STEEL CREEK-MOOSE CR ROAD)

This is a 10-mile winter sled road co Mile 47 from Eagle, with the Internationa of Moose Creek.

Expenditure \$300.00.

ROUTE 11H-LIBERTY CABIN-STEEL CF

This trail forms the summer route mouth of Steel Creek. Liberty Cabin is of Liberty Fork with O'Brien Creek, 2 Route 11B.

Expenditure \$150.00.

ROUTE 53-EAGLE-CIRCLE TRAIL

This winter mail trail connects the $t\varepsilon$ It follows the ice on the Yukon River foldistance.

A small amount of work was done on route is to be reconnoitered next winter eliminating dangerous sections on the ice by portages across several long bends.

Expenditure \$100.00.

ANNUAL REPORT ALASKA ROAD COMMISSION.

ROUTE 65D—KETCHUMSTUK-TANANA CROSSING (67 MILES TRAIL)

This route follows the old telegraph line along the original Valdez-Fort Egbert Trail. The Ketchumstuk-Fort Egbert section was abandoned when the establishment of a radio station at Eagle rendered the telegraph line unnecessary. Travel now follows the cut-off via the Fortymile, Routes 65E, 11F, 11C, 11B and 11A.

A reconnaissance of the route was made and repair work planned. No work was done last year due to the lateness of the season.

Expenditure \$72.00.

ROUTE 65E-CHICKEN-KETCHUMSTUK.....(35 MILES TRAIL)

This 35-mile trail forms a cut-off from the old Fort Egbert Trail to the Fortymile and thence to Eagle.

The Engineer Officer of the Board made a reconnaissance by pack-train over this route last summer and repair work is scheduled. No work was done last year due to the lateness of the season.

No expenditures.

ROUTE &6-FOURTH OF JULY-NATION.....(10 MILES TRAIL)

This trail connects Nation, a small mining district of minor activity, with the Yukon River at the mouth of Fourth of July Creek.

Some work was done in brushing out and completing the trail started by the Territory in 1920.

Expenditure \$560.75.

ROUTE 87-WOODCHOPPER CREEK.....(8 MILES TRAIL)

An examination of work desired in the Woodchopper region was made but no work was performed.

Expenditure \$62.00.

EXAMINATIONS AND SURVEYS.

In addition to Routes 65D, and 65E, above mentioned, the Engineer Officer of the Board and the Foreman in charge of the Eagle sub-district made an extensive reconnaissance of the entire district. The following additional routes were reported on:

Eagle-North Fork-Fortymile. Chicken-Goodpaster-McCarty.

DISTRIBUTION OF EXPENDITURES

Type	Miles*	Expenditures	Unit Cost Dollars per Mile
Wagon Road Sled Road Trail	50		
Totals*Includes routes mair		\$7,472.62 g fiscal year only.	\$17.00

VALDEZ DISTI

Dan A. Jones, District Engineer
T. H. Huddleston, Asst. S
Frank Shipp, Asst. Sup

Valdez, at the head of Prince Wil ernmost open all-the-year-round port in terminus of the Military Road and T terior. Fort Liscum, garrisoned by part is located three miles across the bay an Corps is stationed in Valdez and charged repair of the telegraph line. At Valdez Court for the Third Judicial Division. maintained its principal supply depot at

The principal project of the Board Richardson Highway, extending from Va Tanana River, and thence on to Circle, a route was begun as a trail in 1900 fro Later the main line was diverted at Gu Egbert to Fairbanks. By 1911 it was prehicles for the entire 371 miles betwee Prior to that, freight was handled by do in the winter time. In the summer of 1 bile made the trip through from Fairban most of the traffic has been by motor, excarried over 160 miles of the route by an

A sub-office was established at Chitin disastrous flood closed the military road 16 miles from Valdez. This section of traffic last summer. Meanwhile, the ov of the Copper River and Northwestern Chitina, 130 miles, thence by the Chitina miles from Chitina to Willow Creek, Mile main road. During the current year, an at Chitina was charged with work on the and Willow Creek and on the main road summit of the Chugach Range, at Mile 2. River beyond the summit of the main Ala

Including the different sections of are 21 sub-projects in this district, of whic 114 miles, has been abandoned. The Co

LE SUB-DISTRICT.

ed from the Juneau Office.

rice, Foreman in Charge.

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SUMMARY OF ROADS.

Route	Wagon Road	Sled Road	Trail	Total Miles
Creekck Wade	21/2	30 10	$\frac{11\frac{1}{2}}{12}$	17 30 14 22 20
Walker's Forkile	 	10	20 29 21	29 10 21
-Steel Creek Fanana Crossing numstuk	 		190 67 35 10	190 67 35 10
Creek		50	$\frac{8}{403\frac{1}{2}}$	$\frac{8}{473}$

tring fiscal year.

O'BRIEN CREEK (17 MILES WAGON ROAD)

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season, it was generally maintained and relt, slides removed, and drainage reconstructed. erformed in American Creek Canyon.

516.62.

EN CREEK-FORTYMILE (30 MILES SLED

, an important supply artery for the Forty-

j3.**5**0.

ROUTE 11C—STEEL CREEK-JACK WADE (21/2 MILES ROAD AND 111/2 MILES TRAIL).

A small amount of work was performed in grading the road over the divide leading to Jack Wade from Steel Creek.

Expenditure \$57.75.

ROUTE 11D—CANYON CREEK-WALKER'S FORK (10 MILES SLED ROAD AND 12 MILES TRAIL).

General maintenance work.

Expenditure \$500.00.

ROUTE 11E-EAGLE-SEVENTYMILE(20 MILES TRAIL)

General maintenance on completed portion and three miles of new trail constructed.

Expenditure \$500.00.

ROUTE 11F-JACK WADE-CHICKEN.....(29 MILES TRAIL)

Guiding signs were erected and the trail brushed out.

Expenditure \$300.00.

ROUTE 11G-STEEL CREEK-MOOSE CREEK. (10 MILES SLED ROAD)

This is a 10-mile winter sled road connecting Steel Creek, at Mile 47 from Eagle, with the International Boundary at the mouth of Moose Creek.

An examination of the route was made and a small amount of work was done last year.

Expenditure \$300.00.

ROUTE 11H-LIBERTY CABIN-STEEL CREEK (21 MILES TRAIL)

This trail forms the summer route to the Fortymile at the mouth of Steel Creek. Liberty Cabin is located at the junction of Liberty Fork with O'Brien Creek, 26 miles from Eagle on Route 11B.

Expenditure \$150.00.

ROUTE 53-EAGLE-CIRCLE TRAIL (190 MILES TRAIL)

This winter mail trail connects the towns of Eagle and Circle. It follows the ice on the Yukon River for the greater part of the distance.

A small amount of work was done on the Motuk Cut-off. This route is to be reconnoitered next winter with the end in view of eliminating dangerous sections on the ice and shortening the route by portages across several long bends.

Expenditure \$100.00

PORT ALASKA ROAD COMMISSION.

HUMSTUK-TANANA CROSSING (67 MILES

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1INATIONS AND SURVEYS.

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Fortymile.

r-McCarty.

3UTION OF EXPENDITURES

Miles*	Expenditures	Unit Cost Dollars per Mile
438	\$7,472.62	\$17.00

VALDEZ DISTRICT.

Dan A. Jones, District Engineer (to Dec. 1, 1921). T. H. Huddleston, Asst. Supt., Vaidez. Frank Shipp, Asst. Supt., Chitina.

Valdez, at the head of Prince William Sound, is the northernmost open all-the-year-round port in Alaska. It is the southern terminus of the Military Road and Telegraph Line to the Interior. Fort Liscum, garrisoned by part of the 47th U.S. Infantry, is located three miles across the bay and a company of the Signal Corps is stationed in Valdez and charged with the maintenance and repair of the telegraph line. At Valdez is located also the U.S. Court for the Third Judicial Division. This Board has heretofore maintained its principal supply depot at Valdez.

The principal project of the Board is the military road, or Richardson Highway, extending from Valdez to Fairbanks, on the Tanana River, and thence on to Circle, on the Upper Yukon. This route was begun as a trail in 1900 from Valdez to Fort Egbert. Later the main line was diverted at Gulkana, Mile 12S, from Fort Egbert to Fairbanks. By 1911 it was passable for light wheeled vehicles for the entire 371 miles between Valdez and Fairbanks. Prior to that, freight was handled by double bob-sled (horse-drawn) in the winter time. In the summer of 1913 the first light automobile made the trip through from Fairbanks to Valdez. Since then, most of the traffic has been by motor, even the winter mails being carried over 160 miles of the route by automobile.

A sub-office was established at Chitina during the War when a disastrous flood closed the military road through Keystone Canyon, 16 miles from Valdez. This section of the road was reopened to traffic last summer. Meanwhile, the overland route was by way of the Copper River and Northwestern Railroad from Cordova to Chitina, 130 miles, thence by the Chitina cut-off (military road), 39 miles from Chitina to Willow Creek, Mile 92 north of Valdez on the main road. During the current year, an assistant superintendent at Chitina was charged with work on the cut-off between Chitina and Willow Creek and on the main road from Thompson Pass, the summit of the Chugach Range, at Mile 25, to Rapids on the Delta River beyond the summit of the main Alaska Range, Mile 2311/2.

Including the different sections of the military road, there are 21 sub-projects in this district, of which one, the Tasnuna Trail, 114 miles, has been abandoned. The Cordova-Eyak Lake and Katalla-Chilkat sub-projects have been handled by the Department of Agriculture. The work on the Valdez-Mineral Creek Road and the Granby Road were paid for from Territorial funds by the chairman of the Divisional Road Commission as will appear in his report below. The work, however, was performed by the superintendent of this Board at Valdez. These sub-projects are therefore included in the following table with the 16 sub-projects of this Board:

Sub Project No.	Name of Route	Wagon Road	Sled Road	Trail	Total Miles
4B 4C 4D 4E 4G 4H1 6A 6B 36* 54** 57A** 65A 665B 65B 65C	Valdez Ernestine Ernestine-Willow Creek Willow Creek-Gulkana Gulkana-Sourdough Sourdough-168 Mile Post 168 Mile Post-Delta River Delta River-Rapids Willow Creek-Tonsina Tonsina-Chitina Valdez-Mineral Creek Granby Road Chisana-Nizina McCarthy-Nizina Nizina River Bridge Strelna-Kuskulana Gulkana-Chistochina Cristochina-Slate Creek Cristochina-Tanana Crossing	29 36 21 ¹ / ₂ 18 38 25 ¹ / ₂ 24 15 10 ¹ / ₂ 5 8		78 8 36 40 140	63 29 36 21½ 18 38 25½ 24 15 10½ 58 16 16 40 40 140
	Totals	3131/2		302	6151/2

^{*}Expenditures by the Territory.

ROUTE 4B-VALDEZ-ERNESTINE......(63 MILES WAGON ROAD)

This portion of the Richardson Road has always been the most troublesome and the most costly to maintain. During 1919 a severe washout in Keystone Canyon totally destroyed the road there as well as cutting into the road at numerous other places along Lowe River. This year has seen the completion of the difficult and expensive relocation through Keystone Canyon, consisting of a rockcut through a vertical cliff for the entire distance. At Bear Creek and Sheep Creek suspension bridges of one hundred and fifty and one hundred and seventy-five foot spans, respectively, were erected. The Keystone Canyon relocation was connected with the Bear Creek Bridge by the new side hill road. South of Keystone Canyon, near Comfort, the relocation of a road on the side hill to escape the disastrous floods of the Lowe River has been commenced and will be completed during the working season of 1922. With the completion of this work on this portion of the Valdez-Fairbanks Road, maintenance charges which have been very heavy in the past, in the annual charges to keep the Valdez-Fairbanks Road open, will be greatly reduced.

ANNUAL REPORT ALASKA ROA

Expenditure: 1st Section 2nd Section 3rd Section 4th Section 5th Section 6th Section

Of above, \$220.02 was contributed by repairs to the Valdez Dike.

Total

ROUTE 4C-ERNESTINE-WILLOW CREEF ROAD)

This portion of the road had been cl due to the blockade at Keystone Canyon opened up for traffic this season. A large Tonsina was removed and extensive reve placed. Culverts were repaired and gravel most needed.

Expenditure \$8,469.13.

ROUTE 4D—WILLOW CREEK-GULKANA ROAD)

Work consisted of general maintena dragged several times during the season. The Gulkana Bridge was refloored and a approach to the bridge built. Numerous cul

Expenditure \$15,130.36.

ROUTE 4E—GULKANA-SOURDOUGH (211/2

Road was dragged, ditches cleaned and mile of gravel surfacing was placed, using th dump trucks

Expenditure \$17,786.91.

ROUTE 4F—SOURDOUGH-168 MILE POST ROAD)

Extensive gravel surfacing was carried of the road. A Bucyrus dragline shovel and were used in this work. Four miles of grav pleted. In addition, four miles of grading road were completed. This portion of the rethroughout.

Expenditure \$15,017.62.

^{**}No expenditures during the fiscal year.

^{***}Cooperative project with Territory of Alaska.

ALASKA ROAD COMMISSION.

ave been handled by the Department on the Valdez-Mineral Creek Road and aid for from Territorial funds by the il Road Commission as will appear in vork, however, was performed by the ard at Valdez. These sub-projects are following table with the 16 sub-projects

.e	Wagon Road	Sled Road	Trail	Total Miles
Treek kana n le Post ta River ls sina reek	63 29 36 21½ 18 38 25½ 24 15			63 29 36 21½ 18 38 25½ 24 15 10½
reek	. 5 . 8		78 8	78 16
dgea ina			$36 \\ 40 \\ 140$	16 40 40 140
na Crossing	313½		302	6151/2

Territory.
ring the fiscal year.
with Territory of Alaska.

ERNESTINE (63 MILES WAGON ROAD)

the Richardson Road has always been the the most costly to maintain. During 1919 Keystone Canyon totally destroyed the road ing into the road at numerous other places his year has seen the completion of the diffielocation through Keystone Canyon, consistgh a vertical cliff for the entire distance. At Creek suspension bridges of one hundred and and seventy-five foot spans, respectively, were ne Canyon relocation was connected with the y the new side hill road. South of Keystone t, the relocation of a road on the side hill ous floods of the Lowe River has been comcompleted during the working season of 1922. of this work on this portion of the Valdezntenance charges which have been very heavy annual charges to keep the Valdez-Fairbanks greatly reduced.

Expend	li	tu	ıre	:

1st	Section	 \$10,642.03
2nd	Section	12,757.38
3rd	Section	 19,922.10
4th	Section	 21,785.96
5th	Section	3,145.04
6th	Section	 8,121.24
	Total .	

Of above, \$220.02 was contributed by the City of Valdez for repairs to the Valdez Dike.

ROUTE 4C--ERNESTINE-WILLOW CREEK (29 MILES WAGON ROAD)

This portion of the road had been closed to through traffic, due to the blockade at Keystone Canyon for two years. It was opened up for traffic this season. A large mud slide near Upper Tonsina was removed and extensive revetment of cribbing was placed. Culverts were repaired and gravel surfacing placed where most needed.

Expenditure \$8,469.13.

ROUTE 4D—WILLOW CREEK-GULKANA (36 MILES WAGON ROAD)

Work consisted of general maintenance. The road was dragged several times during the season. Culverts were rebuilt. The Gulkana Bridge was refloored and a new seventy-five-foot approach to the bridge built. Numerous culverts were rebuilt.

Expenditure \$15,130.36.

ROUTE 4E-GULKANA-SOURDOUGH (211/2 MILES WAGON ROAD)

Road was dragged, ditches cleaned and culverts rebuilt. One mile of gravel surfacing was placed, using the Bucyrus dragline and dump trucks.

Expenditure \$17,786.91.

ROUTE 4F-SOURDOUGH-168 MILE POST (18 MILES WAGON ROAD)

Extensive gravel surfacing was carried out on this section of the road. A Bucyrus dragline shovel and a fleet of dump trucks were used in this work. Four miles of gravel surfacing were completed. In addition, four miles of grading and widening of the road were completed. This portion of the road requires graveling throughout.

Expenditure \$15,017.62.

Work on this section consisted of general maintenance, repairing bridges damaged by glacial streams, and reconstruction of culverts and cleaning ditches. One mile of gravel surfacing was placed. A dike one hundred feet long was built for bridge protection.

Expenditure \$8,897.56.

ROUTE 4H1-DELTA RIVER-RAPIDS (251/2 MILES WAGON ROAD)

General maintenance work was performed. Two miles were graded, culverts repaired and ditches cleaned.

Expenditure \$6,067.41.

ROUTE 6A-WILLOW CREEK-TONSINA (24 MILES WAGON

One mile cleared and grubbed thirty feet wide. Eight miles The road was dragged, drainage machine grading performed. ditches cleaned and culverts rebuilt. One mile of new road was constructed.

Expenditure \$23,760.72.

ROUTE 6B-TONSINA-CHITINA.....(15 MILES WAGON ROAD)

The work consisted of general maintenance. Approach to the Lower Tonsina Bridge was washed out by a cutting of the banks of the river and it was necessary to erect a one hundred foot Howe truss span as an extension to the existing bridge. This span was erected in December.

Expenditure \$22,326.08.

ROUTE 36-VALDEZ-MINERAL CREEK (101/2 MILES WAGON

This route extends from Valdez along the beach to the westward as far as the mouth of Mineral Creek, then up the creek to McIntosh's Roadhouse, and beyond to a number of workings at the head of Mineral Creek. Its rehabilitation was begun by the Territory two years ago.

Last season, the approaches to the Siwash Bridge were rebuilt and the bridge repaired.

Total expenditures \$91.20 (Territorial Treasurer).

ROUTE 36A-GRANBY ROAD......(5 MILES WAGON ROAD)

This road was originally built by the Granby Company to haul supplies from their wharf on the beach to the mines in

ANNUAL REPORT ALASKA ROA

Solomon Gulch. On the beach, it also trail from Fort Liscum to Valdez. All handled up the cliffs by an aerial tram, road is still used as a means of commu ferent properties in the Gulch, principal? the power plant which supplies the city power.

Practically all work on this project tion of the Solomon Gulch Bridge, left season, due to lack of funds. About 55 blasted out at the bridge approaches. Bu at each end of the bridge and decking ar on the bridge.

Total expenditures \$495.97 (Territoria

ROUTE 54—CHISANA-NIZINA TRAIL......

No work was done on this trail duri

ROUTE 57-McCARTHY-NIZINA MILES TRAIL)

This road grading was extended four clearing. Clearing and grubbing forty fee an additional one and one half mile. One one-quarter mile corduroy and the constru verts was performed throughout.

Expenditure \$2,853.95.

ROUTE 57A-NIZINA RIVER BRIDGE:

This important project to bridge the and make accessible the mineralized regio Valley progressed satisfactorily during the sance was completed and the crossing locate by drilling the stream bed at proposed liminary design of the structure was prep procure the material for and construct $(1922 \cdot 1923).$

Expenditures.

Alaska Road Territory	l Commission	

ROUTE 61-STRELNA-KUSKULANA....(16 N

No expenditure on this route.

ANNUAL REPORT ALASKA ROAD COMMISSION.

REPORT ALASKA ROAD COMMISSION.

ILE POST-DELTA RIVER (38 MILES WAGON

s section consisted of general maintenance, remaged by glacial streams, and reconstruction or ing ditches. One mile of gravel surfacing was ne hundred feet long was built for bridge pro-

\$8,897.56.

.TA RIVER-RAPIDS (251/2 MILES WAGON ROAD)

itenance work was performed. Two miles were epaired and ditches cleaned.

\$6,067.41.

(24 MILES WAGON _LOW CREEK-TONSINA

eared and grubbed thirty feet wide. Eight miles The road was dragged, drainage and culverts rebuilt. One mile of new road was

\$23,760.72.

NSINA-CHITINA.....(15 MILES WAGON ROAD)

onsisted of general maintenance. Approach to the Bridge was washed out by a cutting of the banks it was necessary to erect a one hundred foot Howe n extension to the existing bridge. This span was ember.

e \$22,326.08.

ALDEZ-MINERAL CREEK (101/2 MILES WAGON))

extends from Valdez along the beach to the westthe mouth of Mineral Creek, then up the creek to dhouse, and beyond to a number of workings at ineral Creek. Its rehabilitation was begun by the

on, the approaches to the Siwash Bridge were reridge repaired.

enditures \$91.20 (Territorial Treasurer).

RANBY ROAD(5 MILES WAGON ROAD)

was originally built by the Granby Company to from their wharf on the beach to the mines in

Solomon Gulch. On the beach, it also connected with the old trail from Fort Liscum to Valdez. All heavy supplies are now handled up the cliffs by an aerial tram, but the upper end of the road is still used as a means of communication between the different properties in the Gulch, principally the Granby Mines and the power plant which supplies the city of Valdez with light and power.

Practically all work on this project was limited to completion of the Solomon Gulch Bridge, left incomplete the previous season, due to lack of funds. About 55 yards of solid rock were blasted out at the bridge approaches. Bulkheads were constructed at each end of the bridge and decking and hand rail were placed on the bridge.

Total expenditures \$495.97 (Territorial Treasurer).

ROUTE 54-CHISANA-NIZINA TRAIL.....(78 MILES TRAIL)

No work was done on this trail during the year.

ROUTE 57-McCARTHY-NIZINA (8 MILES WAGON ROAD, 8 MILES TRAIL)

This road grading was extended four miles to the end of the clearing. Clearing and grubbing forty feet wide was carried out an additional one and one-half mile. One mile of side hill grading, one-quarter mile corduroy and the construction of necessary culverts was performed throughout.

Expenditure \$2,853.95.

ROUTE 57A-NIZINA RIVER BRIDGE:

This important project to bridge the dangerous Nizina River and make accessible the mineralized region of the upper Chitina Valley progressed satisfactorily during the past year. Reconnaissance was completed and the crossing located. Bedrock was located by drilling the stream bed at proposed pier locations. A preliminary design of the structure was prepared. It is planned to procure the material for and construct the piers next winter (1922-1923).

Expenditures:

\$3,190.33 5,000.00	
:	
\$8,190.33	Total

ROUTE 61-STRELNA-KUSKULANA....(16 MILES WAGON ROAD)

No expenditure on this route.

ROUTE 65A—GULKANA-CHISTOCHINA MILES WAGON ROAD, 36 MILES TRAIL)

No work during the year. Belated bills for previous year's work were paid, amounting to \$656.00.

ROUTE 65B-CHISTOCHINA-SLATE CREEK (40 MILES TRAIL)

No work during the year. Belated bills for previous year's work were paid, amounting to \$109.50.

ROUTE 65C-CHISTOCHINA-TANANA CROSSING (140 MILES TRAIL)

Part of the old Valdez-Fort Egbert Trail. A reconnaissance of this trail was made by the Engineer Officer of the Board.

Expenditure \$92.20.

EXAMINATIONS AND SURVEYS

In response to petitions, the superintendent made report on the following proposed routes:

Strelna-Kotsina.

Meier's-Valdez Creek.

As above noted, the Engineer Officer of the Board made a reconnaissance by pack train over Routes 65A and 65C. He then continued across from Meier's, Mile 175, Richardson Highway, to the mining operations on Valdez Creek near Broad Pass for the purpose of determining a connection from Valdez Creek direct west to the Government Railroad to replace the winter sled road maintained by the Valdez Creek operators to the southeast to join the Richardson Highway at Gulkana, Mile 128.

SHELTER CABINS

The shelter cabin at the foot of the Nizina Glacier on Route 54 was repaired at a cost of \$200.

DISTRIBUTION OF EXPENDITURES

Туре	Miles*	Expenditures	Unit Cost Dollars per Mile
Wagon Road	282 224		
Trail	224		•
	506	\$205,731.52	\$406.60
*Includes routes maintai Routes 36 and 36A not		g fiscal year only.	

SOUTHWESTERN)

Anton Eide, Superin

83

93

35B 35C 35G 35H35K

35L35I

There are 42 sub-projects in this been abandoned; 29 of the remaining 3 to the U.S. Government Railway (Alas of roads and trails devised by this I in this district at the following points:

Main Line Mile 0 Seward 10 10A 10B Woodrow10 Roosevelt 29 55 Moose Pass Station 24 24A 24B 75 Girdwood 19E 114 Anchorage 75 75A75B119 Whitney 75B 126 Eagle River 75 151 Matanuska 35J35K160 Wasilla 35L 35 A 35B 35D 35E 35F35H35J181 Nancy 35M20B227 Talkeetna 20H 51

288 Honolulu Creek

Chickaloon Br.

13 Moose Creek

Mile Palmer

)RT ALASKA ROAD COMMISSION.

NA-CHISTOCHINA (4 MILES WAGON LES TRAIL)

he year. Belated bills for previous year's ing to \$656.00.

HINA-SLATE CREEK (40 MILES TRAIL)

he year. Belated bills for previous year's nting to \$109.50.

CHINA-TANANA CROSSING (140 MILES

Taldez-Fort Egbert Trail. A reconnaissance by the Engineer Officer of the Board.

INATIONS AND SURVEYS

etitions, the superintendent made report on routes:

ıa.

z Creek.

the Engineer Officer of the Board made a train over Routes 65A and 65C. He then Meier's, Mile 175, Richardson Highway, to on Valdez Creek near Broad Pass for the g a connection from Valdez Creek direct nt Railroad to replace the winter sled road aldez Creek operators to the southeast to ighway at Gulkana, Mile 128.

SHELTER CABINS

at the foot of the Nizina Glacier on Route ost of \$200.

Unit Cost

BUTION OF EXPENDITURES

Miles* 282 224	Expenditures	Dollars per Mile
506	\$205,731.52	\$406.60
tained during of included.	fiscal year only.	* :

SOUTHWESTERN DISTRICT.

Anton Eide, Superintendent.

There are 42 sub-projects in this district, 11 of which have been abandoned; 29 of the remaining 31 are road or trail feeders to the U.S. Government Railway (Alaska Railroad). The system of roads and trails devised by this Board tie into the railroad in this district at the following points:

Ma	in Line		
	Mile		Route
0	Seward	10 10A	Seward-Radio
7	Woodrow	10B 10	
23		55	Seward-Kenai Lake
29		24	Kenai Lake-Kenai
	2 de la controli	24A	Mile 29-Sunrise.
		24B	
75		19E	Girdwood-Crow Creek
114	Anchorage	75	Anchorage-Eagle River
		75A	Anchorage-Lake Spinard
		75B	Whitney Road
119	Whitney	75B	Whitney Road
$\frac{126}{151}$	Eagle River	75	Anchorage-Eagle River
191	Matanuska	35J	Matanuska-Wasilla
		35K	Matanuska Trunk Road
160	Wasilla	35L	Matanuska-Palmer
100	vv asiiia	35A	Archangel Extension
		35B	Mile 26½-Palmer
		35D 35E	Willow Creek Extension
		35F	Wasilla Fishhook
		35H	Wasilla-Knik
		35J	Wasilla-Finger Lake Wasilla-Matanuska
	•	35 M	Knik Corduroy
181	Nancy	20B	Susitna-Rainy Pass
		20H	Nancy-Susitna
227	Talkeetna	51	Talkeetna-Cache Creek
000		83	Talkeetna-Iron Creek
288	Honolulu Creek	93	Chulitna Ferry
Chic	kaloon Br. Mile		
6	Palmer		Route
. 0	1 aimei	35B	Palmer-Mile 261/2
		35C	Palmer-Matanuska River
		35G 35H	Palmer-Springer
		35H 35K	Finger Lake-Wasilla
		35L	Matanuska Trunk Road Palmer-Matanuska
13	Moose Creek	35I	Moose Creek Grade
		001	andose Creek Grade

ROUTE 65A—GULKANA-CHISTOCHINA (4 MILES WAGON ROAD, 36 MILES TRAIL)

No work during the year. Belated bills for previous year's work were paid, amounting to \$656.00.

ROUTE 65B-CHISTOCHINA-SLATE CREEK (40 MILES TRAIL)

No work during the year. Belated bills for previous year's work were paid, amounting to \$109.50.

ROUTE 65C—CHISTOCHINA TANANA CROSSING (140 MILES TRAIL)

Part of the old Valdez-Fort Egbert Trail. A reconnaissance of this trail was made by the Engineer Officer of the Board.

Expenditure \$92.20.

EXAMINATIONS AND SURVEYS

In response to petitions, the superintendent made report on the following proposed routes:

Strelna-Kotsina.

Meier's-Valdez Creek.

As above noted, the Engineer Officer of the Board made a reconnaissance by pack train over Routes 65A and 65C. He then continued across from Meier's, Mile 175, Richardson Highway, to the mining operations on Valdez Creek near Broad Pass for the purpose of determining a connection from Valdez Creek direct west to the Government Railroad to replace the winter sled road maintained by the Valdez Creek operators to the southeast to join the Richardson Highway at Gulkana, Mile 128.

SHELTER CABINS

The shelter cabin at the foot of the Nizina Glacier on Route 54 was repaired at a cost of \$200.

DISTRIBUTION OF EXPENDITURES

Type	Miles*	Expenditures	Unit Cost Dollars per M ile
Wagon Road Trail	282 224		
	506	\$205,731.52	\$406.60
*Includes routes ma Routes 36 and 36A		g fiscal year only	7.

SOUTHWESTERN

Anton Eide, Super

There are 42 sub-projects in th been abandoned; 29 of the remaining to the U. S. Government Railway (A of roads and trails devised by this in this district at the following points

Ma	in Line Mile	•
0	Seward	1(
7 23 29	Roosevelt	1(1(5; 24 24
75 114	Girdwood Anchorage	24 19 75 75
119 126 151	Whitney Eagle River Matanuska	78 78 78 33
160	Wasilla	35 35 35
		35 35
		35 35 35
181	Nancy	35 20
27	Talkeetna	20 51
88 hic	Honolulu Creek kaloon Br.	83 93
6	Mile Palmer	35

13 Moose Creek

T ALASKA ROAD COMMISSION.

A-CHISTOCHINA (4 MILES WAGON ES TRAIL)

year. Belated bills for previous year's g to \$656.00.

INA-SLATE CREEK (40 MILES TRAIL)

year. Belated bills for previous year's ing to \$109.50.

HINA-TANANA CROSSING (140 MILES

ldez-Fort Egbert Trail. A reconnaissance the Engineer Officer of the Board.

IATIONS AND SURVEYS

tions, the superintendent made report on outes:

Creek.

e Engineer Officer of the Board made a train over Routes 65A and 65C. He then leier's, Mile 175, Richardson Highway, to n Valdez Creek near Broad Pass for the a connection from Valdez Creek direct Railroad to replace the winter sled road lez Creek operators to the southeast to tway at Gulkana, Mile 128.

SHELTER CABINS

t the foot of the Nizina Glacier on Route t of \$200.

JTION OF EXPENDITURES

Miles* 282 224	Expenditures	Unit Cost Dollars per Mile
506	\$205,731.52	\$406.60
ned during included.	fiscal year only.	

SOUTHWESTERN DISTRICT.

Anton Eide, Superintendent.

There are 42 sub-projects in this district, 11 of which have been abandoned; 29 of the remaining 31 are road or trail feeders to the U.S. Government Railway (Alaska Railroad). The system of roads and trails devised by this Board tie into the railroad in this district at the following points:

Ma	in Line Mile	F	_
			Route
0	Seward	10 10A 10B	~ c a.r a reagio
7		105	Seward-Nash Seward-Kenai Lake
23		55	Kenai Lake-Kenai
29	Moose Pass Station	24	Mile 29-Sunrise.
		24A	Lynx Creek-Sixmile
.75	Cind1	24B	Sunrise-Hope
114		19E	Girdwood-Crow Creek
TTA	Anchorage	75	Anchorage-Eagle River
		75A	Anchorage-Lake Spinard
119	Whitney	75B 75B	Whitney Road
126	Eagle River	75	Whitney Road
151	Matanuska	35J	Anchorage-Eagle River Matanuska-Wasilla
		35K	Matanuska Trunk Road
		35L	Matanuska-Palmer
160	Wasilla	35A	Archangel Extension
		35B	Mile 26½-Palmer
		35D	Willow Creek Extension
		35E	Wasilla Fishhook
		35F 35H	Wasilla-Knik
	•	зэ н 35J	Wasilla Finger Lake
		35M	Wasilla-Matanuska Knik Corduroy
181	Nancy	20B	Susitna-Rainy Pass
		20H	Nancy-Susitna
227	Talkeetna	51	Talkeetna-Cache Creek
		83	Talkeetna-Iron Creek
288	Honolulu Creek	93	Chulitna Ferry
Chic	kaloon Br. Mile		•
6	Palmer		Route
U	raimer	35B	Palmer-Mile 261/2
		35C 35G	
		35H	Palmer-Springer Finger Lake-Wasilla
		35K	Matanuska Trunk Road
		35L	Palmer-Matanuska
13	Moose Creek	35I	Moose Creek Grade
			Grado

The following former sub-projects of this Board have been abandoned or superseded by preferable routes resulting from the change in the general transportation situation following the construction of the Government Railroad:

Sub Project No.	Name of Route	Wagon Road	Sled Road	Trail	Total Miles
12A 19 19A 19B 19C 19D 20A 20E 20F 20G 66	Mile 34-Lynx Creek Kern Creek-Knik Kenai Lake-Kern Creek Mile 27-Mile 29 Kenai Lake-Mile 27 ANRR Kern Creek-Indian Creek Knik-Susitna Susitna-McDougal McDougal-Cache Creek Lakeview RH-McDougal Matanuska-Chickaloon	· · · · · · · · · · · · · · · · · · ·		86 40 2 7 22 30 35 30 15	15 86 40 2 7 22 30 35 30 15
	Totals	. 15		305	320

The following former sub-projects of this Board were turned over to the Department of Agriculture working in cooperation with the Territory of Alaska, July 1, 1920, since which date no further expenditures have been made by this Board:

Sub Project No.	Name of Route	Wagon Road	Sled Road	Trail.	Total Miles
10* 10A**	Seward-Kenai Lake Seward-Radio		=		7 1
55***	Kenai Lake-Kenai			12	12
	Totals	. 8		12	20

*Miles 8-14 only.

**Turned over to the Navy Department. Emergency repairs to a bridge were performed at a cost of \$35.00.

***Quartz Creek-Russian River section only.

The following additional sub-projects of this Board were turned over to the Department of Agriculture, May 1, 1922, since which date no further expenditures have been made by this Board, except in settlement of outstanding obligations, as of that date. The work performed during the current fiscal year prior to that date is detailed below:

Sub Project No.	Name of Route	Wagon Road	Sled Road	Trail	Total Miles
10* 19E 24 24A	Seward-Kenai Lake Girdwood-Crow Creek Mile 29-ANRR-Sunrise Lynx Creek-Sixmile Creek	10 39			7 10 39 7
24B 55**	Sunrise-Hope Kenai-Lake Kenai		9	98	9 98
	Totals	63	9	98	$\overline{170}$

*All remaining mileage.
**All remaining mileage. No expenditures during the fiscal year.

ROUTE 10-SEWARD-KENAI LAKE (7 MILES WAGON ROAD)

This road runs from the Town of Seward to Kenai Lake and serves to supply the settlers along the railroad and also as ${\tt a}$

ANNUAL REPORT ALASKA ROAD

recreational road for the people of Seward. I were turned over to the Department of Ag

Work during the fiscal year consisted road machine from Seward to Mile 7. Twere constructed. A two hundred-foot secti Bridge was rebuilt. The bridge at Mile 6 was bents were placed and it was redecked. Tmaintained and is in first class condition.

Expenditure \$4,731.03.

ROUTE 19E—GIRDWOOD-CROW CREEK ROAD)

This road runs from Girdwood on Milroad to the Crow Creek Mining District.

Two miles of road were graded to carr washouts on Glacier Creek. General maint formed throughout.

Expenditure \$2,391.65.

ROUTE 24-MILE 29 ANRR-Sunrise..... (39 M

Work on this route consisted of ger moval of mud slides and repairing of cordur Expenditure \$1,281.70.

ROUTE 24A-LYNX CREEK-SIXMILE CREE ROAD)

A small amount of maintenance work w Expenditure \$396.00.

ROUTE 24B-SUNRISE-HOPE.....(9

Most needed general maintenance wor

Expenditure \$185.00.

ROUTE 55-KENAI LAKE-KENAI.....

No expenditure on this trail.

The following sub-projects, being loc the limits of the National Forests, are be Board. They are arranged in two groups: fi supported during the fiscal year from funds of Territory of Alaska, disbursed through the second, those supported by Territorial funds ritorial Road Commission for the Third Divis Work was performed by the superintendent also served as chairman and secretary of

ORT ALASKA ROAD COMMISSION.

mer sub-projects of this Board have been led by preferable routes resulting from the transportation situation following the connment Railroad:

Route	Wagon Road	Sled Road	Trail	Total Miles
reek nik rn Creek 9 lie 27 ANRR lian Creek gal le Creek McDougal ckaloon			86 40 2 7 22 30 35 30 15 38	15 86 40 2 7 22 30 35 30 15 38

rmer sub-projects of this Board were turned it of Agriculture working in cooperation with ca, July 1, 1920, since which date no further in made by this Board:

Route	Wagon Road	Sled Road	Trail	Total Miles
Lake	7 1		12	$\begin{matrix} 7\\1\\12\end{matrix}$
enai			12	20

the Navy Department. Emergency repairs to a it a cost of \$35.00. sian River section only.

ditional sub-projects of this Board were turned ent of Agriculture, May 1, 1922, since which ditures have been made by this Board, except standing obligations, as of that date. The ug the current fiscal year prior to that date

Route	Wagon Road	Sled Road	Trail	Total Miles
Lake	7 10 39			10 39 7 9
Kenai		9	98	98
Kenar	. 63	9	98	170

age. No expenditures during the fiscal year.

D-KENAI LAKE (7 MILES WAGON ROAD)

from the Town of Seward to Kenai Lake and e settlers along the railroad and also as a

ANNUAL REPORT ALASKA ROAD COMMISSION.

recreational road for the people of Seward. Miles 8 to 14 of this road were turned over to the Department of Agriculture July 1, 1920.

Work during the fiscal year consisted of regrading with the road machine from Seward to Mile 7. Two 66-foot pile bridges were constructed. A two hundred-foot section of the Resurrection Bridge was rebuilt. The bridge at Mile 6 was rebuilt, fourteen new bents were placed and it was redecked. The road was generally maintained and is in first class condition.

Expenditure \$4,731.03.

ROUTE 19E-GIRDWOOD-CROW CREEK (10 MILES WAGON ROAD)

This road runs from Girdwood on Mile 75 Government Railroad to the Crow Creek Mining District.

Two miles of road were graded to carry the road around bad washouts on Glacier Creek. General maintenance work was performed throughout.

Expenditure \$2,391.65.

ROUTE 24-MILE 29 ANRR-Sunrise.....(39 MILES WAGON ROAD)

Work on this route consisted of general maintenance, removal of mud slides and repairing of corduroy.

Expenditure \$1,281.70.

ROUTE 24A-LYNX CREEK-SIXMILE CREEK (7 MILES WAGON ROAD)

A small amount of maintenance work was done on this route. Expenditure \$396.00.

ROUTE 24B-SUNRISE-HOPE.....(9 MILES SLED ROAD)

Most needed general maintenance work was done on this route.

Expenditure \$185.00.

ROUTE 55-KENAI LAKE-KENAI..... (98 MILES TRAIL)

No expenditure on this trail.

The following sub-projects, being located entirely outside the limits of the National Forests, are being retained by this Board. They are arranged in two groups; first, those sub-projects supported during the fiscal year from funds of this Board or of the Territory of Alaska, disbursed through the U. S. Treasury; and, second, those supported by Territorial funds disbursed by the Territorial Road Commission for the Third Division. In all cases, the work was performed by the superintendent of this Board, who also served as chairman and secretary of the Territorial Com-

mission, under the direction of the President of this Board, who also served as the Consulting Engineer for the Territory.

FEDERAL PROJECTS.

Sub					
Project		Wagon Road	Sled Road	Trail	Total Miles
No.		Road	Roau		
20B*	Susitna-Rainy Pass			127	127
$20 H^*$	Nancy-Susitna			25	25
35A	Archangel Extension	2			. 2
$35\mathbf{B}$	Mile 26½-Palmer	8			8
35C	Palmer-Matanuska River	11/2			$1\frac{1}{2}$
35D	Fishhook Extension	5			$\frac{5}{21}$
$35\mathbf{E}$	Wasilla-Fishhook	21			21
35F	Wasilla-Knik	15			15
48	Iliamna Bay-Iliamna Lake	10		2	12
51*	Talkeetna-Cache Creek	9	31		40
51A	Upper Yentna				•
7 5	Anchorage-Eagle River	• 5		5	10
83	Talkeetna-Iron Creek			40	40
					2/1077
	Totals	76½	31	199	$306\frac{1}{2}$

*Cooperative projects with the Territory.

40

ROUTE 20B-SUSITNA-RAINY PASS.....(127 MILES TRAIL)

During the winter of 1921-22 the entire route was gone over and all windfalls removed, fallen tripods replaced, and all of the most necessary emergency work done. A telephone line was installed from Pontello's cabin near the timber line on the south slope of Rainy Pass to Anderson's Roadhouse near the summit, a distance of some 12 miles over a barren windswept and dangerous ridge. The Pontello cabin and the Richardson Roadhouse were repaired for use as shelter cabins. Expenditure:

Alaska Road Commission	\$1,497.88
Territory of Alaska	
Total	\$3,497.88

ROUTE 20H-NANCY-SUSITNA.....(25 MILES TRAIL)

This is the new mail route connecting the Government Railroad with the Rainy Pass Trail. It was gone over in the fall of 1921, windfalls cut out and the most necessary emergency work done.

Expenditure \$296.33.

ROUTE 35A—ARCHANGEL EXTENSION (2 MILES WAGON ROAD)

This road connects with the Wasilla-Fishhook Road, Route 35E, at Mile 16, and follows the bench of the Little Susitna to Archangel Creek, supplying a number of mines and prospects in that section.

ANNUAL REPORT ALASKA RO

One and one-half miles of this roa road is now in good condition.

Expenditure \$3,490.88.

ROUTE 35B-MILE 261/2-PALMER.....

This road extends from Mile 11½ Station on the Government Railroad. It tile farming district.

Four miles were cleared, grubbed : Expenditure \$4,942.54.

ROUTE 35C—PALMER-MATANUSKA RI\ ROAD)

Expenditure of \$1,021.25 was for re_1 Bridge.

ROUTE 35D-FISHHOOK EXTENSION....

This road leaves Route 35E at Mil westerly over the divide into Willow Creek

Three miles of road were graded at This completes the road over the summi miles remain to complete it to the Ready condition of the road is good.

Expenditure \$19,601.20.

ROUTE 35E-WASILLA-FISHHOOK......(21

The portion of this road from Wasil Willow Creek Mines is the important one a greatest part of the work is concentrated. Provided and used on this work and great and otherwise improving it was made. The surfaced with gravel. A storehouse and gravel at Wasilla.

Expenditure \$877.16.

ROUTE 35F-WASILLA-KNIK(15 I

Rehabilitation of this road was begun this season

Expenditure \$781.05.

ROUTE 48—ILIAMNA BAY-ILIAMNA LAKE ROAD, 2 MILES TRAIL)

This trail connects Iliamna Bay on Co Village at the head of Iliamna Lake, whi Bay: It is a very important portage from

ANNUAL REPORT ALASKA ROAD COMMISSION.

REPORT ALASKA ROAD COMMISSION.

he direction of the President of this Board, as the Consulting Engineer for the Territory.

FEDERAL PROJECTS.

	Wagon	Sled	Trail	Miles
of Route	Road	Road	127	127
tainy Pass			25	25
isitna				8
				2 8 1½ 5 21
Jatanuska River Extension				21
	4.5		2	15 12
Knik Take	10	31		40
		-	. 5	10
entna	5		40	40
a-Iron Creek		31	199	3061/2
alsth the Terr	itory.			

rojects with the Territory. USITNA-RAINY PASS.....(127 MILES TRAIL)

winter of 1921-22 the entire route was gone over is removed, fallen tripods replaced, and all of the emergency work done. A telephone line was in ontello's cabin near the timber line on the south Pass to Anderson's Roadhouse near the summit, a e 12 miles over a barren windswept and dangerous itello cabin and the Richardson Roadhouse were reas shelter cabins.

	\$1,497.88
ad Commissionof Alaska	2,000.00
of Alaska	
	\$3,497.88
	A 11

NANCY-SUSITNA.....(25 MILES TRAIL)

he new mail route connecting the Government Rail-Rainy Pass Trail. It was gone over in the fall of cut out and the most necessary emergency work

ire \$296.33.

-ARCHANGEL EXTENSION (2 MILES WAGON

d connects with the Wasilla-Fishhook Road, Route 16, and follows the bench of the Little Susitna to eek, supplying a number of mines and prospects in

One and one-half miles of this road were graded. The entire road is now in good condition.

Expenditure \$3,490.88.

ROUTE 35B-MILE 261/2-PALMER.....(8 MILES WAGON ROAD)

This road extends from Mile 111/2 on Route 35E to Palmer Station on the Government Railroad. It runs through a very fertile farming district.

Four miles were cleared, grubbed and graded.

Expenditure \$4,942.54.

ROUTE 35C-PALMER-MATANUSKA RIVER (11/2 MILES WAGON

Expenditure of \$1,021.25 was for repairs to Matanuska River

ROUTE 35D—FISHHOOK EXTENSION.... (5 MILES WAGON ROAD)

This road leaves Route 35E at Mile 191/2 and leads northwesterly over the divide into Willow Creek.

Three miles of road were graded and metal culverts placed, This completes the road over the summit and four and one-half miles remain to complete it to the Ready Bullion Mines. Present condition of the road is good.

Expenditure \$19,601.20.

ROUTE 35E-WASILLA-FISHHOOK.......(21 MILES WAGON ROAD)

The portion of this road from Wasilla on the ANRR to the Willow Creek Mines is the important one and that upon which the greatest part of the work is concentrated. Two dump trucks were provided and used on this work and great progress in surfacing and otherwise improving it was made. Three miles of road was surfaced with gravel. A storehouse and garage were constructed at Wasilla.

Expenditure \$877.16.

ROUTE 35F-WASILLA-KNIK(15 MILES WAGON ROAD)

Rehabilitation of this road was begun and is to be completed this season.

Expenditure \$781.05.

ROUTE 48-ILIAMNA BAY-ILIAMNA LAKE (10 MILES WAGON ROAD, 2 MILES TRAIL)

This trail connects Iliamna Bay on Cook Inlet with Iliamna Village at the head of Iliamna Lake, which drains into Bristol Bay: It is a very important portage from Cook Inlet to Bering Expenditure \$5,649.56.

ROUTE 51-TALKEETNA-CACHE CREEK (9 MILES WAGON ROAD, 31 MILES SLED ROAD)

This road runs from Talkeetna on the Government Railroad to the Cache Creek Mining District and has been actively prosecuted since the summer of 1920.

Work during the past year has consisted of thirty-one acres of grubbing, twenty-two acres of stripping and nine miles of grading. One mile of corduroy was laid. A forty-five foot bridge was constructed over Date Creek. This road was practically completed to Moose Creek, Mile 10. It is one of the most important new roads under construction by this Commission and it is the intention to continue work this season.

Expenditure:

Alaska Road	Commission\$1	8,821.35
Territory of	Alaska 1	3,588.57
	-	
Total	· • • • • • • • • • • • • • • • • • • •	29 400 09

ROUTE 75-ANCHORAGE-EAGLE RIVER (5 MILES WAGON ROAD, 5 MILES TRAIL)

This road is an important tributary road to Anchorage. Four and one-half miles of road were stripped and graded. This road is now nearly completed, all of the machine grading being done and only a small amount of the side hill grading is to be finished.

Expenditure \$8,446.07.

EXAMINATIONS AND SURVEYS.

ROUTE 83-TALKEETNA-IRON CREEK:

A reconnaissance was made of the Iron Creek mining region and report was made of the feasibility of connecting it with Talkeetna on the Government Railroad.

Expenditure \$273.50.

ALASKA PENINSULA:

The District Superintendent made a trip to the Cold Bay oil fields and investigated the possibility of road construction being required there.

From Cold Bay he made a trip along the coast of the Alaska Peninsula, visiting and taking soundings in all coves, including

ANNUAL REPORT ALASKA ROAL

Geographic Harbor, which might be used the Katmai National Monument (Land of

Katmai Bay is too shallow, due to the shoved into it, to serve as a permanent land (Geographic Harbor) is very narrow, abouabsolutely landlocked. The shallowest sound is a very good harbor.

The distance to the Valley is 25 milfive miles through deep ashes and very 1 decided that road building is impracticable.

Kukak Bay is also a very good land same conditions were found in the hinterlar were more rugged though the ashes were tance is 50 miles.

It appears that a road from any Pac prohibitive in cost if not impossible. The drift around like snow with every wind. It] like so much ground coffee and is always re turbed. Until vegetation has again penetr sod or soil as a binding, it will not pack :

The Bristol Bay side of the Penins vestigated.

Expenditure \$573.20.

ROUTE 51A-UPPER YENTNA:

A reconnaissance party was started of the country to the west of Kahiltna River a Upper Yentna. This party encountered very ditions and was unable to complete the rec was established.

Expenditure \$901.26.

SHELTER CABINS.

One thousand dollars was spent upor shelter cabins on the Rainy Pass Trail. Th as a mail route with very great success. delivered to McGrath and beyond in an av better time than the previous winter when t was used.

ALASKA ROAD COMMISSION.

een made on this road for several years, one over and rehabilitated. Two miles the side hill.

CACHE CREEK (9 MILES WAGON SLED ROAD)

Talkeetna on the Government Railroad g District and has been actively prose-1920.

t year has consisted of thirty-one acres res of stripping and nine miles of gradwas laid. A forty-five foot bridge was reek. This road was practically comile 10. It is one of the most important tion by this Commission and it is the k this season.

	 \$18,821.35
sion	 13,588.57
	 \$32,409.92

E-EAGLE RIVER (5 MILES WAGON 3 TRAIL)

ortant tributary road to Anchorage.
niles of road were stripped and graded.
completed, all of the machine grading beall amount of the side hill grading is to

IATIONS AND SURVEYS.

A-IRON CREEK:

as made of the Iron Creek mining region the feasibility of connecting it with Talent Railroad.

ntendent made a trip to the Cold Bay oil the possibility of road construction being

made a trip along the coast of the Alaska taking soundings in all coves, including

Geographic Harbor, which might be used as a means of entry to the Katmai National Monument (Land of Ten Thousand Smokes).

Katmai Bay is too shallow, due to the large mass of pumice shoved into it, to serve as a permanent landing place. Amalik Bay (Geographic Harbor) is very narrow, about three miles long, and absolutely landlocked. The shallowest sounding was 10 fathoms. It is a very good harbor.

The distance to the Valley is 25 miles. After going inland five miles through deep ashes and very rugged country, it was decided that road building is impracticable.

Kukak Bay is also a very good landlocked harbor but the same conditions were found in the hinterland. The first six miles were more rugged though the ashes were not so deep. The distance is 50 miles.

It appears that a road from any Pacific entrance would be prohibitive in cost if not impossible. The deep ashes mentioned drift around like snow with every wind. It lies on the steep slopes like so much ground coffee and is always ready to slide when disturbed. Until vegetation has again penetrated it and formed a sod or soil as a binding, it will not pack and cannot be held in place.

The Bristol Bay side of the Peninsula will next be investigated.

Expenditure \$573.20.

ROUTE 51A-UPPER YENTNA:

A reconnaissance party was started on a reconnaissance of the country to the west of Kahiltna River and the vicinity of the Upper Yentna. This party encountered very adverse weather conditions and was unable to complete the reconnaissance. A cache was established.

Expenditure \$901.26.

SHELTER CABINS.

One thousand dollars was spent upon repairs to existing shelter cabins on the Rainy Pass Trail. This trail was reopened as a mail route with very great success. All winter mail was delivered to McGrath and beyond in an average of three weeks better time than the previous winter when the Nenana-Ruby route was used.

TERRITORIAL PROJECTS.

Sub Project No.	Name of Route	Wagon Road	Sled Road	Trail	Total Miles
10B 35G 35H 35I 35J* 35K* 35L*	Seward Branch (Nash) Palmer-Springer Wasilla-Finger Lake Moose-Palmer Wasilla-Matanuska Matanuska Trunk Line Palmer-Matanuska	. 3 7 . 2 . 11 . 8			2½ 3 7 2 11 8 5
35M* 36** 36A** 75A 75B* 93	Knik Coduroy Valdez-Mineral Creek Grandy Road Anchorage-Lake Spenard Whitney Road Chulitna Ferry	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$			$10\frac{1}{2}$ $\frac{3}{7}$
	Total				641/2

*No expenditures during the fiscal year.
**In Valdez District.

ROUTE 10B—SEWARD BRANCH (NASH) (2 $\frac{1}{2}$ MILES WAGON ROAD)

This road leads from the Seward-Kenai Lake Road, Route 10. Mile 2½ from Seward, to the north shore of Resurrection Bay through a rich agricultural district. Only emergency repairs, such as turning the glacial stream and leveling the ruts, were made last season. To make this piece of road reasonably passable will take about \$5,000 for graveling. The present condition is poor.

Total expenditure \$400.00.

ROUTE 35G-PALMER-SPRINGER.....(3 MILES WAGON ROAD)

This road connects a number of ranchers along the Matanuska River with Palmer at Mile 5 of the Chickaloon Branch of the Government Railroad.

About two miles of the road were cleared and grubbed in $^{
m OT}$ der to allow the ranchers to get in and out with their implements and machinery.

Total expenditure \$418.00.

ROUTE 35H-WASILLA-FINGER LAKE (7 MILES WAGON ROAD)

This road runs from the Town of Wasilla, at Mile 160 GoV ernment Railroad, in a northeasterly direction to connect with the Matanuska Trunk Road, Route 35K, at Forest Hall. It runs through the richest part of the Matanuska Valley and serves a great many ranchers.

Six and one-half miles were grubbed and graded last season at a cost of \$725 per mile.

The road is now in good condition.

Total expenditure \$4,714.15.

ANNUAL REPORT ALASKA ROA

ROUTE 351-MOOSE-PALMER.....(2

This is an Alaskan Engineering C serves a few ranchers living along the R. The work during the past season landslide near the mouth of Moose Crethe road is fair.

Total expenditure \$236.62.

ROUTE 35J-WASILLA-MATANUSKA (11

This road was built by the Alaskan for the transportation of construction surnuska Junction, Mile 151, Government Mile 160. Present condition, poor. An should be made on this road, principally the southern end to higher ground to keep

No expenditures.

ROUTE 35K-MATANUSKA TRUNK RO ROAD)

This road leads from the Wasilla-Mat about a mile out of Matanuska in a not the farming country and serves a great the route. At Forest Hall, about Mile of joined by the Wasilla-Finger Lake Road, F with its junction with the Mile 26½-Palmer in fair condition.

No expenditures.

ROUTE 35L-PALMER-MATANUSKA...... (5

This road is an Alaskan Engineering (alleling the Chickaloon Branch of the (tween Palmer and Matanuska. It runs that farming country in the Matanuska Vall dition.

No expenditures.

ROUTE 35M-KNIK CORDUROY:

This is a section of corduroy put in ago. It is in fair condition.

No expenditures.

ROUTE 36-VALDEZ-MINERAL CREEK ROAD)

Work accomplished described under

RT ALASKA ROAD COMMISSION.

ORIAL PROJECTS.

u te	Wagon Road	Sled Road	Trail	Total Miles
Nash)akesask Line	2½ 3 7 7 2 11 8			2½ 3 7 2 11 8 5
Greek Spenard	10½ 5 3½ 7 			19½ 5 3½ 7
ing the fiscal	year.			

BRANCH (NASH) (21/2 MILES WAGON

om the Seward-Kenai Lake Road, Route 10, to the north shore of Resurrection Bay ural district. Only emergency repairs, such stream and leveling the ruts, were made this piece of road reasonably passable will raveling. The present condition is poor.

\$400.00.

R-SPRINGER......(3 MILES WAGON ROAD)

ts a number of ranchers along the Matamer at Mile 5 of the Chickaloon Branch of oad.

of the road were cleared and grubbed in orners to get in and out with their implements

\$418.00.

A-FINGER LAKE (7 MILES WAGON ROAD)

from the Town of Wasilla, at Mile 160 Govnortheasterly direction to connect with the oad, Route 35K, at Forest Hall. It runs oart of the Matanuska Valley and serves a

miles were grubbed and graded last season mile.

· in good condition.

re \$4,714.15.

ANNUAL REPORT ALASKA ROAD COMMISSION.

ROUTE 351-MOOSE-PALMER.....(2 MILES WAGON ROAD)

This is an Alaskan Engineering Commission tote road and serves a few ranchers living along the Railroad.

The work during the past season consisted in removing a landslide near the mouth of Moose Creek. Present condition of the road is fair.

Total expenditure \$236.62.

ROUTE 35J-WASILLA-MATANUSKA (11 MILES WAGON ROAD)

This road was built by the Alaskan Engineering Commission for the transportation of construction supplies. It connects Matanuska Junction, Mile 151, Government Railroad, with Wasilla, Mile 160. Present condition, poor. An expenditure of \$20,000 should be made on this road, principally in repairing and shifting the southern end to higher ground to keep it out of the water.

No expenditures.

ROUTE 35K-MATANUSKA TRUNK ROAD (8 MILES WAGON ROAD)

This road leads from the Wasilla-Matanuska Road, Route 35J, about a mile out of Matanuska in a northeasterly direction into the farming country and serves a great number of farmers along the route. At Forest Hall, about Mile 6 from Matanuska, it is joined by the Wasilla-Finger Lake Road, Route 35H. It terminates with its junction with the Mile 26½-Palmer Road, Route 35B. It is in fair condition.

No expenditures.

ROUTE 35L-PALMER-MATANUSKA..... (5 MILES WAGON ROAD)

This road is an Alaskan Engineering Commission tote road paralleling the Chickaloon Branch of the Government Railroad between Palmer and Matanuska. It runs through the heart of the farming country in the Matanuska Valley. It is in fair condition.

No expenditures.

ROUTE 35M-KNIK CORDUROY:

This is a section of corduroy put in near Knik several years ago. It is in fair condition.

No expenditures.

ROUTE 36-VALDEZ-MINERAL CREEK (101/2 MILES WAGON ROAD)

Work accomplished described under Valdez District.

ROUTE 36A-GRANBY ROAD.....(5 MILES WAGON ROAD)

Work accomplished described under Valdez District.

ROUTE 75A—ANCHORAGE-LAKE SPENARD (31/2 MILES WAGON ROAD)

This road leads from Anchorage, at Mile 114 Government Railroad, through a farming district to Lake Spenard. Lake Spenard is a summer resort and bathing place and is used by hundreds of autoists in the summer time. It gives the City of Anchorage a much needed outlet and eventually should be extended around in a loop through the promising agricultural country to connect with the Whitney Road, Route 75B. The work performed last season consisted of dragging the entire length of the road and putting in 117 feet of fir plank road across a swamp. The road is too narrow and should be widened about 10 feet and regraded, at a cost of about \$4,000.

Total expenditure \$533.75.

ROUTE 75B-WHITNEY ROAD.....(7 MILES WAGON ROAD)

This road runs from Anchorage, Mile 114 on the Government Railroad, to Whitney's Ranch. It is used very extensively by autoists, ranchers, wood-haulers, etc. It should be regraded and widened as far as Whitney Station at Mile 119 on the Government Railroad, preparatory to connecting it with the other end of the Eagle River Road, Route 75, by way of Otter Lake. The cost would be about \$10,000. The section from Whitney Station to Whitney's Ranch should eventually be extended to connect with the extension of the Anchorage-Lake Spenard Road, Route 75A

No expenditures.

ROUTE 93-CHULITNA FERRY:

This ferry across the Chulitna River, near the mouth of Honolulu Creek, Mile 288 on the Government Railroad, gives access to the Government Railroad to a number of homesteaders and prospectors in the country across the Chulitna River which, at that point, is unfordable. Present development does not justify a bridge.

Total expenditure \$877.17.

DISTRIBUTION OF EXPENDITURES.

Type Wagon Road	Miles* 147	Expenditures	Unit Cost Dollars per Mile
Sled Road			
Trail	199		
Totals		\$91,782.18	\$237.00
*Includes routes ma	intained during	fiscal year only	7.

YUKON DISTR

H. W. Sterling, Superi-Ike P. Taylor, Asst. Supt. Abe McKinnon, Asst. Supt.

There are 51 sub-projects in this been abandoned; 25 of the remaining 45 directly tributary to the Government Rai extensions of these feeders into the mo Territory. The system of roads and tratie into the Railroad in this district as

Ma	in Line		
	Mile		R.
320		76	U.
344	Mt. McKinley Park Station		M
363	Lignite	46B	Li
371		88	Mo
381	Kobi	46	Κc
411	Nenana	46C	Nε
429	Dunbar	5.A	Dι
		63	Du
460	Happy	7D	Es
467	Fairbanks	4K	Fa
		4 J	Sa
	•	41	Ric
		4H2	Ra
		7G	Fa
		7J	Fa
11	7	7N	Fa
13	Fox	7B	Fo:
4.0	Gilmore	7G	Fai
26	01	71	Gil
-0	Olnes	7B	Oh
29	Tha	7K	Oln
32	Eldorado	7H	Lit
-	Chatanika	7A	Suı
		7C	Sur
		16	Cha
		15	Cir
		23A	Cha

RT ALASKA ROAD COMMISSION.

ROAD.....(5 MILES WAGON ROAD)

described under Valdez District.

GE-LAKE SPENARD (31/2 MILES WAGON

from Anchorage, at Mile 114 Government ning district to Lake Spenard. Lake Spenard and bathing place and is used by hundreds mer time. It gives the City of Anchorage and eventually should be extended around promising agricultural country to connect ad, Route 75B. The work performed last tagging the entire length of the road and fir plank road across a swamp. The road uld be widened about 10 feet and regraded, 100.

\$533.75.

EY ROAD.....(7 MILES WAGON ROAD)

rom Anchorage, Mile 114 on the Government Ranch. It is used very extensively by autoaulers, etc. It should be regraded and widney Station at Mile 119 on the Government to connecting it with the other end of the oute 75, by way of Otter Lake. The cost one of the section from Whitney Station to ould eventually be extended to connect with Anchorage-Lake Spenard Road, Route 75A.

NA FERRY:

288 on the Government Railroad, gives access Railroad to a number of homesteaders and country across the Chulitna River which, at dable. Present development does not justify

are \$877.17.

RIBUTION OF EXPENDITURES.

KIBUTION O.		Unit Cost
Miles*	Expenditures	Dollars per Mile
147	e a	
40		1
386	\$91,782.18	\$237.00
naintained durin	g fiscal year only ects not included.	•

YUKON DISTRICT.

H. W. Sterling, Superintendent. Ike P. Taylor, Asst. Supt., Fairbanks. Abe McKinnon, Asst. Supt., Chatanika.

There are 51 sub-projects in this district, of which 6 have been abandoned; 25 of the remaining 45 are road or trail feeders directly tributary to the Government Railroad, and the balance are extensions of these feeders into the more remote sections of the Territory. The system of roads and trails devised by this Board tie into the Railroad in this district as follows:

	n Line Mile		Route
320	Carlson's Roadhouse	76	U. S. R. RValdez Creek
344	Mt. McKinley Park Station	46D	Mt. McKinley Park Trail
363	Lignite	46B	Lignite-Kantishna
371	Moose Creek	88	Moose Creek Road
381	Kobi	46	Kobi-Eureka
411	Nenana	46Ċ	Nenana-Knights Roadhouse
429	Dunbar	5A	Dunbar-Fort Gibbon
		63	Dunbar-Brooks
460	Нарру	7D	Ester Creek
467	Fairbanks	4K	Fairbanks-Salchaket
	•	4 J	Salchaket-Richardson
	,	41	Richardson-McCarty
		4H2	Rapids-McCarty
		7G	Fairbanks-Gilmore
		7J	Fairbanks-Chena Hot Springs
		7N	Farmers Birch Hill
11	Fox	7B	Fox-Olnes
13	Gilmore	7G	Fairbanks-Gilmore
		7 I	Gilmore-Summit
26	Olnes	7B	Olnes-Fox
		7K	Olnes-Livengood
29	Eldorado	7H	Little Eldorado Creek
32	Chatanika	7A	Summit-Chatanika
		7C	Summit-Fairbanks Creek
		16	Chatanika-Miller House
		15	Circle-Miller House
		23A	Chatanika-Beaver

The following former sub-projects of this Board have been abandoned:

No.		Road	Road		\mathbf{M} iles
Sub Project	Name of Route	Wagon	Sled	Trail	Total
5* 7E 7F 7L 7M 31	Ester-Fort Gibbon	2 1½ 4 3	27		27 2 1½ 4 3 46
	Totals		73		831/2

*Ester-Dunbar section, 27 miles only, of Fairbanks-Fort Gibbon route. Original route was 148 miles long.

All winter mail to the westward was formerly distributed from Fairbanks and followed the Ester-Fort Gibbon sled road. Since the completion of the Government Railroad, this mail now leaves the railroad at Dunbar and follows the Dunbar-Fort Gibbon section of this same sled road.

The Vault Creek and Vault Creek-Treasure Creek Roads connect the old town of Vault with claims on Treasure Creek and with the Happy-Chatanika Railroad. No work has been done on these routes for a number of years and there is at present no occasion for doing any work. Present condition poor.

The Chena-Ester Road connects the abandoned town of Chena on the Tanana River with Ester City on Ester Creek. The road has not been used for several years. The Fairbanks-Tanana Landing Road connects Fairbanks with the Tanana River, being a part of the old original Fairbanks-Valdez Road. No money has been spent on this road for many years nor are present expenditures warranted. Present condition fair.

The Salchaket-Caribou Creek route is an old winter sled road cut in 1908 at the time of a placer excitement up Salchaket River. It connects Munson's Roadhouse at Mile 330, Richardson Highway, with the former center of activity on Caribou Creek, a tributary of the Salchaket River. Nothing has been done on the route since 1914 and until further developments no work is required.

The following sub-projects, upon which work is being done by the Board, are arranged in two groups: First, those supported during the fiscal year from funds of this Board or of the Territory of Alaska, disbursed through the U. S. Treasury; and, second, those supported by Territorial funds disbursed by the Territorial Road Commission for the Fourth Division. All work on the second group was performed by an assistant superintendent of this Board who also served as chairman and secretary of the Territorial Commission, under the direction of the President of this Board, who also served as the Consulting Engineer for the Territory.

FEDERAL PRO

Sub Project	Nome of David
No.	Name of Route
4A**	Donnally 317-3-1
4H2	Donnelly-Washburn
41	Rapids-McCarty
$\bar{4J}$	Richardson-Salahakat
4K	McCarty-Richardson Richardson-Salchaket Salchaket-Fairbanks
5.A.	Dungar-rore Ginnon
7C	Summit-Fairbanks Creek
7D*	
7G*	Fairbanks-Gilmore
7J*	
7 R	GOIGSTEAM-O'Connor Crook
9 15	Mambari - Kareke
16	
17	Chatanika-Miller House
22	Fort Gibbon-Kaltag
23A	
23B	Chatanika-Beaver
23C	Beaver-Caro Caro-Big Creek
23D	Caro-Biat Crook
23E	Caro-Coldfoot Fort Gibbon-Koyukuk
29	Fort Gibbon-Kovukuk
30*	
46**	KODI-ENITEKA Creek
46A* 46B*	Roosevelt-Kantishna
46C	Lignite-Kantishna
46D**	Menana-Knights Roadhouse
46E	Mt. McKinley Park Trail
47**	Auskokwim Reconnaissanca
59	Cuidioot-Wiseman
63*	Fairbanks Bridge
63A**	Dunbar-Brooks
76	
88	Government RR-Valdez Creek Government RR-Moose Creek
	so, or mineric itit-Moose Creek
	Totals

*Cooperative projects with the Territory
**No expenditures during the fiscal year

ROUTE 4A-DONNELLY-WASHBURN...

This is a winter cut-off for sled Mile 245, and Washburn, Mile 314, Rich ing in distance is thus about 14 miles. Pletion of the Government Railway, all interior of Alaska passed over this rollin later years from Cordova, via Chitina banks, sled trails radiate to all inhabited

The route was last used during the winter there was no traffic, and the usuing about \$1,100.00 annually, was not per

No expenditures.

ROUTE 4H2-RAPIDS-McCARTY.....(4

This road is the division of the Richard River Delta River and McCarty, w Tanana River by ferry just above the m

No work done between May 1st, 19

RT ALASKA ROAD COMMISSION.

her sub-projects of this Board have been

oute	Road Wagon	Road Sled 27	Trail	Miles Total
asure Creek		46		1 1/4 4 3 46
ou Creek		73	ort Gibb	831 on route

27 miles only, of Fairbanks-Fort Gibbon route, tiles long.

to the westward was formerly distributed lowed the Ester-Fort Gibbon sled road. Since Government Railroad, this mail now leaves and follows the Dunbar-Fort Gibbon section

and Vault Creek-Treasure Creek Roads coni Vault with claims on Treasure Creek and nika Railroad. No work has been done on number of years and there is at present no y work. Present condition poor.

Road connects the abandoned town of Chena with Ester City on Ester Creek. The road reveral years. The Fairbanks-Tanana Landarbanks with the Tanana River, being a part Fairbanks-Valdez Road. No money has been for many years nor are present expenditures condition fair.

Caribou Creek route is an old winter sled road ime of a placer excitement up Salchaket River. s Roadhouse at Mile 330, Richardson Highway, ter of activity on Caribou Creek, a tributary of r. Nothing has been done on the route since ler developments no work is required.

sub-projects, upon which work is being done by ranged in two groups: First, those supported ear from funds of this Board or of the Territory d through the U. S. Treasury; and, second, those itorial funds disbursed by the Territorial Road he Fourth Division. All work on the second ed by an assistant superintendent of this Board chairman and secretary of the Territorial Come direction of the President of this Board, who Consulting Engineer for the Territory.

FEDERAL PROJECTS.

Sub Project No.	Name of Route	Wagon Road	Sled Road	Trail	Total Miles
4A**	Donnelly-Washburn		55		55
4H2	Rapids-McCarty		00		48
4F12	McCarty-Richardson				201/2
4J	Richardson-Salchaket				30
4K	Salchaket-Fairbanks				40
5A	Dunbar-Fort Gibbon		121		121
7Ĉ	Summit-Fairbanks Creek				11
7D*	Ester Creek				13
7G*	Fairbanks-Gilmore				13
7J*	Fairbanks-Chena Hot Springs		64		64
7R	Goldstream-O'Connor Creek		6		6
71	Rampart-Eureka		21		271/2
9 15	Circle-Miller House			+	49
15	Chatanika-Miller House		77		81
16	Fort Gibbon-Kaltag		• •	257	257
17	Hot Springs-Sullivan Creek	. 9		-0.	9
22 23A	Chatanika-Beaver			120	120
237	Beaver-Caro		75		75
23B	Caro-Big Creek			45	45
23C	Caro-Flat Creek		45		45
23D 23E	Caro-Coldfoot		10	75	75
	Fort Gibbon-Koyukuk			240	240
29	Hot Springs Landing-Eureka			-10	24
30* 46**	Kobi-Eureka Creek			95	95
40**	Roosevelt-Kantishna			•	34
46A*	Lignite-Kantishna			85	85
16B*	Nenana-Knights Roadhouse			42	42
46C 46D**	Mt. McKinley Park Trail	-		86	86
46D	Kuskokwim Reconnaissance	•		00	00
46E	Coldfoot-Wiseman		11	•	12
47**	Fairbanks Bridge		11		- 0
59	Dunbar-Brooks		63		63
63*	No. 1 mm 1 .		00 .		13
63A**	Government RR-Valdez Creek			55	55
76	Government RR-Moose Creek			JO	6
88	Government RR-Moose Creek	. 0			
	Totals	. 322	538	1100	1960
	1 0 caro	. 044	000	1100	2.000

^{*}Cooperative projects with the Territory.
**No expenditures during the fiscal year.

ROUTE 4A-DONNELLY-WASHBURN..... (55 MILES SLED ROAD)

This is a winter cut-off for sled traffic between Donnelly, Mile 245, and Washburn, Mile 314, Richardson Highway. The saving in distance is thus about 14 miles. Prior to the recent completion of the Government Railway, all winter mails to the entire interior of Alaska passed over this route, first from Valdez and in later years from Cordova, via Chitina, to Fairbanks. From Fairbanks, sled trails radiate to all inhabited parts of interior Alaska.

The route was last used during the winter of 1920-1921. Last winter there was no traffic, and the usual maintenance work, costing about \$1.100.00 annually, was not performed.

No expenditures.

ROUTE 4H2—RAPIDS-McCARTY.....(48 MILES WAGON ROAD)

This road is the division of the Richardson Highway between the upper Delta River and McCarty, where the road crosses the Tanana River by ferry just above the mouth of the Delta River.

No work done between May 1st. 1921, and June 30th.

Fifteen days with a crew of twelve men were spent in putting in new culverts and hastily repairing some of the worst ones at close of season. No work was done Nov. 1st, 1921, to April 30th, 1922.

Present condition is good except for culverts.

Expenditures \$16,071.64.

ROUTE 41-McCARTY-RICHARDSON (201/2 MILES WAGON ROAD)

This is a part of the Richardson Highway which practically parallels the Tanana River between the ferry crossing and the old mining town of Richardson.

Work between May 1st and July 30th, 1921, consisted of repairing scow ferry at Tanana River, replacing broken span over Tanana slough with pile bents, and regrading.

No work was done between Nov. 1st, 1921, and April 30th, 1922, except to get out approximately five hundred logs for culverts which can be secured at half price during winter.

Present condition good.

Expenditures \$14,233.25.

ROUTE 4J—RICHARDSON-SALCHAKET (30 MILES WAGON ROAD)

This is the portion of the Richardson Highway between the old mining camp of Richardson and Salchaket Trading Post on the Salchaket River, a tributary of the Tanana.

Work between May 1st and June 30th, 1921, consisted only of minor repair work by one man on Richardson Hill.

From July 1st to Oct. 31st, 1921, a crew of 15 men worked 50 days on miles 309 to 311, south of Birch Lake, graveling road with decomposed granite, cleaning ditches and replacing culverts. Two and three-quarters miles of bad road were put in excellent condition. Considerable work was done at mile 319, where the Tanana River had undermined the road. In addition, all culverts were repaired sufficiently to make them passable.

Present condition is good except the five miles between mile posts 304 to 309.

Expenditure \$17,041.80.

ROUTE 4K-SALCHAKET-FAIRBANKS (40 MILES WAGON ROAD)

This is the most northerly section of the Richardson Highway, to which has been given a great deal of attention for years and owing to the swampy nature of the country passed through will need continued work put upon it.

Operations May 1st to June 30th, 1921: The entire road was gone over hurriedly to fill up the worst mud holes and do temporary repair work on broken down culverts after which a shovel

crew with wagons and trucks was ing gravel from pit at mile 368. paired, repainted, and launched. strengthened.

Between July 1st and Oct. 3 regrading, graveling, and building were regraded, 9 miles were gravinches and all culverts were reneated by the bridge over Joys Slough at m log box culvert and slough filled steam shovel worked 33 days an work at shut-down.

Present condition good.

Total expenditures \$49,553.20.

ROUTE 5A-DUNBAR-FORT GIBBC

This is the winter mail trail Government Railroad and the arm confluence of the Tanana and Ya formerly known as the Ester-Fort 148 miles. Since the completion of section of 27 miles from Ester to D

The only work done between was the protection during breakup between Hot Springs and Rock Cre

Between July 1st and Oct. 31st grading of the banks of the Tolovan

No work was done on this roun April 30th, 1922. No work is content.

Present condition good. Expenditure \$526.44.

ROUTE 7C—SUMMIT-FAIRBANKS ROAD)

This is a branch from the Fairba Road at Summit (Mile 19) to the place This road has considerable traffic du months owing to placer mining ope the Fairbanks Dredging Company.

known as Bear Creek Summit, has al No work was done between Macket for protection during break-up.

Work between July 1st and Oct. and April 30th, 1922.

Present condition good. Expenditure \$395.00.

rew of twelve men were spent in putting ily repairing some of the worst ones at ; was done Nov. 1st, 1921, to April 30th,

good except for culverts.

CHARDSON (201/2 MILES WAGON ROAD)

1e Richardson Highway which practically ver between the ferry crossing and the rdson.

1st and July 30th, 1921, consisted of reanana River, replacing broken span over bents, and regrading.

between Nov. 1st, 1921, and April 30th, pproximately five hundred logs for culverts half price during winter.

good.

34.

3.25.

MILES WAGON ON-SALCHAKET (30

1 of the Richardson Highway between the hardson and Salchaket Trading Post on the utary of the Tanana.

, 1st and June 30th, 1921, consisted only of one man on Richardson Hill.

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41.80.

(ET-FAIRBANKS (40 MILES WAGON ROAD)

t northerly section of the Richardson Highen given a great deal of attention for years ampy nature of the country passed through ork put upon it.

1st to June 30th, 1921: The entire road was to fill up the worst mud holes and do temn broken down culverts after which a shovel crew with wagons and trucks was put to work loading and distributing gravel from pit at mile 368. The ferry at Salchaket was repaired, repainted, and launched. The Piledriver Bridge was strengthened.

Between July 1st and Oct. 31st, 1921, 60 days were spent in regrading, graveling, and building new culverts. Fifteen miles were regraded, 9 miles were graveled to an average depth of 12 inches and all culverts were renewed between miles 362 and 371. The bridge over Joys Slough at mile 369 was replaced by a 6'x6' log box culvert and slough filled in to grade with gravel. The steam shovel worked 33 days and was doing remarkably good work at shut-down.

Present condition good.

Total expenditures \$49,553.20.

ROUTE 5A-DUNBAR-FORT GIBBON (121 MILES SLED ROAD)

This is the winter mail trail between Dunbar, mile 429 on Government Railroad and the army post of Fort Gibbon at the confluence of the Tanana and Yukon Rivers. This route was formerly known as the Ester-Fort Gibbon Road with distance of 148 miles. Since the completion of the Government Railroad the section of 27 miles from Ester to Dunbar is no longer used.

The only work done between May 1st and June 30th, 1921, was the protection during breakup of 31/2 miles of hillside road between Hot Springs and Rock Creek.

Between July 1st and Oct. 31st, 1921, the only work was the grading of the banks of the Tolovana River at the crossing.

No work was done on this route between Nov. 1st, 1921, and April 30th, 1922. No work is contemplated between May 1st and Oct. 31st, 1922.

Present condition good.

Expenditure \$526.44.

ROUTE 7C-SUMMIT-FAIRBANKS CREEK (11 MILES WAGON

This is a branch from the Fairbanks-Gilmore-Summit-Chatanika Road at Summit (Mile 19) to the placer camp on Fairbanks Creek. This road has considerable traffic during both winter and summer months owing to placer mining operations being carried on by the Fairbanks Dredging Company. The summit on this route, known as Bear Creek Summit, has almost prohibitive grades.

No work was done between May 1st and June 30th, 1921, except for protection during break-up.

Work between July 1st and Oct. 31st, 1921, consisted only of general maintenance. No work was done between Nov. 1st, 1921, and April 30th, 1922.

Present condition good. Expenditure \$395.00.

ANNUAL REPORT ALASKA ROAD COMMISSION.

ROUTE 7D-ESTER CREEK.....(13 MILES WAGON ROAD)

This is a cooperative project, partly supported by the Territorial funds, as described below.

Alaska Road Commission expenditures, \$388.33.

ROUTE 7G-FAIRBANKS-GILMORE.....(13 MILES WAGON ROAD)

This is a cooperative project, partly supported by Territorial funds, as described below.

Alaska Road Commission expenditures \$5.61.

ROUTE 7J-FAIRBANKS-CHENA HOT SPRINGS (64 MILES SLED

This is a cooperative project, partly supported by Territorial funds, as described below.

Alaska Road Commission expenditures \$1,215.50.

ROUTE 7R-GOLDSTREAM-O'CONNOR CREEK TRAIL (6 MILES SLED ROAD)

This old road connects the railroad with prospective placer ground on O'Connor Creek, a tributory of Goldstream, which the road crosses at a point 800 feet from the railroad.

No funds have been spent on this route for over ten years until season between July 1st and Oct. 31st, 1921, when a substantial bridge over Goldstream was built, the Railroad furnishing the material and the Road Commission doing the erecting at a cost of \$155.00.

Present condition is good and no further work need be done on this trail until placer discoveries on the Creek warrant it. Expenditures \$154.64.

ROUTE 9-RAMPART-EUREKA (61/2 MILES WAGON ROAD, 21 MILES SLED ROAD)

This connects the mining town of Rampart on the Yukon River with the mining camp of Eureka on Eureka Creek, waters of which flow into Tanana River. The first 61/2 miles out of Rampart form a fair wagon road. The remaining 21 miles are only a mediocre sled road.

No work has been done on this road since summer, 1920. though an inspection trip was made over the route in February.

No winter work was done.

Present condition fair.

Expenditure \$45.00.

ROUTE 15-CIRCLE-MILLER HOUSE (4

This connects Circle City on the Y placer district. This section will be t posed extension of the Richardson Highw Yukon.

No work was performed until after that time and Oct. 31st, 1921, general re No winter work was done. Present condition good. Expenditures \$3,130.36.

ROUTE 16-CHATANIKA-MILLER HOU ROAD, 77 MILES SLED ROAD

This connects the Town of Chatanil of Government Railroad, with Miller Ho district, being a part of the through rou section of the proposed extension of the R

No work was done before June 30 time and Oct. 31st, 1921, a survey party make a part of the definite location for Chatanika and Miller House, which has h in winter only by sled road. Actual cons July 4th. A good location was secured ov were cleared and 4 miles of road built : proximately \$2,000.00 of which was spent 1

Present condition good. Expenditures \$17,872.34.

ROUTE 17-FORT GIBBON-KALTAG.....

This is purely a winter mail trail use the Army Post of Fort Gibbon at the co and Yukon Rivers to Kaltag on the lower sary route for the distribution of mail alo Gibbon. It follows the Yukon on the ic

 N_0 work is ever done on this rout months. It has been the custom in the γ hundred dollars to the mail carrier to sta after year, to replace bridges over Mason is believed that the two bridges mention manently and investigation is under way.

Expenditures \$300.00.

ROUTE 22-HOT SPRINGS-SULLIVAN CRI ROAD).

This road connects the Town of Hot the Tanana River, with the placer prod Sullivan Creek.

ALASKA ROAD COMMISSION.

on expenditures, \$388.33.

ILMORE.....(13 MILES WAGON ROAD)
project, partly supported by Territorial

ion expenditures \$5.61.

HENA HOT SPRINGS (64 MILES SLED

, project, partly supported by Territorial

ssion expenditures \$1,215.50.

AM-O'CONNOR CREEK TRAIL (6 MILES

ects the railroad with prospective placer ek, a tributory of Goldstream, which the 300 feet from the railroad.

n spent on this route for over ten years ly 1st and Oct. 31st, 1921, when a sublstream was built, the Raiiroad furnishing d Commission doing the erecting at a cost

is good and no further work need be placer discoveries on the Creek warrant it.

EUREKA (61/2 MILES WAGON ROAD, 21 ROAD)

mining town of Rampart on the Yukon camp of Eureka on Eureka Creek, waters mana River. The first 6½ miles out of wagon road. The remaining 21 miles are

n done on this road since summer, 1920, rip was made over the route in February.

was done.

fair.

10.

ROUTE 15-CIRCLE-MILLER HOUSE (49 MILES WAGON ROAD)

This connects Circle City on the Yukon River with the Circle placer district. This section will be the final link in the proposed extension of the Richardson Highway from the Coast to the Yukon.

No work was performed until after June 30th, 1921. Between that time and Oct. 31st, 1921, general repair work was done.

No winter work was done.

Present condition good.

Expenditures \$3,130.36.

ROUTE 16—CHATANIKA-MILLER HOUSE (4 MILES WAGON ROAD, 77 MILES SLED ROAD)

This connects the Town of Chatanika, at end of branch line of Government Railroad, with Miller House in the Circle placer district, being a part of the through route to Circle City and a section of the proposed extension of the Richardson Highway.

No work was done before June 30th, 1921. Between that time and Oct. 31st, 1921, a survey party was put in the field to make a part of the definite location for a wagon road between Chatanika and Miller House, which has heretofore been connected in winter only by sled road. Actual construction was begun after July 4th. A good location was secured over first 15 miles, 7 miles were cleared and 4 miles of road built at a cost of \$18,000, approximately \$2,000.00 of which was spent for equipment.

Present condition good.

Expenditures \$17,872.34.

ROUTE 17-FORT GIBBON-KALTAG.....(257 MILES TRAIL)

This is purely a winter mail trail used by dog teams between the Army Post of Fort Gibbon at the confluence of the Tanana and Yukon Rivers to Kaltag on the lower Yukon. It is a necessary route for the distribution of mail along the river below Fort Gibbon. It follows the Yukon on the ice practically the entire distance.

No work is ever done on this route except during winter months. It has been the custom in the past to allot five to six hundred dollars to the mail carrier to stake the Yukon and, year after year, to replace bridges over Mason and Illinois Creeks. It is believed that the two bridges mentioned can be put in permanently and investigation is under way.

Expenditures \$300.00.

ROUTE 22—HOT SPRINGS-SULLIVAN CREEK (9 MILES WAGON ROAD)

This road connects the Town of Hot Springs, two miles from the Tanana River, with the placer producing creek known as Sullivan Creek. No work was done on this route between May 1st and Oct. 31st, 1921.

Present condition fair.

Expenditures \$230.37.

ROUTE 23A-CHATANIKA-BEAVER.....(120 MILES TRAIL)

This is an old winter trail between the Town of Chatanika, at the end of the branch line of the Government Railroad, and the Town of Beaver on the Yukon River, the latter place serving as a point of supply for the Chandalar mining district.

No work has been done on this trail since 1910.

Present condition poor.

Expenditures \$29.14.

ROUTE 23B-BEAVER-CARO.....(75 MILES SLED ROAD)

This route connects the Town of Beaver on the Yukon River with the Town of Caro in the Chandalar mining district.

Very little work was done between May 1st and June 30th, 1921, aside from sending a foreman from Fairbanks and assembling a crew at Beaver.

Between July 1st and Oct. 31st, 1921, the crew worked over the road to Mile 61, doing general repair work, including the building of one bridge and one culvert, the rebuilding of one old bridge, the repairing of caches at Beaver and at Mile 55 and the repairing of two relief cabins and placing good stoves in five relief cabins. In addition, the foreman made a reconnaissance trip through the mining district.

Present condition good.

Expenditures \$5,053.81.

ROUTE 23C-CARO-BIG CREEK(45 MILES TRAIL)

This trail connects Caro with the operations on Big and $To^{\rm bin}$ Creeks. It is passable for Yukon and double-ender sleds. It could be improved to bob-sled standard for about \$5,000.

The route was reconnoitered and a Yukon stove placed in Big Creek Cabin at Mile 26. It is contemplated to put in a passenger trolley carrier across Middle Fork for mushers.

Expenditures \$25.00.

ROUTE 23D-CARO-FLAT CREEK......(45 MILES SLED ROAD)

This sled road was built by the miners and is the route by which freight is handled to Big Squaw, Little Squaw, and the, quartz properties adjacent to the quartz mill. The output of Little Squaw Creek last season was about \$24,000. One hundred tons of freight passed over the road.

ANNUAL REPORT ALASKA RO

The route was reconnoitered and a Creek Cabin at Mile 14. The road is in Expenditures \$25.00.

ROUTE 23E—CARO-COLDFOOT.....

Foreman Frank Irons, upon comp Beaver-Caro section, made a reconnaissand man with intent to locate a feasible wint River through Caro to the Koyukuk Dist tance from Caro to Coldfoot by this ro estimated cost of building a suitable wint \$10,000.00.

Expenditures \$500.00.

ROUTE 29-FORT GIBBON-KOYUKUK......

This route is the old mail trail fr Yukon River to Coldfoot, the mining camp district. The route distance of this trail as 100 miles, which included the trail onl The actual distance is 240 miles.

No work was done this year. Expedone early in 1921.

Present condition good.

Expenditures \$840.48.

ROUTE 30—HOT SPRINGS LANDING-EURI ROAD)

This is a cooperative project partly funds as described below.

Alaska Road Commission expenditure:

ROUTE 46-KOBI-EUREKA CREEK.....

Connecting Kobi Station, (Mile 387 of 24 miles south of Nenana, with Kantishna of Eureka Creek. This is a part of the banks to the Kantishna District, the port Kobi Station being abandoned since the road.

Present condition fair. No expenditure.

ROUTE 46A-ROOSEVELT-KANTISHNA ROAD)

 $$^{\rm This}$$ is a cooperative project, supportunds, partly by Territorial funds disburs-

PORT ALASKA ROAD COMMISSION.

tone on this route between May 1st and Oct.

on fair.

ANIKA-BEAVER(120 MILES TRAIL)

vinter trail between the Town of Chatanika, at ch line of the Government Railroad, and the the Yukon River, the latter place serving as the Chandalar mining district.

en done on this trail since 1910.

n poor.

9.14.

ER-CARO(75 MILES SLED ROAD)

ects the Town of Beaver on the Yukon River tro in the Chandalar mining district.

 ${\bf k}$ was done between May 1st and June 30th, ling a foreman from Fairbanks and assembling

st and Oct. 31st, 1921, the crew worked over doing general repair work, including the builded one culvert, the rebuilding of one old bridge, hes at Beaver and at Mile 55 and the repair ns and placing good stoves in five relief cabins, man made a reconnaissance trip through the

n good.

.053.81.

BIG CREEK(45 MILES TRAIL)

ects Caro with the operations on Big and Tobin ble for Yukon and double-ender sleds. It could sled standard for about \$5,000.

reconnoitered and a Yukon stove placed in Mile 26. It is contemplated to put in a pastr across Middle Fork for mushers.

FLAT CREEK.....(45 MILES SLED ROAD)

was built by the miners and is the route by ndled to Big Squaw, Little Squaw, and the ljacent to the quartz mill. The output of last season was about \$24,000. One hundred ed over the road.

The route was reconnoitered and a Yukon stove placed in Flat Creek Cabin at Mile 14. The road is in fairly good shape. Expenditures \$25.00.

ROUTE 23E-CARO-COLDFOOT.....(75 MILES TRAIL)

Foreman Frank Irons, upon completing his work in the Beaver-Caro section, made a reconnaissance trip from Caro to Wiseman with intent to locate a feasible winter route from the Yukon River through Caro to the Koyukuk District. The estimated distance from Caro to Coldfoot by this route is 75 miles and the estimated cost of building a suitable winter sled road is placed at \$10,000.00.

Expenditures \$500.00.

ROUTE 29-FORT GIBBON-KOYUKUK.....(240 MILES TRAIL)

This route is the old mail trail from Fort Gibbon on the Yukon River to Coldfoot, the mining camp in the Koyukuk mining district. The route distance of this trail has formerly been given as 100 miles, which included the trail only as far as Arctic City. The actual distance is 240 miles.

No work was done this year. Expenditures were for work done early in 1921.

Present condition good.

Expenditures \$840.48.

ROUTE 30—HOT SPRINGS LANDING-EUREKA (24 MILES WAGON ROAD)

This is a cooperative project partly supported by Territorial funds as described below.

Alaska Road Commission expenditures \$5,001.72.

ROUTE 46-KOBI-EUREKA CREEK.....(95 MILES TRAIL)

Connecting Kobi Station, (Mile 387 on Government Railroad) 24 miles south of Nenana, with Kantishna Postoffice at the mouth of Eureka Creek. This is a part of the original trail from Fairbanks to the Kantishna District, the portion from Fairbanks to Kobi Station being abandoned since the completion of the Railroad.

Present condition fair.

No expenditure.

ROUTE 46A—ROOSEVELT-KANTISHNA (34 MILES WAGON ROAD)

This is a cooperative project, supported partly by Federal funds, partly by Territorial funds disbursed through the U. S.

Treasury, and partly by Territorial funds disbursed by the divisional Territorial Road Commission.

Expenditures: Territory of Alaska, \$1,283.75; Alaska Road Commission, \$7,680.34; total, \$8,964.09.

ROUTE 46B-LIGNITE-KANTISHNA.....(85 MILES TRAIL)

The route of this proposed road leads from Lignite Station, (Mile 363 on the Government Railroad), west across Middle, Chisana and Toklat Rivers, up Crooked Creek and down Bearpaw River to Glacier City and from there up Moose Creek, terminating at the Kantishna Postoffice.

Shortly after May 1st, 1921, a survey party was put in the field and during the next eighty days 54 miles of preliminary location were run. The road necessarily passes over the divides between the different rivers but the nature of the ground found was better than expected.

No winter work was done except for the blazing and tripoding of a winter dog trail through the same country which follows the wagon road location as near as is practicable.

Expenditures: Territory of Alaska, \$483.07; Alaska Road Commission, \$11,483.84; total, \$11,966.91.

ROUTE 46C-NENANA-KNIGHTS ROADHOUSE (42 MILES TRAIL)

Connects Town of Nenana on Tanana River (Mile 411 on the Government Railroad) with Knight's Roadhouse on the Toklat River at the mouth of Chisana River. Knight's Roadhouse is also on the Kobi-Diamond-Eureka Trail at Mile 26 and from this point travelers and freighters go on to the Kantishna District either via Diamond and Glacier Cities or on up the Toklat River and over Clearwater Summit. The trail was cut out during fall of 1920, the entire expense being borne by citizens of Nenana.

No work was done on this route by the Alaska Road Commission until the middle of November, 1921, when a small party was put in the field to widen and straighten it and to put shelter for travelers along the trail in two places.

Expenditures \$1,499.80.

ROUTE 46D-MT. McKINLEY PARK TRAIL..... (86 MILES TRAIL)

This is a new project. The proposed trail will extend from Mt. McKinley Park Station, Government Railroad, Mile 344, across Mt. McKinley National Park, via Sable, Polychrome, Highway and Thorofare Passes, to the foot of Muldrow Glacier, then down the McKinley River, passing out of the Park to Wonder Lake and on to Kantishna Postoffice.

During this season, the trail will be brushed out and tripoded at confusing points, eight tents with small stoves will be erectival

at about ten mile intervals for shelter and sign boards placed at the principa

The project has been prepared in tional Park Service, which will submit improvement as a trail as well as fo cessive sections to automobile standard demand. In conjunction with Route route, 171 miles long, from Mile 344, Go the Park to Kantishna Postoffice, and Mile 363, through the finest hunting gro

No expenditure reported prior to ϵ

ROUTE 47—COLDFOOT-WISEMAN (1 N 11 MILES SLED ROAD)

Connects towns of Coldfoot and Wis

No work done on this route since winter freighting, supplies being brought as Coldfoot.

Road is in good condition. No expenditures.

ROUTE 59-FAIRBANKS BRIDGE:

This steel structure is in good co upon it since spring, 1920, except \$6.40 crete piers. No work done this winter.

for north approach.

Expenditure \$6.40.

ROUTE 63-DUNBAR-BROOKS.....

This is a cooperative project partly funds as described below.

A. R. C. expenditures \$366.50.

ROUTE 63A-BROOKS-TERMINAL.....(13

The Brooks-Terminal route formerly known as the Dunbar-Brooks Sled Road.
of 13 miles will connect Brooks with the Tolovana River.

No expenditure.

ROUTE 76-GOVERNMENT R. R.-VALD TRAIL)

Connects McKinley Placer Company's prospects on Valdez Creek, a branch of the Government Railroad at Carlson's

.ASKA ROAD COMMISSION.

itorial funds disbursed by the divi-

of Alaska, \$1,283.75; Alaska Road \$8,964.09.

ISHNA.....(85 MILES TRAIL)

sed road leads from Lignite Station, Railroad), west across Middle, Chisana ked Creek and down Bearpaw River tere up Moose Creek, terminating at

1921, a survey party was put in the the thy days 54 miles of preliminary local eccessarily passes over the divides beat the nature of the ground found was

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GHTS ROADHOUSE (42 MILES TRAIL)

nana on Tanana River (Mile 411 on the th Knight's Roadhouse on the Toklat isana River. Knight's Roadhouse is also ka Trail at Mile 26 and from this point on to the Kantishna District either via es or on up the Toklat River and over trail was cut out during fall of 1920, the by citizens of Nenana.

on this route by the Alaska Road Comof November, 1921, when a small party viden and straighten it and to put shelter rail in two places.

NLEY PARK TRAIL (86 MILES TRAIL)

ject. The proposed trail will extend from ion, Government Railroad, Mile 344, across Park, via Sable, Polychrome, Highway and foot of Muldrow Glacier, then down the g out of the Park to Wonder Lake and

the trail will be brushed out and tripoded that tents with small stoves will be erected

at about ten mile intervals for shelter, mile posts will be erected and sign boards placed at the principal points.

The project has been prepared in cooperation with the National Park Service, which will submit estimates for its further improvement as a trail as well as for the improvement of successive sections to automobile standard as traffic conditions may demand. In conjunction with Route 46B, it will form a loop route, 171 miles long, from Mile 344, Government Railroad, through the Park to Kantishna Postoffice, and return to the Railroad at Mile 363, through the finest hunting ground in Alaska.

No expenditure reported prior to end of fiscal year.

ROUTE 47—COLDFOOT-WISEMAN (1 MILE WAGON ROAD AND 11 MILES SLED ROAD)

Connects towns of Coldfoot and Wiseman in the Koyukuk mining district.

No work done on this route since 1917. Road used for winter freighting, supplies being brought up river on scows as far as Coldfoot.

Road is in good condition.

No expenditures.

ROUTE 59-FAIRBANKS BRIDGE:

This steel structure is in good condition. No money spent upon it since spring, 1920, except \$6.40 for cement facing on concrete piers. No work done this winter.

During summer bridge is to be repainted and replanked except for north approach.

Expenditure \$6.40.

ROUTE 63-DUNBAR-BROOKS.....(63 MILES SLED ROAD)

This is a cooperative project partly supported by Territorial funds as described below.

A. R. C. expenditures \$366.50.

ROUTE 63A-BROOKS-TERMINAL......(13 MILES WAGON ROAD)

The Brooks-Terminal route formerly included Route 63, now known as the Dunbar-Brooks Sled Road. The proposed wagon road of 13 miles will connect Brooks with the head of navigation on the Tolovana River.

No expenditure.

ROUTE 76—GOVERNMENT R. R.-VALDEZ CREEK (55 MILES TRAIL)

Connects McKinley Placer Company's plant and other adjacent prospects on Valdez Creek, a branch of the upper Susitna River. with the Government Railroad at Carlson's Roadhouse, Mile 320.

Between May 1st and Oct. 31st, 1921, no work was done on this new sled road, though a reconnaissance trip was made through the country for the purpose of ascertaining the most feasible route.

December 2nd a party left Carlson's Roadhouse to blaze the trail from Wells Creek to the Company's holdings, a distance of 40 miles. The mining company had already cut the road to the 16-mile post and freight was being hauled over it. Three hundred tons were moved before spring.

Expenditures \$1,139.58.

ROUTE 88—GOVERNMENT R. R.-MOOSE CREEK (6 MILES WAGON ROAD)

Connects prospective placer mining ground on upper Moose Creek, a tributary of the Nenana River, with the Government Railroad at Mile 371. The ground on Moose Creek produced \$3,700 last summer during a very short working season.

The work was done on this road between July 1st and Oct. 31st by E. M. Keys and Sons, \$500 being allotted for the work under the condition that the above named firm would perform, gratis, an equal amount of work. Work done on this road by the firm of E. M. Keys and Sons was very satisfactory.

Present condition of the road is fair for light loads, not exceeding $1{,}000$ pounds.

Expenditure \$499.69.

TERRITORIAL PROJECTS.

Sub					
Project No.	Name of Route	Wagon Road	Sled Road	Trail	Total Miles
7.A 7.B 7.D* 7.G* 7.H 7.I 7.J*	Summit-Chatanika Fox-Olnes Ester Creek Fairbanks-Gilmore Little Eldorado Creek Gilmore-Summit Fairbanks-Chena Hot Springs	$13 \\ 13 \\ 13 \\ 14 \\ 6$	64		11 13 13 13 1½ 6 64 54
7K 7N 7S 15A	Olnes-Livengood Farmers Birch Hill Graehl Bridge Central House-Circle Hot Springs	6½ 9	54		6½ 9
30* 46 A * 63*	Hot Springs Landing-Eureka Roosevelt-Kantishna Dunbar-Brooks	34	63		24 34 63
	Totals** Totals	$\begin{array}{c} 47 \\ 131 \end{array}$	54 181		$\begin{array}{c} 101 \\ 312 \end{array}$

*Cooperative projects with Alaska Road Commission. **Exclusive of cooperative projects.

ROUTE 7A-SUMMIT-CHATANIKA......(11 MILES WAGON ROAD)

This is an old road and very little used at the present time, though passable for automobiles and is a part of the proposed continuation of the Richardson Highway from Fairbanks to Circle City.

No work was done between May 1st and June 30th, 1921.

Between July 1st and Oct. 31st, work, consisting of filling holes, repairi heavy growth of brush overhanging the Present condition fair.

Total expenditures \$525.00.

ROUTE 7B-FOX-OLNES(1

This road connects the towns of I Mile 18 and 34, respectively, on the bran Railroad known as the Happy-Chatanika constructed in pre-railroad days and t little used.

No work was done between May 1st Work between July 1st and Oct. 31 repairing culverts and replanking one sh Present condition fair.

Total expenditures \$230.00.

ROUTE 7D-ESTER CREEK.....(18

This road connects the Town of F on Ester Creek, one of the rich placer c ing the Government Experimental Farm the Government Railroad to Nenana at M

From May 1st to June 30th, 1921, advantage during break-up by A. R. C. A bog, was graveled and general repairs a ried on by the Territorial Road Commissished on July 13, 1921. Nothing more was from dragging the road once.

A portion of this road between Miles a soil area subject to very rapid erosion it is advisable to expend a sum of apprhandling the water at that time. Aside tions between May 1st and Oct. 31st, 1 general maintenance.

Present condition very good.

Total Territorial expenditures \$2,916.8 A. R. C. expenditures \$388.33.

ROUTE 7G-FAIRBANKS-GILMORE..... (13

This road forms an integral part of of the Richardson Highway to Circle Cit with the Town of Gilmore, near the head prominent placer district. It carries a lar the vicinity of Fairbanks, being used pringiners.

ALASKA ROAD COMMISSION.

Oct. 31st, 1921, no work was done on a reconnaissance trip was made through lose of ascertaining the most feasible

y left Carlson's Roadhouse to blaze the the Company's holdings, a distance of mpany had already cut the road to the as being hauled over it. Three hundred

spring.

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NT R. R.-MOOSE CREEK (6 MILES

placer mining ground on upper Moose Nenana River, with the Government Railground on Moose Creek produced \$3,700 ery short working season.

on this road between July 1st and Oct. l Sons, \$500 being allotted for the work at the above named firm would perform, of work. Work done on this road by the Sons was very satisfactory.

of the road is fair for light loads, not

TORIAL PROJECTS.

oute	Wagon Road	Sled Road	Trail	Total Miles 11
ka	11 13 13			$\frac{13}{13}$ $\frac{13}{13}$ $\frac{13}{1\frac{1}{2}}$
creeka Hot Springs.	1½ 6	64 54		64 64 54 6½
Hill Jircle Hot Spring anding-Eureka	gs 9 24	40		9 24 34 63
ishna	47 131	63 54 181		101 312
with Alaska	Road Cor	nmission	•	

rative projects.

CHATANIKA......(11 MILES WAGON ROAD) ad and very little used at the present time, automobiles and is a part of the proposed tichardson Highway from Fairbanks to Circle

le between May 1st and June 30th, 1921.

Between July 1st and Oct. 31st, 1921, general maintenance work, consisting of filling holes, repairing culverts and cutting the heavy growth of brush overhanging the road, was done.

Present condition fair.

Total expenditures \$525.00.

ROUTE 7B-FOX-OLNES(13 MILES WAGON ROAD)

This road connects the towns of Fox and Olnes, situated at Mile 18 and 34, respectively, on the branch line of the Government Railroad known as the Happy-Chatanika Branch. The road was constructed in pre-railroad days and the greater part of it is little used.

No work was done between May 1st and June 30th, 1921.

Work between July 1st and Oct. 31st, 1921, consisted only of repairing culverts and replanking one short bridge.

Present condition fair.

Total expenditures \$230.00.

ROUTE 7D-ESTER CREEK.....(13 MILES WAGON ROAD)

This road connects the Town of Fairbanks with Ester City on Ester Creek, one of the rich placer creeks in early days, passing the Government Experimental Farm at Mile 6 and crossing the Government Railroad to Nenana at Mile 460.

From May 1st to June 30th, 1921, \$100 was spent to good advantage during break-up by A. R. C. Mile 3, known as the peat bog, was graveled and general repairs and maintenance was carried on by the Territorial Road Commission. This road was finished on July 13, 1921. Nothing more was done to Oct. 31st, aside from dragging the road once.

A portion of this road between Miles 7 and 13 passes through a soil area subject to very rapid erosion during spring season and it is advisable to expend a sum of approximately \$100.00 toward handling the water at that time. Aside from this work, operations between May 1st and Oct. 31st, 1922, will be confined to general maintenance.

Present condition very good.

Total Territorial expenditures \$2,916.30.

A. R. C. expenditures \$388.33.

ROUTE 7G-FAIRBANKS-GILMORE.....(13 MILES WAGON ROAD)

This road forms an integral part of the proposed extension of the Richardson Highway to Circle City, connecting Fairbanks with the Town of Gilmore, near the headwaters of Goldstream, a prominent placer district. It carries a large part of the traffic in the vicinity of Fairbanks, being used principally by farmers and miners.

Between July 1st and Oct. 31st, 1921, the entire road was worked over, 4 miles receiving a light layer of gravel and 7 miles being graded, in addition to general repair work. The post bent bridge over Garden Slough, one-quarter mile out from Fairbanks, was rebuilt. New timbers were put on the ice breakers of the Noyes Slough Bridge.

Present condition good.

Total Territorial expenditures, \$3,890.90; A. R. C. expenditures, \$5.61.

ROUTE 7H-LITTLE ELDORADO CREEK (11/2 MILES WAGON ROAD)

This road connects placer mining claims on Little Eldorado Creek, a tributary of Goldstream, with the Government Railroad at Little Eldorado Station, Mile 37, Happy-Chatanika Branch.

No work was performed between May 1st and June 30th, 1921.

Between July 1st and Oct. 31st, 1921, general repair work, including a new bridge of 16-foot span, was done.

Present condition good.

Total expenditures \$336.00.

ROUTE 71-GILMORE-SUMMIT.....(6 MILES WAGON ROAD)

This route forms a part of the proposed extension of the Richardson Highway and is used by automobiles, trucks and teams in going from Fairbanks to Fairbanks Creek or from Fairbanks to Chatanika. It connects the Town of Gilmore with point on divide known as Summit, where road branches, one branch going to Fairbanks Creek, the other to Chatanika.

No work was done on this route between May 1st and June 30th, 1921.

Between July 1st and Oct. 31st, 1921, the entire road was gone over and put in good condition, the grader being used where feasible and bridges and culverts repaired.

This road is in good surface condition but has some excessive grades. Because of the heavy traffic over it and the fact that it will later form a part of the Richardson Highway, approximately two miles of the road will be relocated to secure better grades.

Present condition good.

Total expenditures \$2,965.32.

ANNUAL REPORT ALASKA ROA

ROUTE 7J-FAIRBANKS-CHENA HOT SI ROAD)

This route connects Fairbanks with Chena River and is used by the farmers, the passenger traffic to the Springs.

No work was done between May 1st Between July 1st and Oct. 31st the Chena River at Mile 14 was put in at a being shared by the Territory to the extework was done on the sled road but spent on repairing, widening, and hauli miles of road along the foot of Birch H be continued to the Hot Springs.

Petitions have several times been bluff near Mile 44, where the trail nece on Chena River. The river at this point travelers have had narrow escapes from

Present condition of winter road is g Total Territorial expenditures \$1,05: A. R. C. expenditures \$1,215.50.

ROUTE 7K-OLNES-LIVENGOOD.....(

Connects Town of Olnes on the Chata ernment Railroad with Livengood Creek i This road has been practically abandoned to for summer travel, in favor of the Dunb the Wilbur Creek excitement of the last and encouraging prospects were found, increased.

Between July 1st and Oct. 31st, 1921 Bridge was rebuilt and the foot bridge owas repaired.

Present condition of road is fair. Total expenditures \$221.25.

ROUTE 7N-FARMERS' BIRCH HILL (61/2

This road has been built by the Territ district along Birch Hill. It branches from Road (Route 7G) at Mile 3, and connects Road (Route 7D) at Mile 5.

Some grading was done on this rou June 30th, but the bulk of the work wa July 1st and Oct. 31st, 1921. Due to poot the road was abandoned, a large part of Over two miles of new road to make the

this route between May 1st and June

Oct. 31st, 1921, the entire road was ing a light layer of gravel and 7 miles o general repair work. The post bent one-quarter mile out from Fairbanks, were put on the ice breakers of the

l. enditures, \$3,890.90; A. R. C. expendi-

DORADO CREEK (11/2 MILES WAGON

placer mining claims on Little Eldorado ldstream, with the Government Railroad Mile 37, Happy-Chatanika Branch.

nd Oct. 31st, 1921, general repair work, f 16-foot span, was done.

336.00.

od.

JMMIT.....(6 MILES WAGON ROAD)

a part of the proposed extension of the is used by automobiles, trucks and teams is to Fairbanks Creek or from Fairbanks ects the Town of Gilmore with point on it, where road branches, one branch going other to Chatanika.

on this route between May 1st and June

and Oct. 31st, 1921, the entire road was ood condition, the grader being used where d culverts repaired.

od surface condition but has some excessive heavy traffic over it and the fact that it of the Richardson Highway, approximately vill be relocated to secure better grades.

good. s \$2,965.32. ROUTE 7J—FAIRBANKS-CHENA HOT SPRINGS (64 MILES SLED ROAD)

This route connects Fairbanks with the Hot Springs up the Chena River and is used by the farmers, miners, wood-haulers, and the passenger traffic to the Springs.

No work was done between May 1st and June 30th, 1921.

Between July 1st and Oct. 31st the new bridge over Little Chena River at Mile 14 was put in at a cost of \$1,650.00, the cost being shared by the Territory to the extent of \$525.00. No other work was done on the sled road but approximately \$500 were spent on repairing, widening, and hauling gravel on the three miles of road along the foot of Birch Hill which will eventually be continued to the Hot Springs.

Petitions have several times been circulated to grade the bluff near Mile 44, where the trail necessarily takes to the ice on Chena River. The river at this point is slow in freezing and travelers have had narrow escapes from drowning.

Present condition of winter road is good.

Total Territorial expenditures \$1,052.35.

A. R. C. expenditures \$1,215.50.

ROUTE 7K-OLNES-LIVENGOOD.....(54 MILES SLED ROAD)

Connects Town of Olnes on the Chatanika Branch of the Government Railroad with Livengood Creek in the Tolovana District. This road has been practically abandoned the past few years, except for summer travel, in favor of the Dunbar-Brooks Road. During the Wilbur Creek excitement of the last year, when several new and encouraging prospects were found, the travel on this trail increased.

Between July 1st and Oct. 31st, 1921, the Washington Creek Bridge was rebuilt and the foot bridge over the Chatanika River was repaired.

Present condition of road is fair.

Total expenditures \$221.25.

ROUTE 7N-FARMERS' BIRCH HILL (61/2 MILES WAGON ROAD)

This road has been built by the Territory through the farming district along Birch Hill. It branches from the Fairbanks-Gilmore Road (Route 7G) at Mile 3, and connects with the Fairbanks-Ester Road (Route 7D) at Mile 5.

Some grading was done on this route last season prior to June 30th, but the bulk of the work was accomplished between July 1st and Oct. 31st, 1921. Due to poor location, one mile of the road was abandoned, a large part of it being washed out. Over two miles of new road to make the connection between the

Gilmore Road and Ester City Road, were built and an additional two miles were regraded and widened. A number of new culverts were built. Results of the work done on this route were very satisfactory.

Present condition good.

Total expenditures \$4,814.89.

ROUTE 7S-GRAEHL BRIDGE:

This bridge is over a slough on the winter cut-off from the Fox Road into Fairbanks. All the travel from that direction crosses this bridge in winter as it saves approximately one mile on the distance into Fairbanks. It is also the only outlet for the people living in Graehl during the summer.

Minor repairs were made. This bridge requires rebuilding at an estimated cost of \$1,200.

Total expenditures \$105.97.

ROUTE 15A—CENTRAL HOUSE-CIRCLE HOT SPRINGS (9 MILES WAGON ROAD)

This is a branch road from the Circle-Miller House Road at Central House, Mile 36, to the Hot Springs.

No work was done until after June 30th, 1921. Between that date and Oct. 31st, 1921, general maintenance work, such as ditching, covering corduroy, and repairing culverts, was done.

Present condition fair.

Total expenditures \$620.50.

ROUTE 30—HOT SPRINGS LANDING-EUREKA (24 MILES WAGON ROAD)

Connects the landing on the Tanana River, two miles from Hot Springs, with mining camp of Eureka, passing through Hot Springs.

One hundred dollars was spent to protect road during spring floods, between May 1st and June 30th, 1921. During period July 1st to Oct. 31st, 1921, a new bridge was erected over Baker Creek at Mile 14. Bridge consists of one 80-foot Howe truss span of native timber and approaches decked with four-inch planks. Cost of bridge was shared by the Territory to the extent of \$1,000; total cost approximately \$6,200.

This road has held up well for the small amount of work that has been done upon it since first built and though \$20,000 would be required to make it a good road, \$2,500 will repair the Hot Springs Slough Bridge, put in a few needed culverts and cut the brush from the road. The last item is most necessary as

the underbrush has grown to such ar overlaps the road in many places.

Total Territorial expenditures \$1,1 A. R. C. expenditures \$5,001.72.

ROUTE 46A—ROOSEVELT-KANTISHN ROAD)

This road leads from Roosevelt, o Kantishna River, to the Postoffice of Ka Lacking connection with the railroad, a are brought up the Kantishna River to overland to Kantishna. The road to road

No work was accomplished last so 1921, when a foreman was sent in to lay been cut the winter before. Five thous laid and two and one-half miles of clearin

Condition of road actually built to balance of road is very poor. Nine thou duroy will have to be laid; also two bri and several miles brushed out. Estimate a fair wagon road is \$50,000.

Total Territorial expenditures \$655.0 A. R. C. expenditures \$8,964.09.

ROUTE 63-DUNBAR-BROOKS.....

Connects mining camp of Brooks in Dunbar Station at Mile 429 of the Gove a good winter trail and the best availa

No work done between May 1st and Three bridges were put in over W sloughs near the Tolovana River and route were made, partly from Territoria present in good condition.

Total Territorial expenditures \$1,778 A. R. C. expenditures \$366.50.

ROUTE 46E-KUSKOKWIM RECONNAIS

During the open season the Enginee investigation of possible summer routes froad to the Kuskokwim. The route for Riley Creek through Mt. McKinley Park district to Roosevelt, at the head of navityer. After reaching Roosevelt the rout Kantishna River across Lake Minchumin head of the north fork of the Kuskokwin

ASKA ROAD COMMISSION.

Road, were built and an additional idened. A number of new culverts k done on this route were very

ugh on the winter cut-off from the he travel from that direction crosses ves approximately one mile on the also the only outlet for the people nmer.

This bridge requires rebuilding at

E-CIRCLE HOT SPRINGS (9 MILES

om the Circle-Miller House Road at e Hot Springs.

l after June 30th, 1921. Between general maintenance work, such as d repairing culverts, was done.

LANDING-EUREKA (24 MILES

the Tanana River, two miles from up of Eureka, passing through Hot

spent to protect road during spring fune 30th, 1921. During period July oridge was erected over Baker Creek one 80-foot Howe truss span of naeked with four-inch planks. Cost of ritory to the extent of \$1,000; total

vell for the small amount of work since first built and though \$20,000 a good road, \$2,500 will repair the ut in a few needed culverts and cut the last item is most necessary as

the underbrush has grown to such an extent that it completely overlaps the road in many places.

Total Territorial expenditures \$1,147.36.

A. R. C. expenditures \$5,001.72.

ROUTE 46A-ROOSEVELT-KANTISHNA (34 MILES WAGON ROAD)

This road leads from Roosevelt, on the upper waters of the Kantishna River, to the Postoffice of Kantishna, the mining center. Lacking connection with the railroad, all supplies for the district are brought up the Kantishna River to Roosevelt and then hauled overland to Kantishna. The road to date is largely a winter road.

No work was accomplished last season until after July 1st, 1921, when a foreman was sent in to lay some corduroy which had been cut the winter before. Five thousand feet of corduroy were laid and two and one-half miles of clearing done.

Condition of road actually built to date is excellent, but the balance of road is very poor. Nine thousand feet of additional corduroy will have to be laid; also two bridges will have to be built and several miles brushed out. Estimated cost to make this route a fair wagon road is \$50,000.

Total Territorial expenditures \$655.03.

A. R. C. expenditures \$8,964.09.

ROUTE 63-DUNBAR-BROOKS.....(63 MILES SLED ROAD)

Connects mining camp of Brooks in the Tolovana District with Dunbar Station at Mile 429 of the Government Railroad. This is a good winter trail and the best available route to Brooks.

No work done between May 1st and Oct. 31st, 1921.

Three bridges were put in over Washington Creek and two sloughs near the Tolovana River and general repairs over the route were made, partly from Territorial funds. The road is at present in good condition.

Total Territorial expenditures \$1,778.38.

A. R. C. expenditures \$366.50.

ROUTE 46E-KUSKOKWIM RECONNAISSANCE:

During the open season the Engineer Officer made a thorough investigation of possible summer routes from the Government Railroad to the Kuskokwim. The route followed by him was from Riley Creek through Mt. McKinley Park and the Kantishna mining district to Roosevelt, at the head of navigation on the Kantishna River. After reaching Roosevelt the route followed was along the Kantishna River across Lake Minchumina and the portage to the head of the north fork of the Kuskokwim. The north fork of the

Kuskokwim was followed to the main forks of the Kuskokwim and thence to McGrath.

In addition to this, Superintendent Sterling last winter made a winter reconnaissance, starting at Lignite on the Government Railroad and following the route Lignite-Glacier-Bartlett's Cabin-Telida Village. The reconnaissance was not extended beyond Telida Village but the winter and summer conditions along the east fork of the Kuskokwim from the main forks to Telida Village are well known.

As a result of these two winter and summer reconnaissances, with the numerous shorter ones made by the Engineer Officer and employees of this Board through the last two years, the topography and conditions of travel, both winter and summer, through the area west of the Government Railroad, including the northern portion of Mt. McKinley Park, the Kantishna mining district, and possible routes to the valley of the Kuskokwim are well known.

Total expenditures \$831.75.

DISTRIBUTION OF EXPENDITURES

TIMIT Cost

Type Wagon Road Sled Road Trail	527	Expenditures	Dollars per Mile
Totals	1840	\$157,913.35	\$86.00
*Includes routes mai:	ntained during	g fiscal year only.	

Includes routes maintained during fiscal year only Non-cooperative Territorial projects not included.

KUSKOKWIM DISTR

W. W. Lukens, Asst. Su

This district was organized last working ant superintendent sent to Tacotna, via the the first boat leaving Seattle in the spring. developments at Nixons Forks, northeast of successful dredging operations southwest of in this hitherto inaccessible region has be Members of the Board, last year, made recons out the lengths of the Yukon and Kuskokwin portages from the Kantishna to the north it mina, from Ruby to Ophir via Long-Poorman-Tacotna, and from Kalchagamut to Russian

Many years ago, during the Iditarod constructed the Rainy Pass Trail from Se branches to Ruby and Iditarod. It has since tended the system of winter trails in this relation of the Some short roads were constructed Flat, an excellent road was built from Ruby three years ago, construction of the Ophir-Ting the upper Innoko with the Tacotna River,

A start was made this year in extendent bethel, the ocean port at the head of the estual Should this country continue to develop, as tem will be extended to Cape Newenham a developments on the Alaska Peninsula.

There are 20 sub-projects in this distrine appenditures were made during the fisca sumed charge of the work, the present Boa very little of record concerning conditions in how made extensive reconnaissances through the control of t

Kuskokwim was followed to the main forks of the Kuskokwim and thence to McGrath.

In addition to this, Superintendent Sterling last winter made a winter reconnaissance, starting at Lignite on the Government Railroad and following the route Lignite-Glacier-Bartlett's Cabin-Telida Village. The reconnaissance was not extended beyond Telida Village but the winter and summer conditions along the east fork of the Kuskokwim from the main forks to Telida Village are well known.

As a result of these two winter and summer reconnaissances, with the numerous shorter ones made by the Engineer Officer and employees of this Board through the last two years, the topography and conditions of travel, both winter and summer, through the area west of the Government Railroad, including the northern portion of Mt. McKinley Park, the Kantishna mining district, and possible routes to the valley of the Kuskokwim are well known.

Total expenditures \$831.75.

DISTRIBUTION OF EXPENDITURES

Tinit Cost

Type Miles* Wagon Road	Expenditures	Dollars per Mile
Totals1840	\$157,913.35	\$86.00

*Includes routes maintained during fiscal year only. Non-cooperative Territorial projects not included.

KUSKOKWIM DIS

W. W. Lukens, Asst

This district was organized last wo ant superintendent sent to Tacotna, via the first boat leaving Seattle in the sprin developments at Nixons Forks, northeas successful dredging operations southwes in this hitherto inaccessible region had Members of the Board, last year, made reout the lengths of the Yukon and Kuske portages from the Kantishna to the normina, from Ruby to Ophir via Long-Poor Tacotna, and from Kalchagamut to Russ

Many years ago, during the Iditate constructed the Rainy Pass Trail from branches to Ruby and Iditarod. It has tended the system of winter trails in the Iditarod. Some short roads were construction. Some short roads were construction of the Oping the upper Innoko with the Tacotna R

A start was made this year in e Bethel, the ocean port at the head of the Should this country continue to develop, will be extended to Cape Newenhadevelopments on the Alaska Peninsula.

There are 20 sub-projects in this appenditures were made during the sumed charge of the work, the present how being little of record concerning condition that the substitute of the substitute as the substitute of the substitute and has already adopted to the substitute of the substitute and has already adopted to the substitute of the substitute and has already adopted to the substitute of the substitute and has already adopted to the substitute of the subst

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two winter and summer reconnaissances, or ones made by the Engineer Officer and through the last two years, the topotravel, both winter and summer, through ernment Railroad, including the northern Park, the Kantishna mining district, and ley of the Kuskokwim are well known. 31.75.

TON OF EXPENDITURES

Miles* Expenditures Dollars per Mile
... 308
... 527
... 1005
... 1840 \$157,913.35 \$86.00

ed during fiscal year only.

KUSKOKWIM DISTRICT.

W. W. Lukens, Asst. Supt.

This district was organized last working season and an assistant superintendent sent to Tacotna, via the Kuskokwim River, on the first boat leaving Seattle in the spring. Due to the lode mining developments at Nixons Forks, northeast of McGrath, and to the successful dredging operations southwest of McGrath, prospecting in this hitherto inaccessible region has been much stimulated. Members of the Board, last year, made reconnaissance trips throughout the lengths of the Yukon and Kuskokwim Rivers, crossing the portages from the Kantishna to the north fork via Lake Minchumina, from Ruby to Ophir via Long-Poorman-Cripple, from Ophir to Tacotna, and from Kalchagamut to Russian Mission.

Many years ago, during the Iditarod stampede, the Board constructed the Rainy Pass Trail from Seward to Kaltag, with branches to Ruby and Iditarod. It has since maintained and extended the system of winter trails in this region as far south as Iditarod. Some short roads were constructed around Iditarod and Flat, an excellent road was built from Ruby to Long Creek, and three years ago, construction of the Ophir-Tacotna Road, connecting the upper Innoko with the Tacotna River, was begun.

A start was made this year in extending this system to Bethel, the ocean port at the head of the estuary of the Kuskokwim. Should this country continue to develop, as seens likely, the system will be extended to Cape Newenham and across to the oil developments on the Alaska Peninsula.

There are 20 sub-projects in this district, upon 9 of which no expenditures were made during the fiscal year. When it assumed charge of the work, the present Board was able to find very little of record concerning conditions in this district. It has now made extensive reconnaissances throughout most of the district. It has been able to initiate a systematic rehabilitation of all old routes and has already adopted several much needed extensions.

SUMMARY OF ROADS

Sub Project No.	Name of Route	Wagon Road	Sled Road	Trail	Total Miles
17A°	Lewis Landing-Dishkaket			108	108
17B*	Nulato-Dishkaket			90	90
20C	Rainy Pass-Tacotna			130	130
20D*	Tacotna-Kaltag			145	145
32A	Tacotna-Flat Creek			87	87
32B*	Iditarod-Flat Creek				. 8
32C*	Iditarod-Ophir			90	90
32D	Flat-Crooked Creek			62	62
33A*	Otter Creek-Towpath			22	22
33B*	Summit-Otter Creek				6
34*	Iditarod-Dishkaket		30	68	98
58A	Ruby-Long Creek				30
38B	Long Creek-Cripple City			60	60
38C	Ophir-Cripple			50	50
38D	Tacotna-Ophir				24^{1}_{2}
38E	Long-Poorman	29			29
38F*	Poorman-Ophir			125	125
64	Cripple-Lewis Landing			60	611
92A	Bethel-Quinhagak			90	90
92B	Bethel-Akiak			26	26
	Totals	971/2	30	1213	134012

 $^{\circ}\mathrm{No}$ expenditures during the fiscal year. No work was done on these routes during the period of curtailed appropriations resulting from the World War. They are being investigated.

ROUTE 20C-RAINY PASS-TACOTNA.....(130 MILES TRAIL)

Minor repairs only. Complete rehabilitation to be undertaken next winter.

No expenditures.

ROUTE 32A-TACOTNA-FLAT CREEK......(87 MILES TRAIL)

This is the summer route from the Iditarod to Ophir and

An examination was made and contract let for shelter cabins and horse barns.

Expenditure \$42.50.

ROUTE 32D-FLAT-CROOKED CREEK......(62 MILES TRAIL)

A reconnaissance was made to determine the best summer and winter routes for trails to connect the Iditarod District with the Kuskokwim River.

Expenditure \$130.00.

ROUTE 38A-RUBY-LONG CREEK......(30 MILES WAGON ROAD)

This is an excellent road connecting Ruby with the workings on Long Creek. Its extension to Poorman is contemplated.

General maintenance work was performed and damage sulting from the spring break-up was repaired.

Expenditure \$4,659.48.

ROUTE 38B-LONG CREEK-CRIPPLE CITY.

This is the winter mail trail from Ruby General repair of bridges; reconnaissan-Expenditure \$706.94.

ROUTE 38C-OPHIR-CRIPPLE....

This is the continuation of the winter noko River to Ophir.

Winter and summer reconnaissance. Expenditure \$335.25.

ROUTE 38D-TACOTNA-OPHIR.....(241/2 MI

Every effort was made for the vigorous upon this road through the last season to $\ensuremath{\text{re}}$ increased dredging operations on the upper J ant Superintendent Lukens went into the proj and had transported with him a liberal su equipment necessary for the work. Previous t gone in over the snow from Fairbanks for preliminary work and arranging for the seaso excellent progress was made upon the road. marizes the work accomplished:

Road graded Right-of-way cleared and grubbed Corduroy placed Culverts built Bridges, 20-foot span Bridge, 34-foot span Trestle bridge, 54 feet long

There remains, for the completion of this bridge across Gaines Creek and five miles of with the relocation and rehabilitation of five : cent to Ophir. Every effort is being made, sin to expedite the completion of this important 1 a producing mining district.

Expenditures: Territory of Alaska, \$3,0 Commission, \$38,222.80; total, \$41,292.42.

ROUTE 38E-LONG-POORMAN.....(29 MIL

This is a very poor summer road, follow ter mail trail, Route 38B. It will require reloc er part of its length. Reconnaissance has been was let for timbers for a bridge across the ; bridge will be erected next fiscal year.

Expenditures \$3,557.27.

ANNUAL REPORT ALASKA ROAD COMMISSION.

ORT ALASKA ROAD COMMISSION.

SUMMARY OF ROADS

Route	Wagon Road	Sled Road	Trail	Total Miles
	=		108	108
;-Dishkaket			90	90
1 - 4	********		130	130
ketacotna			145	145
			87	87
g			٥١.	8
Creek	8		90	90
Creek			62	62
			$\frac{62}{22}$	22
Creek			22	6
owpath	6		40	98
· Creek ·····		30	68	
aket	30			30
- 1-			60	60
cinple City			50	50
	0.41/			241/2
	4472			29
1	29		125	125
1			60	64)
Tanding			90	90
gak			26	26
gar				
		30	1213	134016
4.	97½	. 30		
	**		dono	on these

ring the fiscal year. No work was done on these of of curtailed appropriations resulting from the being investigated.

PASS-TACOTNA.....(130 MILES TRAIL)

aly. Complete rehabilitation to be undertaken

mmer route from the Iditared to Ophir and was made and contract let for shelter cabins

:.50.

crooked creek......(62 MILES TRAIL)

e was made to determine the best summer and ails to connect the Iditarod District with the

30.00.

-LONG CREEK......(30 MILES WAGON ROAD)

ellent road connecting Ruby with the workings extension to Poorman is contemplated.

nance work was performed and damage reging break-up was repaired.

1,659.48.

ROUTE 38B-LONG CREEK-CRIPPLE CITY..... (60 MILES TRAIL)

This is the winter mail trail from Ruby to the South. General repair of bridges; reconnaissance of relocation. Expenditure \$706.94.

ROUTE 38C-OPHIR-CRIPPLE.....(50 MILES TRAIL)

This is the continuation of the winter mail trail up the Innoko River to Ophir.

Winter and summer reconnaissance.

Expenditure \$335.25.

ROUTE 38D-TACOTNA-OPHIR.....(241/2 MILES WAGON ROAD)

Every effort was made for the vigorous prosecution of work upon this road through the last season to respond to the greatly increased dredging operations on the upper Innoko River. Assistant Superintendent Lukens went into the project by way of Bethel and had transported with him a liberal supply of supplies and equipment necessary for the work. Previous to this, a foreman had gone in over the snow from Fairbanks for the purpose of doing preliminary work and arranging for the season. As a result, very excellent progress was made upon the road. The following summarizes the work accomplished:

Road graded 4.75 Right-of-way cleared and grubbed 10.00	
Corduroy placed	
Culverts built	
Bridges, 20-foot span2	
Bridge, 34-foot span 1	
Trestle bridge, 54 feet long 1	

There remains, for the completion of this road, one important bridge across Gaines Creek and five miles of location and grading with the relocation and rehabilitation of five additional miles adjacent to Ophir. Every effort is being made, similarly to last season, to expedite the completion of this important portage road through a producing mining district.

Expenditures: Territory of Alaska, \$3,069.62; Alaska Road Commission, \$38,222.80; total, \$41,292.42.

ROUTE 38E-LONG-POORMAN.....(29 MILES WAGON ROAD)

This is a very poor summer road, following in part the winter mail trail, Route 38B. It will require relocating over the greater part of its length. Reconnaissance has been made and contract was let for timbers for a bridge across the Solatna River. This bridge will be erected next fiscal year.

Expenditures \$3,557.27.

ROUTE 38F-POORMAN-OPHIR.....(125 MILES TRAIL)

A reconnaissance was made of a summer trail from Poorman to Ophir. During the present working season, it is planned to blaze out the route, erect signs at confusing points, build a few bridges, and erect shelter cabins.

No expenditures.

ROUTE 64-CRIPPLE-LEWIS LANDING......(60 MILES TRAIL)

This winter trail was flagged across several open stretches. Expenditures \$100.00.

ROUTE 92A-BETHEL-QUINHAGAK.....(90 MILES TRAIL)

This is a new project. The mail trail was permanently tripoded, beacons were set upon opposite shores of all lakes, and temporary stakes were set on the ice. The work was done by contract and consisted of the erection of 89 beacons, 296 tripods, and 10 stakes, the cutting out of one-fourth mile of brush, and the cutting down of two approaches through high banks. The job has been inspected, and contractor paid, but voucher has not yet reached the account.

Expenditure of \$11.50 was for inspection.

ROUTE 92B-AKIAK-BETHEL.....(26 MILES TRAIL)

This is a new project. The mail trail was permanently marked. The work was done by contract and consisted of the erection of 22 beacons, 18 tripods, the cutting down of 13 approaches to portages across bends in the Kuskokwim River, and the clearing of 6 miles of brush 12 feet wide. The old trail was straightened and shortened. The job has been inspected and paid for.

Expenditures: Territory of Alaska, \$500.00; Alaska Road Commission, \$283.48; total, \$783.48.

SHELTER CABINS.

Contract was let for three shelter cabins and two horse barns on the Tacotna-Flat summer trail. The cabins were erected at Brush Creek, Fourth of July Creek and Lincoln Creek; the barns at Brush Creek and Fourth of July Creek.

The work has been inspected but the contractor has not been paid. Price bid was \$1,500 for the job.

DISTRIBUTION OF EXPENDITURES.

Туре	Miles*	Expenditures	Unit Cost Dollars per Mile
Wagon Road Trail			
Totals* *Includes routes mai		\$51,618.84	\$79.60

EXAMINATIONS AND SUF

The Engineer Officer made a winter team down the Yukon River to Ruby, then Grath, Nixons Forks, and back to the Go Rainy Pass. He made a summer reconnais foot from Lake Minchumina down the Kuskol and then to Ophir, Cripple, Poorman, and Ried down the Yukon River to St. Michael.

The President of the Board made a s by pack train, poling boat, launch and or Ophir, Tacotna, McGrath, down the Kuskokw the Yukon-Kuskokwim Portage to Russian M the Yukon to St. Michael.

A great deal of information has thus cerning this hitherto little-known section of prehensive program of road and trail develop up.

NOME DISTRICT.

Chas. D. Jones, Superintendent.

The peculiarly unfavorable soil conditions prevailing and the absence of timber suitable for corduroy add both to the cost of original construction and to the cost of maintenance of roads and trails in this district.

The first boat from Seattle reaches Nome late in June, and the last boat leaves early in November. All supplies for the entire year must be delivered upon the Seward Peninsula between these dates. During the winter, mail is received by dog team from Dunbar, on the Government Railroad, 659 miles from Nome.

Nome is of especial importance as its location on the exposed shore of Bering Sea makes it the first port of call open to navigation in the spring and the last to close in the fall of all ports on the Seward Peninsula. While the bulk of the freight to Seward Peninsular points is delivered in mid-summer through the nearest port, for the great majority of personnel wintering outside, Nome will always remain the point of debarkation in the spring and embarkation in the fall, at the beginning and close of the season, respectively. From Nome or intermediate points on the through mail trail from Fort Gibbon and Dunbar, mail trails radiate to all inhabited points in Western Alaska, as far north as Point Barrow and south to Cape Newenham.

The creeks in the immediate vicinity of Nome are now well supplied by a system of about 60 miles of wagon and auto-truck roads. There are also local systems in the vicinity of Davidson's Landing, Deering, Candle, Council, and Dime Landing. The principal through summer road extends from Nome to Council, a distance of 82 miles. The Seward Peninsular Railway, which extends from Nome to Shelton, a distance of 87 miles, and which ceased operations as a common carrier some ten years ago, is still maintained as a tram line using dogs as motive power.

Two types of winter mail trails are maintained in this district: first, the permanent trails which follow a definite location and are permanently tripoded or otherwise marked across the open tundra; and, second, the temporary flagged trails, which cut across lakes and arms of the sea, or represent short-cuts and alternative routes dependent upon winter snow drifts, storms, or other seasonal climatic conditions, and which are restaked in whole or in part each winter, after conditions become somewhat stabilized. Upon the open tundra where there are no distinguishing landmarks, and during snow-storms, the traveler is absolutely depend

ent upon working his way from stake to occasionally been found frozen to death ν shelter.

There are 61 sub-projects in this distr. no expenditures were made during the year. was done but the vouchers have not yet been was handled upon a cooperative basis, all funds being added to funds of the Board to the entire system of roads and trails. No heretofore been made of the distribution of district nor have definite sub-projects bee tained. The small available funds, year by y to meet emergencies. Much work is in isolate bills have been as much as two years in show determination in advance of the work to be inspection after completion have been entire reasonable cost. The superintendent of the I therefore, in many cases to depend upon ma eral or Territorial officials, and local merchan contracts and the supervision of the work. vestigations, the Board has picked up some ad which some expenditures have been made in the Territory or itself, and has definitely adoj projects.

SUMMARY OF ROADS.

Project No.	Name of Route	Wagon Road
8 8 <u>A</u>	Nome-Council Bonanza Ferry	57
8B	Safety Ferry	
8D 8E*	Council Ferry Council-Ophir Creek Road	1
E	melsing Creek Bood	$\frac{12}{4}$
8G*	Creek-Eikhorn Trail	7
%18 H3	Bear Creek Trolley Casa De Paga Road	20
8Ĵ*	Turran Creek	-5
13A 13B	Shovel Creek Nome-Bessie	5
13C	Bessie-Ranner	$\frac{3\frac{1}{2}}{3\frac{1}{2}}$
13D* 13E*	Dessie-Little Crook	$1\frac{1}{4}$
13E	Bessie-Dry Creek Dry Creek-Newton	11/4
13H*	Green Osborne	8 2
131	Center Creek	2
13J*	Nome River Extension	8 2 1½ 5
18 -	Bessie-Rusten	2
184	Allag-Solomon	$7\frac{1}{2}$
18B 21	Golovin-Council	
25.A	Unalakleet-St Michael	
25B 25C*	Penns River	12
251	Neme Wireless	1 1/2
25E	Mouth of Center Submarine Porestrock	2 72
	Submarine Paystreak	3

OME DISTRICT.

D. Jones, Superintendent.

avorable soil conditions prevailing and the tble for corduroy add both to the cost of d to the cost of maintenance of roads and

m Seattle reaches Nome late in June, and ly in November. All supplies for the entire upon the Seward Peninsula between these er, mail is received by dog team from Dun-Railroad, 659 miles from Nome.

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 $_{\hbox{\scriptsize ent}}$ upon working his way from stake to stake. Travelers have $_{\hbox{\scriptsize occasionally}}$ been found frozen to death within a few yards of shelter.

There are 61 sub-projects in this district, upon 20 of which no expenditures were made during the year. In several cases work was done but the vouchers have not yet been received. All work was handled upon a cooperative basis, all available Territorial funds being added to funds of the Board to maintain and improve the entire system of roads and trails. No accurate reports have heretofore been made of the distribution of expenditures in this district nor have definite sub-projects been consistently maintained. The small available funds, year by year, have been used to meet emergencies. Much work is in isolated sections from which bills have been as much as two years in showing up. The definite determination in advance of the work to be done and a prompt inspection after completion have been entirely impossible at any reasonable cost. The superintendent of the Board has been forced therefore, in many cases to depend upon mail carriers, other Federal or Territorial officials, and local merchants, for the letting of contracts and the supervision of the work. As a result of its investigations, the Board has picked up some additional mileage upon which some expenditures have been made in the past, either by the Territory or itself, and has definitely adopted several new subprojects.

SUMMARY OF ROADS.

Sub Project No.	Name of Route	Wagon Road	Sleđ Road	Trail	Total Miles
8	Nome-Council	. 57		25	82
8A	Bonanza Ferry				
8B	Safety Ferry				
8 <u>C</u>	Council Ferry	. 10			40
8D	Council-Ophir Creek Road				12
8E* 8F*	Melsing Creek Road Warm Creek-Elkhorn Trail	. 4		11	11
8F** 8G*	Bear Creek Trolley			11	11
8H	Casa De Paga Road	20			20
8I*	Hurrah Creek				- 5
8 J °	Shovel Creek	. 5			. 5
13A	Nome-Bessie				31/2
13B	Bessie-Banner	. 3½			31/2
13C	Bessie-Little Creek	. 11/4			114
13D*	Bessie-Dry Creek	. 11/4			114
13E*	Dry Creek-Newton				3/2
13 F 13G*	Nome-OsborneGrass Gulch				8 2
13H*	Grass Gulch Center Creek	114			114
13T	Nome River Extension	5 2			5 72
13J*	Wonder-Flat Creek	$ \begin{array}{ccc} 1\frac{1}{2} \\ 5 \\ 2 \end{array} $			1½ 5 2
13K	Bessie-Buster				714
18	Kaltag-Solomon			$248\frac{1}{2}$	$\frac{712}{248\frac{1}{2}}$
18A	Bonanza-Kotzebue			240	240
18B	Golovin-Council			35	35
21	Unalakleet-St. Michael			60	60
25A	Cripple River				12
25B 25C*	Penny River	11/2			11/2
25D	Nome Wireless	2 2			n 1/2
25 E	Mouth of CenterSubmarine Paystreak				2 3
/-	Edougine rabellegy				•

ANNUAL REPORT ALASKA ROA

At Miles 12½-14, around Camp Nom cleaned off and two overhanging pieces scleaned. The ditch was cleaned for the thousand feet of road between Miles 131 broken rock and material from alongside 14 to Bonanza the road is over a sandsingrass and heavy sod. In other spots a high thrown up in the storm of 1913 made trave this section the caterpillar and a crew ployed. Two miles of grading, one-half miles of corduroying constructed and general repair work do were graded and rolled.

From Solomon to East Fork one mare pairing for twelve days. Two bridges number of bad holes patched and filled a ditch cleaned.

No work was done between East Fork Expenditures: Territory of Alaska, Commission, \$7,230.92; total, \$22,556.79.

ROUTE 8A—BONANZA FERRY:

This is a ferry across the mouth of 32, a distance of about one hundred and i Total expenditure of \$136.00 was for material for repairs and upkeep. Territor aska Road Commission, \$76.00.

ROUTE 8B-SAFETY FERRY:

This ferry crosses the opening of the Mile 22, a distance of twelve hundred fermions $\frac{1}{2}$

Suk Proje No.	ct Name of Route	Wagon Road	Sled Road	Trail	Total Miles
25F 25G 25H* 25I	Anvil Glacier Snake River Extension Otter Creek Sinrock Ferry	3 1½			3 3 11⁄4
26A 26A 27 28*	Candle-Candlé Creek Kugruk River Approach Deering-Inmachuk Dahl Creek-Candle Trail	6 1/4 25		140	25 140
28A 37 41	Nome-Taylor Topkok-Candle Winter Trail Kiana-Klery Creek	1		135 154 11 200	135 154 12 200
41A* 41B* 42 49	Kotzebue-Shungnak Kotzebue-Point Barrow St. Michaels-Kotlik Trail Davidson's Landing-Taylor	24	16	500 70	500 70 40
62 67* 67A 67B*	Dime Creek Corduroy			80 21 18	80 21 18
67C* 68 73 73A	Teller-Mary's Igloo Flagging Trails Marshall Road Kotlik-Marshall	41/4		40 536 190	$\begin{array}{r} 40 \\ 536 \\ 4\frac{1}{4} \\ 190 \end{array}$
73B 77 77C* 77B	Kotlik-Marshall Stuyahok Shelton Ferries Trolleys Bridges		11		11
77A 89	Ferries Nome - Shelton-Keewalik (recon naissance)				
89A*	Seward Peninsular Railway	87			87
*	Totals No expenditure during the fiscal year	322 ar.	27	$2714\frac{1}{2}$	3063½

ROUTE 8-NOME-COUNCIL....(57 MILES ROAD, 25 MILES TRAIL)

From Nome this road follows the coast to Bonanza, Mile 32, then along the Solomon River to East Fork, Mile 49. It then follows the bed of the East Fork for a distance of about ten miles to the divide and crosses over the Skookum Divide, passing the head of Skookum Creek into the head waters of Fox River, a distance of six miles. Thence down Fox River a distance of twelve miles, following the creek bed, to the end of the Council corduroy which it follows to Council, a distance of five miles.

There are three ferries crossed en route and one trolley, all maintained by the Alaska Road Commission.

Total expenditures, prior to June 30, 1921, was for snow shoveling at bridges, clearing culverts, repairs due to break-up; also overhead expense for the purchase of supplies and equipment for season's work. The work after July 1, 1921, on this route was confined mostly between Nome and Bonanza. Between Nome and Fort Davis, Mile 3, one culvert was replaced and two small bridges repaired. Between Fort Davis and Hastings Creek, Mile 6%, three road tenders were employed at different times during the season. All the culverts were cleaned, ruts in the road leveled and filled and holes in the road patched and all seasonal damage, including a large washout at Cunningham Creek, repaired. From Hastings to Cape Nome, Mile

ALASKA ROAD COMMISSION.

	agon toad	Sled Road	Trail	Total Miles
sion	$\frac{3}{3}$ $1\frac{1}{2}$			3 11 ₁
roach Trail	6 1/4 25		140 135 154	6 25 140 135 154 12
rrow	1		$\begin{array}{c} 11 \\ 200 \\ 500 \\ 70 \end{array}$	200 500 70 40
g-Taylor	24 9	16	80 21 18	9 80 21 18
10	41/4		40 536 190	40 536 41/4 190
		11		11
eewalik (recon				87
ır Railway	$\frac{87}{322}$	27	27141/2	3063 1/2
ig the fiscal ye	ar.	05	MII E 6	TRAIL

ICIL (57 MILES ROAD, 25 MILES TRAIL)

oad follows the coast to Bonanza, Mile 32, River to East Fork, Mile 49. It then folast Fork for a distance of about ten miles ses over the Skookum Divide, passing the k into the head waters of Fox River, a disaence down Fox River a distance of twelve eek bed, to the end of the Council corduroy incil, a distance of five miles.

ferries crossed en route and one trolley, all

ska Road Commission.

es, prior to June 30, 1921, was for oridges, clearing culverts, repairs due to lead expense for the purchase of sup-The work after for season's work. his route was confined mostly between Between Nome and Fort Davis, Mile 3, one and two small bridges repaired. Between igs Creek, Mile 6%, three road tenders were times during the season. All the culverts the road leveled and filled and holes in the seasonal damage, including a large washout at epaired. From Hastings to Cape Nome, Mile

14, the heaviest work was done. For a mile and three-quarters of this section there is a bad piece of tundra through which the gravel surfacing keeps settling. About one-half mile, Miles 10-101/2, of willow brush was laid, covered with gravel and the next quarter mile was surfaced heavily with gravel. About one-half mile was heavily graveled at the twelve mile post, being about equally divided on each side of it. At Hastings Creek a fill about nine hundred feet long was made, six hundred and twelve yards of gravel being hauled at a cost of one dollar and fifty cents per yard. The average haul was about one thousand feet. Two bridges twenty-two by sixteen were constructed and one culvert four by four by sixteen, the labor cost for the bridges being \$240.00. This grading and bridge work was done to make it possible to cross Hastings at all times as during any southerly storms the sea backs it up so that it is impossible to cross.

At Miles 121/2-14, around Camp Nome, three bad slides were cleaned off and two overhanging pieces shot down and the slope cleaned. The ditch was cleaned for the entire distance and one thousand feet of road between Miles 131/2-14 were surfaced with broken rock and material from alongside the road. From Mile 14 to Bonanza the road is over a sandspit covered in spots with grass and heavy sod. In other spots a heavy sandbar which was thrown up in the storm of 1913 made travel almost impossible. On this section the caterpillar and a crew of seven men were employed. Two miles of grading, one-half mile of willow corduroying and one and one-half miles of corduroying was done; one bridge constructed and general repair work done. Two miles of road were graded and rolled.

From Solomon to East Fork one man worked patching and repairing for twelve days. Two bridges were repaired and a number of bad holes patched and filled and one thousand feet of ditch cleaned.

No work was done between East Fork and Council.

Expenditures: Territory of Alaska, \$15,325.87; Alaska Road Commission, \$7,230.92; total, \$22,556.79.

ROUTE 8A-BONANZA FERRY:

This is a ferry across the mouth of the Bonanza River, Mile 32, a distance of about one hundred and fifty feet.

Total expenditure of \$136.00 was for salary of ferryman and material for repairs and upkeep. Territory of Alaska, \$60.00; Alaska Road Commission, \$76.00.

ROUTE 8B-SAFETY FERRY:

This ferry crosses the opening of the Bering Sea at Safety, Mile 22, a distance of twelve hundred feet.

Total expenditure of \$386.00 was for salary of ferryman, a new cable, and material for upkeep and repairs. Territory of Alaska, \$211.00; Alaska Road Commission, \$175.00.

ROUTE 8C-COUNCIL FERRY:

This is a ferry across the Niukluk River at Council and connects Council with Route 8.

Expenditure of \$150.00 was for salary of ferryman. No repairs were made this year.

ROUTE 8D-COUNCIL-OPHIR CREEK ROAD (12 MILES WAGON ROAD)

This road follows up Ophir Creek to Crooked Creek, Mile 12, and then to the workings on Crooked Creek, Mile 14. The heaviest travel from Council is over this road, which is in very good condition. This road was originally maintained by the poll tax monies but has since been maintained by small appropriations from the Alaska Road Commission.

The work consisted of surfacing three thousand feet of road between Council and Ophir Creek, repairing six culverts, putting in two new ones and cleaning fifteen hundred feet of ditch.

Expenditure \$1,002.50

ROUTE 8E-MELSING CREEK ROAD (4 MILES WAGON ROAD)

This road follows up Melsing Creek to the end of the workings, four miles from Council. This road has been maintained by poll tax monies with some slight expenditures by the Alaska Road Commission.

No expenditures.

ROUTE 8F-WARM CREEK-ELKHORN TRAIL..(11 MILES TRAIL)

This is a trail leading to Warm and Elkhorn Creeks. It leaves the Ophir Road at a point about two miles from Council and crosses the Ophir Divide to Warm Creek, a distance of six miles, and from Warm Creek it crosses a low divide to Elkhorn, a distance of five miles. The only monies expended on this road were from the poll tax collections.

No expenditures.

ROUTE 8G-BEAR CREEK TROLLEY:

This trolley, on a cable suspended over Bear Creek for the benefit of foot travelers, is about two miles south of Council, near the Council corduroy crossing Bear Creek.

No expenditures.

ROUTE 8H-CASA DE PAGA ROAD.....

From East Fork this road follows about one mile to the mouth of Monta Ruby Divide into Ruby Creek, a distant miles. From Ruby the road follows dow work on the Casa. Some poll tax mon road in addition to the work done by a total of about twenty miles of wagon served in the Casa De Paga.

One thousand feet of corduroy were The railroad ties used for this purpose before by the Territory. Expenditure w and hire of one horse for the work.

Expenditures \$758.00.

ROUTE 8I-HURRAH CREEK.....

Commencing at the forty-four mil Hurrah Creek, a road crosses the Solor the bed of the creek about five miles and supplies the workings along Hurrah

No expenditures.

ROUTE 8J-SHOVEL CREEK.....

Commencing at the thirty-eight n Shovel Creek, a road follows up Shove Kasson and supplies the works along Sho No expenditure.

ROUTE 13A-NOME-BESSIE.....(3)

This is the main road leading from rection to the Bessie Claim on the Third Expenditure prior to July 1st was feet of ditch, filling ruts and some hole

feet of ditch, filling ruts and some hole tection during break-up, shoveling snow i rebuilding the bridge over Bourbon Creek Bridge.

This road is in good condition by repair and maintenance work.

Expenditures: Territory of Alaska Commission, \$981.94; total, \$2,407.74.

ROUTE 13B-BESSIE-BANNER.....(31/2

This road commences at the Bessie soes to Anvil Creek at the mouth of Spe Expenditure prior to July 1st was fo and repair of seasonal damage; after

ASKA ROAD COMMISSION.

6.00 was for salary of ferryman, a pkeep and repairs. Territory of Alumission, \$175.00.

1:

e Niukluk River at Council and con-

as for salary of ferryman. No re-

CREEK ROAD (12 MILES WAGON

ophir Creek to Crooked Creek, Mile s on Crooked Creek, Mile 14. The is over this road, which is in very as originally maintained by the poll n maintained by small appropriations ission.

surfacing three thousand feet of road Creek, repairing six culverts, putting fifteen hundred feet of ditch.

IK ROAD (4 MILES WAGON ROAD)

elsing Creek to the end of the workl. This road has been maintained by ight expenditures by the Alaska Road

ELKHORN TRAIL..(11 MILES TRAIL)

D Warm and Elkhorn Creeks. It leaves t about two miles from Council and Warm Creek, a distance of six miles, cosses a low divide to Elkhorn, a disly monies expended on this road were

TROLLEY:

e suspended over Bear Creek for the about two miles south of Council, near ng Bear Creek.

ROUTE 8H-CASA DE PAGA ROAD..... (20 MILES WAGON ROAD)

From East Fork this road follows the Solomon River bed for about one mile to the mouth of Montana Creek, then crosses the Ruby Divide into Ruby Creek, a distance of three and four-tenths miles. From Ruby the road follows down to the various camps at work on the Casa. Some poll tax money has been spent on this road in addition to the work done by the Territory. There is a total of about twenty miles of wagon trail to the various creeks served in the Casa De Paga.

One thousand feet of corduroy were laid on the Ruby Divide. The railroad ties used for this purpose were purchased the year before by the Territory. Expenditure was for labor of three men and hire of one horse for the work.

Expenditures \$758.00.

ROUTE 81-HURRAH CREEK......(5 MILES WAGON ROAD)

Commencing at the forty-four mile post at the mouth of Hurrah Creek, a road crosses the Solomon River and follows up the bed of the creek about five miles to the Lane Quartz Mine and supplies the workings along Hurrah Creek.

No expenditures.

ROUTE 8J-SHOVEL CREEK.....(5 MILES WAGON ROAD)

Commencing at the thirty-eight mile post on Route 8 at Shovel Creek, a road follows up Shovel Creek to the works on Kasson and supplies the works along Shovel and its tributaries.

No expenditure.

ROUTE 13A-NOME-BESSIE.....(31/2 MILES WAGON ROAD)

This is the main road leading from Nome in a northerly direction to the Bessie Claim on the Third Beach line.

Expenditure prior to July 1st was for cleaning a thousand feet of ditch, filling ruts and some holes; after July 1st for protection during break-up, shoveling snow from culverts and bridges, rebuilding the bridge over Bourbon Creek and repairs to Dry Creek Bridge.

This road is in good condition but will need some slight repair and maintenance work.

Expenditures: Territory of Alaska, \$1.425.80; Alaska Road Commission, \$981.94; total, \$2,407.74.

ROUTE 13B-BESSIE-BANNER.....(31/2 MILES WAGON ROAD)

This road commences at the Bessie at the end of 13A and goes to Anvil Creek at the mouth of Specimen Gulch.

Expenditure prior to July 1st was for protection during breakup and repair of seasonal damage; after July 1st for general repair and patching of a bad washout near the four and one-half mile post.

This road is in good condition but needs some surfacing between the four and five and one-half mile posts.

Expenditures: Territory of Alaska, \$414.80; Alaska Road Commission, \$820.22; total, \$1,235.02.

ROUTE 13C-BESSIE-LITTLE.....(11/4 MILES WAGON ROAD)

Commencing at the end of 13A this road runs west to Little Creek and supplies the workings of the Pioneer Mining Company on Little Creek.

Expenditure prior to July 1st was for protection during breakup and repair of seasonal damage; after July 1st was for three days work with tractor and grader leveling the road and bridging same to passable shape, repairs to culverts and cleaning of three hundred feet of ditch.

This road is in fair shape but needs constant attention as all the hauling to the Pioneer Mining Company goes over it.

Expenditures: Territory of Alaska, \$265.10; Alaska Road Commission, \$701.84; total, \$966.94.

ROUTE 13D-BESSIE-DRY CREEK......(1/2 MILES WAGON ROAD)

Commencing at Bessie, at the end of 13A, this road runs east along the Third Beach to Dry Creek.

Fair condition; very little traffic over this road and no work required.

No expenditures.

ROUTE 13E-DRY CREEK-NEWTON......(1/2 MILE WAGON ROAD)

This road is an extension of 13D east to Newton Gulch, where it connects with 13F at the four mile post.

There is very little traffic over this road and no work is required.

No expenditures.

ROUTE 13F-NOME-OSBORNE.....(8 MILES WAGON ROAD)

This road starts from 13A at about the mile and threequarter post and goes in an easterly direction to Osborne Creek.

Expenditure prior to July 1st was for seasonal damage and protection during break-up. One thousand feet of road was surfaced with tailings from Bourbon Creek near the two mile post at an average yardage cost of \$2.50. The average haul was one and one-half miles. Two Pierce-Arrow trucks were used.

The work on this route after July 1st, between the two and three mile posts, consisted of surfacing one-half mile for a depth of ten inches with tailings from Dry Creek. Between the four

and five mile posts two thousand feet of duroy was done. There are three bad sp this section. From the five to six mile po and one or two bad spots filled. From thalf mile posts the entire road was dressive hundred feet of rip-rap was built to washing. Total length of ditch cleaned, r teen hundred feet. Three new culverts six old ones repaired. Two thousand yowere hauled. From the seven and one-hat the ruts were filled and road made passal feet will need to be surfaced here next se

This road was placed in excellent far as the work was carried on. Of the is no really bad road. With the completion these three sections, totaling about one n excellent condition.

Expenditures: Territory of Alaska, Commission \$6,509.82; total, \$11,376.31.

ROUTE 13G-GRASS GULCH.....(2

This road leaves 13K at about the fiv post and follows a northerly course to Gra Little traffic and no work required.

ROUTE 13H-CENTER CREEK...... (11/2

This road commences at about the o post on 13A and goes in a westerly direcupper Center Creek.

Very little traffic and no work requi-

ROUTE 131-NOME RIVER EXTENSION (5

This road commences at the eight at 13K and follows the west bank of Nome five miles. Expenditure prior to July 1st sonal damage and resistance to the eight at 13K.

sonal damage and maintenance during brea This road is not in very good shape b over it does not justify any expenditure exc

Expenditures: Territory of Alaska. Commission, \$363.97; total, \$925.72.

ROUTE 13J-WONDER-FLAT.....(2

This road commences at about the mile post on 13C, following in a southwes tailing piles on Wonder Creek to Flat Craska mines for their mining on these creek

ORT ALASKA ROAD COMMISSION.

a bad washout near the four and one-half

ood condition but needs some surfacing been and one-half mile posts.

erritory of Alaska, \$414.80; Alaska Road Ital, \$1,235.02.

_ITTLE.....(11/4 MILES WAGON ROAD)

the end of 13A this road runs west to Little e workings of the Pioneer Mining Company

to July 1st was for protection during breaksonal damage; after July 1st was for three or and grader leveling the road and bridging be, repairs to culverts and cleaning of three

fair shape but needs constant attention as Pioneer Mining Company goes over it.

Territory of Alaska, \$265.10; Alaska Road total, \$966.94.

-DRY CREEK (11/2 MILES WAGON ROAD)

Bessie, at the end of 13A, this road runs east to Dry Creek.

very little traffic over this road and no work

REEK-NEWTON......(1/2 MILE WAGON ROAD)

extension of 13D east to Newton Gulch, where at the four mile post.

little traffic over this road and no work is

-OSBORNE..... (8 MILES WAGON ROAD)

ts from 13A at about the mile and threes in an easterly direction to Osborne Creek. for to July 1st was for seasonal damage and eak-up. One thousand feet of road was surrom Bourbon Creek near the two mile post at cost of \$2.50. The average haul was one and Pierce-Arrow trucks were used.

this route after July 1st, between the two and possisted of surfacing one-half mile for a depth tailings from Dry Creek. Between the four

ANNUAL REPORT ALASKA ROAD COMMISSION.

and five mile posts two thousand feet of patching with willow corduroy was done. There are three bad spots yet to be finished on this section. From the five to six mile posts the ditch was cleaned and one or two bad spots filled. From the six to seven and one-half mile posts the entire road was dressed, ditches cleaned, and five hundred feet of rip-rap was built to protect the road from washing. Total length of ditch cleaned, rocked and sodded, seventeen hundred feet. Three new culverts were put in place and six old ones repaired. Two thousand yards of rock and gravel were hauled. From the seven and one-half to the eight mile post the ruts were filled and road made passable. About one thousand feet will need to be surfaced here next season.

This road was placed in excellent condition this season as far as the work was carried on. Of the sections remaining there is no really bad road. With the completion of the re-surfacing over these three sections, totaling about one mile, this road will be in excellent condition.

Expenditures: Territory of Alaska, \$4,866.40; Alaska Road Commission \$6,509.82; total, \$11,376.31.

ROUTE 13G—GRASS GULCH.....(2 MILES WAGON ROAD)

This road leaves 13K at about the five and three-quarter mile post and follows a northerly course to Grass and Nickola Gulches. Little traffic and no work required.

ROUTE 13H—CENTER CREEK...... (11/2 MILES WAGON ROAD)

This road commences at about the one and one-quarter mile post on 13A and goes in a westerly direction to the workings on upper Center Creek.

Very little traffic and no work required.

ROUTE 131-NOME RIVER EXTENSION (5 MILES WAGON ROAD)

This road commences at the eight and one-half mile post on 13K and follows the west bank of Nome River for a distance of five miles. Expenditure prior to July 1st was for repair of seasonal damage and maintenance during break-up.

This road is not in very good shape but the amount of traffic over it does not justify any expenditure except for seasonal damage.

Expenditures: Territory of Alaska, \$561.75; Alaska Road Commission, \$363.97; total, \$925.72.

ROUTE 13J-WONDER-FLAT.....(2 MILES WAGON ROAD)

This road commences at about the three and three-quarter mile post on 13C, following in a southwesterly direction over the tailing piles on Wonder Creek to Flat Creek and serves the Alaska mines for their mining on these creeks.

There is practically no traffic beyond the Flat Creek Bridge and but slight expenditure will be required.

ROUTE 13K-BESSIE-BUSTER.....(71/2 MILES WAGON ROAD)

This road commences at the end of 13A and follows over the divide at the head of Dry Creek down the right limit of Dexter Creek to Nome River, where it crosses the mouth of Buster Creek and follows up Buster Creek on the left limit to the eleven mile post near Union Gulch.

Expenditure prior to July 1st was for maintenance during break-up and repair of seasonal damage. A road tender was kept on this road through the season, filling ruts, cleaning ditches, repairing culverts, and patching bad spots in the road. The work was done between the four and the seven and one-half mile posts. Road is now in good shape.

Expenditures: Territory of Alaska, \$7.00; Alaska Road Commission, \$989.99; total, \$996.99.

ROUTE 18-KALTAG-SOLOMON.....(2481/2 MILES TRAIL)

Commencing at Kaltag, this overland mail trail crosses the divide or portage to the Unalakleet River, which it follows to Unalakleet. From Unalakleet it follows the coast to Bonanza on the east shore of Norton Bay, crossing to Isaacs Point on the west shore it follows the coast to Walla Walla, where it crosses the divide into the Quinahock. It then follows the Quinahock to its head, crossing the divide into McKinley Creek, which it follows to Golovin Bay and thence to Golovin. From Golovin it crosses to Portage Creek, which it follows to its head, crossing the divide into Cheruk Creek, which it follows to the coast. It follows the coast to Solomon and thence over Route 8 to Nome.

Work was done between Kaltag and Unalakleet and consisted of building three bridges over streams near the Twenty-two Mile Cabin, Old Woman, and Ten Mile Creek, the resetting of some of the trail stakes and the grading of two approaches out of the Unalakleet River.

The trail is in good condition but needs constant attention. Between Solomon and Spruce Creek the location of this trail should be removed from the lagoon as the overflows are continually interrupting travel.

Expenditures: Alaska Road Commission \$860.99.

ROUTE 18A-BONANZA-KOTZEBUE (240 MILES TRAIL)

This winter mail trail leaves the Kaltag-Solomon mail trail. Route 18, at Bonanza, Mile 93½, or 155 miles east of Nome on the east shore of Norton Bay and follows up Norton Bay to the mouth of the Koyuk River. Crossing over Star Mountain, it reaches

the Koyuk River again at Dime Landing Haycock. Crossing successively the Pea-River Valley and the Sweepstakes Div stakes Creek to its head. Crossing interfollows the right limit to Snyder's Rothe left limit as far as the mouth of Lathe river to Candle. From Candle, it for two miles, then cuts across the tul Willow Bay, and then follows the coast to it crosses Kotzebue Sound on the ice follows the coast to Cape Blossom. After behind Cape Blossom, the coast is followed.

Expenditure included in Route 68, St

ROUTE 18B-GOLOVIN-COUNCIL

This winter mail trail leaves the Ka 18, at Golovin, Mile 170½, or 78 miles eashore of Golovin Bay. It follows up Mountain, and thence up the Fish and Na Several portages need to be brushed at Expenditures included in Route 68.

ROUTE 21-UNALAKLEET-ST. MICHAEL

This is the mail trail following the a St. Michaels Bay, where it crosses to St. . Expenditure \$50.00.

ROUTE 25A-CRIPPLE RIVER.....(12

This road commences at the beach : River and follows the river for twelve mil Willow Creek and on to Arctic and Sidne on the left bank of the river.

Total expenditure of \$64.95 was for washout near the four mile post.

ROUTE 25B-PENNY RIVER.....(11/2

This road commences at the beach : River and extends one and one-half miles travel to get around some deep sloughs.

Total expenditure of \$88.00 covered g into Penny River and filling some holes no All the freight into Hungry, Oregon,

hauled over this route. From the end of the of work it follows the creek onto the Divithese creeks.

[ALASKA ROAD COMMISSION.

no traffic beyond the Flat Creek Bridge will be required.

STER (71/2 MILES WAGON ROAD)

s at the end of 13A and follows over of Dry Creek down the right limit of er, where it crosses the mouth of Buster er Creek on the left limit to the eleven

July 1st was for maintenance during usonal damage. A road tender was kept season, filling ruts, cleaning ditches, tching bad spots in the road. The work r and the seven and one-half mile posts.

ory of Alaska, \$7.00; Alaska Road Com-

OMON.....(2481/2 MILES TRAIL)

ag, this overland mail trail crosses the Inalakleet River, which it follows to Unst it follows the coast to Bonanza on Bay, crossing to Isaacs Point on the west to Walla Walla, where it crosses the It then follows the Quinahock to its into McKinley Creek, which it follows to Golovin. From Golovin it crosses t follows to its head, crossing the divide it follows to the coast. It follows the ce over Route 8 to Nome.

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condition but needs constant attention. pruce Creek the location of this trail the lagoon as the overflows are contin-

a Road Commission \$860.99.

OTZEBUE......(240 MILES TRAIL)

il leaves the Kaltag-Solomon mail trail, le 93½, or 155 miles east of Nome on Bay and follows up Norton Bay to the Crossing over Star Mountain, it reaches the Koyuk River again at Dime Landing and follows Route 62 to Haycock. Crossing successively the Peace River divide, the Peace River Valley and the Sweepstakes Divide, it follows up Sweepstakes Creek to its head. Crossing into the Keewalik Valley, it follows the right limit to Snyder's Roadhouse, then crosses to the left limit as far as the mouth of Lava Creek. It then follows the river to Candle. From Candle, it follows the Keewalik River for two miles, then cuts across the tundra for sixteen miles to Willow Bay, and then follows the coast to Deering. From Deering it crosses Kotzebue Sound on the ice to Choris Peninsula, and follows the coast to Cape Blossom. After a portage of five miles behind Cape Blossom, the coast is followed to Kotzebue.

Expenditure included in Route 68, Staking Winter Trails.

ROUTE 18B-GOLOVIN-COUNCIL.....(35 MILES TRAIL)

This winter mail trail leaves the Kaltag-Solomon Trail, Route 18, at Golovin, Mile 170½, or 78 miles east of Nome on the east shore of Golovin Bay. It follows up Golovin Bay to White Mountain, and thence up the Fish and Niukluk Rivers to Council.

Several portages need to be brushed out and marked.

Expenditures included in Route 68.

ROUTE 21-UNALAKLEET-ST. MICHAEL (60 MILES TRAIL)

This is the mail trail following the coast from Unalakieet to St. Michaels Bay, where it crosses to St. Michaels.

Expenditure \$50.00.

ROUTE 25A-CRIPPLE RIVER.....(12 MILES WAGON ROAD)

This road commences at the beach at the mouth of Cripple River and follows the river for twelve miles to the workings near Willow Creek and on to Arctic and Sidney Creeks. It is mainly on the left bank of the river.

Total expenditure of \$64.95 was for temporary repairs to washout near the four mile post.

ROUTE 25B—PENNY RIVER.....(11/2 MILES WAGON ROAD)

This road commences at the beach at the mouth of Penny River and extends one and one-half miles up the river to allow travel to get around some deep sloughs.

Total expenditure of \$88.00 covered grading a new approach into Penny River and filling some holes near the one mile post.

All the freight into Hungry, Oregon, and Nugget Creeks is hauled over this route. From the end of the one and one-half miles of work it follows the creek onto the Divide and then around to these creeks.

This road serves the wireless plant in Nome. It commences at Steadman Avenue near the beginning of Route 13A and extends east to the wireless station.

ROUTE 25D-MOUTH OF CENTER......(2 MILES WAGON ROAD)

This road commences at the west city limits and follows the left bank of the Snake River to a short distance beyond the mouth of Center Creek.

Total expenditure was for maintenance and repair during break-up.

Expenditures: Territory of Alaska, \$231.00; Alaska Road Commission, \$154; total, \$385.00.

ROUTE 25E—SUBMARINE PAYSTREAK (3 MILES WAGON ROAD)

This road commences near the one-half mile post on Route 25D, crosses the Snake River Bridge and follows the right bank of Snake River to the workings on the Submarine.

Expenditure was for general repair over the entire length of the road, filling holes from adjacent tailing piles, leveling all the ruts and cleaning the ditches for the entire length.

Expenditures \$550.75.

ROUTE 25F-ANVIL GLACIER.....(3 MILES WAGON ROAD)

This road commences at Anvil Creek at the end of Route 13B and crosses the Divide to Glacier Creek.

Expenditures: Territory of Alaska, \$14.30; Alaska Road Commission, \$50.50; total, \$64.80.

ROUTE 25G—SNAKE RIVER EXTENSION (3 MILES WAGON ROAD)

This road commences at Glacier Creek at the end of Route 25F, extends to and across Snake River and thence across the flat to Boulder Creek.

Total expenditure was for general repair and upkeep. A crew of men was sent out for six days to repair two bridges over Sledge Creek and to place willow corduroy.

Expenditure \$682.78.

ROUTE 25H-OTTER CREEK.....(11/2 MILES WAGON ROAD)

This road extends from Mile 2%, Route 8, in a northerly direction to and across Otter Creek.

No expenditures during the fiscal year.

ANNUAL REPORT ALASKA R

ROUTE 251-SINROCK FERRY:

A ferry across the Sinrock River, and fifty feet, on the Nome-Teller Trail, Total expenditure was for the sale

Expenditures: Territory of Alas Commission, \$279.00; total, \$382.50.

ROUTE 26-CANDLE-CANDLE CREEK...

This road commences in Candle at to Paterson Creek and serves all of the Total expenditure was for genera.

road. Sixty-nine hundred and twenty surfaced to a depth of ten inches wi piles. The average haul was one mile dollars per yard. The ditches were paired, and road left in excellent conditi

Expenditures: Territory of Alas Commission, \$4,453.49; total, \$4,982.61.

ROUTE 26A-KUGRUK RIVER APPROA

At the coal mine on the Kugruk river was made. It is twelve hundred ten feet wide, with an average cut of t Expenditures \$488.00.

ROUTE 27-DEERING-INMACHUK......(2

This road commences at Deering ings on the Inmachuk. It is improved miles on the left bank. From the latter bed.

Total expenditure was for extending chuk River to the twelve mile post. fifty feet of road were built of willow c gravel, ditched for the entire length and road. The road is ten feet wide and was a depth of ten inches.

Expenditures: Territory of Alaska Commission, \$371.04; total, \$6,371.04.

ROUTE 28-DAHL CREEK-CANDLE TRA

This is an overland trail between going in a northeasterly direction from D River, then following the east slope of Boulder, where it crosses into Aurora mouth of Aurora Creek, crosses the Nox

ALASKA ROAD COMMISSION.

ESS.....(1/2 MILE WAGON ROAD)

rireless plant in Nome. It commences the beginning of Route 13A and extation.

ENTER.....(2 MILES WAGON ROAD)

at the west city limits and follows the r to a short distance beyond the mouth

 $_{\mathrm{S}}$ for maintenance and repair during

ory of Alaska, \$231.00; Alaska Road 385.00.

E PAYSTREAK (3 MILES WAGON

near the one-half mile post on Route iver Bridge and follows the right bank kings on the Submarine.

general repair over the entire length from adjacent tailing piles, leveling all ditches for the entire length.

CIER.....(3 MILES WAGON ROAD)

s at Anvil Creek at the end of Route 13B to Glacier Creek. ritory of Alaska, \$14.30; Alaska Road l, \$64.80.

RIVER EXTENSION (3 MILES WAGON

es at Glacier Creek at the end of Route ross Snake River and thence across the

as for general repair and upkeep. A crew six days to repair two bridges over Sledge w corduroy.

REEK.....(11/2 MILES WAGON ROAD)

from Mile 234, Route 8, in a northerly ditter Creek.

uring the fiscal year.

ROUTE 251-SINROCK FERRY:

A ferry across the Sinrock River, distance about one hundred and fifty feet, on the Nome-Teller Trail, Route 67.

Total expenditure was for the salary of the ferryman.

Expenditures: Territory of Alaska, \$103.50; Alaska Road Commission, \$279.00; total, \$382.50.

ROUTE 26-CANDLE-CANDLE CREEK....(6 MILES WAGON ROAD)

This road commences in Candle and follows up Candle Creek to Paterson Creek and serves all of the mining on Candle Creek.

Total expenditure was for general repair and surfacing the road. Sixty-nine hundred and twenty-three feet of road were surfaced to a depth of ten inches with gravel from old tailing piles. The average haul was one mile and the yardage cost four dollars per yard. The ditches were cleaned, three culverts repaired, and road left in excellent condition.

Expenditures: Territory of Alaska, \$529.12; Alaska Road Commission, \$4,453.49; total, \$4,982.61.

ROUTE 26A-KUGRUK RIVER APPROACH:

At the coal mine on the Kugruk River an approach to the river was made. It is twelve hundred and twenty-five feet long, ten feet wide, with an average cut of three feet.

Expenditures \$488.00.

ROUTE 27-DEERING-INMACHUK...... (25 MILES WAGON ROAD)

This road commences at Deering and extends to the workings on the Inmachuk. It is improved for a distance of twelve miles on the left bank. From the latter point it follows the river

Total expenditure was for extending the road on up to Inmachuk River to the twelve mile post. Seventy-nine hundred and fifty feet of road were built of willow corduroy covered with river gravel, ditched for the entire length and six culverts placed in the road. The road is ten feet wide and was covered with gravel to a depth of ten inches.

Expenditures: Territory of Alaska, \$6,000.00; Alaska Road Commission, \$371.04; total, \$6,371.04.

ROUTE 28-DAHL CREEK-CANDLE TRAIL.....(140 MILES TRAIL)

This is an overland trail between Dahl Creek and Candle, going in a northeasterly direction from Dahl Creek to the Kougarok River, then following the east slope of the divide to the head of Boulder, where it crosses into Aurora Creek. It follows to the mouth of Aurora Creek, crosses the Noxapaga, and goes up Berry

Creek, crossing the divide to the mouth of the right fork of Good Hope, thence up Cottonwood to Divide Creek, thence up Divide Creek, crossing the Divide and following the ridge to the Immachuk River. Thence down the Immachuk to Arizona Creek, thence easterly over the Divide to Wade Creek, thence crossing Wade Creek in an easterly direction across the Kugruk Flats to the Kugruk River, thence easterly over the divide to the mouth of Paterson, thence down the Candle-Candle Creek Road to Candle.

ROUTE 28A-NOME-TAYLOR.....(135 MILES TRAIL)

This winter mail trail leaves Nome over Routes 13A and 13K to the mouth of Dexter Creek. Crossing Nome River, it follows the left limit to the mouth of Willow Creek, then recrosses and follows the right limit to the U. S. Roadhouse at Dorothy Creek, then the left limit again and over the divide to Nugget Creek. From the Nugget Roadhouse, it crosses Salmon Lake, follows down Pilgrim River to Iron Creek, then across the flats to the Hot Springs. It then cuts across to Marys Igloo and up the Kusatrin River to Shelton, the northern terminus of the summer tram line (Seward Peninsular Railway). From Shelton, the trail proceeds to Dahl, and then up the Kougarok River to Taylor.

Expenditures \$1,140.00.

ROUTE 37—TOPKOK-CANDLE WINTER TRAIL (154 MILES TRAIL)

This is the Candle mail trail. It leaves the overland mail trail route 18 at Topkok, fifty-three miles east of Nome, and follows its head, thence over the Dithe Topkok River to vide into Skookum, crossing the same and the Fish River and Niukluk Flats to Council. This portion is the regular Council winter trail. From Council the trail follows up Melsing Creek to the head, crosses the divide into the Fish River Flats, then crossing same in a general northeasterly direction to Telephone Creek. Following Telephone Creek to its head it then crosses the Divide and goes down the Koyuk Valley. It then crosses over into First Chance Creek and up to its head, then over the Divide into Gold Run Creek. Following down Gold Run to within two miles of the mouth, the trail then swings northerly and parallels the Keewalik River to Glacier Creek, then on the left bank of the Keewalik River to near the mouth of Lava Creek and then on the Keewalik to Candle. The portion between Council and the mouth of Hunter Creek is but slightly used as the mail now goes in via Haycock and the two trails join at the mouth of Hunter Creek or near Snyder's Roadhouse. There is considerable travel on this trail between Council and the coast at Topkok.

Expenditures \$210.00.

ROUTE 41-KIANA-KLERY CREEK TRAIL)

A permanent staked winter tra connects Kiana and Klery. One mile duroyed by the Alaska Road Commis collected for road tax.

Expenditures \$237.15

ROUTE 41A-KOTZEBUE-SHUNGNA

This winter trail extends from port on Kotzebue Sound, across to the River to Shungnak. Several shelter ca Territory and several more are needed to the trail. All portages will have and marked, some new portages made, as the banks of the river are high and

No expenditures during the fiscal y

ROUTE 41B-KOTZEBUE-POINT BARF

This winter mail trail extends from ainland and then along the coast to investigation.

A shelter (abin near the village thorized.

No expenditures during the fiscal y

ROUTE 42-ST. MICHAELS-KOTLIK TI

This is a winter mail trail to Ko to Marshall. From St. Michaels it fol St. Michaels Canal for eight miles, the mainland. Thence in a southweste Village, a distance of twenty-seven mile Romanof to the beach seven miles, their miles. Thence by Pastolik to Kotlik, twe

With the completion of the work past fall, this route should be in exceller Expenditure \$270.00.

ROUTE 49-DAVIDSONS LANDING-TAY ROAD, 16 MILES SLED ROAD

This road connects the head of na Teller with Taylor Creek. From Davi the Marys River to its head, a distance o over Coco Hill to the head of Coarse Gc thence down Henry Creek to the Kougaro vide to the mouth of the right fork of Good onwood to Divide Creek, thence up Divide bivide and following the ridge to the Inma. own the Inmachuk to Arizona Creek, thence ide to Wade Creek, thence crossing Wade direction across the Kugruk Flats to the easterly over the divide to the mouth of the Candle-Candle Creek Road to Candie.

AYLOR.....(135 MILES TRAIL)

trail leaves Nome over Routes 13A and 13K er Creek. Crossing Nome River, it follows mouth of Willow Creek, then recrosses and to the U. S. Roadhouse at Dorothy Creek, gain and over the divide to Nugget Creek. oadhouse, it crosses Salmon Lake, follows o Iron Creek, then across the flats to the cuts across to Marys Igloo and up the Kusathe northern terminus of the summer tram lar Railway). From Shelton, the trail proup the Kougarok River to Taylor. 40.00.

CONDLE WINTER TRAIL (154 MILES

e mail trail. It leaves the overland mail trail fifty-three miles east of Nome, and follows its head, thence over the Dito crossing the same and the Fish River Council. This portion is the regular Council ouncil the trail follows up Melsing Creek to divide into the Fish River Flats, then crossl northeasterly direction to Telephone Creek. Creek to its head it then crosses the Divide oyuk Valley. It then crosses over into First to its head, then over the Divide into Gold ; down Gold Run to within two miles of the swings northerly and parallels the Keewalik ek, then on the left bank of the Keewalik th of Lava Creek and then on the Keewalik n between Council and the mouth of Hunter used as the mail now goes in via Haycock, in at the mouth of Hunter Creek or near There is considerable travel on this trail he coast at Topkok. 0.00.

ROUTE 41—KIANA-KLERY CREEK (1 MILE ROAD, 11 MILES TRAIL)

A permanent staked winter trail, twelve miles in length, connects Kiana and Klery. One mile of the trail has been corduroyed by the Alaska Road Commission with the help of funds collected for road tax.

Expenditures \$237.15

ROUTE 41A-KOTZEBUE-SHUNGNAK.....(200 MILES TRAIL)

This winter trail extends from Kotzebue, an open summer port on Kotzebue Sound, across to the mainland and up the Kobuk River to Shungnak. Several shelter cabins have been built by the Territory and several more are needed, as well as general repairs to the trail. All portages will have to be brushed out, staked, and marked, some new portages made, and all approaches graded as the banks of the river are high and steep.

No expenditures during the fiscal year.

ROUTE 41B-KOTZEBUE-POINT BARROW..... (500 MILES TRAIL)

This winter mail trail extends from Kotzebue across to the mainland and then along the coast to Point Barrow. It is under investigation.

A shelter cabin near the village of Kivalina has been authorized.

No expenditures during the fiscal year.

ROUTE 42-ST. MICHAELS-KOTLIK TRAIL..... (70 MILES TRAIL)

This is a winter mail trail to Kotlik and on up the Yukon to Marshall. From St. Michaels it follows the left bank of the St. Michaels Canal for eight miles, thence crosses the Canal to the mainland. Thence in a southwesterly direction to Pitmatalik Village, a distance of twenty-seven miles. Thence back to Point Romanof to the beach seven miles, thence to Coffee Point twelve miles. Thence by Pastolik to Kotlik, twelve miles.

With the completion of the work of permanent staking this past fall, this route should be in excellent shape.

Expenditure \$270.00.

ROUTE 49—DAVIDSONS LANDING-TAYLOR (24 MILES WAGON ROAD, 16 MILES SLED ROAD)

This road connects the head of navigation on Imuruk from Teller with Taylor Creek. From Davidsons Landing it follows the Marys River to its head, a distance of twenty-four miles, thence over Coco Hill to the head of Coarse Gold Creek to Henry Creek, thence down Henry Creek to the Kougarok; it follows the Kougarok

to Taylor Creek. This road was originally built by the Kougarok Mining and Ditch Company and has had work done upon it by them and also by the Taylor Creek Ditch Company, Kelliher Dredging Company, the Behring Dredging Company and Dave Johnson Freighting Company. In 1916 this route was taken over by the Alaska Road Commission and maintained by them since.

Total expenditure prior to July 1st was for material for use during season. Six culverts were placed in the road, twenty holes were patched and two of the approaches out of Marys River regraded where washed out by high water. One thousand feet of ditch was dug around the head of Coarse Gold and two hundred feet of road graded about four miles from Taylor on Lincoln Creek.

Expenditures: Territory of Alaska, \$1,000.00; Alaska Road Commission, \$32.00; total, \$1,032.00.

ROUTE 62-DIME CREEK CORDUROY (9 MILES WAGON ROAD)

This road connects Dime Landing, which is situated on the Koyuk River about thirty-five miles from the mouth and two miles from the confluence of Dime Creek and the Koyuk, with the workings on Dime Creek at the Postoffice of Haycock and extends on up Dime Creek to No. 7 above.

Twelve thousand nine hundred and fifty feet of corduroy were laid and covered. There yet remains two thousand eight hundred and fifty feet of this road to be completed which will make a continuous road to the head of Dime Creek.

Expenditures: Territory of Alaska, \$6,361.29; Alaska Road Commission, \$7,680.51; total, \$14,041.80.

ROUTE 67-NOME-TELLER.....(80 MILES TRAIL)

This is the winter mail trail to Teller and Cape Prince of Wales. It is permanently staked from Nome to Teller. It follows the coast from Nome to Cape Douglas, where it cuts across to Cape Riley and then into Teller.

No expenditures during the fiscal year.

ROUTE 67A-TELLER-LOST RIVER.....(21 MILES TRAIL)

This is the extension of Route 67 towards Cape Prince of Wales. It was permanently staked as far as Lost River, crossing the Bay from Teller to the Reindeer Station and thence on the Beach to Lost River.

Expenditure \$420.00.

ROUTE 67B-TELLER-BLUESTONE.....(18 MILES TRAIL)

From Teller there is a wagon road leading across the $tundr^\mu$ to Gold Run and the Bluestone country, a distance of eighteen

miles. This road had some road tax expaska Road Commission has furnished soling several small bridges on it. It is : Gold Run and the Bluestone.

No expenditure during the fiscal year.

ROUTE 67C-TELLER-MARYS IGLOO.....

Though not a mail trail, this is a we from Teller to Marys Igloo via Grantly Heber the Kuzitrin River.

No expenditure during the fiscal year.

ROUTE 68-FLAGGING TRAILS

Under this heading all expenditures cluded. The expenditure includes the pumaking flags, and the cost of straightenin placing the missing ones on the permanen around Nome, throughout the Seward Pewith the Yukon Valley. Many of the trails and are staked by the miners themselves their workings occur. In these cases the material for staking and the miners do the

Expenditures: Territory of Alaska, Commission, \$4,657.20; total, \$5,363.20, inc 18A and 18B, a total of 275 miles, in additio

NAME OF ROUTE

Kotzebue to Riley Channel on Kobu Kotzebue to Seesalik on Pt. Barrow Lockhart Point to Mouth Noatak Deering to Choris Peninsula Deering to Willow Bay Keewalik to Choris Peninsula Keewalik to Callahan's Cabin Callahan's to Nazuruk Mouth Kobuk Candle to Keewalik Teller to Ouglas Teller to Douglas Teller to Mission Teller to Head of Harbor Teller to Igloo Creek Romanof to Coffee Point Cheelana to Kotlik St. Michael's Bay Bonanza to Mouth Koyuk Bonanza to Isaacs Point to Caches Moses to Walla Walla McKinley Creek to west side Golovin Koyun Colovin to White Mountain Nome Locals Around Buff Around Toutel Manney Creek Moses Around Buff
Around Topkok Head Around Cape Nome Around Salmon Lake

Total

RT ALASKA ROAD COMMISSION.

road was originally built by the Kougarok pany and has had work done upon it by tylor Creek Ditch Company, Kelliher Dredging Dredging Company and Dave Johnson 1916 this route was taken over by the 1 and maintained by them since.

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K CORDUROY (9 MILES WAGON ROAD)

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LER.....(80 MILES TRAIL)

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uring the fiscal year.

LOST RIVER.....(21 MILES TRAIL)

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BLUESTONE (18 MILES TRAIL)

is a wagon road leading across the tundra Bluestone country, a distance of eighteen miles. This road had some road tax expended on it and the Alaska Road Commission has furnished some timber for constructing several small bridges on it. It is still used for hauling to Gold Run and the Bluestone.

No expenditure during the fiscal year.

ROUTE 67C-TELLER-MARYS IGLOO.....(40 MILES TRAIL)

Though not a mail trail, this is a well traveled winter route $_{\hbox{from}}$ Teller to Marys Igloo via Grantly Harbor, Imuruk Bay and the Kuzitrin River.

No expenditure during the fiscal year.

ROUTE 68-FLAGGING TRAILS.....(536 MILES TRAILS)

Under this heading all expenditures for winter work are 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 do the work.

Expenditures: Territory of Alaska, \$706.00; Alaska Road Commission, \$4,657.20; total, \$5,363.20, includes work on Routes 18A and 18B, a total of 275 miles, in addition to the following:

Kotzebue to Riley Channel on Kobuk Kotzebue to Seesalik on Pt. Barrow Trail Lockhart Point to Mouth Noatak Deering to Choris Peninsula Deering to Willow Bay Keewalik to Choris Peninsula Keewalik to Callahan's Cabin Callahan's to Nazuruk Mouth Kobuk Candle to Keewalik Teller to Gold Run Teller to Douglas Teller to Mission Teller to Head of Harbor Teller to Igloo Creek Romanof to Coffee Point	easona Miles
Kotzebue to Seesalik on Pt. Barrow Trail Lockhart Point to Mouth Noatak Deering to Choris Peninsula Deering to Willow Bay Keewalik to Choris Peninsula Keewalik to Callahan's Cabin Callahan's to Nazuruk Mouth Kobuk Candle to Keewalik Teller to Gold Run Teller to Douglas Teller to Mission Teller to Head of Harbor Teller to Igloo Creek Romanof to Coffee Point	32
Lockhart Point to Mouth Noatak Deering to Choris Peninsula Deering to Willow Bay Keewalik to Choris Peninsula Keewalik to Callahan's Cabin Callahan's to Nazuruk Mouth Kobuk Candle to Keewalik Teller to Gold Run Teller to Douglas Teller to Mission Teller to Head of Harbor Teller to Igloo Creek Romanof to Coffee Point	12
Deering to Choris Peninsula Deering to Willow Bay Keewalik to Choris Peninsula Keewalik to Callahan's Cabin Callahan's to Nazuruk Mouth Kobuk Candle to Keewalik Teller to Gold Run Teller to Douglas Teller to Mission Teller to Head of Harbor Teller to Igloo Creek Romanof to Coffee Point	-6
Deering to Willow Bay Keewalik to Choris Peninsula Keewalik to Callahan's Cabin Callahan's to Nazuruk Mouth Kobuk Candle to Keewalik Teller to Gold Run Teller to Douglas Teller to Mission Teller to Head of Harbor Teller to Igloo Creek Romanof to Coffee Point	40
Keewalik to Choris Peninsula Keewalik to Callahan's Cabin Callahan's to Nazuruk Mouth Kobuk Candle to Keewalik Teller to Gold Run Teller to Douglas Teller to Mission Teller to Head of Harbor Teller to Igloo Creek Romanof to Coffee Point	14
Keewalik to Callahan's Cabin Callahan's to Nazuruk Mouth Kobuk Candle to Keewalik Teller to Gold Run Teller to Douglas Teller to Mission Teller to Head of Harbor Teller to Igloo Creek Romanof to Coffee Point	35
Callahan's to Nazuruk Mouth Kobuk Candle to Keewalik Teller to Gold Run Teller to Douglas Teller to Mission Teller to Head of Harbor Teller to Igloo Creek Romanof to Coffee Point	30
Candle to Keewalik Teller to Gold Run Teller to Douglas Teller to Mission Teller to Head of Harbor Teller to Igloo Creek Romanof to Coffee Point	14
Teller to Gold Run Teller to Douglas Teller to Mission Teller to Head of Harbor Teller to Igloo Creek Romanof to Coffee Point	-8
Teller to Douglas Teller to Mission Teller to Head of Harbor Teller to Igloo Creek Romanof to Coffee Point	18
Teller to Mission Teller to Head of Harbor Teller to Igloo Creek Romanof to Coffee Point	16
Teller to Head of Harbor Teller to Igloo Creek Romanof to Coffee Point	-6
Teller to Igloo Creek	12
Romanof to Coffee Point	-6
	12
Cheelana to Kotlik	12
St. Michael's Bay	5
Bonanza to Mouth Koyuk	30
Isaacs to Mouth Koyuk	20
Bonanza to Isaacs Point to Caches	43
Moses to Walla Walla	20
McKinley Creek to west side Golovin Bay	14
Golovin to White Mountain	12
Nome Locals	100
Around Bluff	4
Around Topkok Head	
Around Cape Nome	4 2
Around Salmon Lake	9
Atoung bannon bake	ð
, Total	536

ROUTE 73-MARSHALL ROAD.....(41/4 MILES WAGON ROAD)

This road was constructed by the Territory. Two and twelvehundredths miles are corduroy and two and thirteen-hundredths miles graded road. It connects the landing ten miles above Marshall with the workings on Willow Creek.

Total expenditure was for repairs and protection during the break-up. Present condition poor.

Expenditures: Territory of Alaska, \$356.50.

ROUTE 73A-KOTLIK-MARSHALL....(190 MILES TRAIL)

Two sections of work were performed on the winter mail trail between Kotlik and Marshall; first, between Old Hamilton and New Hamilton; second, between Andreafsky and Pilot Station.

Expenditure \$850.00.

ROUTE 73B-STUYAHOK.....(11 MILES SLED ROAD)

This is a new project. It consists of an eleven mile winter sled road and summer trail from the landing on the Yukon River below Russian Mission across to the new diggings on Stuyahok Creek. The Creek is reported to have produced about \$7,000 the first season.

The proposed route was cleared at a cost of \$660.00.

ROUTE 77-SHELTON FERRIES:

These are two ferries over the two branches of the Kuzitrin River at Shelton, each about one hundred feet across. They are free ferries, a ferryman being paid to place them in commission in the spring and take them out in the fall and to provide for ferrying passengers during the break-up and freeze-up.

Expenditure \$300.00.

ROUTE 77A-FERRIES:

In addition to Bonanza Ferry, Route 8A, Safety Ferry, Route 8B, Council Ferry, Route 8C, and the Shelton Ferries, Route 77, there are four other ferries in the Nome District which have heretofore not been assigned route numbers.

Cripple River Ferry: This is a free ferry over the mouth of Cripple River which is at this point about one hundred feet wide. It consists of a whale boat on an endless cable.

The cabin in which the cable and blocks were stored was destroyed by a storm last fall and the dead-men washed out. Natives saved the blocks and boat but were unable to save the cable. A new cable was purchased and installed. Additional expenditure was for taking the boat out of the river and placing it in winter quarters.

Nome River Ferry: This is a small stacross Nome River, where a bridge has be Seward Peninsular Railway. It is used be the cars drawn by dogs on the railway.

ANNUAL REPORT ALASKA ROAD

Ninety-eight dollars were expended for $c\epsilon$ ing it in the water, and making ready for t

Kougarok Ferry: This is a free ferr River on the Dahl Creek-Candle Trail, Rout small boat on an endless cable.

No expenditure during the fiscal year.

Kiana Ferry: This is a free ferry of Kiana-Klery Creek Trail, Route 41. It consists an endless cable.

An additional ferry over Squirrel River stalled. The boat was purchased at Kiana, and ropes had to be shipped from Nome.

Total expenditure \$466.79.

ROUTE 77B-BRIDGES:

The following bridges have not here route numbers:

Nome River Bridge: This is the mai bridge across Nome River on Route 8, near unusual ice conditions caused by heavy stor dynamite was used in blowing out the ice

Expenditures \$497.18. (Included in Rout

Snake River Footbridge: This is a susp Snake River near the mouth of Boulder Cree No expenditures during the fiscal year.

Shelton Footbridge: This is a suspens slough near Shelton.

No expenditures during the fiscal year.

the Kougarok River near the mouth of Coarse
No expenditures during the fiscal year.

Taylor Footbridge: This is a suspension lor Creek at Taylor.

No expenditures during the fiscal year.

Burnt River Footbridge: This is a suspending River on the Dahl Creek-Candle Trail, I No expenditures during the fiscal year.

feet long, across Bull Creek, giving access

ALASKA ROAD COMMISSION.

OAD.....(41/4 MILES WAGON ROAD)

duroy and two and thirteen-hundredths ects the landing ten miles above Marshall ow Creek.

s for repairs and protection during the on poor.

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RSHALL....(190 MILES TRAIL)

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K.....(11 MILES SLED ROAD)

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FERRIES:

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10. S:

nanza Ferry, Route 8A, Safety Ferry, Route ute 8C, and the Shelton Ferries, Route 77, ferries in the Nome District which have signed route numbers.

rry: This is a free ferry over the mouth ch is at this point about one hundred feet whale boat on an endless cable.

and boat out of the river and placing it in

Nome River Ferry: This is a small scow running on a cable across Nome River, where a bridge has been washed out on the Seward Peninsular Railway. It is used by foot passengers and the cars drawn by dogs on the railway.

Ninety-eight dollars were expended for caulking the scow, placing it in the water, and making ready for the season's operations.

Kougarok Ferry: This is a free ferry over the Kougarok River on the Dahl Creek-Candle Trail, Route 28. It consists of a small boat on an endless cable.

No expenditure during the fiscal year.

Kiana Ferry: This is a free ferry over the slough on the Kiana-Klery Creek Trail, Route 41. It consists of a small boat on an endless cable.

An additional ferry over Squirrel River, near Kiana, was installed. The boat was purchased at Kiana, but the cable, blocks and ropes had to be shipped from Nome.

Total expenditure \$466.79.

ROUTE 77B-BRIDGES:

Nome River Bridge: This is the main highway suspension bridge across Nome River on Route 8, near Fort Davis. Due to unusual ice conditions caused by heavy storms during the winter, dynamite was used in blowing out the ice to protect this bridge.

Expenditures \$497.18. (Included in Route 8.)

Snake River Footbridge: This is a suspension footbridge over Snake River near the mouth of Boulder Creek.

No expenditures during the fiscal year.

Shelton Footbridge: This is a suspension footbridge over a slough near Shelton.

No expenditures during the fiscal year.

Kougarok Footbridge: This is a suspension footbridge over the Kougarok River near the mouth of Coarse Gold Creek.

No expenditures during the fiscal year.

Taylor Footbridge: This is a suspension footbridge over Taylor Creek at Taylor.

No expenditures during the fiscal year.

Burnt River Footbridge: This is a suspension footbridge over Burnt River on the Dahl Creek-Candle Trail, Route 28.

No expenditures during the fiscal year.

Bull Creek Bridge: This is a highway bridge about eighteen feet long, across Bull Creek, giving access to the Sunset Creek

The bridge was washed off its abutments during the breakup and had to be replaced in position.

Expenditures \$45.00.

ROUTE 77C-TROLLEYS:

There are two passenger trolleys in this district which have not heretofore been assigned route numbers:

Snake River Trolley: This trolley consists of a passenger cage suspended from a cable across Snake River near Monument Creek.

No expenditures during the fiscal year.

Nome River Trolley: This trolley consists of a passenger cage suspended from a cable across Nome River near the mouth of Osborne Creek.

No expenditures during the fiscal year.

EXAMINATIONS AND SURVEYS.

ROUTE 89-NOME-SHELTON-KEEWALIK RECONNAISSANCE:

The Act of Congress making appropriations for the Support of the Army for the fiscal year ending June 30, 1922, under the item, "Construction and maintenance of military and post roads, bridges and trails, Alaska," provided:

"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 practicable 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."

In accordance with the requirements of this section, Mr. A. G. Blake, a competent civil engineer with long experience on the Seward Peninsula, was engaged to take charge of the reconnaissance. Mr. Blake spent thirty-four days in cruising over the country north of Shelton and between the Kougarok and Candle. A total of five hundred miles of various routes were followed by him:

- A. Shelton to Taylor Creek via Kougarok River and Dahl Creek;
- B. Taylor Creek to Shelton via ridge on west watershed of Kougarok River;
- C. Davidsons Landing to Shelton partially;
- D. Shelton to Imuruk Lake-Kugruk River-Silver Mine and Candle:

ANNUAL REPORT ALASKA ROAD

E. Candle to Wallin Coal Mine and J
 F. Inmachuk River to Shelton via G
 Creek, Boulder Creek, Dahl Creel
 traveled route and staked trail.

The field work was completed in S report with a recommended system of being prepared.

Expenditure: Alaska Road Commissio

ROUTE 89A—SEWARD PENINSULA R/ TRAM)

Chapter 39, Session Laws of Alaska, Federal Board of Road Commissioners for A and approval of the Territorial Board of were authorized to purchase the Seward tending from Nome to Shelton, for use as a way. This narrow gauge railroad for man abandonment as a steam railroad, has be overland artery of communication with the trict and the other placer mining camps o of the Seward Peninsula. The repair of the trict and provided the structure was public into complished provided the structure was public.

An examination and inventory of this Mr. A. G. Blake, a competent civil engineer pose. Negotiations were entered into wit of the railroad and they agreed to accept the entire road. The purchase at this pri agreements appended thereto requiring the ptain the road bed in case the same should mining operations in certain localities, we Territorial Board of Road Commissioners is of the title for the property made by the Teral and following this, it is believed the acsummated.

This railroad will be of great service transportation problem of the Seward affecting traffic movement to the Kougaro the north portion of the Seward Peninsula. are the construction of three bridges, and maintenance for the type of traffic carried light. The price agreed upon, \$25,000, fo eight-seven miles of summer and winter roin view of the service rendered even undeditions.

ALASKA ROAD COMMISSION.

he Creek has very steep banks and a d off its abutments during the breakin position.

ger trolleys in this district which have ed route numbers:

This trolley consists of a passenger ble across Snake River near Monument

ng the fiscal year.

This trolley consists of a passenger able across Nome River near the mouth

ing the fiscal year.

ATIONS AND SURVEYS.

.TON-KEEWALIK RECONNAISSANCE:

making appropriations for the Support of year ending June 30, 1922, under the item, enance of military and post roads, bridges .ded:

 $\$ \$10,000 of the foregoing amount shall be ary investigation and report on the feasicost of the best and most practicable conme-Shelton system of communications and le Kugruk River, Chicago Creek, and the t, whether by wagon road, sled road, tramans."

the requirements of this section, Mr. A. G. vil engineer with long experience on the s engaged to take charge of the reconspent thirty-four days in cruising over the on and between the Kougarok and Candle. d miles of various routes were followed by

aylor Creek via Kougarok River and Dahl

to Shelton via ridge on west watershed of

er; nding to Shelton partially; muruk Lake-Kugruk River-Silver Mine and ANNUAL REPORT ALASKA ROAD COMMISSION.

E. Candle to Wallin Coal Mine and Inmachuk River; and F. Inmachuk River to Shelton via Good Hope River, Aurora Creek, Boulder Creek, Dahl Creek, etc., over the usually traveled route and staked trail.

The field work was completed in September and the final report with a recommended system of communications is now being prepared.

Expenditure: Alaska Road Commission \$3,984.66.

ROUTE 89A-SEWARD PENINSULA RAILROAD (87 TRAM)

Chapter 39, Session Laws of Alaska, 1921, provided that the Federal Board of Road Commissioners for Alaska with the consent and approval of the Territorial Board of Road Commissioners, were authorized to purchase the Seward Peninsula Railroad extending from Nome to Shelton, for use as a public tram and highway. This narrow gauge railroad for many years, following its abandonment as a steam railroad, has been used as the main overland artery of communication with the Kougarok mining district and the other placer mining camps on the northern portion of the Seward Peninsula. The repair of the bridges and washed out portions of track are of great public interest and could be accomplished provided the structure was publicly acquired.

An examination and inventory of this railroad was made by Mr. A. G. Blake, a competent civil engineer, engaged for the purpose. Negotiations were entered into with the present owners of the railroad and they agreed to accept a price of \$25,000 for the entire road. The purchase at this price, with certain other agreements appended thereto requiring the present owners to maintain the road bed in case the same should be disturbed by placer mining operations in certain localities, was recommended. The Territorial Board of Road Commissioners is now having a search of the title for the property made by the Territorial Attorney General and following this, it is believed the acquirement will be consummated.

This railroad will be of great service in relieving the entire transportation problem of the Seward Peninsula particularly affecting traffic movement to the Kougarok mining district and the north portion of the Seward Peninsula. The necessary repairs are the construction of three bridges, and thereafter the cost of maintenance for the type of traffic carried upon the road will be light. The price agreed upon, \$25,000, for the acquirement of eight-seven miles of summer and winter road, is a nominal one in view of the service rendered even under present traffic conditions.

r Alaska Road Commission.

NAL EXAMINATIONS.

Board made a thorough examination of the Nome-Council Road and the Nome ember. Last fiscal year a thorough ex the District Superintendent of all winter nding the same as far north as Kotzebue Seward Peninsula. During the present and reconnaissance of all summer routes of the Seward Peninsula is being made. ason all routes, winter and summer, will some qualified employee or member of

HELTER CABINS.

as expended during the year for shelter he following work was done:

rchase of materials, freight and labor	768.41
oin at Tonkok and repairs	260.00 75.00
River Cabins, repairs	135.00 72.00
pe, wood, roofing, etc.	189.59
\$	L,500.00

TION OF EXPENDITURES.

Miles*	Expenditures	Unit Cost Dollars per Mile
211¾ 27 1189½ 536		
1.9641/4	\$88,016.12	\$44.85
ined during	fiscal year only.	

TRACTS IN FORCE.

ERCIAL STATISTICS.

ensus was begun by the Commission in benditures for freight on each route at the ost of transporting the same amount of ailing before the road was constructed, a represents the economic saving to the e construction of the particular route in

ing for all the routes built by the Comtable for 1911, 1912, and 1913, has been

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	353,118.29	2,573,525.28	2,144,667.00
1911-1913	937,199.96	2,573,525.28	6,268,032.00

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 development 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 almost 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:

Winter: Per	Ton-mil	6
Bob-sled (sled road)	•	
Dog-team (trail)		
Summer:		
Truck (wagon road)	0.40	
Wagon (wagon road)	1.23	
Pack train (trail)		
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, proceries, 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 in the Annual Report, C. of E. Expenditures for the fiscal year, and to include vouchers received and placed in the account, including June 30. 1922, were \$47,503.46.
- (b) By par. 3, S. O. No. 50-0, War Department, Washington. D. C., March 9, 1921, and under the provisions of Acts of Congress approved June 17, 1910, and June 15, 1917, the President of the Board, in addition to his other duties, was detailed for consultation or to superintend the construction or repair of any aid to navigation authorized by Congress in the Sixteenth Lighthouse District (includes the Territory of Alaska) and was directed to report by letter to the Secretary of Commerce.
- (c) The President of the Board, at the request of the Commanding Officer, Fort Wm. H. Seward, Alaska, made a special examination of the water main which supplies the post and town of Haines, Alaska. This main crosses Chilkat Inlet at the mouth of the river of the same name. The crossing is about two miles wide and the pipe-line is

subjected to the scour and untide as well as glacial floods in pounding of the ice run. It has breaks which have cut off the weeks at a time.

His report and recommendati reconstruction of the line having War Department, the Board was with supervision of the work. The dred and fifty dollars of Quarterms to the post finance officer in pure breaks and leaks were repaired, the and the reconstruction started las

At the close of the fiscal was practically completed. Soldi under the immediate supervision of penditures aggregated \$2,505.02.

(d) By letter of the Secretary of War, the President of the Board was Department representative upon Alaska Council. Under the autho the President of the Board design cer of the Board to act in his abse

STATEMENT OF RECEIPTS AND

This report covers vouchers received ar including June 30, 1922.

REC	E١	PT	S
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Balance on hand July 1, 1921 Received since from: War warrants Transfers from officers Sales of property, etc., Alaska Fund Refunds, Army Acts
Total
DEDUCTIONS: Deposited to credit Treasurer of United States balance on hand close of F. Y. 1921
Net Total
DISBURSEMENTS
Disbursed as per tabulated statement below Balance on hand in Army Account of Adv.

Net Total

	EXPENDITURES IN	DETAIL
Ac	ct. Name of Route Unalaklik-St. Michael Hot Springs-Sullivan Creek Chatanika-Beaver Beaver-Chandlar Chandlar-Koyukuk Caro-Flat Creek Caro-Coldfoot Mile 29 ANRR-Sunrise Lynx Creek-Sixmile Creek Sunrise-Hope Cripple River Penny River Penny River Penny River Extension Sinrock Ferry Candle-Candle Creek Kugruk River Extension Sinrock Ferry Candle-Candle Creek Kugruk River Approach Deering-Inmachuk Nome-Taylor Fort Gibbon-Koyukuk Hot Springs Landing-Eureka Tacotna-Flat Creek Flat-Crooked Creek Archangel Extension Mile 26½-Palmer Palmer-Matanuska River Willow Creek Extension Wasilla-Fish Hook Wasilla-Knik Topkok-Candle Ruby-Long Creek Long Creek-Cripple City Ophir-Tacotna, 1st section Ophir-Tacotna, 2nd section Ophir-Tacotna, 3rd section Ophir-Tacotna, 3rd section Solatna Bridge Juneau-Sheep Creek Kt. Michael-Kotlik Skagway-Smugelers Cove Silver Bow Basin Roosevelt-Kantishna Lignite-Kantishna Lignite-Creek Creek, 1st section Talkeetna-Cache Creek, 1st section Talkeetna-Cache Creek, 1st section Talkeetna-Cache Creek, 2nd section Talkeetna-Cache Creek, 1st section Topher-Lewis Landing-Gulkana-Chistochina-Tanana Crossing Gulkana-Chistochina Chistochina-Slate Creek Chistochina-Tanana Crossing Ketchumstuk-Tanana Crossing Coller-Lewis Landing Gulkana-Chistochina-Creek Chistochina-Tanana Crossing Ketchumstuk-Tanana Crossing Coller-Lewis Landing Coller-Lost River Flagging Trails Krangell-Oil Dock Marshall Road Kollik-Marshall Stuyahok Trail Anchorage-Eagle River	Constru
21	Unalaklik-St. Michael	
22 23.4	Hot Springs-Sullivan Creek	
23E	Beaver-Chandles	
23C	Chandlar-Kovukuk	•••••
231	Caro-Flat Creek	
23E	Caro-Coldfoot	
24 .24A	Mile 29 ANRR-Sunrise	
24B	Lynx Creek-Sixmile Creek	396
$25\widetilde{\mathrm{A}}$	Cripple River	1.85
25B	Penny River	•••••
25D	Mouth of Center Creek	
25E 25F	Submarine Paystreak	
25G	Anvii-Glacier	
251	Sinrock Ferry	
26	Candle-Candle Crook	
26A	Kugruk River Approach	••••
27 28A	Deering-Inmachuk	
20A 29	Nome-Taylor	1,140.
30	Hot Springs Landius F	
32A	Tacotna-Flat Creek	
32D	Flat-Crooked Creek	
35A 35B	Archangel Extension	3 490 5
35C	Mile 26½-Palmer	3.942.5
35D	Palmer-Matanuska River	
35E	Wasilla Fish Hook	9,601.2
35F	Wasilla-Knik	877.1
37 38A	Topkok-Candle	
38B	Ruby-Long Creek	
38C	Long Creek-Cripple City	
38D	Ophir-Teestre 1-4	
38D	Ophir-Tacotna 2nd gostion	15,000.0
38E	Ophir-Tacotua, 3rd section	11,000,0
39	Solatna Bridge	3 557 2
41	Juneau-Sheep Creek	
42	St Michael Early	
44A 45	Skagway-Smugglers Cove	
46.A	Silver Bow Basin	. 11,158.71
46B	Roosevelt-Kantishna	8.964.09
46C	Nenantishna	11,966.91
46E	Kuskokwim Posennadanouse	1,499.80
48 49	Iliamna Bay-Iliamna Lake	831.75
51	Davidsons Landing-Taylor	4,740.93
	Talkeetna-Cache Creek, 1st	***************************************
51	Talkeotra Carl G	10,200.00
51A	section Section	
53	Upper Yentna	12,209.92
57 57A	Eagle-Circle	301.26
57.A	Nizina Nizina	***************************************
59 62	Fairbanka Duid-	8,190.33
63	Dime Creek Cordurer	***************************************
64	Dunbar-Brooks	•
65A	Cripple-Lewis Landing	
65B	Chistochina	***************************************
65 <u>C</u> 65D	Chistochina Slate Creek	***************************************
67A	Ketchumstuk-Tanana Crossing	
687	Teller-Lost River Crossing	•••••
72	Tagging Trails	•••••
(3 79 .	Marshall Dock	4.964.97
72 73 73A 3B	Kotlik-Monekall	*,001.01
5	Stuyahok Trail	850.00
	Anchorage-Eagle River	660.00
	2 Tel A.C	8,446.07

EXPENDITURES IN DETAIL.

FEDERAL APPROPRIATIONS AND "ALASKA FUND" AND FUNDS CONTRIBUTED BY THE TERRITORY OF ALASKA AND OTHERS.

•				
Acct.	Name of Route	Construction	Maintenance	Total
T	Prince of Wales Island	.\$	\$ 204.50	\$ 204.50
2B	Mendenhall Glacier Extension. Mendenhall Glacier Bridge Juneau-Duck Creek	2,572,24	3,400.00	5,972.24
2C	Mendenhall Glacier Bridge	482.39		482.39
$\int 2D$	Juneau-Duck Creek	. 1,450.00	1,573.69	3,023.69
3A 3B	Haines-Wells	12 000 00	6,955.93	6,955.93 12,000.00
36	Haines-Wells Pleasant Camp Extension Porcupine Extension Haines-Mud Bay Valdez-Comfort Comfort-Canyon Keystone Canyon Canyon-Wortmans, first section Canyon-Wortsmans, 2nd sec Wortmans-Beaver Dam Beaver Dam-Ernestine	100.00		100.00
\ 3D	Haines-Mud Bay	5.039.30		5.039.30
4B1	Valdez-Comfort		10,642.03	10,642.03 12,757.38
4B2	Comfort-Canyon	10,000.00	2,757.38	12,757.38
4B3	Keystone Canyon	19,922.10		19,922.10
4B4	Canyon-Wortmans, first section	9,000.00	0.000.00	9,000.00
4B4 4B5	Wantmans Poorts Dem	9,785.96	3,000.00	12,785.96 3,145.04
4B6	Beaver Dam-Ernestine	***************************************	$3,145.04 \\ 8,121.24$	8,121.24
4C	Puncating Willow Cheels	***************************************	8,469.13	8,469.13
4D	Willow Creek-Gulkana		15,130,36	15,130.36
4E	Gulkana-Sourdough		17.786.91	17.786.91
4F	Willow Creek-Gulkana Gulkana-Sourdough Sourdough-Mile 168 Mile 168-Delta River (M 204) Delta River-Rapids Banids-McCarty		15,017.62	15,017.62
4G	Mile 168-Delta River (M 204)	•••••	8,897.56	8,897.56
4H1	Della River-Rapids	*************	6,067.41	6,067.41
4H2	Rapids-McCarty McCarty-Richardson		$16,071.64 \\ 14,233.25$	$16,071.64 \\ 14,233.25$
4.]	Richardson-Salchaket	***************************************	17,041.80	17,041.80
41	Richardson-Salchaket Salchaket-Fairbanks, 1st sec Salchaket-Fairbanks, 2nd sec Salchaket-Fairbanks, 3rd sec. Dunbar-Fort Gibbon Willow Creek-Tonsing, 1st sec.		15,500.00	15,500.00
4K	Salchaket-Fairbanks, 2nd sec		16,553.20	16,553.20
(41)	Salchaket-Fairbanks, 3rd sec.		17,500.00	17,560.00
5.A	Dunbar-Fort Gibbon		526.44	526.44
6A	Willow Creek-Tonsina, 1st sec. Willow Creek-Tonsina, 2nd sec.	*******	13,350.00	13,350.00
$^{6\mathrm{A}}_{6\mathrm{B}}$	Willow Creek-Tonsina, 2nd sec.	••••••	10,410.72 12,210.08	10,410.72 12,210.08
6B	Tonsina-Chitina, 1st section Tonsina-Chitina, 2nd section		10,116.00	10,116.00
7C	Summit-Fairbanks Creek	***************************************	395.00	395.00
7D	Ester Creek		388.33	388.33
7G	77 1.1 1 (71)		5.61	5.61
7J	Fairbanks-Glmore Fairbanks-Chena Hot Springs Goldstream-O'Connor Creek Nome-Council Bonanza Ferry Safety Ferry Council Ferry Council-Ophir Creek Road Casa De Paga Bannart-Eureka	************	1,215.50	1,215.50
7R	Goldstream-O'Connor Creek	154.64		154.64
8 8A	Nome-Council		22,556.79	22,556.79 136.00
8B	Safety Ferry		136.00 386.00	386.00
8C	Council Ferry	***************************************	150.00	150.00
810	Council-Ophir Creek Road		1,002.50	1.002.50
8H	Casa De Paga		758.00	758.00
£9			45.00	45.00
[10 [10A	Seward-Kenai Lake	***************************************	4,731.03	4,731.03 35.00
11A	Seward-Radio Eagle-O'Brien		$35.00 \\ 4.516.62$	4,516.62
11B	O'Brien-Fortymile		353.50	353.50
11Ĉ	Steel Creek-Jack Wade		57.75	57.75
11D	O'Brien-Fortymile Steel Creek-Jack Wade Canyon Creek-Walkers Fork		500.00	500.00
11E	Eagle-Seventymile Jack Wade-Chicken Steel Creek-Moose Creek Liberty Cabin-Steel Creek		500.00	500.00
11F	Jack Wade-Chicken	***************************************	300.00	300.00 300.00
11G	Steel Creek-Moose Creek		300.00	150.00
11H 13A	Nome-Bessie		150.00	
13B	Bessie-Banner	***************************************	2,407.74 1,235,02	4 925.06
13C	Bessie-Little		966.94	
13F	Nome-Osborne		11,376.31	076 31
131	Nome River Bessie-Buster		925.72	925.72 996.99
13K	Bessie-Buster		996.99	
<u>(14.</u> 15	Sitka-Indian River	******	1,250.12	
15	Sitka-Indian River Circle-Miller House		3,130.36	
16 17	Fort Cibbon-Kaltag		17,872.34	17,300.00
18	Kaltag-Solomon		300.00 860.99	0.60.97
19E	Girdwood-Crow Creek	391 65	2,000.00	2,391.88
20B	Susitna-Rainy Pass	3,497.88		2,391.88 3,497.88 296.33
20H	Circle-Miller House Chatanika-Miller House Fort Gibbon-Kaltag Kaltag-Solomon Girdwood-Crow Creek Susitna-Rainy Pass Nancy-Susitna		296.33	230

ORT ALASKA ROAD COMMISSION.

NDITURES IN DETAIL.

TIONS AND "ALASKA FUND" AND FUNDS IE TERRITORY OF ALASKA AND OTHERS.

	Maintenance	Total
e Construction		
sland \$2 572.24	\$ 204.50 3,400.00	\$ 204.50 5,972.24
P HIXTERISION - POST		482.39
1 450 00	1,573.69	3,023.69
	6,955.93	6,955.93 $12,000.00$
Extension 12,000.00 100.00 5 039.30		100.00
ion 5,039.30		5,039,30
	10,642.03	10,642.03
10,000.00	2,757.38	12,757.38 $19,922.10$
19,922.10 inst section 9,000.00	***************************************	9,000.00 $12,785.96$
2nd sec 9,785.96	$3,000.00 \\ 3,145.04$	3,145,04
Dam		8.121.24
	8,469.13	8,469.13
Urone	8,121.24 $8,469.13$ $15.130.36$ $17,786.91$ $15.017.62$	15,130.36 $17,786.91$
	15,017.62	15,017,62
	8,897.50	8,897.56 6,067.41
1 (LL ==)	6.067.41	6,067.41
ius	16,071.64 14,233.25	16,071.64 $14,233.25$
1013	17,041.80	17,041.80
andt		19,500,00
ates 2nd sec.	16,553.20 17,500.00	16,553.20 17,500.00
nks. 3rd sec	526.44	526.44
bon	19 250 00	13,350.00
naine 2nd sec.	10,410.72 12,210.08	$\substack{10,410.72\\12,210.08}$
1st section	19,116.00	10.116.00
2nd section	395.00	395.00 388.33
(S 010011	388.33 5.61	388.33 5.61
:e	1,215.50	1,215.50
Hot Springs 154.64		$\substack{154.64 \\ 22,556.79}$
mor orear	22,556.79 136.00	136.00
	386.00	386.00
	150.00	150.00 1,002.50
	$1.002.50 \\ 758.00$	758.00
	45.00	45.00
Lake	4,731.03	4,731.03
	35.00 4,516.62	35.00 4,516.62
	353.50	353.50
le k Wade	57.75	57.75 500.00
Valkers Fork	500.00 500.00	500.00
k Wade	300.00	300.00
cken	300.00	300.00 150.00
Steel Creek	150.00 2,407.74	2,407,74
	1,235,02	1,235.02
***************************************	966.94	966.94 11,376.31
	11,376.31	925.72
	11,376.31 925.72 996.99	996.99
	1 950 12	1,250.12
ver	3,130.36 17,872.34	3,130.36 17,872.34 300.00
" HOUSE	300.00	300.00
altag	860.99	860.99 2,391.65
Creek	2,000.00	3,497.88 296.33
Creek 391.65 Pass 3,497.88		296.33
1 000		

EXPENDITURES IN DETAIL.—(Continued.)

Acct.	Name of Route	Construction	Maintenance	Total
21	Unalaklik-St. Michael		50,00	50,00
$\frac{21}{22}$			230.37	230.37
23 A	Chatanika-Beaver		29.14	29.14
23B	Chatanika-Beaver Beaver-Chandlar Chandlar-Koyukuk Caro-Flat Creek Caro-Coldfoot	·· ······	5,053.81	5,053.81 25.00
23C	Coro-Flot Creek		25.00 25.00	25.00 25.00
23D 23E	Caro-Coldfoot		500.00	500,00
2311	Mile 29 ANRR-Sunrise		1,281.70	1,281.70
24A	Lynx Creek-Sixmile Creek	396.00	•••••	396.00
24B	Mile 29 ANRR-Sunrise Lynx Creek-Sixmile Creek Sunrise-Hope Cripple River Penny River Mouth of Conton Creek	185.00		185.00
25A	Cripple River		64.95 88.00	64.95 88.00
25B	Mouth of Center Creek		385.00	385.00
25D 25E	Submarine Paystreak		550.75	550.75
25F	Penny River Mouth of Center Creek Submarine Paystreak Anvil-Glacier Snake River Extension Sinrock Ferry Candle-Candle Creek Kugruk River Approach Deering-Inmachuk Nome-Taylor Fort Gibbon-Koyukuk Hot Springs Landing-Eureka Tacotna-Flat Creek Flat-Crooked Creek Archangel Extension Mile 26½-Palmer Palmer-Matanuska River Willow Creek Extension Wasilla-Fish Hook Wasilla-Knik Topkok-Candle		64.80	64.80
25G	Snake River Extension		682.78 382.50	682.78
251	Sinrock Ferry		382.50	382.50
26	Candle-Candle Creek		4,982.61 488.00	4.982.61 488.00
26A	Deering-Inmachuk		6.371.04	6,371.04
$^{27}_{28A}$	Nome-Taylor	. 1.140.00	0,012	1,140.00
29	Fort Gibbon-Koyukuk		840.48	840.48
30	Hot Springs Landing-Eureka		5,001.72	5,001.72
32A	Tacotna-Flat Creek		42.50	42.50
32D	Archangel Extension	2 400 99	130.00	130.00 2,490.88
35A 35B	Mile 2614 Palmer	3 942 54	1,000.00	4,942.54
35C	Palmer-Matanuska River		1,021.25	1,021.25
35D	Willow Creek Extension	9,601.20	10,000.00	19,601.20
35E	Wasilla-Fish Hook	877.16		877.16
35F	Wasilla-Knik	************	781.05	781.05
37	Topkok-Candle		$210.00 \\ 4,659.48$	$210.00 \\ 4.659.48$
38A 38B	Long Creek-Cripple City		706.94	706.94
38C	Wasilla-Knik Topkok-Candle Ruby-Long Creek Long Creek-Cripple City Ophir-Tacotna, Ist section. Ophir-Tacotna, Ist section. Ophir-Tacotna, 3rd section. Solatna Bridge Juneau-Sheep Creek Kiana-Klery Creek St. Michael-Kotlik Skagway-Smugglers Cove Silver Bow Basin Roosevelt-Kantishna Lignite-Kantishna Nenana-Knights Roadhouse Kuskokwim Reconnaissance Iliamna Bay-Iliamna Lake Davidsons Landing-Taylor Talkeetna-Cache Creek, 1st section		335.25	335.25
38D	Ophir-Tacotna, 1st section	15,000.00	292.42	15,292,42
38D	Ophir-Tacotna, 2nd section	. 11,000.00	3,650.00	14,650.00
38D	Ophir-Tacotna, 3rd section	9,000.00	2,350.00	11,350.00
38E	Juneau Cheon : Crook	3,357.21	1,103.74	3,557.27 $1,103.74$
$\frac{39}{41}$	Kiana-Klery Creek	***************************************	237.15	237.15
42	St. Michael-Kotlik		270.00	270.00
144A	Skagway-Smugglers Cove	11,158.71	*******	11,158.71
145	Silver Bow Basin	0.004.00	299.69	299.69
46A	Rooseveit-Kantishna	8,954.09	***************************************	8.964.09 11,966.91
46B 46C	Nenana-Knights Roadhouse	1 499 80		1,499.80
46E	Kuskokwim Reconnaissance	831.75	903 63	831.75
48	Iliamna Bay-Iliamna Lake	4,745.93		5.649.56
49	Davidsons Landing-Taylor	***************************************	1,032.00	1,032.00
51	Talkeetna-Cache Creek, 1st	10 000 00	# 100 OO	15 500 60
51	section Sectio	10,200.00	7,300.00	17,5 00.00
91	section	12,209,92	2,700.00	14,909.92
51A	Upper Yentna	901.26	100.00	901.26
53	Upper YentnaEagle-Circle		100.00	100.00
57	McCarthy-Nizina Nizina Bridge Fairbanks Bridge		2,853.95	2.853.95
57A	Nizina Bridge	8,190.33	6.40	8,190.33
67A 62	Dime Creek Cordurov	**************************	14,041.80	6.40 $14,041.80$
63	Dunbar-Brooks		366.50	366.50
64	Cripple-Lewis Landing		100.00	100.00
65A	Dime Creek Corduroy Dunbar-Brooks Cripple-Lewis Landing Gulkana-Chistochina		656.00	656.00
65B	Chistochina-Slate Creek	***************************************	109.50	109.50
65C 65D	Vatchumstuk-Tanana Crossing	***************************************	$92.20 \\ 72.00$	92.20 72.00
67A	Teller-Lost River		420.00	420.00
68	Flagging Trails	***************************************	5,363.20	5,363.20
72	Guirana-Chistochina Chistochina-Slate Creek Chistochina-Tanana Crossing Ketchumstuk-Tanana Crossing Teller-Lost River Flagging Trails Wrangell-Oil Dock Marshall Road Kotlik-Marshall	4,964.97	356.50	4,964.97
73	Marshall Road		356.50	356.50
73A 73B	AUHK-Marshail	850.00		850.00
175	Kotlik-Marshall Stuyahok Trail Anchorage-Eagle River	850.00 660.00 8,446.07		$660.00 \\ 8,446.07$
SHARE TO		0,110.01	. *****	0,110.01

ANNUAL REPORT ALASKA ROAD COMMISSION.

EXPENDITURES IN DETAIL.—(Continued.)

Acet.	Name of Route	Construction	Maintenance	Total
76	Govt. Railroad-Valdez Creek	1,139.58	***************************************	1,139.58
77	Shelton Ferries		300.00	300.00
77A	Ferries		466.79	466.79
77B	Bull Creek Bridge	*******	45.00	45.00
78	Valdez Depot	•••••	1,036.20	1,036.20
79	Seward Depot		3,148.89	3,148.89
81	Good Creek-Salmon River			362.39
82	Taku Reconnaissance			899.21
83	Talkeetna-Iron Creek		*****************	273.5 0
86	Nation	560.75	***************	560.75
87	Woodchopper Creek	62 .00	***************************************	62.00
88	Govt. Railroad-Moose Creek	499.69		499.69
89_	Kougarok Reconnaissance	3,984.66	••••••	3,984.66
90B	Shelter Cabins, 2nd Division	1,500.00	************	1,500.00
90C	Shelter Cabins, 3rd Division	1,200.00	***************************************	1,200.00
91	Yakutat	50.55		50.55
92A	Bethel-Quinhagak		****************	_11.50
92B	Bethel-Akiak	783.48	***************************************	783.48
95	Alaska Peninsula Reconnais	573.20		573.20
100	Office	6,910.04	13,820.08	20,730.12
	Totals\$	236,216.91	\$447,030.77	\$683,247.68

EXPENDITURES IN DETAIL—COOPERATIVE FUND.

(Included in preceding Table.)

FIRST DIVISION.

Acct. 1 2 3 3D 14 44A 72 81 91	Name of Route Pr. of Wales Is. Portage\$ Juneau System Haines-Pleasant Camp Haines-Mud Bay Sitka-Indian River Skagway-Smugglers' Cove Wrangell-Oil Dock Strawberry Point Yakutat	10,881.75 17,086.94 39.30 0.00 9,194.96 2,964.97 62.39	Territorial \$ 0.00 0.00 1,968.99 5,000.00 500.00a 1,963.75b 2,000.00c 300.00 6.82	Total \$ 204.50 10,881.75 19,055.93 5,039.30 500.00 11,158.71 4,964.97 362.39 50.55
	Totals\$	40,478.54	\$ 11,739.56	\$ 52,218.10
	SECOND DI	VISION.		
	ozoone e.	71010111		
Acct.	Name of Route	Federal	Territorial	Total
8 & 25 13& 25 13I 18 21 25G 26 27 28 37 41 42 49 62 67 68 73 89 90B	Nome-Council Ferries Nome Locals Nome River Extension Kaltag-Solomon Unalakleet-St. Michael Snake River Extension Candle-Candle Creek Deering-Inmachuk Dahl Creek-Candle Topkok-Candle Kiana-Klery Creek St. Michael-Kotlik Davidson's Landing-Taylor Dime Creek Corduroy Nome-Prince of Wales Flagging Winter Trails Marshall-Kotlik Nome-Keewalik Recon. Shelter Cabins	1.491.79 10,847.06 363.97 860.99 50.00 682.78 4,941.49e 371.04 1,140.00 210.00 237.15 270.00 32.00 7,680.51 420.00 4,657.20 1,510.00f 3,984.66	\$ 15,325.87 374.50 7,289.44 561.75 0.00 0.00 0.00 529.12 6,000.00 0.0	\$ 24,317.29 1,866.29 18,136.50 925.72 860.99 682.78 5,470.61 6,371.04 1,140.00 237.15 270.00 1,032.00 14,041.80 421.00 5,363.20 1,866.50 3,984.66
	Totals \$	48 742 06	\$ 40 004 47	\$ 88,746.53

ANNUAL REPORT ALASKA ROA

Name of Route

THIRD DIVISION

Federa

10 20 51 57 60 90C	Seward-Kenai Lake \$ 4,731.0 Rainy Pass Trail 1,794.2 Talkeetna-Cache Creek 18,821.2 McCarthy-Nizina 6,044.2 Valdez Dike 0.0 Shelter Cabins 0.0
	Totals
	FOURTH DIVISION
Acet.	Name of Route Federal
7 9 11 15 16 22 30 38A 38D 46 63 92	Fairbanks Local Roads \$ 2,159.08 Rampart-Eureka 45.00 Eagle-Fortymile 6,677.87 Circle-Miller House 3,130.36 Chatanika-Miller House 17,872.34 Hot Springs-Sullivan 230.37 Hot Springs Landing-Eureka 5,001.72 Ruby-Long 4,659.48 Ophir-Tacotna 38,222.80 Roosevelt-Kantishna-R.R. 20,663.98 Brooks-Dunbar 366.50 Bethel Trails 294.98
	Totals\$ 99,324.48i

Acct.

SUMMARY.

Tay .	Federal
Third Division	40,478.54 48,742.06 31,390.87 99,324.48

Grand Totals\$219.935.95

a-Contributed by City of Sitka.

b-Includes \$463.75 from Alpine Club of Skag c-Includes \$500.00 from City of Wrangell.

d-Includes Council Local Roads.

e-Includes Kugruk River Approach.

f-Includes Stuyahok Trail.

g—Contributed by City of Valdez.

h—Exclusive of \$7.812.19 expended by Divisi on Anchorage and Matanuska Local Relimination of the control of

j-Exclusive of \$21,324.25 expended by Divisi on Fairbanks Local Roads.

ES IN DETAIL.—(Continued.)

c	onstruction	Maintenance	Total
ez Creek	1,139.58	300.00 466.79 45.00 1.036.20	1,139.58 300.00 466.79 45.00 $1,036.20$
		3,148.89	3,148.89
River	$362.39 \\ 899.21$		362.39 899.21
e	273.50		273.50 560.75
· · · · · · · · · · · · · · · · · · ·	$\begin{array}{c} {\bf 560.75} \\ {\bf 62.00} \end{array}$		62.00
se Creek	499.69 $3.984.66$		499.69 3,984.66
ssance Division	1,500.00		1,500.00 $1,200.00$
l Division	1,200.00 50.55	***************************************	50.55
	$\frac{11.50}{783.48}$	***************************************	11.50 783.48
econnais	573.20 6,910.04	13,820.08	573.20 20,730.12
	\$236,216.91	\$447,030.77	\$683,247.68

N DETAIL—COOPERATIVE FUND.

uded in preceding Table.)

FIRST DIVISION.

3. Portage\$	Federal 204.50 10,881.75 17,086.94 39.30 0.00 9,194.96 2,964.97 62.39 43.73	Territorial \$ 0.00 0.00 1,968.99 5,000.00 500.00a 1,963.75b 2,000.00c 300.00 6.82	Total \$ 204.50 10,881.75 19,055.93 5,039.30 500.00 11,158.71 4,964.97 362.39 50.55
	40,478.54	\$ 11,739.56	\$ 52,218.10

SECOND DIVISION.

Route	Federal	Territorial	Total
	8,991.42d	\$ 15,325.87	\$ 24,317.29
\$	1,491.79	374.50	1,866.29
	10,847.06	7,289.44	18,136.50
	363.97	561.75	925.72
xtension	860.99	0.00	860.99
l		0.00	50.00
Michael	$50.00 \\ 682.78$	0.00	682.78
xtension		529.12	5,470.61
Creek	4,941.49e	6,000.00	6,371.04
ι uk	371.04	0.00	1,140.00
ndle	1,140.00	0.00	210.00
***************************************	210.00	0.00	237.15
reek	237.15	0.00	270.00
tlik	270.00	1,000.00	1,032.00
nding-Taylor	32.00		14.041.80
rduroy	7,680.51	$6,361.29 \\ 0.00$	420.00
Wales	420.00		5,363.20
r Trails	4,657.20	706.00	1,866.50
	1,510.00f	356.50	3,984.66
Recon	3,984.66	0.00	1,500.00
	0.00	1,500.00	1,500.00
	40 742 06	\$ 40,004.47	\$ 88,746.53

THIRD DIVISION.

Acct.	Name of Route	Federal	Territorial	Total
10 20 51 57 60 90C	Seward-Kenai Lake Rainy Pass Trail Talkeetna-Cache Creek McCarthy-Nizina Valdez Dike Shelter Cabins	1.794.21 18,821.35 6,044.28	\$ 0.00 2.000.00 13.588.57 5.000.00 220.02g 1,200.00	$\begin{array}{c} \$ & 4.731.03 \\ 3.794.21 \\ 32.409.92 \\ 11.044.28 \\ 220.02 \\ 1,200.00 \end{array}$
	Totals	\$ 31,390.87	\$ 22,008.59h	\$ 53,399.46
	FOURTH D	IVISION.		
Acet.	Name of Route	Federal	Territorial	Total
7 9 11 15 16 22 30 38 A 38 D 46 63 92	Fairbanks Local Roads Rampart-Eureka Eagle-Fortymile Circle-Miller House Chatanika-Miller House Hot Springs-Sullivan Hot Springs Landing- Eureka Ruby-Long Ophir-Tacotna Roosevelt-Kantishna-R.R. Brooks-Dunbar Bethel Trails	45.00 6,677.87 3,130.36 17,872.34 230.37 5,001.72 4,659.48 38,222.80	\$ 0.00 0.00 0.00 0.00 0.00 0.00 0.00 3.069.62 1,766.82 0.00 500,00	\$ 2,159.08 45.00 6,677.87 3,139.36 17,872.34 230.37 5,001.72 4,659.48 41,292.42 22,430.80 366.50
	Totals\$		\$ 5,336.441	794.98
	SUMMA		ψ 0,000.11j	\$104,000.9Z
	CHIMA	.n.,		
First Div	rision	Federal	Territorial	Total
Secona D Third Div	ivision vision ivision	40,478.54 48,742.06 31,390.87 99,324.48	\$ 11,739.56 40,004.47 22,008.59 5,336.44	\$ 52,218.10 88,746.53 53,399.46 104,660.92
	Grand Totals\$	219,935.95	\$ 79,089.06	\$299.025.01
b—Inc c—Inc d—Inc e—Incl f—Incl g—Con h—Exc i—Incl ' i—Exc	atributed by City of Sitka. Indes \$463.75 from Alpine Club luds \$500.00 from City of Wraludes Council Local Roads. Indes Kugruk River Approach. Indes Stuyahok Trail. Itributed by City of Valdez. Indusive of \$7.812.19 expended in Anchorage and Matanuska undes belated bills from previous of \$21,324.25 expended in Fairbanks Local Roads.	ngell. by Division Local Road	al Commissio s.	n, mainly

CONTRIBUTED FUNDS.

ESS APPROVED JUNE 30, 1921, ALASKA SPECIAL FUND

| 1pproved April 21, 1919.
| Trails and Ferries. | \$115.517.94 |
| 85,746.61 |
| Roads, etc.... | | 28,000.00 |
| 43,237.28 |
| Nizina River Bridge | 5,000.00 |
| Shelter Cabins | 6,500.90 |
| \$284,001.83 |
chl	500.00
Skagway	463.75
contributed Funds	\$285,685.60

III. EXPENDITURE OF OTHER FUNDS SUPERVISED BY THE BOARD.

Accol	RMAN, 3RD DIVISION		
No.	Name	Miles	Expenditure
	Overhead		\$ 45.33
10B	Seward-Nash	21/2	400.00
35G 35H	Seward-Nash Palmer-Springer Wasilla-Finger Lake Moose-Palmer Valdez-Mineral Creek Granby Road	3 7	$418.00 \\ 4,714.15$
351	Moose-Palmer	\dot{i}	236.62
36	Valdez-Mineral Creek	101/2	91.20
36A	Granby Road Lake Spenard Chulitna Ferry	5	495.97
5A	Chulitaa Ferry	31/2	533.75
)3			877.17
	Total Balance	*********	\$ 7.812.19
	Balance		1,087.81
	Total Allotted		\$ 8 900 00
iti 7 II	RMAN, 4TH DIVISION		
ccou			\$21,324
No.	Name	Miles	Expenditure
<u></u> .	Overhead		\$ 65.00
7A	Summit-Chatanika	11	525.00
7B 7D	Fairbanks-Ester Crook	13	230.00
7Ğ	Fairbanks-Gilmore	13 19	2.916.30
7Ĥ	Little Eldorado Creek	11/4	3,890.90
71	Gilmore-Summit	6	336.00 2,965.32
īĴ	Fairbanks-Chena H. S.	64	1,052.35
K.	Olnes-Livengood	54	221.25
7N 7S	Grachi Bridge	$6\frac{1}{2}$	4,814.89
5A	Central H. Circle H S		105.97
)	H. S. Landing-Eureka	24	$620.50 \\ 1,147.36$
6A.	Roosevelt-Kantishna	34	655.03
3	Summit-Chatanika Fox-Olnes Fairbanks-Ester Creek Fairbanks-Gilmore Little Eldorado Creek Gilmore-Summit Fairbanks-Chena H. S. Olnes-Livengood Farmers Birch Hill Graehl Bridge Central HCircle H. S. H. S. Landing-Eureka Roosevelt-Kantishna Dunbar-Brooks	63	1,778.38
	Total Balance		\$21,324.25
	Balance	······································	675.75
	Total Allotted		\$22,000.00
For	the Quartermaster General, U.S. A	·my:	
For	t William H. Seward water supply .		\$ 2,502.0
Dis	tributed as follows:		
	Lumber		\$ 16.10
	Piling Pile Points Class Poot		
	Fuel and Repairs		240.00
	Fuel and Repairs	······	1,614,27
	Total		
For	the Chief of Engineers, U. S. Army:		
Riv	ers and Harbors, Fish Traps, etc		947 F00 1
Dis	tributed as follows:	•••••••••	
	Improvement of Nome Harbor		\$38 010 96
	Survey of Wrangell Harbor	*****************	85.00
	Survey of Wrangell Narrows		2,931.27
	Fish Trans Public Userings	·····	690.37
	Improvement of Nome Harbor Survey of Wrangell Harbor Survey of Wrangell Narrows Investigation of Port Facilities Fish Traps, Public Hearings, etc. Increased Compensation, 1921-22	·····	5,345.86 440.00
	Total		\$47.502.46
	Total supervised funds (19		



