

ANNUAL REPORT OF THE ALASKA ROAD COMMISSION

FISCAL YEAR 1930

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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

TWENTY-SIXTH ANNUAL
REPORT

1930

PART II
OPERATIONS

BOARD OF ROAD COMMISSIONERS
FOR ALASKA

JUNEAU, ALASKA

1930

Alaska Road Commission,
Juneau, Alaska, October 1, 1930.

The Honorable, The Secretary of War
(Through The Chief of Engineers, United States Army)
Washington, D. C.

SIR:

In compliance with the provisions of Sec. 2 of an Act of Congress approved January 27, 1905, as amended by Act approved May 14, 1906, I have the honor to submit the attached report of the operations of the Board of Road Commissioners for Alaska for the fiscal year ending June 30, 1930:

Maj. Douglas H. Gillette, Corps of Engineers, was relieved as engineer officer of the Commission on February 15, 1930. The undersigned was appointed engineer officer in addition to his duties as president and served as such to include June 24, 1930.

Maj. Layson E. Atkins, Corps of Engineers, reported for duty June 24, 1930, and has served since June 25, 1930 as engineer officer of the Commission.

First Lieut. Philip R. Gargas, Corps of Engineers, assumed the duties of secretary and disbursing officer on August 1, 1929, relieving First Lieut. Emerson C. Itschner, Corps of Engineers, who remained on duty with the Commission to include August 22, 1929. First Lieut. James C. Christiansen, Corps of Engineers, succeeded Lieut. Gargas as secretary and disbursing officer on February 1, 1930. Lieut. Gargas remained on duty with the Commission to include April 4, 1930.

First Lieut. Emerson L. Cummings, Corps of Engineers, remained on duty with the Commission to include August 29, 1929.

Second Lieuts. Leland B. Kuare and Raymond B. Oxrieder, Corps of Engineers, reported for duty August 19, 1929 and have remained on duty with the Commission throughout the remainder of the year.

The duties of this Commission, whose members also serve on river and harbor work under the Chief of Engineers, have required close cooperation with Territorial and Federal agencies. This cooperation has been accomplished without friction and has resulted in efficient execution of public works and economical expenditures of Federal and Territorial funds. These desirable results are attributable in part to the authority vested in the Commission by law to handle its business "of its own motion" and make decisions in Alaska.

The accomplishments during the past year are shown in the report.

Respectfully,

MALCOLM ELLIOTT.

Major, Corps of Engineers, U. S. Army.

President.

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REPORT UPON THE CONSTRUCTION AND MAINTEN-
ANCE OF MILITARY AND POST ROADS, BRIDGES,
AND TRAILS, ALASKA; and of other Roads, Tram-
ways, Ferries, Bridges, Trails and Related Works in
the Territory of Alaska.

REPORT OF THE BOARD OF ROAD COMMISSIONERS
FOR ALASKA.

Malcolm Elliott.....President.
D. H. Gillette.....Engineer Officer.
J. G. Christiansen.....Secretary and Disbursing Officer.

For description of Project Under This Commission see Part I of
this Report, contained in Annual Report of the Chief of Engineers,
United States Army.

STATUTORY AUTHORITY.

An act to provide for the construction and maintenance of roads
* * * * * in the District of Alaska, and for other purposes.

~~Be it enacted by the Senate and House of Representatives of the~~
United States of America in Congress assembled, That all monies
derived from and collected for liquor licenses, occupation or trade
licenses, outside of the incorporated towns in the Territory of Alaska,
shall be deposited in the Treasury Department of the United States,
there to remain as a separate and distinct fund, to be known as the
"Alaska Fund" and to be wholly devoted to the purposes hereinafter
stated in the Territory of Alaska * * * * * and all the residue (65%
of total fund) of said fund shall be devoted to the construction and
maintenance of wagon roads, bridges, and trails in said Territory
* * * * *

SECTION 2. That there shall be a board of road commissioners
in said district, to be composed of an engineer officer of the United
States Army to be detailed and appointed by the Secretary of War,
and two other officers of that part of the army stationed in said
district and to be designated by the Secretary of War. The said
engineer officer shall, during the term of his said detail and ap-
pointment, abide in said district. The said board shall have the
power, and it shall be their duty, upon their own motion or upon
petition, to locate, lay out, construct, and maintain wagon roads and
pack trails from any point on the navigable waters of said district
to any town, mining or other industrial camp or settlement, or between

any such towns, camps, or settlements therein, if in their judgment such roads or trails are needed and will be of permanent value for the development of the district; but no such road or trail shall be constructed to any town, camp, or settlement which is wholly transitory or of no substantial value or importance for mining, trade, agricultural, or manufacturing purposes. * * * * * In case no responsible and reasonable bid can be secured, then the work may be carried on with material and men procured and hired by the board. The engineer officer of the board shall in all cases supervise the work of construction and see that the same is properly performed. * * * * * It shall be the duty of said board, as far as practicable, to keep in proper repair all roads and trails constructed under their supervision, and the same rules as to the manner in which the work of repair shall be done, whether by contract or otherwise, shall govern as in the case of the original construction of the road or trail. The cost and expense of laying out, constructing, and repairing such roads and trails shall be paid by the Secretary of the Treasury, through the authorized disbursing officer of the board, designated by the Secretary of War, out of the road and trail portion, of said "Alaska Fund" upon vouchers approved and certified by said board. * * * * * (Act of January 27, 1905, as amended by Acts of May 14, 1906 and March 3, 1913.)

Provided, That hereafter, so long as the construction and maintenance of "Military and Post" Roads in Alaska, and of other roads, bridges, and trails in that Territory shall remain under the direction of the Secretary of War, he be authorized to submit such estimates for the consideration of Congress as are in his judgment necessary for a proper prosecution of the work. (Act of July 9, 1918). Hereafter when an appropriation for this purpose for any fiscal year shall not have been made prior to the 1st day of March preceding the beginning of such fiscal year, the Secretary of War may authorize the Board of Road Commissioners to incur obligations for this purpose of not to exceed 75 per centum of the appropriation for this purpose for the fiscal year then current, payment of these obligations to be made from the appropriation for the new fiscal year when it becomes available. (Act of Feb. 12, 1925).

Provided, That the Secretary of War is hereby authorized to receive from the Territory of Alaska, or other source, such funds as may be contributed by them to be expended in connection with funds appropriated by the United States for any authorized work of construction, repair, and maintenance of roads, bridges, ferries, trails, and related works in the Territory of Alaska, and to cause such funds to be deposited to the credit of the Treasurer of the United States, and to expend the same in accordance with the purpose for which they were contributed. (Act of June 30, 1921).

CURRENT APPROPRIATION.

Construction and Maintenance of Roads, Bridges, and Trails. Alaska: For the construction, repair, and maintenance of roads, tramways, ferries, bridges, and trails, Territory of Alaska, to be expended under the direction of the Board of Road Commissioners described in Section 2 of an Act entitled "An Act to provide for the construction and maintenance of roads, the establishment and maintenance of schools, and the care and support of insane persons in the District of Alaska, and for other purposes," approved January 27, 1905, as amended by the Act approved May 14, 1906, and to be expended conformably to the provisions of said Act as amended to be immediately available. (Act of May 28, 1930).

OPERATIONS DURING THE FISCAL YEAR.

The work during the fiscal year ending June 30, 1930, was executed under appropriations for "Construction and maintenance of roads, bridges, and trails, Alaska, 1929-1930" approved February 28, 1929, and "1930-1931," approved May 28, 1930, and from receipts from the "Alaska Fund," Act of Congress approved January 27, 1905, as amended by Act approved May 14, 1906. Work was also done which was covered by funds contributed by the Territory of Alaska, the National Park Service and others, Act of Congress approved June 30, 1921.

The work in the last fiscal year was largely directed to maintaining the existing system and the improvement of the more important routes for the use of motor vehicles. New construction was confined to a few major projects upon which work has been in progress for several years.

The work accomplished during the fiscal year may be summarized as follows:

New construction: 37 miles road, 38 miles trail, 780 linear feet bridges over 60 ft. span, 11 airplane landing fields, and 14 shelter cabins.

Improvement: 58½ miles road reconstructed, 66¼ miles road surfaced, 2 miles Tolovana tramway rebuilt and numerous small bridges and culverts rebuilt.

Maintenance: 1342½ miles road, 85 miles tramway, 905¼ miles sled road, 4277¼ miles permanent trail, 314 miles temporary flagged trail, 736 miles telephone lines, 29 airplane landing fields and 40 shelter cabins.

Total for all classes of work: 7126¼ miles consisting of 1504¼ miles of road, 87 miles tramway, 905¼ miles sled road, 4315¼ miles of permanent trail, 314 miles temporary flagged trail.

The more important roads upon which new construction was performed were the McCarthy-Nizina, Chatanika-Circle, Mount McKinley National Park, Gulkana-Chistochina, Long-Poorman, Haines-Chilkoot, Kaslof, Iliamna, Circle Hot Springs and Nome-Council. The bridge renewal program was continued. The more important structures upon which new construction or extensive repairs were performed included bridges across Chistochina River, Noyes Slough and East Fork.

The important Richardson Highway was maintained open during the entire season. Improvement to new standard was continued and except for a few short sections this road is now in excellent condition for auto traffic. As a result of the rapid improvement both local and tourist travel has continued to increase. During the 1930 season tourist travel began in June.

Surfacing of the Steese Highway was continued. As a result of the improvement traffic over this route continued to increase. During the 1930 season travel began over this route in May.

Construction of the road from Gulkana on the Richardson Highway to Chisana, through the mineralized belt north of the Wrangell Mountains was continued. This is now the major new project under construction.

Work was started late in 1929 and an unusual amount of precipitation during the summer greatly retarded the progress of the work.

The roads constructed by the Commission, originally intended for wagon traffic are now generally of higher standard suitable for automobiles and light trucks. The demand for roads of this type is increasing, and effort is made in each case to provide a gravel surface for the road.

ORGANIZATION.

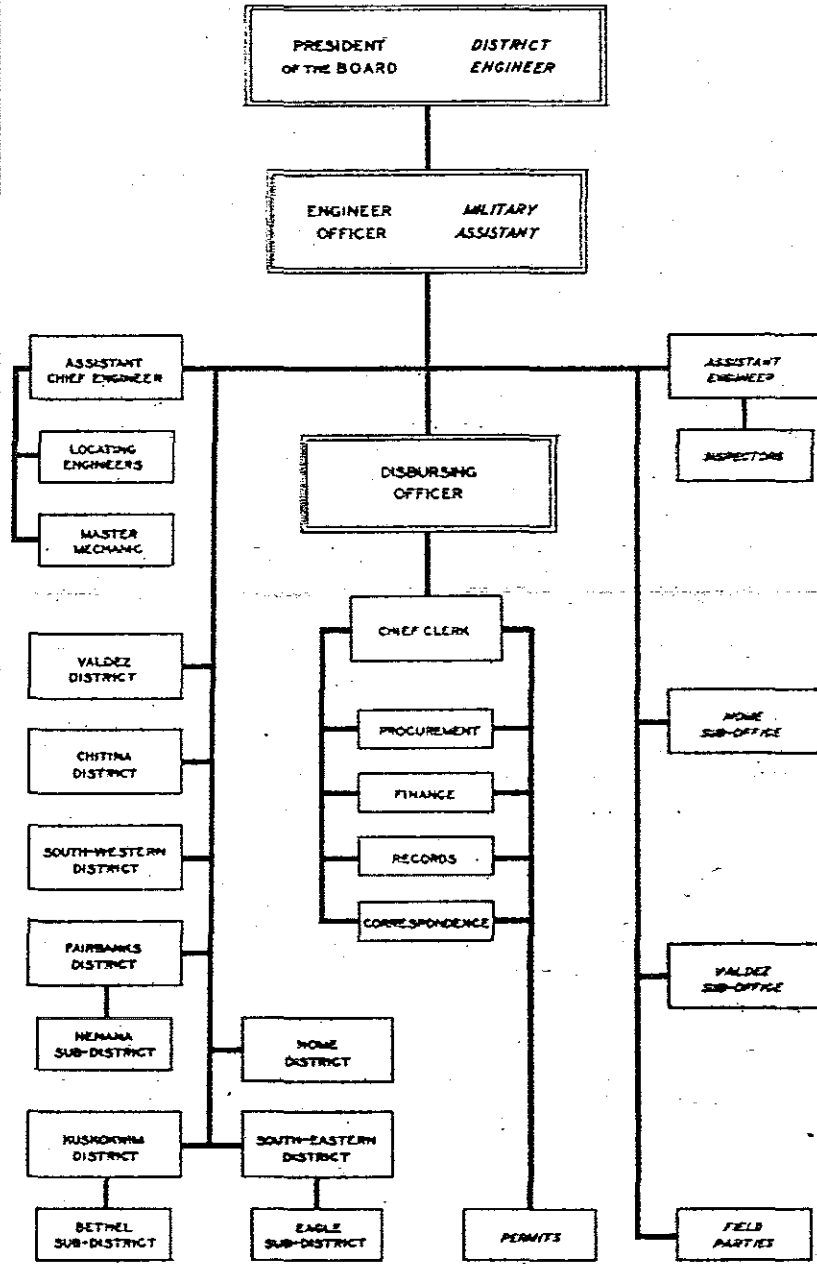
The headquarters of the Commission are located at Juneau; a sub-office is maintained at Washington, D. C., as required. The Territory is divided into seven districts and three sub-districts with boundaries as shown on the maps accompanying the district reports herein.

Each district is in charge of a Superintendent who supervises the work of the local foremen. The members of the organization are experienced men who in nearly all cases have been with the Commission many years.

DUAL ORGANIZATION CHART

ALASKA ROAD COMMISSION AND JUNEAU ENGINEER DISTRICT

CONSISTING OF -
 A PRESIDENT
 AN ENGINEER OFFICER
 A DISBURSING OFFICER



MACHINERY AND EQUIPMENT.

The following additional equipment was purchased during the fiscal year:

- 17 Auto Trucks, Ford, 1-yd. dump.
- 4 Auto Trucks, Ford, 1½-ton freight.
- 5 Auto Trucks, Ford, light cargo.
- 2 Compressors, air, portable.
- 4 Graders, tractor-drawn.
- 4 Jackhammers.
- 4 Maintainers, road, tractor-drawn.
- 4 Mowers, highway.
- 2 Plows, reversible backfiller attachment for 30 tractor.
- 9 Scrapers, automatic Fresno.
- 1 Shovel, gas, 1/3-yd.
- 8 Tractors, Caterpillar 30.
- 1 Tractor, Caterpillar 60.

The high cost of labor has made necessary the prosecution of as large a part of the work as possible with mechanical equipment.

The Commission is now well equipped to handle engineering construction anywhere in the Territory. Its major items of equipment include the following:

- ~~2 Auto Trucks, Dodge.~~
- 123 Auto Trucks, Ford.
- 40 Auto Trucks, G. M. C.
- 1 Auto Truck, Pierce Arrow.
- 1 Auto Truck, White.
- 7 Boilers, steam.
- 1 Boiler, piledriver.
- 2 Cars, gasoline section.
- 8 Cars, roller bearing push.
- 4 Compressors, air, portable.
- 2 Crushers, stone.
- 1 Drum, hoisting.
- 30 Drags, road.
- 1 Drag, planer.
- 2 Drag Lines, gasoline.
- 2 Derricks, motor.
- 2 Ditchers, road.
- 1 Engine, donkey.
- 6 Engines, hoisting.
- 34 Graders, road, tractor drawn.
- 12 Graders, road, horse drawn.
- 9 Graders, power.

- 1 Hoist, Allison.
- 10 Jackhammers.
- 4 Levels, surveying.
- 1 Loader, bucket, power driven.
- 1 Loader, belt conveyor, portable.
- 2 Locomotives, gasoline.
- 3 Machines, mowing, horse drawn.
- 8 Machines, mowing, tractor attachment.
- 12 Maintainers, tractor drawn.
- 5 Pile-drivers, complete.
- 49 Plows.
- 2 Plows, reversible backfiller attachment for 30 tractor.
- 1 Plow, snow, lateral rotary type.
- 8 Rollers, road.
- 3 Saws, power driven.
- 1 Sawmill, portable.
- 1 Scarifier.
- 58 Scrapers, slip.
- 5 Scrapers, wheel.
- 1 Scraper, self-loading, tractor drawn.
- 14 Scrapers, Fresno.
- 16 Scrapers, automatic, tractor drawn.
- 1 Shovel, 2-yd. steam.
- 7 Shovels, 1/2-yd. gasoline.
- 47 Sleds, bob.
- 29 Tractors, Caterpillar 30.
- 4 Tractors, Caterpillar 60.
- 5 Tractors, Holt.
- 1 Tractor, Case.
- 3 Tractors, Fordson, crawler track.
- 11 Tractors, Fordson.
- 30 Trailers, Highway.
- 7 Transits, surveying.
- 71 Wagons.
- 4 Welding, Outfits.
- 14 Winches, hand.

PROGRESS OF THE WORK.

The high scale of wages and supplies in the Territory is a large element in the cost of this work. The rate paid for labor varies from \$3.50 to \$8 per day with board for common labor. The cost of subsistence and forage is also correspondingly high. Besides these high costs, the nature of the work in Alaska adds to the cost in a way to make comparisons with road work in the United States difficult. In the roads built here the cruising, clearing, grubbing and construction of the road includes all work done upon the roads in the settled parts

of the United States from pioneer days. Even with this the mileage list of our roads can be looked upon with a great deal of gratification.

In the classification of the Commission, roads are any roads cleared, grubbed, ditched, graded, and drained sufficiently to accommodate wagon traffic. Light motor vehicles are now using these roads in increasing numbers. This requires a gravel surface at an increased first cost, but with an eventual saving in annual maintenance charges.

Sled roads are cleared and grubbed like wagon roads, but not graded. They are drained only sufficiently to prevent their destruction by the summer rains. Their wearing surface is of snow. Double bob-sleds, drawn by two, four or more horses haul heavy loads over these roads as well as over the wagon roads in winter time. During the past few seasons, caterpillar tractors have been successfully used during the winter time, and such traffic is expected to increase.

Trails include any construction less than the above, suitable for dog-sleds or single horse-drawn double-ender in winter and pack trains in summer. Except where frozen river surfaces are used some work is always necessary to permit the use of dog teams.

Flagged trails represent cut-offs across frozen lakes, arms of the sea, etc. The marks are necessary to prevent travelers from getting lost in bad weather.

The growth of the road system is shown in the diagram facing page 42 of this report. Only net increases are shown as the short sections abandoned from time to time because of disuse are not included. The following table summarizes the status of the work to date:

STATUS	MILEAGE					Grand Total
	Road	Sled Road	Trail	Total	Flagged	
1929 Report	1,031	636	3,223	4,890	712	5,602
ADDITIONS:						
New Mileage	755½*	819¼	5,144	6,719	.....	6,719
Reclassified	170	256½	80	506½	.....	506½
GRAND TOTAL	1,956½	1,711¼	8,447	12,115½	712	12,827½
DEDUCTIONS:						
Transferred to other						
Bureaus	116½	9	45½	171¼	.....	171¼
Reclassified	33½	173½	299½	506½	.....	506½
Abandoned or dropped account duplication of routes	99	125½	918	1,142½	.....	1,142½
NET TOTAL	1,707¼	1,403¾	7,184	10,295¼	712	11,007¼
*—Includes 87 miles tramroad.						
No work 1930	115½	498½	2,868¾	3,483	398	3,881
Work 1930	1,591¼	905¼	4,315¼	6,812¼	314	7,126¼

From the above table it will be noted that the present system aggregates 11,007¼ miles, consisting of 1,620¼ miles of road, 87 miles

of tramroad, 1,403½ miles of sled road, 7,184 miles of trail and 712 miles of temporary flagged trail. The net gain in mileage for the seven year period has been 5,405½ miles, including 589½ miles of road, 87 miles of tramroad, 767½ miles of sledroad and 3,961 miles of trail.

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

DISTRICT	Road	Sled Road	Trail	Flagged Trail	Total
Southeastern Alaska	85½	—	23	—	88½
Eagle	24	78	109	—	211
Bethel	—	28	622	—	648
Valdez	100	—	—	—	100
Chitina	249½	—	385	—	635½
Fairbanks	489½	313	161	—	943½
Nenana	183½	389½	571	—	1,073½
Southwestern Alaska	289½	33½	172½	—	445½
Kuskokwim	76½	62½	609	—	747½
Nome	243½	—	23	314	2,243½
Totals	1,591½	965½	4,315½	314	7,128½

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

F. Y.	W. D. Acts	Alaska Fund	Other Funds*	Total
1945	\$ —	\$ 23,000.00	\$ —	\$ 23,000.00(a)
1946	118,172.09	57,420.77	—	175,692.86(a)
1947	197,930.91	148,814.79	—	346,745.70(b)
1948	244,857.18	120,772.72	—	365,629.90(b)
1949	236,874.97	146,971.93	—	383,846.90(b)
1949	237,498.50	162,898.29	—	340,396.79(b)
1949	160,690.00	166,777.95	—	266,777.95
1949	150,194.68	167,392.49	—	317,466.07
1949	—	17,052.23(c)	—	17,052.23
1949	125,010.91	236,117.56	—	361,128.47
1949	153,174.43	170,689.37	—	323,862.80
1949	126,852.28	157,915.84	—	284,768.12
1949	165,011.73	135,708.89	—	300,720.62
1949	566,031.75	78,718.15	—	644,749.90
1949	325,000.00	273,020.18	145.20	598,165.38
1949	248,651.95	52,372.31	—	299,024.26
1949	132,426.73	134,992.96	101,184.56	368,604.25
1949	350,000.00	218,247.21	49,551.98	666,799.19
1949	426,867.34	173,029.19	83,411.16	683,247.68
1949	555,613.67	34,398.23	150,070.59	740,082.49
1949	720,423.17	67,683.67	138,000.81	926,107.65
1949	775,665.02	168,518.01	194,164.61	1,138,347.64
1949	1,013,577.53	115,035.11	182,705.05	1,311,317.69
1949	859,443.65	297,969.20	119,814.04	1,277,166.89
1949	866,192.99	134,593.11	253,882.17	1,253,668.18
1949	597,297.64	131,371.86	315,494.61	1,447,163.91
1949	775,406.36	138,542.03	342,401.26	1,256,349.65
TOTALS	\$10,433,324.29**	\$3,566,870.84***	\$1,984,328.03	\$15,985,523.16

(a)—To October 31st.

(b)—To September 30th.

(c)—U. S. Treasury Adjustment.

*—Other Funds—includes the following expenditures from other appropriations:

F. Y.	Increase of Compensation	Quartermaster General	Funds Contributed	National Park Service
1948	\$ 145.20	\$ —	\$ —	\$ —
1949	—	—	101,184.56	—
1949	910.00	—	97,611.98	—
1949	4,322.09	—	79,089.08	—
1949	28,857.72	—	121,212.87	—
1949	45,675.36	—	92,325.45	—
1949	15,136.08	300.00	98,768.53	80,620.00

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1926	290.17	122,414.55	50,000.00
1927	812.00	103,001.19	16,000.94
1928	792.83	198,059.34	60,000.00
1929	1,000.00	249,494.51	65,000.00
1930	1,499.80	180,980.15	160,821.31

TOTALS\$95,076.45(a) \$4,604.80 \$1,453,212.53(b) \$431,842.25(c)

(a)—Includes refunds of \$15.95.
(b)—Includes refunds of \$10,571.43.
(c)—Includes refunds of \$20.94.

**Total War Department appropriations	\$11,073,100.00	
Balance unexpended July 1, 1930	652,521.34	
Amount expended		\$10,410,578.66
Add Navy Department reimbursement	3,976.19	
Add repayments and voucher corrections 1920	420.32	
Add repayments and voucher corrections 1921-1929	15,548.62	23,245.63
Total expenditures		\$10,433,824.39
***Total Alaska Fund	\$ 3,598,870.70	
Balance unexpended July 1, 1930	150,182.15	
Amount expended		\$ 3,436,688.55
Add Receipts from sales, 1925-29	49,448.09	
Add Voucher Corrections, 1925-29	1,462.68	
Add Sales, refunds, etc., 1921-1929	79,271.52	130,182.29
Total expenditures		\$ 3,566,870.84

These expenditures are summarized as follows:

FEDERAL APPROPRIATIONS:

Alaska Fund, 1905-1929	\$ 2,157,491.19
War Dept. Acts, 1905-1929	3,659,397.01
Increase of Compensation, 1915-1929	145.20
U. S. Treasury Adjustment, 1912	17,952.23
Alaska Fund, 1921-1930	1,332,327.42
War Dept. Acts 1921-1930	7,232,946.16
Increase of Compensation, 1921-1925	94,931.25
Quartermaster General, 1925-1930	4,694.80
National Park Service, 1925-1930	431,842.25
Lowell Creek	99,481.12
Total	\$14,532,308.63

CONTRIBUTED FUNDS:

Territory of Alaska, 1929	\$ 101,184.56
Territory of Alaska, 1921-1929	1,263,866.75
Miscellaneous, 1922-1930	88,161.22
Total	\$ 1,453,212.53
Grand Total	\$15,985,521.16

In addition to the above funds, disbursed through the U. S. Treasury, the Commission has supervised the expenditure of the following funds disbursed by other agencies for road and trail development:

Road tax, labor, and miscellaneous contributions, 1905-1929	\$ 200,000.00
Department of Agriculture, 1929	202,702.67
Quartermaster General, 1901-1902	100,000.00*
Chief of Engineers, 1904-1905	34,631.78*
Territorial Funds and Forest Revenues Prior to 1921	684,239.64**
Territorial Divisional Commissioners, 1921-1929	194,939.60
Territorial Divisional Commissioners, 1930	1,000.00
Seward Peninsula Tramway, 1923	24,014.00
Tolovana Tramway, 1924	6,425.00

Kaltag Portage Survey. 1925	312.72
Miscellaneous, 1926-1929	19,849.50
Miscellaneous, 1930	2,500.00
Total	\$1,470,614.91

*Expended prior to organization of the Alaska Road Commission.

**Expended prior to supervision by the Alaska Road Commission.

The following table gives the total amount expended on the various subprojects up to June 30, 1930, from all sources. It does not include the first four items in the above table under "Supervised Funds:"

No.	Sub-project Name	Federal Appropriations and "Alaska Fund"	Contributed Funds	Supervised Funds	Grand Total	Construction	Maintenance
1*	Prince of Wales Island	\$ 55,854.28	\$ 7,995.98	\$	\$ 63,850.26	\$ 42,811.86	\$ 21,038.40
2A*	Auk Bay Extension	44,286.13	14,870.66	1,247.64	60,404.43	48,104.13	12,300.30
21*	Mendenhall Glacier Extension	15,150.21	.....	.....	15,150.21	7,505.64	7,644.57
2C*	Eagle River Extension	16,055.57	.....	2,305.75	18,362.32	15,002.32	3,360.00
211*	Juneau-Duck Creek	99,731.04	.....	9,927.23	109,658.27	78,407.72	31,250.55
2B	Gastineau Channel Bar .....	.....	926.00	28,621.83	29,547.83	28,621.83	926.00
2F	Gold Creek Bridge, Juneau .....	.....	.....	2,156.75	2,156.75	2,156.75	.....
2G	Alaska Juneau Mine Trail .....	.....	.....	831.66	831.66	831.66	.....
2F1	Juneau Wharf	23,156.31	7,050.00	.....	30,216.31	30,216.31	.....
3A	Haines-Weils	188,860.57	44,087.43	.....	232,948.00	123,629.99	109,318.01
3B	Pleasant Camp Extension	90,639.29	72,869.80	.....	163,509.09	142,194.20	21,314.89
3C	Poreupline Extension	46,594.63	1,040.00	.....	47,634.63	38,354.90	9,279.73
3D	Haines-Mud Bay	2,970.27	10,790.00	16,268.16	30,028.43	18,807.46	11,220.97
3H	Haines-Chilkoot .....	.....	10,663.82	6,962.74	17,626.56	16,756.56	869.50
3F	Haines-Jones Point .....	.....	225.60	2,093.45	2,318.45	1,553.45	765.00
4A**	Donnelly-Washburn	33,460.06	.....	.....	33,460.06	18,865.40	14,594.66
4AA	Richardson-Democrat Creek .....	.....	1,820.59	500.00	2,320.59	2,320.59	.....
4BA	Valdez-Ptarmigan Drop	974,748.82	.....	.....	974,748.82	470,556.55	504,192.27
4BB	Ptarmigan Drop-Ernestino	439,896.81	.....	.....	439,896.81	171,227.56	268,669.25
4C	Ernestine-Willow Creek	354,971.63	.....	.....	354,971.63	177,499.85	177,471.78
4D	Willow Creek-Gulkana	579,431.63	.....	.....	579,431.63	246,394.58	333,037.05
4E	Gulkana-Sourdough	364,551.41	.....	.....	364,551.41	144,173.70	220,377.71
4F	Sourdough-Mile 168	301,999.33	.....	.....	301,999.33	136,258.29	165,741.04
4G	Mile 168-Delta River	473,701.65	.....	.....	473,701.65	158,615.89	315,085.76
411	Delta River-Rapids	678,376.91	.....	.....	678,376.91	259,965.60	418,411.31
412	Rapids-Grumder	352,254.21	.....	.....	352,254.21	120,386.12	231,868.09
4I	Grumder-Richardson	343,246.60	.....	.....	343,246.60	121,294.00	221,952.60
4J	Richardson-Salehaket	430,878.34	.....	.....	430,878.34	215,518.01	215,360.33
4JA	Lake Harding Road	4,763.40	.....	.....	4,763.40	3,100.75	1,662.65
4K	Salehaket-Palrbanks	625,788.61	.....	.....	625,788.61	264,062.87	361,725.74
4KA	Saleha Bridge	69,537.02	.....	.....	69,537.02	50,370.67	19,166.35
5**	Ester-Dunbar	19,405.18	.....	.....	19,405.18	12,624.18	6,781.00
5A	Dunbar-Tanana	87,239.22	.....	.....	87,239.22	50,269.69	36,969.53
5B	Nenana-Campbells	1,545.61	380.00	.....	2,025.61	1,919.01	106.60
5C	Fish Lake-American Creek .....	.....	7,501.43	.....	7,501.43	5,766.53	1,734.90
6D	American Creek Aviation Field .....	.....	550.00	390.00	940.00	940.00	.....
6E	Tanana Aviation Field .....	.....	3,899.96	.....	3,899.96	3,899.96	.....
6F	Hilola Creek-Moran Creek	1,178.89	.....	.....	1,178.89	1,178.89	.....
6A	Willow Creek-Tonsina	219,769.27	.....	.....	219,769.27	109,660.78	110,108.49

No.	Sub-project Name	Federal Appropriations and "Alaska Fund"	Contributed Funds	Supervised Funds	Grand Total	Construction	Maintenance
6B	Tonsina-Chitina	333,419.30	.....	.....	333,419.30	145,362.69	188,056.61
6D	Chitina Depot	13,659.63	.....	.....	13,659.63	11,938.66	1,620.97
6E	Chitina-Native School .....	.....	599.66	.....	599.66	496.06	104.60
6F	Lower Tonsina Aviation Field .....	.....	1,239.16	.....	1,239.16	1,239.16	.....
6G	Copper Center Aviation Field .....	.....	200.59	.....	200.59	200.59	.....
7A	Summit-Chatanika	69,659.37	306.00	4,252.03	74,216.40	40,762.71	33,453.69
7AA	Cleary Creek	2,344.40	1,511.71	3,206.54	7,062.66	4,317.81	2,744.84
7B	Fox-Olmos	27,096.85	1,299.36	6,805.81	35,202.02	28,091.66	7,110.37
7BA	Dome-Spaulding Mine .....	.....	3,161.51	.....	3,161.51	2,839.37	322.14
7BB*	Fox-Steel Creek .....	.....	.....	855.75	855.75	855.75	.....
7C	Summit-Fairbanks Creek	15,945.14	6,325.80	26,521.85	48,792.79	24,902.61	23,890.18
7CA	Summit-Fish Creek .....	.....	12,881.93	2,776.16	16,658.09	12,780.82	2,877.27
7D	Ester Creek	39,918.37	12,674.43	25,405.43	78,998.23	38,656.93	40,341.30
7DA	College Spur .....	.....	91.54	845.12	936.66	530.00	406.66
7DB	Ester-Damo .....	.....	60.21	4,596.58	4,656.79	4,192.73	464.06
7DC	St. Patricks-Happy .....	.....	731.62	6,069.47	6,800.99	6,069.47	731.52
7DD	Ester-Boegler .....	.....	.....	1,000.00	1,000.00	.....	.....
7E*	Vault Creek	4,495.20	.....	379.00	4,875.20	4,702.83	172.37
7F**	Vault Creek-Treasure Creek	1,379.09	.....	.....	1,379.09	1,350.00	29.09
7G	Fairbanks-Gilmore	124,636.34	.....	24,356.19	148,992.53	70,402.75	78,589.78
7GA	Lazelle Road .....	.....	97.76	5,199.84	5,297.60	4,113.51	1,184.09
7H	Little Eldorado Creek	3,890.83	807.01	6,775.87	11,473.71	8,578.31	2,895.40
7I	Gilmore-Summit	33,661.21	.....	11,334.93	44,986.14	19,163.32	25,822.82
7IA*	Gilmore Creek .....	.....	.....	1,562.00	1,562.00	.....	.....
7J	Fairbanks-Chena Hot Springs	12,263.00	835.00	2,587.10	15,685.10	8,032.59	7,652.51
7JA	Chena River Branch	1,035.65	390.00	.....	1,425.65	614.01	811.64
7JB	Palmer Creek Aviation Field .....	.....	575.00	.....	575.00	575.00	.....
7JC	Colorado Creek-South Fork .....	.....	600.00	.....	600.00	600.00	.....
7K	Olmos-Livengood	13,152.82	240.00	1,274.93	14,667.75	12,820.48	1,847.27
7N	Farmers-Birch Hill .....	.....	2,146.14	21,916.56	24,062.70	14,401.97	9,660.73
7NA	Isabelle Creek .....	.....	109.42	2,347.21	2,456.63	1,675.00	775.63
7NB	Ballaine-Rickert .....	.....	13.37	1,897.86	1,911.23	1,800.00	111.23
7R	Goldstream-O'Connor Creek	154.64	.....	.....	154.64	154.64	.....
7S	Graehl Bridge .....	.....	1,353.12	1,345.41	2,698.53	1,323.57	1,374.95
7T	Farmers-Chena Slough .....	.....	3,646.18	7,274.91	10,921.09	8,198.77	2,722.32
7V	Fairbanks-Wireless	495.46	.....	.....	495.46	.....	495.46

7X	Chem Hot Springs Aviation Field		1,361.58	378.00	7,739.68	1,689.68	50.00
7Y	Fairbanks Aviation Field		17,217.32	2,453.90	19,071.22	19,471.22	200.00
7Z	Fairbanks Aviation Field Road	766.66			766.66	766.66	
8	Nome-Council	214,007.74	133,218.24	55,647.98	402,873.96	179,382.96	223,491.00
8D	Council-Ophir Creek	2,856.76	2,460.00		5,316.76		5,316.76
8I	Casa de Paga	9,552.50	10,808.00	10,079.75	30,440.25	17,439.65	13,000.60
8J	Shovel Creek	5.05	3.00	58.50	66.55	58.50	8.05
8K	Council Aviation Field		504.60		504.60	504.60	
8L	Port Safety Aids		376.60		376.60		376.60
9	Rampart-Eureka	44,664.82	3,827.00	1,618.32	50,010.14	29,114.36	20,895.78
10*	Seward-Kenal Lake	72,387.76	5,000.00	3,396.17	80,783.93	46,260.83	34,523.10
10A*	Seward-Radio	6,594.04			6,594.04	6,470.04	124.00
10B	Seward-Nash		1,215.25	39,780.75	21,996.00	13,242.30	8,753.70
10C	Lowell Creek Flood Control	90,616.06	25,080.75		115,696.81	113,238.62	2,458.19
10D	Seward Aviation Field		6,756.95	60.00	6,816.95	6,571.20	245.75
11A	Eagle-Liberty	101,487.73	800.80	600.00	102,888.53	48,263.41	54,625.12
11AA	American Summit-Liberty	9,838.15			9,838.15	6,429.14	3,409.01
11B	Liberty-Forty Mile	19,237.31		1,216.00	20,453.31	15,251.19	5,202.12
11C	Steel Creek-Jack Wade	6,466.66			6,466.66	4,632.50	1,834.16
11CC	Steel Creek-Jack Wade (Summer)	660.50			660.50		660.50
11D	Steel Creek-Walker's Fork	6,196.70			6,196.70	4,110.00	2,086.70
11E	Eagle-Seventy Mile	16,703.44			16,703.44	4,964.59	11,738.85
11F	Jack Wade-Chicken	2,679.46			2,679.46		2,679.46
11G	Steel Creek-Canyon Creek	914.00			914.00		914.00
11H	Liberty Cabin-Dome	5,625.41			5,625.41	2,714.27	2,911.14
11I	Dome-Steel Creek	5,254.43			5,254.43	1,300.00	3,954.43
11J	Forty Mile-Franklin	44.76			44.76		44.76
11K	Forty Mile-Steel Creek	80.00			80.00		80.00
11L	Franklin-Chicken	1,677.76			1,677.76		1,677.76
11M	Jack Wade-Walker's Fork Boundary	126.00			126.00		126.00
11AM	Jack Wade-Mouth Walker's Fork	1,236.00			1,236.00		1,236.00
11N	Elywig Creek	909.50			909.50	909.50	
11P	Chicken Aviation Field		1,674.13	550.00	2,224.13	2,224.13	
11Q	Barto Aviation Field		1,420.75		1,420.75	1,420.75	
12A**	Mile 34-Lynx Creek	22,192.66			22,192.66	13,053.63	8,239.03
13A	Nome-Bessie	63,900.80	21,009.68		84,910.48	38,541.96	47,034.53
13B	Bessie-Snuko River	66,541.68	20,835.50		87,377.18	29,533.12	47,814.06
13C	Bessie-Little Creek	7,819.36	6,895.10		14,714.46	1,433.08	13,580.47
13D**	Bessie-Dry Creek	3,218.40		70.80	3,289.20	1,582.47	1,706.73
13E**	Dry Creek-Newton	623.74			623.74	300.88	223.86

No.	Sub-project Name	Federal Appropriations and "Alaska Fund"	Contributed Funds	Supervised Funds	Grand Total	Construction	Maintenance
13P	Nomo-Osborne	28,220.99	28,410.72		56,640.71	15,393.79	41,246.92
13Q**	Grass Gulch	1,125.73			1,125.73	780.79	338.94
13I**	Custer Creek	1,538.80			1,538.80	83.66	1,455.16
13J**	Wonder-Flat Creek	2,803.72			2,803.72	170.50	2,033.22
13K	Bussle-Buster	35,233.42	18,039.50		53,272.92	17,603.98	35,768.94
13L	Nomo Buoys		585.00		585.00		585.00
13M	Nomo Depot	3,072.99			3,072.99		3,072.99
14*	Sitka-Indian Idver	9,610.88			9,610.88	6,274.72	3,336.16
14	Sitka-Indian Idver	3,643.52	2,650.12		6,293.64	3,663.00	2,730.64
14A	Sitka National Monument	3,948.14	4,286.30		8,234.44	1,660.00	6,683.44
14B	Sitka Military Cemetery	6,523.22	700.00		7,223.22	3,900.00	4,323.22
14C	Pioneer Cemetery Road		4,026.93		4,026.93	3,341.02	685.91
14D	National Cemetery Road	528.52	420.00	397.50	1,346.02	697.47	648.55
15	Circle-Miller House	553,791.90	4,598.63		558,390.53	420,427.03	137,963.50
15A	Central House-Circle Hot Springs	16,457.95	3,370.00	3,702.25	23,530.20	18,180.70	5,349.50
15B	Central House-Danwood			2,669.75	2,669.75	2,669.75	
15C	Circle Hot Springs Aviation Field		370.00	1,016.50	1,386.50	1,316.50	70.00
15D	Leech Cutoff	224.75			224.75	224.75	
15E	Miller House Spur		354.68	1,559.55	1,914.23	1,870.53	43.70
16	Chatanika-Miller House	637,228.64	9,969.59		647,198.23	478,081.39	169,116.84
16A	U. S. Creek Branch		10,140.46	231.07	10,371.53	10,371.53	
16B	Eagle Creek Spur		223.61	81.17	304.78	81.17	223.61
16C	Chatanika-Miller House (Winter)	22,065.13	1,000.00		23,065.13	14,614.74	8,450.39
17	Tanana-Kaltag	33,518.93			33,518.93	23,737.80	9,781.13
17A**	Lewis Landing-Dishkakot	483.37			483.37	483.37	
17B**	Nulato-Dishkakot	735.88			735.88	485.88	250.00
17C	Nulato Aviation Field		5,011.89		5,011.89	5,011.89	
17D	Tanana-Kaltag Station Telephone Line		4,336.99		4,336.99		4,336.99
18	Kaltag-Nomo	55,604.45	9,478.00	566.70	65,649.15	28,137.39	38,510.76
18A	Bonanza-Kotzebue	5,810.95	3,212.40		9,023.35	1,230.00	7,793.35
18B	Golovin-Council	143.00	130.00		273.00		273.00
18D	Unalakleet Aviation Field		1,069.27		1,069.27	1,041.67	27.60
18E	Solomon Aviation Field		128.80		128.80	95.00	33.80
18F	Golovin Aviation Field		1,380.50		1,380.50	1,375.40	5.10
18G	Moses Aviation Field		254.20		254.20	225.00	29.20
18H	Kaltag-Unalakleet Telephone						

	Line		1,854.35		1,854.35		1,854.35
19**	Kern Creek-Kulk	13,891.95			13,891.95		10,276.22
19A**	Kenal Lake-Kern Creek	6,833.20			6,833.20		6,833.20
19B**	1 Mile 27-Mile 29 A.N.R.R.	741.66			741.66		741.66
19C**	Kenal Lake-Mile 27 A.N.R.R.	1,595.81			1,595.81		1,595.81
19D**	Kern Creek-Indian Creek	3,758.26			3,758.26		3,758.26
19E*	Girdwood-Crow Creek	3,434.15			3,434.15		891.65
20A**	Knik-Susitna	8,437.44			8,437.44		2,542.50
20B	Susitna-Rainy Pass	30,876.98	2,000.00		32,876.98		7,807.85
20C	Rainy Pass-Big River	16,436.46			16,436.46		629.59
20D**	Dishkaket-Kaltag	4,290.00			4,290.00		6,698.69
20DA	Takotna-Ophir (Winter)	4,780.74			4,780.74		1,927.39
20DE	Ophir-Dishkaket	4,335.00			4,335.00		38.60
20E**	Susitna-McDougal	8,640.21			8,640.21		950.74
20F**	McDougal-Cacho Creek	7,350.00			7,350.00		760.00
20G**	Lakeview-McDougal	3,675.00			3,675.00		
20H	Nancy-Susitna	2,264.16			2,264.16		347.10
20J	Susitna-Tyonek	2,643.93			2,643.93		
20K	Susitna Aviation Field		931.10		931.10		2,264.16
21	Unalakleet-St. Michael	7,266.33	1,630.00		8,896.33		
22	Hot Springs-Sullivan Creek	47,476.34	9,235.33	1,005.00	57,716.67		6,203.70
23A	Snowshoe-Beaver	11,043.03	640.00	2,580.00	14,163.03		29,892.83
23B	Beaver-Caro	60,780.24			60,780.24		3,227.58
23C	Big Creek	9,614.77			9,614.77		30,539.43
23D	Caro-Flat Creek	14,290.64			14,290.64		3,294.77
23E	Caro-Coldfoot	13,167.46			13,167.46		10,267.38
23F	Chandalar Aviation Field		6,747.24	1,468.50	8,215.74		6,607.59
24*	1 Mile 29 A.N.R.R.-Sunrise	57,850.94			57,850.94		
24A*	Lynx Creek-Six Mile	10,882.40			10,882.40		27,123.09
24B*	Sunrise-Hope	1,085.00			1,085.00		3,800.00
25A**	Cripple Creek	6,516.84	2,284.95		8,801.79		885.00
25B**	Penny River	1,367.08	600.00		1,967.08		5,067.97
25C	Nome Wireless	2,336.14	758.00		3,094.14		1,276.03
25D	Mouth of Center Creek	14,425.27	8,351.50		22,776.77		1,764.91
25E	Submarine Paystreak	29,234.88	4,667.00	677.35	34,579.23		6,087.77
25H**	Otter Creek	1,802.52			1,802.52		16,689.00
25K	Nome City Dock		2,966.65		2,966.65		24,370.33
25L	Nome Aviation Field		5,439.12		5,439.12		1,149.54
25M	Telephone Lines, Seward Peninsula		10,492.81		10,492.81		10,208.90
25N	Nome City Streets		672.07		672.07		652.98
25P	Nome Harbor Lights		472.13		472.13		
26	Candle-Candle Creek	44,622.32	28,741.23	4,026.95	77,390.50		1,916.42
26A**	Kugruk River Approach	488.00			488.00		42,396.43
26B	Bear Creek Trail	467.09	146.00		613.09		488.00
							340.00
							273.09

No.	Sub-project Name	Federal Appropriations and "Alaska Fund"	Contributed Funds	Supervised Funds	Grand Total	Construction	Maintenance
26C	Candle-Kiwalik	427.91	600.00		1,027.91	1,027.91	
26D	Kiwalik Aviation Field		443.30		443.30	300.00	143.30
26E	Candle Aviation Field		1,355.00		1,355.00	1,355.00	
26F	Telephone Line Reconnaissance		148.00		148.00		148.00
27	Deering-Hutchuk	43,534.24	45,370.54	1,017.35	90,322.13	80,801.00	9,521.13
27A	Deering Aviation Field		1,022.00		1,022.00	1,022.00	
28	Sheldon-Candle	7,588.30	1,383.00	3,190.10	12,161.40	8,207.02	3,954.38
28A	Nome-Serpentine Hot Springs	6,323.04	4,740.00	855.00	11,918.04	6,239.00	5,679.04
29	Tanana-Bettles	13,056.95			13,056.95	7,012.14	6,044.81
29A	Bettles-Goldfoot	9,261.59		2,000.00	11,261.59	6,130.00	5,131.59
29C	Mile 70-Hughes	2,167.02			2,167.02	1,708.57	458.45
29D	Wild River Trail	1,425.76			1,425.76		1,425.76
29E	Bettles River Aviation Field		250.00	250.00	500.00	500.00	
30	Hot Springs Landing-Eureka	46,093.01	9,807.71	3,907.00	60,927.81	20,425.81	40,502.00
30A	Hot Springs-Tofly	6,500.73			6,500.73	4,309.26	2,191.47
30B	Mantley Hot Springs Aviation Field		1,075.00	90.00	1,165.00	1,140.00	25.00
31	Caribou Creek	13,004.62	540.00		13,544.62	8,580.92	5,063.70
32A	Takotna-Flat	9,247.04			9,247.04	5,437.23	3,809.81
32AA	Takotna-Flat	45.00			45.00		45.00
32AB	Moore Creek	15.00			15.00		15.00
32AC	Candle Creek-Takotna	1,216.09			1,216.09		1,216.09
32B	Iditarod-Flat	82,875.04	16,143.61	12,098.31	111,116.96	55,886.27	55,230.69
32C	Ophir-Iditarod	7,244.95			7,244.95	5,000.00	2,244.95
32D	Flat-Crooked Creek	4,910.09	200.00		5,110.09	1,480.00	3,630.09
32DD	Flat-Georgetown	160.00			160.00		160.00
32E	Takotna Aviation Field		2,295.12		2,295.12	1,943.10	352.02
32F	Takotna Depot	6,118.64			6,118.64	4,304.20	1,814.44
32A**	Otter Creek Towpath	448.23			448.23		448.23
32B**	Summit-Otter Creek	5,047.66			5,047.66		5,047.66
33C	Flat City-Flat Creek	3,189.75			3,189.75		3,189.75
33D	Head Flat Creek-Willow Creek	4,722.07			4,722.07	1,243.00	3,479.07
33E	Willow Creek-Chicken Creek	3,940.15			3,940.15	1,500.00	2,440.15
33F	Flat City-Otter Discovery	5,292.15		11,086.03	16,378.23	9,811.03	6,567.20
33G	Candle Landing-Candle Creek			6,572.00	6,572.00	5,597.00	975.00
33H	Flat Aviation Field		1,900.00	1,000.00	2,900.00	2,900.00	
34**	Iditarod-Dishkakot	4,830.98			4,830.98	4,730.98	100.00

34A	Flat-Holy Cross-Anvik	1,552.39	.....	.....	1,552.39	.....	1,552.39
34B	Iditarod-Shageluk-Anvik	1,033.87	.....	.....	1,033.87	500.00	533.87
35A	Arhangel Extension	29,822.97	.....	.....	29,822.97	17,197.02	12,625.95
35AA	Sherry Branch	1,768.49	.....	.....	1,768.49	1,119.32	649.17
35AB*	Arhangel Extension	104.20	.....	.....	104.20	104.20	.....
35B	Palmer-Fishhook	21,468.80	1,850.00	807.08	24,185.88	16,916.60	7,269.28
35C	Palmer-Matanuska River	32,464.68	116.66	1,729.33	34,310.67	23,656.16	10,654.51
35D	Willow Creek Extension	98,844.40	.....	.....	98,844.40	38,134.14	60,710.26
35DA	Gold Chord Branch	5,591.24	5,000.00	.....	10,591.24	10,591.24	.....
35E	Wasilla-Fishhook	113,815.22	.....	.....	113,815.22	33,412.63	80,402.59
35F	Wasilla-Krik	50,951.98	.....	345.00	51,296.98	26,435.47	24,861.51
35G	Palmer-Springer .....	.....	31.15	2,800.83	2,831.98	1,573.32	1,258.66
35H	Wasilla-Palmer	6,387.03	4,235.00	22,057.23	32,679.26	19,057.23	13,622.03
35I	Moose-Palmer	500.00	536.61	7,000.66	8,036.67	6,893.09	1,143.58
35J	Wasilla-Matanuska	12,714.19	8,908.55	2,540.56	24,163.30	9,276.23	14,887.07
35K	Matanuska Trunk Road	8,450.73	5,810.00	21,331.46	35,592.19	15,051.46	20,540.73
35L	Palmer-Matanuska .....	.....	3,129.45	11,356.15	14,485.60	8,404.70	6,080.90
35N	Houston-Willow Creek	272.00	.....	940.32	1,212.32	940.32	272.00
35O	Fishhook-Goldmint	11,265.32	9,400.00	.....	20,665.32	17,536.83	3,128.49
35P**	Moose-Baxter .....	.....	.....	2,218.62	2,218.62	2,218.62	.....
35Q	Edlund Road .....	.....	11.25	3,047.19	3,058.44	2,551.69	506.75
35R	Bogard Road .....	.....	200.64	13,228.58	13,429.22	12,228.58	1,200.64
35S	Moose Creek Trail	2,118.44	.....	.....	2,118.44	2,041.01	77.43
35T	Werner Connection	2,630.17	2,580.00	.....	5,210.17	2,771.32	2,438.85
35U	Moose Creek Aviation Field .....	.....	481.75	.....	481.75	461.50	20.25
35V	Fishhook Aviation Field .....	.....	917.49	.....	917.49	848.74	68.75
35W	Wasilla Aviation Field .....	.....	459.50	.....	459.50	459.50	.....
35X	Wasilla Aviation Field Road .....	.....	1,135.94	.....	1,135.94	1,136.94	.....
36	Mineral Creek	17,327.80	18,700.56	24,347.37	60,375.73	35,315.01	25,060.72
36A	Granby Road .....	.....	340.44	3,081.91	3,421.35	3,081.91	340.44
36B	South Second Street, Cordova .....	.....	.....	3,373.15	3,373.15	3,373.15	.....
36C*	Byak Lake Road .....	.....	.....	7,735.85	7,735.85	7,735.85	.....
36CA	Cordova Aviation Field .....	.....	941.90	.....	941.90	926.15	15.75
36D**	Valdez-Quartz Creek .....	.....	.....	524.75	524.75	524.75	.....
36E**	Valdez-Glacier .....	.....	.....	616.91	616.91	616.91	.....
36F**	Shoups Bay .....	.....	.....	3,457.25	3,457.25	3,457.25	.....
37	Topkok-Candle	1,026.56	.....	.....	1,026.56	816.56	210.00
37A	Bluff-White Mountain	1,223.23	2,050.00	.....	3,273.23	3,273.23	.....
37B	Bluff Aviation Field .....	.....	80.00	.....	80.00	80.00	.....
38A	Ruby-Long	216,487.42	3,824.59	.....	220,312.01	132,020.35	88,291.66
38B	Poorman-Cripple	3,449.84	.....	.....	3,449.84	1,502.96	1,946.88
38C	Ophir-Cripple	3,927.91	.....	.....	3,927.91	1,899.00	2,028.91
38D	Ophir-Takotna	197,263.43	55,095.84	.....	252,359.32	174,507.50	77,851.82
38DA	Little Creek Road .....	.....	10,175.46	.....	10,175.46	8,796.04	1,379.42

No.	Sub-project Name	Federal Appropriations and "Alaska Fund"	Contributed Funds	Supervised Funds	Grand Total	Construction	Maintenance
38E	Long-Poorman	129,107.79	490.00	.....	129,597.79	103,574.56	26,023.23
38EE	Long-Poorman (Winter)	5,368.00	10.00	.....	5,378.00	5,268.00	110.00
38F	Tanarack-Poorman .....	.....	.....	22,322.69	22,322.69	22,322.69	.....
38F	Poorman-Ophir	3,030.44	.....	.....	3,030.44	.....	3,030.44
38G	Takotna-Landing	8,374.68	.....	.....	8,374.68	7,374.68	1,000.00
38H	Ganes Creek Road .....	.....	10,668.19	.....	10,668.19	3,403.85	7,264.34
38K	Ruby Aviation Field .....	.....	1,324.38	600.00	1,924.38	1,200.00	724.38
38L	Ruby Aviation Field Road .....	.....	.....	500.00	500.00	500.00	.....
38M	Ophir Aviation Field .....	.....	1,635.12	190.00	1,825.12	1,825.12	.....
39*	Juncieu-Sheep Creek	45,929.40	.....	.....	45,929.40	25,390.13	20,539.27
40	Douglas-Gastineau Channel	15,763.55	2,853.00	.....	18,616.55	12,019.88	6,596.68
41	Kluna-Klery Creek	3,623.57	56.00	.....	3,679.57	3,014.76	663.81
41A	Kotzebue-Shungnak	1,506.44	1,808.00	.....	3,314.44	.....	3,314.44
41B	Kotzebue-Point Barrow	3,180.74	2,737.28	.....	5,918.02	4,400.02	1,518.00
41D	Kotzebue Aviation Field .....	.....	1,098.10	.....	1,098.10	670.60	427.50
41E	Kobuk Aviation Field .....	.....	1,000.00	.....	1,000.00	1,000.00	.....
42	St. Michael-Kotlik	1,867.51	518.00	.....	2,385.51	.....	2,385.51
43*	Petersburg-Scow Bay	8,171.55	1,500.00	13,794.58	23,466.23	13,497.67	9,968.56
44*	Skagway Valley	10,303.30	.....	821.53	11,124.83	8,803.95	2,320.88
44A	Skagway Trails	11,652.50	4,081.38	.....	15,733.88	11,158.71	4,575.17
44B	Skagway Aviation Field .....	.....	3,600.00	.....	3,600.00	3,600.00	.....
45*	Silver Bow Basin	20,669.30	2,796.31	.....	23,465.61	5,338.62	17,627.59
46	Kobt-Bureka	15,072.85	.....	.....	15,072.85	12,671.63	3,501.22
46A	Roosevelt-Kantishna	47,660.99	12,370.51	1,655.03	61,686.53	41,962.60	19,723.93
46B	Ligalke-Kantishna	12,646.93	483.07	.....	13,130.00	11,966.01	1,163.99
46C	Nenana-Knight's Roadhouse	3,256.62	.....	.....	3,256.62	3,592.58	1,664.04
46D	McKinley Park Road	456,682.07	.....	700.26	457,382.32	416,357.56	42,024.76
46E	Diamond-Telida	10,039.77	.....	.....	10,039.77	6,811.56	3,228.21
46F	Nenana Cemetery Road	4,444.32	2,846.24	.....	7,290.56	3,818.63	3,471.93
46G	Kobt-Bonnifield	5,767.51	.....	.....	5,767.51	5,706.61	60.90
46H	Lake Minchumina Aviation Field .....	.....	900.00	.....	900.00	750.00	150.00
46J	Kantishna Aviation Field .....	.....	775.00	.....	775.00	675.00	100.00
46K	Telida Aviation Field .....	.....	850.00	.....	850.00	600.00	250.00
46M	Nenana Aviation Field .....	.....	862.56	150.00	1,042.56	720.00	322.56
47	Coldfoot-Wiseman	13,016.43	.....	2,000.00	15,016.43	8,942.61	6,073.82
47A	Wiseman Aviation Field .....	.....	3,915.62	1,613.26	5,528.87	4,113.26	1,415.62
47B	Nolan Branch	19,562.19	.....	.....	19,562.19	16,192.74	3,369.45
47C	Wiseman-Hammond	5,749.19	.....	.....	5,749.19	3,967.07	1,782.12
48	Iliamna Bay-Iliamna Lake	49,670.34	.....	.....	49,670.34	45,163.88	4,506.46

49	Davidson's Landing-Taylor...	9,485.09	8,927.00	18,412.09	7,713.17	10,698.92
50*	Stikine River	2,256.76	.....	2,256.76	2,256.76	.....
51	Talkeetna-Cache Creek	177,418.91	81,109.36	258,528.27	165,339.35	93,188.92
51A	Cache Creek Trail	4,253.11	300.00	4,553.11	2,270.00	2,283.11
51B	Peters Creek Trail	10,239.29	1,000.00	11,239.29	10,206.82	1,032.47
51C	Yentna-Mills Creek	5,174.80	.....	5,174.80	5,130.44	44.36
51E	Mills Creek-Cache Creek	2,066.36	.....	2,066.36	1,307.45	758.91
51F	Cache Creek Aviation Field	.....	179.90	.....	179.90	.....
52*	Ketchikan-Ward's Cove	6,801.98	19,318.44	26,120.42	21,120.42	5,000.00
52A*	Ketchikan-Charcoal Point	.....	.....	15,500.48	12,500.48	3,000.00
53	Isagle-Circle	5,746.59	.....	5,746.59	1,684.72	4,061.87
53A	Circle-Port Yukon	7,702.98	.....	7,702.98	4,100.57	3,602.41
53B	Port Yukon Aviation Field	.....	2,483.89	.....	2,540.89	543.00
54	Chikana-Nizina	6,658.21	3,308.00	9,966.21	7,897.90	2,068.31
54A	Chikana Aviation Field	.....	1,494.03	.....	1,494.03	.....
54B	Nabesna Aviation Field	.....	1,474.68	.....	1,474.68	.....
55	Kenai-Russian River	10,705.76	1,300.00	12,005.76	6,650.26	5,355.50
55A	Kenai Aviation Field	.....	901.51	.....	901.51	.....
56*	Tasnuana	1,058.14	.....	1,058.14	1,058.14	.....
56B**	Katalla-Chilkat	.....	7,752.56	.....	7,752.56	.....
57	McCarthy-Dan Creek	152,567.69	7,836.46	160,404.15	146,352.23	14,051.92
57A	Nizina River Bridge	134,689.56	25,000.00	159,689.56	125,941.80	33,747.76
57B	Nizina-Chilkna River	2,984.07	2,075.00	5,059.07	5,400.57	658.50
57C	McCarthy-Kennecott River	385.79	.....	385.79	.....	385.79
57D	Chilkna Branch	5,987.51	.....	5,987.51	5,028.48	959.03
57E	McCarthy-Green Butte	1,804.55	.....	1,804.55	.....	1,804.55
57F	McCarthy Aviation Field	.....	1,923.00	.....	1,780.88	142.12
58*	Hyder-Salmon River	63.50	.....	63.50	63.50	.....
59	Fairbanks Bridge	73,627.46	.....	73,627.46	61,699.30	11,928.16
59A	Fairbanks Depot	21,173.96	.....	21,173.96	16,707.00	4,466.96
60	Valdez Dyke	56,065.98	16,213.54	72,279.52	56,065.98	16,213.54
60A	Valdez Aviation Field	.....	2,351.65	.....	2,351.65	.....
60B	Upper Tonsina Aviation Field	.....	1,699.97	.....	1,699.97	.....
61	Stroina-Kuskulana	5,746.88	2,278.98	8,025.86	17,106.28	4,500.73
61A	Kotsina Trail	15,689.10	370.00	16,059.10	14,671.55	1,387.55
61B	Nugget Creek Extension	1,030.00	.....	1,030.00	.....	1,030.00
61C*	Bilholt-Kotsina	.....	6,858.42	.....	6,858.42	.....
61D	Farnan Trail	941.96	.....	941.96	926.16	15.80
61E	Bronner Trail	2,373.25	1,100.00	3,473.25	3,473.25	.....
62	Dino Creek	25,395.72	22,713.59	48,109.31	43,702.96	4,406.35
62A	Haycock-Bear Creek	247.82	270.00	517.82	216.00	301.82
62B	Haycock Aviation Field	.....	105.00	.....	105.00	.....
62C	Koyuk Aviation Field	.....	27.08	.....	27.08	.....
63	Dunbar-Brooks	13,935.64	10,248.15	24,183.79	31,259.58	12,929.99

No.	Sub-project Name	Federal Appropriations and "Alaska Fund"	Contributed Funds	Supervised Funds	Grand Total	Construction	Maintenance
63B	Brooks-Livongood Creek	2,478.45	1,857.00	28,564.86	32,901.21	20,064.86	12,836.35
63BA	Amy Creek Branch	500.00	.....	1,868.45	2,368.45	2,068.45	300.00
63C	Brooks Tram	49,172.52	1,543.04	6,425.00	57,141.16	18,311.30	38,829.86
63D	Brooks-Aviation Field Road	.....	.....	713.00	713.00	713.00	.....
63E	Livongood Aviation Field	.....	1,125.25	1,200.00	2,325.25	2,154.00	171.25
64**	Cripple-Lewis Landing	100.00	.....	.....	100.00	.....	100.00
64A	Cripple-Cripple Mountain	553.65	.....	.....	553.65	292.00	261.65
64AA	Cripple-Cripple Mountain (Winter)	851.05	.....	.....	851.05	611.05	240.00
65A	Gulkana-Chistochina	270,742.76	.....	.....	270,742.76	324,733.50	46,969.26
65B	Chistochina-Slate Creek	109.50	.....	149.00	258.50	149.00	109.50
65C	Chistochina-Tanana Crossing	39,451.22	.....	.....	39,451.22	39,369.02	92.20
65D	Ketchumstuk-Tanana Crossing	1,669.82	.....	.....	1,669.82	.....	1,669.82
65E	Chickon-Ketchumstuk	1,663.50	.....	.....	1,663.50	.....	1,663.50
65F	Grundler-Tanana Crossing	11,833.39	.....	.....	11,833.39	9,372.71	2,460.68
65G	Shann-Chisana	3,448.53	.....	.....	3,448.53	2,468.41	980.12
65H	Tanana Crossing Aviation Field	.....	300.00	.....	300.00	300.00	.....
66**	Matanuska-Chickaloon	353.75	.....	914.55	1,268.30	1,268.30	.....
67	Nome-Teller	4,180.06	5,413.50	150.00	9,743.56	300.00	9,443.56
67A	Teller-Cape Prince of Wales	1,000.08	1,943.00	.....	2,943.08	.....	2,943.08
67B	Teller-Bluestone	3,118.56	5,330.00	.....	8,448.56	4,461.45	3,987.11
67C	Teller-Pilgrim Hot Springs	1,148.72	1,835.00	.....	2,983.72	1,800.00	1,183.72
67D	Teller-American River	292.34	614.00	.....	906.34	849.67	56.67
67E	Teller Aviation Field	.....	752.80	.....	752.80	752.80	.....
67F	Tin City-Goodwin	467.82	630.00	1,000.00	2,097.82	2,097.82	.....
67G	Lost River Aviation Field	.....	121.40	.....	121.40	121.40	.....
67H	Wales Aviation Field	.....	121.40	.....	121.40	121.40	.....
68	Flagging Trails	65,099.04	17,289.53	12,069.53	94,458.10	.....	94,458.10
70	Miscellaneous Surveys and Reconnaissances	11,632.01	617.30	466.49	12,715.80	12,715.80	.....
72*	Wrangell Oil Dock	2,964.97	2,000.00	.....	4,964.97	4,964.97	.....
72A*	Wrangell Cemetery Road	.....	.....	8,630.22	8,630.22	6,289.22	2,350.00
73	Marshall Road	7,918.05	1,338.75	11,685.90	20,942.70	14,558.05	6,384.65
73A	Kotlik-Marshall	1,672.94	1,620.00	.....	3,292.94	850.00	2,442.94
73B	Stuyahok	916.00	.....	.....	1,660.00	1,660.00	.....
73C	Old Hamilton-Scanmon Bay	866.18	1,512.00	.....	2,378.18	1,853.45	524.73
76	Anchorage Loop	80,477.16	22,974.85	5,606.43	109,058.44	57,003.79	52,054.65
76A	Anchorage-Lake Spenard	.....	3,816.78	16,449.05	19,265.83	10,010.23	9,255.60

75C	Chester Creek Boat Landing	235.83	927.30	1,163.13	782.42	380.71
75D	Anchorage Depot	6,072.03		6,072.03	3,966.35	2,105.68
75E	McDonald Road	1,329.52	975.00	2,304.52	1,106.13	1,199.39
75G**	East First Street, Anchorage			1,023.46	1,023.46	
75H	Lake Spenard Aviation Field	177.15	100.00	277.15	277.15	
76	Ollivell Road	5,410.91		5,416.91	4,589.99	826.92
76J	Anchorage Aviation Field	3,604.84		3,604.84	3,604.84	
76	Cantwell-Valdez Creek	10,790.80		10,790.80	7,840.20	2,950.60
76A	Valdez Creek Aviation Field	602.60		602.60	602.60	
78	Valdez Depot	4,705.84		4,705.84		4,705.84
79	Seward Depot	4,114.05		4,114.05		4,114.05
80A	McGrath-Takotna	368.06		368.06		368.06
80A A	McGrath-Takotna	4,396.80	332.00	4,728.80	2,182.00	2,546.80
80B	McGrath-Tofala	11,324.88		11,324.88	7,178.21	4,146.67
80C	McGrath-Candle Creek	305.20		305.20		305.20
80D	Nixon Fork-Nixon Mine		2,348.00	2,348.00		
80E	Takotna-Twin Peaks	213.10		213.10	113.10	100.00
80F	Medfra-Nixon Mine	3,450.00		3,450.00	1,809.00	1,641.00
80G	Takotna-Nixon Fork	010.50		010.50		010.50
80G D	Takotna-Nixon Fork (Whiter)	183.16		183.16		183.16
80H	McGrath Aviation Field	11,596.53	300.00	11,896.53	14,896.53	
80J	Medfra Aviation Field	345.00		345.00	285.00	60.00
81	Good Creek-Salmon River	3,900.62	3,499.40	13,400.02	9,990.14	3,409.88
81A	Blak River	197.12	1,352.88	1,550.00	1,550.00	
82*	Taku River	899.21	19,309.74	20,208.95	20,208.95	
84	Fairbanks-Council Survey	41,528.75		41,528.75	41,528.75	
86	Fourth of July Creek	4,194.66		4,194.66	1,161.23	3,033.43
87	Woodchopper Creek	872.00		872.00	62.00	810.00
88	Ferry-Eva Creek	20,775.68		20,775.68	18,359.89	2,415.79
89	Kougarok Reconnaissance	4,312.11		4,312.11		
89A	Seward Peninsula Railroad	149,163.17	100.00	24,404.55	173,667.72	64,539.92
89B	Pliginsk Aviation Field	716.00		716.00	716.00	
89C	Iron Creek-Amerloan River	424.02	1,000.00	1,754.02	1,754.02	
90A	Shelter Cabins, 1st Division	340.36		340.36	340.36	
90B	Shelter Cabins, 2nd Division	27,019.73	5,007.69	32,027.42	27,979.39	4,048.03
90C	Shelter Cabins, 3rd Division	21,703.58	1,097.47	22,801.05	20,921.70	1,879.35
90D	Shelter Cabins, 4th Division	36,409.77	2,007.00	38,416.77	34,071.18	4,345.59
91*	Yakutat	43.73	6.82	50.55	50.55	
92A	Bothel-Quinhagak	1,330.21	1,000.00	2,330.21	1,797.60	532.71
92B	Bothel-Tuluksook	1,744.24	725.00	2,469.24	1,478.48	990.76
92C	Aktak-Ituwood Mission	784.00	800.00	1,584.00	1,584.00	
92D	Bennett Cutoff	198.00	200.00	398.00	398.00	
92E	Yukon-Kuskokwim Portage	12,352.33	10,600.00	22,952.33	22,016.48	935.85
92F	Quinhagak-Good News Bay	1,749.06	768.45	2,508.41	2,417.77	90.64

No.	Sub-project Name	Federal Appropriations and "Alaska Fund"	Contributed Funds	Supervised Funds	Grand Total	Construction	Maintenance
92G	Good News Bay-Togalak	1,304.87	970.00		2,274.87	2,203.33	71.54
92H	Togalak-Nushagak	5,039.95	1,400.00		6,439.95	3,848.47	2,591.48
92I	Lewis Point-Naknek	1,947.70	860.00		2,807.70	2,632.34	175.36
92J	Naknek-Egegik	1,531.50	740.00		2,271.50	2,105.00	166.50
92K	Egegik-Kanatak	922.00			922.00	350.00	572.00
92L	Crooked Creek-Aniak	1,099.58	310.00		1,409.58	820.00	589.58
92M	Aniak-Tuluksak	2,231.31	1,120.00		3,351.31	2,514.96	836.35
92N	Aniak-Canyon Creek	306.00			306.00		306.00
92O	Tuluksak-Foothills	1,444.14			1,444.14	1,185.12	259.02
92P	Holy Cross-Kallishak	950.20			950.20	500.00	450.20
92Q	Upper Landing-Bear Creek	2,327.98	2,800.00	400.00	5,527.98	4,100.00	1,427.98
93	Chulitna Trail	4,885.32	3,000.00	877.17	8,762.49	6,956.44	1,806.05
93A	Bull River Trail	1,716.79	1,200.00	1,598.81	4,515.60	3,582.32	933.28
93B	Indian River	2,979.63	3,600.00		6,579.63	6,566.23	13.40
93C	Curry Aviation Field	124.41	1,119.60	2,900.00	4,144.01	3,376.60	767.41
93D	Chulitna Tram	238.85			238.85	238.85	
94	Kodiak-Abberts	58,068.26			58,068.26	46,308.51	11,259.75
95	Kanatak-Becharof Lake	30,135.24			30,135.24	23,882.31	6,252.93
95B	Larsen Bay-Karluk River	962.05			962.05	800.00	921.05
96	Chickaloon-King River	1,723.06			1,723.06	272.29	1,111.93
96A	Chickaloon Cable	384.22			384.22	7,500.37	122.83
96B	Chickaloon-Nelchina	7,623.20			7,623.20	413.80	
97	Sunrana Footbridge	413.80			413.80	413.80	
97A	Healy Aviation Field		491.79		491.79		
98	Homer Spit	20,799.74	16,424.56		37,224.30	32,869.75	4,354.55
98A	Nuku Bay	2,023.85			3,724.90	3,650.98	2,097.77
98B	Ninilchik Aviation Field		384.18		384.18		
98C	Kashof Aviation Field		674.52		674.52		
98D	Kashof Road		7,072.22		7,072.22		
100	Office and General Overhead	612,709.38	777.71		613,487.09	248,385.45	265,101.64
101	Territorial General Overhead			71,521.31	71,521.31	30,936.42	31,584.89
	Totals	\$14,532,308.63	\$ 1,453,212.63	\$ 932,280.46	\$16,917,801.62	\$ 9,490,683.96	\$ 7,427,112.66
	*—Transferred to Department of Agriculture.						
	**—Abandoned.						
	Richardson Highway and Edgerton Cutoff*	\$ 6,382,755.19	\$	\$	\$ 6,382,755.19	\$ 2,731,876.49	\$ 3,650,878.70
	Seese Highway*	1,418,967.46	14,873.22	39,943.15	1,473,783.83	1,028,837.20	444,946.63
	*—Included in above table.						

COST OF MAINTENANCE.

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

Classification	Mileage	Annual Maintenance per mile	Total
Wagon Roads	1,707 $\frac{1}{2}$	\$300	\$512,250
Sled Roads	1,403 $\frac{3}{4}$	25	35,094
Trails	7,184	10	71,840
Flagged Trails	712	3	2,136
Totals	11,007 $\frac{1}{4}$	\$ 56.45	\$621,320

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

INSPECTION.

The magnitude of the task and extent of territory covered by the wide-flung activities of this Commission may be realized from the fact that it would take two years of continuous traveling on the ground with the best facilities available for a single individual to make a complete inspection of the entire mileage for which the Commission is responsible. In view of the growing use of airplanes in Alaska more comprehensive and frequent inspections can now be made by the members of the Commission than was formerly the case. The President or Engineer Officer spend the greater part of each working season inspecting the field work and ascertaining the needs of all sections for transportation routes.

FEDERAL AID.

The provisions of the Federal Aid Road Acts do not apply to the Territory of Alaska. The original Federal Aid Road Act was approved July 11, 1916, and was amended by the Act approved February 28, 1919. The Federal Highway Act of November 9, 1921, as supplemented and amended, is now the basic law governing Federal Aid road work.

The extension of the Federal Aid Road Acts to Alaska has been proposed. In view of the fact that nearly 12 years before the Federal aid idea was adopted, the Alaska Road Commission had been created by Congress in 1905 to meet the special conditions in Alaska, had the

work well in hand; and in view of the further fact that the theory, specifications, methods, etc., of the Federal Aid do not meet the conditions in the Territory, Congress has instead increased the powers and appropriations of the Alaska Road Commission.

DEPARTMENT OF AGRICULTURE.

The National Forests, administered by the U. S. Forest Service, are provided with a road system, the work on which is done by the U. S. Bureau of Public Roads. The territory served by this organization, comprising about 5% of the area of the Territory, lies mostly in Southeastern Alaska and could not be tied in with the rest of the Territory by a road system. The work of the two road building agencies is thus entirely distinct and no overlapping of work or effort exists or is possible.

TERRITORIAL ROAD LEGISLATION.

The present road law in the Territory, known as the Cooperative Road Act, was passed on April 21, 1919 (Chapt. 11, Session Laws 1919). It was made necessary by the Federal appropriation for the National Forests, which could be expended only provided cooperative funds were appropriated by the Territory, the Department of Agriculture funds becoming available in the ratio of about three dollars of Federal funds to one dollar of Territorial funds. Under this law the Territorial Board of Road Commissioners, consisting of the Governor, the Secretary, and the Treasurer of the Territory, was authorized to enter into cooperative agreements with the Department of Agriculture, the Alaska Road Commission, or other Federal bureaus, and to turn over to the disbursing officers of such bureaus Territorial funds to be expended by them upon the cooperative projects.

The Territorial Board was also authorized and directed to submit to the Legislature estimates for further work. The Divisional Boards consisted, as before, of one elected commissioner at an annual salary of \$2,500 and two appointed members who should be reimbursed for their expenses for such time as they should actually serve. The Divisional Boards, also, were required to submit annual reports upon January first.

This law further provided that after March 1, 1921, the Divisional Chairman should be appointed from qualified civil engineers in the Territory who should serve without pay and provided for two elected commissioners in each division who should receive a per diem of \$10 for such time as they should actually serve, but whose total compensation should not exceed \$1,000 in any one year.

The following Territorial funds have been appropriated and expended to March 31, 1930:

APPROPRIATIONS:

Forest Revenues to June 30, 1920	\$ 299,453.77
April 30, 1927, Shelter Cabins	20,000.00
May 3, 1917, Roads, Bridges, Trails and Ferries	400,000.00
May 3, 1917, Nizina Bridge	25,000.00
May 1, 1919, Shelter Cabins	5,000.00
May 1, 1919, Roads, etc.	375,000.00
May 5, 1921, Nizina River Bridge	25,000.00
May 5, 1921, Seward Peninsula Railway	24,014.00
May 7, 1921, Shelter Cabins	10,000.00
May 7, 1921, Roads, etc.	210,000.00
May 3, 1923, Tolovana Tram	6,425.00
May 4, 1923, Roads, etc.	210,000.00
May 4, 1923, Shelter Cabins	15,000.00
May 5, 1923, Kaltag Portage Survey	312.72
April 30, 1925, Roads, etc.	260,000.00
April 30, 1925, Shelter Cabins	20,000.00
April 30, 1925, Telephone Lines, Seward Peninsula	3,892.20
April 30, 1925, Pioneer Com. Road	3,341.03
Deposits from sales and refunds	422.25
May 2, 1927, Telephone Lines, Seward Peninsula	4,000.00
May 5, 1927, Roads, etc.	460,000.00
May 5, 1927, Shelter Cabins	82,286.58
April 27, 1929, Telephone Lines, Seward Peninsula	5,000.00
May 1, 1929, Telephone Lines	74.69
May 2, 1929, Yukon-Kuskokwim Portage	7,500.00
May 2, 1929, Roads, etc.	320,000.00
May 2, 1929, Shelter Cabins	20,000.00
Total appropriated to March 31, 1930	\$2,821,808.59

EXPENDITURES:

Expended by Territory prior to April 1, 1921	\$ 684,239.84
Expended by Territory, April 1, 1921 to March 31, 1930	40,441.37
Supervised by A. R. C. 1921-1930	226,291.32
Cooperative with A. R. C. 1920-1930	1,354,894.38
Cooperative with Forest Service 1920-1930	310,169.39
Total expended to March 31, 1930	\$2,625,436.71
Balance, April 1, 1930	196,371.88
Total	\$2,821,808.59

TERRITORIAL BOARD.

The Territorial Board of Road Commissioners, as now constituted, is composed of the following:

Geo. A. Parks, Governor of the Territory.....	Chairman.
Cash Cole, Auditor of Alaska.....	Secretary.
Walstein G. Smith, Territorial Treasurer.....	Member.
Robert J. Sommers.....	Territorial Highway Engineer.

LOCAL COOPERATION.

Under the authority of the Territorial Cooperative Road Act, approved April 21, 1918, and the Act of Congress approved June 30, 1921, the Commission made additional cooperative agreements for the prosecution of work supported in part by Federal funds and in part by funds appropriated by the Territorial Legislature. In the first and second divisions, Southeastern and Western Alaska, respectively, no divisional chairmen were appointed during the past year, all available funds being allotted to cooperative projects. In the other two divisions, superintendents of the Commission were appointed chairmen of the respective Territorial commissions.

The President of the Commission continued to supervise certain public works for the Territory and the work of the Divisional Chairmen as well as the other work supported by appropriations of the Territorial Legislature. No Territorial road building organization has been maintained since March 1, 1921.

The following general road funds were expended on Territorial projects during the fiscal year:

COOPERATIVE ROAD PROJECTS:

Alaska Road Commission Funds	\$ 124,195.52
Territorial Funds	55,531.17
Miscellaneous Contributions	2,369.23
Total	\$ 182,035.92

TERRITORIAL ROAD PROJECTS:

Territorial Funds	\$ 40,842.32
Miscellaneous Contributions	5,559.00
Total	\$ 46,501.52

SPECIAL PROJECTS:

Shelter Cabins, Territory, 2nd Division	\$ 3,594.13
2nd Division	1,968.59
4th Division	3,314.13
Aviation Fields, Territory, 1st Division	3,609.00
2nd Division	7,539.42
3rd Division	12,352.00
4th Division	15,895.30
Aviation Fields, Miscellaneous Contributions	7,000.45
Telephone Lines, Territory	4,680.81
Nome Harbor, Territory	2,500.00
Valdez Dyke, Territory	5,051.29
Castineau Bar, Territory	351.00
Yukon-Kuskokwim Portage, Territory	10,500.00
Seward Peninsula Tramway, A. R. C. Funds	12,275.15
Tolovana Tramroad, A. R. C. Funds	7,963.83
Nizina Bridge, A. R. C. Funds	7,766.31
Total	\$ 106,373.72

Grand Total **\$ 331,817.46**

For the working season of 1930 (fiscal year 1931) the Territorial Board has allotted to the Department of Agriculture \$11,000 and to the Alaska Road Commission the following amounts:

Cooperative Road Projects	\$ 53,500.00
Territorial Road Projects	23,750.00
Shelter Cabins	8,000.00
Aviation Fields	33,400.00
Telephone Lines	5,000.00
Nome Harbor	2,500.00
Valdez Dyke	7,500.00
Total	\$ 139,650.00

These amounts are held subject to the call of the Commission.

In addition to the above amounts \$6,387.00 for aviation fields and \$3,793.17 for shelter cabins have been deposited. The existing balance of \$14,969.72 in contributed funds includes \$1,039.35 contributed by the Fairbanks Commercial Club for improvement of the Fairbanks airport, and \$3,750.00 contributed by Willow Creek Mines for road construction.

The cooperative Road Act has worked satisfactorily under the

conditions imposed. Certainly, the amount of road work accomplished for the money expended has been far in excess of what would have been possible under separate organizations. Had the Territory attempted to expend its \$50,000 per division under an independent organization, nearly one-fourth of the available funds would have gone into overhead, salary and expenses of a divisional chairman and clerk, rent, light, etc. All of this service was furnished free by the Alaska Road Commission and at no additional cost to itself. In addition, the extensive plans and mechanical equipment of the Alaska Road Commission, representing a capital investment of over \$500,000, were furnished where available in the Territorial work without charge except for fuel and ordinary running expenses. Due to the extensive organization of the Alaska Road Commission, it has also been possible to apply Territorial money to outlying projects where the maintenance of an independent organization would have been impossible or prohibitive in cost. Finally, all available money is lumped together and expended upon a comprehensive system with a continuity in plans and a consistency in operations over an extended period of years.

The Alaska Road Commission, also, is a gainer, under the Co-operative Road Act. By having greater funds available, it is able to consolidate purchases and supplies and thus to secure better prices. Conflicts in plans and complications in operations are avoided. By having funds becoming available all the year round, the difficulties resulting from fiscal year appropriations beginning or terminating about the middle of the open working season are minimized, and the entire organization and conduct of operations are rendered more flexible.

AVIATION FIELDS.

Aviation has had a very rapid development in recent years due to the large area of Alaska and scarcity of other means of transportation. While in the United States the use of airplanes may save hours or days, in Alaska, weeks may be saved on a single trip.

To keep pace with the development of aviation the Territorial Legislature has authorized since 1925, the expenditure of a part of Territorial road funds for the construction of aviation fields. The work is performed by the Commission under the existing cooperative arrangement. To date 61 fields have been constructed, 5 are now under construction, and there are 5 natural sites used at times for landing planes, on which no work has been done. (See map in back). Total expenditures to date are \$119,281.67.

Commercial companies operating in Central Alaska since 1925 have handled the following business:

	March 1, 1925 to Feb. 29, 1930	Total to Feb. 29, 1930
Plane miles	187,492	611,492
Passengers carried	1,015	3,615
Passenger miles	162,135	497,135
Mail and express	81,325	236,825

CONSOLIDATION OF WORK UNDER THE COMMISSION.

The following additional duties have been imposed upon the members of the Commission 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 Commission, in addition to his other duties, was appointed District Engineer; the other two members of the Commission were placed under the immediate orders of the District Engineer and the Secretary and Disbursing Officer of the Commission, was, in addition, designated as Disbursing Officer for the district. The Alaska district is a part of the North Pacific Division. Detailed report of the operations of the Alaska district will be found in the Annual Report, C. of E.
- (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 District Engineer who is also President of the Commission, in addition to his other duties, has been 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).
- (c) At the request of the Territorial government the President of the Commission supervises various Territorial public works such as roads, aviation fields, shelter cabins, telephone lines, flood protection, terminal construction, etc.
- (d) By informal arrangement, effective April 1, 1922, the President of the Commission agreed to act for the National Park Service, Department of the Interior, on certain matters relating to the improvement of the Sitka National Monument and the development of Mount McKinley National Park.
- (e) At the request of the Secretary of the Interior, the Commission made a survey and submitted a special report upon the control of Lowell Creek, Seward, Alaska, to protect government property in the vicinity from damage due to floods. By the act approved February 9, 1927, this flood control work was assigned to the Secretary of War who designated the Alaska Road Commission as the agency to carry out the work. The War Department appropriation act of March

23. 1923. included funds for the work, which has been completed.

- (f) At the request of the Quartermaster General of the Army, the Commission disburses funds and generally supervises the administration of the Sitka National Cemetery created by Executive Order of June 12, 1924.
- (g) At the request of the Commanding General, Ninth Corps Area, the Alaska Road Commission has undertaken a survey and report on a water supply for Chilkoot Barracks, the only Army post in Alaska.
- (h) Supervision and inspection on behalf of the Federal Power Commission of the hydro-electric development at Eklutna.
- (i) Construction of a float for Government boats at Juneau. This work has been undertaken by the Commission at the request of the various departments interested and with the approval of the Chief Coordinator. The cost of the work will be defrayed by the departments which will be benefited.
- (j) Under Special Orders No. 161, dated July 12, 1929, the President of the Commission was assigned to duty as instructor for reserve officers in the Territory of Alaska.

CONSOLIDATED ENGINEERING ORGANIZATION.

The practical result of the foregoing orders has been the development, without legislation, but through executive order or interdepartmental or inter-bureau agreement, of a practical working arrangement through which the facilities of all the services involved are used interchangeably, but a careful account is kept so that each appropriation is eventually expended for the purpose intended by Congress and no appropriation is either increased or diminished by such interchange of working funds or facilities. Separate accounts and reports are rendered to the departments under the direction of which the work is performed. As a result of this coordination numerous public works have been conducted in an economical manner and without the large overhead that would have been necessary if they had been performed by several different bureaus.

The following are the current activities under consolidated engineering direction:

The construction, repair, and maintenance of federal roads, tramways, ferries, bridges, trails, and related works, now aggregating over 10,000 miles, and extending from open-all-the-year-round south coast ports to all inhabited parts of the Territory; Territorial roads, bridges, ferries, aviation fields, telephone lines and trails throughout the

Territory, covered by cooperative agreements; shelter cabins; Nome-Sheldon Tramway 74 miles operated by cars drawn by motors or by dogs; Tolovana Tramway; Valdez Dyke; Yukon-Kuskokwim Portage; Government float at Juneau.

Improvement of Nome Harbor; Improvement of Wrangell Narrows; Improvement of the Tolovana River; the preliminary examination or survey of Ketchikan Creek, Port Alexander, Resurrection Bay, Sitka Harbor, Dry Pass and Nome Harbor; flood control Salmon River; the investigation of port facilities; the issuance of permits for fish traps and other structures in the navigable waters along the Territory's 26,000-mile coast line; miscellaneous inspections, public hearings and contingencies of Rivers and Harbors; Improvement of Sitka National Monument; development of Mt. McKinley National Park; improvement; Chilkoot Barracks Water Supply; administration of Sitka National Cemetery; control of Lowell Creek; maintenance of aids to navigation in Nome Harbor, Safety Harbor and Gastineau Channel Bar; and the inspection of power plant construction at Eklutna.

ALASKA TRANSPORTATION PROBLEMS.

In order that the difficulties of transportation within Alaska may be fully appreciated it is necessary for one to visit the Territory and to traverse part of it not yet provided with roads or trails. To one gifted with a good imagination the following brief description will indicate the difficulties in part:

Alaska is a frontier country of vast area, about one-fifth that of the United States proper. With its population of about 30,000 whites and an equal number of natives it is in about the same stage of development as was our great western frontier at the time just preceding the Civil War. There are many reasons why Alaska will not develop so rapidly, however, one of the most important of which is the great difficulty encountered in transportation.

This is essentially a country of very bold relief. Along the entire southern coast line, from Portland Canal east of Ketchikan to False Pass at the southwest extremity of the Alaska Peninsula mountain ranges rise, abrupt and rugged, direct from the sea. This continuous chain of mountains along the coast has done much to retard the development of Alaska since it presents to the visitor a forbidding and discouraging aspect and it has always greatly increased the difficulties of access to the interior.

Beyond these mountains there lies a broad stretch of rolling upland country comprising the valleys of the Copper, Susitna and Nushagak Rivers. The two first named are the only rivers of any size that break through the continuous chain of coast ranges to drain into the Pacific Ocean. The Nushagak flows parallel to the coast