

BIENNIAL REPORT
ON
FOREST ROAD PROJECT
ACTIVITIES
BY
BUREAU OF PUBLIC ROADS
U. S. Department of Agriculture
PERIOD
1923 and 1924
C. W. CHEATHAM
Asst. District Engineer
UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF PUBLIC ROADS,
District No. 1.

Juneau, Alaska, March 1, 1925.

Secretary

Territorial Board of Road Com.,
Juneau, Alaska.

Dear Sir:

Attached hereto is a brief report of the activities of the Bureau of Public Roads, U. S. Department of Agriculture, for the biennium ending March 1, 1925.

The provision of the Federal Aid Road Act relating to roads within or adjacent to the National Forests applies to the Tongass and Chugach National Forests which comprise about five per cent of the area of the Territory.

A part of the appropriations made under this Act are expended on cooperative projects with the Territory of Alaska.

Respectfully submitted

(Signed) C. W. CHEATHAM,
Assistant District Engineer
Bureau of Public Roads.

FIRST JUDICIAL DIVISION

Glacier Highway, Juneau Section.....20.0 Miles

This section embraces the Thane Road, Basin Road and the road leading from Juneau to Mendenhall Glacier.

In the past two years nearly all bridges have been rebuilt, all log culverts replaced by concrete and a considerable portion of the road widened to 18 feet. Approximately 12,000 cubic yards of gravel surfacing was placed. It is planned to continue work until the entire section has been brought to an 18 foot standard.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$45,721.57

Glacier Highway, Tee Harbor Section.....7.0 Miles

This road is an extension of the Glacier Highway and connects Tee Harbor and Auk Bay.

During 1923 and 1924, three miles were constructed and seven miles surfaced. The work involved heavy clearing and the removal of a large amount of solid rock. The road was built on a maximum grade of 3 per cent.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$78,765.73

Territory of Alaska 263.29

Biennial Total Expenditures.... \$79,029.02

Glacier Highway, Eagle River Section.....8.26 Miles

This road is an extension of the Glacier Highway and connects Tee Harbor and Eagle River where there is a considerable area of agricultural land, part of which is under cultivation. A survey was made in 1922. The contract for construction was let to Siems & Carlson in 1923 and the grading was completed in 1924. The surfacing will be completed and the road opened for traffic the coming season. The maximum grade is 5 per cent. Width over all, cuts 16 feet and fills 14 feet.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$101,783.19

Glacier Highway, Mendenhall Loop Section.....1.66 Miles

This road connects the Glacier Highway at Auk Lake with the old Richardson trail at McGinnis Creek. Additional surfacing was applied and other minor improvements made.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$ 396.48
Territory of Alaska	875.06

Glacier Highway, Juneau-Eagle River Section.....4.0 Miles

This is a section of the main Glacier Highway. Expenditures for the biennium cover only settlements on outstanding accounts.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$ 195.10
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The Glacier Highway location was extended to Berners Bay, a distance of 14.2 miles. When constructed, this extension will make a more or less promising mining district accessible, also a tract of agricultural land in the vicinity of Berners Bay. No plans have been made to extend the road in the immediate future.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$ 4,793.34
Territory of Alaska	800.00

Petersburg-Scow Bay.....3.1 Miles

This road connects Petersburg with Scow Bay where there is a small fishing population. The road was improved and surfaced. Suitable gravel for surfacing had to be transported by boat, a distance of five miles. In addition to the gravel spread on the road, 400 yards was placed on the beach for use the coming season.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$11,683.52
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Salmon River Road.....14.0 Miles

This road begins at the dock at Hyder, Alaska, and extends up Salmon River to the International Boundary. It taps a rich mining district.

Owing to exceptionally heavy floods it was necessary to reconstruct several sections of this road and do considerable additional work on pile trestles constructed in 1922.

A contract was let for the reconstruction of the road around the 7 mile bar. This work involved about 2 1/4 miles of heavy rock work and is about 60 per cent. complete.

A pile dock approach 2,600 feet in length connecting the road at high tide with the dock was completed and final settlement made.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$38,288.26
Territory of Alaska	5,058.61

Sitka-Power Station.....4.39 Miles

A survey of this road was made in 1923. The road connects Sitka and the power plant at Power Creek. It also serves several residents of homesteads in the vicinity of Jamestown Bay. A large part of the road is laid on a steep solid rock side hill. The road was built on a maximum 7 per cent. grade, 13 feet in width over all on hill-sides. Screened gravel surfacing is to be placed the coming season.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$64,884.91
Territory of Alaska	64.25

Tongass Highway, Ketchikan-Ward's Cove, Section 1.....3.99 Miles

This road extends from the northern limits of the city of Ketchikan to the entrance of Wards Cove. It serves a large population residing adjacent to the road also a sawmill, radio station and two canneries. This road was surfaced its entire length with an 8" layer of crushed rock. This took about 5,000 cubic yards of material.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$22,847.08
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Tongass Highway, Ketchikan-Wards Cove, Section 2.....2.35 Miles

This project is an extension of the Tongass Highway from the entrance of Wards Cove to the townsite of Wacker. It serves one cannery, a packing plant and a number of residents of Wacker.

The contract for the construction was let in 1922 but owing to financial difficulties of the contractor, the work was not completed until the fall of 1924. This was a heavy piece of construction, thru solid rock. The work involved 24,710 cubic yards of solid rock, 8,300 cubic yards of common, 15 acres of clearing and grubbing, 910 feet of bridge, 1,031 feet of culvert and 4,600 cubic yards of crushed rock surfacing.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$60,066.22
Territory of Alaska	6,771.31

Tongass Highway, Saxman Section.....1.74 Miles

This road connects Ketchikan and Saxman. It serves the residents of Ketchikan and a small population at Saxman and several residents

outside the city limits. The road was constructed 15 feet wide over all and on nearly a level grade. Seventy-five per cent. of the material was solid rock and the clearing and grubbing very heavy. An excellent road bed was secured. The project is to be surfaced with crushed rock the coming season.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$33,723.25

Wrangell Oil Dock.....1.04 Miles

This road connects Wrangell with the Standard Oil Dock and the cannery on the north side of the island. Since the completion several new houses have been built along the first quarter mile of the road. The road also serves the people of Wrangell by making it possible for residents to work at the cannery during the summer months.

About one-half mile of the project is a plank road and the balance graded earth surfaced with beach gravel.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$10,831.20

El Nido.....0.49 Miles

This road is located on the west side of Lisianski Inlet. It begins at the mouth of Cann Creek and extends to a basin about one mile distant. It serves as an outlet to prospectors and miners operating in this district. This is a low type road constructed on steep grades, partly corduroy and partly graded. The work the past two years consisted of finishing work done previously.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 2,830.00

Yakutat Cannery.....1.0 Miles

No work was done on this project. Expenditures shown were for bills contracted the previous biennium.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 87.50

White Pass Highway—Location Survey.....3.1 Miles

The work on this project consisted of maintenance and location survey only. 1.28 miles leading north from Skagway were built some years ago and only general maintenance was done on this portion of the

road. A location survey was made of 1.82 miles additional and plans and estimates completed. This road serves the general public of Skagway largely as a recreational road.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 2,203.72

Tongass Highway, Saxman-Beaver Falls Section (Location Survey)
11.53 Miles.

This road is an extension of the Tongass Highway. It connects at Saxman and extends to Beaver Falls. It will serve the cannery at Beaver Falls Creek and the power plant near Mountain Point. Also several homesteads enroute.

It will be a great benefit to a steadily growing population at Ket-chikan. No construction work has as yet been done.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 3,610.79

Wrangell Highway, Cemetery-Shoemaker Bay Section (Location Survey)
4.08 Miles.

This connects with the road at the Wrangell Cemetery and extends south to Shoemaker Bay where a considerable tract of agricultural land is available for homestead entry. The proposed road will open up this section also serve the people of Wrangell with a recreational road. A location survey was made the past season but no construction work has been done.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 1,111.94

MAINTENANCE—FIRST JUDICIAL DIVISION

Glacier Highway.....32.67 Miles

This road was maintained its entire length. Considerable improvement work such as widening, replacement of culverts, bridges, etc., was done, especially on the first 15 mile section. Approximately 5,000 cubic yards of gravel was placed and the road kept in excellent condition for automobile traffic. About \$700.00 was spent in the spring of 1923 and about \$1,000 in the spring of 1924 removing snow slides on the Thane road. Snow plowing equipment was secured last fall and the road has been maintained and kept clear of snow during the heavy snows of the past winter.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$25,144.66
Territory of Alaska	3,584.04
Biennial total of Expenditures	\$28,728.70

Tongass Highway.....6.5 Miles

This includes all roads at Ketchikan. On account of the heavy rains in this vicinity, the maintenance of roads is difficult and expensive. However, the roads have been maintained in good condition for automobile traffic. During the past season 6.34 miles were surfaced with crushed rock which makes an excellent road, and after one or two years should reduce the maintenance cost.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$ 1,802.07
Territory of Alaska	2,407.00
Biennial total of Expenditures	\$ 4,209.07

Petersburg-Scow Bay.....3.1 miles

The work consisted of general maintenance such as cleaning ditches, reshaping, etc. Considerable gravel surfacing was applied.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$ 469.50
Territory of Alaska	275.00
Biennial total of Expenditures	\$ 744.50

Salmon River Road.....12.03 Miles

This includes all roads in the vicinity of Hyder, Alaska, also the 2,600 foot pile dock approach: On account of the heavy freighting to the mines and the flood conditions, considerable work was necessary to keep this road in good shape for automobile and truck traffic. Five thousand dollars was expended on the section above Texas Creek on permanent improvements. A large amount of rock filling was added to the jetties in Salmon River and to the piers of the bridge at Texas Creek.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$13,364.61
Territory of Alaska	5,250.00
Biennial Total Expenditures	\$18,614.61

Sitka-Power Station.....0.87 Miles

The work on this road consisted of general spring maintenance and some minor repairs to the surface and drainage structures.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$ 645.78
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White Pass Highway.....2.28 Miles

This is an old road constructed by the Alaska Road Commission. Only general maintenance work was done. Practically all the funds were spent on repairs to the bridge across Skagway River. Local residents contributed considerable time. The bridge, however, is unsafe for heavy loads and should be rebuilt in the near future.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$ 662.26
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Wrangell Highway.....2.04 Miles

At the beginning of maintenance in 1922, this road was in bad shape. Practically no work had been done on the Cemetery Section since its construction. A gravel surface has been applied, the culverts repaired and road raised above high tide line in several places. The road is now in good condition.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$ 3,089.10
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THIRD JUDICIAL DIVISION

Cordova-Eyak Lake, Section 2.....4.35 Miles

This project begins at Mile 2 on the Cordova-Eyak Lake Road and extends to the Fish Hatchery on the North Arm of Eyak Lake and is a continuation of the road started around the lake from the town of Cordova. It affords the citizens of that town their only means of recreation. This work was started in 1922 and completed in 1923. On account of the cliffs extending to the shore of the lake, very heavy rock work was encountered thruout the entire project. This project was also surfaced the entire length.

Expenditures by Bureau of Public Roads:

Forest Road Funds	\$55,389.05
Territory of Alaska	695.16
Total Biennial Expenditures	\$56,084.21

Cordova-Eyak Lake, Section 3.....1.38 Mile

This project begins at the end of Section 2 and extends around the arm and up Power Creek. This extension provides an additional recreational drive for the people of Cordova and also aids development o

a hydro-electric power plant on Power Creek, electric power being much needed in this town.

Location Survey was made in August 1924 and plans are being prepared for the construction of this extension.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 761.31

Girdwood-Crow Creek.....10.28 Miles

This road begins at Girdwood at Mile 75 on the Alaska Railroad and extends up Glacier Creek to Crow Creek; thence up Crow Creek to its head, a total distance of 10 miles. It will make accessible several placer claims and also open up a very highly mineralized country at the head of Crow Creek.

The survey of this project was made in the fall of 1922 and plans and estimates were made in the spring of 1923.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 2,408.88

In May, 1923, a contract was let for the construction of the first 7 miles of this project. This section was completed in August, 1924.

The work consisted of clearing, grubbing and grading and the construction of a 135 foot frame bent bridge across California Creek, also the placing of 1,500 cubic yards of surfacing. A maximum 7 per cent. grade and a maximum curvature of six degrees were used as a basis for the construction of this road.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$57,334.87

Hope-Palmer Creek.....12.41 Miles

This project begins at Hope, Alaska, and lies on the upper side of Resurrection Creek valley to Palmer Creek ridge, then up Palmer Creek to the head of the valley. This road opens up a country which is very highly mineralized and also is a great benefit to miners and prospectors along the route.

Survey was made late in the fall of 1923, and plans and estimates prepared in the spring of 1923.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 2,983.22

Bids were called for on this project in May, 1923. None were received that were acceptable and it was decided to do the work by day labor, which was started in June, 1923 and completed in November, 1923.

Work consisted of clearing, grubbing and grading. The maximum grade was seven per cent. and the maximum curvature 6 per cent.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$61,726.33

Hope-Sunrise8.69 Miles

This project begins at Hope, Alaska, and extends along Turnagain Arm to Sunrise and will, when completed, give the people of Hope an outlet to the Railroad without having to cross the Arm.

Survey was made on this project late in the fall of 1922 and plans and estimates made in the spring of 1923.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 2,827.85

Katalla-Softuk18.00 Miles

This project begins at Softuk about four miles north of Katalla and extends to Chilkat.

A survey was made of this project in the summer of 1923 and plans and estimates made during the winter of 1923 and 1924. On account of excessive cost and very little use for the road, it was decided that the old road would serve the needs of the country until such time as additional activities justified the expenditure necessary to reconstruct the road.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 5,300.00

Railroad-Sunrise, Sections 1, 2 and 3.....37.3 Miles

This road begins at Moose Pass at Mile 29 on the Alaska Railroad and extends in a northerly direction to Sunrise. There was an old wagon road thru this country built by the Alaska Road Commission, but was not suitable for modern travel. On account of the mines that are opening up thruout the whole district and also to give the residents of Hope an outlet, it was decided to rebuild this project using the old road where possible.

Work was started in May, 1923 by day labor. In November, 1923, operations were suspended, 9.4 miles having been rebuilt. The work consisted of widening, ditching, cutting down grades to come within the 7 per cent. maximum and where this could not be done, new location was made. The entire length of this project was surfaced.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$25,000.00

In May, 1924, work was resumed at Mile 9.4 and clearing, grading, culverts and bridges were completed to Mile 20. Surfacing was stopped at Mile 15 on account of the wet weather.

Across Canyon Creek on the old Johnson Creek Road there was replaced a 50 foot truss bridge with a 30 foot frame bent approach with 500 cubic yards of rock fill replacing the rest of the old bridge that was there.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$32,008.60

There was also a survey made from Mile 20 to Sunrise on Section Three of this project and plans and estimates are being prepared for this section.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 3,773.63

Seward-Kenai Lake.....8.33 Miles

This project begins at Mile 10 on the Seward-Kenai Lake Road and extends to divide where it crosses the railroad; thence continues down Snow River to Mile 14 where it again crosses the Railroad and continues on to the head of Kenai Lake. This road serves as an outlet for the residents of lower Kenai country and as a recreational road for the people of Seward.

Besides heavy clearing and grubbing, the construction work involved the removal of over 36,000 yards of solid rock and the placing of approximately 7,000 yards of gravel surfacing. Maximum grade 6 per cent. and maximum curvature 60 degrees.

Section Two of this project was completed in July 1923 and Section Three in July 1924 and was opened to traffic.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 1,312.12
Territory of Alaska 44.08
Biennial total Expenditures \$84,356.20

Quartz Creek-Russian River.....12.3 Miles

This project begins at Mile 8½ on the Railroad-Sunrise project and extends down Bear Creek and Quartz Creek to Kenai Lake; thence along Kenai Lake to Coopers Landing where it will cross the lake and connect with the road built in 1920 and 1921.

Survey, plans and estimates have been completed on this project but construction is being delayed until some of the more important roads are completed.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 1,689.72
Territory of Alaska 298.19

Katalla Road.....14.00 Miles

This road begins at Katalla and extends thru the Chilkat Oil well property and then to Chilkat on Bering River. The first four miles of this road were built by the Bureau of Public Roads in 1920 and the other ten miles were built by an English company in 1908. The latter section had nearly grown up with brush and some of the bridges were in need of repair.

Work during 1923 consisted of repairing bridges, cleaning out slides and cutting out the brush that obstructed the road.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 634.00
Territory of Alaska 331.12

MAINTENANCE—THIRD JUDICIAL DIVISION.

Cordova-Eyak Lake6.28 Miles

This work consisted of removing slides, cleaning out ditches and culverts, redressing and dragging.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 3,152.29
Territory of Alaska 500.00
Biennial total Expenditures \$ 3,652.29

Hope District52.41 Miles

This project begins at Moose Pass Station on the Alaska Railroad and extends thru to Hope, Alaska, and then up Palmer Creek. It was taken over from the Alaska Road Commission in July, 1922.

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The work consisted of rebuilding bridges, culverts, surfacing and cutting out wind falls. On the Hope-Palmer Creek Section, which was built by the Bureau of Public Roads, over 3,000 cubic yards of surfacing was placed. In the fall of 1923, due to heavy rains, it was necessary to do considerable work to make it passable even for the winter mail team.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$13,165.70

Katalla Road14.00 Miles

The usual maintenance work was done on this project. On account of the age of the bridges on the old section it was found necessary to rebuild most of these and to do considerable surfacing between Katalla and the oil wells. It was also necessary to redrive ten bents on the Crooked River bridge due to heavy rains which resulted in the river changing its course.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 3,456.72
Territory of Alaska 2,734.83
Biennial total Expenditures \$ 6,191.55

Quartz Creek-Russian River.....13.0 Miles

On account of the flood in the fall of 1923, considerable work was made necessary on this project. There were several hundred feet of the road and the bridge at Cooper's Creek destroyed by high water.

This has all been repaired and the bridge replaced. Surfacing has been placed where needed and the road made passable for automobile traffic.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$ 3,377.09
Territory of Alaska 1,780.15
Biennial total Expenditures \$ 5,157.54

Seward-Kenai Lake16.93 Miles

The first seven miles of this project were taken over from the Alaska Road Commission in 1922. At that time the road was in bad shape and considerable repairs and maintenance were necessary. During the flood in the fall of 1923, there were two miles of road completely destroyed making it necessary to rebuild this section. Where possible the old road was filled in and where this could not be done, a fill was thrown up along the side of the old road. This was maintained during

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In the summer of 1924 at a considerable expense as the channel of the Crooked River stream was filled up for seven miles during the flood which caused the stream to overflow the road at frequent intervals.

On the rest of the road the usual maintenance was done such as grading, shaping, redressing and cleaning ditches.

Expenditures by Bureau of Public Roads:

Forest Road Funds\$15,440.47
Territory of Alaska 1,151.10
Biennial total Expenditures \$16,591.57

In order to maintain the road between Mile 3 and 5, it has been found necessary to reconstruct this section on higher ground above the railroad. A location survey was made in 1923 and it is planned to reconstruct this section the coming season.

Expenditures by Bureau of Public Roads (S. P. & E.):

Forest Road Funds\$ 356.31

SUMMARY

First Division—

Tongass National Forest:

	Federal	Territorial	Total
Forest Road Surveys	\$ 15,154.54	\$ 800.00	\$ 15,954.54
Forest Road Construction	512,669.26	12,532.52	526,201.78
Forest Road Maintenance	45,117.98	11,516.04	56,694.02
Total First Division	\$573,001.78	\$ 24,848.56	\$597,850.34

Third Division—

Chugach National Forest:

	Federal	Territorial	Total
Forest Road Surveys	\$ 17,649.89	\$ 600.00	\$ 18,249.89
Forest Road Construction	318,856.00	1,368.55	320,224.55
Forest Road Maintenance	38,592.27	6,166.38	44,758.65
Total Third Division	\$375,098.16	\$ 8,134.93	\$383,233.09
Grand Total	\$948,099.94	\$ 32,983.49	\$981,083.43