

BIENNIAL REPORT

on

FOREST ROAD PROJECTS

Chugach and Tongass National Forests Alaska

1927-1928

Road activities within the National Forests in Alaska for the period of this report have been conducted under the supervision of a District Engineer and district organization of the Bureau of Public Roads with headquarters at Juneau. All roads within the National Forests are maintained by the Bureau.

Funds expended by the Bureau are provided under the Federal Highway Act of July 11, 1916, which Act limits the expenditure to roads within or adjacent to the National Forests and designates roads so constructed as Federal Forest Highways. The detail of expenditure is determined by the approval of the Secretary of Agriculture of a program jointly recommended by the Forest Service, Territorial Highway Board, and Bureau of Public Roads. Funds have been expended in the Tongass and Chugach Forests in Alaska on the location and in the amounts set forth in the following detailed list of projects.

TONGASS NATIONAL HIGHWAY

The Tongass Highway has been constructed both north and south from the town of Ketchikan, and extends north to Wacker City on Wards Cove, and south to Herring Bay, a total of 14.10 miles.

The entire Highway is gravel surfaced and is in excellent condition, with the exception of a portion of the Wards Cove road which is in need of widening and of the placing of additional surfacing material. Traffic reports indicate that between 30,000 and 40,000 trips are made over the Highway annually. Improvements adjacent to, and served by, the Highway are rapidly increasing. Extension of the Highway to the south in both 1927 and 1928, has made available a number of home sites, practically all of which are now under private ownership or lease, and are being rapidly improved. In addition to the suburban home improvements, the Highway serves sawmills, canneries, dairies and other local industries. Funds have been expended on this highway during the biennium as follows:

Saxman-Mt. Pt. Section (construction 3.08 miles) Contract	\$	352.56
Saxman-Mt. Pt. Section (surfacing 3.08 miles) Contract		35,277.10
Mt. Point-Power Plant Section (construction 2.79 miles) Cont.		23,248.66
Mt. Point-Power Plant Section (surfacing 2.79 miles) Contract		16,665.62
Ketchikan-Wards Cove Sec. (reconstruction 6.31 miles) D. L.		244.72
Wards Cove Trestle Reconstruction (bridges) Day Labor		2,439.12
Territorial Section (reconstruction 0.18 miles) Day Labor		6,918.15
Extraordinary Repairs		1,605.21
Maintenance, 1927		4,733.43
Maintenance, 1928		7,295.00
Saxman-Beaver Falls Section (survey 11.26 miles)		95.17
Ketchikan-Wards Cove widening (survey 5.45 miles)		456.31

Total Expenditures during the biennium		\$169,325.95
Total expenditures prior to January 1, 1927:		
Construction	\$377,451.98	
Maintenance	12,251.18	\$389,703.16
Total expenditures to December 31, 1928:		
Construction	\$534,749.50	
Maintenance	24,279.61	\$559,029.11
Source of funds:		
Territorial Funds	\$ 64,343.15	
Federal Funds	494,685.96	559,029.11

GLACIER HIGHWAY

The Glacier Highway is now practically complete to its terminus at Eagle River and it is probable that but small allotments will be required for the usual replacements and for the annual maintenance. The road is 44.33 miles in length and is surfaced with either water-washed or crushed gravel. Bridge and culverts are in good condition. The width of the highway varies from 10 to 20 feet.

Traffic on this highway is increasing annually, due both to the very rapid improvement of the road-side properties and to the continually increasing tourist traffic during the summer season.

The construction of a branch road following the shore line of Auk Bay was begun in 1928 and is now practically complete. This spur is 2.71 miles in length and will serve a number of homesteads, fishermen's homes, and will, in addition, make possible the selection and occupancy of additional homesteads. The business of fur farming has been rapidly increasing and a number of successful farms are now operated tributary to the highway. There now exists property improvements and live stock interests adjacent to, and served by, the highway to the value of more than three million dollars. These properties include hydro electric plants, fur farms, dairies, homesteads, gardens and summer cottages. Funds have been expended on sections of this Highway as follows:

Juneau Section (widening 8.93 miles) Day Labor	\$	7,302.76
Reconstruction Section (bridges) Day Labor		19,497.57
Mendenhall Loop Extension (construction 0.62 miles) D. L.		1,113.17

Eagle River Landing (construction 0.68 miles) D. L.	373.57	
Fritz Cove Section (construction 2.71 miles) Contract	73,839.65	
Extraordinary Repairs	3,119.43	
Maintenance, 1927	13,062.88	
Maintenance, 1928	17,465.08	
Fritz Cove Section (survey 2.71 miles)	1,846.38	

Total expenditures during the biennium \$137,620.49

Total expenditures prior to January 1, 1927:

Construction	\$551,189.25	
Maintenance	63,428.81	\$614,618.06

Total expenditures to December 31, 1928:

Construction	\$658,281.78	
Maintenance	93,956.77	\$752,238.55

Source of Funds:

Territorial Funds	\$ 45,987.87	
Federal Funds	706,250.68	\$752,238.55

SALMON RIVER HIGHWAY

The Salmon River Highway extends from the Town of Hyder on the Portland Canal up the Salmon River to the Territorial Boundary. The total length of the road now constructed and maintained by the Bureau of Public Roads is 12.01 miles.

The Salmon River Highway furnishes the only means of traffic between the mining district on the upper Salmon River and upper Texas Creek, a tributary stream. Both of these mining districts are rapidly increasing in mineral production. The Highway also furnishes an outlet for a number of properties on the Canadian side of the boundary, and a large part of the traffic carried is due to mining activities in the Dominion. Traffic has constantly increased since the original construction of the road. It has been necessary from time to time to relocate and reconstruct sections threatened by river action. Funds have been expended on this Highway during the biennium as follows:

Six-Mile-Riverside Section (reconstruction 2.37 miles) Con.	\$ 75.97	
Six Mile-Riverside Section (surfacing 2.37 miles) Day Labor	3,839.44	
Cemetery-Fish Creek Section (reconstruction 3.11 miles) Con.	72,142.12	
Cemetery-Fish Creek Section (surfacing 3.11 miles) Day Labor	16,499.21	
Extraordinary Repairs	6,300.15	
Maintenance, 1927	12,718.28	
Maintenance, 1928	8,073.39	
Riverside-11 Mile Section (survey 2.44 miles)	1,097.18	

Total expenditures during the biennium \$120,745.74

Total expenditures prior to January 1, 1927:

Construction	\$276,056.51	
Maintenance	34,947.40	\$311,003.91

Total expenditures to December 31, 1928:

Construction	\$376,010.58	
Maintenance	55,739.07	\$431,749.65

Source of Funds:

Territorial Funds	\$ 51,320.00	
Federal Funds	380,429.65	\$431,749.65

TEXAS CREEK HIGHWAY

Texas Creek Highway extends from Mile 9 on the Salmon River Highway opposite the junction of Texas Creek and the Salmon River up the east fork of Texas Creek to a point a short distance below the source of this stream at the glacier, thence across the East Fork on a steady upgrade around the point of the intervening mountain into the drainage of the west fork and along the mountain side to the head of that stream and practically to the summit of the range.

During the past biennium, the first section of 3.41 miles has been graded and surfaced, and is now in use. The second section of 4.37 miles is under contract and grading is well under way. The Texas Creek mining district is now well defined and it is believed that this Highway will add materially to the wealth of the Territory through the opportunity for mineral development, which its construction will undoubtedly afford. Funds have been expended during the biennium as follows:

Salmon River-Texas Bridge Sec. (construction 3.41 miles) Con.	\$ 81,977.14	
Texas Bridge-Ihex Creek Sec. (construction 4.37 miles) Con.	42,390.00	
Maintenance, 1927	0.00	
Maintenance, 1928	367.37	
Salmon-River-Texas Bridge Section (survey 3.41 miles)	787.61	
Texas Bridge-Summit Section (survey 3.20 miles)	7,536.25	

Total expenditures during the biennium \$133,057.37

Total expenditures prior to January 1, 1927:

Construction	\$ 1,162.71	
Maintenance	00	\$ 1,162.71

Total expenditures to December 31, 1928:

Construction	\$133,852.71	
Maintenance	367.37	\$134,220.08

Source of Funds:

Territorial Funds	\$ 46,450.00	
Federal Funds	87,770.08	\$134,220.08

PETERSBURG HIGHWAY

The Petersburg Highway extends from Petersburg in a southerly direction to the Mountain Point Cannery. A part of this road from Petersburg to Scow Bay was constructed a number of years ago and during the past biennium was relocated, widened and resurfaced. An extension from the end of the old construction to Mountain Point was sur-

veyed, and a contract for its construction awarded. The latter section is well underway and grading is complete. The road will be completed early in 1929, and there will then be available for the use of the people of Petersburg, 5.67 miles of excellent graveled road. Funds have been expended on this Highway for the biennium as follows:

Petersburg-Scow Bay Sec. (reconstruction 2.98 miles) D. L.	\$ 40,453.03
Scow-Bay Cannery Section (construction 2.69 miles) Contract	59,683.43
Maintenance, 1927	223.66
Maintenance, 1928	2,789.56
Petersburg-Scow Bay Relocation (survey 2.98 miles)	742.29
Scow Bay-Cannery Section (survey 2.69 miles)	2,910.70

Total expenditures during the biennium	\$ 106,802.67
Total expenditures prior to January 1, 1927:	
Construction	\$ 51,928.62
Maintenance	2,779.96
	\$ 54,708.58

Total expenditures to December 31, 1928:	
Construction	\$ 165,718.07
Maintenance	5,793.18
	\$ 161,511.25

Source of Funds:	
Territorial Funds	\$ 13,315.57
Federal Funds	148,195.6)
	\$ 161,511.25

POINT AGGASSIZ HIGHWAY

The Point Agassiz Highway on the mainland, 9 miles from Petersburg, extends northerly from Muddy River for 4.54 miles. This road has been constructed as an aid to development in agriculture, and serves a number of small farms and dairies. The road makes it possible for them to transport their farm and dairy products to tide water and also permits their families to reach the community school, approximately in the center of the project, at all seasons. Funds have been expended during the biennium as follows:

Point Agassiz-Muddy River Sec. (constr'n 4.54 miles) Con.	\$ 49,392.83
Point Agassiz-Muddy River Section (bridges) Day Labor	8,620.36
Point Agassiz-Muddy River Section (survey 4.54 miles)	2,303.20

Total expenditures during the biennium	\$ 60,316.39
Total expenditures prior to January 1, 1927:	
Construction	\$.00
Maintenance	.00
	\$.00

Total expenditures to December 31, 1928:	
Construction	\$ 60,316.39
Maintenance	.00
	\$ 60,316.39

Source of Funds:	
Territorial Funds	\$.00
Federal Funds	60,316.39
	\$ 60,316.39

WRANGELL HIGHWAY

The Wrangell Highway extends both north and south from the town of Wrangell. The total length of road constructed and maintained at this point is 4.27 miles. The road has been improved during the biennium by the reconstruction of 1.23 miles, and the surfacing of two miles, all of which work was done by the Bureau of Public Roads by day labor. Funds have been expended during the biennium as follows:

Wrangell-Cemetery Section (reconstruction 1.23 miles) D. L.	\$ 72.79
Cemetery-Shoemaker Bay Section (surfacing 2.00 miles) D. L.	839.28
Maintenance, 1927	1,135.26
Maintenance, 1928	1,487.51

Total expenditures during the biennium	\$ 3,389.24
Total expenditures prior to January 1, 1927:	
Construction	\$ 61,279.72
Maintenance	4,225.76
	\$ 65,505.48

Total expenditures to December 31, 1928:	
Construction	\$ 62,046.19
Maintenance	6,848.53
	\$ 68,894.72

Source of Funds:	
Territorial Funds	\$ 1,900.00
Federal Funds	66,994.72
	\$ 68,894.72

MILL CREEK HIGHWAY

This is a short stretch of forest road leading from the beach at the mouth of Mill Creek to Virginia Lake and serves to transport supplies to the lake, from which point they are taken by boat to the Ground Hog mining district at the upper end of this body of water. The total length of the road is 0.87 miles.

The project was practically completed in the previous biennium, but additional surfacing and additional survey work was done in 1927. The total expenditures during the biennium are as follows:

Beach-Virginia Lake Section (construction 0.87 miles) D. L.	\$ 3,005.76
Beach-Virginia Lake Section (survey 0.87 miles)	16.90

Total expenditures during the biennium	\$ 3,022.66
Total expenditures prior to January 1, 1927:	
Construction	\$ 7,847.29
Maintenance	.00
	\$ 7,847.29

Total expenditures to December 31, 1928:	
Construction	\$ 10,869.95
Maintenance	.00
	\$ 10,869.95

Source of Funds:	
Territorial Funds	\$.00
Federal Funds	10,869.95
	\$ 10,869.95

SITKA HIGHWAY

This Highway extends from the south boundary of the Sitka National Monument, near Sitka, to a power station on Power Creek, and was graded in 1924 and surfaced in 1925. A small amount has been expended for extraordinary repairs, in addition to maintenance during the biennium. The total length of the road is 4.64 miles. Funds have been expended during the biennium as follows:

Maintenance, 1927		\$	877.95
Maintenance, 1928			1,150.98
Total expenditures during the biennium		\$	2,028.93
Total expenditures prior to January 1, 1927:			
Construction	\$103,494.65		
Maintenance	3,189.53	\$	106,684.18
Total expenditures to December 31, 1928:			
Construction	\$103,494.65		
Maintenance	5,218.46	\$	108,713.11
Source of Funds:			
Territorial Funds	\$ 9,800.00		
Federal Funds	98,913.11	\$	108,713.11

WHITE PASS HIGHWAY

The constructed portion of the White Pass Highway extends from the city limits of the town of Skagway to a point on the Skagway River 2.28 miles above. This road has been maintained by the Bureau for a number of years. As a result of continued pressure by the citizens of Skagway and vicinity, a detailed survey of the proposed extensions of this highway was made in 1927 and 1928. The surveys were made with the object of determining the detailed cost of all possible extensions in this vicinity, as a basis for future recommendations for construction. The expenditures during the biennium are as follows:

Maintenance, 1927		\$	453.46
Maintenance, 1928			296.27
Skagway-Denver Glacier Section (survey 5.23 miles)			1,058.72
White Pass Highway (survey 12.52 miles)			4,298.92
Total expenditures during the biennium		\$	6,107.37
Total expenditures prior to January 1, 1927:			
Construction	\$ 4,040.95		
Maintenance	3,041.38	\$	7,082.33
Total expenditures to December 31, 1928:			
Construction	\$ 9,398.69		
Maintenance	3,791.11	\$	13,189.70
Source of Funds:			
Territorial Funds	.00		
Federal Funds	\$ 3,189.70	\$	13,189.70

SEWARD HIGHWAY

The Seward Highway extends from the city limits of the town of Seward, north to Kenai Lake and also includes several short feeder roads. The original construction included a number of large bridges. Changes in river channels and deterioration of bridge material made reconstruction of certain bridges imperative. Plans were prepared and contracts let for the erection of four bridges with necessary approaches, to replace unsafe structures. The new bridges were reconstructed and the old bridges removed without material delay in traffic. The expenditures on this Highway for the past biennium has been considerable, but has not added materially to the length of the available road. The total length of the Seward Highway is 18.34 miles. Funds have been expended during the biennium as follows:

Reconstruction Bridges Section (bridges) Contract		\$	48,648.34
Extraordinary Repairs			2,867.70
Maintenance, 1927			4,271.89
Maintenance, 1928			5,081.62
Relocation Bridge Section (survey)			289.51
Total expenditures during the biennium		\$	61,158.96
Total expenditures prior to January 1, 1927:			
Construction	\$230,768.88		
Maintenance	29,707.92	\$	260,476.80
Total expenditures to December 31, 1928:			
Construction	\$282,574.43		
Maintenance	39,061.33	\$	321,635.76
Source of Funds:			
Territorial Funds	\$ 20,400.00		
Federal Funds	301,235.76	\$	321,635.76

EYAK LAKE HIGHWAY

6.28 miles of Eyak Lake Highway were constructed in 1923 and 1.08 miles in 1925; the total length of the Highway is now 7.14 miles. Flood conditions in 1927 and 1928 have added materially to the maintenance cost on this route. No mileage has been added, but extraordinary repairs have been required. Funds have been expended during the biennium as follows:

Maintenance, 1927		\$	4,874.47
Maintenance, 1928			4,561.37
Eyak Lake-Radion Station Section (survey 8.00 miles)			4,921.32
Total expenditures during the biennium		\$	14,357.16
Total expenditures prior to January 1, 1927:			
Construction	\$143,158.26		
Maintenance	13,207.89	\$	156,366.15
Total expenditures to December 31, 1928:			
Construction	\$148,079.58		
Maintenance	22,643.73	\$	170,723.31

Source of Funds:

Territorial Funds	\$ 8,200.00	
Federal Funds	\$162,523.31	\$170,723.31

KATALLA HIGHWAY

The Katalla Highway was built a number of years ago and for some time carried a considerable traffic. Conditions at Katalla, however, are now such that traffic is reduced to a minimum. There is, however, a fixed need for the use of this road, and it is maintained and repaired as required. A number of small bridges have failed, either from flood or other action and have been replaced. This replacement constitutes the major portion of the expenditure on this Highway. The total length of road now in use is 13.89 miles. The total expenditure on this Highway during the biennium is as follows:

Extraordinary Repairs	\$ 1,658.52	
Maintenance, 1927	0.00	
Maintenance, 1928	24.00	
Total expenditures during the biennium	\$ 1,682.52	
Total expenditures prior to January 1, 1927:		
Construction	\$ 33,203.66	
Maintenance	11,690.75	\$ 44,894.41
Total expenditures to December 31, 1928:		
Construction	\$ 34,862.18	
Maintenance	11,714.75	\$ 46,576.93
Source of Funds:		
Territorial Funds	\$ 13,327.62	
Federal Funds	33,249.31	\$ 46,576.93

MOOSE PASS HIGHWAY

The Moose Pass Highway extends from Moose Pass Station (Mile 29 on the Alaska Railroad) to Hope, Alaska. Day labor operations have been under way during the two years of the biennium and the road is now completed for its entire length. The major portion of the work done during the biennium consisted of surfacing sections of road previously constructed and of reconstructing of certain sections which had proven inadequate.

The total length of this Highway is 45.66 miles. Funds have been expended during the biennium as follows:

Railroad-Sunrise, Section 3 (construction 8.60 miles) D. L.	\$ 537.22	
Railroad-Sunrise, Section 3 (surfacing 8.60 miles) D. L.	4,838.37	
Railroad-Sunrise, Section 4 (reconstruction 6.04 miles) D. L.	18,746.27	
Hope-Sunrise Section (construction 11.10 miles) D. L. (cr)	3,639.36	
Hope-Sunrise Section (surfacing 11.10 miles) D. L.	43,455.96	
Emergency Work	992.00	
Maintenance, 1927	9,840.65	
Maintenance, 1928	12,283.48	
Total expenditures during the biennium	\$ 87,053.59	

Total expenditures prior to January 1, 1927:

Construction	\$346,023.42	
Maintenance	22,397.72	\$368,421.14

Total expenditures to December 31, 1928:

Construction	\$410,952.88	
Maintenance	44,521.85	\$455,474.73

Source of Funds:

Territorial Funds	\$ 608.50	
Federal Funds	\$454,866.23	\$455,474.73

PALMER CREEK HIGHWAY

Palmer Creek Highway extends from the town of Hope up Palmer Creek to a mining district on the upper waters of that drainage. This road is practically an extension of the Moose Pass Highway. The total length of the project is 11.92 miles. The total expenditures for the biennium is as follows:

Maintenance, 1927	\$ 1,346.38	
Maintenance, 1928	1,886.42	
Total expenditures during the biennium	\$ 3,232.80	
Total expenditures prior to January 1, 1927:		
Construction	\$ 64,121.36	
Maintenance	10,523.75	\$ 74,645.11
Total expenditures to December 31, 1928:		
Construction	\$ 64,121.36	
Maintenance	13,756.55	\$ 77,877.91
Source of Funds:		
Territorial Funds	.00	
Federal Funds	\$ 77,877.91	\$ 77,877.91

JOHNSON PASS ROUTE

The Johnson Pass Route as indicated on the Forest Highway System extends from Mile 29 on the Moose Pass Highway to Mile 34 on the Alaska Railroad. A section has been improved during the biennium and is now passable to Lynx Creek, 8.2 miles from the initial point of the route. Funds have been expended during the biennium as follows:

Forks-Lynx Creek Section (reconstruction 8.20 miles) D. L.	\$ 5,443.46	
Total expenditures during the biennium	\$ 5,443.46	
Total expenditures prior to January 1, 1927:		
Construction	\$.00	
Maintenance	.00	\$.00
Total expenditures to December 31, 1928:		
Construction	\$ 5,443.46	
Maintenance	.00	\$ 5,443.46
Source of Funds:		
Territorial Funds	.00	
Federal Funds	\$ 5,443.46	\$ 5,443.46

KENAI RIVER HIGHWAY

The Kenai River Highway is indicated on the Forest Highway System as extending from Mile 8 on the Moose Pass Highway to the Forest Boundary on the lower Kenai River. A section of this road including a bridge across Kenai River was constructed a number of years ago. The road has been maintained by the Bureau of Public Roads, but has carried a very small amount of traffic. During the biennium a survey connecting this constructed section with the Moose Pass Highway by way of Quartz Creek has been completed. Flood and other extraordinary conditions contributed the major portion of the cost of maintenance on the road during the past biennium.

The constructed road extends from Coopers Landing at the lower end of Kenai Lake down the Kenai River for 6.51 miles. The total expenditures on this highway for the biennium are as follows:

Extraordinary Repairs	\$	4,677.08	
Maintenance, 1927		398.37	
Maintenance, 1928		1,164.72	
Quartz Creek Relocation (survey 12.14 miles)		2,440.77	
Total expenditures during the biennium	\$	8,680.94	
Total expenditures prior to January 1, 1927:			
Construction	\$	58,533.50	
Maintenance		9,113.99	\$ 67,647.49
Total expenditures to December 31, 1928:			
Construction	\$	65,651.35	
Maintenance		10,677.08	\$ 76,328.43
Source of Funds:			
Territorial Funds	\$	20,500.00	
Federal Funds		55,828.43	\$ 76,328.43

CROW CREEK HIGHWAY

Crow Creek Highway extends from Girdwood on the Alaska Railroad (Mile 75) to placer and quartz mines on upper Crow Creek. A section of the road 6 miles in length was constructed by the Bureau in 1924. During the biennium mineral development beyond the terminus of the constructed road has proven the need of an extension, and a survey of 1.76 miles was therefore made. Funds have been expended during the biennium as follows:

Maintenance, 1927	\$	760.95	
Maintenance, 1928		1,274.34	
Crow Creek-Cache Section (survey 1.76 miles)		1,297.73	
Total expenditures during the biennium	\$	3,333.02	
Total expenditures prior to January 1, 1927:			
Construction	\$	76,213.06	
Maintenance		1,115.85	\$ 77,328.91
Total expenditures to December 31, 1928:			
Construction	\$	77,510.79	
Maintenance		3,151.14	\$ 80,661.93

Source of Funds:

Territorial Funds00	
Federal Funds	\$	80,661.93	\$ 80,661.93

AFOGNAK LAKE HIGHWAY

The Afognak Lake Highway is on Afognak Island and extends from the beach up the Afognak River to a point on Afognak Lake, where the U. S. Bureau of Fisheries have maintained and operated an extensive fish hatchery for a number of years. During the biennium, a survey was made of this road for a distance of 4.54 miles, in order that the probable cost of construction might be determined. Funds for the expenditure on this road during the biennium are as follows:

Afognak Bay-Hatchery Section (survey 4.45 miles)	\$	1,266.77	
Total expenditures during the biennium	\$	1,266.77	
Total expenditures prior to January 1, 1927:			
Construction	\$.00	
Maintenance00	\$.00
Total expenditures to December 31, 1928:			
Construction	\$	1,266.77	
Maintenance00	\$ 1,266.77
Source of Funds:			
Territorial Funds00	
Federal Funds	\$	1,266.77	\$ 1,266.77

SOUTHEASTERN ALASKA RIVER SURVEYS

In 1927, in response to the apparent need of aid to the mining industry and the desirability of reliable information regarding possible future developments, funds were set aside for certain surveys and investigations to be made by the Bureau of Public Roads. It was agreed that surveys should be carried from tide water up a number of large rivers to mineral contacts of known value. Three survey parties were organized and the work started. Surveys were completed on the Chickamin River, Endicott River and between Lisianski Inlet and Patterson Bay. The country through which these surveys were carried was found to be so difficult that it was necessary to clear and grade low type trails in order to take the party forward in connection with the survey.

A vast amount of information has been gained. The desirability and possibility of road construction determined and the fact that the survey parties left passable foot trails has made it possible for prospectors to penetrate farther into the interior than heretofore. It is proposed to continue these surveys, and it is hoped that necessary legislation will provide for expenditures of Highway funds in some form of stage construction which will permit of the initial work on a trail basis. The total expenditure during the biennium for this type of work is as follows:

Chickamin River (survey 37.09 miles)	\$	19,903.92	
Endicott River (survey 14.26 miles)		7,308.64	

North Arm-Lislanski Inlet (survey 10.52 miles)	3,778.79	
Farragut River (survey 15.60 miles)	8,015.04	
Leduc River (survey 25.00 miles)	5,212.26	
Patterson Bay-Sister Lake (survey 8.50 miles)	1,535.25	
Tenakee Inlet-Idaho Inlet (survey 12.68 miles)	3,964.69	
Unuk River (survey 25.00 miles)	720.75	
Total expenditures during the biennium	\$ 50,439.34	
Total expenditures prior to January 1, 1927:		
Construction	\$.00	
Maintenance	.00	\$.00
Total expenditures to December 31, 1928:		
Construction	\$ 50,439.34	
Maintenance	.00	\$ 50,439.34
Source of Funds:		
Territorial Funds	.00	
Federal Funds	\$ 50,439.34	\$ 50,439.34

TRAIL CONSTRUCTION

The Bureau of Public Roads, being organized for the construction of roads, was requested during the biennium to construct certain trails. Funds were provided by the Forest Service and by the Territorial Road Commissioners in cooperation. These funds were not designated as those to be expended by the Bureau. The work, however, was undertaken as a cooperative measure and trails constructed as required. The total expenditure during the biennium for this type of work is as follows:

Blind River Trail (construction 5.0 miles)	\$ 2,591.52	
Craig-Klawak Trail (construction 9.0 miles)	5,705.44	
Montana Creek Trail (construction 4.0 miles)	858.23	
Resurrection Creek Bridge	17.08	
Total expenditure during the biennium	\$ 9,172.27	
Total expenditures prior to January 1, 1927:		
Construction	\$.00	
Maintenance	.00	\$.00
Total expenditures to December 31, 1928:		
Construction	\$ 9,172.27	
Maintenance	.00	\$ 9,172.27
Source of Funds:		
Territorial Funds	\$ 1,254.81	
Federal Funds	7,917.46	\$ 9,172.27

MISCELLANEOUS SMALL PROJECTS*

For a number of years prior to the biennium just past, certain projects and improvements were financed under the heading of miscellaneous small projects. This term includes expenditure of small amounts on projects that were not considered of sufficient importance to justify project designation. The fund was discontinued, however, and during the past

biennium no expenditure of this type has been made. The expenditures prior to the biennium are as follows:

Total expenditures during biennium	\$.00	
Total expenditures prior to January 1, 1927:		
Construction	\$ 44,451.39	
Maintenance	.00	\$ 44,451.39
Total expenditures to December 31, 1928:		
Construction	\$ 44,451.39	
Maintenance	.00	\$ 44,451.39
Source of Funds:		
Territorial Funds	\$ 11,980.39	
Federal Funds	32,471.00	\$ 44,451.39

- El Nido Road, Construction 0.94 miles, Day Labor.
- Portage Road, Construction 6.00 miles, Day Labor.
- Yakutat Highway, Yakutat-Cannery Sec., Survey 1.06 miles.
- Cordova Wharf, Survey.
- Administrative and Engineering Investigations.

RECAPITULATION

As a recapitulation of the figures set forth in the preceding tabulation, the following is a total of all funds expended during the biennium:

Tongass Highway	\$169,325.95
Glacier Highway	137,620.49
Salmon River Highway	120,745.74
Texas Creek Highway	133,057.37
Petersburg Highway	106,802.67
Point Agassiz Highway	60,316.39
Wrangell Highway	3,389.24
Mill Creek Highway	3,022.66
Sitka Highway	2,028.93
White Pass Highway	6,107.37
Seward Highway	61,158.96
Eyak Lake Highway	14,357.16
Katalia Highway	1,682.52
Moose Pass Highway	87,063.59
Palmer Creek Highway	3,232.80
Johnson Pass Highway	5,443.46
Kenai River Highway	8,680.94
Crow Creek Highway	3,333.02
Afognak Lake Highway	1,266.77
S. E. Alaska River Surveys	50,439.34
Trail Construction	9,172.27
Total expenditures during biennium	\$988,237.64

Total expenditures prior to Jan. 1, 1927:		
Construction	\$2,430,925.21	
Maintenance	221,621.89	\$2,652,547.10
Total expenditures to Dec. 31, 1928:		
Construction	\$3,299,284.21	
Maintenance	341,620.53	\$3,640,784.74
Source of Funds:		
Territorial Funds	\$ 309,387.91	
Federal Funds	3,331,396.83	\$3,640,784.74

TERRITORIAL SHELTER CABIN FUND

APRIL 1, 1927, TO MARCH 31, 1929

Report of the administration of the Shelter Cabin Fund apportioned by the Governor in compliance with Section 3, Chapter 17, Session Laws of 1917. \$40,000.00 was available for the biennium. The following work was accomplished by the Alaska Road Commission under its cooperative agreement with the Territorial Board.

The fund was apportioned as follows:

	Allotted 1927-28	Allotted 1928-29	Total Expended
Second Division	\$ 5,787.42	\$ 6,064.00	\$11,851.42
Third Division	3,398.00	3,242.21	6,640.21
Fourth Division	8,284.14	5,490.86	13,775.00
Totals	\$17,469.56	\$14,797.07	\$32,266.63

DISTRIBUTION

SECOND DIVISION

1927-28

Route No.	Location	Work Done	Cost
18	Topkok, 48 miles from Nome	Repairs and wood	\$ 43.00
18	Chlukuk, 66 miles from Nome	Combination cabin and dog barn constructed	791.93
18	Walla Walla, 96 miles from Nome	Repairs and wood	20.00
18	Moses, 115 miles from Nome	Repairs and wood	36.
18A	McCoys, 19 miles from Haycock	Log Cabin and dog barn built	500.00
18A	Choris Peninsula, 20 miles from Kiwalk	Additional bills of construction	16.31
18A	Arctic Circle, 34 miles from Kiwalk	Furnishing wood	25.00
21	Coal Mine, 12 miles from Unalakleet	Stove pipe and repairs	6.68
28	Dahl, 12 miles from Shelton	Windows	8.64
28A	Iron Creek, 60 miles from Nome	Combination cabin and dog barn built	563.90
28A	Hot Springs, 77 miles from Nome	Cabin built	279.46
28A	Shelton, 85 miles from Nome	Combination cabin and dog barn built	630.26
28A	Windy, 19 miles from Shelton	Combination cabin and dog barn built	\$1,146.00