and even in 1984 it still was expensive to maintain that stretch of road.

The board was expending nearly $30,000 each year between 1915 and 1920 to maintain the picturesque mountainous part of the road that included Keystone Canyon. In July 1919, for example, floods near the canyon wiped out 15 miles of the steepest part of the Richardson Road. Seemingly year after year, torrential glacial streams did most of the damage during the spring and summer and kept crews busy throughout the season. A relocation of a 10-mile stretch of road would have eliminated much of the difficulty, but new construction funds were not available. The 1919 annual report graphically described the flooding which occurred that summer:

> *Route 4B. Valdez-Ernestine Road (63 miles). Three crews were engaged on this route throughout the entire season. During July and August the stream from Valdez Glacier destroyed one pile bridge in the vicinity of Valdez and threatened several others and the intervening road; the road on the alder flat, at the head of Keystone Canyon, was inundated and partially destroyed, necessitating a new location on the hillside. Bear Creek, in mile 18, filled its channel with 20 feet of boulders, gravel, and debris, washed out one of the bridge trusses, and destroyed both approaches, and at Beaver Dam, the Tsaina River inundated all of mile 42, including the sites of the roadhouse and telegraph station. These destructive inroads by the rivers necessitated new location at a time when the crews were already busily engaged in important maintenance and river control. Due to the great scarcity of labor, the commanding officer at Fort Liscum detailed some 20 men for work on the washout in mile 18 and others for duty on the pile driver at Valdez. In the fall a section of mile 8 was destroyed, and a detour was constructed on the flat a short distance to the north. In all there was a considerable amount of new construction necessitated by washouts. As these sections of new road are all short and were built hurriedly with the object of keeping the road open, the location was not in all cases of the best. In fact, only a small portion of the summer's work can be considered of permanent value.*[24]

Nature often conspired to work against the board's efforts, and often it proved difficult to convince members of Congress to appropriate larger sums of money for the work in Alaska. The board, therefore, decided to present a comprehensive ten-year construction and maintenance program to Congress in 1920. It hoped that such a plan might effectively show Alaska's needs and convince Congress to appropriate the necessary funds.

24. *Ibid.*, pp. 3875-76.

6 The 1920s

The Board of Road Commissioners was a division of the U. S. Army and, as such, was not answerable to Alaskans, yet the board did try to respond to the public it served. It was not a passive public.

Alaskans have never been shy about making demands on the federal government. Throughout their history as residents of a territorial possession, Alaskans believed themselves to be victims of their limited political influence in Washington, D.C.[1] Residents complained when the government did not provide the services available to other Americans. Complaints were very vociferous during the gold rush era when the federal government might perhaps have been excused for a tardy response to such a swift swelling of the population. Alaskans expected full mail service despite the awesome distances and scattered population. They expected trails, roads, railroads, telegraphs, and police protection as well.

When the proprietor of Circle Hot Springs, a much-frequented resort north of Fairbanks, asked for a road, it was with a sense of outrage at its non-existence. As F. M. Leach explained to Alaska's governor Thomas Riggs in 1919: "I am appealing to you for assistance in obtaining a road to the Circle Hot Springs, *not as a favor, but out of justice to the people* of this part of Alaska, and out of consideration for the development of the most permanent resources in the Territory."[2]

Proprietor Leach complained to the governor that the Board of Road Commissioners for Alaska built a wagon road from Circle to a point 2.5 miles below the Miller Roadhouse—a distance of some 46 miles, at a cost of over $100,000—yet failed in their promise to provide feeder roads to the side creeks and to Circle Hot Springs. Freighters and merchants had benefited from the Circle-Miller road and supported the link to Circle Hot Springs, a region of immediate value for its agricultural products and future promise as a mining district.[3] Leach and others had pleaded with board officials to build branch roads to connect with the mines, and were "placated with assurances that as soon as the main road was complete, branch roads would be built to the side creeks and the Circle Hot Springs."

Eight years had passed since then, Leach stated, and yet less than $3,000 had been expended, and that only on the 9-mile branch to Deadwood Creek, connecting with the government road at the Central House. Not one cent had been allotted to build a road another 9 miles to Circle Hot Springs. It was badly needed to give individuals suffering from rheumatism access to the baths for relief who now could not reach them during the summer. The abundance of hot water used for irrigation gave the opportunity to establish a great farm at the site, and Leach felt "that this is the most permanent asset so far discovered...this warm ground farm, free from frosts in this frozen country and this great flow of healing, revivifying water surely will be a great boon to mankind long after the placer

1. Hunt, *North of 53°*, pp. 251-257; see also William H. Wilson, "Alaska's Past, Alaska's Future," *Alaska Review*, Spring and Summer, 1970, pp. 1-12.

2. F. M. Leach to Governor Thomas Riggs, June 12, 1919, ARC, R. G. 30, Federal Records Center, Seattle, Washington.

3. *Ibid.*

mines have been worked out and forgotten..." but the resource had to be made accessible to the world.[4]

Governor Riggs asked the board members to consider Leach's request and they assigned Circle district road supervisor John H. Joslin to make an investigation.[5] Joslin reported on the self-serving nature of some of Leach's statements, and on the absurdity of giving a priority to Leach's little-used road over the nearby Deadwood road, then under construction, or over needed repairs on the main Circle road. Joslin did recommend a small allotment for Leach's needs, but the board pleaded lack of funds and refused to help Leach.[6]

Similarly, residents of the Circle mining district petitioned the board in 1922 for faster work on the Chatanika-Circle road, citing the hardships imposed by the completion of the Alaska Railroad:

> *For the past 28 years this region has been a continuous producer of gold, one of the largest producing camps in Alaska. Its transportation accommodations have been by river boats to Circle, on the Yukon River, some 50 miles from the mines. These mines, already located, will be steady producers for 28 years more, under favorable conditions. But the completion of the railroad to Fairbanks and the extension of the White Pass Railway to the Mayo silver district, which has been announced, will eliminate the river traffic passing Circle. This, in all probability means that freight for this section of the river will be by an occasional boat, whenever tonnage will justify a trip, which will necessarily be at a higher tonnage rate than was charged when a regular line of boats passed Circle. Thus the railroad largely displacing the boats as freight carriers into the interior of Alaska works a decided hardship upon the residents of this district until an auto-truck road is completed some 80 miles from the end of the railroad at Chatanika to the Miller House. These conditions, we believe, justify us in asking consideration in the matter of road construction, even taking precedent over other sections of the interior of Alaska not adversely affected by the completion of the railroad. Therefore, we, the undersigned residents of the Circle District, most humbly pray that the Alaska Road Commission do everything within its power to hasten the completion of the auto-truck road from Chatanika to Miller House.*[7]

The board's superintendent for the Fairbanks district, Hawley W. Sterling, approved the petition and asked the board to allot as much money as possible to the project.[8] But Colonel James G. Steese, the president of the board in 1922, cautiously replied to the petitioners that "We have made as large an allotment as we can with our limited appropriation. Until Congress greatly increases our appropriation, it will not be possible to close this gap [the automobile road from Chatanika to Miller House] as rapidly as we should like to do so."[9]

Farther south, John Hajdukovich, a sourdough and trader, requested that the board improve the 36-mile-long McCarty-Healy River trail, providing the only means of communication between Fairbanks and Richardson and the area contiguous to the Healy River. No vehicles heavier than dog sleds used it, since motorboats and poling boats operated on the

4. F. M. Leach to Governor, January 2, 1920, ARC, box 65480, R. G. 30, Federal Records Center, Seattle, Washington.

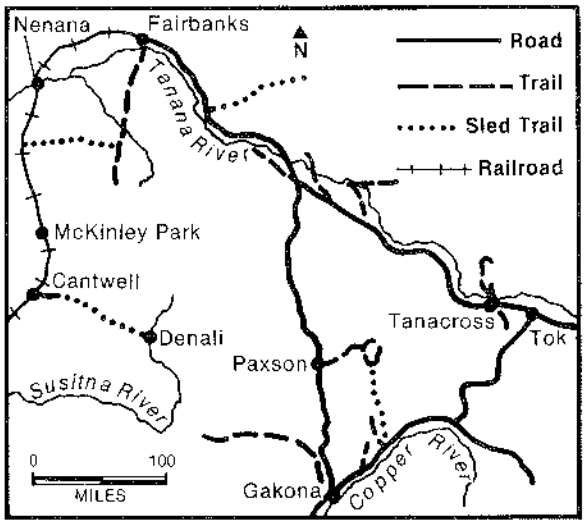
5. Governor Thomas Riggs to Chairman, ARC, January 5, 1920; Captain John Zug to John H. Joslin, January 8, 1920; R. G. 30, Federal Records Center, Seattle, Washington.

6. John H. Joslin to Captain John Zug, January 30, 1920, R. G. 30, Federal Records Center, Seattle, Washington.

7. Petition to Alaska Road Commission from Circle, undated, probably February, 1922, R. G. 30, Federal Records Center, Seattle, Washington.

8. Hawley W. Sterling to the Board, April 14, 1922, R. G. 30, Federal Records Center, Seattle, Washington.

9. James G. Steese to Circle residents, May 12, 1922, R. G. 30, Federal Records Center, Seattle, Washington.



Roads and trails in the Tanana district.

Tanana during the summers carrying passengers and freight. Twelve white men and about a hundred Indians, living as far east as Tanana Crossing, used the winter trail. It was a good one, except for Clearwater Creek and two smaller streams in its vicinity which never froze, even in the coldest winters. The two streams were bridged "with wretched, ramshackle polefoot bridges which endanger the lives of the users." Hajdukovich suggested that the board build proper bridges, and that a trapper operating a small ferry across Clearwater Creek who intended to give up the operation be induced to stay.[10] If the money could be found, the board agreed to build the two bridges and pay the ferry operator a small sum for his services in order to keep the trail operational.

It appears that the board found the money because Hajdukovich and a crew performed trailwork between McCarty and Tanana Crossing for the board on a contract basis, and he reported on his accomplishments in detail the end of February 1924. From McCarty to Clearwater, a distance of about 12 miles, he had widened the trail, eliminated windfalls, and cut 3 miles of new trail through heavy timber burned in a forest fire the previous year. His crew bridged the middle Clearwater with a 110-foot-long bridge, wide enough for horse-drawn double-enders. Hajdukovich wrote that his crew had built several smaller bridges, graded high banks and widened the trail where necessary, and removed the windfalls. In short, the trail between McCarty and Tanana Crossing once again was in fairly good shape.[11]

And so it went; as the case histories show, everyone suffered the frustrations of reduced road appropriations. The board was just as ardent as the governor and residents in believing that good roads meant prosperity. They did try to respond to the public's requests—demands, in some cases—even though the board was a division of the U. S. Army and not officially answerable to Alaskans.

To a great extent the federal government attempted to meet the expectations of Alaskans with large expenditures of public funds, particularly after the gold rush. Whether the expenditures were reasonable under the circumstances cannot be measured here. Before insisting that the government might have spent more money on Alaska's roads, it might be necessary to establish that given the other national priorities at a given time, it would have been obviously negligent of the government to provide more funds. Whether such an assessment could actually be made, even after an intensive study, is unlikely. This conclusion is not an exercise in avoiding the question, but rather an expression of the question's complexity. How much money did the other western territories get for their roads when their development was at a comparable stage to Alaska's in 1920? Did Alaska deserve more because of its size, or less because of its small population and limited industry? Would Alaska have developed more rapidly if roads had been planned to foster economic development rather than being built once a district's activity made the need for roads urgent and feasible? The board could address these questions only indirectly in its various reports over the years.

10. District Engineer to President of the Board, October 2, 1919, ARC, box 65480, R. G. 30, Federal Records Center, Seattle, Washington.

11. Hajdukovich to Superintendent, ARC, Fairbanks, February 25, 1924, ARC, box 65480, R. G. 30, Federal Records Center, Seattle, Washington.

Historical Summary of the Organization and a Ten-Year Plan

James G. Steese, president from 1920 to 1927 of the Alaska Road Commission (as the board was officially renamed in the 1920s), found it appropriate to summarize the history of the commission in his 1926 annual report. He divided its almost 22 years of service to Alaska into three periods. The first covered the administration of General Richardson from 1905 to 1917. In this pioneering period settlements and lines of communication were very primitive. With small but increasing appropriations, Richardson intelligently developed the rudiments of an Alaskan transportation system. In 1913 he drew up a comprehensive operations program which called for the expenditure of $7,500,000 during the succeeding 10 years. Indeed, during Richardson's last 2 years in Alaska, Congress appropriated a high of $500,000 each year for the work. The Richardson Highway was the commission's largest project throughout the period. Running from Valdez to Fairbanks, it had become passable throughout its length for dog teams by 1907, by 1910 for light horse-drawn wagons, and in 1913 the first light automobile made the entire trip from the interior to the coast. The pioneer period, in short, laid the foundation for all future work and terminated when Richardson was called to service in the European War in December 1917.[12]

The second period, spanning the years from 1917 to 1920, was characterized by a general standstill of commission work and the cessation of economic development within the territory. Congress appropriated very little money and, during the last 2 years, reduced funds to a mere $100,000 per year. Expert personnel were not available for supervision, having been lured to the contiguous states by job opportunities created by the war. Labor in general was scarce and living expenses high. Work proceeded on only a few projects, and much of the mileage constructed in the previous period went into disrepair or was reclaimed by the wilderness. The period closed in 1920 when the present commission organized itself.[13]

The third period, from 1920 to the close of the 1926 fiscal year, was characterized by increased appropriations, broader legislation, close cooperation with the territory, the purchase of much mechanical equipment that largely replaced horses, and standards for heavier construction to withstand motor traffic. The commission also reopened old trails and roads, and generally adjusted the transportation routes made necessary by the construction of the Alaska Railroad which had reached Fairbanks from Seward in 1923. Federal appropriations increased from $350,000 to $900,000 per annum, and together with other resources, brought the funds available for the 1925 work season to $1,350,000.[14]

The year 1920, however, was more exciting for the board than Steese's matter-of-fact enumeration indicates. For one thing, the Board of Road Commissioners for Alaska faced reorganization. Major William H. Waugh, the board's president following Richardson, left his position on April 14, 1920, to be replaced by Lieutenant-Colonel John C. Gotwals. The latter only served from April 15 to July 6, 1920. On July 7, 1920, Colonel James G. Steese assumed the presidency which he held until October 15, 1927. Steese, a successful career officer at age 38,

12. Board of Road Commissioners for Alaska, *Annual Report Of The Alaska Road Commission, Fiscal Year 1926: 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-Second Annual Report, 1926, Part II, Operations (Juneau, Alaska: Alaska Daily Empire Print, 1926), p. 37. Hereafter cited as Part II, Operations and year.

13. *Ibid.*

14. *Ibid.* pp. 37-38.

had graduated from West Point in 1907 and served a four-year hitch in Panama during the construction days. He taught several years at West Point and Forts Riley and Leavenworth and subsequently became the assistant chief of engineers. In 1918 he was promoted to colonel and won an appointment to the general staff. As a bachelor without a family to yearn for warmer climates, Steese was ideally suited for service in the far North.[15]

In 1920, the board also marked the end of the war, and in fact the entire period of its 16-year history with the announcement of another comprehensive 10-year program. No more obvious sign of maturity could be offered than its formulating this long-range plan. The board's plan was an affirmation of its belief in Alaska's eventual prosperity despite the hard times, and was also an expression of disdain for the practice of responding haphazardly to emergencies. Sound standards of engineering management dictated such a program; so did standards of political management. It was no longer enough for the board to find satisfaction in keeping its limited mileage of roads and trails open and adding a few miles each year. The board believed that, despite Alaska's loss of population during the war and the collapse of gold mining, the territory would recover, and a comprehensive road system would foster future growth.

Although the board had proposed a similar but less comprehensive road plan in 1913, recommending the expenditure of $7,250,000 over the next 10 years, the amount actually appropriated through the year 1920 had totaled only $1,645,000, a sum which did not even come close to reaching the proposed goals. Only 30 percent of the money requested for the plan's first 7 years had actually been received. Funding had lagged even before the war emergency, which had disrupted expectations even more severely. In fact, during the war large sections of the old road system were not kept in repair, and some sections even became impassable.

The new planning proposal, however, was different. It represented both the first real effort at long-range planning by the board and its commitment to Alaska as well. For these reasons, and those stated above, it should be noted in full:

During the 16 years of this Board's existence, slightly over a thousand miles of road (besides much greater lengths of sled road and trails) have been constructed and maintained, with a cost of slightly over $5,000,000. Two policies of this Board through all this period have shown the highest wisdom: first, that of building successively trail, sled road, and wagon road as the traffic along a communication line justified; second, building largely with local labor. These two policies assured building along sound lines, resulting in roads carrying traffic as soon as completed. To import labor to construct roads would make possible the building of roads away from centers of present or even prospective population and serving, when completed, only as a monument to the builder.The soundness of the Board's policy is further emphasized by a survey of roads now in use. Under no possible conception can any part of the present road and trail system possibly be abandoned.

The following sets forth a ten-year program that will carry forward substantially the reviving industries of this territory and will provide the government railroad with a generous contribution of traffic.

To prepare any program of road construction, both the topography of the region traversed, and the economic return expected must be studied. In topography alone, the glaciers, glacial streams, swamps, elevated snow-covered mountain ridges, frozen soil and dense vegetation offer obstacles of remarkable obstinacy. As to economic

15. William H. Wilson, *Railroad in the Clouds: The Alaska Railroad in the Age of Steam, 1914-1945* (Boulder, Colorado: Pruett Publishing Company), 1977, p. 156.

returns, the traffic existing and prospective must be estimated. The building of roads through known mineralized but undeveloped areas to reach developed areas is sought.

To be considered at the same time is the location of projected roads in relation to other lines of traffic—that is, waterways, and railroads. In the present state of Alaska's development, it is unwise to parallel such lines of traffic with wagon roads. It is especially aimed to build as feeders and in a few cases to cross divides and link together existing lines of traffic. Roads planned upon such a conception will give the greatest return with a minimum of cost.

Almost of equal importance with the above considerations come the fitting of the program with the funds that are requested. This modest program can be constructed within the estimated cost and time. It would require only a draftsman's service to cover the map of Alaska with a network of roads that could not be constructed with any reasonable appropriation within less than 50 years. This estimate is therefore made with a view of being a realizable program with the funds and time reasonably available. This program of development covers that desired during the next 10 years, 1921 to 1930, inclusive. The new road mileage which is projected totals 700 miles. These roads are termed 1921 roads. This will call for a rate of construction of 70 miles per year. The cost of these roads to construct and maintain through this period will average $10,000 per mile. This cost is an average for all districts. The roads selected for construction during this period are along well-defined lines of travel which have received previous development as trails and sled roads and whose worth is unquestioned.

In the work proposed for the next 10 years, three classes of road building operations will be carried on. First, the new construction planned as arterial or feeder highways and totaling 700 miles for the period will be carried out. These roads will, in the main, follow old lines of development...Second, roads termed development roads, the value or location of which is not yet fixed will be constructed from time to time with a limited apportionment of funds....Construction of roads of this type provide the necessary flexibility to meet new conditions. At a later time, these development roads may develop into arterial roads. Third, the present road and trail system must be kept up. This requires an expenditure for maintenance which is estimated from past expenditures of the Board, to be $200,000 per year.[16]

The 10-year program briefly described Alaska's physical features and the lines of communication already established, dividing the territory into districts: southeastern Alaska, the island and coastal mainland east of the 141st meridian, "is served almost entirely by waterborne commerce and no new construction is planned under this program. The necessary short tributary roads to settlements not already constructed can be built as development roads;" the "Copper River Valley, embracing Cordova, Valdez, and Kennecott and served by the Copper River Railroad extending to the summit on the Fairbanks Road;" the Susitna valley which is traversed by the government railroad includes Seward, Anchorage, and Matanuska, and the Alaska Peninsula and Kodiak Island which "are closely attached in development to this district and are included therein;" the Kuskokwim area, which covers the valley of the Kuskokwim River west of the Alaska Range and includes the lower Yukon valley, "is very meagerly provided with transportation facilities and most important projects of this program aim at relieving this situation;"

16. Board of Road Commissioners for Alaska, *Report Upon the Construction and Maintenance of Roads, Bridges, and Trails, Alaska*, in Annual Report of the Chief of Engineers, 192, Extract (Washington: Government Printing Office, 1920), pp. 61-65. Hereafter cited as *Annual Report of the Alaska Road Commission* and year.

the Yukon district, with Fairbanks and the Yukon and Tanana valleys, is of high importance for development, as here must originate the most important tonnage for the Government Railroad;" and the Nome district on the Seward Peninsula.[17]

The report concluded with a list of about 30 prospective roads that the board considered vital. Some have not yet been built.

By 1923 the board reported on the progress of the 10-year plan which, in summary, had called for construction of 700 miles of feeder highways, mainly along existing routes, at an estimated cost of $7,000,000; development roads on location to be determined at an estimated cost of $1,000,000; and maintenance of existing road and trail systems at an estimated cost of $2,000,000. For the year 1921 some $425,000 was appropriated rather than the $1,200,000 requested; and for 1923 an appropriation increased to $650,000 still fell far short of the $1,500,000 requested. In summary, the board had asked for $3,655,000 and received $1,540,000 or something over one-third of the requested funds.[18]

Such statistics indicate that this era of the Board of Road Commissioners for Alaska, beginning in 1920, did not differ from earlier times in that appropriations did not meet the hopes of planners. Whether the persistence of shortfall between expectations and realities should be marked with particular attention as an indictment of federal neglect is another matter. Funding for roads and trails was not limited to the annual appropriations made to the board. About 40 percent of the total cost of the road and trail system came from the Alaska Fund, derived from federal trade and occupation taxes collected in Alaska. Furthermore, as already discussed, the territorial legislature had started to deal with road matters in its first session in 1913, subsequently addressed the issue in most succeeding biennial sessions, and provided funds as well.

While the territorial government wrestled with Alaska's transportation system, the federal government acted to insure some cooperation among the various agencies with programs in the territory. For example, over the years, the War Department added to the responsibilities of the board. On April 1, 1921, the Office of the Chief of Engineers appointed the president of the board as the district engineer, and placed the two other board members under the orders of the district engineer. The board's secretary and disbursing officer also became disbursing officer of the district. As a part of North Pacific division, the district engineer rendered an annual report of the operations of the Alaska district to the Chief of Engineers.[19]

Congress and the War Department also directed the president of the board to direct the construction or repair of any aid to navigation authorized by Congress in the sixteenth lighthouse district, which included Alaska. By an informal agreement, the president of the board 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. This agreement became effective on April I, 1922. In addition, the territorial government requested the president of the board to supervise a variety of territorial public works, such as the construction of roads, aviation fields, shelter cabins, telephone lines, flood protection and terminals. The duties and responsibilities kept piling up. The Quartermaster General of the Army requested the board to disburse funds and generally supervise the administration of the Sitka National Cemetery, created by executive order of June 12, 1924, and at the request of the commanding general of the Ninth Corps area, the board (or the Alaska Road Commission) had built a water supply system for Chilkoot Barracks, the only army post in Alaska. The commission, on behalf of the Federal Power Commission, supervised and inspected hydroelectric developments in the territory, as well.

17. *Ibid.*

18. *Annual Report of the Alaska Road Commission, Fiscal Year 1923,* p. 2087.

19. *Annual Report of the Alaska Road Commission, 1932,* p. 1.

The Alaska Road Commission would also play a role in developing the Alcan Highway. In conformance with an act Congress had approved on May 15, 1930, the president of the Alaska Road Commission was appointed a member of the commission for studying the possible construction of the Pacific-Yukon Highway to connect the northwestern part of the United States with British Columbia, Yukon Territory, and Alaska.[20]

The Board and the Alaska Railroad

In keeping with the federal government's attempts to encourage cooperation within its agencies, the legislature also tried to combine some functions. The completion of the Alaska Railroad in 1923 had suggested a potential conflict between the Board of Road Commissioners and the Alaska Railroad, both in the transportation business. To prevent this, the railroad enabling legislation had provided for the assignment of the president and engineer officer of the board to the two additional posts of chairman and chief engineer on the Alaska Engineering Commission, the body managing the Alaska Railroad.[21]

On March 26, 1923, board president Steese became the chairman and Major John C. Gotwals assumed the post of chief engineer of the Alaska Engineering Commission. This combined the road construction and railroad management. Steese obviously was very pleased with the new arrangement and its streamlining, "hourglass" efficiency, for he stated:

> *the practical results of the foregoing orders have been the development...of a practical working arrangement through which the facilities of all the services involved are used interchangeably. 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.*
>
> *The result has been an immediate speeding up of development work upon a unified plan based upon a careful survey of the situation, a thorough knowledge of the entire Territory and its problems, and a coordination of all the various conflicting interests after full hearings before all parties at issue. Instead of interminable conferences between different bureaus which formerly sometimes required papers to travel to Washington and back several times, matters are handled promptly upon the ground, or whether the approval of Washington is required, such approval has usually been obtained by a single telegram covering the various angles or the views of the bureaus concerned....*
>
> *The organization chart looks like an hourglass with the central office at the waist. All authorities and appropriations are gathered in from the four departments and six bureaus and then spread out again over the various jobs. Similarly the reports and vouchers are gathered up from the various outlying districts, and then passed up to the various departments and bureaus under whose direction the particular work has been handled.*[22]

By May of 1923, the railroad and the board used each other's men, equipment, and supplies interchangeably. But because

20. *Ibid.* pp. 11-12.

21. *Annual Report of the Alaska Road Commission, Fiscal Year 1923,* pp. 2100-2101.

22. *Ibid.*

only the Congress could transfer the functions of the board to the Department of the Interior which oversaw the railroad, the two organizations continued to be treated separately for accounting purposes.[23]

Despite Steese's optimism, he was replaced as the railroad chief after only six months in office, and the consolidated operations of the railroad and the board functions ceased. The experiment had been unsuccessful because the railroad had too many problems which Steese and Gotwals had been unable to solve in their brief tenures. These included the railroad's rickety condition. Their predecessors had poured their appropriations into construction and reconstruction of the doddering Alaska Northern Railroad, the name given the first 70-odd miles of the Alaska Railroad north out of Seward. They had also spent money on general economic development and operations. In short, much of the railroad construction had been makeshift and needed replacement, and there was not enough time and money to accomplish this. In the final analysis the railroad and the board broke apart because Congress did not encourage a permanent merger.[24]

Road Requests and Assessments

Alaskans continued to ask for road work and the board continued to assess the requests and fulfill those that it could. In 1919 district engineer C. G. Morrison had left Valdez in early May and traveled to Meiers Roadhouse on the Valdez-Fairbanks road. With the season's work about to begin in earnest, he worried that his best mechanic, "Arthur," had left the employ of the board to attend to his sick wife in Seattle. "His absence," he complained, "leaves us in considerable of a fix as there is not a man on the whole job who could fill his place." Morrison thought that mechanics should get at least $185 per month since chauffeurs received $165 per month. Without the pay boost, it would be difficult to engage competent men.[25]

Morrison advised Major W. H. Waugh, who was president of the board at the time, that now was the time to get a brown bear. It only took "an easy jaunt of a few hours from Cordova" to the head of Eyak Lake, or a trip to Hinchinbrook Island. Dr. Walter W. Council, a Cordova physician, and his hunting companion had bagged three brownies on the north arm of Eyak Lake. One had been a monster in size, and Council had stated "under oath that the foot-steps alone weighed one hundred and fifty pounds." Meiers, the proprietor of the roadhouse, had told him that the "caribou are so thick beyond Paxson that they interfere with the [road] work," so Lars, an employee of the board, had to relocate his camp "as he could not force the caribou to move."[26]

A few days later Morrison traveled over the very rough road section from Meiers to Paxson. It needed much repair and maintenance work, but he was pleasantly surprised that the stretch from Paxson to Rapids was in excellent shape. It was usually this part of the road which suffered severe heaving damage every spring during the break-up.

Game was plentiful, and Morrison told Waugh that Joe Johansen, who owned a couple of hunting cabins, one at the head of Jarvis Creek, had invited both to hunt in the

23. Wilson, *Railroad in the Clouds*, pp. 84-85.

24. *Ibid.*, p. 156-159.

25. C. G. Morrison to Waugh, May 23, 25, June 26, 27, 1919, box 65481, ARC, R. G. 30, Federal Records Center, Seattle, Washington. All quotes are from this document.

26. C. G. Morrison to President of the Board, October 2, 1919, ARC, box 65480, R. G. 30, Federal Records Center, Seattle, Washington.

area. Johansen assured Morrison that they would be certain to bag sheep, bear, and perhaps also caribou.

On June 26, Morrison was in McCarthy and complained that labor was scarce and the Kennecott mines competed with the board for the few men available for the season. He was lucky, however, in hiring a number of men who had come up from Seattle. Ten of the men he had hired, he told the major, "were Mexicans in spite of their statements that they're Spanish."[27] As long as they worked in a satisfactory fashion, however, nationality did not make any difference. Morrison enjoyed his stay in the settlement of McCarthy. The weather was ideal, the men all worked in their shirt sleeves, and everybody was happy. He observed that the settlement for some time had "a crooked booze-running Commissioner...who has permitted the Red Lights and bootleggers to run the town." When that man was fired and a good man appointed, the "inmates of the dives" all scurried for cover. After only a few days of cleaning up, the Kennecott Corporation had "recognized the place as again fit for their men to visit." Morrison did not elaborate how the Kennecott employees were to entertain themselves with all the dives closed.

From Strelna on the Copper River and Northwestern Railway, Morrison made a short side trip to inspect the road that the Alaska Copper Corporation had built. He went as far as the junction with Ole Berg's property, the North Midas. It was a good road and almost the entire length of 16 miles was graveled and the surface hard and smooth. Berg's branch road extended 3 miles to the foot of his train and crossed the Kuskulana River over a bridge jointly constructed by Berg and the board. Berg estimated that he shipped about 100 tons of ore to the railroad. He asked Morrison for help in putting his branch road into better shape. Morrison recommended that the board spend $2,000 on Berg's road and assume maintenance responsibilities for the Alaska Copper Corporation road. Morrison's suggestions were in accord with board policies to stretch available money wherever possible to aid local economic development. Morrison also reported on John Hajdukovich's request to improve the McCarty-Healy River trail and F. M. Leach's plea for a road connecting his resort at Circle Hot Springs to the board's road to Circle.[28]

The problem was that there was not enough money available to comply with all the requests. In fact, with the United States' entry into World War I, congressional appropriations for Alaskan road and trail construction decreased dramatically. In 1917 the board received $500,031.95 in federal funds and $76,716.15 in territorial funds for a total of $576,748.10. In 1919 the total had shrunk to $299,024.26, increased to only $358,604.25 in 1920, and stood at $936,107.65 in 1924. Thereafter, total annual funds available hovered around approximately $1,200,000 per year until 1933 when, because of the Depression, they plummeted to $695,036.16. Because of the shortage of funds during the war and immediate postwar years, the board had been forced to abandon significant road and trail mileage. In fact, Colonel Steese remarked in 1921, "we have about ten million dollars worth of work in sight and are viewing with considerable concern the possibility of our securing only about four hundred and twenty-five thousand for the next year. That would be hardly enough money to complete the rehabilitation of the existing mileage and perform the necessary annual maintenance." Steese was not far off the mark. Congress appropriated a meager $426,807.34 in 1922. Together with territorial and private funds, Steese had a budget of $683,247.68 at his disposal, a very small sum indeed.[29]

But despite the shortage of funds, the board accomplished much. The foreman for the Fortymile district, Fred Price, reported on the work accomplished in the 1921 season. The following excerpts are from his account

27. *Ibid.*

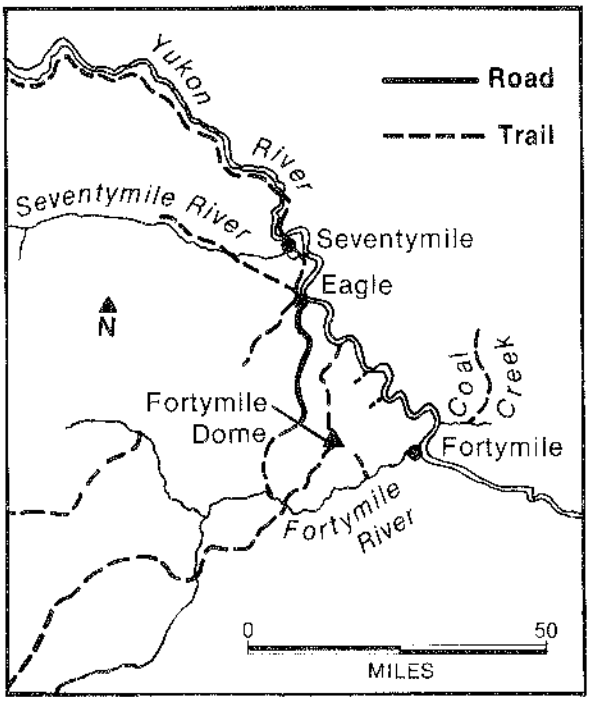
28. *Ibid.*

29. *Annual Report of the Alaska Road Commission, Fiscal Year 1933*, p. 2; Steese to MacNale, November 12, 1921, ARC, box 65479, R. G. 30, Federal Records Center, Seattle, Washington.

(the account, his reconnaissance of O'Brien and Polly creeks as a possible route for a main trunk road to Chicken and his general remarks on the mining activities, can be found in the Appendices):

Eagle and Forty-Mile Roads and Trails

In July I put a small crew of men to work upon the winter roads and pack trails, putting them into good shape for winter travel. As much ground as possible was covered with the money at my command. The high water of the spring caused a wash-out in the canyon leading to Gravel Gulch. A repetition of this could be avoided by a small amount of maintenance work in the spring during the high water. Cutting a channel in the ice would cost but a few dollars but would save hundreds by avoiding an occurrence of this kind. I would recommend that this be done.



Roads and trails in the Eagle area, showing access to the Forty-Mile and Seventy-Mile mining areas.

Seventy-Mile

On my trip to the Seventy-Mile I found the trail leading to Alder Gulch in very bad condition, from Crooked Creek up-stream, but with the money allotted to this district there is now a good trail leading up-stream to Barney Creek. I set aside $100.00 out of the $1,000.00 allotted for the construction of a foot-bridge across the Seventy-Mile at Nugget Gulch. This bridge is to be put in this winter, as there is no way of crossing the river at medium high water. Some parties were held up for two days before they could cross. The possibility of extending the road to Crooked Creek on the left limit is rather impractical, as there are several abrupt bluffs which would entail too much expense in getting around them. There is a good base leading up to the falls upon the right limit of Seventy-Mile....

Mail Service

There is semi-monthly service to the creeks, each mail having a weight limit of 600 pounds. On the 15th of July there was in the post-office at Eagle, 3,600 pounds of mail and unless a special contract is issued the mail will lay until it can be taken over the winter trail, causing a considerable inconvenience to the miners. Mr. Powers, the present mail carrier assured me that with a good road these conditions now existing would be relieved. Furthermore the contract for carrying the mail could be cut one third a year making a saving to the Government, amounting to $2,600 which in a short time would pay for the construction of the road.

Summary

Being conversant with mining conditions, it is in my judgement not a worked out district, but one with a future before it, second to none in the Yukon. This district has been producing extensively for the past forty years. During the war it of course received a setback, but with good roads and trails, and a reduction in

the cost of produce will induce younger blood to enter the country.

The Eagle-Forty-Mile and the surrounding districts have a bright future.[30]

Northerners were vociferously unhappy if any of their petitions were denied or delayed. Without attempting to exonerate the Board of Road Commissioners from all criticism, it is important to know that its staff investigated conditions on the trails and roads and in the remote back country as well. One way to show how the necessary work was accomplished 60 years ago is by including the full report of a Russian River-Kenai reconnaissance trip submitted in March, 1923:

1. The reconnaissance was made during the month of March, 1923. Fifteen days time required from March 1st to 15th inclusive. Employed one man as guide, also one dog team consisting of three dogs and one light sled. Small amount of provisions was also purchased and used on the trip.

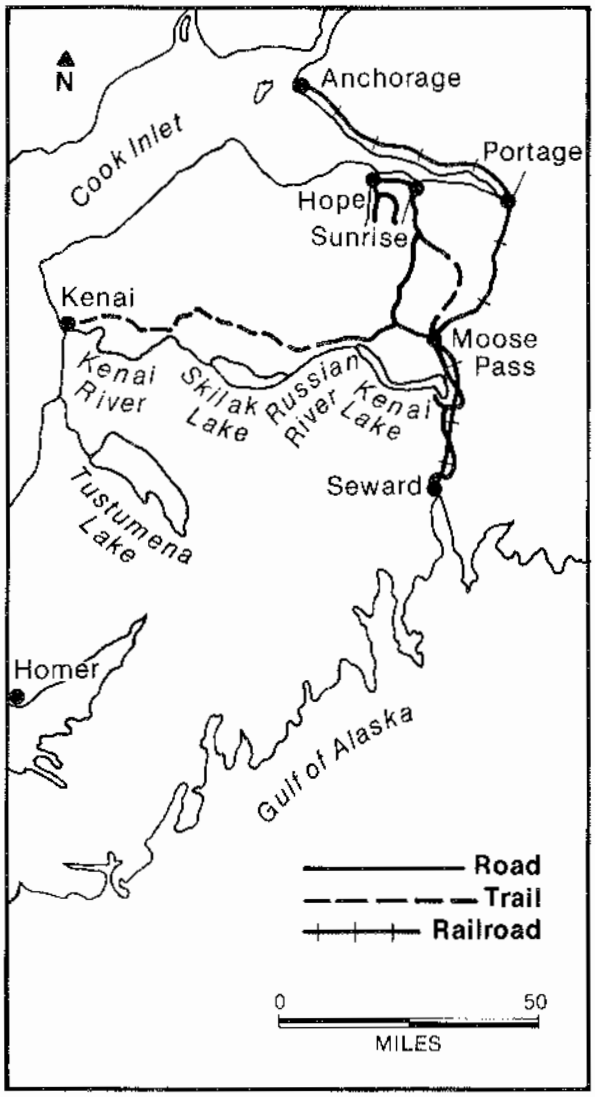
Made the trip in four days each way actual traveling time from Moose Pass to Kenai and from Kenai returning to Moose Pass. Two days snow shoeing was required on each way of the trip, this being due to a very heavy snow storm and winds.

Snow conditions from Moose Pass Station, U. S. Railroad to Kenai. The snow at Moose Pass is approximately four feet deep. The snow down along Kenai Lake and the upper Kenai River is one foot six inches deep. Then as we approached Kenai town the snow was deeper measuring about four feet on an average. The winter 1922-1923 has been one of much snow fall in the vicinity of Kenai.

The average snow fall this section of the country is twelve to fourteen inches.

Seven days were spent making side trips from the main line of travel. The present line of travel in many sections of the trail should be changed to a new location in the timber rather than to be located on the sloughs, creeks, rivers and lakes, which are late to freeze up and often early to open up in the spring; also requiring every one who travels to break trail every trip they make through the open country.

There is very little cutting or marking of trail to guide the travelers and during a



Russian River trail to Kenai, trails to Hope and Sunrise, the Alaska Railroad from Seward to Anchorage.

30. Price to Alaska Road Commission, November 5, 1921, ARC, box 65480, R. G. 30, Federal Records Center, Seattle, Washington.

snow or wind storm it is very dangerous to travel. The trail can be shortened. The approximate distance as now traveled estimated to be one hundred five miles, also estimated the route can be shortened approximately twenty miles thus making the entire distance from Moose Pass to Kenai approximately eighty five miles and under favorable conditions the trip could be made in three days travel.

There are several cabins along the trail that can be used for shelter, also along the central part of the trail the mail carrier erected two shelter tents 12' x 12' and provided them with stoves. This is done each winter and provides very good shelter for the general travel, however there should be erected several log shelter cabins, about fourteen by twelve feet with one door and one window and a pole roof covered with twelve inch layer of moss and then covered with corrugated iron.

Beginning at Moose Pass or mile one of the Moose Pass-Sunrise trail which begins at Mile twenty nine U. S. Railroad, enroute for Kenai the travel is upon a lightly constructed wagon road to Mile eight and one half where the travel turns out to the left across a small lake, called Mud Lake, then the travel continues down a small creek in a canyon, which is called Bear Creek, then from Bear Creek the travel continues down a much larger creek valley called Quartz Creek. After traveling down Quartz Creek Valley the trail then crosses the lower end of Kenai Lake. The trail which is traveled from where it turns out of the Moose Pass-Sunrise Road at Mile eight and one half to the lower end of Kenai Lake is seven and one half miles and has never been cut out for a dog team, only as the travelers themselves have been forced from time to time to cut away a wind fall tree or occasionally a drooping willow or alder that would catch the sled or load thereon.

This section of the trail should be cut out for dog teams and double enders, the brush and trees are quite thick and some places heavy timber is to be encountered. Estimate the cost cutting this section of seven and one half miles of trail at $450.00. Six small bridges at fifty dollars each, three hundred dollars. Total cost $750.00.

Shelter cabins on this section. There is a homesteader at the junction of the Moose Pass-Sunrise wagon road where travelers are welcome to stop, also about four miles up Quartz Creek from Kenai Lake there is a log cabin approximately 12' x 16' equipped with stove and etc. The cabin is in first class condition.

The usual travel goes from mile 23 U. S. Railroad, or Roosevelt over the ice of Kenai Lake to the lower end. There are some years the Kenai Lake does not freeze safe to travel on, also the lake is very late to freeze up. For the above mentioned conditions the trail should go by the way of Moose Pass, therefore assuring early and late travel with safety each year.

Here at the lower end of the Kenai Lake the wagon road survey crosses the lake and continues down the south side of the river, for several conditions the survey for the wagon road should have continued down the north side of the Kenai River, and not crossed at the lower end of Kenai Lake.

From the lower end of Kenai Lake on the north bank near Quartz Creek mouth, the winter trail crosses Kenai Lake and continues down the south bank a distance of about three miles to the lower landing stations, where Louis Bell and Mr. Fuller each have a large comfortable well constructed cabin, also some outhouses for dog shelter; and who are always willing to accommodate travelers. Then about one and one half miles below Mr. Bell's place there are the other cabins where travelers can also stop. From this lower landing the Bureau of Public Roads have constructed a light wagon road for a distance of approximately 5½ miles along the south bank of the upper Kenai

River. Then crossing the river near Schooner Bend, this crossing consists of three seventy foot trusses constructed of native timber also one hundred feet of trestle approach, pile driven bents, width of bridge twelve feet. This structure was erected in the fall and winter 1920. Then the lightly constructed wagon road continues down the north side of the upper Kenai River for a distance of approximately two miles.

From the end of the graded wagon road a narrow right of way has been cut along the foot hills and a very narrow trail graded along the steep banks and holding to the bench flats, whenever possible, for a distance of four miles.

At this point the trail turns north and leaves the river and follows up a small creek then through a low pass onto a deep lake about one mile long and three eighths mile wide. From there the trail leaves the Kenai River and continuing up the small creek to the lake a distance of four miles. The right of way has been cleared and not graded. This section should be graded as it is very difficult to travel along a hillside early in the fall of the year and no snow for the sled to run on also to keep the same from turning over. There are several very narrow places of the grade section along the Kenai River bank on the north side.

Estimated cost of repairs and reconstruction of this trail section from the landing on lower Kenai Lake to the shelter tent in the lower pass which is a distance of approximately fifteen miles. Four miles of widening the grade for sleds at some of the narrow points. Estimates $300.00 per mile making total cost of widening the trail $1,200.00. Estimated grading hillside for sled road at $500.00 per mile will make a total $2,000.00 for grading this section.

Then from the tent in the low pass on to Kenai a distance by way of the present trail approximately seventy miles continues through a low swamp, and lake country. This section of the trail should be relocated through the timber section, and well cut out and tripoded where same is laid out across sloughs or lakes. Some ten or twelve miles of this trail follows down Moose River which is a winding sluggish stream and does not freeze up very solid also over flows and causes much trouble. The entire trail can be well located in the timber. Estimated cost of cutting this section of the trail for dog sleds at sixty dollars per mile and seventy miles to be cut out would equal $4,200.00 total cost including all necessary small bridges.

There should be three new shelter cabins constructed between Moose River and upper Kenai River, estimate cost of the cabins $250.00 each, making a total cost $750.00.

Estimated cost of repairs and construction of winter sled trail from Moose Pass Station at Mile 29 U. S. Railroad through to Kenai which would be for the use of dog teams, also horses and double enders could be used on this trail from time to time as such should be required, the amount would be $8,900.00 to be expended as reported herein.

The work from Moose Pass Station to where the trail leaves the upper Kenai River is included in the Bureau of Public Roads district. Should any work be considered the section between Moose Pass road and Kenai Lake is most needed and should be cut out first, then the next section of this trail should be the first seventy miles out of Kenai Station also, three shelter cabins. Then last of all the central part of the trail and road along the upper Kenai River.

Should at any time a wagon road be considered the same should be constructed along the north side of the upper Kenai River down to Skilak Lake then along the north side of Skilak Lake to the lower Kenai River to the mouth of Moose River, and a one hundred fifty foot suspension type bridge should be used. Then the road should leave the lower Kenai River and take a direct course for Kenai Station.

The country through this section is ideal for wagon road construction. Most of the country is dry gravel benches with some small out croppings solid rock of which is mostly composed of slate. Estimate the cost of constructing a wagon road through this section to cost from $7,000-$10,000 per mile. Plenty timber available for all small bridges, as there would not be many required.

Under present conditions there has been but very little work done on the last seventy miles of trail out of Kenai, this trail should be cut out for travel, eliminating many short unnecessary crooks and turns which have been created by driving through the timber dodging trees to eliminate cutting as much as possible.

Should a good trail be cut out, two round trips per month could be made as easily and cheap as under present conditions, and only making one round trip per month. The mail contractor has contracted all mail offered, one trip per month. Heretofore the amount of mail has never exceeded four hundred pounds, sometimes only one hundred fifty pounds received. The last trip or March trip the mail carrier received seven hundred eighty pounds mail mostly parcel post. The trail being so crooked and narrow, the longest he can use is a ten foot long sled and is very difficult to handle, also four hundred pounds is about the limit for the sled in weight. Therefore the mail carrier was compelled to relay his mail and it will take him about twenty days to make the round trip and will also be about ten days late with the mail arriving at Kenai. The mail offered each year is increasing rapidly.

The school at Kenai has eighty seven pupils enrolled. Three teachers employed. One church and two stores, also a U. S. Commissioner's precinct. Two fish cannerys, one owned by the Northwest Fisheries and the other by the Libby-McNeil Company. Both cannerys to be operated season 1923, current report. Much fur is produced from trapping wild fur bearing animals also from fur farms which are becoming very numerous. Reported six new fox farms to start this season. The winter population of Kenai is estimated at five hundred most of whom are Russians and native Indians. There being no doctor in Kenai all persons seeking medical aid have to be hauled out on dog sleds or take the chances and wait over until navigation opens so they can be removed by boat to Anchorage or elsewhere.

A trail should be cut from Kenai to the Coal Bay of Homer Post Office, Kachemack Bay, which is a distance of approximately seventy miles. This would permit winter travel about the coast also give access to the many fox farmers and few ranchers living along the coast. This entire section of the country is much in need of trails.

Should this trail and road to the lower Kenai or Skilak be constructed and repaired it would not only afford much better travel for the Kenai vicinity, also would help to open up one of the best game and scenic sections of Alaska.

This is one of the best and largest moose pastures in Alaska, also the brown and black bear are numerous. This section affords one of the best hunting grounds in Alaska, both for local people and the trophy hunters who come to Alaska and hunt with guides. There are many sections of land in the Kenai Valley where settlers can take up homesteads. Roads and trails would greatly improve this condition.

2. The following is a summary of the estimated cost of improvements and repairs, advised to be made on this project, season 1923:

Cutting Trail 7½ miles @ 60.00	450.00
Widening Grade 4 miles @ 300.00	1,200.00
Hillside Grade 4 miles @ 500.00	2,000.00
Cutting Sled Trail 70 miles @ 60.00	4,200.00
Small Log 6 bridges @ 50.00	300.00
New Shelter 3 cabins @ 250.00	750.00
Total Amount Estimated	$8,900.00

3. Expenses on the Russian River-Kenai reconnaissance were as follows:

15 days hire one man with sled and equipment @ $10.00 per day	150.00
Provisions and supplies	16.85
Dog Fish, 60 pounds @ $.20	12.00
One pair snow shoes	11.55
Total Expenses[31]	190.40

Such reports provide illustrations of the work required from board personnel. They also tell about travel conditions and establish that an orderly process in settling construction priorities was well established by the 1920s.

Annual Appropriations

Throughout the history of the Board of Road Commissioners for Alaska, the time lines of the annual appropriation remained a matter of concern. Prior to 1919 appropriations were not available until the first of July, the beginning of the fiscal year. To make effective use of Alaska's short construction season it made sense to purchase supplies and freight them to work locations in the winter, but this could not be done unless money remained from the previous year's appropriation. Congress helped the situation in 1919 by authorizing the immediate use of money as soon as the appropriation was approved. But delays in starting construction still occurred when Congress did not pass the appropriations until late in the fiscal year and, particularly, when the bill was held up until the early part of the next fiscal year. Congress found a remedy in 1922 when it authorized the board to incur obligations prior to July up to a limit of 50 percent of the budgeted appropriations. Congress made the same provision in 1923, but in 1924 it dropped this authorization for indebtedness from the bill. The board members were dismayed. It seemed as if Congress just could not understand Alaskan conditions.[32]

At times the board members felt overwhelmed by their responsibilities and the magnitude of their task. On occasion board president Steese tried to express his duties in terms that might capture the imagination of distant Washington bureaucrats. He wrote in 1922, "consider the magnitude of a task that takes two years of continual traveling with the best facilities for a single individual to make a complete inspection of the entire mileage of road and trails in Alaska."[33] Steese also wanted it understood that the board members were not deskbound paper shufflers: "The President and the Engineer spend eighty percent of their time in the field."

It is a little hard to see how the two chief officers managed such extensive field work with interdepartmental meetings and the flow of paperwork. However, there is no reason to dispute Steese's statement.

Congress did achieve a more lasting reform in 1922 by specifying that the Secretary of War was responsible for "military

31. Walter W. Lukens to Engineer Officer of the Board, March 9, 1923, ARC, box 65479, R. G. 30, Federal Records Center, Seattle, Washington.

32. *Annual Report of the Alaska Road Commission, Fiscal Year 1925*, pp. 2070-2071.

33. *Ibid.* p. 10.

and post" roads in Alaska and for "other roads, bridges, and trails" as well.[34] Coupled with this change was congressional approval of the War Department's transfer of road appropriations to Title II, Non-military Activities. This change was of considerable benefit to Alaska. Road funds would no longer be charged against the support of the army and subjected to the spirited efforts of the military brass to divert funds for other purposes.

Board president Steese had applauded the 1923 consolidation of roads and railroads under his direction. Now he faced the prospect of dual competing transportation administrations once again. His disgust triggered an unprecedented sharp complaint in his 1924 report. No reason was assigned for this "sudden and unexpected change of policy," he remarked. And the separation of authority "partly broke the only effort successfully made in coordinating and consolidating some of the activities of the 38 or more federal bureaus attempting to run Alaska from Washington, D.C."[35]

Steese's reference to "38 or more federal bureaus" was the first direct public statement any board president had ever made to the administrative chaos that had always threatened road and trail work in Alaska. Briefly he had abandoned the venerable pretense that the several federal agencies cooperated gracefully to resolve construction priorities.

Perhaps some of Steese's problems could be traced to expectations raised by President Warren Harding's 1923 visit to Alaska. Harding's chief purpose in Alaska was the dedication of the Alaska Railroad, but he did join Steese and other officials on inspection tours of the Richardson Highway, motoring for 20-mile stretches out of both Fairbanks and Valdez. Then, after reaching Seattle, President Harding made a speech which included remarks of heartwarming cheer to Alaska's road proponents:

> *In another direction there is justification for a most liberal disposition—that of road and trail building.... Roads constitute a prime need in every new country, and our long national experience in pushing our highways ahead of the controlling wave of settlement ought to convince us that the broadest liberality towards roads in Alaska will be certain to bring manifold returns.... The present road system is but a beginning, and I am willing to be charged with a purpose of something like prodigality in my wish to serve Alaska generously, and more, in this matter of road building.*[36]

Alas, President Harding had no time to demonstrate his "prodigality." He died a few days later.

After the intensive work done on the Richardson Highway in anticipation of President Harding's visit, the long route to the interior was in good shape and graveled for much of its length. The state of the Richardson Highway meant much to Alaskans as an amenity of civilization and commerce—and for its promise of development. But it would be fair to point out that the territory's major road was not thronged with traffic. In 1923 Governor Scott C. Bone tried to keep an accurate check on the road's traffic. He may have missed some unnoticed travelers, but he stated his tallies with some satisfaction:

11,517 persons	87 motor vehicles
30 wagons	24 double bobsleds
26 pack horses	384½ tons of freight[37]

Slim figures? Well, that depends on one's particular point of view. The governor remembered that only a few years earlier Alaskans had to depend entirely on rivers or rough winter dog trails. Now 87 automobiles and trucks had passed along in comfort and

34. *Ibid.*, p. 2071.

35. *Annual Report of the Alaska Road Commission, Fiscal Year 1924*, p. iii.

36. *Annual Report of the Alaska Road Commission, Fiscal Year 1925*, p. 2070.

37. *Annual Report of the Governor of Alaska*, (Washington, D. C.: Government Printing Office, 1924), p. 18. Hereafter cited as *Annual Report of the Govenor of Alaska* and year.

speed. That was progress! And, after all, the number of vehicles might well have been in thousands—and certainly would be soon.

Like the Board of Road Commissioners, the various governors of Alaska reported each year on all territorial activities, and then included transportation data gleaned from the board's reports. The chief executives were avid proponents of better roads and trails. Annually the governor repeated the same language in opening his discussion of transportation: "The great outstanding problem of Alaska is that of transportation."[38] All forms of transportation should be improved, but "the crying need of the Territory is for roads; Alaska will never reach a high state of development until a system of good roads covers the entire country."[39]

The governors always praised the work of the Board of Road Commissioners and emphasized the difficult terrain of Alaska. One stated, for example, that "almost all routes of travel cross long stretches of boggy country over which it is impossible to drag a wagon....Appropriations of $750,000 or $1,000,000 per annum would only be a fair amount with which to continue this excellent construction work...."[40]

Despite the disappointments of Steese and Alaskan residents who longed for a better road system, congressional appropriations actually were increasing significantly in the mid-1920s. The future looked fairly bright. The wartime neglect and tardiness of postwar recovery seemed to have reached a point of reversal. The territorial Board of Road Commissioners vigorously participated in many projects and contributed sorely needed dollars. America in the 1920s represented a remarkable picture of prosperity. Belatedly, it appeared that Alaska, still sulking in the economic woes of the war and mining declines, might benefit substantially from the national prosperity. Perhaps soon a motorist could speed the entire distance from Valdez to Circle on improved, surfaced roads!

The Board of Road Commissioners Becomes the Alaska Road Commission

When Major James G. Steese submitted his annual report on Alaska's roads and trails to the War Department on October 5, 1926, he officially replaced the name "Board of Road Commissioners for Alaska" with the now commonly used title "Alaska Road Commission."[41] As on previous occasions, he summarized the statutory origins and the history of his organization. He pointed out that until the retirement of Colonel Richardson on December 29, 1917, the board had reported directly to the War Department through the Adjutant General. This arrangement probably reflected the good rapport Richardson had enjoyed both with the Adjutant General and the Secretary of War. When Richardson left, the Secretary of War gave orders that the Alaska Road Commission be placed under the general supervision of the Chief of Engineers.[42]

Steese reported that the Alaska Road Commission maintained its headquarters in Juneau, and ran sub-offices, when required by active operations, at Valdez, Chitina, Fairbanks, Eagle, Nenana, Anchorage, Seward, Takotna, and Nome; and also in Seattle, Washington and in the nation's capital. Steese obviously took pride in the accomplishments achieved over a 22-year period. The commission had constructed

38. *Annual Report of the Governor of Alaska, 1920*, p. 10.

39. *Annual Report of the Governor of Alaska, 1919*, p. 47.

40. *Ibid.*

41. *Annual Report of the Alaska Road Commission, Fiscal Year 1926*, p. 1953.

42. *Ibid.*

1,433.5 miles of wagon road, 100 miles of tram road, 1,086 miles of sled road, 6,671.5 miles of permanent trail, and 712 miles of flagged trail for a total of 10,003 miles.[43]

Despite these gains, Steese was dissatisfied. He pointed out that the Alaska Road Commission had proposed a comprehensive 10-year construction program and asked for specific annual appropriations to carry it out. Unfortunately, however, the total appropriations for the first 5 years had been less than half the estimates, and about three-fourths of the available funds had been required for repairs and maintenance. Instead of receiving the $6,655,000 requested for the first 5 years, Congress had appropriated only $3,220,000. Steese recommended that construction work be speeded up in order to realize the maximum benefit from the work already accomplished. Accordingly, the commission had revised the 10-year program in 1924 and recommended the following appropriations for the second 5 years of the program period:

(a) For maintenance of existing routes at $542,000 per year	$2,710,000
(b) For improvement of existing routes to the same standard throughout	2,600,000
(c) For completion of projects already undertaken	1,735,000
(d) For completion of projects already approved but not yet undertaken	1,780,000
(e) For completion of projects likely to arise with development during the five years	1,135,000
Total for five years	$9,960,000
Less Alaska Fund and territorial contributions (estimated)	960,000
Net federal appropriations	$9,000,000[44]

Yet, despite earnest pleading, Congress had seen fit to appropriate only $900,000 of the $1,750,000 needed for fiscal year 1927 or the working season of 1926 to realize the goals of the second 5-year period. But despite the shortage of funds, the commission had continued the work begun in 1920 of rehabilitating the roads and trails in remote sections of Alaska. In addition, new construction of 67.5 miles of wagon roads, 14 miles of sled roads, 212 miles of trails, 380 linear feet of bridges of 60-foot span and over, and 8 airplane landing fields had been accomplished. Some 62 miles of wagon road had been reconstructed, 96 miles of wagon roads graveled, 5 miles of the Nome-Shelton tramway raised to standard of 10-ton loads, and many small bridges and culverts had been rebuilt. The employees of the commission also maintained 1,035 miles of wagon roads, 95 miles of tramway, 935 miles of sled roads, 3,631.5 miles of permanent trails, 368.5 miles of temporary flagged trail, and 400 miles of telephone lines. It was an impressive achievement.[45]

Steese reported that the commission had undertaken new construction on several roads: the Haines-Pleasant Camp, McCarthy-Nizina, Chatanika-Circle, Mount McKinley National Park, Gulkana-Chistochina, Long-Poorman, and Ophir-Takotna. In addition, the extensive bridge program begun in 1925 continued, and Alaska Road Commission crews newly constructed or extensively repaired bridges across the Savage and Sanctuary rivers in McKinley Park, Big Goldstream, Hot Springs Slough, Valdez Glacier Stream, Bear Creek, Klutina River, Miller's Glacier Stream at mile 223, Banner Creek, Gasoline Creek, and Tanana Slough at mile 348.[46]

Steese wrote that automobile use in the territory had increased rapidly in the last few years, and he estimated that motor cars and trucks handled about 90 percent of the traffic on the main wagon roads. This heavy use had greatly increased the cost of road maintenance. The Richardson Highway bore

43. *Ibid.*

44. *Ibid.*, p. 1954.

45. *Ibid.*, p. 1957.

46. *Ibid.*

the brunt of this increased traffic. Traffic reports for the 1925 calendar year showed the following movement over the highway:

4,208	persons
139	wagons
6	pack horses
1,853	motor-driven vehicles
479	double bobsleds
1,704	tons of freight[47]

This was an impressive increase over the traffic reported by the territorial governor two years earlier. Steese estimated that within two more working seasons it would be possible to have the Richardson Highway completed to a uniform standard and graveled along its entire 410-mile length. Finally, about 110 miles of the planned 165-mile extension from Fairbanks to Circle on the upper Yukon had become passable for wagons in the summertime, while double bobsleds used the entire length during the winter. He warned, however, that unless Congress appropriated more money, little could be done to meet the pressing needs for the improvements and extensions of the systems and especially in constructing the badly needed highway and trail feeders to the Alaska Railroad.[48] This was very important because it would help developing local industries and provide freight for the railroad.

New Equipment Purchases

Steese was proud of the mechanical equipment the Alaska Road Commission had acquired. High labor costs and maintenance of horses had forced the commission to mechanize its operations. He listed the equipment acquired over the years:

10 Auto Trucks, Dodge	8 Transits, surveying
71 Auto Trucks, Ford	1 Loader, bucket, power driven
39 Auto Trucks, G.M.C	1 Locomotive, Fordson
4 Auto Trucks, Packard	2 Machines, mowing
1 Auto Truck, Pierce Arrow	1 Mixer, concrete
5 Auto Trucks, White	4 Piledrivers
1 Boiler, Piledriver	54 Plows
2 Cars, Gasoline section	1 Plow, snow, lateral rotary type
4 Cars, Roller bearing push	3 Radio outfits
2 Compressors, air	8 Rollers, road
2 Crushers, stone	3 Saws, power driven
1 Drum, hoisting	1 Scarifier
25 Drags, road	78 Scrapers, slip
1 Drag, planer	10 Scrapers, wheel
2 Drag lines, gasoline	2 Scrapers, Fresno
2 Derricks, motor	1 Shovel, 3/4 gd. steam
2 Ditchers, road	1 Shovel, 3/4 gd. steam
2 Ditchers, road	3 Shovels, 1/2 gd. gasoline
1 Engine, donkey	70 Sleds, bob
9 Engines, hoisting	8 Trackers, Best 30
14 Graders, road, tractor drawn	16 Tractors, Holt
22 Graders, road, horsedrawn	1 Tractor, Case
4 Graders, power with with Fordson Tractor	1 Tractor, Fordson, crawler space
4 Levels, surveying	83 Wagons
2 Tractors, Titan	1 Welder outfit
1 Tractor, Yuba	5 Winches, hand
36 Trailers, Highway	

During the 1926 fiscal year, the commission purchased the following equipment:

11 Trucks, Ford, 1 yd. dump	1 Shovel, Gasoline, Byers 1/2 yd.
5 Trucks, Ford, light cargo	1 Loader, Bucket, Power driven.
3 Tractors, Best 30.	1 Compressor, Air, Portable
1 Tractor, Fordson, with crawler tread	1 Snow Plow, lateral rotary type
3 Graders, Gilbert with Fordson tractor attached	4 Dump bodies, 1 yd., for Ford trucks
4 Graders, Tractor drawn, (Adams)	
2 Graders, Horse drawn (Adams)	

Additionally, the army turned over the following pieces of surplus stock to the Alaska Road Commission:

25 Trucks, G.M.C. 3/4 ton
17.25 Tons Pyrotol.
Miscellaneous small surveying instruments and drafting supplies[49]

Despite the impressive inventory of mechanical equipment, worth about $500,000, road construction was still very expensive because of the high territorial wage scales, averaging from $3.50 to $6.00 per day for common labor, including board, and the high cost of supplies. Steese also pointed out that Alaska's size, difficult geography and

47. *Ibid.*

48. *Ibid.*, pp. 1957-1958.

49. Part II, *Operations, 1926*, pp. 10-11.

climate, in addition to high costs, made comparisons with road work in the contiguous states difficult. Alaska road construction, Steese observed, included cruising, clearing, grubbing and actual construction all in one operation. In the contiguous, settled parts of the United States these processes had started in pioneer days.

Territorial Cooperation

Cooperation with the territory remained excellent. Initially based on the territorial Cooperative Road Act of April 21, 1919, and an act of Congress approved June 30, 1921, the commission had entered into additional cooperative agreements for work supported partially by federal and partly by territorial funds. For fiscal year 1926, cooperative projects had been allotted $86,772.91 from the Alaska Road Commission, $101,765.00 in territorial funds and $2,819.01 from miscellaneous contributions. This money had been spent on shelter cabins in the second, third, and fourth judicial divisions, aviation fields in the second and fourth judicial divisions, telephone lines, the Nome harbor, Seward Peninsula tramway and Tolovana tramroad, and the Nizina bridge. Other cooperative projects were planned for 1927. Steese thought that the amount of road work accomplished for the money expended had "been far in excess of anything heretofore possible."

Indeed, if the territory had attempted to expend its $30,000 per division under an independent organization, nearly one-third of the available funds would have gone into overhead, salary, and expenses of a divisional chairman and clerk, rent, light, and other items. Under the cooperative agreement, the Alaska Road Commission furnished all of this free without any additional costs to itself. Additionally, the commission made available its extensive plant and mechanical equipment to territorial road work without extra charge except for fuel and ordinary repairs. And since commission activities covered all of Alaska, it was possible to use territorial money in outlying projects where the maintenance of an independent organization would have been impossible or prohibitive in cost. Most important, perhaps, all the funds were lumped together and expended on a comprehensive transportation system with a continuity in plans and consistency in operations over an extended period of years.[50]

If the territory benefitted under the terms of the Cooperative Road Act, so did the Alaska Road Commission. The availability of larger sums enabled the consolidation of supply purchases and with it lower prices. And having funds become available throughout the year minimized the difficulties resulting from fiscal year appropriations beginning or terminating about the middle of the open working season. This made the entire organization and conduct of operations more flexible.[51]

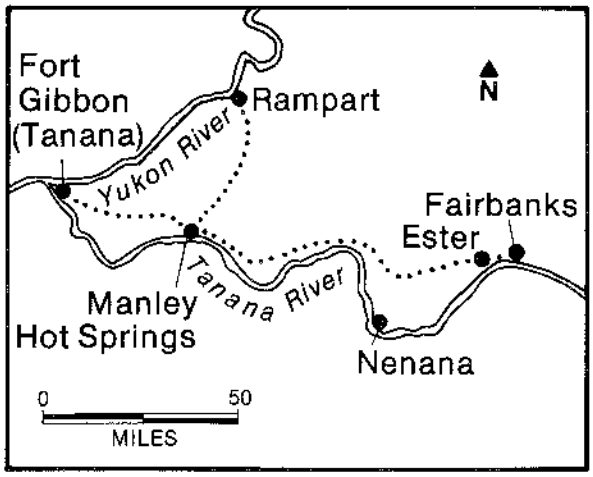
J. L. Galen, the president of the Richardson Highway Transportation Company, early in the spring of 1924 lobbied Colonel Steese for "every dollar you can spare to the Richardson Highway," made necessary, indeed fully justified, by the greatly increased travel he anticipated in the coming season. His company had every intention of substantially improving the transportation service over the Richardson Highway. Ten new Studebaker cars were to be put into service to handle all tourists in comfort, and if traffic volume justified it, Galen was ready to purchase as many other automobiles as the market demanded. He proudly related that his company already owned nine Studebakers, three Dodge touring cars, two Cadillac passenger cars used for hauling baggage, and one freight truck. All equipment was first class and attractive, he assured Steese. Galen also considered erecting a tent camp at either Paxson's or Summit

50. *Ibid.*, pp. 19-20.

51. *Ibid.*, p. 20.

Lake because the stretch between Black Rapids and Meiers Roadhouse would be too long should it become necessary to divide a large tourist party and "yet take them through on a close schedule." In fact, the Richardson Highway had become an important traffic feeder both for the Alaska Railroad and the Copper River and Northwestern Railway. With these two rail systems it formed a circular route which had become widely known in the contiguous states as the "Golden Belt Line Tour," and hundreds of tourists made this very scenic trip each season with no delays or inconveniences. In the process, Galen's company and others catering to the visitors had experienced a modest prosperity. Steese responded favorably to these entreaties, and the Alaska Road Commission spent about $280,000 on the Richardson Highway during the 1924 season.[52]

Territorial residents perceived many transportation needs, and as Colonel Steese pointed out, "each town...wants all roads and trails brought to its front door regardless of other communities or of the general transportation situation." Many requests for local roads and trails the commission had to turn down for lack of funds. In the spring of 1924, for example, the chief clerk of the post office at Nenana recommended that the commission make extensive improvements to the Nenana-Tanana winter mail route, in effect making it a summer route as well. Steese refused to consider the proposal because, as he pointed out, whenever practicable, boats carried the mails in the summer and horse-drawn bobsleds or dog sleds carried it in the winter. The commission, as a matter of policy, did not spend any money constructing summer roads to parallel river routes. The Nenana-Tanana, or Dunbar - Fort Gibbon winter bobsled road, formerly known as the Fairbanks-Ester-Fort Gibbon winter bobsled road, was the main winter route into all of western and northwestern Alaska. The commission had improved the trail to the standard of a winter bobsled road many years before and consistently maintained it. In view of the excellent boat service on the Tanana River, therefore, the commission did not consider it justified to improve the winter bobsled road to permit the summer use of wagons.[53]



Fairbanks - Ester - Fort Gibbon winter trail and trail to Rampart on the Yukon River.

In another section of Alaska, travelers made several requests that the commission improve the Yukon-Kuskokwim-Russian Mission portage. Here the commission decided action—or at least investigation—was appropriate, but the problem of this portage plagued them for years. In the fall of 1923 Walter W. Lukens, an assistant superintendent for the commission and the person who provided the Russian River-Kenai reconnaissance report quoted earlier, made an investigation of the site. In October 1923 he reported from Holy Cross, recommending that $1,000 be expended on the Russian Mission portage that same fall to clear out brush from the creeks. If this work was performed, Lukens thought that the mail delivery to the Kuskokwim on this route could be increased to two runs per month, and the weight limit raised to 1,000 pounds, 400 of these to Bethel and 600 to McGrath. Lukens advised that the

52. Galen to Steese, April 20, 1924, ARC, box 65480, R. G. 30, Federal Records Center, Seattle, Washington; Part II, *Operations, 1924*, pp. 49-50.

53. Steese to Territorial Board of Road Commissioners, April 29, 1924, ARC, box 65480, R. G. 30, Federal Records Center, Seattle, Washington.

commission also should spend some $3,000 in the early spring and summer of 1924 to clear the small streams, sloughs, and lakes of "grassod" which had closed most of the shallow waterways completely, making it very difficult for travelers to navigate. He suggested that the commission construct small dams at six of the creeks. These would impound the water, making it possible to build a skidway or slide on which boats and canoes could be drawn up and let down on the other side with a hand windlass and small steel cable.[54]

There were two land portages, one very low and the other quite high, each about one mile long. Lukens recommended that the commission build a tram for each of the portages and equip each with light hand-pushed four-wheeled cars to haul the mails, freight, baggage, and boats. Since the portage was so difficult in its present unimproved form, travel over it was fairly light. Once improvements had been made, however, Lukens expected travel between the two rivers to increase substantially. He therefore suggested the erection of three shelter cabins along the portage for summer travel, each to cost about $350. Lukens recommended that the Paimiut portage be staked with high beacons which would lessen the travel hardships over this route, that two shelter cabins be built on this portage.[55]

The Yukon-Kuskokwim Portage.

Lack of money prevented the commission from implementing most of Lukens' recommendations. In the fall of 1927 Assistant Chief Engineer Ike P. Taylor inspected the Yukon-Kuskokwim-Russian Mission portage to report what had been accomplished and what work still needed to be done. He left Russian Mission over the portage on September 8 and arrived at the mouth of Mud Creek on the Kuskokwim River two days later, accompanying the mail carrier who traveled the route once every two weeks. Taylor carefully described the route. He left Russian Mission on a small gas boat and traveled some 6 miles down the Yukon River to the mouth of Tatlawiksuk Slough and up this slough about 30 miles to the first portage, which was about a half mile in length; on it was located a shelter cabin the commission had constructed in 1926. Once across the portage, he used a rowboat propelled by an outboard engine to cross a lake about a mile long and then navigated a narrow channel some 300 feet long into a second small lake of the same length. At the end of the second lake it was necessary to portage about 3,000 feet to a large lake beyond. Taking another rowboat with an outboard engine, he crossed the 2-mile-long lake which ended in a winding 1-mile-long 1-foot deep channel with a slight current, very crooked and partly filled with

54. Lukens to Gotwals, February 9, 1924, ARC, box 65637, R. G. 30, Federal Records Center, Seattle, Washington.

55. *Ibid.*

grass and water lilies. This channel entered yet another shallow 2-mile-long lake which ended in narrow, grassy channels connecting small lakes.

Taylor observed that there were several alternate routes which all should be investigated and the best selected, then marked well and improved by widening and straightening. Approximately 4 miles of this type of channel constituted the headwaters of Crooked Creek which he followed downstream for approximately 20 miles. Taylor left Crooked Creek at its junction with Johnson Creek, followed Johnson Creek about 8 miles and reached the next portage, about 3,000 feet long, which led to a small lake with a commission shelter cabin. He crossed the lake by rowboat and went over another short portage to Mud Creek. This he followed downstream 5 miles to a deep-water slough of the Kuskokwim River. Taylor found these last 5 miles before the slough as troublesome as any of the water portions of the route. The water was very shallow for the entire distance, and in some sections not over 6 inches deep. In addition, Mud Creek was very narrow in places and brush and snags obstructed progress. Taylor related that some years before a brush and earthen dam, some 6 feet high, had been built at the mouth to back up water, allowing logs to be floated down. Travelers later removed part of the dam to allow the passage of boats. Taylor recommended that another similar dam be built at the same location, backing the water up to the portage. A stiff log derrick with a hand winch, he thought, could be used to elevate boats over it.[56] Taylor then recommended the construction of two trams with steel rails placed on wooden ties together with the necessary appurtenances, and the straightening, cleaning, and where necessary, damming, of the water portions of the route. He did point out, however, that there was little traffic over the route beside the mail trip every two weeks each way. The mail amounted to about 4,000 pounds per season, and additionally, about forty individuals had crossed the portage in the 1926 season.[57]

The next year D. H. Gillette, the engineer officer of the commission, and his assistant left for the Yukon-Kuskokwim-Russian Mission portage. They arrived at Russian Mission on June 27, 1928, and left the settlement with the mail carrier the next day, arriving at Bethel on July 1. Gillette and his assistant took elevations with a hand level and made careful measurements with tape, in the process confirming Taylor's report of the previous fall and correcting it where necessary. Gillette drew up a list of recommended projects, consisting of two steel trams 2,500 and 4,000 feet long, respectively, costing a total of $12,470, and water improvements, including the construction of a 3,000-foot-long canal at the second portage, costing $12,050 for a combined total of $24,520. Gillette admitted that the traffic at present was slight, but he pointed out that improving the portage would entice many travelers to enter and leave the Kuskokwim by that route. As Gillette appraised the situation, local inhabitants were practically forced to use the portage in order to get out of the area since the airplane fares to Anchorage and Fairbanks cost a prohibitive $500 and $750, respectively. Furthermore, the riverboat *Tupper* arrived too late and left too early to benefit prospectors and trappers very much. In short, the benefits to be derived would be entirely commensurate with the costs of the improvements. Finally, Gillette suggested that the commission and the territory split the construction costs evenly.[58]

Early in 1929 the commission had decided to proceed with the work and instructed Donald MacDonald, an assistant superintendent, to familiarize himself with all the details of the project. The commission was to furnish the steel rails, squared lumber, and explosives needed to blast the canal on the second portage. The commission intended to build the canal, but have the rest of the work performed by local contractors. Still, despite the detailed instructions and blueprints, Gillette

56. Taylor to Gillette, October 21, 1927, ARC, box 65637, R. G. 30, Federal Records Center, Seattle, Washington.

57. *Ibid.*

58. Gillette to President of the Board, July 26, 1928, ARC, box 65637, R. G. 30, Federal Records Center, Seattle, Washington.

admonished the foreman to use his good sense in building from the blueprints because field conditions might call for alterations. What the commission wanted to accomplish, he stated, "is a route which will enable a stranger to start at one end and go through the whole portage in the same boat without unloading it, the only limitation being that boat and cargo should not weigh more than about two tons."[59]

It was to take the 1930 construction season, as well, before the project was finished, because territorial funds did not become available in time. The commission had acted on public requests to improve the Yukon-Kuskokwim-Russian Mission portage, but it took 7 years of effort before the public had reason to be satisfied.

The citizens of Kodiak wanted roads as well. In June 1924 Willard T. Scott, the deputy marshal of Kodiak, visited Hawley W. Sterling, the superintendent of the Anchorage division of the Alaska Road Commission "for the purpose of boosting the road situation at Kodiak Island." Sterling suggested that Scott meet with those interested in road construction in Kodiak in order to arrive at a consensus as to how the small allotment available should be spent. In July, Sterling left for Kodiak with a crew of three men and a cook to investigate conditions himself. He met with some of the town's leading citizens, including Scott, Erskine, Kraft, Broadcobb, and Abbert and discussed road needs with them. Each one presented a different view, Sterling ruefully reported, but all except one agreed that the money should be spent on a road from the town toward the cannery—although they could not agree on a location, only a direction.[60]

Sterling and his crew then examined the possible location of a road as far as Spangler's Cut which the commission had built in 1922. The cut had been of some value, allowing three homesteaders living some 5 miles out to reach town on a saddle horse. Put in as a temporary measure, it had cost $3,000 including the survey. Unfortunately, none of the work on the cut could be used as a base for later road construction, for it forced travelers to traverse the beach over large broken rock and slippery boulders and to go around a rock point which could only be negotiated at low tide. Sterling discussed the situation with Abbert, who used the route most often, and then decided to spend the little available money in putting in a horse trail on the sidehill in a location which later could be widened into a road, avoiding the beach entirely.[61]

Regrettably, not one of the interested parties, except Abbert, had offered any financial or labor assistance on the work unless the road went their way. In fact, Sterling reported, Erskine took the attitude that "we are entitled to it," and refused to apply anything to the project regardless of the route. This attitude riled Sterling, for if anyone was entitled to any assistance it was Abbert who owned a ranch 5 miles from town and had worked hard and conscientiously for 12 years to build a viable business. He had invested $40,000 in his place, possessed about 500 sheep, 70 head of cattle and 8 horses, but had steadily lost money on his enterprise until the last 2 years when he had barely broken even.[62]

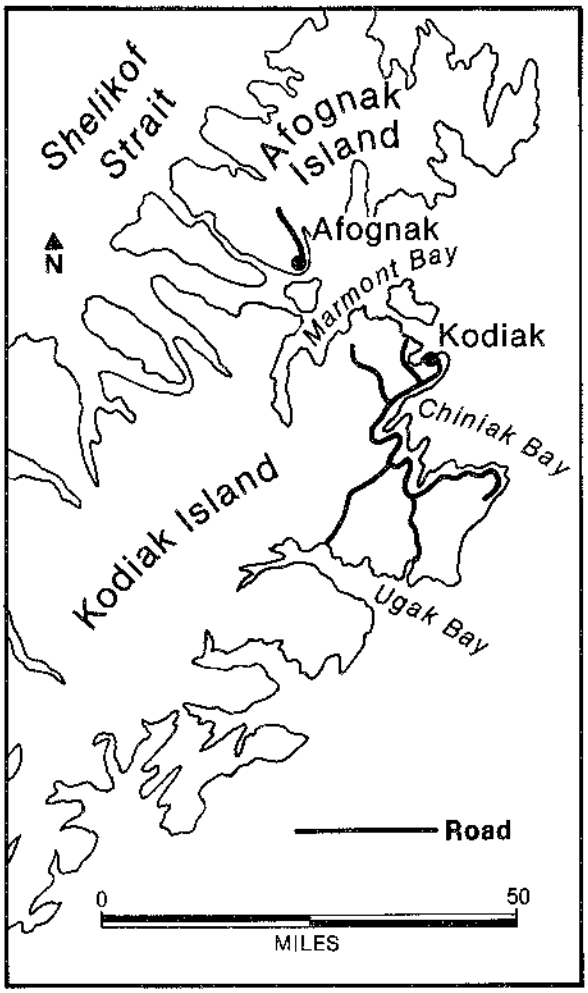
Sterling recommended to commission president Steese not to spend any funds at all on the 3,000-foot road from the town to the cannery, for he felt that city residents should have the initiative to construct this section from their own resources. Furthermore, he counseled that the commission should not even get involved in the location of this road, because it only would entangle it in heated arguments over property rights. Let the locals settle these problems among themselves, Sterling advised, and then allot $10,000 next season to start road construction from the cannery toward Abbert's ranch—but only if

59. Gillette to MacDonald, February 16, 1929, Gillette to Foreman, Yukon-Kuskokwim Portage, April 22, 1929, Gillette to Haselem, April 23, 1929, ARC, box 65637 R. G. 30, Federal Records Center, Seattle, Washington.

60. Sterling to Steese, July 16, 1924, ARC, box 65479, R. G. 30, Federal Records Center, Seattle, Washington.

61. *Ibid.*

62. *Ibid.*



Roads and trails on Kodiak and Afognak islands.

the townspeople built the stretch to the cannery. Sterling concluded that "if they refuse to construct the road which lies within the town, I would not approve of spending five cents more at Kodiak until such time as they see the light and are willing to help themselves, to that extent."[63]

Early in 1925 a subcommittee of the Kodiak Good Roads Club petitioned the commission to spend $30,000 over the next three years on three projects. First, it wanted the commission to take over the maintenance of a 2.5-mile portion of the old Russian Mill Bay road that the community had kept open and maintained over more than fifty years at substantial expense. The community had spent over $3,000 during the last five years alone. It was an important stretch of road because it served the United States Agricultural Experiment Station as well as many homesteads west of town. The committee also asked that the commission reopen the last 1.5 miles of this road all the way to Mill Bay. Not only would this construction materially benefit the homesteaders, but there were valid historical and sentimental reasons for performing the work. The Russians had built a grist mill, operated by water flowing from the chain of lakes, on Mill Bay; they had built this road, perhaps as early as 1798, in order to reach their mill. The date of construction made it a historical road, "the oldest highway in the Territory of Alaska, and almost as old as the famous El Camino Real of the California Padres."[64]

The subcommittee pointed out that Kodiak Island was most favorably located with regard to the great fishing banks of the North Pacific. This location promised a prosperous future, and Kodiak shortly was destined "to become the center of the largest deep sea fisheries of the Pacific Ocean, meaning, most likely, the most important, as far as quantity of production is concerned, fishery in the world."

The development of the fisheries naturally would create a higher demand for farm goods, such as meat and dairy products. It therefore was essential to build highways to the ranches so farmers could deliver their goods to town. The subcommittee reminded the commission that its first road project on Kodiak had been designed to enable Abbert in the Buskin River valley to market his meat and milk in town without having to depend upon the uncertain water route. When citizens first broached the subject with the commission, they received assurances that this road to the Abbert ranch would be built. On the strength of that promise, Abbert had invested thousands of dollars in ranch improvements and several other homesteaders had located

63. *Ibid.*

64. Subcommittee of the Kodiak Good Roads Club to Lunsford, February 9, 1925, ARC, box 65479, R. G. 30, Federal Records Center, Seattle, Washington.

in the Buskin River valley. Finally, the subcommittee was of the firm belief that every member of the Kodiak Good Roads Club, embracing virtually every resident of Kodiak and vicinity, would contribute in either cash or labor to help carry out this project. In fact, residents already had pledged $295.00 in cash and 61 man-days of labor, including horse teams as well.[65]

Perhaps the subcommittee's conclusion convinced Steese that Kodiak had begun to "see the light" as Sterling had wanted. During the 1926 work season, the commission spent $13,754.29 in construction of the Kodiak - Abbert's road and another $500 in maintenance for a total of $14,254.29.[66] The petitioning had been successful.

There were times when the commission discovered that it had listed a stretch of wagon road erroneously in its annual report. This was the case with the Iliamna project, route 48, listed as 10 miles of wagon road and 2 miles of trail. Superintendent Sterling inspected the site in 1924 and reported that no wagon road existed, nor had there ever been one. Prior to 1917 the commission had performed no work in that district with the exception of a reconnaissance trip by John Zug. In 1917 the commission dispatched Mr. Cooper to start the work. In August W. G. Fenton replaced Cooper as foreman to work on the so-called road. He spent $5,000 for 9.2 miles of road, but less than a week after he had left, a heavy rain made the first 4 miles impassable because the location had been too close to a stream. In 1921 the commission sent H. W. Vance as foreman to the project. Vance changed the location of the first 4 miles, crossing a different summit to reach the creek flowing into the Iliamna River. Although Vance had avoided the flood danger, the stretch getting up to the summit and then down from it was so steep as to be unsuitable for a wagon road, indeed, in some places not even a pack horse could carry a load.[67]

Sterling observed that the trail served the traders, settlers, prospectors, and trappers in and around Iliamna village who transported part of their supplies over it. Villagers purchased most of their goods from canneries on Bristol Bay. They shipped their supplies up the Kvichak River, thence through Iliamna Lake and 4 miles up the Iliamna River. It cost $20 to transport each ton over this route, which was entirely navigable for boats drawing 3 feet, even in low water. Sterling suggested that the route from Bristol Bay would always be used for transporting bulk tonnage, depending on the availability of steamer service. Building a wagon road from Iliamna Bay would not change this transportation pattern, he thought, but since there was no regular, frequent, and dependable service to Bristol Bay, and since the canneries could not always supply all needs, the Iliamna Bay outlet was vital to those living within the district. He estimated that there were 45 Caucasians and 150 Natives. Most of the residents trapped, a few prospected, and most seemed content to remain in the area all their lives. Sterling pointed out that the area was highly mineralized, containing gold, silver, copper, lead, zinc, and oil. All that was needed to develop the country, he thought, was to encourage immigration by constructing a transportation route. He suggested that various government bureaus cooperate to make the trail a viable one. The Department of Commerce, for example, should improve the bay by marking the deepest channel with buoys or spars to make it safe for gas boats; while the post office should inaugurate a bimonthly service between May and October on specified days, insisting that the carrier deliver the mail to a cabin at the end of the trail so that it could be taken on by pack horse. This scheme would insure that residents could get in and out on a regular mail boat.[68]

Ultimately a wagon road should be built. But before this happened the commission

65. *Ibid.*

66. Part II, *Operations, 1926*, p. 97.

67. Sterling to Lunsford, September 2, 1924, ARC, box 65479, R. G. 30, Federal Records Center, Seattle, Washington.

68. *Ibid.*

should undertake several projects for helping the district, such as constructing a shelter cabin at the end of the new trail, carrying the bay end of the trail to a point where it could be reached by gas boat in high or low tide, building bridges over the entire route, and putting the trail on the west and east sides of the summit on wagon road grade.[69] Following Sterling's recommendations, the commission expended $5,770.00 in new construction and $725 in maintenance on the Iliamna Bay-Iliamna Lake route for a total of $6,495; and another $5,001.76 and $1,540, for a total of $6,541.76 in 1927.[70]

The foregoing examples show that the Alaska Road Commission responded flexibly and intelligently to the territory's transportation needs. A highly competent staff stretched modest appropriations to best advantage. What bothered commission personnel, however, was the fact that each new project completed subsequently required funds for maintenance. There would come a time, they feared, when all available funds would be required for maintaining existing wagon roads, trails, bridges, and tramways, among others. This would foreclose the construction of any new projects.

Ceasing to build new projects would not be easy. As it was, Alaskans always demanded more transportation facilities than the Alaska Road Commission could construct. It did not matter in what isolated sections of the territory its residents worked and played; invariably, they demanded that their mails be delivered and they be afforded access to supply sources, such as rivers and ports. Alaskans also were incurable "boosters" who bragged about the natural resources, scenic attractions, and climatic advantages of their particular region.

69. *Ibid.*

70. Part II, *Operations, 1927, 1928*, pp. 95, 85.

7 Alaskans Continue to Demand Roads

The citizens of Nome, on the sparsely settled, treeless and windswept Seward Peninsula, thought highly of their region. At the end of 1927 the Northwestern Alaska Chamber of Commerce issued an appeal to the federal government to extend the Nome-Shelton tramway to Candle and to construct adequate harbor facilities at Nome. The appeal, handsomely printed by the *Nome Nugget*, the town's newspaper, featured a map of the Seward Peninsula on the cover. Noted on it were the region's resources, such as numerous reindeer herds, gold, coal, and tin fields, and a hot springs location. Lines radiating out from Nome harbor into the ocean marked water transportation routes: to Barrow and the Arctic Ocean, to St. Michael and the Yukon River, to Seattle and San Francisco, to Japan and China, and to Anadyr, Siberia. The chamber explained that the citizens of Nome needed federal aid in order to "open up a highly mineralized region to the northward rich almost beyond imagination of man... giving access to a region in comparison with which all other mining fields in Alaska pale."[1]

Nome was the logical and only supply base, for its port had at least two more months of open navigation than any other port on the Seward Peninsula, allowing ships to arrive and depart from the middle of May until the beginning of November. With the suggested improvements, Nome would serve the mining districts on the Kougarok, Inmachuk, Kugruk, and Kiwalik rivers.[2]

The chamber applauded the rehabilitation work on the Nome-Shelton tramway, a distance of 86 miles, which the commission had undertaken during the last three years. As a result of the work, freight rates had fallen from 10 cents to 1 cent a pound. Extending the tramway to Taylor, about 40 miles from Shelton, would effect a similar savings. Beyond Taylor, unfortunately, mining activities had almost ceased because of excessive freight costs. If the federal government financed the proposed extension, the chamber argued, "a vast field of quartz, as well as placer values, would be opened up to the nation's wealth and advantage." In addition, "great wealth would also be tapped in the fur industry and the reindeer industry."[3]

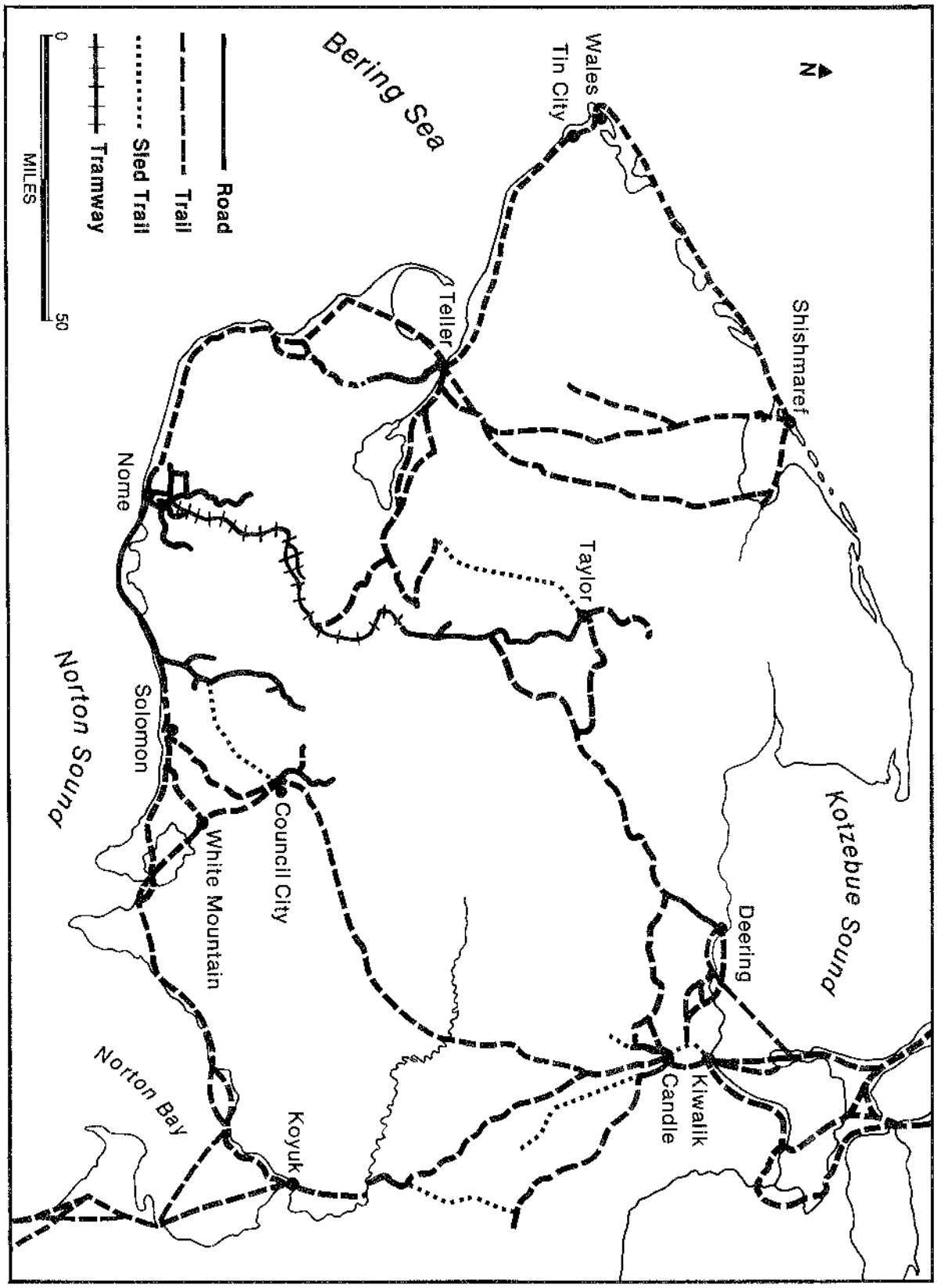
Nome needed a decent harbor, because its geographical position made it the "metropolis of the north" and the only distributing point for the coast of Alaska from the Kuskokwim to Herschel Island on the American side of the Arctic Ocean, a distance of over 2,000 miles, and the logical port from which to supply settlements on the Siberian coast, the chamber pointed out. Indeed, "all roads lead to Nome," and with a little government help Nome would become a great seaport and harbor, serving the needs of "the vast treasure house of the Northern section almost at our door...."[4]

1. Northwestern Alaska Chamber of Commerce, "An Appeal to the Federal Government of the United States for the Extension of the Nome-Shelton Tramway to Candle, Alaska, and for Adequate Harbor Facilities at Nome, Alaska," November 1, 1927, ARC, box 65637, R. G. 30, Federal Records Center, Seattle, Washington.

2. *Ibid.*

3. *Ibid.*

4. *Ibid.*



Roads, trails and railroads on the Seward Peninsula.

Minerals were only a part of the region's wealth, because the chamber expected that the Bering Sea shortly was to become "the nation's greatest fish reserve." It abounded in halibut, cod, shrimp, crab, and many varieties of salmon, as well as herring. These riches of the sea strengthened the argument that Nome needed a large modern harbor and transportation facilities in order to dock and shelter the fishing fleet. Indeed, the chamber expected that within a few years, Nome would "be the Ketchikan of Northwestern Alaska."[5]

The chamber also believed that there was a great future for the reindeer industry. It claimed that a government biologist, Dr. E. W. Nelson, a few years earlier had estimated that Alaska could support between four and five million reindeer. About a million and a quarter could be slaughtered each year. A reindeer carcass, dressed for the market, averaged about 150 pounds. Taking this weight and the value of the meat, Nelson calculated that a fully developed industry should yield approximately $43 million per annum. The chamber estimated one million carcasses per year, and at 150 pounds each, that would necessitate shipping out 150 million pounds of meat. It was not only the meat which was valuable, of course, since markets also had developed for reindeer by-products. Hides yielded leather, bone could be ground and shipped, horns utilized in manufacturing, and the hoofs made excellent gluestock. Waste fat found use in soap making, and the entrails and blood could be manufactured into fertilizer or dog and fox feed.[6]

Last, but not least, were the coal deposits in the Kugruk River valley which would give a great impetus to prospecting. At present, the Seward Peninsula imported coal from British Columbia which cost from $28.50 to $35.00 per ton. The Kugruk coal could easily be landed in Nome for $12.00 to $15.00 per ton, a substantial savings.

In view of all of the foregoing prospects, the chamber asked Congress to appropriate $750,000 for extending the Nome - Shelton tramway to Candle and building an adequate harbor at Nome, and providing docking facilities for ships of 8-foot draft or more "in order that the region described herein may be developed and redound to the Nation's wealth and strength."[7]

Despite the Northwestern Alaska Chamber of Commerce's case that the new Eldorado on the Seward Peninsula was theirs for a pittance, Congress, in its blindness, did not appropriate the requested funds. Instead the commission continued to spend funds for construction and maintenance for a wide variety of projects. In fiscal year 1929, for example, it allotted a total of $113,406 for projects in the Second Judicial Division, a far cry from the $750,000 requested by the chamber for only two construction proposals.[8]

The Road From Haines to Chilkoot

At times, the Alaska Road Commission could not immediately supply the necessary funds. This was the case with a short road from Haines to Chilkoot. In the summer of 1926, Joseph W. Stansfield, a homesteader and proprietor of Chilkoot Fur Farms who raised mink, blue foxes, and chinchillas, asked Colonel Steese if the commission could start work on a road to connect Chilkoot with Haines, a distance of about 3 miles. The commission had to inform Stansfield that there was no possibility of starting the project

5. *Ibid.*

6. *Ibid.*

7. *Ibid.*

8. *Operations, Part II*, 1929, p. 143.

in 1926, and in fact, there appeared to be "no possibility that it will be started within the next several years."[9]

Territorial officials, who would have put up the money for the road, had told the commission that there was much desirable homestead land adjoining the existing good roads in the vicinity of Haines, and "that they cannot afford to build expensive roads such as this to any locality far from the existing roads where one may take out a home-stead."[10]

Stansfield was taken aback by the attitude of the territorial board and the commission. He insisted on presenting his side of the question. He agreed that Haines and vicinity had good roads and that there was excellent homestead land nearby, yet this did not mean that there was an abundance of suitable sites for homesteads near Haines. On the Haines - Pleasant Camp road, claimants had taken up the land for 7 miles, and there was no good land beyond that for several miles. There was no available land along the Mud Bay road. Stansfield argued that it was very much of an uphill struggle to establish a homestead in Alaska. Since the local market was so small, homesteaders with products to sell needed to be as near as possible to a steamship dock in order to be successful. Stansfield complained that too many homesteaders had given up the struggle. Building a short road would give a group of homesteaders a fair chance to succeed. He even offered to have the group of settlers participate financially, in a modest fashion, in the project. This, he had heard, had been done in other parts of the territory. Still, the commission could promise no road work, but Stansfield's neighbors started to add their voices to the growing demand for a road. In the fall of 1926, Ruby E. Allen, the fur farmer's neighbor, told the Alaska Road Commission that "I have staked me a homestead and built a cabin north of Haines on Chilkoot Inlet, I would greatly appreciate it if you would do all in your power to see that we have a road along the beach in the near future."[11]

Steese assured Allen, as he had Stansfield, that the territorial board and the commission would consider the request when next year's program came under discussion, but he could offer "no encouragement whatever as to the inauguration of this project." Steese had examined the stretch of proposed road and concluded that the costs were "all out of proportion to the possible benefits."[12]

By spring 1927, Stansfield and Allen had interested numerous other citizens of the Haines region in their plight. Some eighty residents signed a petition directed to the commission and the territorial board asking that the road from Haines to Chilkoot be built as soon as possible. The petitioners pointed out that the requested road would provide "an outlet for a very fertile farming district," a typically Alaskan exaggeration.[13]

Steese once again promised that the commission and the territorial board would consider the proposal but could not be more specific. Stansfield was grateful that the commission had at least acknowledged the petition. He pointed out that despite the lack of access, improvements and development on various homesteads had been progressing for the last four years, "and a good deal of building will be done there this summer, road or no road." But it was difficult. His neighbor, for example, had been waiting for ten days

9. Stansfield to Steese, July 3, 1926, Oliver to Stansfield, July 14, 1926, ARC, box 65637, R. G. 30, Federal Records Center, Seattle, Washington.

10. *Ibid.*

11. Stansfield to Oliver, July 25, 1926, Oliver to Stansfield, August 9, 1926, Ruby E. Allen to Alaska Road Commission, September 4, 1926, Steese to Allen, September 20, 1926, ARC, box 65637, R. G. 30, Federal Records Center, Seattle, Washington.

12. *Ibid.*

13. Petition, residents of Haines, to the Alaska Road Commission and the Territorial Board of Road Commissioners, March, 1927, Steese to Stansfield, April 4, 1927, Stansfield to Steese, April 8, 1927, ARC, box 65637, R. G. 30, Federal Records Center, Seattle, Washington.

with a crew of four men to transport supplies and materials to his site but the weather had been too bad to make the trip.[14]

What did Stansfield expect during the breakup seasons when travel throughout the territory was difficult, Steese asked. Even the road out of Juneau was "still blocked by deep snow and neither the Bureau of Public Roads nor ourselves have ever pretended to maintain traffic at this season of the year." But Steese apparently now was more optimistic, because he told Stansfield that an engineer officer would come to Haines in early May to inspect the entire situation "and line up a program for next year."[15]

Major Lunsford E. Oliver, the engineer officer, visited Haines and estimated that the short road would cost between $10,000 to $12,000, far more than the commission or the territorial board were willing to spend because it would benefit relatively few people. Such an amount of money could be spent more effectively elsewhere to serve a much larger constituency. Stansfield was disappointed, and he and his neighbors now asked for the construction of a packhorse trail along the beach from Haines to Chilkoot. Those benefited, he promised, would contribute $50 in labor or cash to get the project underway. But despite repeated pleas by the homesteaders, neither the commission nor the territorial board appropriated any funds.[16]

In the late fall of 1928, Major D. H. Gillette, who was the engineer officer for the commission from July 1927 to February 1930, walked over the proposed route. A road of sorts existed, he explained, and the homesteaders apparently had done much work on it lately. But it had a slope of 33 percent on the north side, and for about a mile extensive clearing and boulder blasting would be necessary to put it into shape. He estimated the cost of the road at about $11,500; it would serve three homesteading families raising vegetables and furs. These three shipped out about 20 tons of goods a year, and brought in the same amount, at an average cost of approximately $12 per ton. This rate could easily be reduced to $2 per ton with the road in place. Gillette thought that an additional fifteen to twenty homesteaders could locate between the hill and the cannery, and related that the construction of the road "would actually lead to more families coming in as they all seem to be doing very well, with their furs especially."[17]

In conclusion, he pointed out that the residents of Haines supported the proposal wholeheartedly, undoubtedly because all would indirectly benefit from increased business in the vicinity. In the 1929 season, the territorial board finally appropriated funds for the road from Haines to Chilkoot, and the commission built it.[18] The tenacity of the homesteaders finally had paid off.

The Situation in 1927

Major Steese, still president of the Alaska Road Commission, submitted his annual report in October 1927. He noted that cooperation continued between territorial officials and the commission, based on section 17 of the territorial Road Act of April 21, 1919. Under this section, commission personnel had also performed territorial functions. For example, Anton Eide, the assistant superintendent of the commission for southwestern

14. *Ibid.*

15. Steese to Stansfield, April 13, 1927, ARC, box 65637, R. G. 30, Federal Records Center, Seattle, Washington.

16. Stansfield to Steese, May 1, 1927, Steese to Stansfield, May 14, 1927, Stansfield to Steese, August 29, 1927, Steese to Stansfield, September 14, 1927, Stansfield to Elliot, December 5, 1927, Gillette to Stansfield, December 6, 1927, ARC, box 65637, R. G. 30, Federal Records Center, Seattle, Washington.

17. Gillette to President of the Board, October 19, 1928, ARC, box 65637, R. G. 30, Federal Records Center, Seattle, Washington.

18. *Ibid.*

Alaska, had acted as chairman and secretary of the territorial divisional Road Commission for the Third Division, while Hawley Sterling, the superintendent for the Fairbanks district, had filled the same position for the territorial divisional Road Commission for the fourth division. In fact, the territory had not maintained its own road organization since March 31, 1921.[19]

The commission also had continued its cooperative effort with the territory on the rehabilitation and operation of the approximately 87-mile-long Nome to Shelton tramway on the Seward Peninsula and the Tolovana tramroad, located about 50 miles northwest of Fairbanks and extending about 13 miles southward from the town of Brooks to the head of navigation on the Tolovana River. The commission had spent $22,073.16 on the rehabilitation of the former, and $6,932.08 on the latter. In addition, the commission had assumed the repair and maintenance of 400 miles of telephone lines for the territory, and the construction and maintenance of 24 aviation fields.[20]

In *The Alaska Year Book* of 1927, the editors summed up the Alaskan transportation situation. "In a pioneer country," they stated, "there is nothing so important at the start as roads and trails. They are the arteries that carry the very life blood of supplies to the far flung outposts, and make living possible until the Constitution catches up with the Flag."[21]

Much had already been accomplished in Alaska, such as the construction of the Richardson Highway and the Alaska Railroad. Considering the difficult terrain, the total construction cost of the Richardson Highway, including maintenance for more than twenty years, came to slightly under $12,000 per mile, a truly remarkable figure. Now the Alaska Road Commission planned to extend this road from Fairbanks to Circle, which, when finished, would link the coast to the Yukon River with a scenic highway about 540 miles in length.[22]

But despite these accomplishments, the North needed still more roads into new mining districts and there were "sections that only need transportation to make them productive." For example, the Kuskokwim, lower Yukon, and Nome districts in southwestern Alaska needed more roads. Millions of tons of pay ore in the Hyder district could be developed as soon as connection to tidewater was complete. The promising mineral regions of the Copper and Nabesna country were only accessible by pack trails. In fact, lack of transportation arteries made it impossible to get supplies and mining machinery into most of the territory except at prohibitive costs. Therefore, promising mineral properties were idle and prospectors only performed the annual assessment work to hold the ground, and in the meantime waited for the federal government to build transportation routes.[23]

Unfortunately, Congress had never appropriated the full amount the commission had requested. That body knew of "the crying needs...[for] roads and trails in the North..." but when presenting their budget to Congress, "some bunchgrass congressman who wants a new post-office building at Pumpkin Center" had always been able to reduce the Alaskan request at least by half. Therefore, Congress could do nothing more important during its next session than to appropriate funds generously for the construction of new roads in Alaska, the editors of the *Alaska Year Book* concluded. For the 1928 season, Congress appropriated $860,192.90 to the War Department for its Alaska work, down from the $889,443.65 it had allowed in 1927. The

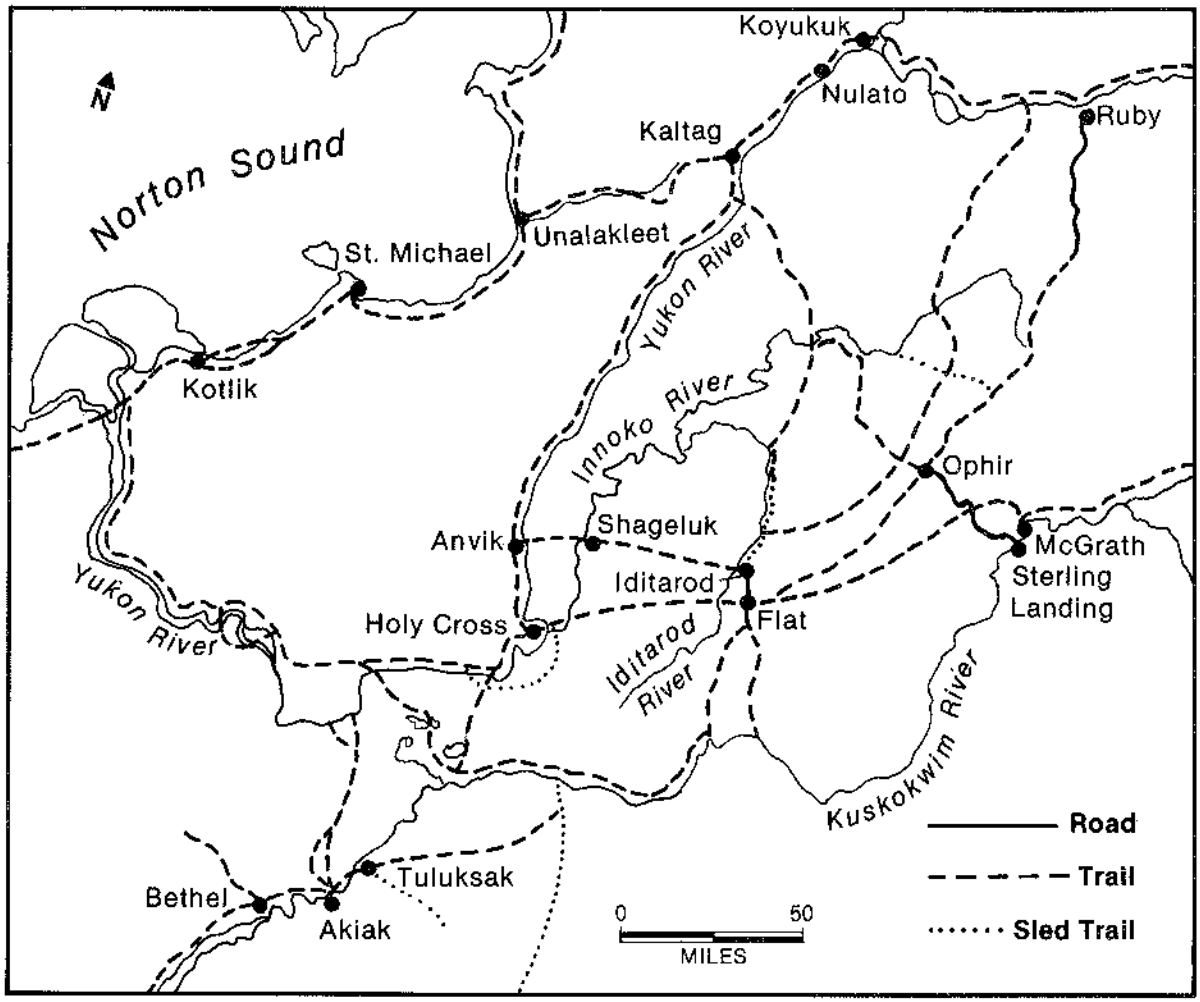
19. Report of Chief of Engineers, U.S. Army, 1927, Extract, *Report Upon the Construction and Maintenance of Roads, Bridges, and Trails, Alaska* (Washington: Government Printing Office, 1927), p. 1977. Hereafter cited as *Extract*, 1927.

20. *Ibid.*, p. 1980.

21. *The Alaska Year Book, 1927* (Seattle: The Alaska Weekly, 1927), p. 13.

22. *Ibid.*

23. *Ibid.*



Roads and trails in the Kuskokwim district.

Alaska Fund had yielded another $134,593.11, while other contributions had amounted to $258,883.17 for a total of $1,253,668.18 which amounted to a slight increase of $36,501.29 over the previous year's total.[24]

While Congress and the territorial legislature wrestled with money questions, the employees of the commission were out in the field performing their duties. For example, C. F. Lottsfeldt, the superintendent of the Kuskokwim district, left Takotna on November 30, 1927, accompanied by Lars Indergard as dog musher and a team of 15 dogs. The purpose of the trip was to inspect the Bethel district and make recommendations for winter trail work. The two men traveled for 37 days, covering a distance of 931 miles, and averaging about 25 miles per day. Most of the account of their travel and Lottsfeld's recommendations follow:

> *Arrived at Ophir evening 30th and the next day proceeded toward Flat arriving there on December 3rd. Laid over one day at Flat and then left for Holy Cross inspecting the new work along this route. Stopped evening 5th at Frank Fox's Reindeer Camp, arrived at Holy Cross following day.*
>
> *Laid over the 7th and the following day left for Paimute, arriving there that evening. Account extremely soft weather laid over Dec. 9th. Dec. 10th we proceeded toward the Kuskokwim River arriving at*

24. *Ibid*; Part II, *Operations, 1928*, p. 13.

Kaltshak [sic] that evening. The next proceeded to Tuluksak arriving there the 12th. Stopped evening 11th at Bob Herman's cabin. On December 13th in company with Tony Sumi left to make an inspection of the new shelter cabin at the Foothills, we returned to Tuluksak evening 14th.

On December 15th left Tuluksak and arrived Bethel on the 17th. Laid over at Bethel for repairs to sled the 18th, 19th and 20th. Left Bethel December 21st arrived at Quinhagak December 23rd, stopped the 21st at the new shelter cabin at Black Fish Lake and the 22nd at the Eek schoolhouse.

Left Quinhagak December 24th proceeding toward Goodnews Bay, arriving there afternoon December 26th. Stopped one night Jack Smith's Bay shelter cabin and the other at Indian River shelter cabin. Laid over the 27th at Goodnews Bay. December 28th we proceeded toward Togiak arriving there January 1st. On the 29th and 30th we were held storm bound at the shelter igloo on the South Fork of the Goodnews River. On December 31st we "siwashed it" about four miles from Togiak.

January 1st, 1928 we proceeded down the bay to Johnny Owens place. On the second we left for Kulukuk [Kulukak] arriving there that evening. The next day we left for Dillingham arriving there on the 5th. Due to poor trail markings and soft weather we were forced to "siwash it" the first night out about ten miles from Kulukuk, and the second evening stopped at the native village at Tuklong [Tuklung].

Laid over at Dillingham the 6th, making arrangements for the summer trail work between Dillingham and Snag Point. The 7th left for Koggiung arriving there on the 9th. Stayed one night with natives six miles from Portage Creek, and the second night at the King Salmon Saltery. This saltery is four miles off the trail but does not greatly lengthen the distance to the Squaw Creek Cannery. Left Koggiung January 10th in a blinding blizzard and were lucky to reach Libbyville Cannery that evening just at dark. This section is not marked. The next day we proceed toward Naknek stopping that night at the Portland Packers Cannery. Jan. 12th left for Egegik arriving there before noon on the 14th. Stopped first night at the Halfway Shelter Cabin and the second at Frank Altonen's six miles from Egegik. This section is well tripoded but due to a very severe blizzard at times it was impossible to see twenty five feet ahead. Left Egegik January 15th and arrived Kanatak January 17th at 2 P.M. Stopped the first night at West End Becharoff Lake shelter cabin and the second night at the East End Becharoff Lake shelter cabin.

Route 92 P *56 Miles Trail*
Holy Cross-Kaltshak [Kalskag]

The section of this trail between Holy Cross and Paimute, that is the part traveled along the river, should be staked with willows every winter. The river between these points has several channels, some of which are several miles longer than others. Strangers often take the longer channel due to lack of markings. The section of the trail between Paimute and Kaltshak can be greatly shortened by cutting through some heavy timber near Paimute. Would also culminate travel on several sloughs which overflow badly. A tundra fire burnt down many of the old tripods which should be replaced next fall.

Allotment Required *$785.00*

Route 92 *32 Miles Trail*
Tuluksak-Bear Creek

Inspection was made over this route and only necessary maintenance needs to be performed next year.

Route 92 *60 Miles Trail*
Aniak-Tuluksak

The crossings on the river route between these two places should be marked with willows right after the freezeup every

winter. A short land portage cut out between Ohogamute [Ohogamiut] and Kaltshak would shorten this trail two miles.

Allotment Required $375.00

Route 92 *74 Miles Trail*
Crooked Creek-Aniak

All the crossings on this river route should be marked with willows every winter after freezeup.

Allotment Required $75.00

Route 92 *44 Miles Trail*
Bethel-Tuluksak

This section should also be marked with willows on the river every fall as it is very easy for travelers to get off the beaten trail. Because of the river cutting in the banks between Akiak and Bethel need to be cut down every year.

Allotment Required $125.00

Route 92 A *90 Miles Trail*
Bethel-Quinhagak

This trail is now in good condition, well marked and tripoded the entire distance. Beacons have been placed on the edge of all the larger lakes. Only maintenance work need be performed next season.

Route 92 *60 Miles Trail*
Quinhagak-Goodnews Bay

This trail is in first class condition with only maintenance needed next season.

Route 92 G *53 Miles Trail*
Goodnews Bay-Togiak

This trail is far below standard and without a guide is nearly impossible to follow. The first four miles out of Goodnews Bay there are no tripods, and the remainder of the distance they can only be found here and there. Tripods were constructed from small willows and tied at the top with rope. These tripods will not stand up against the weather in this section where at times they have very violent winds. If the commission desires to have this as a standard part of the route between Bethel and Kanatak, the entire work will have to be done over in a year or two. I don't believe any of the present markings will remain. This work will be rather expensive as poles for good tripods cannot be obtained closer than Akiak.

Allotment Required $3,000.00

Route 92 H *125 Miles Trail*
Togiak-Nushagak

The section of the trail between Togiak and Johnny Owens, a distance of nine miles is not tripoded. This work should be done in the next year or two. The section between Johnny Owens and Kulukuk is only fairly well marked and needs considerable improvement in the way of tripoding. Between Kulukak and Tuklung the trail is poorly marked. The first four miles out of Kulukuk has never been tripoded, because of this we went up the wrong draw which put us off the trail about ten miles. Several places where the trail crosses creeks the brush needs to be cut out. The Tuklung shelter cabin is two miles off the trail and there are neither markings to or from the cabin. Tripods should be placed to and from the cabin otherwise it will never be used.

The trail between Tuklung and Nushagak is well marked and needs no further improvement. I think it advisable that this entire section between Togiak and Nushagak be brought up to standard as quickly as possible due to considerable travel between the government hospital at Dillingham and the schools along the Bering Sea.

Allotment Required $1,500.00

Route 92 I *86 Miles Trail*
Lewis Point-Naknek

The trail between Lewis Point and Portage Creek needs some improvements, especially a large beacon showing where the trail goes into Portage Creek leaving the Nushagak River. Trail between Portage Creek and Koggiung is well marked. There are no markings between Koggiung and Naknek on account of the heavy travel between the various canneries in this section.

Route 92 J *50 Miles Trail*
Naknek-Egegik

The trail between the Diamond M. Cannery and Egegik is marked with old telephone poles, many of them are beginning to fall down. Mr. Frank Altonen, original contractor of this work, offered to do this maintenance work for nominal sum.[25]

Guthrie's Inspection Trip

Captain Ralph R. Guthrie undertook a much shorter inspection trip in February 1928. Employing the same musher with a team of 17 dogs, he left Lawing on February 5 bound for Kenai which they reached in three days. After a one-day rest the party returned to Lawing. The weather was variable, temperatures fluctuating from +40°F to 0°F. The two men experienced snow drifts 3 feet deep, and on the return journey encountered a snow storm which dumped 18 inches on the trail. They followed a well-broken trail, except during a snow storm on Kenai Lake, and met 11 dog teams during their travels. Guthrie estimated that this amounted to a fairly heavy traffic of about 40 dog sleds during the winter months. Guthrie's report of his journey and his work recommendation follow:

The route of the inspection started at Lawing, Mile 25, U. S. Railroad, and led over the ice, down Kenai Lake, to the lower end. Thence up the Kenai River a short distance, off the river and up the mountain side to an elevation of approximately seventy-five feet, and rather precipitous, for a mile and a half to Cooper's Landing. About this section of the lake it may be said that travel in the winter is very precarious, there being a considerable number of air holes off Black Point, opposite the mouth of Quartz Creek. During the past twenty years many teams have broken through. The mile-and-a-half section between the mouth of Kenai River and Cooper's Landing is maintained apparently by the fire patrols, and is the worst place on the trail. A little grading, the rehabilitation of one small bridge, and the hewing down of a few trees here would do very well and could be accomplished at a cost of one hundred dollars. On the lower end of Kenai Lake to a point seven and one half miles beyond Cooper's Landing there is an average of one cabin per mile, and all are suitable for shelter. The prevailing grade is about thirty per cent.

The first shelter cabin encountered is located fifteen miles from Cooper's Landing. It was in good condition, corrugated iron roof, one door, two windows, sheet iron stove, five joints of pipe, pole bed, and dog cabin. The latter was about twelve by twelve feet inside measurement, the dimensions of the shelter cabin itself being fourteen by sixteen feet. After leaving this cabin no further shelter was encountered until the cabin known as the "Midway Cabin," of approximately the same dimensions as the first, but without dog shelter, was reached. This was twenty-nine miles from Cooper's Landing. This cabin was very comfortable, indeed, with a sheet

25. Lottsfeldt to Engineer Officer of the Board, February 21, 1928, ARC, box 65637, R. G. 30, Federal Records Center, Seattle, Washington.

iron stove, a pole bed, and the comforts which could be expected under the circumstances. It is here suggested that these cabins (all of them) could be improved by battening up or filling in the interval between the iron roof and the pole roof, six inches beneath. Into this open space the snow drifts and melts from the heat of the stove, causing leakage in the vicinity of the bed. The approximate cost for three cabins on the Kenai-Lawing trail in the opinion of the undersigned could be covered by one hundred and fifty dollars, or fifty dollars per cabin. Between Cooper's Landing and Midway Cabin only two fallen trees were encountered, and they were lying across the road as it led across the second small lake after leaving Cooper's Landing. They were about fifty yards apart, and could be removed by one man in about a minute. A few objectionable "nigger-heads" were found on the trail between a point eight miles from Cooper's Landing and Midway Cabin, and again six miles beyond Moose River and the village of Kenai. The third relief cabin, located Mile 19 from Kenai, was in the same condition as the others; very habitable, but it was found that natives had been using it as a trapper's cabin, and it is strongly suspected of being infested with vermin.

Using a twelve-foot sled and seventeen dogs with a broken trail it was found that from forty to sixty miles could have been easily accomplished in a day, any place on the road. At approximately twelve miles from Kenai village there is a plateau with a very steep incline, varying from thirty-five to fifty per cent grade, and winding in and out between trees, very dangerous to teams. From this point toward Kenai the Road Commission trail is practically abandoned and an old Siwash trail, leading over frozen swamps, is used. It is recommended that the Road Commission accept the judgement of traffic in this regard, and that the Siwash trail be adopted and improved. Three miles of trail in the vicinity of Mile 19 from Kenai has also been abandoned by traffic in preference of a shorter cut, apparently to good advantage. It was found that the trail is opened each winter by the natives, and that in spite of any advantage which might exist in the new government trail, they prefer the one that they laid out themselves. In the judgement of the undersigned, the only way to get those sections of the trail used would be to send a trail breaking crew over the trail early in the season. The advisability of this is questioned.

In general, the trail from Lawing to Kenai is not in bad condition for either heavy or light hauling. It is believed that Duncan Little, of Cooper's Landing, with one assistant could go over the entire trail in two months next summer and put it in excellent shape. No one could hope to remove all of the nigger-heads, but the more prominent ones could be smoothed away. All the equipment needed would be a couple of axes, cross cut saw, spades, hammers, nails, and a couple of pack horses. Bridges and shelter cabin roofs could be repaired, and the material found on the ground. Mr. Little has the reputation of being extremely conscientious and industrious, and has both experience and common sense. It is recommended that he be put in charge of the work and authorized to employ one man as an assistant, and that the period of his employment not exceed two months.

Answering the questions in your memorandum of May 20, 1927, for all superintendents, the following information is given:

Length of road from Lawing to Kenai, approximately 120 miles.

Shelter cabins, Mile 19 from Kenai and Mile 37 from Kenai.

A privately owned prospector's cabin used as a shelter cabin at Mile 46 from Kenai.

General ruling grade, 20 per cent.

Maximum grade encountered, 50 per cent, 150 feet long.

Maximum grade not objectionable if trees are cut which now endangers sleds from turning over. Cost of improvement $20.00.

Two-horse teams cannot be used.

One small bridge to be renewed at Cooper's Landing.

Grading not necessary, but strong shovel work required at approaches to two small lakes between Cooper's Landing and Midway Cabin, approximate cost $20.00. No new bridges required.

Road now used does not drift nor glacier badly. Trail is located so that approximately thirty-nine miles is over frozen lakes and streams. This not objectionable.

Nigger-heads and stumps are to be removed in a few instances.

Condition of shelter cabins excellent, except for roofs noted. Stoves have all been installed by private interests, and are at present adequate, but should be replaced next summer by new stoves suitable for both heating and cooking.

Character of traffic on route, foot, and dogsleds, about forty sleds per month.

This route cannot be used in the summer time without long and difficult detours on account of so much of it being over ice. It is purely a winter trail, and if it is to be converted into a summer trail, as well, a road must be cut from Lawing along the north bank of Kenai Lake to Cooper's Landing, and from a point seven and one half miles beyond Cooper's Landing the road must be widened and improved, detouring all lakes and streams, the entire distance to Kenai. As seven lakes and three streams are used, this is liable to be expensive.

In case a wagon road were contemplated, it would necessitate a wagon road along the north bank of Kenai Lake to Cooper's Landing, or the use of the railroad outlet at present supplied by the Quartz Creek route to Moose Pass and thus junction with the railroad, cost about ten thousand dollars ($10,000.00) per mile. From the lake the road could then follow the north bank of Kenai River along the present trail branching off onto a trapper's trail twelve miles from Cooper's Landing to Skilak Lake, cost about five thousand dollars ($5,000.00) per mile. Thence along the north bank of Skilak Lake to the lower Kenai River to the mouth of Moose River which must be spanned by new fifty-foot suspension type bridge, cost of road ten thousand dollars ($10,000.00) per mile, cost of bridge five thousand dollars ($5,000.00) to ten thousand dollars ($10,000.00). From the bridge the road could take direct route to Kenai village over tundra, cost about five thousand dollars ($5,000.00) per mile.

Recommendation

It is recommended that two good trail construction men be employed for two months next summer to go over the entire trail from upper Kenai Lake to Kenai village to make common sense repairs to the winter trail and to shelter cabins, using material to be found in the forest with a moderate amount of equipment and material furnished, and no further expense undertaken. Also that plans be formulated to construct a winter trail around upper Kenai Lake from Lawing, for the purpose of avoiding the obvious dangers to lives and mail, involved in crossing over treacherous stretches of thin ice abounding in air holes at different periods during the winter.[26]

The Anchorage-Matanuska Road

There can be no doubt that the Alaska Road Commission had assembled a knowledgeable headquarters and field staff over the years. Futhermore, the commission and the territorial board cooperated smoothly on many projects, the former serving as the construction contractor and the latter supplying the funds. At times, however, there arose

26. Guthrie to Alaska Road Commission, February 17, 1928, ARC, box 65480, R. G. 30, Federal Records Center, Seattle, Washington.

disagreements. One of these concerned the proposed construction of an Anchorage-Matanuska road. The 1927 territorial legislature, at the urgings of the legislative delegation from the Third Judicial Division, had included $25,000 for the undertaking. Perhaps the delegation had half-heartedly urged the appropriation at the behest of the Anchorage Chamber of Commerce, because the money measure stated "that in performance of said work... said Board shall not expend more than the sum of $200,000.00...."[27]

The legislators knew that both the territorial highway engineer and the commission had estimated the cost of the project at $318,000 without surfacing. The legislature knew that the territorial board could not proceed on a project which it could not finish—but voting the $25,000 certainly endeared the politicians to the Anchorage electorate.[28]

Major Malcolm Elliott, the new commission president since November 1927, was appalled about the very idea of building this road. While residents in most parts of Alaska desperately needed the most rudimentary transportation network, Anchorage citizens were demanding a vast expenditure on a route already provided with a railroad. He carefully explained to the territorial board that the commission would not approve the expenditure of federal funds on this project. The commission had an understanding with the Secretary of the Interior that it would not parallel existing railroad lines. The road was not needed, and the use of federal funds for the Anchorage-Matanuska road would inevitably deprive other communities of badly needed transportation facilities and of the full assistance from federal money to which they were entitled. Furthermore, the $318,000 estimate was low, because it contemplated joint use with the railroad of bridges over certain streams with no assurance that this heavy use would not require early rebuilding. There was no allowance for the maintenance of the completed sections during the construction phase. Including these factors, Elliott believed that the total cost of the project would amount to approximately $500,000, a sum all out of proportion to the benefits expected. In short, the proposal was economically unsound and therefore not worthy of federal assistance.[29]

Worse yet, Elliott warned that Congress would most likely take a very dim view of the Anchorage-Matanuska road. Legislators very quickly would conclude that a territory which could afford the luxury of a highway paralleling a railroad clearly had advanced beyond the pioneer stage and no longer needed "appropriations for roads amounting to sums much larger than the per capita contributions for Federal aid in the States." He assured the territorial board of his "disinclination to interfere in any way with local control of how territorial money shall be spent," but in this case asked that the project at least be delayed. He concluded that if this did not happen it probably would lead to decreasing federal contributions for Alaska's road building program. And that, he asserted, would be injurious to Alaska's best interests.[30]

The territorial board thereupon sought the advice of Alaska's attorney general, John Rustgard. He advised that because the estimated cost of construction exceeded the amount authorized by the legislature, the board had no authority to proceed. The Anchorage Chamber of Commerce was bitterly disappointed at Rustgard's decision. Senator Arthur Frame, the sponsor of the measure authorizing the funds to begin the project, was present at the chamber meeting. He explained that the politicians had meant well, and blamed those in charge of road building operations in the territory of not

27. Rustgard to Parks, March 28, 1928, ARC, box 65481, R. G. 30, Federal Records Center, Seattle, Washington.

28. *Ibid.*

29. Malcolm Elliott, "Statement of the Alaska Road Commission's Attitude on Anchorage-Matanuska Road," March 26, 1928, Elliott to Territorial Board of Road Commissioners for Alaska, March 26, 1928, ARC, box 65481, R. G. 30, Federal Records Center, Seattle, Washington.

30. Malcolm Elliott, "Statement of the Alaska Road Commission's Attitude on Anchorage-Matanuska Road," March 26, 1928, ARC, box 65481, R. G. 30, Federal Records Center, Seattle, Washington.

wanting to connect the Anchorage and Matanuska road systems. Therefore, they "resorted to the adverse opinion of the attorney general as an excuse."[31]

On March 29, 1928, the territorial board held a special meeting at which it accepted Rustgard's opinion and decided not to proceed with the work. The question then remained: could the board use the designated $25,000 for general roadwork in the Third Judicial Division? Attorney General Rustgard put the members of the territorial board at ease when he ruled that the construction of the Anchorage-Matanuska road was not compulsory but rather discretionary. Therefore, the attorney general ruled, the $25,000 could be expended for general road work in the Third Division.[32]

That was not the end of the matter, for by early March 1929 the legislative committee of the Anchorage Chamber of Commerce had prepared a memorial for the territorial house and senate. The chamber complained that because the Alaska Road Commission, "a federal agency," had been unwilling to cooperate in the construction of the project, the territorial $25,000 had not been used. It reiterated the necessity for building the road because it would open "one of the most fertile and promising agricultural regions in the Territory of Alaska" and asked that the legislature appropriate $50,000 for the following biennium "for the purpose of building so much of said road as the sum permits to be constructed."[33] The Anchorage-Matanuska road eventually was built—but that was in the future.

Commission Accomplishments to 1928

In 1928 president Elliott proudly reviewed the territory's transportation system for the *Alaska Year Book*. The territory's road system, he told his readers, consisted of one main axis connecting Prince William Sound with the Yukon River, and a considerable number of small road nets which connect the various commercial, mining, and agricultural centers with supply bases located on the coast, railroads, the main highway, and the navigable rivers. The commission's proudest accomplishments were the Richardson and Steese highways, together extending from Valdez at tidewater to Circle on the Yukon River. At its northern terminus in Fairbanks, the Richardson Highway joined the northern terminus of the Alaska Railroad main line which connected Fairbanks with Seward. Together, the highway and railroad formed a belt line traversing much of interior Alaska.[34]

The Copper River and Northwestern Railway ran from Cordova on Prince William Sound to the Kennecott copper mines. Chitina, a station on the railroad, also was the southern terminal of the Edgerton Cutoff, a branch of the Richardson Highway. The Steese Highway extended north from Fairbanks to Circle City on the Yukon River. Elliott pointed out that Circle City was on the route which, beginning at Skagway, followed the White Pass and Yukon Railway to Whitehorse and then by river transportation went down the Yukon River through the Klondike gold fields and Dawson into central Alaska. These railroad, highway, and water routes formed the framework of a transportation system covering a wide area rich in natural resources.[35]

31. Rustgard to Parks, March 28, 1928, ARC, box 65481, R. G. 30, Federal Records Center, Seattle, Washington; *Anchorage Daily Times*, April 13, 1928.

32. Parks to Rustgard, July 24, 1928, Rustgard to Parks, July 30, 1928, ARC, box 65481, R. G. 30, Federal Records Center, Seattle, Washington.

33. *Anchorage Daily Times*, March 5, 1929.

34. Major Malcolm Elliott, "The Road System of Alaska," *The Alaska Year Book* (Seattle, Washington: The Alaska Weekly, 1928), p. 34.

35. *Ibid.*

The Alaska Road Commission and the Forest Service were developing small road systems which either tied in with the main rail, highway, and river systems or were located along the coast, connecting with good harbors. In southeastern Alaska, small highway systems centered at Ketchikan, Hyder, Wrangell, Petersburg, Sitka, Juneau, Haines, and Skagway. Each of these towns and settlements possessed sheltered, deep-water harbors. Along the remaining coastline, roads connected almost all ports with the immediate hinterland. Small road networks of this kind existed at Cordova, Valdez, Seward, Kodiak, Iliamna, Kanatak, Nome, and Deering. Settlements along the Yukon and Tanana rivers, like Eagle, Beaver, Rampart, Livengood, Tanana Hot Springs, and Ruby, had short road systems. In the upper Kuskokwim country, travelers obtained access to the river over short road systems connecting with McGrath and Takotna. Similarly, a short road connected the mining areas around Flat and Otter with the Iditarod River; Wiseman, the head of small-boat navigation of the upper tributaries of the Koyukuk River north of the Arctic Circle, possessed roads leading to the nearby mines.[36]

Automobile, wagon, and sled roads led from mining, agricultural, and trapping operations to the Alaska Railroad. Prospectors, miners, and homesteaders on the Kenai Peninsula, in the Matanuska Valley, in the vicinity of Talkeetna and in the important Kantishna region, all used commission-built roads and trails which enabled them to transport supplies to their workings and ship their products to outside markets. A highway under construction from the railroad into Mount McKinley National Park eventually was to lead to near the base of the mountain, opening the park to public use. Homesteaders in both the Matanuska and Tanana valleys did considerable farming, and the commission had built local roads connecting these operations to the railroad. The country adjacent to the Richardson Highway and the Copper River and Northwestern Railway was connected with short roads to the mineral operations in the vicinity of Kennicott, Kotsina, and the Chistochina country.[37]

As of 1928, the entire road system consisted of 1,623 miles of automobile, tram, and wagon roads, 1,375 miles of winter sled roads, 7,044 miles of trails, and 712 miles of flagged winter trails. The Alaska Road Commission had built this imposing transportation system within the short span of 24 years at a cost of about $13 million. About $4 million of this total, or approximately 30 percent, had been derived from Alaskan sources, while the federal Treasury had contributed the balance.[38]

When the commission had started its labors in 1905, there had been no roads worthy of the name. Inhabitants freighted supplies over unimproved trails or used pack horses and dog sleds. Life was primitive by necessity in any community not close to water transportation. All this had changed, for the transportation system had enabled the residents to import all the conveniences of modern life, yet large areas of Alaska that were capable of economic development still were a wilderness. Much work needed to be done yet, Elliott concluded.[39] Despite a perpetual shortage of funds, the commission undertook much exploratory work. If funds became available, then roads and rails could be constructed quickly because informal surveys had already been accomplished. It had become customary for commission personnel to use the early spring to inspect various routes and make recommendations for improvements. Donald MacDonald, a commission engineer, reported on the condition of the winter trail from Chatanika to Fort Yukon in February 1929. There were two sections of the trail, one leading from Chatanika to Circle, and from the latter point to Fort Yukon.

36. *Ibid.*

37. *Ibid.*

38. *Ibid.*

39. *Ibid.*

The Chatanika Winter Trail

The Chatanika winter trail originated at the little mining community by the same name, situated on the Steese Highway. The mail followed the highway to mile 45, about 17 miles from the community, crossed the Chatanika River to an older winter trail on the left bank of the river and went along the trail to Sourdough Creek at mile 66.6, some 38.6 miles from Chatanika. The winter trail then again followed the Steese Highway to an Alaska Road Commission tent cache at mile 82.6. Since the Steese Highway drifted over with snow at this location, the winter trail avoided this difficulty and dropped into McManus Creek, followed it to its head, and climbed up the McManus Twelvemile Divide, also called Twelvemile Summit. From here it followed the highway for a short distance along the divide, and then dropped down to the head of the North Fork and to the old Twelvemile Roadhouse. It joined the highway again at mile 88, followed it to mile 102, and then left it again to avoid the deep snow drifts on Eagle Summit. It followed Eagle Creek to its head and then crossed the Eagle Summit about 1.5 miles east of the highway. The trail descended to Miller and Mammoth creeks and intercepted the Steese Highway again at approximately mile 120. From here it followed the highway to mile 162.5 at Circle on the Yukon River.[40]

While there were some rough spots along the winter trail, MacDonald considered it unwise to spend any funds on improvements because of the scant winter traffic. With the completion of the Steese Highway to Circle, all residents with access to the road made every effort to ship supplies in the late fall before the highway closed for the winter. In addition, Fairbanks citizens had asked that the mail for the district be carried by plane during the winter months, thereby eliminating expensive delivery by dog sled. He proposed, however, that a relief cabin and stable be built at the junction of the highway and winter trail at mile 82.6. Travelers used the highway over Twelvemile Summit up to December 15 in most winters. If more snow fences were put in, MacDonald reasoned, the highway over the summit could probably be used throughout the winter in an ordinary year. There was a relief cabin opposite mile 85 at the foot of Twelvemile Summit, but it was located about 300 feet from the trail and not easily seen. MacDonald pointed out that the proposed relief cabin and stable could be real life savers, because violent winds and blizzards often closed Twelvemile Summit and shelter then became absolutely necessary.[41]

Eagle Summit, MacDonald continued, was notorious throughout the interior for the hazards it presented to winter travelers. Blizzard and wind conditions here were worse than on Twelvemile Summit. A 5-foot-wide trail was cut into the side of a hill on the north side of the summit for a distance of about 2,000 feet; this stretch was very dangerous. The slightest winds blocked the trail, and it frequently had happened that in a blinding blizzard travelers had slipped into a deep gulch on the west side of the trail. MacDonald proposed that the commission widen the trail to 18 feet, and also install a telephone in a suitable shelter at the summit. Telephone lines extended from Fairbanks to mile 70 of the Steese Highway; the Fairbanks Exploration Company owned the section of the line from Chatanika to mile 70. Another telephone line owned by a Mrs. Rasmussen of Circle, ran from Circle to mile 106. Thus, there existed a 36-mile gap, and residents along the road had repeatedly requested that this distance be bridged. The Rasmussen telephone line already missed Eagle Summit at the point where MacDonald's proposed shelter would stand, so that improvement would be inexpensive, involving only the purchase of a telephone and the construction of a shelter

40. Donald MacDonald, "Report on Winter Trail Conditions, Chatanika to Fort Yukon, February 28, 1929," ARC, box 65480, R. G. 30, Federal Records Center, Seattle, Washington.

41. *Ibid.*

for the instrument. This would allow travelers to summon aid when necessary. Steese Highway residents had volunteered the labor cost of construction and winter maintenance if the commission paid for the phones, lines, and tripods needed to close the gap between phone lines. MacDonald estimated that these materials would cost about $2,000. He recommended that the expenditure be made, because not only would it serve the public, but the Alaska Road Commission as well.[42]

The second part of the trail extended from Circle to Fort Yukon. It had been built in 1924 to avoid the dangerous ice conditions of the original Yukon River trail. The early trail followed the bends and turns of the river channels, making it unnecessarily long and difficult to follow as well. The 1924 trail consisted of a series of long tangents ranging from 2 to 14 miles. It took advantage of all existing shelter, and had reduced the distance from 85 to 67 miles. From the town of Circle the trail headed in a straight line through some light timber and wide open spaces to the first shelter cabin, some 20.5 miles from Circle. The open windy stretches, grass clumps, and swampy conditions made this the most difficult part. The second shelter cabin was 33 miles from Circle, and the third stood 47.5 miles from the town on a slough of the river. At mile 45.5 the trail left the land and followed sloughs to the main channel of the Yukon River and then into Fort Yukon. The last part of the trail, past the third cabin, changed yearly with the river.

MacDonald had inspected the trail because residents of Fort Yukon had petitioned the commission to have the trail widened and raised to double-ender sled standards. MacDonald estimated that the requested improvements would cost $4,700, which he judged to be unwarranted by the light traffic: the weekly mail carrier, a few passengers, and the transportation of furs. MacDonald did recommend, however, that the commission build a shelter cabin 10 miles out of Circle in the open flats where strong winds and snowdrifts rendered travel difficult and slow. In fact, the mail carrier and several other travelers "have had to Siwash at or near this point and several times men have arrived in Circle in dangerously exhausted condition.[43]

The Richardson Highway

Personnel of the commission also inspected the Richardson Highway, the most highly developed transportation link in the territorial system which the commission had constructed. By 1929 it had developed into 371 miles of gravel-surfaced wagon and automobile road connecting Valdez and Fairbanks. There were two main branches, the Chistochina (then under construction), which was designed to give access to the highly mineralized Shushana area located north of the Wrangell Mountains and the Edgerton Cutoff. The Chistochina road branched off at mile 128 at Gulkana. The Edgerton Cutoff branched off at mile 92.4 at Willow Creek and connected the Richardson Highway with Chitina, the little town located 39 miles away at mile 131 of the Copper River and Northwestern Railway. This railroad originated at the seaport of Cordova and ran to the Kennecott copper mines situated to the south of the Wrangell Mountains.[44]

The Richardson Highway, the commission pointed out in its 1929 report to headquarters, was still in a development status. The commission had completed the route as a winter sled road in 1907 and by 1913 upgraded it to a wagon road. After World War I, the commission had worked diligently to improve the road to automobile standards. As a result, in

42. *Ibid.*

43. *Ibid.*

44. "Condition of the Richardson Highway, Alaska, May 10, 1929," ARC, box 65481, R. G. 30, Federal Records Center, Seattle, Washington.

certain newly improved sections thawing, ground settlement, and drying were still incomplete. Those sections had an unfinished appearance. Still, much had been accomplished since 1920. Almost all the steep grades had been eliminated, most of the narrow places widened, bridges and culverts rebuilt, soft spots drained and graveled, and dangerous stretches had been either removed, fenced, or properly marked with standard United States highway warning signs.[45]

In 25 years of operating in Alaska, the commission had had $14,400,000 available for its work. Of that amount, 43 percent, $6,158,000, had been spent on the Richardson Highway, $2,842,000 on construction and $3,316,000 for maintenance and improvements, for an average total per mile cost of $15,900. The commission now was attempting to place the entire highway on a purely maintenance basis, and in 1929 only 20 percent of the route required more than annual maintenance.[46]

The Kuskokwim District

The Richardson Highway had opened the areas adjacent to it for settlement and development. On the other hand, the Kuskokwim district contained some of the most inaccessible parts of Alaska, including the Kuskokwim River valley, and it extended eastward along the coast to Bristol Bay and west as far as the Yukon River; it thus included the valleys of the Iditarod and Innoko rivers. The chief mining operations were centered about Iditarod, Ophir, and Takotna, where the commission stationed its district headquarters. Although the commission had constructed shelter cabins, aviation fields, and the Yukon-Kuskokwim portage, the district's remoteness and high costs had prevented the building of any through routes for wagons or automobiles. Freight destined for Takotna and vicinity reached Bethel by ship from Seattle; reloaded on river boats, the freight was shipped from there to the communities along the Kuskokwim River. Goods for Iditarod and environs went by ship from Seattle to Seward and then via the Alaska Railroad to Nenana where they were loaded on railroad-owned river boats, and shipped to Holy Cross. There they were unloaded once again into smaller craft and sent up the Iditarod and Innoko rivers. There were two important winter trails, one via McGrath, Telida, Diamond, and Knights to Kobi [Rex] or Nenana, and another one extending from McGrath to Aniak, Bethel, Goodnews Bay, Togiak, Dillingham, Naknek, and Kanatak.[47]

C. F. Lottsfeldt occupied the position of superintendent for this far-flung district. It was his responsibility to determine the need for roads connecting mining operations with supply centers. Miners had proposed the construction of a 10-mile wagon road between Cripple and the Cripple Mountain district. Lottsfeldt traversed the route and reported two dragline and two hydraulic operations at work, employing 23 men, making the location one of the most active mining areas in the district. Summer transportation to the mines was impossible because of the 3.5 miles of swampy tundra travellers encountered when leaving the town of Cripple. Even pack horses, he observed, had a difficult time reaching the camps because of the swamp. Lottsfeldt recommended the construction of the road, estimating that it would cost $5,000 per mile, or $50,000 for the whole project. Since both the Takotna-Ophir and Iditarod-Flat roads were on a maintenance basis, practically the entire funds for his district could be allocated for this new project. He suggested that

45. *Ibid.*

46. *Ibid.*

47. *Annual Report of the Alaska Road Commission, 1932, p. 37.*

$30,000 be made available the first year, and the other $20,000 for the second year.[48] The commission, however, found that the mining activities there did not warrant the expenditure of $50,000.

The Eagle District

In the meantime, J. G. Christianson, a military member of the commission, examined the transportation system and resources of the Eagle area. He observed that Eagle was a dying town. Only a substantial gold strike could revive the settlement, but the prospects for such a discovery were slight. Eagle had a population of 50 non-Natives, the Fortymile district had 125, and the Seventymile district only 20 residents. The average age of the men and women in the Eagle district was approximately 60 years. Christianson reported that "the chief industry seems to be the holding of claims of low-grade placer ground and hoping that some day someone may come who will buy their claims, and many are still waiting after 30 years of such hoping."[49]

The district imported about 200 tons of supplies annually and exported furs and gold. Eagle received 55 tons, the Fortymile district 125 tons, and the Seventymile district 20 tons—about 1 ton per resident. John B. Powers, a teamster who handled about 90 percent of the freight, had 15 horses and mules and about 40 buildings scattered over the district; he also had the mail contract which called for three monthly trips. Christianson predicted that if Powers should go out of business it would deal the death blow to the district because there was nobody with enough capital to replace him. Powers, in fact, was the "only real user" of the road and trail system which the Alaska Road Commission had built and maintained. Some supplies, Christianson reported, moved into the district during winter and avoided Eagle altogether. When the goods were dropped off at the confluence of the Fortymile River with the Yukon River in Canada, miners would pick them up and sled them up the Fortymile River. In fact, the mine at Walker Fork, the largest in the district (employing 25 men), received its supplies directly from Dawson.[50]

Christianson also listed the mining locations. In the Fortymile district, the large Walker Fork mine used both dragline scraper and hydraulics. There also were smaller operations at Chicken Creek, Jack Wade, Dome and Moose creeks, and Discovery Fork. At several other places, he observed mining operations run singly or by two men. In the Seventymile district, small placer mines operated at Crooked, Broken Neck, Bryant, Fox, and Alder creeks. Christianson pointed out that, although considerable quantities of low-grade placer ground existed, to utilize them really profitably required modern machinery. This, in turn, necessitated capital which was in short supply. In conclusion, he stated that the commission intended to spend $2,000 in the Seventymile and $4,500 in the Fortymile districts for the 1929 season. Considering the low freight volume moving over the roads and trails each year, the Eagle district received a generous allotment of road funds for the season.[51]

48. Lottsfeldt to Gillette, May 29, 1929, ARC, box 65479, R. G. 30, Federal Records Center, Seattle, Washington.

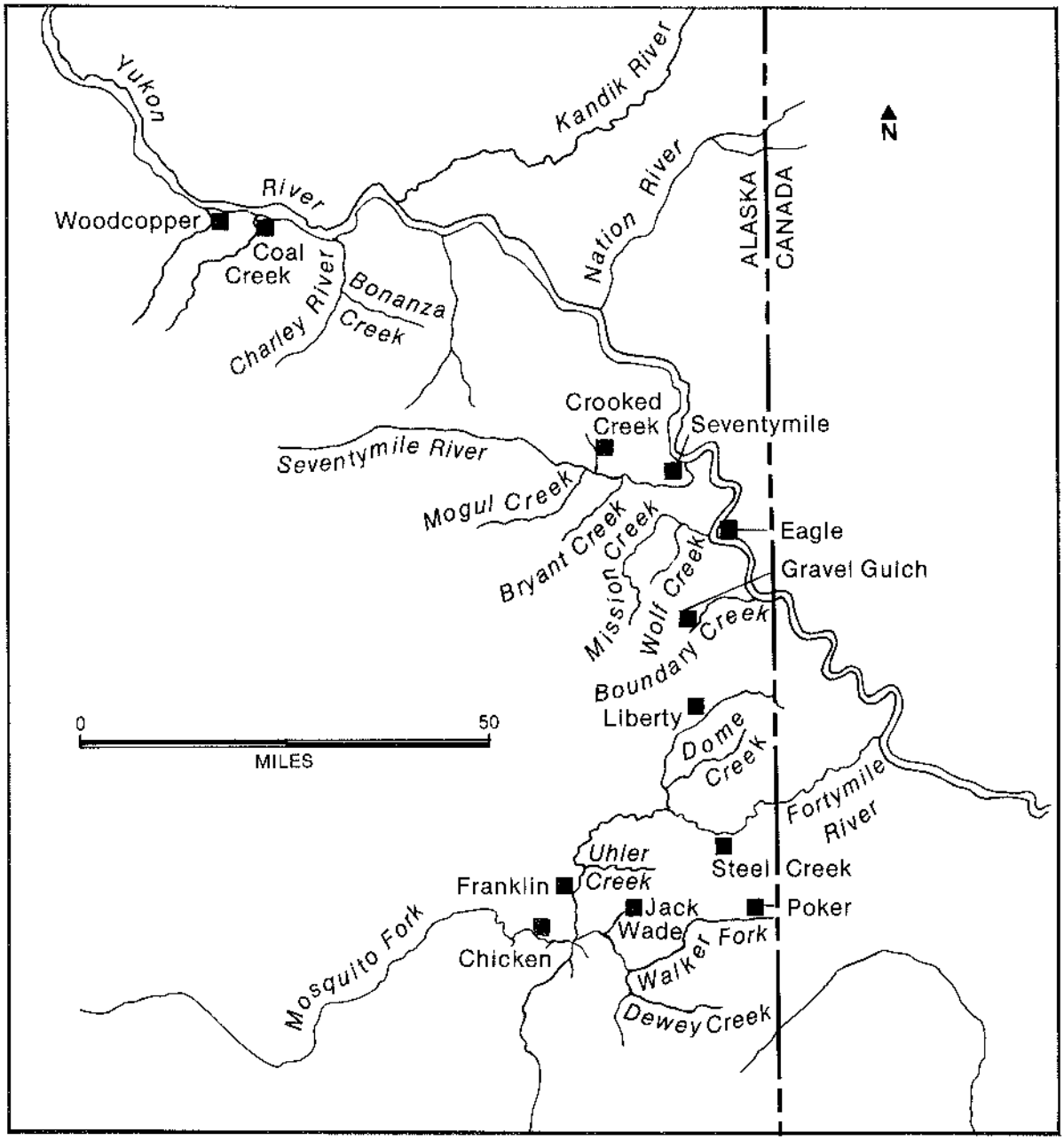
49. Christianson to Engineer Officer, ARC, June 10, 1929, ARC, box 65480, R. G. 30, Federal Records Center, Seattle, Washington.

50. Ibid.

51. Christianson to Engineer Officer, June 10, 1929, ARC, box 65480, R. G. 30, Federal Records Center, Seattle, Washington.

Commission Accomplishments to 1932

Unfortunately, Congress never appropriated the funding level which the Alaska Road Commission desired, as a review of the decade since the formal ten-year plan was written can show. The commission, in cooperation with the governor of Alaska, the territorial Board of Road Commissioners, and other interested federal and territorial officials, had submitted to Congress a long-range program of operations in 1920. It had



Mining locations in the Forty-Mile and Seventy-Mile area.

proposed three types of work in order of their priority: first, the construction of approximately 700 miles of arterial or feeder highways principally following old routes, at an estimated cost of $7 million; second, the building of development roads where they were most needed, at a cost of about $1 million; third, the maintenance of the existing road and trail systems at a ten-year cost of approximately $2 million. This brought the total cost for the ten-year period to $10 million.[52]

For the first five years of the program, however, Congress had appropriated less than half the requested funds. Of this sum, three-fourths had been required for maintenance and repairs. In 1924, the commission revised its 1920 ten-year program. For the next five years, it requested $4,350,000 for the maintenance and improvement of 9,736 miles of existing routes, and $1,735,000 for the completion of projects already underway. It requested another $1,780,000 for the completion of projects already approved but not yet undertaken, and another $1,135,000 for constructing transportation components likely to arise with economic development during the next five years. In short, the commission requested a total of $9 million for the second five-year period, but Congress appropriated only $4,325,000 for a shortfall of $4,675,000.[53]

Finally, the commission submitted a new ten-year program which was to become effective in fiscal year 1932. For maintenance and improvements it asked for $9,047,000, and another $7,500,000 for new construction for a total outlay of $16,547,000. Of this amount, the commission asked Congress to appropriate $15,547,000, and the territorial legislature to contribute $1,000,000.[54]

The War Department next advised the Alaska Road Commission that it needed to prepare yet another expenditure projection and submit it to the Federal Employment Stabilization Board in accordance with the Employment Stabilization Act of 1931. The commission tried again, and came up with a six-year program, covering the years from 1933 through 1938. It asked for $740,000 for maintenance and improvements and $290,000 for new construction in 1933 for a total of $1,030,000. For the next five years, from 1934 through 1938, it asked for $650,000 for maintenance and improvements and $480,000 for new construction for each year for a total annual federal budget of $1,230,000, or for a six-year total of $7,180,000.[55]

In 1932, before the transfer of the Alaska Road Commission from the War Department to the Department of the Interior, commission members proudly issued their annual report celebrating 28 years of service to the territory. It had built and maintained 1,701.5 miles of wagon and tram roads, most of which were suitable for automobile travel; 1,495.5 miles of winter sled road, 7,322 miles of trail, and 712 miles of flagged trail. This had been accomplished at a total cost of $18,015,848.47, of which $9,393,369.68 went for new construction and $8,622,478.49 for maintenance and improvements. The commission had expended a total of $18,312,825.40 of which Congress had appropriated $12,694,859.28. Some $5,617,966.12, or over 30 percent of the total, had come from territorial sources.[56]

In 1932 the Alaska Road Commission conducted the following activities under its consolidated engineering direction: the construction, repair, and maintenance of federal roads, tramways, ferries, bridges, trails, and related works, in excess of 11,000 miles, and extending from year-round open ports on Alaska's south coast to all inhabited parts of the territory; territorial roads, bridges, ferries, aviation fields, telephone lines, and trails throughout Alaska, covered by cooperative agreements; shelter cabins; and the 74-mile

52. *Report Upon The Construction and Maintenance of Roads, Bridges and Trails, Alaska,* Extract From the Annual Report of the Chief of Engineers, 1931 (Washington, D. C.: Government Printing Office, 1932), pp. 2274-2275.

53. *Ibid.*

54. *Ibid.*

55. *Annual Report of the Alaska Road Commission, 1932,* p. 20.

56. *Ibid.*

long Nome-Shelton tramway with cars pulled by either engines or dogs. There also was the Valdez dike, the Yukon-Kuskokwim portage, and the government float in Juneau.[57]

The Alaska Road Commission also had made improvements at several locations, including Nome harbor, Port Alexander, Port Refugio, and Seward harbor; it had conducted preliminary surveys or examinations of Sitka harbor, Dry Pass, Nome harbor, Egegik River, Kake harbor, Stikine River, Petersburg harbor, Keku Straits, Kodiak, Wrangell, and Craig harbors; it had built flood control devices on the Salmon River; it issued permits for fish traps and other structures in the navigable waters along Alaska's 26,000-mile-long coast; it had improved the Sitka National Monument; and it maintained various aids to navigation. Although receipts did not match requests, there were more funds available to allow purchase consolidation for supplies, resulting in lower unit prices, and combined operations avoided conflicts in plans and work compilations. Also, having funds available on a year-round basis avoided the difficulties resulting from fiscal year appropriations beginning or terminating about the middle of each working season. All of this made the operations much more flexible and responsive to local needs.[58]

57. *Annual Report of the Alaska Road Commission, 1932*, p. 12.

58. *Ibid.*, pp. 11, 12.

8 The Alaska Road Commission and Alaskan Aviation

The railroad was not the only other form of transport that affected the Alaska Road Commission's activities. As if the territory's surface was not challenge enough, the commission also had to keep an eye on the sky. "The aviation," as Alaskans called it, became very important in the territory. The first plane to fly in Alaska took off from Fairbanks on July 4, 1914. Fairbanksans always celebrated the Fourth of July with foot, horse, and bicycle races; tugs of war; and baseball games—and this time they added an aerial circus. Arthur Williams, the owner of the Arcade Restaurant, and two other merchants hired aviator James Martin from the States and paid his and his wife's transportation as well as the shipment of his small tractor biplane. It was an expensive undertaking and cost the three men several thousand dollars. They made a good choice in picking Martin, for he was one of the earliest aviation pioneers in the United States and had invented the first successful tractor biplane in 1911, with which he set a world speed record of 70 miles per hour. An army consulting enigneer during World War I, he became a good friend of General Billy Mitchell, the army advocate of air power and an old Alaska hand from the WAMCATS days. Martin subsequently invented numerous aeronautical products and manufactured those together with planes and automobiles at a factory in Garden City, New York.[1]. In 1914, that was in the future, however.

The promoters planned to hold the aerial circus at the ball park and to charge $5 a head for admission, expecting a large crowd. But when Martin went up in his plane, the ball park was almost empty; spectators covered rooftops and woodpiles all over town, watching the show for free. After one false try, Martin's biplane lifted into the air and flew some 400 feet above the baseball diamond for 9 minutes before it settled down. He flew four times, but the promoters lost a bundle of money.[2]

In 1920 General Mitchell sponsored the flight of the Army Air Service's Black Wolf Squadron from New York to Nome. This flight, under the command of Captain St. Clair Streett, showed Alaskans what airplanes could do. It took the squadron almost 6 weeks to reach Alaska. Finally, they landed at the ball park in Fairbanks to be joyously greeted by a large crowd of residents. "Wrong Font" Thompson, the editor of the *Fairbanks Daily News-Miner*, wrote that "adventurers of an earlier day take their hat off to the advance guard of the new generation who are blazing a pioneer trail by means of locomotion which seems almost super human and uncanny in its marvelous accomplishment."[3]

Several individual pilots followed the army fliers, but Carl Ben Eielson probably was the most important figure for the development of Alaskan aviation. He had learned flying in the Army Air Service during World War I. A graduate of the University of North Dakota, he

1. Jean Potter, *The Flying North* (Sausalito, California: Comstock Editions, Inc., 1977), p. 23.

2. *Ibid.*, pp. 23-24.

3. *Ibid.*, pp. 24-26. For a personal account of the flight see St. Clair Streett, "The First Alaskan Air Expedition," *National Geographic Magazine* 41 (May 1922), pp. 536-552.

arrived in Fairbanks in 1922 where he taught mathematics and general science and coached basketball at the red frame high school on Eighth Street. But what Eielson wanted to do was to fly, not teach. Soon he persuaded Fairbanksans to buy a plane for him, a Jenny with an OX-5 engine. Dick Wood, a pioneer banker, gave most of the money. The plane arrived in Fairbanks on July 1, 1923, and three days later Eielson climbed into the wicker seat of the open cockpit plane and made the first commercial flight in interior Alaska. Wood climbed in behind him, well fortified with "Alaska Mule," a vicious local moonshine liquor. The two flew to Nenana, 50 miles from Fairbanks on the Alaska Railroad. That summer Eielson made several more cross-country trips, hauling passengers and light freight to nearby towns.[4]

Late in November of 1923, the United States Post Office Department gave Eielson a contract for ten twice-monthly mail trips from Fairbanks to the town of McGrath, more than 300 miles distant. The department also shipped him a Liberty-powered DeHavilland for the flights and agreed to pay him $2 a mile—less than half the cost of transporting mail by dogsled. "The Aviation" had arrived in the North, and it was destined to revolutionize transportation, helping to tie together a vast subarctic subcontinent.[5]

With aviation established in the North, it became necessary to build aviation fields. As early as 1925, landing fields had to be created in Nome for Alaska's pioneering pilot, Noel Wien. A Minnesota farm boy who had arrived in Fairbanks in 1924, Wien soon compiled a list of aviation firsts which was almost endless. Almost every flight he made was an inaugural one.[6]

For the first flight to Nome, Jimmy Rodebaugh, one of the owners of the Fairbanks Airplane Company, bought a very large Fokker F. III which arrived in the town on two train flatcars early in the summer of 1925. Noel Wien and his brother Ralph assembled the aircraft with a curious crowd watching their every move. The assembly was uncomplicated, because the Fokker fitted together easily, but it took some time because of the size of the parts. Rodebaugh and the other officers of the company were anxious to get the Fokker flying because it promised to provide twice the revenue of any of the company's three biplanes. The Fokker carried five instead of two passengers at an average of $1 per mile, and 500 pounds of freight averaging 40 cents a pound on short flights and 75 cents on flights longer than 60 miles. In addition, there still was room for any mail the owners could contract from the post office in the future.[7]

The *Fairbanks Daily News-Miner* was enthusiastic about the plane, stating that "Pullman equipment has nothing on the interior of this airship." The reporter was impressed by the "red upholstered chairs and settee, easily opened windows, vases for flowers and draped and leather fittings" which all combined to make the airplane look comfortable and beautiful. The dull green exterior finishing gave the airship an aristocratic look and gave "one the feeling that all the equipment is safe and substantial."[8]

In this aircraft Wien planned to make a round trip to Nome on the Bering Sea, some 570 miles from Fairbanks. It was a most ambitious undertaking because the traditional method of traveling to Nome in the summer took about three weeks. The trip by boat down the Tanana and Yukon rivers and across Norton Sound is a distance of about 1,100 miles. In the winter it was traveled by dog team, 735 miles and four weeks to reach the

4. Potter, *The Flying North*, pp. 29-34.

5. *Ibid.*, pp. 34-35, 52-54, 62-63. Eielson, the pioneer, perished in an attempt to take passengers and furs off the American motor trading ship, the *Nanuk*, icebound off the village of North Cape, Siberia, in November 1929. Not until February 18, 1930, did searchers find the pilot's body.

6. Ira Harkey, *Pioneer Bush Pilot: The Story of Noel Wien* (Seattle and London: University of Washington Press, 1974), pp. vii-viii.

7. *Ibid.*, p. 136.

8. *Ibid.*, pp. 137, 139.

town. The air distance to Nome was 570 miles which the Fokker could cover in less than seven hours. Wien's flight to Nome, the first truly long-distance effort accomplished in the territory, advanced northland transportation substantially.[9]

Norman C. Stines, a Bostonian and mining engineer for the Fairbanks Exploration Company, chartered the Fokker for $1,500 to fly him and two women members of his party, Midge Downer and Mrs. Mayo, to Nome. But before Wien could fly to Nome he needed a place to land and take off again. G. R. Jackson, together with an employee of the Alaska Road Commission who understood aviation field requirements, scouted Nome and vicinity for a suitable location. They discovered two. One lay on the high point on Bessie Road between where Osborne Road branched off and Bourbon Creek; it offered a strip about 500 feet long and 25 feet wide. It could easily be smoothed out and all side obstructions removed without expense. The second was the parade grounds of the army's old Fort Davis; the grounds were covered with driftwood and split by a telephone line running through its center. Jackson estimated optimistically that clearing a 1,000-foot strip along the south side between the sea and the telephone line would cost $50. This sandy field had a length of 1,800 feet from the bridge to the first building at the fort and offered no overhead obstructions. It was 200 feet wide with a 5 percent slant dipping toward the sea; across the Nome River from this field there was a 50-foot long meadow, about 75 feet wide and covered with goose grass, which could extend the strip with no further work. The Fokker needed a 900-foot run after touchdown. It had no brakes and its skid was a shovel type, 3 inches wide and 6 inches long. A sharp skid would not have dug in deep enough, because the craft was so light on the empennage that Wien could pick up and walk the tail around without help. So Noel chose the Fort Davis field, provided it did not consist of loose sand and that it be cleared of all driftwood, making it 1,400 by 500 feet without obstructions at either end.[10]

To comply with Wien's specifications, Jackson hired Billy Rowe for $1,100 to clear, level, roll, and generally put the field into the same condition army aviators enjoyed when they landed in Nome in 1920. It would be 1,400 feet long, he assured Wien, but only 300 feet wide because that was the distance from the sea to the Nome River. The telephone line was to be removed, and although there was some loose sand, the field's center was fairly firm. The Fairbanks Airplane Company guaranteed the $1,100 payment to Rowe, and informed Jackson that the territorial legislature had appropriated $5,000 for the Nome field and asked the Alaska Road Commission to accomplish the work.[11]

On June 7, 1925, hundreds of Fairbanks citizens watched as thirteen people lined up to have their photograph taken standing in front of the Fokker. There was Jimmy Rodebaugh, dressed in coveralls; Norman C. Stines, in breeches and matching jacket, boots, white shirt, and tie; and his two companions, Midge Downer and Mrs. Mayo. Others posing in their Sunday best were Mayor Frank de la Vergne of Fairbanks; airplane company stockholders Mr. and Mrs. R. C. Wood; store owners Mr. and Mrs. Frank Gordon; and Frank Struthers. Ralph Wien in coveralls stood beside his pilot brother in boots, breeches, leather jacket, and cloth cap. A uniformed conductor of the Alaska Railroad pretended to dispatch the historic flight. Then the Stines party climbed aboard, and the photographer shot one more picture with Mayor de la Vergne handing Noel a letter addressed to the mayor of Nome. Noel started the engine, and after a long takeoff run between lines of autos and trucks, the Fokker was airborne at 10:45 p.m. on June 7, 1925, carrying 1,350 pounds which placed it over the

9. *Ibid.*

10. Jackson to Stines, May 7, 1925, Stines to Jackson, May 30, 1925, ARC, box 65433, R. G. 30, Federal Records Center, Seattle, Washington; Harkey, *Pioneer Bush Pilot*, p. 137.

11. Stines to Jackson, June 1, 1925, Jackson to Stines, June 1, 1925, Jackson to Stines, June 2, 1925, ARC, box 65433, R. G. 30, Federal Records Center, Seattle, Washington.

aircraft's posted gross weight of 4,800 pounds. Wien climbed to 4,000 feet and cruised west at 90 miles an hour, passing Nenana on the left, Manley on the right, and picking up the Yukon River at Tanana. From there on Wien did not know the country below him. He planned to follow the Yukon just to where it turned sharply south after receiving the Koyukuk River, 300 miles west of Fairbanks. There he would leave the Yukon and continue westward over the mountains between Nulato and Norton Bay and follow the coast to Nome. Wien carried Coast and Geodetic Survey charts of the Yukon and the Bering Sea coast, and he believed old-timers who had told him that the Yukon had many sand bars suitable for emergency landings along its entire length. That faith proved to have been misplaced.[12]

Wien was to land on a sand bar at the little mining settlement of Ruby, but when he got there at 12:45 in the morning there was no sand bar. In fact, since the river ran high after breakup, Wien had seen no sand bars at all on the trip. So he continued on, but about 40 miles from Ruby, the flight ran into heavy weather covering the whole Nulato range from north to south. Since he did not know how much rain the engine could take, and did not know the country ahead, he turned back. Wien had seen a cleared place on top of a hill above Ruby and there landed the plane at about 2 a.m. It ran uphill a couple of hundred feet and got to the top. It was a baseball field, and just over the highest point the plane rolled down, hit a soft spot, nosed over and slowly somersaulted onto its back. Noel and Ralph Wien helped the passengers out of the cabin. Fortunately, nobody had been hurt, and the damage to the plane was slight; the propeller was shattered, and approximately a foot of the balanced rudder was crushed down. Wien had landed within 400 feet a plane which needed a 900-foot landing run, and instead of smashing it and killing all five people aboard, had left it needing only a new propeller, some tube straightening, and a piece of petticoat to make it flyable again.[13]

Many of Ruby's population of 125 souls gathered at two in the morning and took the unexpected visitors down the bluff to the roadhouse where they slept a few hours. After some rest, Stines decided to forego any further flying, hire a small boat to try to catch up with the regular Yukon steamer going to Saint Michael on Norton Sound, and from there take another scheduled boat along Norton Sound to Nome. As soon as the Army Signal Corps radio station opened later in the morning, Wien contacted Fairbanks Airplane Company and reported the accident and damage. Dick Wood promised to rush a spare propeller via gasoline launch to Ruby, hoping that he could cover the 220 miles to Ruby in two days. While Stines and his party departed downriver, the Wiens set to work repairing the Fokker. The entire village helped right the plane, and village women supplied cloth for patching the fabric. Wood arrived with the propeller on the second day, having covered the distance to Ruby in a record 30 hours. Soon they were airborne again, and after a flawless flight of three hours and 40 minutes out of Ruby, the Fokker swooped down over Nome and landed on the newly prepared strip on June 9, pronouncing it to be "satisfactory for use during this season's flights..." Another $500 had to be spent to make the field safe, but the commission planned to construct a new one about a mile north of Nome—which was to be the permanent airfield.[14]

The territorial legislature had indeed appropriated $5,000 for "aeroplane landing fields in the Second Division of Alaska," directing the territorial Board of Road Commissioners to select appropriate sites for such construction. The territorial board in turn handed the responsibility over to the commission under the terms of the 1919 cooperative agreement. At the suggestion of Noel Wien, the commission then built a permanent airfield at the Bessie Road site. It consisted of

12. Harkey, *Pioneer Bush Pilot*, pp. 138-139.

13. *Ibid.*, pp. 140-141.

14. *Ibid.*, pp. 142-144; Wien to Summers, June 12, 1925, Nylen et al. to Territorial Board of Road Commissioners, June 13, 1925, ARC, box 65433, R. G. 30, Federal Records Center, Seattle, Washington.

two runways, an east-west and a north-south one, the first 1,300 by 200 feet and the second 1,400 by 200 feet. The construction task was easy and inexpensive because the area was underlain with gravel and covered only with bunches of moss which had to be removed, and then the runways could be dragged, smoothed, and rolled.[15]

Alaskans quickly realized that the airplane was the ideal mode of transportation for the huge and rugged territory. Trips that would have taken weeks could now be covered in hours, and soon requests for construction of aviation fields poured in. William H. Hesse, the superintendent of the Chandalar Gold Company, made one of these in the summer of 1925. R. J. Sommers, the territorial highway engineer, told Hesse that only $600 was available for such work but Sommers expected that the citizens of the area served would provide any additional funds needed. Sommers also established procedures for such construction projects. The territory and the Alaska Road Commission had adopted a standard size for aviation fields, 1,400 by 600 feet, extending in the general direction of the prevailing winds in order to permit planes to take off and land against the wind. Fields were to be smooth and firm, and this required a location with good drainage. A field had to be absolutely free from soft spots, Sommers explained, because the planes in use weighed between 3,000 and 5,000 pounds, and "when the plane comes to rest the entire weight is supported on the two-wheel landing gear and a plane in landing hitting a soft spot on the field is almost sure to result in a wreck."[16]

In the summer of 1925, the territorial Board of Road Commissioners authorized funds for airfield construction in a number of locations. The Alaska Road Commission was to construct fields at Takotna ($1,500) and Flat ($1,000). The board asked that citizens in various communities form local aviation committees to select the sites, receive territorial funds, and raise local contributions. The estimated cost of the Fort Yukon field amounted to $900, and of this amount the community had agreed to contribute $600 in cash or work. The local aviation committee in Wiseman laid out the field and contributed $1,000; the board paid $2,000. Livengood was to receive $300 and Lake Minchumina $700, while no final arrangements had yet been made for Ruby, Circle, and Chena Hot Springs.[17]

On January 30, 1928, the Fairbanks district of the Alaska Road Commission reported that 15 airfields had been constructed for a total cost of $13,963.03. The territory had funneled $11,018.03 into the work, cash contributions had amounted to $1,500, and donated labor had been worth $1,445.00. Work on aviation fields progressed rapidly thereafter.

Alaskans enthusiastically embraced aviation, largely because of the territory's huge size, difficult geography, and scarcity of other tranportation means. To keep pace with aviation developments, therefore, the territorial legislature, since 1925, had authorized the expenditure of a portion of the territorial road funds for the construction of aviation fields. The Alaska Road Commission built these airfields under the existing cooperative agreement with the territory. By 1932, some seventy of these airfields had been constructed at a total cost of $173,243.47. Some figures included in the Alaska Road Commission's annual report in 1932 illuminate the importance of Alaskan aviation during that fiscal year:

Planes in service	31
Plane miles	742,854
Passengers carried	6,637
Passenger miles	942,176
Mail and express carried	496,680 lbs.[18]

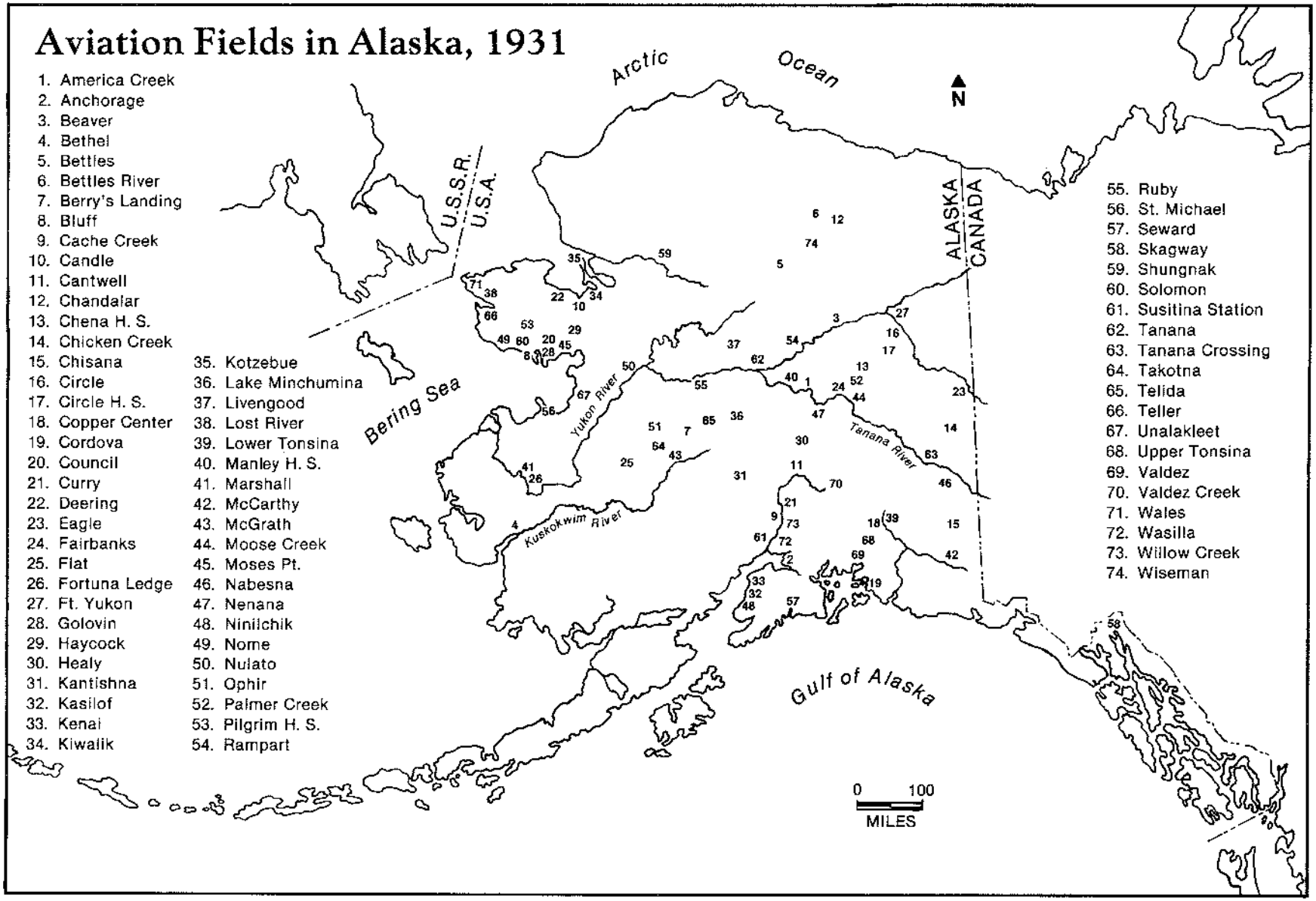
15. Theile to Steese, June 13, 1925, Oliver to Fairbanks Airplane Corporation, October 29, 1925, ARC, box 65433, R. G. 30, Federal Records Center, Seattle, Washington.

16. Sommers to Hesse, June 19, 1925, in historical files of the Alaska Department of Transportation and Public Facilities, Fairbanks, Alaska.

17. Steese to Halsem, July 13, 1925, Sommers to Oliver, May 14, 1926, Sommers to Edmunds, July 25, 1925, ARC, box 65433, R. G. 30, Federal Records Center, Seattle, Washington.

18. *Annual Report of the Alaska Road Commission, 1932.*

Aviation Fields in Alaska, 1931



1. America Creek
2. Anchorage
3. Beaver
4. Bethel
5. Bettles
6. Bettles River
7. Berry's Landing
8. Bluff
9. Cache Creek
10. Candle
11. Cantwell
12. Chandalar
13. Chena H. S.
14. Chicken Creek
15. Chisana
16. Circle
17. Circle H. S.
18. Copper Center
19. Cordova
20. Council
21. Curry
22. Deering
23. Eagle
24. Fairbanks
25. Flat
26. Fortuna Ledge
27. Ft. Yukon
28. Golovin
29. Haycock
30. Healy
31. Kantishna
32. Kasilof
33. Kenai
34. Kiwalik
35. Kotzebue
36. Lake Minchumina
37. Livengood
38. Lost River
39. Lower Tonsina
40. Manley H. S.
41. Marshall
42. McCarthy
43. McGrath
44. Moose Creek
45. Moses Pt.
46. Nabesna
47. Nenana
48. Ninilchik
49. Nome
50. Nulato
51. Ophir
52. Palmer Creek
53. Pilgrim H. S.
54. Rampart
55. Ruby
56. St. Michael
57. Seward
58. Skagway
59. Shungnak
60. Solomon
61. Susitina Station
62. Tanana
63. Tanana Crossing
64. Takotna
65. Telida
66. Teller
67. Unalakleet
68. Upper Tonsina
69. Valdez
70. Valdez Creek
71. Wales
72. Wasilla
73. Willow Creek
74. Wiseman

At the end of 1934, Hawley Sterling, the acting chief engineer of the Alaska Road Commission, submitted a summary of existing and proposed airfields to Captain Murray Hall, the inspector of the aeronautical division of the Department of Commerce. By that time the commission also had established two kinds of airfields: class "A" fields, having two runways, each 300 by 3,000 feet, and emergency landing fields with an estimated size of 200 by 1,500 feet with only one runway. Sterling estimated that it would cost $905,000 to improve existing fields, upgrade others, and build additional emergency fields. This cost estimate, he warned, included only construction costs of the field but nothing for radio, lights, accommodations, depots, or hangers. The Alaskan aviation community, the commission, and the territorial Board of Road Commissioners all hoped that the Department of Commerce would allocate the estimated funds for airport improvement and construction in the North.[19]

Hall used Sterling's summaries and maps in preparing his recommendations for the Department of Commerce. He considered the size of the emergency landing fields at only 200 by 1,500 feet to be too small, but understood that Sterling had reduced the requested estimates for 500 by 3,000-foot fields because of the tremendous costs involved. Hall recalculated the costs for the larger fields, and together with other revisions this increased the entire proposal from Sterling's $905,000 to $2,269,000. The Department of Commerce should spend this suggested amount, he maintained, because a complete and comprehensive airport network would be of immeasurable importance to the territory. The other means of transportation, Hall exaggerated, were "but little better and no faster than walking," and this alone should make the advantages of the airplane apparent. Commercial aviation had increased rapidly in the last few years, he asserted, "and its curtailment would be a calamity" for the territory. During the fiscal year ending June 30, 1934, Alaska's aviation industry had transported 10,194 passengers, carried 869,000 pounds of freight, and flown a total of 1,126,610 miles—a truly magnificent achievement.[20]

Hall then developed a comprehensive airways system for Alaska which included a series of airfields lying along the best routes of travel. He also suggested the construction of five additional weather stations to be located at Anchorage, Bethel, McGrath, Boundary, Ketchikan, and perhaps a sixth one at Cordova, capable of forecasting and distributing weather reports like the two existing stations in Fairbanks and Juneau. The one-man station at Nome was inadequately equipped and needed to be upgraded. That was not all, for there also was a need for approximately 30 radio stations erected at locations commensurate with the airways system to be served. The United States Army Signal Corps, already operating more than 15 radio stations in Alaska, could take over the operation of these additions with only a relatively small increase in personnel and funds. This would create a distinct airways radio system and avoid duplication of efforts by the Department of Commerce. Best of all from the Alaskan perspective, Hall recommended that the federal government construct and maintain such a system, not only for the benefit of Alaskans but for the nation at large. What Hall apparently did not know was that federal funds already had been used for airfield construction in Alaska. Prior to 1933, such projects had been financed jointly by the territory, the municipalities and settlements, and to a lesser degree by the Alaska Road Commission, although the latter had been, for the most part, in charge only of construction. In 1933, the Public Works Administration allotted $110,000 for building and improving territorial airfields. The largest chunk of money, $55,000, had been used for an airfield

19. Report of all Expenditures: Aviation Fields, Calendar year 1927, January 30, 1928, in historical files of the Alaska Department of Transportation and Public Facilities, Fairbanks, Alaska; Sterling to Hall, November 16, 1934, ARC, box 65433, R. G. 30, Federal Records Center, Seattle, Washington.

20. Hall to Assistant Director of Air Commerce, Bureau of Air Commerce, January 4, 1935, ARC, box 65433, R. G. 30, Federal Records Center, Seattle, Washington.

near Cordova, another $5,000 for one near Nome, and the rest for some 14 other fields in different parts of Alaska.[21]

Captain Hall's recommendations to the Department of Commerce, the memorandum "Air Field Construction and Air Navigational Development in Alaska," follows:

It is proposed by a series of air fields lying along the best routes of travel and tying in the principal towns and settlements of Alaska, to serve commercial development and to some extent to facilitate the travel of military aircraft and thus harmonize with the requirements of national defense.

Route No. 1. *Ketchikan-Fairbanks-Nome. This route contemplates the building of Class A fields and improvement of existing fields to make them Class A fields, at the following places: Ketchikan, Juneau, Boundary (a field to be constructed in Alaska near the international boundary between the Territory of Alaska and Yukon Territory, Canada, on one of the tributaries of the White River or between the tributaries of the White River and those of the Tanana), Tanacross (formerly known as Tanana Crossing), Fairbanks, Tanana, Nulato, Koyuk and Nome, with auxiliary fields approximately every 100 miles in between dependent upon the topography of the country. Fields of a sort already exist at Juneau, Tanacross, Fairbanks, Tanana, Nulato, Koyuk and Nome, but none of these fields is sufficiently good to be entitled to Class A status. No landing field whatever exists at the present time at Ketchikan or Boundary.*

Route No. 2. *This route ties in with Route 1 at Boundary and extends thence southwest to Anchorage and thence northwest via Rainy Pass to McGrath, Flat, Unalakleet, Koyuk and Nome, with part of the route, from Koyuk to Nome, being identical with a part of Route 1. On this route it is contemplated to improve the existing fields at Anchorage, McGrath and Flat to make them first class fields and to build two fields of the same type, one at Skwentna River and one on the South Fork of the Kuskokwim and an auxiliary field about halfway between near the summit of Rainy Pass. The construction of Class A fields at the Skwentna and the South Fork of the Kuskokwim is strongly recommended by Mr. Murray Hall, inspector for the Bureau of Aeronautics in Alaska, on account of the difficulties at times in getting through Rainy Pass.*

If these fields are not built, a plane approaching Rainy Pass from either direction, in the event the Pass is found to be closed, would be obliged to fly back in one direction to Anchorage and in the other to McGrath. A number of auxiliary routes also branch off from Route 2 to serve the surrounding country.

Route No. 3. *This route may be described as starting at either Fairbanks or Anchorage. If the route is considered as starting at Fairbanks, the Class A fields would be Fairbanks, Nenana, McGrath (which is on Route 2), Flat (also on Route 2) and thence southwest to Bethel, with intermediate auxiliary fields. If the route is considered as starting from Anchorage, it will follow Route 2 as far as Flat and then proceed to Bethel. Bethel is the principal settlement on the lower Kuskokwim and mail is now carried there on one of the star routes by air.*

Route No. 4. *This route, commencing at Ketchikan with a projected Class A field, proceeds over Route 1 as far as Juneau to another Class A field, and thence northwesterly along the coast of the Gulf of Alaska to Cordova, with a number of auxiliary fields in between, and thence northerly to Valdez, Copper Center and Fairbanks tying into Route 1 again at McCarty about 100 miles from Fairbanks. This route between Ketchikan and Cordova will probably not be much used for several years to come but*

21. *Ibid*; Dimond to Gruening, January 10, 1935, ARC, box 65433, R. G. 30, Federal Records Center, Seattle, Washington.

the establishment of auxiliary fields along the coast between Juneau and Cordova is highly advisable both for commercial use and from a military standpoint. The part of the route between Cordova and Fairbanks is now used quite extensively and will be flown much more in the future with the establishment of auxiliary fields. It is contemplated to build what would be substantially a Class A field at Cordova, to improve the existing field both for land and water landings at Valdez so that it too will be substantially a Class A field, and to improve the field at Copper Center to make it a Class A field. The auxiliary fields are indicated on the map.

Route No. 5. *Seward to Fairbanks. There is an existing field at Seward which should be made a Class A field, the same with respect to Anchorage, a new field should be established on the Talkeetna and several intermediate fields along the route northerly to Nenana (on Route 2) and thence to Fairbanks.*

Route No. 6. *This may be considered as beginning at Anchorage and extending southwesterly with a Class A field to be built on Iliamna Lake, and continued thence to Dillingham where another Class A field should be constructed, and thence to Mumtrak on Goodnews Bay where an auxiliary field will serve for the present, with a branch south through Koggiung to Naknek to Egegik and to Ugashik on the Alaska Peninsula. The four fields last named will, as indicated by the map, be auxiliary fields. No field whatever exists at present at Iliamna Lake or at Dillingham. There is a very considerable amount of commercial traffic already in this region and fields at these two places have been found to be necessary.*

Water Ports. *It should be noted here that a great deal of the air commerce in Alaska is carried on either sea planes, amphibians or planes equipped with pontoons. Along the coast and even in the interior this has been found the best...means of air travel since water landings can be had on lakes and rivers in many places where no land fields exist. Cordova, for example, has an excellent water port as well as a land field, and the same is true of Valdez and several other places. At Fairbanks water landings can be made on the Chena Slough but the stream is so winding and so narrow that such landings usually entail a considerable degree of danger particularly to pilots who are not familiar with the region. At Anchorage the water landings are made either on Lake Spenard, which is too small for a takeoff with heavily loaded ships, or on Cook Inlet, which is frequently too rough in the summer time and in the winter is full of floating ice.*

Therefore it is recommended at Anchorage an artificial lake be created by the construction of a dam in a nearby stream thus impounding the water and furnishing a lake considerably more than a mile in length; and that at Fairbanks either a lake be created or that the channel of the stream be straightened in order to permit a safe water landing for aircraft. The air traffic at both Fairbanks and Anchorage is such that the suggested water landings are necessary in addition to the Class A land fields.[22]

While Hall had been preparing an aviation framework for Alaska, Lieutenant Colonel Henry "Hap" Arnold led ten Martin B-10 twin-engined bombers on a flight to Alaska. The chief of the Army Air Corps, General Ben Foulois, had instructed Arnold to undertake a special assignment, namely to follow the early air trails pioneered by the army in 1920 when General Billy Mitchell sent Captain St. Clair Streett in command of four DeHaviland 4-B biplanes on a flight from New York to Nome. Mitchell's objectives had been to keep his pilots sharp, give them experience

22. Memorandum, "Air Field Construction and Air Navigational Development in Alaska," 1935, ARC, box 65433, R. G. 30, Federal Records Center, Seattle, Washington.

at long-range navigation, and gather map information. Arnold's mission in 1934 was more complex, but no less daring, considering the large size of his planes in relation to the rather primitive existing landing facilities. His group was to take aerial photographs for navigation charts and future airway routes and to evaluate the feasibility of locating future defense bases in Alaska.[23]

In the summer of 1934, Arnold and his flight group circled over Anchorage and then landed at Merrill Field where they were greeted by throngs of friendly residents. Arnold and his executive officer, Major Hugh Knerr, interviewed local pilots to accumulate information about the air routes and the equipment they used, such as instruments, radios, charts, maps, and navigation aids. In addition, the bush pilots gave Arnold important hints on winterizing aircraft and engines. The colonel gathered similar data at other Alaskan locations and then took his flight of bombers back to the States and reported to his superiors in the nation's capital. He emphasized the strategic value of the territory, evidently skillfully; although bureaucracies work slowly, blueprints for military bases in Juneau, Sitka, Anchorage, and Fairbanks, and for naval installations along the coast and in the Aleutian Islands were drafted. Arnold's report materially aided these labors.[24]

The colonel's flight undoubtedly reawakened military interest in northern aviation. Early in 1935, the famed arctic explorer, lecturer, and writer, Vilhjalmur Stefansson, attended a dinner in Washington hosted by an army general. During the course of the evening, Major General Hugh A. Drum, the assistant chief of staff, asked Stefansson about the relative wisdom either of stationing large, permanent military air forces in the North or providing ground facilities there with a skeletal staff. In an emergency the latter course of action, Drum thought, would enable the army to deploy air power to the North from bases in the States. Some time later, Stefansson answered in a lengthy memorandum in which he considered the pros and cons of the proposition. He concluded that "for quickness and decisiveness of action, and for thorough adaptation of both personnel and equipment to arctic and subarctic conditions, it would be best to have a large force permanently in Alaska."[25]

A number of considerations, however, weighed against stationing a large air force in the North. These included the much greater maintenance costs, and since the territory had no political clout, "the politicians would be opposed to large expenditures in Alaska."[26]

Furthermore, other powers in the area might consider such a force a threat to their security. Under these circumstances, Stefansson suggested that it might be ideal to have three main bases, in Minnesota, North Dakota, and Montana, where the climate is similar to interior and northern Alaska. Much of the training would take place in these three states, while the "final or postgraduate stage of training should be in Alaska in connection with establishing and maintaining there the necessary ground facilities for occupation by a large force that would come when wanted from somewhere south" of the forty-ninth parallel.[27]

A few months later, in May 1935, Major Carl Spatz of the Air Corps, the chief of the Training and Operations Division, recommended to the chief of the Air Corps that the federal government construct commercial airfields and airways in Alaska complete with night lighting, radio navigation aids, and communications systems. Spatz supported this proposal by pointing out that adequate airways systems would aid Alaska's economic

23. Stephen E. Mills and James W. Phillips, *Sourdough Sky: A Pictorial History of Flights and Flyers in the Bush Country* (New York: Bonanza Books, 1960), pp. 111-113.

24. *Ibid*. pp. 114-119.

25. Stefansson to Drum, January 26, 1935, Stefansson Memorandum to Drum, January 26, 1935, R. G. 18, Central Decimal Files 686, N.A.

26. *Ibid*.

27. *Ibid*.

development and eventually warrant the costs of maintenance; that they furnished potential operating facilities for wartime use by the Air Corps, so therefore should be as complete as possible; and that the lack of railroads and roads in the North called for radio aids and a communications system as complete as possible to make operations safe. At the same time, an inter-departmental committee studied Captain Murray Hall's recommendations for the development of a comprehensive airways system for the North. The War, Navy, Interior, Post Office, and Commerce departments were represented on this committee to consider the costs of construction and maintenance computed under five different schemes. These varied from a complete lighting, equipment, and radio system, costing $5,198,000 to build and $1,200,100 to maintain annually, to the cheapest scheme calling for day terminals, day intermediate fields, and skeleton radio equipment with a construction tag of $356,000. The War Department incorporated Spatz's recommendations into its proposal, and requested that seventeen landing fields be speedily developed. Fairbanks headed the list, followed by Ketchikan, Petersburg, Juneau, Valdez, Cordova, Seward, Anchorage, Copper Center, Galena, Nome, Bethel, Big Delta, and ending with Mumtrak on Goodnews Bay.[28]

Despite planning, recommendations, and high hopes, Congress did not appropriate any money for an Alaskan airways system. In the fall of 1936, Secretary of the Interior Harold L. Ickes neatly summarized the state of Alaskan aviation. He asserted that the airplane rendered "a greater per capita service in that territory than anywhere else on earth... under the most extreme and hazardous conditions existing in any populated area."[29]

The secretary stated that there were "74 so-called airfields in Alaska," and gave data indicating their inadequacies:

2 out of 74 had more than one runway;
2 out of 74 had runways longer than 3,000 feet
8 out of 74 had runways between 2,000 and 3,000 feet;
15 out of 74 had runways between 1,500 and 2,000 feet;
39 out of 74 had runways less than 1,500 feet.[30]

Ickes asserted that more often than not Alaskan aviators were forced to use sandbars and clearings rather than the airfields. The only surfacing provided was that found at the site, and in a few cases when gravel was available it was used to fill holes. Except for Fairbanks and Anchorage, which each had a rotating beacon and one floodlight, none of the fields had any lighting. No public radio facilities catered primarily to air service, but seven airfields had privately owned radios. There were no accommodations at any of the fields, and except at two localities, there were no privately owned hangers for visiting planes. The facilities of these two localities were limited. There had been no planning in constructing the existing airfields on air routes fixed by nature and climatic conditions or fixed by centers of population; rather they had been constructed at points where most needed in order to move passengers and freight from a center point to a terminating makeshift field. The secretary pointed out that fewer than half a dozen fields had been built purely for emergency and safety, and bush pilots customarily flew as much as 300 miles in a land plane without sighting a single landing field.[31]

In view of these appalling facts, the Alaska Road Commission and the Bureau of Air Commerce of the Commerce Department, after consulting with representatives of the

28. Spatz memorandum to Executive, May 6, 1935, Adjutant General to Chief of Air Corps, May 3, 1935, Brigadier General O. Westover, Assistant Chief of the Air Corps to Chief of the Air Corps, May 9, 1935, R. G. 18, Central Decimal Files 68, N.A.

29. Ickes to Secretary of War, August 5, 1936, R. G. 18, Central Decimal Files #686, N.A.

30. *Ibid.*

31. *Ibid.*

War and Post Office departments, had prepared a program of airport development calling for the expenditure of $3,000,000. Unfortunately, Interior so far had been unable to secure emergency funds for this program. Ickes, therefore, expected to include a substantial amount in the 1938 Alaska Road Commission estimates, hoping to eliminate presently existing hazards gradually. He finally asked the War Department to instruct the Signal Corps to study the proposed airport construction program and furnish estimates for providing adequate communication aids and weather reports for this system.[32]

It was not until 1937 that the federal government contributed any substantial funds for the construction and maintenance of Alaskan airfields and seaplane ramps, platforms, and floats. These funds fell far short of what Hall, the Air Corps, and Ickes had envisioned. During the 1937 and 1938 construction seasons, they amounted to a mere $214,117.31. The territory contributed $282,827.74 and municipalities, commercial companies, and individuals chipped in $31,066.90 for a two-year total of $528,011.95. The Alaska Road Commission built and improved some airfields, and so did the Civilian Conservation Corps, while the territory contracted with private builders and municipalities for the others.[33]

In the fall of 1938, the Civil Aeronautics Authority (CAA) became involved in the planning process for airports and airways facilities in Alaska. At an interdepartmental conference, the CAA revealed its intention to improve a number of airfields in the larger municipalities, and also to install radio beams, radio communications, and make weather reports available. The CAA, however, stated that it did not intend to install modern equipment, but rather to use the older, obsolescent but usable gear on hand. This plan made possible the provision of reasonable facilities over a considerable area rather than maximum facilities in a few places. The CAA intended to cover southeastern, southcentral, interior and northern Alaska, and the Aleutian Chain as far as Dutch Harbor with this communication network, and eventually to tie the system into the Honolulu beam.[34]

War broke out in Europe on September 1, 1939, when Germany's panzer divisions invaded and quickly overran Poland. In the closing days of that conflict, Soviet forces joined the German effort and moved across the Russian-Polish border. Across the Pacific Ocean, the Japanese pursued their third year's effort to conquer China. On February 23, 1940, General George Catlett Marshall, the chief of staff, presented the army budget for fiscal year 1941 to the Subcommittee on the War Department of the House Appropriations Committee. He reminded subcommittee members of the existing crisis abroad, and urged that "any major developments there should be paralleled by added precautions in this country. If Europe blazes in the late spring or summer, we must put our house in order before the sparks reach the Western Hemisphere."[35]

The proposed budget was a modest one in view of coming events. Including a supplemental estimate, and as reduced by the Bureau of the Budget, the army asked Congress for $906,137,254. It was the last defense budget for years to be dealing only in millions and not billions of dollars. The budget included $12,734,000 for the construction of an operating air base near Anchorage. The hearings concluded on March 26, 1940. A few days later the Subcommittee on the War Department reported the measure to the full Appropriations Committee, but minus the funds for the Anchorage base. Despite pleas by Marshall, Major General Henry "Hap" Arnold, and Alaska's delegate to Congress Anthony J.

33. *Biennial Report of the Alaska Territorial Highway Engineer and Superintendent of Public Works, 1937-1938* (Juneau, Alaska: January 3, 1939), pp. 61-65.

34. Memorandum on a conference with the CAA, September 30, 1938, R. G. 18, Central Decimal Files #686, N.A.

35. United States Army, Alaska, *The Army's Role in the Building of Alaska*, Pamphlet 360-5, 1 April 1969 (Anchorage Headquarters United States Army, Alaska: April 1969), pp. 73-74.

36. *Ibid.*

Dimond, the subcommittee refused to budge, and on April 4 the House voted the appropriation without the Anchorage base.[36]

On April 9, 1940, Adolf Hitler's armies invaded Denmark and Norway and in the ensuing weeks occupied the two countries. When Marshall and Arnold appeared before the Subcommittee on the War Department of the Senate Appropriations Committee on April 30 and asked for the restoration of the Anchorage base, a different mood prevailed. Before the Senate subcommittee finished its hearings on May 17, the German Luftwaffe had bombed Rotterdam without provocation or warning, and German armies had seized the Netherlands, marched through Belgium, and begun the invasion of France. The Senate restored the Anchorage air force base, and the House concurred. In 1939 Congress had appropriated $4,000,000 to build a cold-weather testing station for airplanes near Fairbanks. Construction started on Ladd Field there in 1940. Fort Richardson and its air establishment, Elmendorf Field, now could be built. On December 7, 1941, the Japanese attacked the American Pacific Fleet at Pearl Harbor. America was at war, but not a single military base in Alaska was ready for action. Now Congress poured billions of dollars into the defense effort, and all the plans nurtured for years to create an integrated airways system were speedily accomplished.[37]

36. *Ibid.*

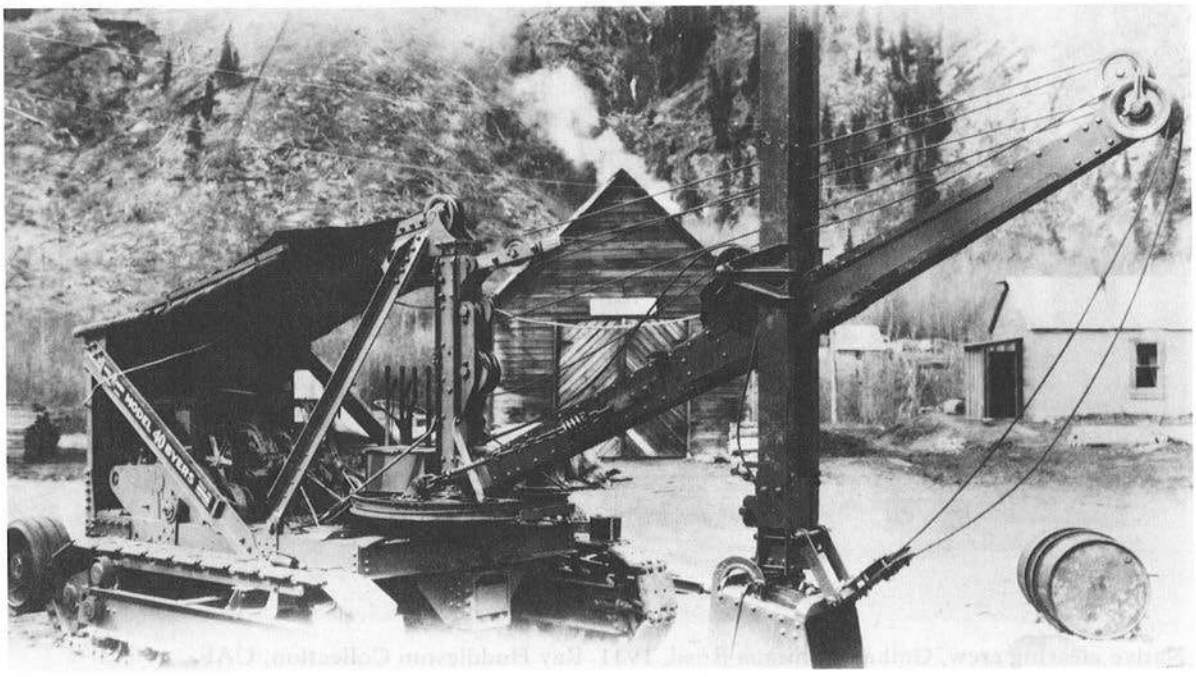
37. *Ibid.*

Secretary Harold L. Ickes at Muldrow Glacier, Mt. McKinley National Park. Anchorage Museum of History and Art (AMHA).

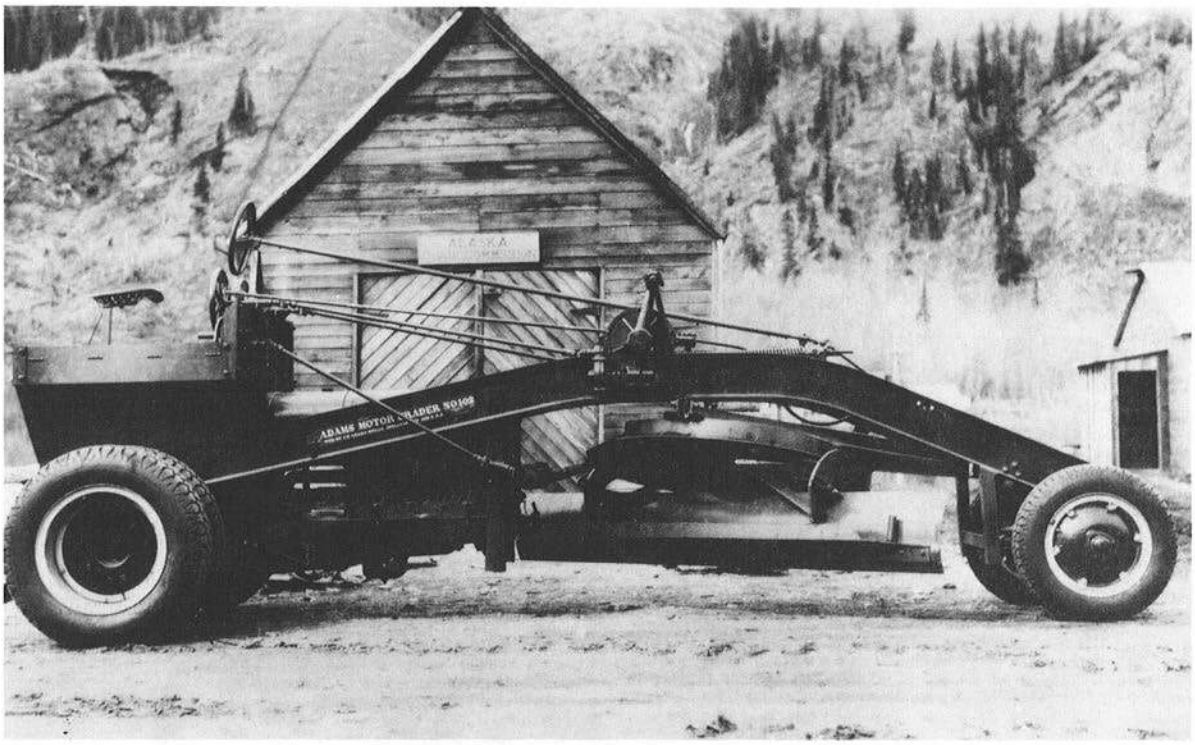
Malcolm Elliott, president of the Alaska Road Commission from November 9, 1927 to July 20, 1932. Alaska Road Commission Collection, AHL.

Alaska Road Commission offices in Valdez, early 1930s. Ray Huddleston Collection, UAF.

Mile 25 on the Richardson Highway, near Thompson Pass, early 1930s. Ray Huddleston Collection, UAF.



Power shovel at Valdez site, early 1930s. Ray Huddleston Collection, UAF.

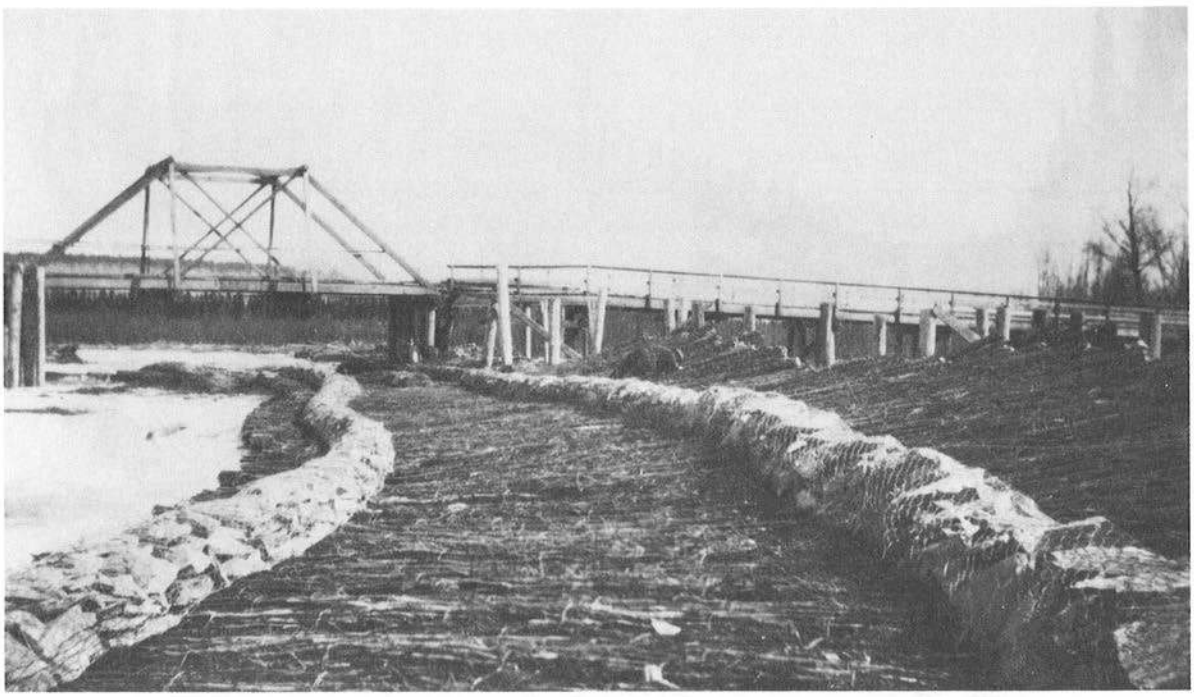


Adams motor grader, Chitina district, May 1931. Ray Huddleston Collection, UAF.

Native clearing crew, Gulkana-Chisana Road, 1931. Ray Huddleston Collection, UAF.

Crew clearing road, early 1930s. Ray Huddleston Collection, UAF.

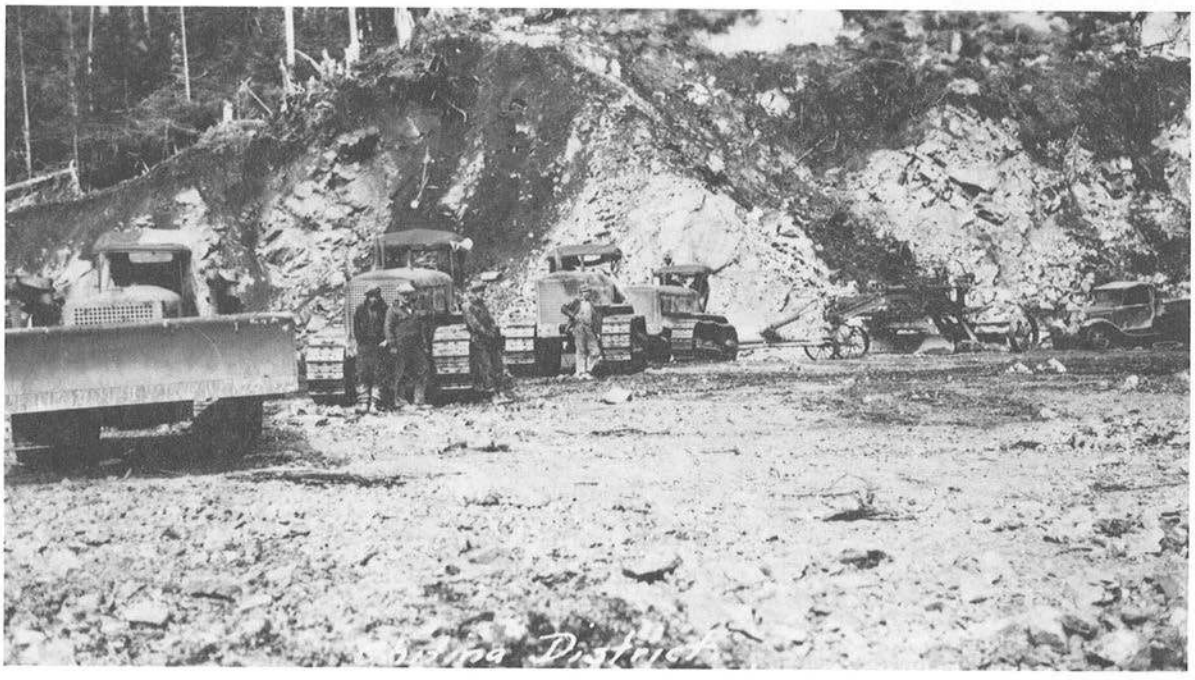
Aerial view of Alaska Road Commission camp and bridge construction on the Richardson Highway, 1930s. Ray Huddleston Collection, UAF.



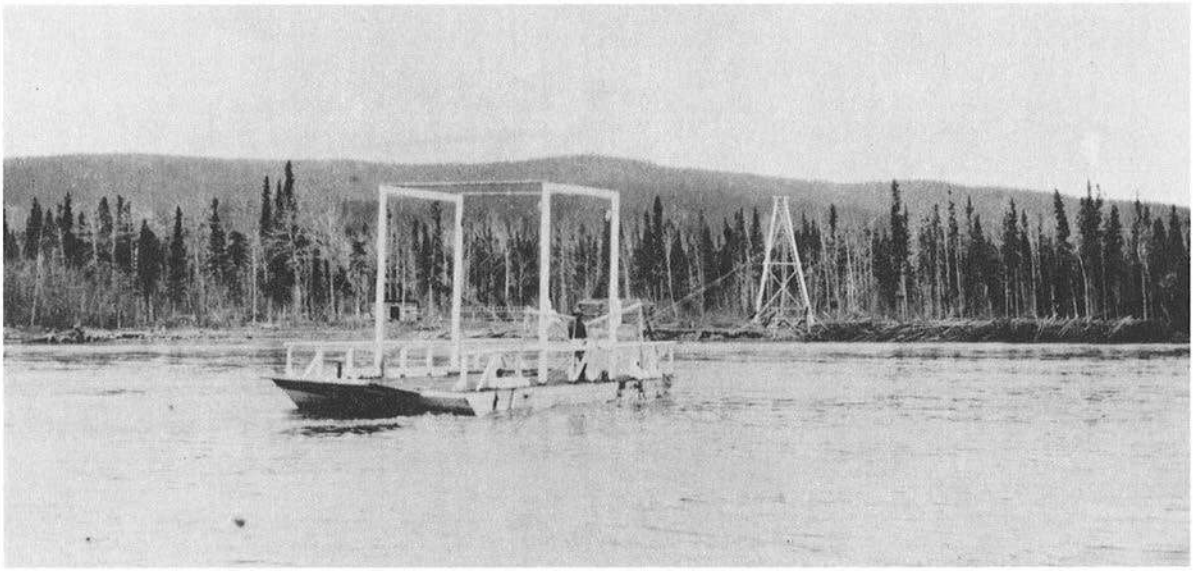
Bank stabilization with rip-rap near Gulkana, Richardson Highway, 1930s. Ray Huddleston Collection, UAF.

Bridge, with 100-foot span over the Gulkana River, at mile 128, Richardson Highway, was carried away by ice, May 9, 1933. Ray Huddleston Collection, UAF.

Moving camp; "30" tractor and Eagle trailer on Gulkana-Chisana Road, Chitina district, 1933. Ray Huddleston Collection, UAF.



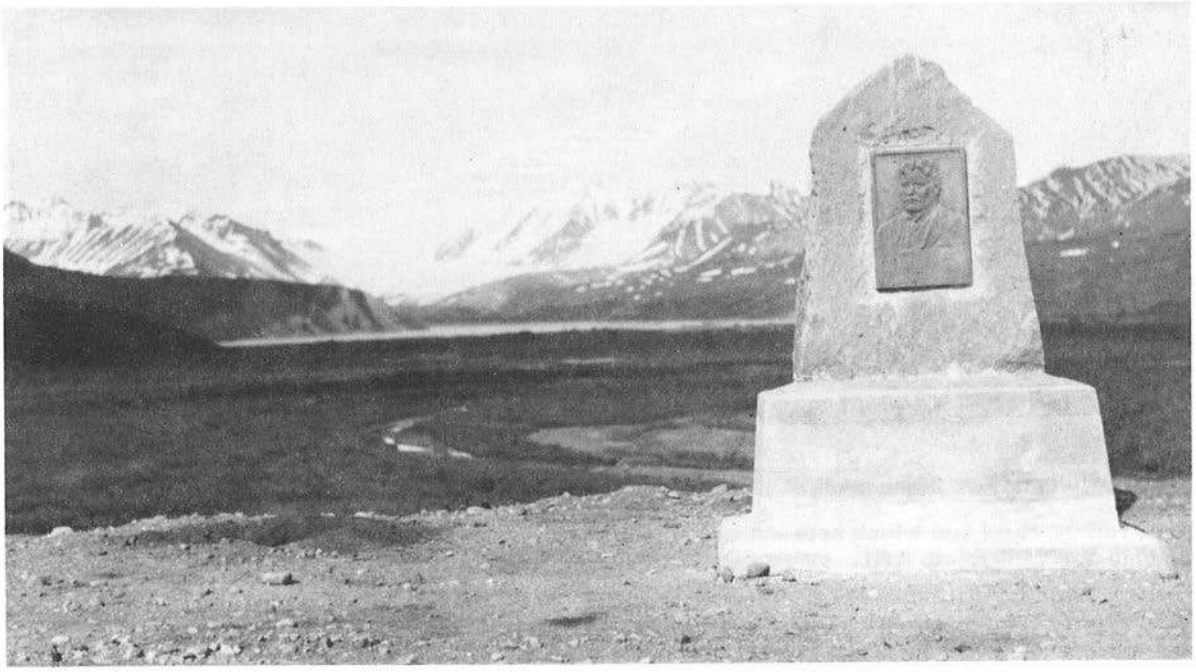
Allis-Chalmers tractors at the Cordova landing field, 1934. Ray Huddleston Collection, UAF.



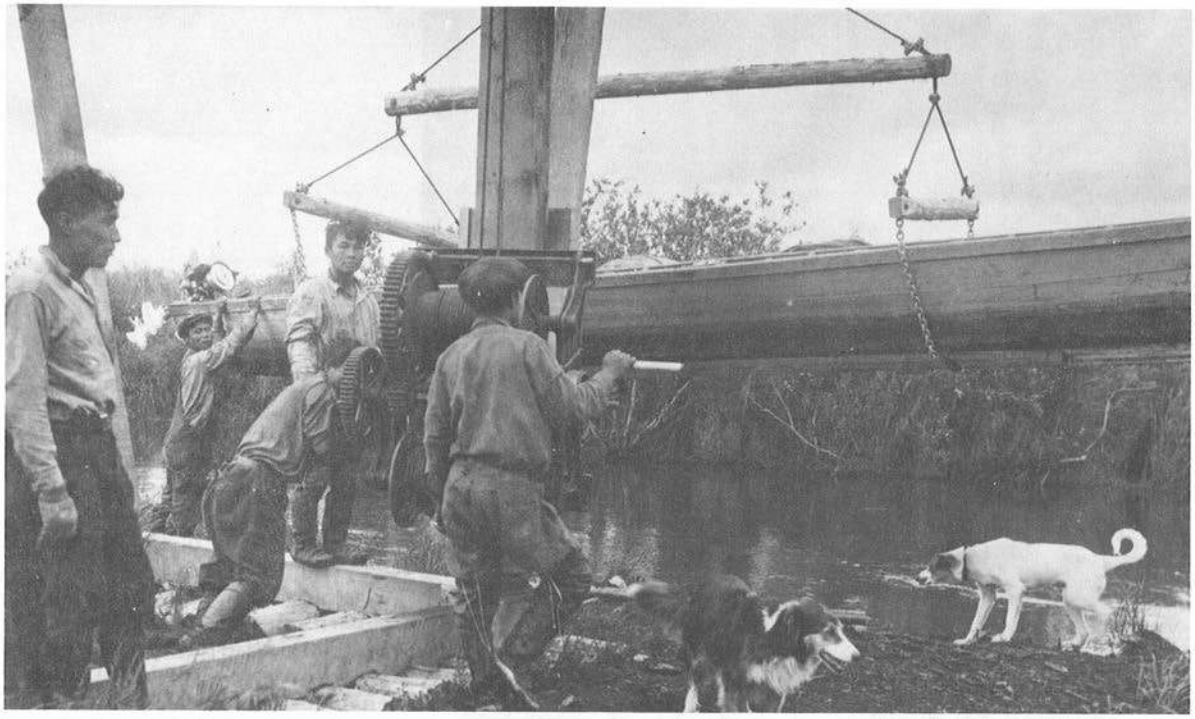
The ferry across the Tanana River at McCarthy, or McCarty, a station established by the U.S. Army Signal Corps in 1904 when it located a telegraph station there. Over the years, the site was variously known as Big Delta Roadhouse, Grundler, McCarthy Telegraph Station, McCarty Roadhouse, Tanana Ferry, and Washburn. John Zug Collection, UAF.

Sourdough Roadhouse on the Richardson Highway, 1930s. Ray Huddleston Collection, UAF.

Ike P. Taylor spent all but two of his 36 years of federal service in Alaska. He started working for the Alaska Engineering Commission, which built the Alaska Railroad, in 1916, and began working for the Alaska Road Commission in 1921 as superintendent for the Fairbanks district. In 1923 he was promoted to assistant chief engineer, and became chief engineer in 1932. He retired on February 1, 1950. The Taylor Highway, from the Alaska Highway to Eagle on the Yukon River, was named for him. Alaska Road Commission Collection, AHL.



Richardson monument on the Richardson Highway at Summit Pass. Ray Huddleston Collection, UAF.

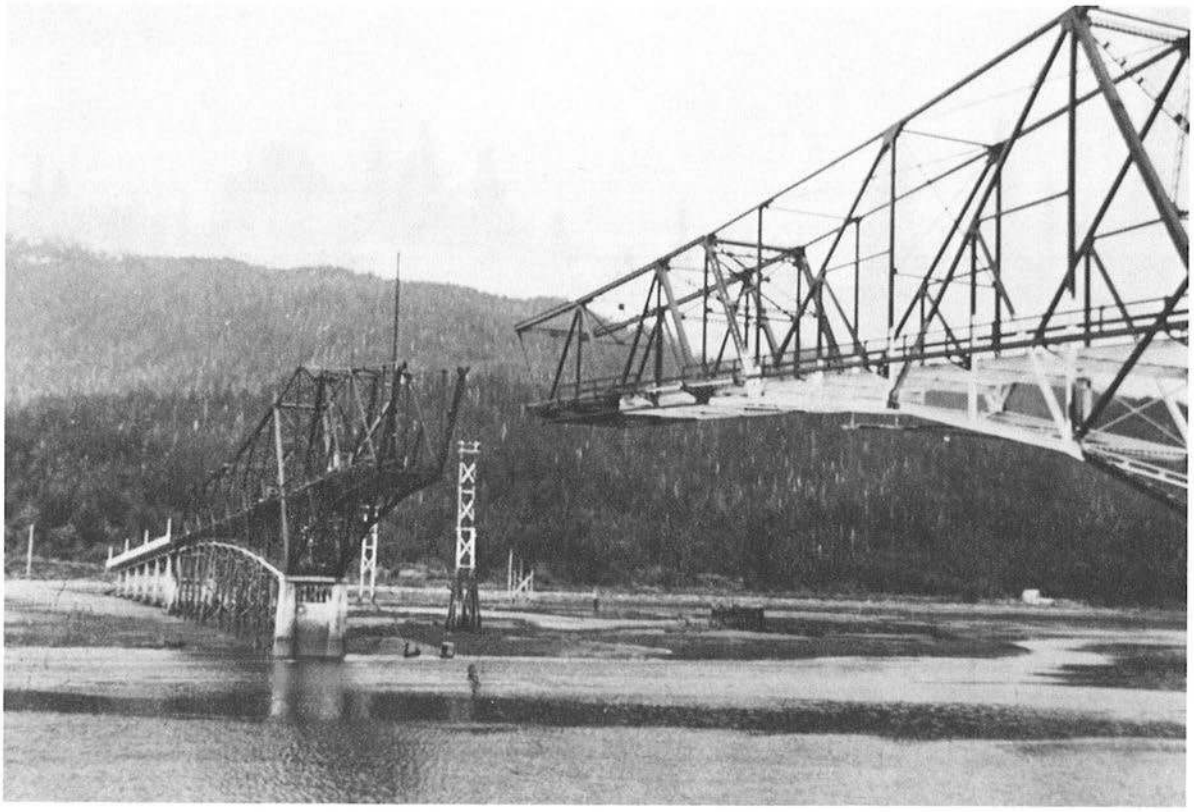


Winch in use on the Yukon-Kuskokwim Portage, 1930s. Alaska Road Commission Collection, AHL.

Dam, rollers, cavel and winch between two lakes on the Yukon-Kuskokwim Portage. Alaska Road Commission Collection, AHL.

Camp and shelter cabins on the Kenai Peninsula, late 1930s. Alaska Road Commission Collection, AHL.

Tractor pulling grader on newly graveled road, 1930s. Alaska Road Commission Collection, AHL.



Juneau-Douglas bridge construction, June 1, 1935. Alaska Road Commission Collection, AHL.

9 The 1930s: The Transfer of the Alaska Road Commission

Alaska had changed substantially between 1905, when the War Department assumed the responsibilities for transportation systems in the territory, and 1932, when the Department of the Interior took over these duties on July 1. The War Department turned over an 11,231-mile-long transportation system, but only 1,627.5 miles of that consisted of roads. Still, it was a substantial achievement, considering the fact that in 1905 there had been less than a dozen miles of wagon roads in all of Alaska.

As road mileage increased, railroad and air transportation systems grew; but steamboat travel on the Yukon River dwindled. By 1930 there was only one boat, owned by the Alaska Railroad, plying between Nenana and Holy Cross every two weeks. A gasoline launch, operated by a commercial company, irregularly served points between the mouth of the river and Holy Cross. Once every two weeks a steamboat came down from Dawson and traveled up the Tanana River to Nenana. Gas launches or steamboats supplied small communities located on the tributaries of the Tanana and Yukon rivers usually only twice a year, in the spring and again in the fall.[1] The price of these services was exorbitant.

The Alaska Railroad, managed by the Department of the Interior, ran two trains weekly in the summer and one in the winter. The Copper River and Northwestern Railway closed during the winter after the owners shut down the Kennecott mines because of low copper prices; the closure deprived the railroad of its chief source of income, transporting the metal between the towns of Kennicott and Cordova. On the Seward Peninsula the Alaska Road Commission maintained the 74-mile-long narrow-gauge railway from Nome to Shelton which the Territory of Alaska previously had purchased from its private owners. It was a railroad without headquarters, shops, roadhouses, stations, telegraph operators, or schedules. Those who traveled it owned their transportation, using the track whenever convenient. It was known as the "pupmobile of the North," because dogs customarily pulled the light push cars which could be lifted from the rails to avoid collisions with someone coming from the opposite direction. Hawley Sterling, a long-time employee of the Alaska Road Commission, remarked that "any arguments upon meeting were usually between the 'locomotives' rather than the 'engineers'."[2]

Just as horses had partially replaced dogs, the airplane now consigned both to obscurity for long-distance travel. Airplane companies operated in Anchorage, Fairbanks, and Nome. Licensed bush pilots flew for hire, and fares between Fairbanks and Nome and between Fairbanks and McGrath had been reduced to $200.00 and $100.00, respectively. The territorial legislature had financed the construction of scores of airfields, and "Outside" capital had become interested in commercial possibilities of Alaskan aviation, particularly a future route through Canada and Alaska to the Orient.

1. Hawley Sterling, "Transportation in Alaska," 1945, manuscript in the possession of Ben Stewart, Fairbanks, Alaska, pp. 18-19.

2. *Ibid.*, p. 19.

Congressional appropriations for the Alaska Road Commission shrank from a peak of $1,013,577.53 in 1926 to $448,777.90 in 1933, despite the fact that more road miles had to be maintained. Yet much had been accomplished despite the financial shortages. The Richardson Highway was gravel-surfaced for its entire length, and automobiles could travel comfortably from Valdez to Fairbanks in two days without danger of becoming stuck in mud in a poor section. Passengers could travel the distance for as little as $50.[3] Hawley Sterling remembered that the father of the Alaska road system, General Wilds P. Richardson, or the "much beloved Colonel Dick to his friends," had last visited Alaska in 1925. He had died four years later, and to his memory, a granite plaque was placed in Isabel Pass along the road named in his honor. "No conscientious road man ever passes this monument" on the Richardson Highway, Sterling recounted, "without stopping for a brief ceremony of good cheer in Colonel Dick style."[4]

The Alaska Road Commission had completed the Steese Highway from Fairbanks to Circle City on the Yukon River and graveled the surface over the worst sections; this road improvement encouraged placer miners to explore mining possibilities along its route. From the Alaska Railroad, passengers could drive 65 miles into Mount McKinley National Park, and the commission had built or was in the process of constructing other branch roads from the railroad. Good, short roads adjacent to coastal towns in the national forests already existed or were being built.

Vast improvements in road machinery had contributed to the progress. Tractors had proven their versatility in northern operations, and not only had replaced horses in road construction, but displaced these animals for winter freighting as well. Scrapers, graders, and trucks had steadily improved in performance and eliminated much of the heavy manual labor.

The Road Commission's Transfer to the Department of the Interior

Compared to the early days, Alaska's transportation systems were moving beyond the pioneer stage. Other branches of the federal government were becoming more involved in Alaska's roads—as had happened before in other western territories of the United States. As early as February of 1917, the War Department had entertained the thought of transferring the Alaska Road Commission to the Department of the Interior, then engaged in building the Alaska Railroad. The plan, recommended by Major General T. H. Bliss, was consistent with the War Department's intentions of drastically reducing its responsibilities in the North.[5]

Wilds P. Richardson had left his job as president of the commission at the end of 1917. But after having spent practically all of his productive working years in Alaska, he retained a keen interest in the North. In the late fall of 1923, Richardson discussed army activities in Alaska with Secretary of War John W. Weeks, and particularly the work of the Alaska Road Commission. The secretary asked Richardson to obtain information on the travel and general business over the Valdez-Fairbanks trail. And although the army's work in Alaska needed no defense, Richardson asserted, the secretary wanted to be armed "with the facts briefly stated, to

3. *Annual Report of the Alaska Road Commission, 1935,* p. 4.

4. Hawley Sterling, "Transportation in Alaska," pp. 1921.

5. Bliss to Secretary of War, February 6, 1917, Records of the Adjutant General's Office, 1780s to 1917, AGO Doc. File, various files pertaining to Alaska, R. G. 94, N.A.

answer any questions or criticisms that might be made, both as to the cost of the work and its past and present value."[6]

Colonel John C. Gotwals, the engineer officer of the commission, complied with Richardson's request and furnished him with traffic statistics, taken at the Salcha ferry near Munson's Roadhouse, covering the open season from May 18 to November 1, 1923:

	Persons	Autos	Trucks
Commercial	1080	480	30
U.S. Government A.R.C.	180	12	48
Coast and Geodetic Survey	32	—	12
Signal Corps	81	—	55
Totals	1373	492	245

	Wagons	Horses	Tons
Commercial	6	12	80
U.S. Government A.R.C.	8	24	122
Coast and Geodetic Survey	—	—	8.5
Signal Corps	2	4	40
Totals	16	40	250.5

The statistics reported the through traffic, but there also was considerable local movement from Valdez and Chitina not destined for Fairbanks. Gotwals had only been able to ascertain that teamsters freighted some 100 tons from Valdez to the vicinity of Copper Center. Additionally, there had been much winter freighting over the road during the past season, including moving supplies from Chitina to the Slate Creek and Mentasta mining districts, and at times even as far as the Shushana mining area. Furthermore, one company had freighted 150 tons of mining machinery from Fairbanks to Caribou Creek via the Salcha River. Gotwals estimated that in addition to the figures given in the table, another 500 persons and 500 tons of freight had moved over the road. A month later, Secretary Weeks proposed that the Bureau of Public Roads of the Department of Agriculture take over the functions of the Alaska Road Commission. The bureau already operated in Alaska as elsewhere, constructing roads on federal lands for development purposes. Weeks, therefore, thought it unwise that there "should be two agencies requiring duplicate equipment doing the same type of construction in one locality."[7]

The secretary considered this the best solution rather than transferring road-building responsibilities to the Department of the Interior, which had no organization nor expertise in this field. During recent reorganization discussions in Congress, Weeks had submitted this proposal to the lawmakers.[8]

Actually, it had been Alaska's governor Scott C. Bone who had suggested that the Alaska Road Commission be abolished, but at the same time he had requested that Congress include the territory in the Federal-Aid Highway Act of 1916 and its various subsequent amendments. This piece of legislation funnelled federal money into road construction activities in the states and territories according to a complex matching formula involving population, size of the state or territory, and the acreage of the public domain in each jurisdiction. Congress had excluded Alaska from the highway act, ostensibly because the territory's vast area would have entitled it to receive an unduly large share of the total appropriation made under the act. Legislation introduced into the Senate and House in 1925 for the reorganization of the administrative branch of the government abolished the Alaska Road Commission and transferred its duties to the Department of the Interior, while at the same time including the territory to share in all appropriations available for apportionment under the Federal-Aid Highway Act.[9]

6. Richardson to Board of Road Commissioners for Alaska, November 3, 1923, ARC, box 65481, R. G. 30, Federal Records Center, Seattle, Washington.

7. Gotwals to Richardson, November 20, 1923, ARC, box 65481, R. G. 30, Federal Records Center, Seattle, Washington; Weeks to Representative Louis C. Cramton, December 19, 1923, R. G. 94, Records of the Adjutant General's Office, 1780s to 1917, AG Doc. File, various files pertaining to Alaska, N.A.

8. *Ibid.*

9. 39 Stat. 355, July 11, 1916; 42 Stat. 212, November 9, 1921; S. 3445 and H.R. 9629, 1925.

Alaska's congressional delegate Dan Sutherland was unhappy with the proposal, and he appealed to Secretary Weeks to exert himself on preserving the commission. If the section of the measure abolishing the Alaska Road Commission could not be deleted, he asked that the War Department offer an amendment providing for the continuation of the commission's work under the supervision of engineer officers detailed from the army. Sutherland reminded the secretary that appropriations for roads and trails in Alaska in 1920 had been barely sufficient to maintain the transportation system already constructed, much less develop new roads. In fact, progress in the transportation field had come to a standstill. However, the Chief of Engineers had persuaded Congress to increase the annual appropriations gradually, and for fiscal year 1926 that amounted to $900,000. (Sutherland had done his part aiding this effort.) The commission had regained considerable momentum after its postwar restructuring. It had aggressively enlarged the organization and acquired much new mechanical equipment; extended its facilities to other bureaus of the federal government as well as to the territory; prepared an extensive road program; and with increased funding made some progress in accomplishing that program. To terminate the commission at this point would be disastrous for Alaska, Sutherland maintained, and he asked that the secretary further consider the matter before the legislation came up for a vote in Congress.[10]

The delegate had the support of Major General H. Taylor, the chief engineer. He reminded the adjutant general that for several years attempts had been made to include Alaska in the Federal-Aid Highway Act, always unsuccessfully. The House Committee on Roads had held several hearings on the matter, and representatives of the War and Agriculture departments had testified. But the Department of Agriculture and the roads committee members had been unwilling to extend the Federal-Aid Highway Act to Alaska in a fashion acceptable to Delegate Sutherland, namely providing greater funds for road and trail construction than available under existing law. In the meantime, the Alaska Road Commission had performed its work, praised by the Bureau of the Budget and the House Committee on Territories. In annual appearances before the appropriation committees of both houses of Congress, the Alaska Road Commission had won the confidence of both, evidenced in the modestly increased funds these committees had made available. From the military point of view, Taylor continued, army officers serving with the commission received valuable training for their wartime duties in road and trail location and construction and in exploratory and reconnaissance surveys under pioneer conditions. Better yet, these men performed essential work of permanent value economically and efficiently.[11]

Taylor particularly objected to the abolition of "a going concern" with no concrete plans for anything to take its place. Nobody knew how the Secretary of the Interior intended to handle territorial road work, but it was known that he had "no personnel nor organization in Alaska equipped to take it over."

Worse yet, the proposed legislation made no provision for safeguarding the system of military roads and trails which the War Department had constructed during the past 20 years. Taylor also criticized that section of the proposed legislation which transferred control from the commission, which was resident in the territory with full authority to meet emergencies and handle business on the spot without having to wait for permission from Washington, to a department in the capital "with all the attendant delays that are such a conspicuous feature of the usual handling of Alaskan affairs...." In fact, the committees on the territories for several years had been considering plans for centralizing control of all federal affairs relating to Alaska.[12]

10. Sutherland to Weeks, January 28, 1925, Taylor to Adjutant General, February 3, 1925, R. G. 94, Records of the Adjutant General's Office, 1780s to 1917, AG Doc. File, various files pertaining to Alaska, N.A.

11. *Ibid.*

12. *Ibid.*

Taylor criticized the proposed measures from yet another angle, namely that they were uneconomical, because at least two organizations—and perhaps even four—reporting to different departments would have to be created if these bills passed. He praised the commission for handling other engineering work for which funds were provided. He reviewed some of these: river and harbor work for the Chief of Engineers, handling the water supply at the army's Chilkoot Barracks, and administering the Sitka military cemetery for the Quartermaster General; the commission also managed the Sitka National Monument and developed roads in Mount McKinley National Park for the National Park Service; and finally, the Alaska Road Commission performed needed work for various municipalities and built roads, bridges, trails, and shelter cabins supported by territorial legislative appropriations. In short, inasmuch as the existing organization had fully proved its versatility, effectiveness and economy, Taylor recommended the maintenance of the status quo.[13]

After some soul-searching, Secretary Weeks reconsidered his previous views and advised Congress that the abolition of the Alaska Road Commission would be premature, because throughout America's frontier history the War Department had performed work of a similar character to that of the Alaska Road Commission in opening up the West. Alaska still was a remote frontier, and it would be years before it reached a development stage comparable with that found in the contiguous states. In view of these facts, and the expressed desires of Alaskans, Secretary Weeks declared that his department was willing to continue to sponsor the work of the Alaska Road Commission.[14]

Weeks might have added that much of the agitation for the abolition of the Alaska Road Commission came from advocates for a centralized Alaskan transportation administration within Congress as well as from the Department of the Interior that had constructed the Alaska Railroad and now operated it. In 1923, the administration of President Warren G. Harding had consolidated the functions of the railroad and the commission. By the end of that year, the two organizations had broken apart again, primarily because little hope existed for a permanent merger, and the differing natures of rail and road created internal problems. The merger, however, was one of many efforts to rationalize the federal bureaucracy in Alaska.[15]

Some Bureaucratic Background

In fact, dissatisfaction with Alaska's laggard development reached back to a period following the American purchase of Russian America, when Sitka citizens had complained about the lack of economic development. Finally, in 1913, Secretary of the Interior Franklin K. Lane called for a local development board. Thereafter, the Department of the Interior and its congressional friends had urged a reorganization of the federal bureaucracy in Alaska. A variety of draft bills established a board comprising major bureau heads and other federal officials who could radically rearrange bureau activity and make other decisions subject only to the approval of the Secretary of the Interior. Historian William H. Wilson has stated: "insofar as these proposals recognized the need for a special, coordinated approach to northern lands, they were enlightened and progressive. Had their sponsors confessed that Alaska required a unique federal policy because of its

13. *Ibid.*

14. Weeks to Mapes, February 12, 1925, R. G. 94, Records of the Adjutant General's Office 1780s to 1917, AGO Doc. File, various files pertaining to Alaska, N.A.

15. Wilson, *Railroad in the Clouds*, pp. 156-159.

particularly difficult climate, terrain, and geographical relationships, their candor might have carried the day."[16]

However, rather than doing so, they argued that bureaucratic red tape had frustrated and defeated the efforts of the many hardworking and ambitious pioneers. In addition, journalists attacked federal bureaucrats routinely in the popular press for their indecisiveness and obstructionist methods. These insulting barrages about bureaucratic staff and methods were resented and added to the fears of bureaus threatened with a loss of their autonomy. From 1914 through the early 1920s, the bureaus worked with their congressional sympathizers to ward off several development board bills.[17]

In the meantime, the Department of the Interior tried various temporary administrative solutions. Secretary John Barton Payne, Lane's successor, established an Alaska advisory committee which included representatives of his own department, the Post Office Department, the Department of Agriculture, and the Shipping Board. This committee studied reports, held hearings in Seattle, and submitted its recommendations for territorial development. Among these was one for the creation of a permanent interdepartmental Alaska committee to be located in Washington. This committee was to include, in addition to the members of the advisory committee, representatives from the War, Navy, Agriculture, and Commerce departments. Alaska's governor was to serve in an ex-officio capacity, and it was to be chaired by a representative of the Department of the Interior. The departments agreed, so Secretary Payne established the committee with the approval of President Woodrow Wilson in December 1920. Subsequently, this new entity met occasionally and made recommendations, but it lacked real authority. The Harding administration retained it, and renamed it the Alaska Interdepartmental Committee. In 1922 an Alaska Council was appointed within the territory, which proved to be as ineffectual as the Washington committee. Finally, at the request of Secretary of the Interior Hubert Work, President Harding abolished the interdepartmental committee in April 1923.[18]

It is against this background that one has to view the efforts of the Department of the Interior to assume the functions of the Alaska Road Commission—namely the desire to streamline and combine related responsibilities in one department. The Department of the Interior worried particularly about the continued deficits of its Alaska Railroad, and despite drastic economy measures applied by the manager, Colonel Otto Ohlson, Congress applied heavy pressure for further cutbacks. In August 1931, the Special Select Committee on Investigation of the Alaska Railroad (named the Howell Committee after its chairman, Senator Robert B. Howell) arrived in the territory. The committee's report was critical of the railroad's management and skeptical about its economic future. Senator Howell in particular argued that since no significant development had taken place along the railbelt, the line's success or failure should be judged by profit and loss alone.[19] The report revealed the railroad's many problems, and an important one among these was thought to be the trucking competition over the Richardson Highway from Valdez to Fairbanks. In order to cut this competition, the Department of the Interior proposed tolls be imposed for the use of the Richardson Highway. (See Chapter 10.) The way to impose tolls was to take over the Alaska Road Commission from the War Department.

16. *Ibid.*, pp. 155-156.

17. *Ibid.*

18. *Ibid.*

19. *Ibid.*, pp. 198-199.

Congress Considers the Transfer

Eventually, the administration of President Herbert Hoover prepared legislation for the transfer of the Alaska Road Commission to the Department of the Interior and asked Senator Howell and Representative Edward T. Taylor to introduce the legislation in their respective chambers. This they did. The Senate passed the measure unanimously and the House passed the bill as well. Taylor praised the work of the army engineers, but stated that the time had come to consolidate and systematize federal activities in Alaska. The transfer of the commission was a first step in the right direction. Officials in the executive department had carefully considered into which department the Alaska Road Commission would fit best. Taylor argued that when members of Congress realized that the Interior Department has the public domain, "about 98 percent of this territory, the Mount McKinley National Park, the reindeer, the Alaska Railroad, the governorship...and the larger proportion of all the activities of Alaska...," they would surely appreciate why "the President and his Cabinet officers decided that this work should be transferred from the War Department to the Interior Department."[20]

Some members of Congress suggested that it might be best to consolidate road-building activities in the Bureau of Public Roads, but deferred to administration desires in the matter. The House Committee on Territories considered the measure favorably in May 1932. Secretary of the Interior Ray Lyman Wilbur stated that the transfer was advisable "if we hope to succeed in our efforts to place the Alaska Railroad on a self-sustaining basis."[21]

Still another consideration in favor of the transfer was that it would enable Congress to review the budgets for the main transportation systems in Alaska in one department, because now the railroad, river, and highway systems would be under central administrative control and expenditures could be properly correlated. Wilbur promised no curtailment of the road building program for Alaska as a result of the transfer, a promise made to still fears many Alaskans had expressed to members of Congress.[22]

Secretary of War Patrick J. Hurley remarked that "while it is believed that the activities referred to have been efficiently and economically administered under existing law," his department had no objections to the transfer. However, Representative Edward T. Taylor who had authored the House measure, was curious to learn how the Department of the Interior proposed to carry out its new duties. Secretary Wilbur testified that he intended to assign the administration of the commission to Alaska's governor, an employee of the department, who was located in Juneau as were the headquarters of the commission. The War Department normally assigned six army officers to the Alaska Road Commission, although there were only five in 1932. In addition, a few civilians were permanent employees, occupying positions such as senior engineers, superintendents and assistant superintendents, disbursing clerks, foremen, and mechanics, among others. There also were about a hundred temporary employees, many of whom had worked for the commission for many construction seasons. Payroll expenses for permanent employees in 1931 amounted to $109,920, with an estimate of $110,770 and $111,540 for 1932 and 1933, respectively. The salaries and wages for temporary employees for 1931 had come to $817,463, and with estimates of $762,275 and $600,505 for 1932 and 1933, respectively. Secretary Wilbur intended to maintain as

20. *Cong. Record*, 75C., 1 S., pp. 14076-14077 (June 27, 1932).

21. U.S. Congress, House, *To Transfer the Administration of the Board of Road Commissioners in Alaska from the War Department to the Department of Interior*, H. Rept. 1444 to accompany H.R. 11717, 72 C., 1 S. (Washington: Government Printing Office, 1932), pp. 1-2.

22. *Ibid.*

much of the existing civilian organization as possible with the prospective reduced appropriations, but he planned to relieve the army officers of their duties.[23]

Wilbur's testimony satisfied Representative Taylor, who was of the opinion that there existed "an unnecessary amount of government of Alaska by too many departments, bureaus, boards, commissions, and officials," and he thought that much of this should be gradually and systematically consolidated, combined, and coordinated wherever reasonably possible. Such a course, Taylor and the committee believed, would be in the interest of the federal government and would speed the orderly development of Alaska.[24]

The Senate Committee on Commerce also reported the transfer measure favorably. The senators, however, stressed that truck competition over the Richardson Highway would increasingly affect the Alaska Railroad adversely. Therefore, besides transferring the commission, the measure also authorized the Secretary of the Interior to fix and collect tolls on the Richardson Highway "where necessary or available in the public interest."[25]

Colonel Otto F. Ohlson already had warned Fairbanks merchants that they were unwise in "patronizing temporary fair-weather competition of the railroad that did not contribute to the upkeep of Fairbanks." He reminded members of the Fairbanks Commercial Club that the railroad had been built "for the people of Alaska and for the purpose of developing the Territory, and that they needed it." Ohlson told his listeners that the railroad spent between $1- and $2-million annually; that it rendered expensive service in the winter, operating rotary snow plows in order to get the trains through; and that unless the inhabitants of the railbelt gave their loyal support to the railroad, "there was a possibility of it being closed down during the wintertime, necessitating merchants having to lay in a 7-month [sic] supply which they could not afford to do in these times because of lack of capital and credit." Continuous service required patronage in the summer as well as in the winter, Ohlson had concluded.[26]

Secretary Wilbur told the senators that he had not urged the transfer "as a matter of economy in road building but to make possible a smaller deficit on the Alaska Railroad and in the interest of effective coordination of related activities now handled by two departments." He once again stated that Alaskan citizens and organizations need not be afraid that his department would neglect the road building program in the North, nor would civilian administration be more expensive than the military one. In fact, he concluded, "it would be our endeavor to continue the efficient operation now maintained by the War Department."[27]

Both houses of Congress passed the transfer bill. The Alaska Road Commission became a part of the Department of the Interior, effective July 20, 1932.

The Last Year Under the War Department

For 28 years under the supervision of the War Department, the commission had labored diligently to construct a basic transportation network. The work in Alaska had offered invaluable experience in northern construction problems to many young army

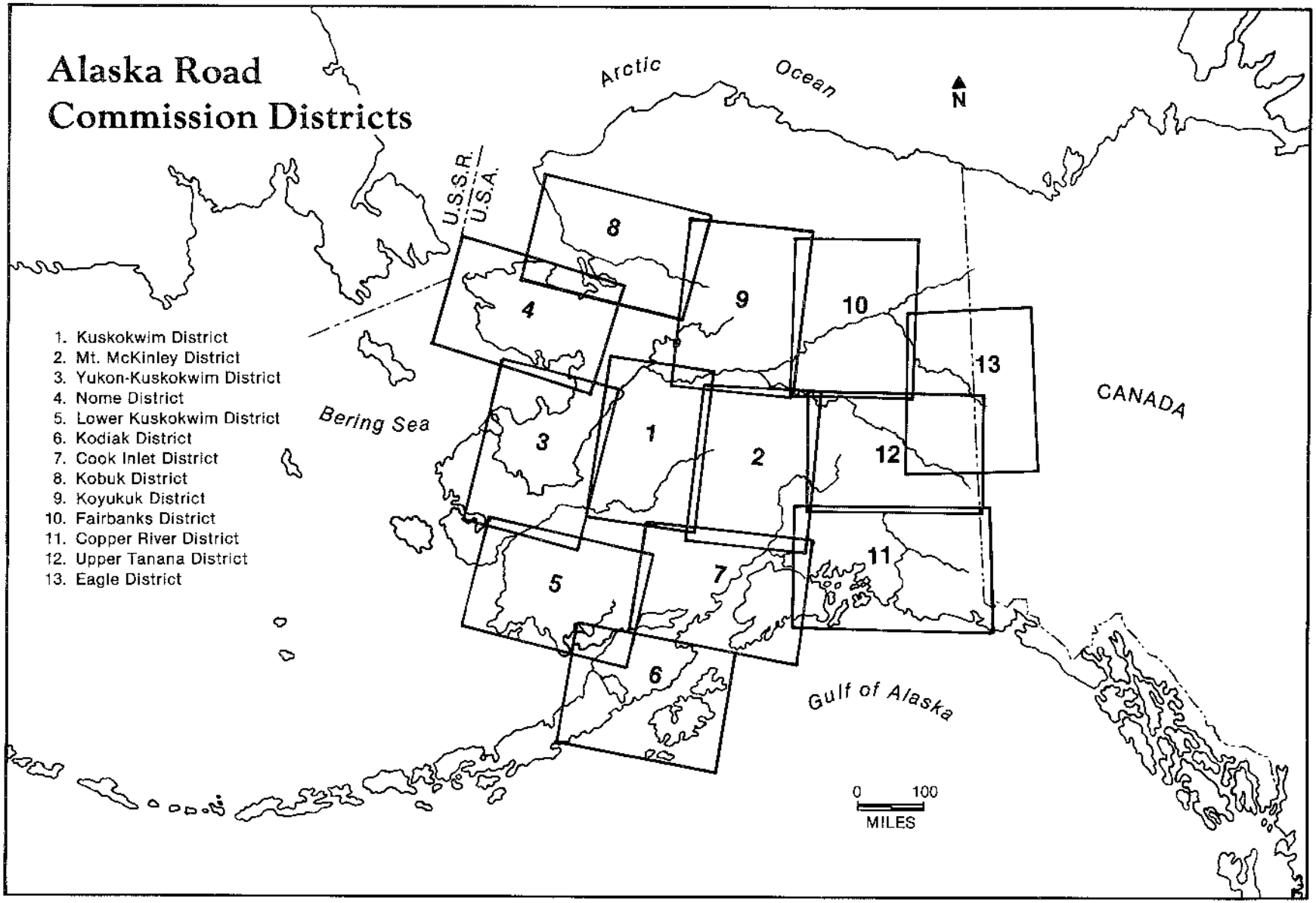
23. *Ibid.*, p. 2.

24. *Ibid.*, p. 3.

25. U.S. Congress, Senate, *Providing for the Transfer of the Duties of the Board of Road Commissioners in the Territory of Alaska to the Department of the Interior, and for other purposes*, Senate Rept. 753 to accompany S. 4525, 72C., 1S. (Washington: Government Printing Office, 1932), p. 1.

26. *Ibid.*, p. 2.

27. *Ibid.*, p. 3.


Alaska Road
Commission Districts
Arctic
Ocean
N
U.S.S.R.
U.S.A.
Bering Sea
CANADA
Gulf of Alaska
1. Kuskokwim District
2. Mt. McKinley District
3. Yukon-Kuskokwim District
4. Nome District
5. Lower Kuskokwim District
6. Kodiak District
7. Cook Inlet District
8. Kobuk District
9. Koyukuk District
10. Fairbanks District
11. Copper River District
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officers. Alaskans had greatly benefitted from the dedicated labors of the organization, and although there had been occasional criticism, the majority of northern residents approved of the commission's efforts. During its last year of operation under the War Department, the commission had largely attempted to maintain the existing transportation network, and to improve the more important routes for the use of motor vehicles. Inadequate appropriations had confined new construction to a few major projects which already had been underway for a number of years. In its final year under the War Department the commission had built 40.15 miles of new roads, 20 miles of sled roads, 130 miles of trails, 520 linear feet of bridges with over 60-foot spans, 3,158 linear feet of trestle span bridges, 1 airplane landing field, and 4 shelter cabins. It reconstructed 75.6 miles of road, surfaced 107.37 miles of road, and replaced numerous culverts. In addition, it maintained 1,304.13 miles of road, 74 miles of tramway, 813.5 miles of sled road, 4,732.25 miles of permanent trails, 329 miles of temporary flagged trails, 26 airplane landing fields, and 36 shelter cabins.[28]

By 1932 the Alaska Road Commission had constructed a transportation system of 11,231 miles consisting of 1,627.5 miles of roads, 74 miles of tramroads, 1,495.5 miles of sled roads, 7,322 miles of trails, and 712 miles of temporary flagged trail. Between 1905 and 1932, the commission had expended a total of $18,312,825.40 from all sources, but War Department appropriations accounted for $11,895,928.42 of this total.[29]

The commission headquarters had been at Juneau, and it also maintained a suboffice in Washington, D.C. It had divided the territory into seven districts and one subdistrict. A superintendent in each district directed the work of the local foremen. Employees of the commission all were experienced men who, in nearly all cases, had served the organization for many years. The commission, because of the high cost of labor, had purchased much mechanical equipment over the years, enabling it to handle engineering construction anywhere in the territory.[30]

In short, the transfer ended an important era in Alaska's transportation history and began another. In 1932, however, nobody could foresee what the new era would be like.

The Civilian Operations in 1933

In its 1933 annual report, the commission stated that "the general scheme of operations is practically the same as under the War Department," except that the military officers had all departed. As before, the Juneau headquarters, staffed by a chief and assistant chief engineers and the required clerical assistants, was located in the Federal and Territorial Building. The disbursing officer for the Department of the Interior at Juneau handled commission finances. The commission used Alaskan products in its work whenever price and quality compared favorably with the cost of the same items delivered to warehouses in the territory. A governmental agency in Seattle, acting also for various other federal bureaus operating in Alaska, brought all supplies not obtainable locally. The individual bureaus shared the cost of this service on a pro rata basis. The commission's share consisted of 4 percent of the invoice price of items purchased.[31]

28. Alaska Road Commission, *Twenty-Eighth Annual Report of the Alaska Road Commission, Fiscal Year 1932, 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* (Washington: Government Printing Office, 1932), p. 2.

29. *Ibid.*, pp. 5-7.

30. *Ibid.*, pp. 3-4.

31. *Annual Report of the Alaska Road Commission, 1933*, p. 6.

The Alaska Road Commission hired both common and skilled labor in the territory. Decreased appropriations because of the Depression meant shorter work periods for even the most senior employees, and for others no work for the commission at all that season. The commission noted "the exceptional loyalty to the organization which is manifested generally even by the lowest paid laborers." The commission explained that this was probably because "as a whole Alaska labor is probably superior to that found elsewhere."[32] What the commission did not mention was that seasonal employment suited the lifestyles of its employees. Many Alaskans hunted and trapped during the off-season or traveled Outside to spend the winter in warmer climates.

In 1933 the Alaska Road Commission maintained five district offices located at Valdez, Anchorage, Nome, Chitina, and Fairbanks, and two district suboffices at Eagle and Takotna. The commission closed the two district suboffices during the winter months, and during the winter of 1932-1933, the commission had decided to discontinue the Kuskokwim district suboffice at Takotna. Increased air travel, which caused a marked decrease in the use of winter trails, made this move possible; it saved $2,500. The Anchorage district office now handled the construction season operations.[33]

As before, the commission handled or supervised construction projects for other federal bureaus and the territorial government. This work consolidation had saved considerable tax dollars over the years, particularly on small projects in isolated sections of Alaska. This was especially true of small territorial road projects which were not included in the commission's general road program.[34]

Alaskan construction posed special problems because of the territory's peculiar physical and climatic conditions. Permafrost and thawing during the summers required that special precautions be taken for proper drainage. It was frequently necessary to build intercepting ditches on the uphill side of a road to drain off the water. After vegetation had been stripped from the projected roadway, it was necessary to allow the ground to thaw, settle, and consolidate for several months before the grading could be completed and the surface finished. Once exposed, the subsurface ice continued to thaw, often causing banks to slough in mud slides that covered and blocked the roads. In order to keep existing roads open for traffic during this period it was necessary to corduroy the stretch in question.[35]

Alaska's climate called for special revetment and stream control methods to withstand the destructive effects of sudden floods and washouts caused by the rapid runoff from melting snow, heavy rains in the mountains, or the release of impounded waters by breaks in glaciers. The commission had found that the most suitable type of revetment for this purpose consisted of brush bundles wrapped in wire and weighted down with stones to prevent their washing away. Raging streams and rivers needed to be controlled at times, but most often they had to be crossed. The commission built bridges of native spruce or imported timber or steel, using the most durable material for the most important bridges, and was in the process of replacing culverts made of native lumber with metal culverts which did not rot.[36]

The small appropriation forced the Alaska Road Commission to confine its work largely to maintenance and improvement of the few significant routes. The commission accomplished the following work during the fiscal year 1933:

32. *Ibid.*

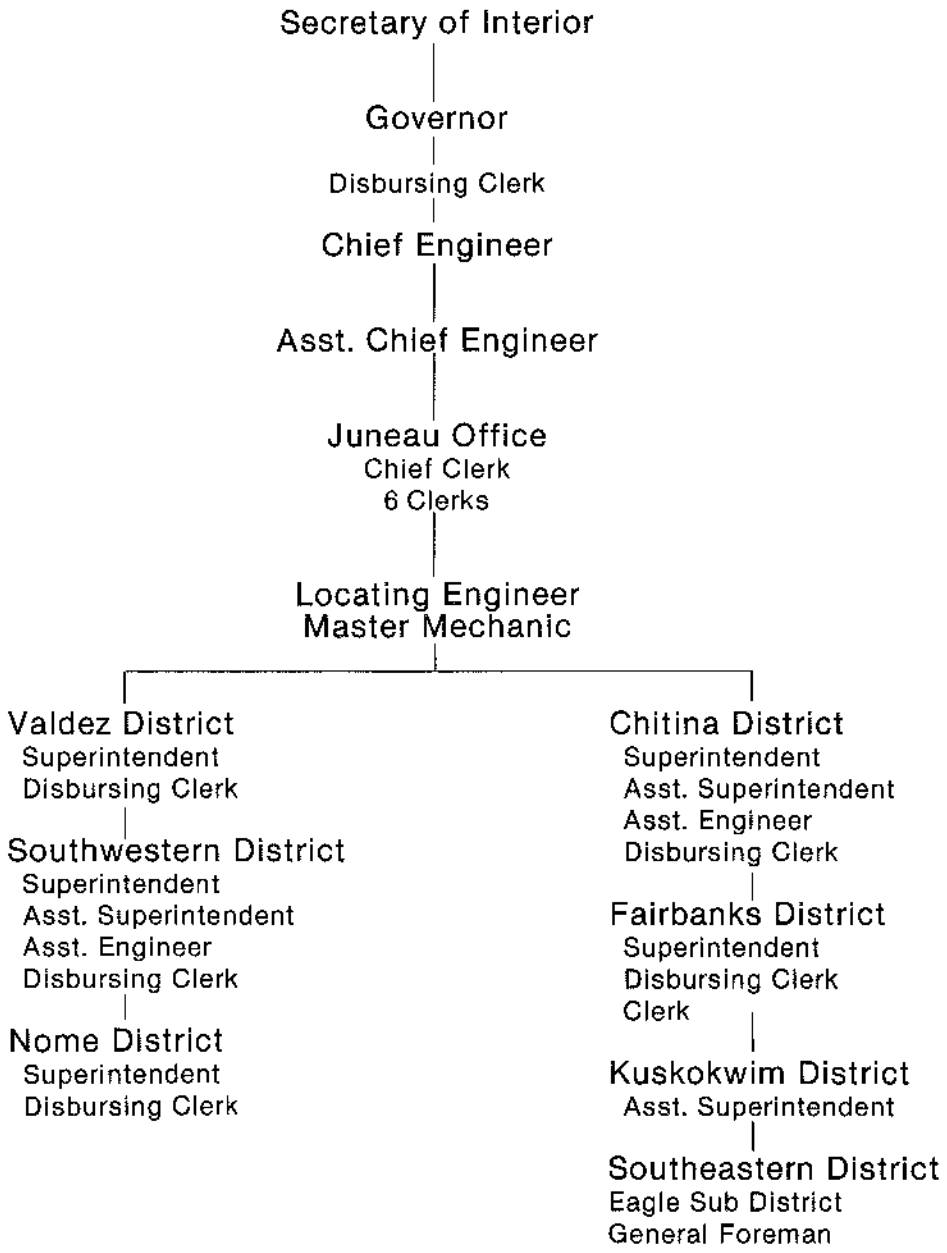
33. *Ibid.*, p. 8.

34. *Ibid.*

35. *Ibid.*

36. *Ibid.*, p. 9.

Organization Chart
Alaska Road Commission



Source: R. G. 126, Central Classified Files, 9-1-55, N.A.

New construction of 21.5 miles of road, 59.5 miles of sled road, replacement of 340 linear feet of bridges of 60-foot span or over, and 1,732 linear feet of trestle span. It reconstructed 30.6 miles of road; surfaced 54.14 miles of road with 72,387 cubic yards of gravel; built 319 linear feet of retaining walls, and replaced numerous culverts. The commission maintained 1,552 miles of road, 74 miles of tramway, 707 miles of sled road, 4,687 miles of permanent trail and 329 miles of temporary flagged trail.[37]

John E. Ballaine and the Anchorage-Matanuska Road

It had been a poor year for the Alaska Road Commission, but prospects for the future looked brighter as President Franklin D. Roosevelt's various New Deal agencies became operational. There were hopes that the Public Works Administration, provided for in the National Industrial Recovery Act, might allocate substantial funds for Alaskan road work in 1934.

In the fall of 1933, Anchorage residents, as they had done for a number of years, once again pleaded that the commission construct the Anchorage-Matanuska road. The commission previously had turned this project down because it paralleled the Alaska Railroad and the money could better be used elsewhere. The proposed road also had non-government critics, and one of these was John E. Ballaine, a northern railroad promoter, businessman, and former general manager of the defunct Alaska Central Railroad. Ballaine objected to the project because the road would parallel the Alaska Railroad all the way to Matanuska and compete with it for freight, and would not, as claimed, open "as much as an acre of agricultural land anywhere north of Eagle River."[38]

The argument that the road would provide miners with access to Anchorage simply was not true, he said. There was "not a single miner, not a single mine, not a single prospect or indication [of any minerals] anywhere between Anchorage and Matanuska, 35 miles in the valley or in the adjacent mountains...."[39]

It was unnecessary to build the road because the Alaska Railroad already connected Anchorage with the road system in the Matanuska-Wasilla region. Furthermore, farmers in the Anchorage area had available to them agricultural lands within a radius of 8 miles of the city. If they cultivated these lands, he argued, farmers would be able to supply a settlement 100 times the present population of Anchorage with agricultural products.[40]

Finally, Ballaine addressed the fact that Anchorage citizens for 9 years had urged the construction of the proposed road and in 1933 alone had expended about $4,000 by voluntary subscriptions, the Alaska Railroad had given its blessings once, and the territorial legislature had approved the proposal twice. That still was no reason, Ballaine stated, to waste precious federal funds on the project, because "the identical reasons can be presented in favor of automobile road building in thirty or more other localities in Alaska, not one of which has roads connecting either with the railroad or with navigable waters."[41]

37. *Ibid.*

38. Ballaine to Ickes, September 16, 1933, ARC, box 65481, R. G. 30, Federal Records Center, Seattle, Washington.

39. *Ibid.*

40. *Ibid.*

41. *Ibid.*

Ballaine suggested that if funds were available they should be spent in providing access to "an extensive shelf [of land] between Cook Inlet and the Kenai Mountains, an area 30 miles wide by 110 miles long, having rich soil over most of it...." This area, he claimed, was potentially the richest part of Alaska with birch and poplar forests, and thousands of acres of "luxuriant blue stem and red top grasses." The region of about 2.2 million acres was washed by the "Japan current and yet being sheltered from the ocean by a projecting spur of mountains." With a benign climate, Ballaine suggested that it could comfortably support about 500,000 "hardy Americans" pursuing general agriculture, fruit growing, gardening, dairying, fishing, mining, and lumbering.[42]

Ballaine had still another plan up his sleeve. He proposed that the commission build a road between the end of the Chickaloon branch of the Alaska Railroad and the Richardson Highway at Gulkana, traversing a mineralized zone for 40 miles out of Chickaloon. This would open rich country and allow the commission to abandon some 250 miles of the Richardson Highway which wound "through barren country where no population or industries ever will be...." Such a scheme, he claimed, "would abolish for all time the present destructive competition by the Richardson Highway against the railroad, and would benefit Anchorage and all the rest of the railbelt incomparably more" than the proposed auto road to Matanuska.[43]

Alaska's governor John W. Troy refuted Ballaine's criticisms, pointing out that the proposed road paralleled the railroad for only 23 miles out of Anchorage and then swung away to go through much good farm land between the Knik River and Palmer. Near Palmer, it connected with the 118-mile Wasilla-Matanuska-Palmer road system, half of which was surfaced with gravel. The whole system was passable by automobiles during the summer. Unfortunately, the railroad operated just one weekly freight schedule throughout the year, permitting only weekly delivery of farm products to the Anchorage market. Troy thought that the construction of the road would stimulate the approximately fifty homesteaders in the area to produce larger crops for the city market. It was true, of course, that there were numerous projects throughout Alaska which had been endorsed by the citizens in their vicinities, but the argument in favor of the Anchorage-Matanuska project was that it served one of the larger population centers in the territory.[44]

With the receipt of Public Works Administration funds, the commission took over the Anchorage-Eklutna road, which the municipality of Anchorage had started and partially graded. In the late fall and winter of 1933, the commission graded 12 miles of this road, constructed bridges over Eagle River and Peters Creek, and put in a 300-foot steel bridge with a 120-foot approach over the Matanuska River at Palmer.[45]

Plans for a Juneau-Douglas Bridge

The availability of Public Works Administration funds prompted Governor Troy to apply to the U.S. Army Corps of Engineers for permission to build a highway bridge across Gastineau Channel, connecting the cities of Juneau and Douglas on Douglas Island. When Lieutenant John R. Noyes of the U.S. Army Corps of Engineers held a public hearing on

42. *Ibid.*

43. *Ibid.*

44. Troy to Ickes, October 2, 1933, ARC, box 65481, R. G. 30, Federal Records Center, Seattle, Washington.

45. *Annual Report of the Alaska Road Commission, 1934*, p. 10.

the application on November 8, 1933, he explained that the corps had to consider applications of that kind under the provisions of the Rivers and Harbor Act of 1899. The governor asked for permission to build a bridge composed of a fixed high-level span 400 feet long across the channel at its narrowest point, pile approaches on both sides for a total length of about 1300 feet, and rock fills on both ends connecting with the existing street system in Juneau and with the road extending northward from Douglas. The bridge was to be about 380 feet wide with a clearance of 50 feet above mean sea level which was about 38 feet above the highest recorded tide. Previously the War Department had issued permits for overhead cables across the channel to the electric company of Juneau and the Alaska-Juneau Gold Mining Company. Both permits, which had been in effect for about 20 years, specified that the cables cross the navigable part of the waterway at an elevation of 50 feet above mean high water or slightly greater. The clearances required of those two cables were therefore somewhat higher than that requested for the bridge.[46]

Nobody at the hearing objected to the proposed bridge. Tom Gardner, for example, represented a lumber company which used the basin above the bridge site for storing log booms. His company had never experienced difficulties in going to that part of Gastineau Channel above the bridge site at any stage of the tide passing under the existing wires and transmission lines. B. Frank Heintzleman, a forester employed by the Department of Agriculture, cautiously suggested that "it would be a big mistake to close the channel above the bridge to any future industrial development." Perhaps some investors "might want to start something up there which would require more clearance for vessels than these bridges you contemplate."[47]

Heintzleman proposed the construction of a drawbridge to eliminate the problem. Then it would be possible to lower the bridge down to 8 feet above the highest high water.[48]

There was no real support for Heintzleman's drawbridge idea. It was not long before the Corps of Engineers issued the permit for the construction of the Juneau-Douglas bridge, the commission signed the necessary contracts, and the foundation work on the project began on April 23, 1934.[49]

Larger Construction Proposals

By late November 1933, Governor Troy had assembled a long wish list of roads, airfields, and other related projects to be built with funds to be appropriated by the Public Works Administration. It was an expensive request for 25 projects with a combined price tag of $6,552,000. Public Works Administration money fell far short of the governor's requirements, however, and only partially funded 14 projects to the tune of approximately $964,000.[50]

Early in 1935 the Bureau of Public Roads in the Department of Agriculture evaluated the governor's proposed projects. The bureau had taken over construction of roads and trails in Alaska's national forests in 1922, a

46. Minutes of hearing on application of the Governor of Alaska for a permit to construct a bridge across Gastineau Channel, November 8, 1933, ARC, box 65482, R. G. 30, Federal Records Center, Seattle, Washington.

47. *Ibid.*

48. *Ibid.*

49. John W. Troy, "Alaska Road, Air Field and Other Related Projects Recommended to Honorable Harold L. Ickes, Secretary of the Interior for Construction under the Public Works Section of the National Industrial Recovery Act," November 27, 1933, Troy to Ickes, March 13, 1934, R. G. 126, Central Classified Files: 9-1-55; N.A.; *Annual Report of the Alaska Road Commission, 1934*, p. 43; *Annual Report of the Alaska Road Commission, 1933*, p. 2.

50. *Ibid.*

task formerly performed by the Alaska Road Commission. The two organizations had developed quite different and distinct philosophies governing their construction activities in Alaska. The bureau noted, rather disdainfully, that commission projects largely consisted of "surface construction more or less in the nature of expediency"—in short, of very low standards. This led to subsequent heavy repair and maintenance expenses. "Such roads," a Bureau of Public Roads spokesman pointed out, could "be handled quickly by day labor or force account methods" and naturally did not involve "extensive long range careful planning."[51]

The work done by the Bureau of Public Roads contrasted sharply with that performed by the commission. The bureau had constructed about 304 miles of roads in the Chugach and Tongass National Forests at a cost of $6,278,273. Many of the forest highways were situated near population centers, particularly Juneau, Ketchikan, Seward, and Skagway, and smaller settlements such as Wrangell, Petersburg, Sitka, Katalla, and Cordova. Nearly all of these roads were usable throughout the year. The work of the Bureau of Public Roads had been performed with careful surveys, with plans, designs, and construction intended for continued service over a long period. After many years of Alaskan experience, the bureau was convinced that "such relatively permanent construction on rather narrow surfaced widths but with good grade, alignment and structures has been good policy."[52]

Naturally, work had been slow but steady, and in some instances portions of the highways needed to be improved to higher standards of widths and surface thickness. The bureau spokesman asserted that short-season roads, roads not maintained during the winter such as mining service roads, "ought similarly to be always in usable condition."[53] A noble ideal, but an unattainable one for the Alaska Road Commission which had to build and maintain roads, bridges, trails, tramways, and airfields in all areas of Alaska outside of the Chugach and Tongass National Forests. These forests covered approximately 20 million acres; Alaska contains about 378 million acres—leaving the commission with responsibilities over an area of 358 million acres. From 1905 to 1935, the commission had spent a total of $22,107,953 from all sources and built 1,653 miles of roads, 74 miles of tramway, 549 miles of sled road, 4,005.5 miles of permanent trail, and 304 miles of temporary flagged trail. In 1935, the commission had added 121 miles of road, 8 miles of sled road, 6 miles of tramroad, 126 miles of trail, 848 linear feet of timber bridges over 38-foot span, 1,120 linear feet of steel bridges of 300-foot span or over 1,836 linear feet of timber trestle span bridges, 432 linear feet of concrete girder span, and 2 airfields.[54] Alaska Road Commission construction standards might not have been as high as those of the Bureau of Public Roads but at least the commission had succeeded in providing Alaska with a rudimentary transportation system of approximately 7,000 miles. That had been an extraordinary achievement, considering the territory's difficult geography and climate and the commission's meager financial resources.

In the summer of 1936, Delegate Dimond appealed to the House of Representatives to approve a ten-year road construction program for Alaska at a total cost of $20 million, or $2 million per year. Such a program, consistently carried out, would give Alaska "a really efficient and useful system of roads and one that would be bound to stimulate speedily the settlement and the economic development of the Territory."[55]

51. Chief of Bureau, Bureau of Public Roads to Secretary of the Interior Ickes, April 22, 1935, R. G. 126, Central Classified Files, 9-1-55, N.A.

52. *Ibid.*

53. *Ibid.*

54. *Annual Report of the Alaska Road Commission, 1934*, p. 1.

55. Excerpt, *Congressional Record*, 74C., 2S., "Roads to Alaska," Remarks of Hon. Anthony J. Dimond, June 16, 1936, Anthony J. Dimond Papers, box 32, File Roads, Folder A, University of Alaska Archives, Fairbanks.

Dimond explained to his colleagues that Alaskan trails were "pack paths through the forests and over the tundra, and not capable of being traversed by vehicles of any description." Only 2,400 miles of motor roads in a region of 591,000 square miles was not much, he complained. It was actually even less than Dimond had stated—only about 2,000 miles of road existed in the territory in 1936. Indeed, "the State of Delaware, with a proportionate road mileage, would have just about 10 miles of highway in the entire State." Dimond observed that "even Delaware would feel rather cramped with only that much in the way of roads."[56]

Dimond told his fellow lawmakers that the $20 million requested for the ten-year period included not only construction but also maintenance costs from year to year. It did not include the substantial territorial contributions for Alaskan roads. In fact, except for roads built in the national forests and in Mount McKinley National Park, Alaska's citizens had paid approximately 32.3 percent of the entire cost of construction and maintenance of all Alaska roads through 1935.[57]

Dimond continued to say that even at the end of the ten-year period when the $20 million had been expended, the territory still would not have all the roads it needed. He predicted that such a construction program would stimulate the "economic exploitation" of Alaska. There was no need to look beyond the ten-year period at present to determine what might be required for the future. "Eventually," he stated, "I hope to see a highway over which one can drive from New York City to Bering Sea without a break." All that lay in the future, however, and "for the present we must be more modest," and the plan as presented "for immediate road development in Alaska has nothing in it of the unreasonable or extravagant."[58] Congress, however, did not appropriate the needed funds. While some of the projects eventually were built, others never emerged from the planning stage. Indeed not until 1948 did Congress approve an accelerated road construction program—and that step was made necessary by the Cold War.

The Cache Creek Mining District

Year after year it was the same story: endless requests for roads from all sections of Alaska, but too little money to meet these needs. For example, there were the mining operations in the Cache Creek mining district near Talkeetna. Merle H. Guise, the vice-president and consulting engineer for the Peters Creek Mining Company, Inc., one of the operations in the area, appealed to the commission to improve the Peters Creek road and airfield "so we really could go ahead and mine. I mean in a real manner, so as to get some real 'dust' out, and some freight in, and I know my people would back me in this section or any section where there was a chance of really 'opening up'...."[59]

Although willing to help, Ike P. Taylor, the chief engineer of the Alaska Road Commission, was pessimistic about the outlook for the 1936 season. Appropriations for Alaskan roadwork in the Department of the Interior budget were meager. Taylor doubted that the commission would be able to undertake any extensive road improvements in the Talkeetna district, because expected funds provided only for maintenance and minor improvements to the existing road system. Guise, of course, was disappointed by the

56. *Ibid.*

57. *Ibid.*

58. *Ibid.*

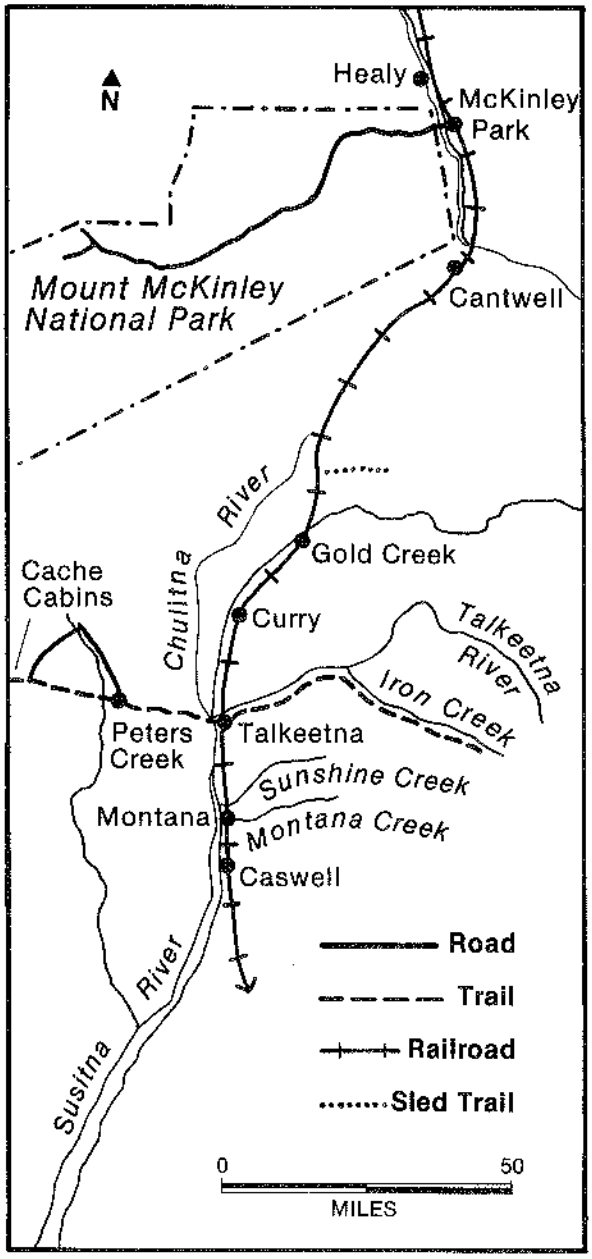
59. Guise to Taylor, January 8, 1936, Taylor to Guise, January 28, 1936, Guise to Taylor, February 22, 1936, ARC, box 65479, R. G. 30, Federal Records Center, Seattle, Washington; *Annual Report of the Alaska Road Commission, 1936*, p. 32.

unwelcome news. Not much work remained to complete the road up Peters Creek from the Peters Creek bridge on the Talkeetna-Cache Creek road. It only needed to be widened sufficiently to allow tractors to haul in the large machinery ready for assembly. "The areas of pick and shovel [mining] ground remaining in this and other placer camps" in Alaska is limited, Guise told Taylor, and "it is absolutely necessary that we have some better means of transportation if we are to operate in any practical manner." This included the proposed airfield, for the existing landing strips were only safe for winter operations and "extremely unsafe for summer use."

Guise believed that the mining operators in the district could guarantee a sufficient tonnage for weekly air service from Anchorage. He clearly was frustrated. Petitioning for roads and airfields season after season had only brought piecemeal results. Airfields, such as the one his company requested, were far more important for developing Alaska than spending enormous sums on a few large airports, he asserted. Guise referred to President Franklin D. Roosevelt's New Deal effort which had resettled some 200 families from Michigan, Wisconsin, and Minnesota in the Matanuska Valley, approximately 50 miles north of Anchorage, as a particularly stupid waste of millions of dollars "in a vain effort to grow pineapples or coconuts or whatever it is hoped to grow in the Matanuska Colony...."

He promised also to appeal to the territorial Board of Road Commissioners for help on the road and airfield because it was extremely vital that we have better transportation this summer if we are not to be checked or defeated in this venture...." He intended to "use every means at hand to secure such improvements, or to find out why legitimate mining ventures and worthwhile mining districts are neglected while well-nigh worthless and useless projects are flooded with money from several sources."

Guise obviously exaggerated, because projects seemingly worthless to him served the vital needs of some other user constituency. His complaints and those of his fellow miners, however, were effective, because the commission expended $5,514.25 on the Talkeetna-Cache Creek road, and $19,067.81 on the Peters Creek road in the 1936 working season.[60]



Transportation routes in the Talkeetna area.

60. *Ibid.*

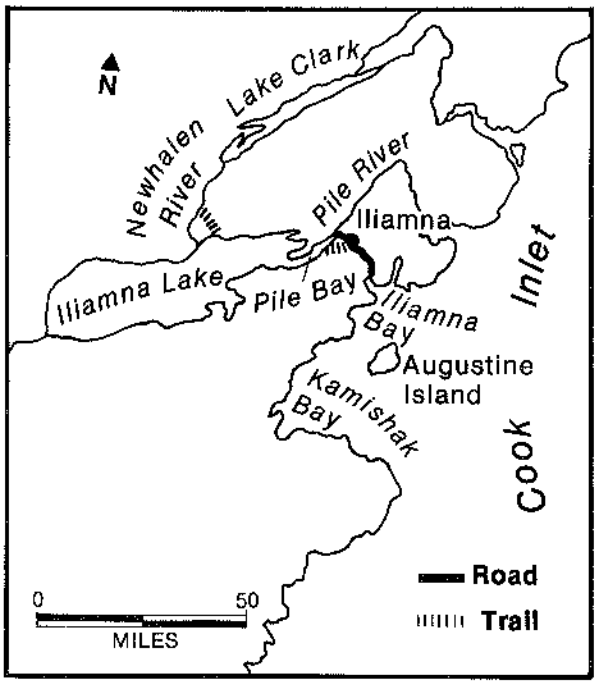
During the 1938 construction season, the commission expended further funds in the Talkeetna-Cache Creek mining district. At the end of February, the Anchorage district office of the commission sent a bridge crew of nine men to Talkeetna. The men arrived in Talkeetna on the same day about midnight, and the next day started moving equipment across the Susitna River. After establishing camp at the Peters Creek bridge, the men demolished the old wooden bridges across Peters, Croto, and upper Peters creeks and replaced them with a 150-foot span on steel piling piers, an 80-foot span and two 18-foot steel approaches, all on steel piling piers, and a 56-foot girder span on concrete piers resting on solid rock, respectively. A. F. Ghiglione constructed the first two bridges, and Amos Morse the last one. At the end of the season, Superintendent M. G. Edmunds reported the total cost of the bridges: Peters Creek, $10,079.36; Croto Creek, $5,885.72; and upper Peters Creek, $5,212.61. The commission continued to spend funds for maintenance and improvements in the Talkeetna-Cache Creek district. In 1939 it amounted to $37,020.32; in 1940 it came to $21,731.67, with another $150.76 for the Talkeetna airfield; in 1941 it amounted to $21,342.05; in 1942 to $24,175.94; and it declined to $11,215.05 in 1943; to $3,206.86 in 1944; and again rose slightly to $5,830.12 in 1945.[61]

The War Production Board had issued "Gold Mining Limitation Order L-208" on October 8, 1942, which delayed industry nonessential to the war effort. In 1943, gold production dropped 20 percent over the previous year's level, and the industry never really recovered from the near shutdown during the war. With the de-emphasis on gold mining, the mining communities lost their political and economic leverage; the commission used its funds for work on the main road system and work in and near Alaska's urban centers.

The Iliamna Lake District

Alaska's residents lived in widely scattered locations, and every settlement at one time or another appealed to the commission to construct relatively short roads connecting to the railroad, to a major road, or to tidewater. For example, in early 1936 the Seward Chamber of Commerce petitioned the commission, on behalf of the people of the Iliamna Lake district, to extend the existing Iliamna Bay - Pile Creek road another 2.5 miles to the shores of Iliamna Lake. The commission had built the existing road in the 1920s. Substantial freight came over the road, but lake boats and scows were unable to ascend Pile Creek to the end of the road. Therefore, smaller craft had to be used on the leg from Pile Creek to Iliamna Lake, where the freight once again had to be transferred to larger boats for distribution to points along that body of water. There was no money to respond to the request that season, so in early 1937 residents of the region prepared a petition and a summary of why roads were needed in the Iliamna and Lake Clark region. At present, the petitioners pointed out, the region could be reached via the Kvichak River from Bristol Bay. The route, they argued, was long, costly, and not always satisfactory because of the tides and unpredictable weather in the bay. This caused time delays and soaring freight rates which discouraged potential settlers from coming into the region. A great deal of money already had been spent on the Iliamna portage, but it could not be fully utilized because of the swiftness of the Iliamna River which constantly shifted its channels and which only small skiffs equipped with outboard motors could navigate. Worse, even this dubious route was impossible for a large part of the shipping season because the water was so low that

61. Edmunds to Taylor, February 16, 1939, R. G. 30, ARC, box 65479, Federal Records Center, Seattle, Washington; *Annual Report of the Alaska Road Commission, 1939*, p. 32; *Ibid., 1940*, pp. 32-33; *Ibid., 1941*, p. 25; *Ibid., 1942*, p. 24, *Ibid., 1943*, p. 24, *Ibid., 1944*, p. 21; *Ibid., 1945*, p. 22.



Roads and trails in the Iliamna Lake region.

motors were often damaged. It was almost impossible to haul large amounts of supplies downstream during the dry months of June through August. Goods, therefore, had to be piled up on the bank of the Iliamna River waiting for high water. What was needed to remove this bottleneck, the petitioners pointed out, was the construction of a 2.5 mile road from the portage to Pile Bay. The commission already had surveyed the route, so the request was not a new one. From Pile Bay, lake boats easily could haul freight and supplies, which would increase traffic over the portage which had been underutilized.[62]

The petitioners also argued that the commission should build a road, approximately 14 miles in length, from Iliamna Lake to Lake Clark. The shores of the latter offered ideal residential sites as well as homesteads. The soil, after proper cultivation, yielded many types of vegetables and domestic plants. In fact, even strawberries thrived on the shores of the lake, and "there was no telling what a garden enthusiast might be able to do."[63]

In addition, the region contained valuable metal deposits such as gold and copper, and many prospectors already held mining claims, "anxiously waiting for proper transportation facilities so that they could easily bring in the needed machinery." In short, the construction of these two roads would be of great benefit to Alaska because it would result in increased revenues from taxation. The region, blessed with a favorable climate, had needed no federal assistance. In fact, all non-Native and Native families as well as individuals were self-supporting. Progress, however, demanded the construction of roads, and this task was the responsibility of the territory "desiring such progress" and could not be undertaken by individuals. These arguments must have been persuasive, for in 1937 the commission allotted $4,646.55 for the project, and this rose to $32,833.40 in 1938, enough to finish the two projects.[64]

Telephone Communications

Roads and trails enabled Alaskans to obtain supplies, develop mineral properties, and reach the outside world. Telephone communication enabled residents to make immediate contacts with one another, relay vital information, and request help when needed. In the first decade of the twentieth century the U.S. Army had constructed a lengthy telegraph

62. Fryer to Commission, April 1, 1936, Residents to Commission, February 4, 1937, ARC, box 65479, R. G. 30, Federal Records Center, Seattle, Washington.

63. *Ibid.*

64. *Ibid.*; *Annual Report of the Alaska Road Commission, 1937*, p. 36; *Ibid., 1938*, p. 34.

system linking Alaska with the outside world. After radio communication made the telegraph line obsolete, the Signal Corps abandoned it. In 1926 the Alaska Road Commission took over the line from Valdez to Fairbanks, a distance of 371 miles, and maintained and operated it. In 1927, the commission constructed a branch line of 39 miles to Chitina, and added another 106-mile branch line to Nabesna from 1930 to 1934 in connection with road construction in that area. In 1936, the Alaska Road Commission owned a total of 516 miles of line. Construction had cost $3,264 and the average cost of annual maintenance amounted to $6,500. The highway line connected the Fairbanks switchboard to all city phones. Furthermore, phones had been installed in all roadhouses and construction camps along the route. In addition, the commission maintained a small switchboard at Copper Center, which served to connect Nabesna, Chitina, and Valdez. It was impossible to obtain a through connection from Fairbanks to Valdez, but messages between the cities could be relayed via the Rapids Roadhouse. The old line, however, was not in top shape and it was impossible to maintain uninterrupted service at the level of maintenance performed. This was particularly true after the commission camps along the route had closed for the winter.[65]

Within a short time, the Comptroller General of the United States wanted to know if the commission collected tolls for the phone services it provided. The answer was negative. The commission requested the Fairbanks Telephone Company to run the line through its exchange, and allowed it to make a charge to reimburse it in exchange for the services rendered. Rates charged varied from a low of 25 cents from Fairbanks to mile 18 on the Richardson Highway to a high of 75 cents for a call from Fairbanks to Rapids. There were no charges for official government calls. All roadhouses south of Rapids paid a modest fee directly to the operator of the Copper Center switchboard of the Alaska Road Commission. Taylor explained that it would have been absurd to charge tolls for a telephone service which was so unreliable, particularly during the winter. He estimated that the Fairbanks Telephone Company probably collected no more than $250 per annum for its services. Taylor doubted that the company would handle this service for any less money than it now received. If the government decided to discontinue the service through the Fairbanks Telephone Company exchange, Taylor pointed out, it would inconvenience the commission, and require the installation of additional telephone equipment in its Fairbanks office, warehouse, shop, and garage.[66]

The Comptroller General investigated the matter, and reported that the Fairbanks Telephone Company collected approximately $720 per annum, rather than the $250 Taylor had estimated, from calls made over a line built and maintained at public expense. There was no compensation to the United States. In addition, the commission now had installed and maintained a government-owned switchboard in the home of Frank H. Carroll at Copper Center which served 386 miles of telephone line south of Rapids. The Comptroller General discovered that Carroll was an employee of the commission who worked as a telephone line repairman at a rate of $8 per day when actually needed. His wife, Wayla Carroll, served as commission telephone operator at a salary of $420 per year. The Comptroller General was shocked to discover that as additional compensation, Frank H. Carroll was permitted to charge individuals and business concerns for the privilege of connecting privately-owned telephones to the government line and retain the proceeds for his personal use. The Comptroller General estimated that this amounted to an additional $3,000 per year.[67]

65. Taylor to Ruth Hampton, November 24, 1937, ARC, box 65410, R. G. 30, Federal Records Center, Seattle, Washington.

66. Hampton to Taylor, November 30, 1937, Taylor to Hampton, November 30, 1937, Taylor to Hampton, April 14, 1938, ARC, box 65410, R. G. 30, Federal Records Center, Seattle, Washington.

67. Comptroller General to Hampton, April 14, 1938, ARC, box 65410, R. G. 30, Federal Records Center, Seattle, Washington.

The Comptroller General objected to this casual arrangement, and insisted that formal contracts be drawn up and the proceeds split between the private operators and the federal government. Taylor agreed to comply with the wishes of the General Accounting Office. The Fairbanks Telephone Company stated that in order to split the receipts, toll charges would have to be doubled to make it worth its time to handle them. R. J. Shepard, the superintendent of the Chitina commission office, recommended that a full-time operator be hired and the commission collect the tolls. He insisted that Wayla Carroll receive a civil service appointment as operator. The Carroll family had given 7½ years of excellent service to the commission; in fact, they had built their family life to fit the job, and therefore should be kept on. Mrs. Carroll was a paid observer for the U.S. Weather Bureau, and these duties fit in well with those of a switchboard operator. In any event, Shepard was anxious to get the matter resolved in a fashion acceptable to the General Accounting Office.[68]

In the middle of June 1939, Chief Engineer Taylor increased the toll rates for the Richardson Highway line by about 50 percent, and announced that the Fairbanks Telephone Company would collect the money under the terms of a contract. For the Carrolls the chief engineer drew up a formal contract. Taylor then asked the General Accounting Office to review the two documents, and if they were not satisfactory, indicate what changes were necessary. He asserted that the commission was anxious to comply with General Accounting Office guidelines, "even to the extent of abandoning the line if there is no other alternative." He was reluctant to do that, however, because the line passed through "a pioneer section where communication facilities are wholly lacking," and numerous small mine operators depended on this service. The General Accounting Office did object to the contract between the commission and Frank H. Carroll because it was for personal services in connection with the maintenance and operation of the telephone exchange at Copper Center for a fixed sum plus certain phone rentals. At the same time the commission contemplated using the services of the contractor as a lineman, when one was needed, at a wage of $8 a day. This not only involved dual employment and double compensation contrary to law, but also involved the expenditure of federal income which, by law, had to be deposited into the Treasury of the United States as miscellaneous receipts.[69]

The General Accounting Office had expended thousands of dollars in investigating and reporting upon a matter which involved about $3,000 per year. Unwilling to make exceptions for Alaska's unique circumstances, it destroyed a telephone system which, although primitive, had served the Alaska Road Commission and numerous residents very well for a number of years. It was not until radio communication came into use during World War II and made the primitive telephone system totally obsolete that Alaskans outside the most settled areas regained workable communications.

Slow Times in the North

Telephones were not the only elements of the twentieth century to suffer during the last half of the decade. Alaska was in a period of transition. The heavy use of the airplane and the decline of the mining industry enabled the Alaska Road commission to slowly discontinue maintenance on many shelter cabins, various short roads, and some trail mileage. In 1936, for example, the commission discontinued maintenance on

68. Taylor to Shepard, April 10, 1939, Taylor to Nash, April 10, 1939, Shepard to Taylor, May 1, 1939, ARC, box 65410, R. G. 30, Federal Records Center, Seattle, Washington.

69. "Notice to all Concerned," June 16, 1939, "Invitation For Bids," June 20, 1939, Memorandum by G. H. Skinner for Fred R. Geeslin, December 4, 1939, Elliott to Secretary of the Interior, December 27, 1939, ARC, box 65410, R. G. 30, Federal Records Center, Seattle, Washington.

projects from towpaths to roadways in which it had invested—for construction and maintenance over the years—a total of over $265,000. Most of these were individually quite small, but the Livengood tram alone had absorbed $63,455.39 of the commission's always insufficient resources before maintenance was discontinued. The commission also turned over numerous projects to other departments for continued improvement and maintenance, such as the Juneau-Sheep Creek road and the Sunrise-Hope connection.

Still, at the end of the 1936 fiscal year the commission boasted of 2,037 miles of road and tramroad, most of it suitable for automobiles, 1,630 miles of winter sled road, 7,151 miles of trail, and 314 miles of flagged trail. As of June 30, 1936, the commission had expended $22,958,891.09, of which $12,104,550.55 had been utilized for new work and $10,854,340.54 for maintenance and improvement.[70]

Although roads suitable for motor vehicle traffic took a growing proportion of commission work, there were regions in Alaska, however, where shelter cabins and trails continued to be important. The Bethel area in western Alaska was a good example. Located on the Kuskokwim River, the settlement itself was a supply center for villages throughout the region. H. M. "Big Hans" Hansen contracted with the commission for the construction of shelter cabins and the staking of trails. Work in these remote areas was difficult, at best. Hansen was to build a few shelter cabins, but noted that the construction material he had received was "all green and wet" at the time he handled it. He also told the commission that additional lumber needed to be purchased locally, at higher prices, to compensate for the shrinkage. He discovered, for example, that "none of the 8-inch lumber measures over 7 inches; there is also a lack of extra lumber to take care of the door and window casings."[71]

Hansen was an experienced builder. He recommended double-pane windows, celotex, and building paper. Solid insulation was a necessity, he pointed out, because there was little heating fuel along the trails.[72]

Staking trails with pipes in the region had been a failure, Hansen stated, because most of the pipe driven into the ground between the Bethel-Goodnews Bay trail leaned at a 45-degree angle. The metal pipe was a perfect conductor for the sun's heat, thawing the permafrost to the bottom of the pipe. Strong winds, common in that section, caused the pipes to lean over. None of the pipe had been driven less than 3 feet into the ground. Whenever the ground had proven too hard to drive the pipes that deep, workmen had built tripods, and these had withstood the climatic elements exceedingly well. Hansen recommended the erection of tripods to mark the trail from Johnson River to Kinak village, and from Bethel to Nuntchak. Hansen offered to put tripod markers on the trails for $32.00 per mile, with tripods 500 feet apart. Since there were not enough iron pipes on hand, Hansen proposed to use spruce poles to make up the shortage. Hansen also offered to build the shelter cabin on the Johnson River to Kinak village trail, including two extra windows, a stove, and stove pipe for $500.00, "work guaranteed and job complete before July 1, 1937—but will not take the job for day labor. This is the best I can do and if satisfactory with the A.R.C. let me know at earliest date. All my work is guaranteed or no pay."

Hansen's offer was acceptable to Chief Engineer Taylor, although he reminded Fred J. Spach, the assistant engineer of the commission in Anchorage, that it still was necessary "to write up invitations and call for bids at Bethel." This was a necessary legal formality, Taylor implied, and continued that Spach should send Hansen "an invitation direct and it will, of course, be necessary to

70. *Annual Report of the Alaska Road Commission, 1936*, pp. 10, 14-16, 19, 21-24, 26-28, 30, 33-35.

71. Spach to Alaska Road Commission, November 28, 1936, ARC, box 65637, R. G. 30, Federal Records Center, Seattle, Washington.

72. *Ibid.*

explain to him that it is impossible to give him the work on contract without formally calling for bids." The commissioner awarded Hansen the contract for building the shelter cabin in that same year, and the one for trail staking in 1938.[73]

The Cook Inlet-Kenai Peninsula Region

Although nobody had any inkling that the Cook Inlet-Kenai Peninsula region would go through dramatic growth in the post-war period, settlers already had started moving into the area in the late 1930s. The region's towns still were small. Anchorage, for example, had a population of only 2,736 in 1930, and Seward a modest 835. By 1940, Anchorage had almost doubled to 4,229 souls, and Seward had registered a small increase to 949 residents.[74] M. C. Edmunds, the commission superintendent in Anchorage, noticed the growth on the Peninsula on a visit to Homer in early 1939. While there, he attended a meeting of the Homer Civic League, whose members told him that there had been an influx of families into the Homer district within the last two years. Since all the lower benches in the vicinity already were homesteaded, these folks had taken out land on the higher benches to the west of the settlement. No roads existed to serve these newcomers, and eventually numerous spur roads would be required to reach the various homesteads. League members suggested that the commission should begin a survey for a road between Homer and Kenai, because that would let prospective settlers know where to locate.[75]

Taylor thought the idea of having settlers located along the line of a proposed road a good one—but "when we put in stakes for a road the people will reasonably expect that the road will be built soon." With the small funds available, he stated, the location had to be a short one so as not to disappoint the settlers.

At the end of 1939, the newly-formed Kenai Development League of Homer, Alaska, appealed to the commission, to territorial governor Ernest Gruening and delegate to Congress Anthony J. Dimond to funnel some territorial or Works Progress Administration money into their region. About 320 individuals resided in the area, and many needed immediate work relief. If funds could be obtained, these people could be put to work to build sorely needed roads connecting the homesteads to the already existing system. In addition, the Homer dock needed repairs badly. It was the community's only facility through which vitally needed supplies could be brought in. The league estimated that $18,000 would at least start the work. Superintendent Edmunds met with league members and listened to their requests, but cautioned that funds were limited.[76]

By 1940, however, the commission had started to build a road along the high benches where several newcomers had settled. This irked some of the older settlers, and John Brandvold, their spokesman, protested the location, stating that the road on top of the bench would be useless to those who had homesteads on the lower benches. Further-

73. *Ibid.*; Spach to Taylor, February 16, 1937, Taylor to Spach, February 23, 1937, Taylor to Spach, February 24, 1937, ARC, box 65637, R. G. 30, Federal Records Center, Seattle, Washington; *Annual Report of the Alaska Road Commission, 1937*, p. 40; *Ibid., 1938*, p. 44.

74. George W. Rogers and Richard A. Cooley, *Alaska's Population and Economy: Regional Growth, Development and Future Outlook*, Vol. II, Statistical Handbook (College, Alaska: University of Alaska, 1963), p. 27.

75. Edmunds to Taylor, February 17, 1939. The communication included the list of more permanent homesteaders in the vicinity, showing the sections where they were located. ARC, box 65479, R. G. 30, Federal Records Center, Seattle, Washington.

76. Taylor to Edmunds, March 9, 1939, Jones to A.R.C., December 9, 1939, ARC, box 65479, R. G. 30, Federal Records Center, Seattle, Washington.

more, the top of the bench would be blanketed by snow anywhere from 6 to 10 feet deep. The location along the side hill Brandvold and his group had asked for would be "bare of snow entirely and this road will be bare at least three months longer each year than any of the roads that you can build on top of the ridge." What Brandvold and his group objected to was that they would have to climb to the top of the bench to reach the road and "go at least three times as far to get to the store and post office...."[77]

If the commission accommodated their wishes and built a road along their homesteads, the distance to the store and post office would be shortened by 3 to 7 miles. "That means a whole lot in the winter," Brandvold concluded, "when the days are short and the weather is cold and the snow is several feet deep."[78]

C. Arvid Swanson, a spokesman for the majority of the homesteaders in the Homer area, was acutely embarrassed by the complaints of Brandvold's group. He assured the commission that the majority of residents realized that road building funds were limited and not everything desirable or needed could be accomplished in a year. In short, most everyone agreed that "the Road Commission is doing a fine job and the majority are more than pleased with the way the work is progressing."

Taylor was pleased with Swanson's assurances, and told Brandvold that "no subversive influence has been brought to bear to cause the road to be located along the top of the bench rather than to build the long grade up the hill" as his group had desired. With the large number of settlers in the region it was "impossible to provide a road to each man's homestead and it was felt if we could get in the main roads that each individual homesteader could then reach the road nearest to him."[79]

Obviously, the commission had carefully considered the various alternatives. They decided, as in other cases, to put very limited funds into the construction of trunk roads in the best location to serve the greatest number of people.[80]

Unfortunately, it was apparent that appropriations for the Alaska Road Commission under the Department of the Interior were consistently less than what they had been the last ten years under the War Department administration. The years from 1932 to 1941 were extremely lean ones for the commission, and all it was able to do was to maintain some 2,200 miles of low-standard roads, with small improvements, and try to maintain the 10,000 miles of trails which had been constructed by 1932. The commission had been able to discontinue maintenance on some trail mileage during this decade and use the savings for small improvements to existing roads. The commission submitted adequate estimates to the Department of the Interior each year, but nobody there really fought for the agency before Congress, except Alaska's delegate, Anthony J. Dimond, who had submitted a ten-year $20 million road construction plan to Congress in 1936.

Early in 1938 Delegate Dimond tried again to aid Alaskan road construction when he testified before the Subcommittee of the House Appropriations Committee concerned with the activites of the Department of the Interior. He opened his remarks by stating that it was very difficult to make anybody understand the need for roads in a country which had so few. The Department of the Interior had budgeted a mere $535,000 for the Alaska Road Commission for 1939. That amount, Dimond pointed out, was not even sufficient to maintain the existing system, and "if we are going to develop Alaska, we must have more money for roads. We are simply at a standstill with $535,000."[81]

77. Brandvold to Taylor, June 16, 1940, ARC, box 65479, R. G. 30, Federal Records Center, Seattle, Washington.

78. *Ibid.*

79. Swanson to Taylor, July 8, 1940, Taylor to Brandvold, July 13, 1940, ARC, box 65479, R. G. 30, Federal Records Center, Seattle, Washington.

80. *Ibid.*

81. *Cong. Record*, Appendices, 75C., 35, pp. 1382-1385; *Annual Report of the Alaska Road Commission, 1939*, p. 1.

Dimond asked for many other items, such as funds for the construction of emergency airfields and airports, for the rehabilitation of the Alaska Railroad, and for defensive installations, among others. Dimond told his colleagues that Alaska was situated on the direct line between the Orient and the United States. Should a hostile power seize Alaska, it would be within "a nice comfortable airplane range" of Seattle, Washington. Alaskans demanded to be protected by their government, because without that protection they knew that they would be the first victims should war break out. Congress did not respond. As planned, it appropriated $535,000 for 1939.[82]

The decade of the 1930s showed that the chief pattern of transportation development in the territory still held true: there was not enough money to accomplish the work Alaskans wanted. Only during the pioneer period, with the feud between Richardson and Wickersham, had this continuing problem taken the form of a dispute between individuals. After World War I, the struggle over money and what exactly to do with what funds there were, became more one of territorial residents against what they saw as an unresponsive system. Congress may have thought to bring rational management and appropriate federal control to northern transportation with the 1932 transfer of the Alaska Road Commission from the War Department to the Department of the Interior; surely they assumed that now more of the federal expenditures could be recovered as Alaskans began to pay for their own systems. But a closer look at some of the events of the 1930s shows that Alaskans did not share the federal view—and were quite willing to break the law to prove it.

82. *Ibid.*

10 Tolls on the Richardson Highway

For years, Congress and the federal government had been dissatisfied with Alaska's uneven, slow development. As early as 1913 Secretary of the Interior Franklin K. Lane had called for the creation of an Alaskan development board. Subsequently, Interior and its congressional friends urged a reorganization of the federal bureaucracy in the North. Many draft bills were proposed to establish a board comprising major bureau and agency heads and other federal officials who could recast federal activities in a major fashion and make other basic decisions subject to the approval of the Secretary of the Interior. Misunderstandings on the part of Congress and infighting among bureaucrats doomed these efforts, however, and while Congress struggled with the concept of development boards, Interior tried temporary solutions, which led to the consolidation of the Alaska Railroad and the Alaska Road Commission in the spring of 1923. By May of that year the railroad and the Road Commission used each other's men, equipment, and supplies interchangeably.

James G. Steese, president of the Alaska Road Commission at that time, directed the merged transportation agencies. He was pleased with the merger, and thought that it immediately speeded development work according to a unified plan, and better yet, decisions could be made quickly in the field. Six months later, in October 1923, the consolidated operations ended. The Alaska Railroad had many problems; probably the most important was the line's poor condition. Upheavals in management continued to shake the railroad, and its troubles did not end until the appointment of strong-willed and industrious Otto F. Ohlson as general manager in 1928. In response to heavy congressional pressures for economy, Ohlson ran a tight operation. He consolidated sections and discontinued stations, bought used rolling stock, and most important, raised freight rates—to the ire of Alaskans. Soon, Ohlson fought competing trucks, busses, boats and airplanes, mostly for the summer traffic because the tough winters made operations for all but the railroad nearly impossible. The competition hauled almost entirely high-value perishables, first class freight, and passengers. Competition started in earnest in 1931 after Congress had mandated drastic rate increases designed to put the railroad on a self-sustaining basis. Competition continued despite the railroad's low summertime rates and a system of licensing and tolls on the Richardson Highway. And as competition continued, the emotional level grew until the truckers became the heroes, and Ohlson and the railroad the villains, of Alaska transportation.[1]

Only as a last resort did Ohlson accept the idea of a toll on highway tonnage. The Department of the Interior received its authority to regulate traffic and impose license fees and tolls in the 1932 transfer of the Alaska Road Commission from the War Department. Now, one administrative head possesed the power to control the competition for traffic between the Richardson Highway and the Alaska Railroad. The transfer act also contemplated an equalization of rates between the railroad and the highway transportation system to discourage the diversion of passenger and freight traffic from the railroad to the highway. Until the 1932 transfer, no formal

1. Wilson, *Railroad in the Clouds*, p. 207.

regulations governed the speed, weight, or type of vehicle on Alaska's roads. Regulations were needed to protect the system, particularly during the soggy breakup season when the roads became very soft, against the ever more powerful and heavier cars, busses, and trucks. On February 15, 1933 the secretary adopted regulations governing the use of the Richardson Highway. Subsequently amended on June 13, 1933, they were designed to accomplish three goals: I) regulate the weights of vehicles, 2) limit the size of vehicles, and 3) set up a system requiring all vehicles to be (and to pay for being) registered and licensed. The purpose of these fees was to aid in the maintenance of the road and reduce the direct competion of the common carriers on the highway with the railroad. Failure to comply with the regulations established by the Secretary of the Interior would perhaps have constituted a crime. However, since the act contained no express language on the subject, the courts probably would not have sustained any attempt to make a violation the basis for prosecution.[2]

Alaska's governor George A. Parks was confused about the various proposals by the Department of the Interior to issue new rules and regulations. Nobody had informed him; whatever information he possesed had been obtained from press notices. Parks guessed, however, that these proposals were designed to equalize the rates of the Alaska Railroad and those charged by carrier on the Richardson Highway. The governor predicted that it would be difficult to fix tolls. For example, bus companies operating between Fairbanks and Valdez charged $10 for a one-way ticket at the height of the competition in 1932, while the railroad cost $47 from Seward to Fairbanks. Many Alaskans lived along the highway and traveled a great deal; obviously they did not compete with the railroad. Additionally, several hundred individuals from Fairbanks and coastal points made weekly trips along the highway for recreational purposes. Many Fairbanksans owned summer cabins at Harding or Birch lakes some 60 miles south of Fairbanks, and others made fishing excursions to Paxson's roadhouse, a point almost midway on the highway. None of these people competed with the railroad, and therefore should not have to pay tolls. Furthermore, imposing tolls suggested that the government assumed the obligation to keep the road open at all times for traffic. Would claims accrue against the government in the event of washouts or slides? These likely hazards might delay traffic for several days and cause carriers who had paid tolls at Valdez to lose loads of perishables.[3]

This was not all, however, for how should tolls be collected? During the practically continuous daylight of summer, traffic was underway at all hours of the day and night. The law restricted employees to eight working hours per day. Since preliminary investigation revealed that tolls would have to be collected at two points along the highway, this necessitated stationing three men at each station unless the road was closed for a certain period each day. In conclusion, Parks recommended that Ohlson be instructed to direct his traffic manager to study the problem carefully and cooperate with the governor's office in preparing recommendations for approval by the Secretary of the Interior.[4]

If the governor was confused, so was the Department of the Interior. I. K. Burlew, the adminstrative assistant to the secretary, maintained that local traffic should not be charged but that busses and trucks—acting as common carriers in competition with the railroad—should be; tolls should be collected through a license system because hiring a collection staff would be too expensive. Colonel Ohlson traveled the highway in early July and reported that the low rate of $10.00 in effect at the beginning of the season had been increased to $25.00 for a one-way ticket between Valdez and Fairbanks or between Chitina and Fairbanks. Since the railroad charged $47.05 for a one-way trip from Seward to Fairbanks, the proposed toll had to be the

2. *Ibid.*, pp. 210-211.

3. Governor George A. Parks to Secretary of the Interior, July 5, 1932, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.

4. *Ibid.*

difference of $22 to be effective — but that, he warned would trigger serious protests and antagonistic feelings among northern residents. Echoing Governor Parks, Ohlson stated that Alaskans would argue that imposing tolls would obligate the government to maintain the highway in good condition. Ohlson asked that he be permitted to lower the freight and passenger rates to Fairbanks to a competitive level while the Richardson Highway was open during the warm season.[5]

By the end of August 1932, Interior made some recommendations about tolls on the Richardson Highway:

1. That the department proceed with due caution as to precedent regarding highway tolls, giving regard to recent practice on toll highways and bridges.

2. That pleasure cars on single trips, as well as personal vehicles belonging to residents along the highway, should not be charged tolls.

3. That tolls be charged busses, trucks, or any type of common carrier for hire.

4. That tolls should not be charged to the extent of the amount needed to make the railroad competitive with highway traffic or freight haulage. No attempt should be made to equalize rates between the railroad and the highway.

5. Tolls, where charged, should be collected through a system of licenses, eliminating the need for a collection staff.

6. To make railroad haulage rates competitive with highway haulage, lower freight and passenger rates should be used while the highway is open.

Governor Parks and Colonel Ohlson considered these recommendations, but rejected all except the last one as impractical. Instead, both men advocated regulations governing the size and weight of all vehicles and the speed of all traffic. Such regulations, properly enforced, would reduce maintenance costs and render freight transportation from Valdez to the interior unprofitable except for certain perishable goods. These traffic regulations, together with lower railroad freight and passenger rates during the warm season, would solve the problem.[6]

In early December 1932, Interior decided to follow the suggestions of the two men to draft regulations governing vehicle size weight, and speed on Alaskan roads. But it also intended to include a schedule of registration and license fees for commercial passenger cars and trucks operating on the Richardson Highway. The preliminary draft would have allowed no wheeled vehicles exceeding 10,000 pounds gross weight, including load, to operate on Alaskan roads. Vehicles were restricted to 7.5 feet in width and 20 feet in length, including trailers. This provision was to protect the roads, particularly during spring breakup when heavy trucks caused serious damage. Alaskan bridges were sturdy, and therefore Interior restricted the moving load on any bridge to be no greater than 10,000 pounds for any vehicle having a length of not less than 14 feet. No more than two successive loads were allowed on any span at once. In addition, motor vehicles were to be operated at a safe speed and in a safe manner. No truck weighing more than 6,000 pounds was to drive faster than 25 per hour.[7]

Every motor vehicle operating on the Richardson Highway was to obtain a permit for a nominal fee of $1. In addition, each vehicle was to pay a license fee, the amount

5. E. K. Burlew to Judge Finney, July 7, 1932, Ohlson to J. M. Dixon, July 9, 1932, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.

6. Memorandum by Dobbel, Executive Assistant to the Secretary, August 20, 1932, Parks to Secretary of the Interior, October 11, 1932, Ohlson to Secretary of the Interior Lyman Wilbur, October 28, 1932, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.

7. Burlew to Ohlson, December 1, 1932, Regulations Governing Traffic On The Richardson Highway, Territory of Alaska, February 15, 1933, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.

depending on its classification. Class A vehicles, which included all conveyances used for commercial or pleasure purposes not listed in classes B and C, were exempt. Class B vehicles, those carrying from five to fifteen passengers, were to pay license fees ranging from $100 to $175, depending on their size. Class C vehicles up to 7,000 pounds gross weight were to pay $100, those above 7,000 pounds but below 10,000 pounds were to pay $150, and finally automobiles operating as Class B up to a weight of 7,000 pounds were to pay the minimum charge for their class, plus an additional $100. Shortly thereafter, the solicitor of the Department of the Interior discovered that there was no statute which provided penalties for the violation of these new regulations. He suggested that the department draft a measure for congressional approval to correct this oversight.[8]

In the meantime, American voters rejected the Republicans in the 1932 elections and chose Democrat Franklin D. Roosevelt as the new chief executive. Roosevelt's secretary of the interior, Harold L. Ickes, inherited Alaskan problems, including the regulations governing automobile traffic in the North and imposing license fees for use of the Richardson Highway. Ickes agreed with his predecessor's actions, and in reply to a protest from the city council of Fairbanks stated that American taxpayers for many years had paid the deficits incurred by the Alaska Railroad. He could see no apparent reason why the federal government should maintain a highway which further reduced railroad revenues. Although the fees to be charged would not cover the maintenance of the highway, nevertheless they would reduce the subsidy somewhat and above all would "show an effort on the part of the people of Alaska to share in the expense now carried completely by the taxpayers of the States."[9]

Alaska's newly elected delegate to Congress, Anthony J. Dimond, was unhappy with the imposition of license fees or tolls for the use of the Richardson Highway. Dimond was a tall, powerfully built individual who had grown up on his father's farm near Palatine Bridge, New York. Born in 1881, he finished high school in Amsterdam, New York, and completed an additional fifth year of schoolwork which qualified him as a teacher. Working on the farm, he taught an eight-grade country school during the winters, studied Latin and mathematics and also read law for about three years under the supervison of an Amsterdam attorney. In 1905, Dimond came to Alaska where he worked as a prospector, miner, teamster and waiter. In 1911 a hunting accident that nearly cost him his life left Dimond permanently with osteomyelitis, an infection of the bone, that was then incurable. Realizing that his prospecting career had ended, Dimond resumed the study of law and was admitted to the Alaska Bar in mid-December, 1912. Appointed U.S. Commissioner at Chisana, center of a recent gold strike, he became a law partner in a Valdez firm in 1914. He participated in civic affairs in Valdez and eventually won a seat in the territorial senate. In 1932 he ran for the delegateship against the incumbent James Wickersham and routed him in the Roosevelt landslide.[10]

The new delegate told Secretary Ickes that the whole scheme of imposing registration and license fees should be set aside and "no further order or regulation made except such as may be necessary to prevent the use of the road by trucks or cars as might not be suitable for the type of road which exists."[11]

In fact, he thought that instead of trying to prevent the use of the highway through fees and tolls, the Department of the Interior should encourage the use of the railroad by

8. Finney memorandum, March 7, 1933, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.

9. Harold L. Ickes, Order No. 640, June 13, 1933, and Appendices, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.

10. Mary Childers Mangusso, "Tony Dimond," *The Alaska Journal*, Autumn 1982, pp. 11-23; Dr. Marie Therese Dimond, Sister, Notre Dame de Namur, interview with Claus-M. Naske, April 20, 1975, Washington, D.C.

11. Dimond to Ickes, June 2, 1933, Ickes to Dimond, June 13, 1933, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A. (The regulations are given in the appendices.)

lowering its passenger and freight rates. Ickes was not moved by the delegate's arguments and repeated his belief that the federal government should not be required to build and maintain a highway to compete with its own railroad, which was losing money to boot. Indeed, Ickes thought that the fees should be extended to cover private passenger cars, as well as privately owned trucks carrying merchandise for their owners, and, as he informed the delegate, he had amended the regulations accordingly.[12]

Ickes had consulted Alaska's new Democratic governor, John W. Troy, on the automobile license fees for the use of the Richardson Highway. Troy had opposed the fee system, and on July 6, 1933, Ickes read an editorial in the *Daily Alaska Empire* entitled "An Unjust Tax," criticizing the Department of the Interior and the secretary. Ickes had been told that Troy owned the newspaper; as owner he presumably controlled editorial policy. Ickes wanted to know how the governor could reconcile this attack on the administration with the loyalty expected of a presidential appointee. The secretary lectured Troy that as an employee of the Department of the Interior he was not permitted to criticize a federal policy once it had been established. Troy obviously did not understand the temper of Congress, "although it has been expressed frequently and emphatically, with regard to Federal appropriations for Territorial support."[13]

Congress no longer wished to subsidize Alaska, Ickes stated. Alaskans had to realize that "self-support and the independence that goes with it is more important to their welfare than federal 'hand-outs'...." In fact, even those who believed that the federal government owed "Alaska a living must affirm that a liberal subsistence has been provided for many years."

The time had come, Ickes concluded, to measure the rights of Alaskan citizens against those of the taxpayers in the contiguous states and establish a mean "that is not disproportionate on either side."[15]

Governor Troy quickly assured the secretary that he no longer owned the newspaper referred to and, in fact, had not read the offending editorial. And in case he no longer could loyally support the administration, Troy stated, he would immediately submit his resignation. Ickes seemed to be satisfied with Troy's assurances, and that settled the matter. In the meantime, however, the Juneau and Fairbanks chambers of commerce vociferously objected to the toll system, so did political and civic organizations as well as individuals who called for the revocation of the regulations, claiming that while law-abiding citizens paid the license fees, others deliberately avoided them without punishment. And indeed, without amending legislation to provide penalties for violating the secretary's regulations, the government could undertake no prosecutions.[16] In the meantime, however, affected citizens complained.

Jack Warren, a homesteader near Fairbanks, was one such law-abiding individual who had paid the $101 license fee on his truck and $6 for his car. Living 24 miles south of Fairbanks on the Richardson Highway, Warren cut and sold firewood in the city. He did not object to paying the license fee—if everyone paid equally and the regulation was enforced. But he knew of 16 trucks that used the highway more than he did and yet their owners had avoided the required payment, enabling them to "profitably market their wood for less than I can, thereby getting all the business."[17]

Warren wrote Ickes that there were other trucks as well that traveled the entire length of the highway, competing with the railroad by

12. *Ibid.*

13. Ickes to Troy, July 20, 1933, Central Classified Files, 9-1-55, part 2, R. G. 126, N.A.

14. *Ibid.*

15. *Ibid.*

16. Troy to Ickes, July 30, 1933, James D. Cunningham memorandum for Burlew, January 25, 1934, Central Classified Files, part 2, R. G. 126, N.A.

17. Warren to Ickes, October 5, 1933, Central Classified Files, part 2, R. G. 126, N.A.

carrying freight from Valdez. They did not pay either. "Thus I pay a high freight rate for everything I use coming over the Alaska Railroad and *then* a high tax to get merchandise just twenty-four miles out on the highway," Warren complained. He demanded redress for this outrage, for only a few had paid the fees "while the others laugh at you and your regulation and at us, the poor *saps* who did pay it."[18]

Most motorists ignored the license fee requirements. And the department also found that it was unable to enforce the provisions regarding weight, safety, and speed.

For all the dissatisfaction with the prevailing license fee system, the federal government collected very little money. For example, in 1933 some 113 class A vehicles paid a license fee of $6 each for a total of $678, no class B licenses were taken out, and only four class C were paid, three at $101 each and one at $151, for a grand total of $1,132. Governor Troy readily admitted that the registered class A automobiles did not represent the total number of privately owned cars using the highway because the majority of owners simply did not bother to take out licenses. Several of these individuals not complying with the regulations had been reported to the U.S. District Attorney, but he had advised that he could not prosecute under existing laws. The governor urged the Department of the Interior to obtain legislation providing penalties for the violators, because those who obeyed the law increasingly resented those circumventing it. As a matter of fact, Troy thought that reducing railroad fares would do much more to divert passengers and freight from highway competition than license fees could ever hope to achieve. Although the governor opposed the licensing system per se, he realized that it appeared to be necessary for the purpose of diverting traffic to the railroad. He therefore proposed that only trucks, busses, or passenger cars hauling freight and travelers from Valdez to Fairbanks or vice versa be licensed and that all other vehicles be freed from these fees. Troy mentioned that all through-traffic on the Richardson Highway had to use the ferry crossing the Tanana River about 73 miles southwest of Fairbanks. It might be practical to establish a toll collection facility at that point where it would catch all commercial through-traffic. Secretary Ickes liked the toll idea and asked the governor to work out a rate structure.[19]

Troy thereupon proposed that all vehicles using the Richardson Highway be assessed a $5 annual registration fee, while commercial vehicles pay $5 per passenger and $2 per 1,000 pounds or fraction thereof for net loads. In the meantime, however, nothing could be done in collecting either licenses or tolls or in enforcing the regulations which had no penalty clause. The Department of the Interior appreciated the governor's suggestions, but had been unable to persuade Congress to define an offense and provide a penalty for the Richardson Highway situation. Furthermore, changing from a license to a toll system probably would have to be approved by the President, and still would not cover the use of the road at either end.[20] The question of the license fees was becoming very complicated, indeed.

Early in 1935, Ohlson and Ike P. Taylor, the chief engineer of the Alaska Road Commission, attended a conference in Washington, and, together with other department employees, proposed to strike at the truckers where they could be hurt most. They adopted Governor Troy's scheme to collect a toll at the commission-operated ferry across the Tanana River at McCarty (now Big Delta). Taylor recommended collecting a toll of 2.5 cents per ton-mile at the ferry. Thus the rate for one ton going the full distance was $9.27, a charge which they believed would return some traffic to the railroad. Truckers could refuse to pay, and they could not be prosecuted for nonpayment. But they could not cross the river until they paid. Secretary Ickes

18. *Ibid.*

19. Troy to Burlew, January 20, 1934, Ickes to Troy, June 7, 1934, Central Classified Files, 9-1-55, part 2, R. G. 126, N.A.

20. Thomas to Burlew, July 31, 1934, Central Classified Files, part 2, R. G. 126, N.A.

issued the new orders governing the "use of roads, trails, and other works" on March 25, 1935. They included the new tolls and deleted the license fees.[21]

The Valdez Chamber of Commerce and a sizable group of Fairbanks citizens protested the tolls even more vehemently than the fees. The chamber denied that the Richardson Highway represented a threat to the Alaska Railroad since freight deliveries occurred only during the open season from June 15 to October 15. Only 20 per cent of the total tonnage hauled over the highway during these short five months reached Fairbanks, while 80 per cent was transported to Copper Center and other points adjacent to the highway that were not reached by any other transportation. The chamber concluded that the tolls "are a rank discrimination entirely un-American and contrary to the usual procedure in the encouragement of the development of a pioneer country as no tolls are assessed on any other highway in Alaska."[22]

The Fairbanks citizens claimed that the tolls were confiscatory, not in the public interest, increased the living costs for interior residents, created unemployment, discriminated against citizens in the interior; further, the tolls were "un-American and an unjust burden upon the pioneer people of Interior Alaska." Some ninety-two petitioners asked President Roosevelt and Secretary Ickes to revoke the order "forthwith" and grant interior residents "their accustomed right to the free use of the Richardson Highway...."[23]

Despite these protests, the new system seemed to work, at least for a while. The truckers could not evade the toll station, for they had to cross the river. Highway tonnage destined for Fairbanks slipped from 734 tons in 1934 to 304 tons in 1935. Regular ferry collections for the crossing at $1 per vehicle decreased from $1,186 in 1934 to $967 in 1935. The new toll brought in a total of $2,856 in 1935.[24] But Ohlson's hopes were short-lived, because with financial aid from interested parties in Fairbanks and Valdez, the truckers soon regained the tonnage they had lost. By 1939 the trucking business boomed, and, confident of public support, the truckers were prepared to evade the tolls by subterfuge if possible and force if necessary. In September 1939 Clyde Gordon, a motor truck operator, reached the McCarty ferry with a load of fuel oil. Toll collectors Lloyd Hansen and Charles Simmons denied Gordon the use of the ferry when he offered payment only of the vehicle toll of $1. They demanded that he pay the 2.5 cents per ton-mile from Valdez to Fairbanks. Gordon returned to his truck which he parked some 200 yards south of the ferry landing and within a short time U.S. Deputy Marshal Einar A. Tonseth arrested him at the request of Frank Nash, the superintendent of the commission for the Fairbanks district. No complaint had been filed nor had a warrant for arrest been issued. The Deputy Marshal took Gordon to Fairbanks after forcing him to leave his truck south of the ferry. Once in the city, he was set free. Gordon thereupon filed a suit against the commission asking that the judge issue an injunction preventing the collection of tolls on the highway, insisting that neither Ickes nor the Alaska Road Commission had the right to impose tolls which were "designed to annoy, harass, and penalize" those transporting freight over the highway. What Gordon had failed to mention in his civil suit was that he had parked his truck in such a fashion that it blocked all other traffic. Only after he refused to move the truck did Tonseth arrest him. On July 26, 1940, U. S. District Court Judge Harry E. Pratt rejected Gordon's suit, stating that the Secretary of the Interior

21. Department of the Interior, Order No. 905, March 25, 1935, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.

22. Valdez Chamber of Commerce to Ickes, February 9, 1935, Fairbanks Citizens to Roosevelt and Ickes, May 14, 1935, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.

23. *Ibid.*

24. Traffic on Richardson Highway at McCarty Ferry, December 6, 1935, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.

had the authority to level tolls and that he did not "act beyond the power delegated and that he did not act capriciously and arbitrarily."[25]

A month later Gordon appeared in the U. S. Commissioner's Court on a charge of disorderly conduct, based on his having again blocked the Richardson Highway at the McCarty ferry crossing just a few days earlier. This time Benjamin D. Stewart, Jr., a civil engineer with the Alaska Road Commission, signed the complaint on which the warrant of arrest was issued. U.S. Deputy Marshal Pat O'Connor made the arrest after Gordon parked his truck diagonally across the road in front of the toll booth. He refused to pay, and he did not do so until after he was arrested. Then the ferry took him across the river and he drove into town. The jury listened to the testimony and shortly thereafter returned its verdict of "not guilty." The jury verdict proved that there was much support for the trucker's position. In fact, after the verdict, commission officials were "somewhat up in the air as what to do in case the truck drivers try another such stunt, as it will apparently do no good to have them arrested and appears very doubtful if a jury could ever be secured in Fairbanks that would return a verdict of guilty, no matter how strong the evidence."[26]

By the summer of 1940, truckers sometimes unloaded their trucks at the river and shipped their loads across on a motorized, home-built scow defiantly waving a skull-and-crossbones flag. They then drove their empty trucks onto the ferry, paid the required $1 fee and reloaded after debarking on the north bank. Headlines in the *Fairbanks Daily News Miner* reported, "Truckers Refusing Toll Pay; Richardson Highway Battle Flares as Freighters Buy Boats."

Six Fairbanks trucking companies were determined not to pay the government tolls, and they had hauled a number of large motor boats to Big Delta to tow their scows. Alaska's acting governor, E. L. Bartlett, reviewed the situation for the Department of the Interior and suggested that an alternative toll station could be established at Shaw Creek, somewhat closer to Fairbanks than Big Delta. That would require the establishment of a separate organization there, however, and add to the costs. Bartlett also warned Washington that "the substantial and informed opinion at Fairbanks is, that no matter where a toll station is established or how it is established no jury could be found locally to convict a man for failing to pay the toll."

Before the department responded to this latest incident, six truckers, members of the Tanana River Transportation Company, arrived at the ferry crossing northbound in the early evening hours of September 15. The group lingered on the south side and made no attempt to cross the river on the commission ferry or on their own boats and small barge. Shortly before midnight, ferry operator Floyd Hansen closed for the night and remarked that "anyone wanting to cross the river could go ahead, use the ferry and take themselves across...."

The truckers took Hansen at his word and took their loaded vehicles across. They then gave Clyde (Doc) Gordon, the individual operating the gas boat and barge at Big Delta for the freighters, $5 to pay the ferry charge.[27]

Superintendent Frank Nash quickly replaced ferryman Hansen with Otto Bayles and instructed him to take along padlocks and chains to secure the ferry when it was not in operation. The truckers, however, continued to use the ferry without paying the tolls. In the early morning hours of September 20, Gordon and a few other men hooked onto the ferry with the trucker's power boat, called the *Paul*

25. In the District Court for the Territory of Alaska, Fourth Division, Clyde Gordon, Plaintiff, vs. Frank Nash, Lloyd Hansen, and Charles Simmons, Defendants, September 18, 1939, Nash to Juneau Headquarters, Alaska Road Commission, September 20, 1939, Central Classified Files, part 1, R. G. 126, N.A.

26. Opinion, Clyde Gordon vs. Frank Nash et al., July 26, 1940, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.; *Fairbanks Daily News Miner*, August 14, 1940; Nash to Juneau Headquarters of the Alaska Road Commission, August 16, 1940, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.

27. Wilson, *Railroad in the Clouds*, p. 212; *Fairbanks Daily News-Miner*, September 17, 1940; Nash to Juneau Headquarters, Alaska Road Commission, September 20, 1940, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.

Bunyan, towed six trucks across the river, and then returned the ferry to the south bank. The truckers continued to use the ferry whenever they arrived at Big Delta, either loaded or empty. Bayless kept the steering wheel locked, but made no attempt to lock it to the shore as it seemed likely that sooner or later violence would erupt and somebody would get hurt. Early on the morning of September 25, the *Paul Bunyan* broke down, so the truckers broke the chain and operated the ferry under its own power. A day later the Department of Justice dispatched U.S. Deputy Marshal Pat O'Connor to Big Delta to restore order.

O'Connor's presence did not intimidate the truckers; since they had succeeded before, they continued their assault on the toll system. Within a short time, the Deputy Marshal arrested fourteen truckers who refused to pay tolls. After each arrest, he allowed the driver to take his loaded truck across the river without toll payment and permitted him to proceed to Fairbanks on his own recognizance. U.S. Marshal Joseph McDonald jailed the men for a few hours, and then Judge Pratt released them after the prisoners had applied for a writ of habeas corpus.[28]

The joint trial of the fourteen men accused of disorderly conduct for allegedly blocking the Richardson Highway at the Big Delta ferry crossing lasted a day and a half before United States Commissioner William V. Growden. The jury of seven men and five women deliberated half an hour before returning a verdict of "not guilty." United States Attorney Ralph J. Rivers remarked in disgust that he had "just lost the first highway blockade case on an absolutely arbitrary acquittal by a local jury...."

In fact, most Fairbanksans considered taking the ferry as a protest against the toll as a type of "Boston Tea Party patriotism." Under the circumstances, with no provisions for punishing toll evaders on the books except the disorderly conduct statute, Rivers saw little sense in prosecuting additional cases.[29]

Rivers did not know it yet, but a day earlier, on October 14, a number of truckers seized Dennis Doyle, the U.S. Deputy Marshal stationed at Big Delta, took his shotgun and locked him into the commission scale house. They then moved ten loads of freight across the river on the ferry without payment of toll. After the truckers had finished their work, they released Doyle and gave him back his gun. There were no arrests. As soon as Rivers heard of the incident he declared that "assaulting an officer in the performance of his duty" constituted a felony with a maximum punishment of three years in jail or a $5,000 fine or both. Rivers planned to present the case to the grand jury. The issuance of warrants for arrest and subsequent trial in the district court, he stated, would depend on the return of indictments by the grand jury. A couple of days later, Nash ordered the ferry drydocked for the season because of low water and running ice in the river. Nash was relieved that his troubles had ended, at least for the time being.[30]

While the traffic on the Richardson Highway ended with the onset of winter, the paper war over tolls continued. Alaska's new governor, Ernest Gruening, was angered by this "latest carefully planned act of violence" and thought it essential "that justice be meted out to the culprits if the Department's highway regulations are ever to be enforced."

He suggested that the Department of Justice act "promptly and vigorously." If

28. *Fairbanks Daily News-Miner*, September 26, 30, 1940; Nash to Juneau Headquarters, Alaska Road Commission, October 1, 1940, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.

29. *Fairbanks Daily News-Miner*, October 3, 1940; Rivers to Nash, October 15, 1940, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.

30. *Fairbanks Daily News-Miner*, October 15, 16, 1940.

necessary, they should station a force of U.S. Deputy Marshals "sufficiently great to prevent a repetition of this latest performance."[31]

Gruening soon learned that the grand jury in Fairbanks had refused to return an indictment against the truckers because they considered the Richardson Highway toll discriminatory and retarding to the development of Alaska. The governor relayed the news to Secretary Ickes. He clearly was unhappy about the action of the grand jury, but apart from the toll evasion—which had cost an estimated $7,633 in 1940—there had also been the persistent overloading of trucks, adding further to highway maintenance costs. Obviously there was a toll rebellion on the Richardson Highway, and Gruening suggested that in the 1941 season the department should meet these challenges. Regardless of cost, Interior should enforce the regulations. Gruening had strong opinions on the subject,

31. Gruening to Ickes, October 25, 1940, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A. A summary of traffic at Big Delta for 1939 and 1940 and an estimate of tolls evaded in 1940 follows:

	1939	1940
Govt. Vehicles	342	417
All other vehicles	1,800	2,142 *
Total	2,142	2,559
Govt. passengers	761	691
Other Local Traffic	2,090	2,197
Other Commercial	2,920	3,578
Total	5,771	6,466
Freight Excl. Govt. Local Tons	31.95	9.00
Freight Excl. Govt. Through Tons	1,408.15	2,167.50 *
Total	1,440.10	2,176.50
Ferry charges collected	$ 1,800.00	2,093.50 **
Tolls collected	13,252.34	12,439.17 **

*These include vehicles and tonnage on which no ferry charge was made as shown below.

**Does not include established amount of toll and ferry charges evaded as shown below.

Estimated amount freight moved across river by other means than ARC ferry	481 tons
Estimated amount freight moved across river on ARC ferry by freighters who took over ferry and did not pay toll	270 tons
Estimated amount freight moved across river on ARC ferry by ferryman upon order of Deputy Marshal after he had arrested drivers for blocking road; no toll paid	72 tons
Total estimated freight on which toll not paid	823 tons
Vehicles crossed on ferry while being used by truckers - no ferry charge paid	49
Estimated toll evaded 823 tons 305,333 ton miles @.025 (Assumed all above freight moved Valdez to Fairbanks, 371 miles)	$7,633.32
Ferry charges evaded	49.00
Total estimated evasion	$7,682.32

The increase in number of vehicles crossing the ferry is partly accounted for by the fact that the road was open between Valdez and Fairbanks about two weeks earlier in 1940 than in 1939 thus increasing the length of open season about 10%. This also partly accounts for increase in freight hauled.

but throughout the winter of 1940-41 his superiors endlessly debated the question of what to do about the toll rebellion in far-off Alaska. Learned lawyers exchanged complicated opinions, and administrators simply scratched their heads. By April 1941 Secretary Ickes, although loath to admit it, had to confess that the federal government was powerless to secure compliance with the regulations "issued under law by the Secretary of the Interior and approved by the President."[32]

By May 1941 Ickes informed the governor that the Department of Justice had authorized the stationing of two U.S. Deputy Marshals at the Big Delta ferry. If these law officers were unable to control the situation, Gruening was to close the highway to all through-traffic. The governor thought that two deputies should be able to enforce the law, but warned that U.S. Marshal McDonald had connived with the truckers last year. He should be informed that unless he performed his duties he and his deputy marshals would be fired.[33]

Gruening was convinced that the toll rebellion would continue. Already, the truckers were constructing a big scow at Big Delta to be used to haul their trucks across the river. The governor had looked into the possibility of having the government withdraw all the surrounding land from entry, thus making it impossible for a rival ferry to operate. Unfortunately, some homesteads already had been claimed and the competing ferry would operate from this privately held ground. Other alternatives for collecting tolls existed not far from Big Delta in places where the road was narrow, with a cliff on one side and the river on the other. Discontinuing maintenance on the highway was another possiblity, for then it soon would become impassable. As a last resort, "a discharge of buckshot into one of the truck's gas tanks and tires would have a decidedly deterrent effect upon the violators," Gruening thought.[34]

By June Marshal McDonald reported that all was quiet at Big Delta because the truckers used their own ferry to cross the river and then resumed their journey north to Fairbanks. McDonald suggested that the commission establish a toll gate at Shaw Creek bridge, 12 miles north of Big Delta. At this point the road made a sharp descent to the river level, crossing Shaw Creek over a bridge. He offered to station his deputies there, but the commission was unclear about whether it had the authority to proceed in the matter.[35]

On July 18, 1941, Ickes adopted McDonald's suggestion and revised the regulations which now prohibited any vehicle transporting freight to pass Shaw Creek bridge without proof of payment of tolls. The commission constructed a toll gate, but the truckers presumably pulled it out and destroyed it. Before deputies could be stationed at Shaw Creek and a new toll gate be built, the truckers and the government reached an agreement. Until a court decided upon the validity of the tolls, the operators agreed to pay the toll which was to be placed in escrow. George W. Folta, the counsel-at-large for the department, negotiated the agreement. The truckers insisted, and Folta agreed, that the validity of the tolls be tested in U.S. Supreme Court.[36]

On October 17, 1941, the district court in Fairbanks upheld the validity of the tolls. But by the summer of 1942 there was no doubt that the tolls only added to the cost of supplies and

32. *Alaska Daily Press*, October 29, 1940; Gruening to Ickes, October 30, 1940, Ickes to Attorney General, April 10, 1941, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.

33. Gruening to Ickes, May 29, 1941, Central Classified Files, 9-1-55, part 2, R. G. 126, N.A.

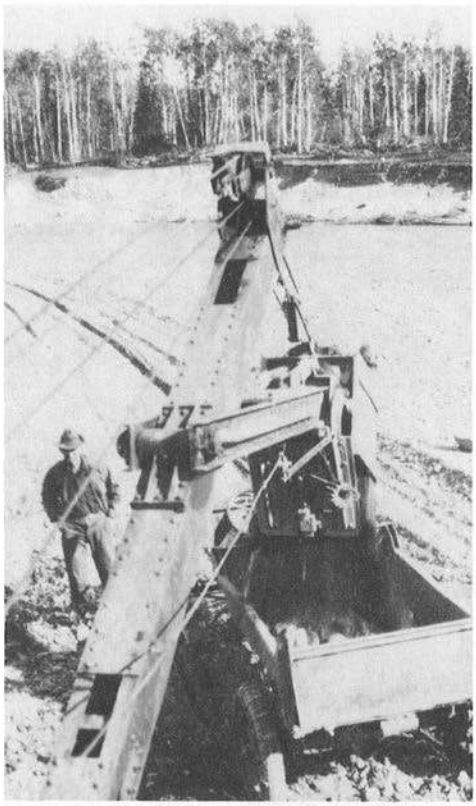
34. *Ibid.*

35. McDonald to Attorney General, June 16, 1941, Central Classified Files, 9-1-55, part 2, R. G. 126, N.A.

36. United States of America, Plaintiff, vs. Lawrence J. Rogge et al., August 15, 1941, Office File of G. W. Folta, Counsel-At-Large, Juneau, Alaska, R. G. 48, N.A. Folta to Margold, August 19, 1941, Central Classified Files, 9-1-55, part 1, R. G. 126, N.A.

equipment for federal wartime projects. Colonel Ohlson had his hands full moving an unprecedented volume of military freight and keeping his railroad from collapsing under its weight. The small amount of truck cargo destined for Fairbanks civilians no longer mattered. On July 15, 1942, Ickes removed the tolls, and they were never restored. The demands of war had disposed of the dispute.[37]

37. United States of America, Plaintiff, vs. Lawrence J. Rogge, et al., October 17, 1941, Order No. 1715, July 15, 1942, Central Classified Files, 9-1-55, part 2, R. G. 126, N.A.



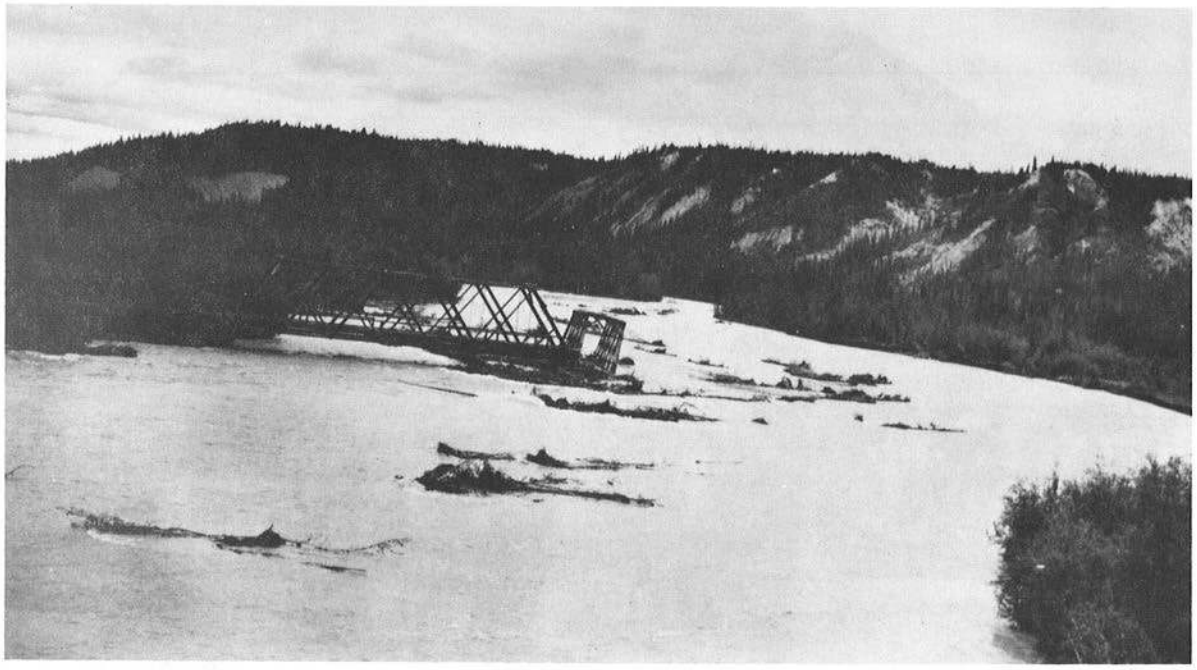
Dump shovel, Richardson Highway, early 1940s.
Ray Huddleston Collection, UAF.

Bulldozer moving rock slide, mile 43½ on the Richardson Highway, Valdez district, August 1940.
Ray Huddleston Collection, UAF.

Along the Glenn Highway, early 1940s. AMHA.

Construction camp at mile 68, Glenn Highway, 1944. AMHA.

Glenn Highway construction, 1944. AMHA.



Washout of the old bridge over the Tonsina River, mile 81. Ray Huddleston Collection, UAF.

Bulldozers lined up in the Valdez Road Commission yard, 1948. Ray Huddleston Collection, UAF.

Seward Highway completed at Girdwood, 1951. Alaska Railroad Collection, AMHA.

Opening of bridge over the Kenai River, Soldotna, early 1950s. Anthony Schuam, Victor C. Rivers, Robert B. Atwood, Z. J. Loussac, Governor Ernest Gruening, and General William E. Kepner participated in the opening ceremony. AMHA.

Angelo F. Ghiglione was promoted to the position of Commissioner of Roads for Alaska on July 1, 1951. He held the job until the Alaska Road Commission went out of business in September 1956. Ghiglione started work in Alaska in 1929 as an instrument man on harbor work in the panhandle. He rose through the ranks and became chief engineer of the ARC on January 3, 1949. He received a bachelor's degree in civil engineering from the University of Washington, and a master's degree in civil engineering from the Massachusetts Institute of Technology. During World War II he served as a commander in the U.S. Navy Civil Engineers Corps, where he was a contract officer for the 13th Naval District, overseeing approximately $100 million of construction in the northwest. Alaska Road Commission Collection, AHL.