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The Board of Road Commissioners for Alaska

1918 to 1924

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PREFACE

This narrative history of the Board of Road Commissioners for Alaska (or the Alaska Road Commission) is a continuation of the narrative submitted in December, 1981. The narrative's first segment comprised the pioneer period, 1905 to December, 1917. This narrative continues from 1918 through 1924.

The first man to travel the entire route of the Valdez to Prudhoe Bay corridor in a continuous journey may have been Harold Eide, a young, tough Norwegian who was given a map of a supposed gold strike by a friend of his in California. From an article he wrote in later years, we know a great deal about his trek. The year was 1917, and most of the more productive placer mining areas in Alaska had been worked out. Nome, Fairbanks, and other lesser centers of production were settling into a slow decline. Each year the territory's population dwindled further; there was little incentive for a man to go north to try his fortune. But Eide was footloose and unattached, and his friend's discovery had been made in an area that had not drawn many prospectors. It was a region where no major strikes had ever been made -- the rugged, remote Brooks Range which divides the forest-clad hills of the interior from the treeless tundra of the Arctic coastlands.

The young man had done some prospecting in the North earlier, so he already had some experience. From Seattle he steamed north to Valdez, enjoying enroute some of the grandest scenery North America offers along the famed Inside Passage route.

Once in Valdez, which was half buried under its heavy winter snow cover, Eide completed his preparations. If he waited until June, he could take a passenger coach, but he could not afford it. He intended to ski over the Valdez trail to Fairbanks, then proceed north from the interior city. His pack weighed 110 pounds when it was complete with grub, gear, sleeping bag, and blankets. A bit heavy, he reflected, but nothing a sturdy son of Norway could not handle. What is a journey of over 1,000 miles, when, at the end, there was a pot of gold to be gathered? Thus fortified by his expectations, Eide shook hands with a few well-wishers, shouldered his burden, stepped into his skis, and set off.

Outside of Valdez, the snow was deep and loose, and the going was consequently slow. The skier sloughed into the narrow

canyon that provided the opening into the interior, after taking a last look at Valdez, huddled into the snow below. "No chance of losing the trail, for the steep, timber-clad hills on either side hemmed me in like going through a tunnel."[1]

After three days of strenuous effort, Eide reached Glennallen and stayed overnight in the roadhouse there. This was a treat and a reward he gave himself for the ardours of the initial hard traveling days, and the camp making along the trail at night. The roadhouses along the trail offered all the comforts a weary traveler could desire. Nothing fancy -- but the basics: a bed, warm water for a wash, plain food and lots of it, and a drink for those who were so inclined. Eide was not inclined. Roadhouse comforts were not cheap, and the prospector could not indulge himself too often.

Pushing on the next morning, Eide had the trail to himself. He encountered no other travelers coming down from Fairbanks and therefore guessed that they were snowbound up the line. At East Trail Junction the roadhouse was jammed, with travelers bound north and south held up there, waiting for freshly fallen snow to pack so they could get a move on. Eide exchanged trail lore with the others, then moved on along his "lonely way." His way may have been lonely, but it was efficient, as his progress proved. From time to time he was able to overtake freighting sleds bound for Fairbanks and speed on ahead of them. Sometimes the sled drivers were in distress, with broken sled runnens which had to be mended under difficult conditions. Overloading was the cause of this. "It was a case of being too greedy," considered Eide.

Isabel Pass provided the next obstacle. For one with time to enjoy it, the summit provided a spectacular view of snow-covered rivers and mountainous grandeur. He stopped at Ivar's roadhouse, but there were no beds available. The proprietor's wife invited him to lay out his sleeping bag in the kitchen and he fell asleep "to the soft gurgling of the teakettle and the sweet smell of bread baking in the oven." Ivar was a keen dog

handler, and was quite willing to exchange sound dogs for ailing ones for any freighters who had the need. On their return trip from Fairbanks, they would usually find that their foot-sore canines had been restored to health through rest and Ivar's care.

Some travelers tried to keep their spirits high despite the hardship of the trail. Soon after leaving Ivar's, Eide encountered a group of merrymakers. He had been skiing into the night because the full moon gave ample light when he came upon a party gathered around a roaring campfire. They were entertainers and were whooping it up with music, whiskey and good cheer. "A man was sitting on something that looked like a throne atop a sled, swinging a whiskey bottle in time to music furnished by three bewhiskered, drunk performers dancing on the snow and playing their instruments at the same time." The man on the chair was going to Fairbanks to become the town's painless dentist; the others were cabaret performers. "Right now none of them felt any pain," Eide remarked ruefully, and he moved beyond the group rather disdainfully.

When the skier reached the Tanana River he had his best day's run -- a good 45 miles. The temperature hovered at about twenty below as he moved up the Tanana and then followed the Chena River, a tributary along which the gold town of Fairbanks was located. The little settlement was a glad sight and its twinkling lights signaled the welcome end to the first half of his journey. "All things have to come to an end, even the Valdez Trail." He went into the Blue Fox Cafe and ate a hearty, well-deserved meal. Other diners there gathered around, assuming he was the mail carrier, and called for the latest gossip from Valdez.

After four days rest, Eide was ready to set out for the North. The road to Livengood, about 80 miles northwest of Fairbanks, was good, because mining operations were being carried on at that camp all winter. On July 24, 1914, N. R. Hudson and Jay Livengood had discovered gold on Livengood Creek. Hundreds rushed to the camp during the winter of 1914-1915. From Liven-

good to Wiseman there was a good trail because traffic was maintained between the new and the older mining center. Wiseman was one of the two places within the Arctic Circle where mining had been carried on: the other was in the Chandalar country to the east.

His next halt was at Coldfoot, then called Slate Creek. Today it is the site of a pumping station for the Trans-Alaska Pipeline, but in 1917 it was a dying mining community. The traveler bought himself a handful of cigars and some chocolate bars "to chew on my lonesome journey." From this point his journey would be lonesome indeed. There would be no other travelers and no roadhouses beyond nearby Wiseman, and it was there that Eide purchased the last provisions he would be able to buy. Beyond this he would have to supplement his diet with game meat. His pack load now weighed 150 pounds but he had to provide all the necessary food to sustain himself on the remainder of the trail. He even bought a couple of pounds of nails to be used in the construction of a log cabin once he reached his destination. He rested for two days in Wiseman, but remained reticent concerning his plans. It did not do to talk too much, and he arose early on the day of his departure so that he would not be observed. "It was not smart to let people in on any new discovery or there would be too much company."

Eight more days of travel brought him to the place indicated on the sketch map his friend had given him. He set to work building his cabin, completing it by the first of July. His goal was to prospect through the summer, the return to Wiseman before winter.

Through the remaining weeks of the short subarctic summer Eide covered a good deal of ground while looking for interesting quartz out-croppings. He walked into the foothills of the Brooks Range near Anaktuvuk Pass and passed some time with the caribou-hunting Eskimos who had established a hunting camp there. (A few years later the Eskimos were to establish a permanent community at the same site. It was a good place for a village because it

lay astride the caribou migration route.) The Eskimos were not having any luck at hunting that day, so Eide gave them a hand with his trusty Krag rifle. He brought down two animals and kept a small portion of the meat for his own use. The Eskimos were getting ready to journey to Barrow by way of the upper Colville River, and Eide figured he had better get back to Wiseman. But first he wanted to have a look at the country beyond the pass, the area we now call the North Slope, and recognized as one of the most valuable oil regions in the world. Eide thought the country would be dull, flat, marshy, and unattractive, and was surprised at what his first glimpse revealed. "The view was so different from anything I had seen before, so beautiful, so intriguing, and so challenging to a young Viking, I just had to investigate it further." Lyricism came easy to the spell-bound man: "The midnight sun, low over the horizon to the north, painted hundreds of little lakes into fantastic redish gold. Slightly to the east, dozens of tiny fingers of water wiggled their way among the rocks to make the Sag River a contribution to the Arctic Ocean." Eide sat by his campfire fascinated, munching on caribou, and drinking in the view. "Caribou grazed nearby, unafraid of me. A couple of bears ambled past, down the slope toward the river, evidently bent on having fish for supper." He was no longer anxious to return to Wiseman. Instead he would cross the slope and have a look at the Arctic Ocean which was only 80 miles to the North.

Eide found the headwaters of the Sag River and began following its course to the sea. At first the going was good, the ground was firm and rocky, and the tall wind-blown grass was no impediment to his walk. The country seemed lush and prolific. Where, he mused, is the much discussed "desolate Arctic"? Everywhere there was wildlife within view - wolves, bears, caribou, foxes, and smaller animals. After camping overnight, he discovered his first hardship in overland travel. It was not anything very menacing, just water. Spongy ground, interminal swamps, and a network of small and larger lakes that seemed as complex as a particularly devised maze. He was up to his rear

end in water much of the time, and had to cross and recross streams whenever he spotted a grizzly bear along the banks. It was a cold, wet and fatiguing hike -- and the country appeared less attractive now. "I could feel the chill of wet clothes sticking to my body like the grip of death." That night he managed to find a little higher ground for a campsite. He got a brisk fire going, and soon his clothes were drying, coffee was brewing, and a caribou steak was sizzling in the pan. Things were looking up and there was even music -- self-produced on a harmonica he had carried with him all the way from Seattle. "The midnight sun spread its peace over the tundra with soothing colors of red and gold reflected on the ponds and river."

At the end of the next day, the young traveler reached his goal -- the Arctic coast. He blazed up a huge campfire to dry out his clothes, and by a remarkable coincidence, it attracted the attention of traders aboard a passing schooner. There were probably only about a half dozen schooners navigating the entire arctic at the time, but Eide had the good luck to encounter one of them and got a ride to Barrow, and eventually to the outside. His odyssey had been concluded successfully; the Valdez-Prudhoe Trail had proved to be servicable.

Eide's adventure of 1917 has been described at length here because it illustrates the condition of some of Alaska's roads and trails rather effectively. In 1917, Eide's mode of travel on the Valdez-Fairbanks Road was nearly unique. Off that major corridor to the interior, however, Alaskans were still accustomed to going by any means possible: on foot, by skis, by dog or horse-drawn sled, or by wagon.

Although World War I did not touch Alaska greatly, those years were transitional ones in many respects. Regular automobile and truck traffic loomed just over the horizon. Soon it would be possible to travel in comfort in one's automobile or by hired motor vehicles all the way from Valdez to Circle at any time of the year. As for crossing the Brooks Range, well, who would want to do that? Most Alaskans were content to have the road end at Circle.

Developments in the road system that were accomplished from 1918 to 1925 met some of the expectations of Eide's fellow travelers. Certainly the automobiles increased in numbers. Yet progress seemed painfully slow in expanding the sparse network of roads suitable for wagons, much less mechanized vehicles. Most of the thin ribbons marked as summer or winter trails on the maps did not blossom into roads through the work of the Board of Road Commissioners in those years. In fact, if maps had accurately reflected the changing conditions, they would have shown the obliteration of many trails and the impassability of large section of the roads. International events and the ravages of nature were the chief setbacks to the territory's road program.

In 1917, after the United States joined the European war, the American Army's highest priorities did not include the maintenance of Alaska's transportation system. Several years passed before cuts in appropriations were restored to pre-war levels.

The resignation of General Wilds P. Richardson on December 29, 1917, closed the pioneering period of the Board of Road Commissioners for Alaska. Richardson, President of the Board from its inception in 1905, had supervised the road and trail work with remarkable persistence and dedication. His administration did not go uncriticized -- most notably by the Alaskan delegate to Congress, James Wickersham, whose continued fulminations have been detailed in the first section of this history -- but his direction achieved outstanding results, and established the pattern for road developments for the following decades.

America's participation in World War I severed Richardson's connections with Alaska and disrupted the progress of road construction in the vast territory. While Richardon served with distinction in France and Siberia, his successor as Board President, Major William H. Waugh, had to carry on with sharply cut appropriations. Alaska's needs could not compete with the war.

While the war period of 1917-1920 was characterized by a lack of funding (appropriations were $100,000 for each of the

last two years of the war as opposed to the $500,000 Richardson had received for each of the last two years of his tenure), other events signaled momentous changes and developments for the future. The advances continued despite the war. Numbers of automobiles using Alaskan roads increased dramatically, and created pressures for suitable highways. Simultaneously, there were great leaps foward in the development of mechanized equipment for road work. Taken together, the two developments mark the war period as one of great significance in its foreshadowing of events, despite the low ebb of funding for the era that separated pioneer from modern times.

A history of Alaska's roads cannot be limited to considerations of the technology of the building and maintenance of surfaces, culverts, and bridges. Roads are as much an index of social change as they are of technological progress. Of all the changes in patterns of national life that occurred in the early decades of the twentieth century, none has been more dramatic and far-reaching in its results than the success of the autmobile. Henry Ford's first automatic assembly lines started up in January of 1914, thereby determining the future of road transportation. Years before, when autos were still being made individually, Thomas Alva Edison announced that "the horse was doomed," but when Ford coupled his assembly methods with a five dollar daily wage for his workers, he initiated a sweeping social revolution.[2]

Against this background of transportation advances, it is interesting to review the perceptions of the Board of Road Commissioners for Alaska as the automobile revolution moved north at an ever-accelerating rate. Early mentions of the automobiles in the annual reports have a foreboding ring. At first glance it appears as if Board members felt themselves burdened enough with the formidable logistics of the territory's expanse and had reason to dread an innovation that threatened to transform their heroic pioneering work to a derisible level of attainment. Actually, the writers were paying lip service to the stern limits of their duties to provide military routes. By law, if not in

practice, private travel was not their concern. Thus their reports cautiously denied any responsibility for the new social phenomenon: "The use of automobies has not been encouraged by the Board, but the number of such vehicles in Alaska is growing rapidly from year to year."[3] This cautious disclaimer of any intent to foster automobile use in 1918 had been made in earlier reports and was to be repeated, but the members were not really ignorant of events nor resistant to a clearly determined course of history. While the Board conceded that automobile use "has greatly increased the cost and difficulty of maintaining the roads," they also realized that "the value of quick transportation is recognized."[4] Obviously the conscientious Board understood its responsibilities: "It is hoped that sufficient funds may eventually be appropriated to permit the Board to undertake a general prospect for the sufficiency of all the most important roads."[5]

By 1918 the Valdez-Fairbanks Road and the Willow Creek-Chitina branch were regularly used by automobile stages during the summer months. Gravel surfacing and improvements in grading over the previous two years made the wagon road suitable for stage vehicles, but the Board did not claim to have produced a road suitable for use by private automobile drivers. "Much improvement in the way of surfacing will have to be done before these and similar roads throughout the territory can be claimed as automobile roads," admitted the Board.[6]

Road and trial statistics were fairly impressive. A total of 1,006 miles of wagon roads, 673 miles of sled roads, and 2,346 miles of trails had been constructed, "giving access to practically every developed portion of Alaska."[7] Of course, much of the wagon road mileage had not been surfaced, but approximately 300 miles had at least been surfaced with gravel.

Another demand for increasing transportation facilities during the war period was not yet urgent in 1918, but its pressure cast a long shadow. The construction of the Alaska Railroad from Seward to Fairbanks was well underway. The railroad would

eventually carry passengers and freight over a route roughly paralleling a good proportion of the Valdez-Fairbanks Road. Conceivably, the railroad's use could reduce the traffic burden on the road, but it would also create demand for more roads elsewhere. Every community near the railroad route considered that the Board was obligated to provide a feeder wagon road to the railroad. Such feeder roads made economic sense, as the Board acknowledged, but after making an equitable allotment of budgeted funds to communities adjacent to the railroad, much remained to be done. "It is believed," the Board reported in 1918, "that the construction of the feeders constitutes a separate problem on which special provision should be made by appropriation or otherwise."[8] Clearly the Board was not simply passing the buck to Congress or other agencies in pointing out this problem. While Congress might be reluctant to provide a substantial increase in the road appropriation when railroad construction was requiring heavy funding, the need for feeder roads was a logical result of the railroad. Thus, in the short run, at least, the railroad promised to create more difficulties for the Board and its slender budget than it alleviated.

Brighter prospects of the 1918 Annual Report were included in the "machinery and equipment" section. Machinery purchased in 1918 included:

2 tractors, 12-25 horsepower
1 road grader, 8 foot
3 road graders, 6 foot
4 road drags, 3 way
4 auto trucks, heavy[9]

In the previous season employees of the Board had tested two old tractors of the track-layer type on a hundred-mile stretch near Fairbanks and demonstrated the adaptability of these machines for pulling graders and drags. Improvements in the Valdez-Fairbanks Road fostered the potential value of tractors. By 1919 the engineers determined that ten percent of the road

could be maintained with the aid of tractor power. The logistics were irrefutable and echoed Thomas Edison's forecast for the doom of horses. "At present each tractor is doing the work of eight horses, at a daily operating cost equal to the cost of feeding three horses."[10] The test showed conclusively that the tractor had numerous operating advantages over horses which only worked nine months a year, but ate all year long. Additionally, the tractor required fewer men for operation; fewer men required fewer supplies. And a tractor's wide wheels performed like a roller in forming a hard and compact roadway.

In 1919 the Board planned to double its machinery inventory.[11] Clearly, mechanization had arrived in Alaska.

One problem characteristic of the period was a scarcity of labor. In 1918 some work sections were understaffed by twenty to thirty percent. The availability of Native labor was beneficial. In 1918, some 40 Natives were employed on the Valdez-Fairbanks Road alone, and the practice of hiring continued over the entire history of the Board of Road Commissioners. As a cash benefit to the Native village economies, the seasonal hiring of Natives compared to the later employment of village labor by the Bureau of Land Management as forest fire fighters.

From a study of the Board's annual reports, a historian could summarize the superficial history of road and trail construction from 1918, but only in a shallow fashion. The established form of the document and the balance demanded by its purpose dictated a pattern of reporting. Reporters had to show pride in their actual accomplishments without diminishing the urgency of future needs. No overt deception was practiced in achieving such a balance. Roads and trails were never finished. Maintenance demands followed hard on the completion of any new construction. And in good years or bad, more money was always welcome, indeed needed.

But the historical record shows what the annual published report does not reveal. Extensive correspondence, masses of field diaries, and reconnaissance reports are rich in the

detailed underpinnings of the laconic annual summaries. Such records speak of frustrations, triumphs, and much grueling drudgery by the road personnel.

Consider the tragic story of Richard Feltham, a trader of McDougall who took a pack train of supplies into the Cache Creek Mining District (Susitna) where 30 small mining camps awaited provisioning. The trail was not good. Feltham had discovered that in May, 1917, when he lost his way, wandering around for 12 hours after losing sight of the trail signs before returning to McDougall without delivering his goods.[12]

Yet in June of that year he tried again. After several days, men went to search for him. "In the neighborhood of the old Hungryman Camp evidences of the man to find the way were pitiful to see," wrote on rescuer.

> Blazes on the trees running through the swamps in different directions showed plainly the vain efforts made to find a most obscure trail that would lead to Cache Creek. Finally, through the faithfulness of his pack horse, that was found standing in the trail with the saddle turned under him, attention was attracted to the man rolled in his blanket, about 50 feet off the trail. Stimulants aroused in him a recognition of his rescuers . . . but the effect was but temporary, and he died within a few hours.[13]

Tragedies can have meaning. To the miners of Cache Creek, the trader died because of the government's callousness and ingratitude. "The death of Dick Feltham," wrote one miner, "is grim evidence of the crying need of roads and trails in our district."[14] Over 200 men "are striving to develop a country rich in natural resources but greatly handicapped by the lack of roads." How can legislators and other responsible officials "stand back and permit a continuation of such a condition that calls for the occasional sacrifice of a life given in an effort to develop a country"? For 12 years the miners had worked in the area. Now they cried in anguish:

> We don't ask for boulevards and parks, but we want help in the construction of a plain, every-day dirt road that will

guarantee to get us home to safety . . . and won't leave us to perish as it did poor Dick Feltham.[15]

Cache Creek miners had petitioned the Board of Road Commissioners in March, 1917, two months before Feltham's death. They had also petitioned the territorial Legislature, asking their representatives to memorialize the Board of Road Commissioners. Eventually the miners got their road.[16]

Other records reveal less dramatic episodes of road work. There is, for example, the work of John H. Joslin, the supervisor for the Circle road work during the summer of 1918. He established his first base camp at Birch Creek ferry in June. With four men he repaired the road from Circle to the end three miles below Miller House. "The work cost nearly double what I expected for several reasons, one of which was . . . the poor quality of men available." The war affected local manpower: "I found it nearly impossible to get or keep the most indifferent labor, and this is true of all interior Alaska I believe."[17] Besides reporting to his supervisor on his ditch clearing and other work, Joslin made recommendations for regrading certain stretches and relocating others. And for want of anyone else on the spot more expert or impartial than he was, Joslin also advised on the district's long-range prospects: "Dredging and hydraulic operations . . . from all appearances will continue for many years, giving employment to about 200 people."[18]

The Cache Creek and Circle documents illustrate the prevailing attitude toward roads and trails. Local residents were optimistic, certain that a great economic future was the destiny of their region. Personnel of the Board of Road Commissioners had to beware of unsupported hopefulness, yet were dependent upon the information derived locally. The situation shows the uncertainty of the entire road and trail planning process, particularly in the mining regions of Alaska.

Even in normal times, the prediction of a mining region's longevity was hazardous, and no one anticipated the impact of the war on gold mining, the chief industry of the interior. Early in

the war, mining activities diminished because of the scarcity of labor. But the increased prices of equipment and rising pay scales were even more detrimental than the labor shortage. By war's end, mining had become unprofitable on any but the richest claims. The result was a sharp drop in production and a dwindling of population that continued until World War II construction prospects created a boom period again.

Alaskans were not immediately aware that the war had altered economic and demographic conditions so severely. If mining and other industries were declining, there were a number of ways to spark a revival. Of these ways, the improvement of transportation headed the list. It was easy and sometimes reasonable for Alaskans to equate trail and road improvements with their economic survival. Indeed, in some regions, like the Chandalar District north of the Arctic Circle, beyond the reach of roads, good trails, or easily navigable rivers, a promising mining industry languished for lack of transportation. Even basic food provisioning was difficult for miners along the southern slope of the Brooks Range, but the area's remoteness still caused a mini-stampede of 200 men in 1906. Some placer gold was produced, but a rosy, long range future was predicted for quartz mining. Quartz mining, however, required more machinery, particularly a stamp mill to crush the quartz. Miners were given a trail of sorts in 1910, and invested in a giant Allis-Chalmers four-stamp mill which was shipped via the Yukon River to Beaver. From Beaver the distance to the mines was 115 miles, a long haul for a 28-ton machine.[19]

Sporadic attempts over the next 20 years to get the huge mill to the mines were failures. Such equipment required a decent wagon road. Parts of the machinery were dismantled and reached their destination. Heavier parts were left along the trail. The mill was never placed in operation, and the quartz prospects of the region were not realized despite the investment of $200,000 by William Sulzer, the mine's chief backer.

A reduction in freight rates was the chief argument for improved trails and roads. Accurate determinations of such savings were not easily gained, but it was reasonable to assume that all road improvements reduced freight rates. For many years the Board's annual reports featured figures gathered in 1913 which "indicated that the direct savings in cost of transportation of freight during that year due to the construction of roads by the Board was $2,144,117."[20] But this money savings, reports affirmed, did not tell the whole story: "It is doubtful, however, if anything like that amount of freight would have been transported without the roads, and the indirect loss which would be occasioned by the restriction on output and development if the roads did not exist cannot easily be estimated."[21]

By 1919, the automobile revolution had occurred. It carried mail on 160 miles of the Richardson Road (in that year the Valdez-Fairbanks Road had been named for the Board's first president), from Chitina to Fairbanks. Other horse-drawn traffic diminished fast: "Approximately ninety percent of the traffic on the main wagon roads is handled by motor, which has greatly increased the cost of maintenance."[22]

That the very triumph of the automobile and the road's capacity to handle it carried a stinger in its tail was ironic, but understandable. Greatly increased costs of road maintenance were due to the technological changes in transportation which had occurred and the success of road engineers in adapting to such changes.

The Board had not exaggerated the quality of Alaska's roads, conceding that their roads "would not be considered good wagon roads in most sections of the country."[23] Plainly, automobile drivers were using the roads despite their inadequacy because the vehicles saved a significant one-third the cost of horse-drawn traffic per ton per mile. Low-standard wagon roads might be hard on automobiles, but the cost of feeding one horse for a day had reached a prohibitively high rate of $5.00. And the efficiency of animals remained what it had always been.

The Board's mechanization progress lagged behind that of the public and freighters for a time. It only acquired one new tractor, a Truxton car unit, and two new road scrapers in 1919. But the continued reliance on older equipment and horses was necessary because of limited funds. Appropriations for 1919 had been slashed. Road repairs cost three times what they might have, because tractors could not be purchased to replace horses. A report on dragging summed up the efficiency of tractors:

> In previous years it has been impossible to properly drag the many miles of road which are included in the section of each crew. When dragging was attempted, the roadhouse bills at $6 per day per man amounted to such a sum that it often became such an expensive operation that proper dragging was not practicable.
>
> The three 12 to 25 horsepower tractors and three-way drags have proven a great success, one trip over the road being equivalent to as many as four trips of the old type horse-drawn drag.
>
> The road between Fairbanks and Tenderfoot (75 miles) was maintained with two of these outfits last summer, and they were also used on road-grader work. Late in the summer a few trips were made by another tractor-drag unit operating between Tonsina and Willow Creek, 25 miles. This summer one of these units has been engaged all the time on dragging, one between Tonsina and Sourdough, 70 miles, and the other between Fairbanks and Sulchaket, 35 miles. The third outfit has done very little dragging, but is working very successfully south of McCarty, grading new road.
> Attached to the maintenance unit is a trailer of sufficent size to carry supplies of all kinds, a tent, a small cook stove, provisions, and the bedding of the two operators who are thus enabled to pitch camp at the end of the day's run without incurring prohibitive roadhouse bills.
> The average cost of the operation of these outfits was $1.36 per mile dragged, and $12.87 per day of eight hours. During last summer an average of nine miles were made per day, but this spring the average is being raised one mile. The average number of miles obtained from a gallon of distillate and gas is 0.77 miles, while the lubricating oil used averaged 98 miles per gallon.[24]

The Board of Road Commissioners bought equipment as it could in subsequent years, and enjoyed a windfall in surplus army

The Board of Road Commissioners bought equipment as it could in subsequent years, and enjoyed a windfall in surplus army equipment in 1920, including six two-ton trucks, six one-ton trucks, and six tractors.

Nature set certain obstacles to effective road maintenance. For all its scenic attraction then and now, the first 18 miles of the Richardson Road out of Valdez consumed a large chunk of the Board's budget year after year, and even in 1981 it still is expensive to maintain that stretch of road.

The Board expended nearly $30,000 each year 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 report is graphic on the summer 1919 flooding of what had always been the most expensive road in Alaska to maintain.

> 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 bowlders (sic), 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 road house 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.[25]

In 1920, the Board formalized the end of the war, and in fact, the entire period of its 16 year history, with the announcement of a comprehensive ten-year program. No more obvious sign of maturity could be offered than in 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; and 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. It is true that the board had proposed a similar but less comprehensive road plan in 1913. It had recommended the expenditure of $7,250,000 over the next 10 years. Through the year 1920 the amount actually appropriated, however, had totaled only $1,645,000, a sum which did not even come close to reaching the proposed goals. Only thirty percent of the monies requested for the plan's first seven 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 system were not even kept in repair, and some sections even became impassible.

The new planning proposal, however, was different. It represented the first real effort at long-range planning by the Board and its commitment to Alaska as well. For these, and the reasons 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 obstincy. As to economic 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 cass 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 to 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 or 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. These are described in detail below. 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. A number of roads of this type are described hereafter. 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. Detailed estimates of such maintenance is given below.

In presenting the program in detail, it is necessary to outline briefly the physical features of Alaska and the lines of communication already established. The portion of Alaska now under development naturally divides into the following districts:

1 Southeastern Alaska, embracing the island and coastal mainland east of the one hundred forty-first meridian. This district 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.

2. Copper River Valley, embracing Cordova, Valdez, and Kennecott and served by the Copper River Railroad extending to the summit on the Fairbanks Road.

3. Susitna Valley, embracing the country traversed by the Government Railroad in the Susitna Valley, including Seward, Anchorage, and Matanuska. The Alaskan Peninsula and Kodiak Islands are closely attached in development to this district and are included therein.

4. The Kuskokwim, embracing the lower Yukon Valley and the valley of the Kuskokwin west of the Alaska Range. This district is very meagerly provided with transportation facilities and the most important project of this program aims at its relief.

5. Yukon District, including Fairbanks, and the Yukon and Tanana valleys. This region is of high importance for development, as here must originate the most important tonnage for the Government Railroad.

6. Nome district, 1921 roads;

Project symbol	Name of Road	District	New construction	Remarks
			Miles	
A	Talkeetna, Takotna, Ophir, Ruby	Susitna and Kuskokwim	280	This road reaches from Ruby, on the Yukon, through the most promising mining district of the Kuskokwim, through Mount McKinley Park, to Talkeetna on the Government Railroad. Sixty miles of this route are already under construction. The most promising mineralized region of the Upper Yentna Valley is reached.

B	Davidsons Landing Kugarok, Candle	Nome	135	This road runs from tidewater through the Kugarok mining district to Kotzebue Sound at Candle. It is of the highest importance for the further development of the Seward Peninsula.
C	Roosevelt, Glacier, Riley Creek	Yukon	75	This road connects the important Kantishna mining district with the head of navigation on the Kantishna River and with the Government Railroad at Rileys Creek.
D	Eagle 40-Mile Boundary	...do...	50	This road is an extension of an existing road and improvement of a sled road to the 40-mile mining district fr Eagle. Connection will be made at the Alaska-Yukon Territory boundary with the Miller Creek Road to Dawson.
E.	Chatanika, Miller House	...do...	80	This road connects two old road commission projects, enabling traffic to pass from Circle on the Yukon to the Fairbanks district and serving as a very important feeder to the Government Railroad.
F.	Rampart, Hot Springs	...do...	21	This road connects two old projects connecting Rampart on the Yukon with Hot Springs on the Tanana.

G.	Gulkana, Chistochena	Copper River 40	This road is an important tributary to the Fairbanks Trail, is a part of a future main artery road from the Copper River Valley to the Yukon at Eagle, and makes accessible the promising Slate Creek mining district.

Under development roads, the most important possible projects are noted below:

Alaskan Peninsula. -- Wide Bay-Oil Fields, 25 miles. Reaches from Tidewater at Wide Bay to the oil fields now being prospected near Cold Bay.

Kenai Peninsula. -- Kenai-Homer, 70 miles. This road, with the completion of the Kenai mile 29, will give a system of roads to the Kenai Peninsula reaching every district and making connection with the Government Railroad at mile 29.

Susitna Valley. -- Talkeetna-Iron Creek, 45 miles. This road will connect an important mining district in the Susitna Valley with the Government Railroad.

Copper River Valley. -- Abercrombie (Copper River R.R.) - Katalla, 45 miles. Makes accessible the Katalla oil field to the port of Cordova, and especially necessary in case a railroad extension is not made.

Katalla-Cape Yaketaga, 80 miles. Reaches a new oil field now being prospected and otherwise inaccessible for development.

Yukon Valley. -- Forty Mile to Tanana Crossing, 60 miles. An extension of the Eagle-Forty Mile Road passing through an important mining district and reaching the valley of Tanana.

Susitna Valley -- Government Railroad-Valdez Creek, 50 miles. This road makes accessible to the railroad the important Valdez Creek mining district. This district is now reached only by a 70 mile trail from Meiers on the Richardson Road.

Copper River Valley. -- Nizina River to Nizina, 10 miles. This will include the Nizina River Bridge and make accessible the upper Chitina Valley to the Copper River Railroad.

Strelna to Kuskulana River, 16 miles. This comprehends the improvements of existing roads built by mining operators and makes accessible an important mining district in the upper Kuskulana Valley.

Chistochina-Chisana, 45 miles. This makes accessible the Chistochina Valley working to the road projected on this year's program from Gulkana to Chistochina.

Yukon Valley. -- McCarty to Forty Mile, 135 miles. This road would complete a through road from Dawson and Eagle to Fairbanks, and would pass through a very promising and undeveloped agricultural region in the upper Tanana Valley.

Circle to Fort Yukon, 80 miles. Makes accessible both winter and summer the important trading post of Fort Yukon. This settlement of 50 white and 500 natives is now reached by water in summer, and with difficulty over the ice on the Yukon in winter.

Chatanika-Livengood, 56 miles. This road makes accessible the important mineral developments around Livengood.

Beaver-Caro, 75 miles. Provides a line of traffic between the Chandalar mining district and the Yukon.

Fort Gibbon-Arctic City, 100 miles. Connects the valley of the Koyukuk with the Yukon Valley.

Eagle-Seventy Mile, 40 miles. Connects the Seventy Mile mining district with Eagle.

Nome District. -- Nome, Kugarok, 60 miles. Connects the Nome district with the Kugarok district and with the Davidson's Landing-Candle Road projected under this year's program.

Southeastern Alaska. -- Skagway-White Pass, 13.5 miles. This is an important international road, and by cooperative effort on the part of the Canadian Government would make travel by road from Skagway to White Horse possible.

Taku Landing-Boundary, 22 miles. This road, if prolonged by the Canadian Government, would permit travel from Juneau to Lake Atlin.[26]

Before discussing the Board's accomplishments under its new plan, something more should be noted of the public's role in road planning. The Board of Road Commissioners was a divison of the

U.S. Army, and was not answerable to Alaskans, yet the Board did try to respond to the public it served.

Alaskans have never been shy about making demands on the federal government. When the proprietor of Circle Hot Springs, a much frequented resort, 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: "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."[27]

Leach went on to complain that the Board of Road Commissioners for Alaska built a wagon road from Circle to a point 2-1/2 miles below the Miller House -- a distance of 46 miles, at a cost of over $100,000 yet failed in their promise to provide feeder roads to the side creeks and the Circle Hot Springs. Freighters and merchants had benefited from the road built and opposed the link to Circle Hot Springs, a region of immediate value for its agricultural products and future promise as a mining district.

Governor Riggs asked the Board members to consider Leach's request and they assigned John H. Joslin to make an investigation.[28] Joslin reported on the self-serving nature of some of Leach's statements, and the absurdity of giving 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 allottment for Leach's needs, but the Board pleaded lack of funds and refused to help Leach.[29]

Similarly, residents of the Circle mining distict 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 undesigned residents of the Circle District, most humbly pray that the Alaska Railroad Commission do everything within its power to hasten the completion of the auto-truck road from Chatanika to Miller House.[30]

The Board's superintendent for the Fairbanks distict, Hawley W. Sterling, approved the petition and asked the Board to allot as much money as possible to the project.[31] But Colonel James G. Steese, the new president of the Board, replied cautiously to the petitioners:

> 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 automotible road from Chatanika to Miller House) as rapidly as we should like to do so.[32]

And so it went, as the case histories show. Everyone suffered the frustrations of the reduced road appropriations, and the Board was just as ardent as the Governor and residents in believing that good roads meant prosperity.

Some of the bleakness of 1921-1922 was dispelled by the gains in equipment. In 1922 new equipment included:

3 Ford trucks
1 moving machine
1 tractor-drawn road grader
1 cylinder reboring machine

But the true equipment bonanza was in the acquistion of substantial quantities of surplus U.S. Army equipment, including 15 Dodge tractors, 6 White tractors, and 9 Holt tractors.

For the first time in its history the Board had enough equipment for work anywhere in Alaska. With some pride Board President Steese listed all the equipment owned in his 1922 report. He must have reflected upon the progress he could make if he had money enough to keep all the machinery going throughout the working season:

6 tractor-drawn road graders
17 horse-drawn road graders
3 air compressors
1 Bucyrus drag line
2 hoisting engines
4 pile drivers
40 double-ender sleds
3 jack hammers
6 radio outfits
8 trailers
8 road rollers
2 power saws
2 car tractors
20 Holt tractors
3 Titan tractors
1 Yukon tractor
70 wagons
5 winches
28 Dodge trucks
10 Ford trucks

6 GMC trucks
1 Gersix truck
4 Mack trucks
4 Pakcard trucks
2 Pierce Arrow trucks
2 White trucks
2 stone crushers
7 transits
3 levels
1 pile driver steam boiler
1 power driven pump
82 slip scrapers
10 wheel scrapers[34]

By 1923 the Commission 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 system at an estimated cost of $2,000,000. For the year 1921 some $425,000 was appropriated rather than the $955,000 requested; for 1922 only $465,000 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.[35]

Such statistics indicated that in the third era of the Board of Road Commissioners for Alaska from 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.

On this overall question it should be noted that Alaskans throughout their history as a territorial possession believed themselves to be victims of their limited political influence in

Washington, D.C.[36] Residents complained when the government did not provide the sevices 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 of the land. They expected trails, roads, railroads, telegraphs, and police protection as well. To a great extent the federal government met the expectations of Alaskans with large expenditures of public monies, 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 find that given the other national priorities at a given time, it was 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?

Funding for roads and trails was not limited to the annual appropriations made to the Board. About forty pecent 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.[39] Furthermore, as already discussed earlier, the territorial Legislature had started to deal with road matters in its first session in 1913, and 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 in 1923 to insure some cooperation among the various agencies with programs in the territory. The completion of the Alaska Railroad that year had suggested a potential conflict between the Board 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 of Road Commissioners to the two additional posts of Chairman and Chief Engineer on the Alaska Engineering Commission, the body managing the Alaska Railroad.[38]

On March 26, 1923, Board President Steese became the Chairman and Major John C. Gotwals assumed the post of Chief Engineer of the Alaskan Engineering Commission. This combined the road construction and railroad management.

Steese obviously was very pleased with the new arrangement and its streamlining,"hourglass" efficiency:

> The practical result of the foregoing orders has been the development, without legislation but through executive order or interdepartmental or interbureau agreement 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 where 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 following are the activities involved in this arrangement: the construction, repair, and maintenance of federal roads, tramways, ferries, bridges, trails, and related works now aggregating over 9,000 miles, and extending from open-all-the-year-round south coast ports to all inhabited parts of the Territory; Territorial roads, bridges, ferries, and trails throughout the Territory, covered by cooperative agreements; shelter cabins; Nizina River Bridge; Nome-Shelton Tramway (87 miles operated by cars drawn by dogs); Tolovana Tramway; Kaltag Portage Survey; Improvement of Nome Harbor; Improvement of Wrangell Narrows, Tolovana River, Yukon-Kuskokwim Portage, English Bay, and Gastineau Channel and adjacent waters; the investigation of port facilities; the survey and design for a government dock at Juneau; the issuance of permits for fish traps and other structures in the navigable waters along the Territory's 26,000 mile coast line; miscellaneous inspections, public hearings, and contingencies of rivers and harbors; improvement of Sitka National Monument; Development of Mount McKinley National Park; construction, maintenance and operation of the Alaska Railroad from Seward to Fairbanks, 470-1/2 miles; railway spurs to the Eska, Jonesville, Chickaloon, and Healy River coal mines, 46 miles; from Fairbanks to the gold creeks as far as Chatanika, 39 miles narrow gauge; Moose Creek coal spur, 4-1/2 miles narrow gauge; also river boat service on the Tanana and Yukon Rivers between Nenana and Holy Cross, 750 miles, with through billing arrangements covering freight service from Seattle or Tacoma to points on the Yukon River and its principal tributaries between the International Boundary at Eagle and Bering Sea at St. Michael; also an agreement covering automobile service on the Richardson Highway from Fairbanks to Chitina and Valdez, 410 miles; also operates coal mines, hospitals, hotels, and commissaries.

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, viseed, and then passed up to the various departments and bureaus under whose direction the particular work has been handled.[39]

By May of 1923, the railroad and the Board used each other's men, equipment, and supplies interchangeably. But because only the Congress could transfer the functions of the Board to the

Department of the Interior where the railroad was located, the two organizations continued to be treated separately for accounting purposes.[40]

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 tenure. These included the railroad's rickety condition. Their predecessors had poured their appropriations into construction and re-construction of the doddering Alaska Northern Railroad which comprised the first 70 odd miles out of Seward of the Alaska Railroad. They had also spent monies 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 enourage a permanent merger.[41]

The Board once again operated on its own, and the financial summary of June 30, 1923, gives full picture of the project funding for the 1919-1923 period:

FINANCIAL SUMMARY

Amount expended on all projects to June 30, 1923, including receipts from sales, etc:			
During fiscal years 1905-1922	$6,409,424.04		
Fiscal year 1923	618,869.62	$7,028,293.66	
Alaska special fund fiscal year 1930-1922	277,885.60		
Alaska special fund fiscal year 1923	121,212.87	399,098.47	
			7,427,392.13
Total for new work	4,277,696.99		
Total for maintenance	3,149,695.14		
Total expended		7,427,392.13	
Balance available		669,118.41	
Grand total to be accounted for			8,096,510.54

Appropriations to June 30, 1923:		
Construction and maintenance of military post roads, bridges and trails, Alaska		4,945,000.00
Wagon roads, bridges and trails Alaska fund	2,652,892.56	
Increase of Compensation, War Department		34,265.01
Receipts from sales, etc.	48,694.14	
Refunds to Alaska fund	3,187.18	
Refunds to War Department appropriations		2,120.49
Refunds to contributed funds	20.45	
Reimbursement from Navy Department		3,976.19
Sales, etc., to accrue to Alaska fund		7,276.50
Funds contributed by Territory of Alaska and towns, for public roads, bridges, trails and ferries, Alaska special fund	399,078.02	
Total	8,096,510.54	

Fiscal year ending June 30	1919	1920	1921	1922	1923
Expended for improvement and new work	$114,829.11	$185,190.66	$432,243.90	$236,251.91	$314,195.39
Expended for maintenance	184,195.15	173,410.59	234,545.28	446,995.77	425,887.10
Total Expended	299,024.26	358,601.25	666,789.08	683,247.68	740,082.40
Appropriated by War Department Acts	100,000.00	100,000.00	350,000.00	425,000.00	1,115,000.00
Allotted from Alaska fund	52,372.31	124,991.96	218,237.10	173,029.19	3,398.23
Contributed by Territory of Alaska and Others		115,517.94	113,746.61	56,421.05	113,412.87
Increase of Compensation, War Department			940.00	4,322.09	28,857.72
Total	152,372.31	340,510.90	682,923.71	658,772.33	1,291,668.82

Increase of compensation, Military Establishment - Continued.		
1921		$940.00
1922		4,322.09
1923		28,857.72
Total		34,265.01
Grand total, Federal funds		7,632,157.57

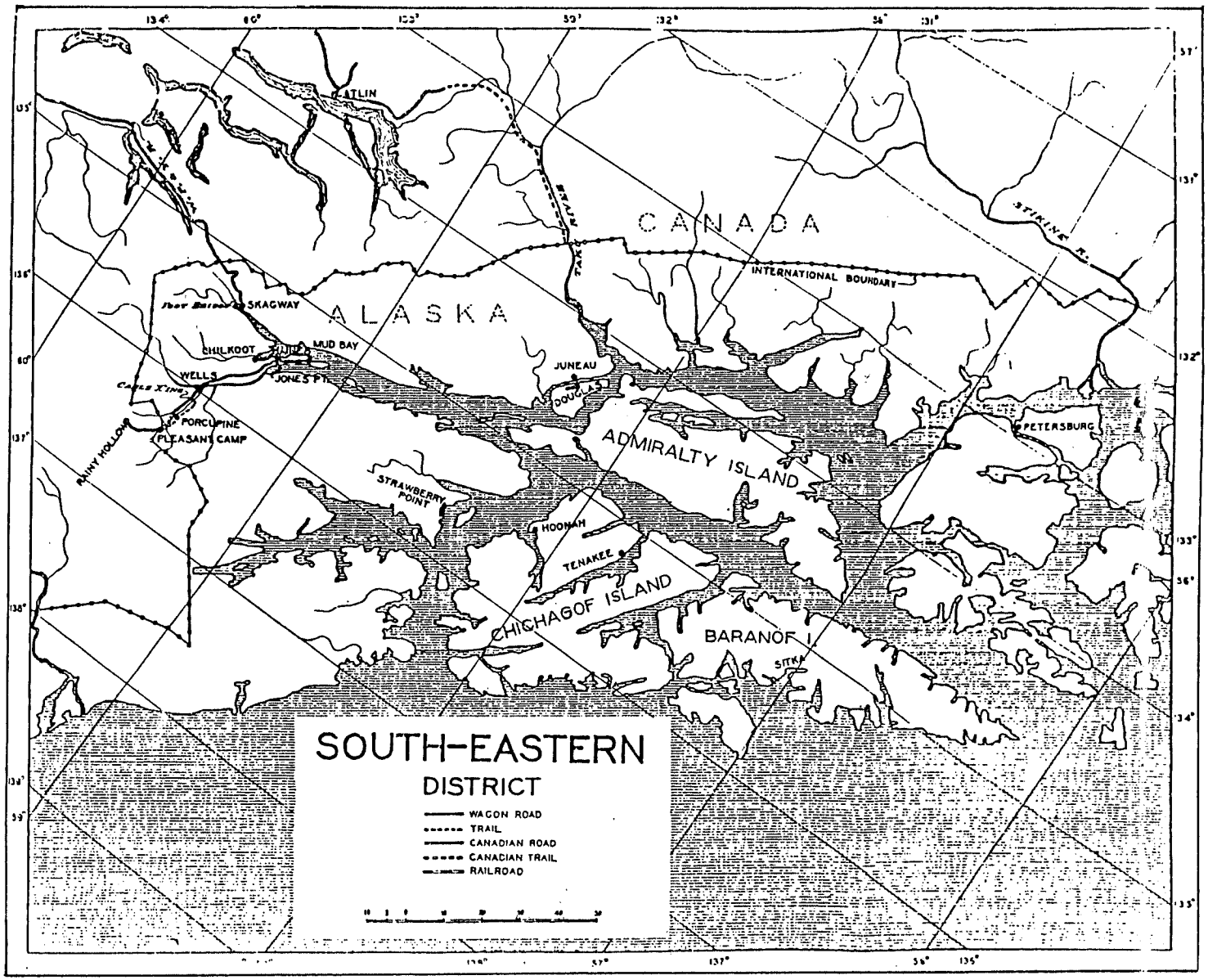
CONTRIBUTED FUNDS

(Act of Congress approved June 30, 1921, Alaska special fund)

1. By the Territory of Alaska:		
Act of legislature approved Apr. 21, 1919 -		
Public roads, bridges, trails, and ferries -		
Fiscal year 1920	$115,517.94	
1921	85,746.61	$201,264.55
Approved May 7, 1921, roads, etc. -		
Fiscal year 1921	28,000.00	
1922	43,237.28	
1923 (includes $20.45 refund)	88,533.33	159,770.61
Approved May 5, 1921, Nizina River Bridge -		
Fiscal year 1922	5,000.00	
1923	20,000.00	25,000.00
Approved May 7, 1921, Shelter Cabins -		
Fiscal year 1922	6,500.00	
1923	3,500.00	20,000.00
Total territory		396,035.16
2. by others:		
Fiscal year 1922 -		
City of Valdez	220.02	
City of Wrangell	500.00	
City of Sitka	500.00	
Alpine Club of Skagway	463.75	1,683.77
Fiscal year 1923:		
City of Valdez	601.83	
City of Juneau	777.71	1,379.54
Grand total, contributed funds		399,098.47[42]

In 1923 the Board also published a large wall map which showed every trail and road in Alaska. This fine document remains the most valuable source of locating particular routes,

although smaller-scale sectional components of the overall map were published in the 1921 annual report and in other annual reports of the 1920's. For ready reference the maps are included here.[43]



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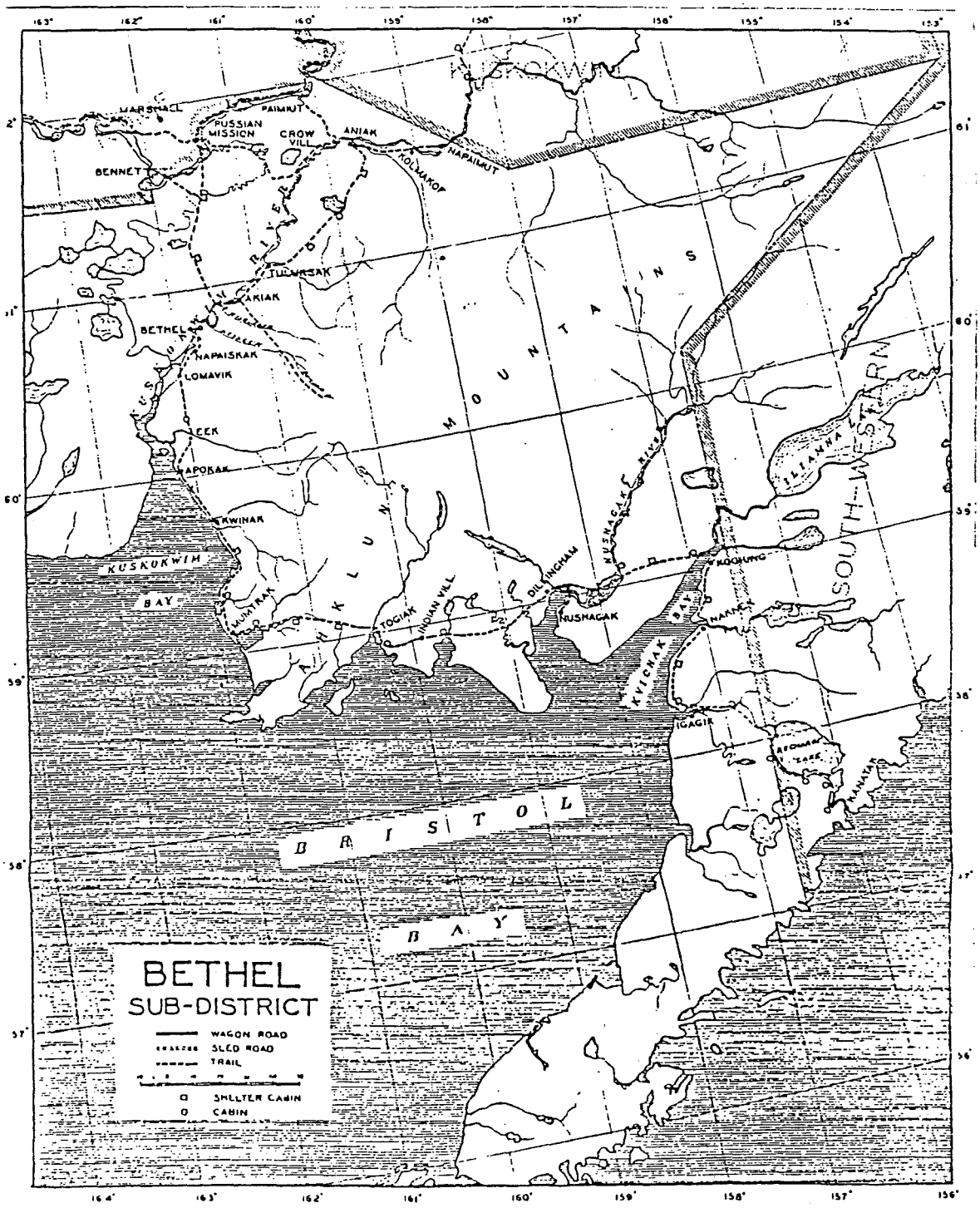

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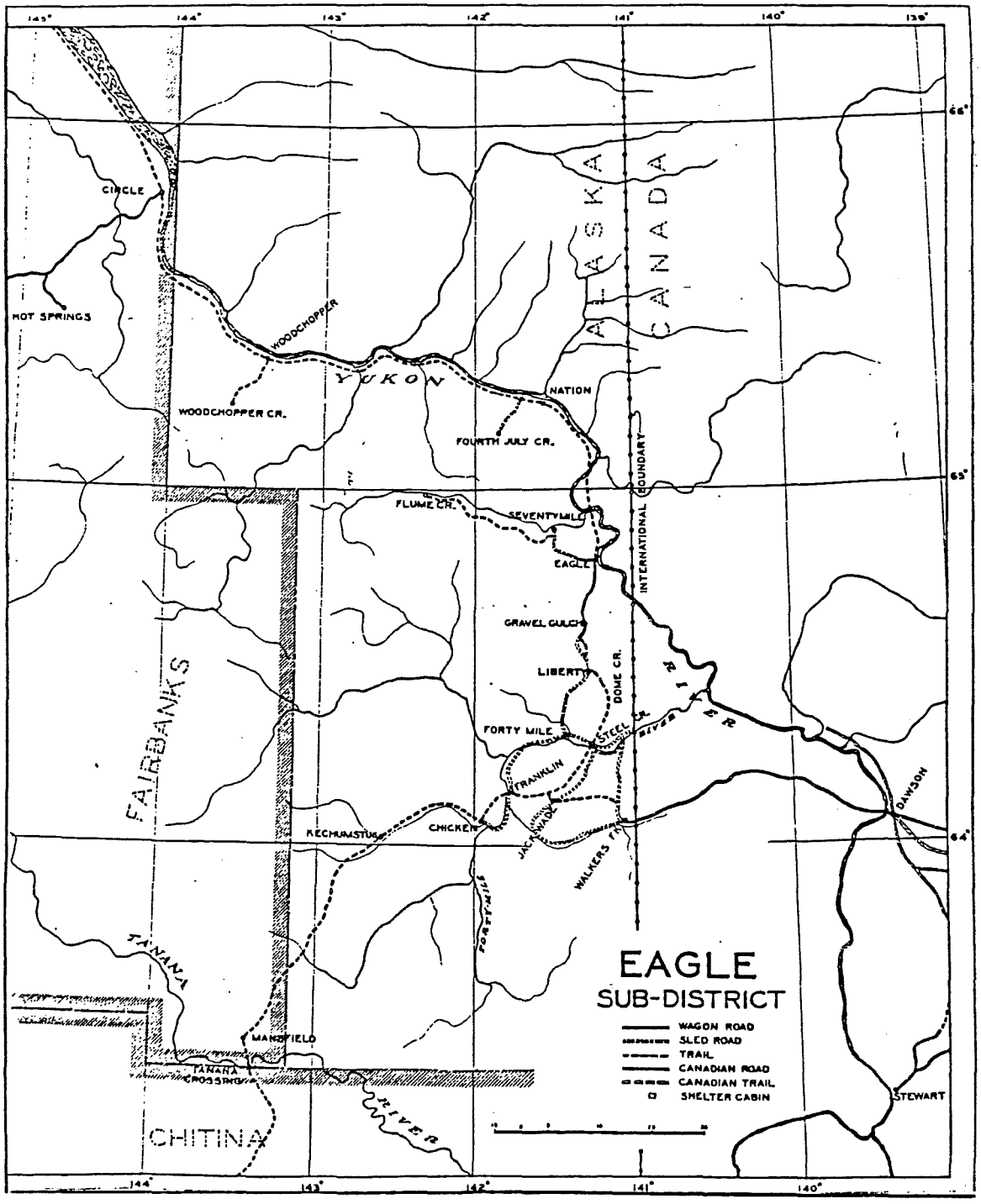

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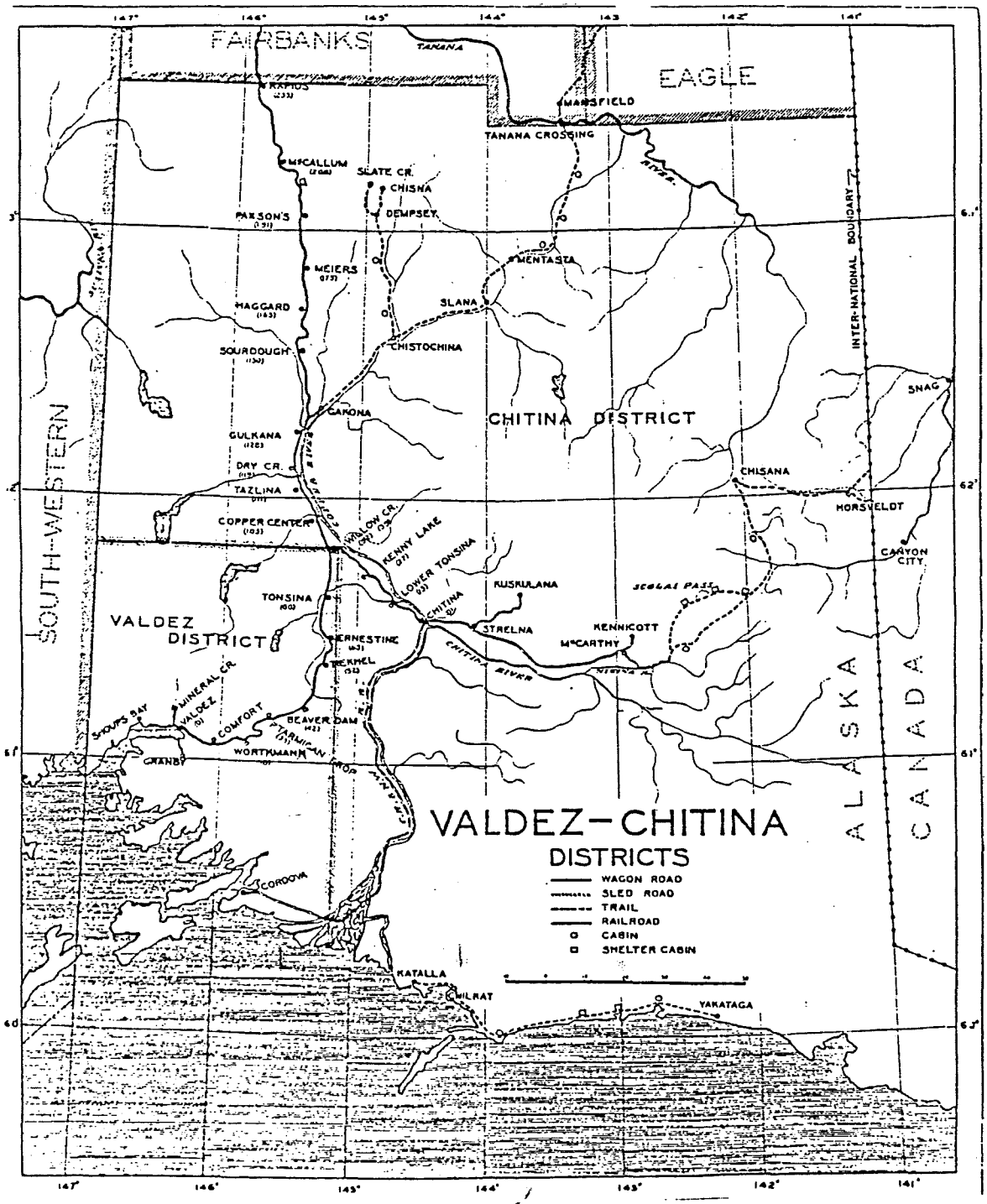

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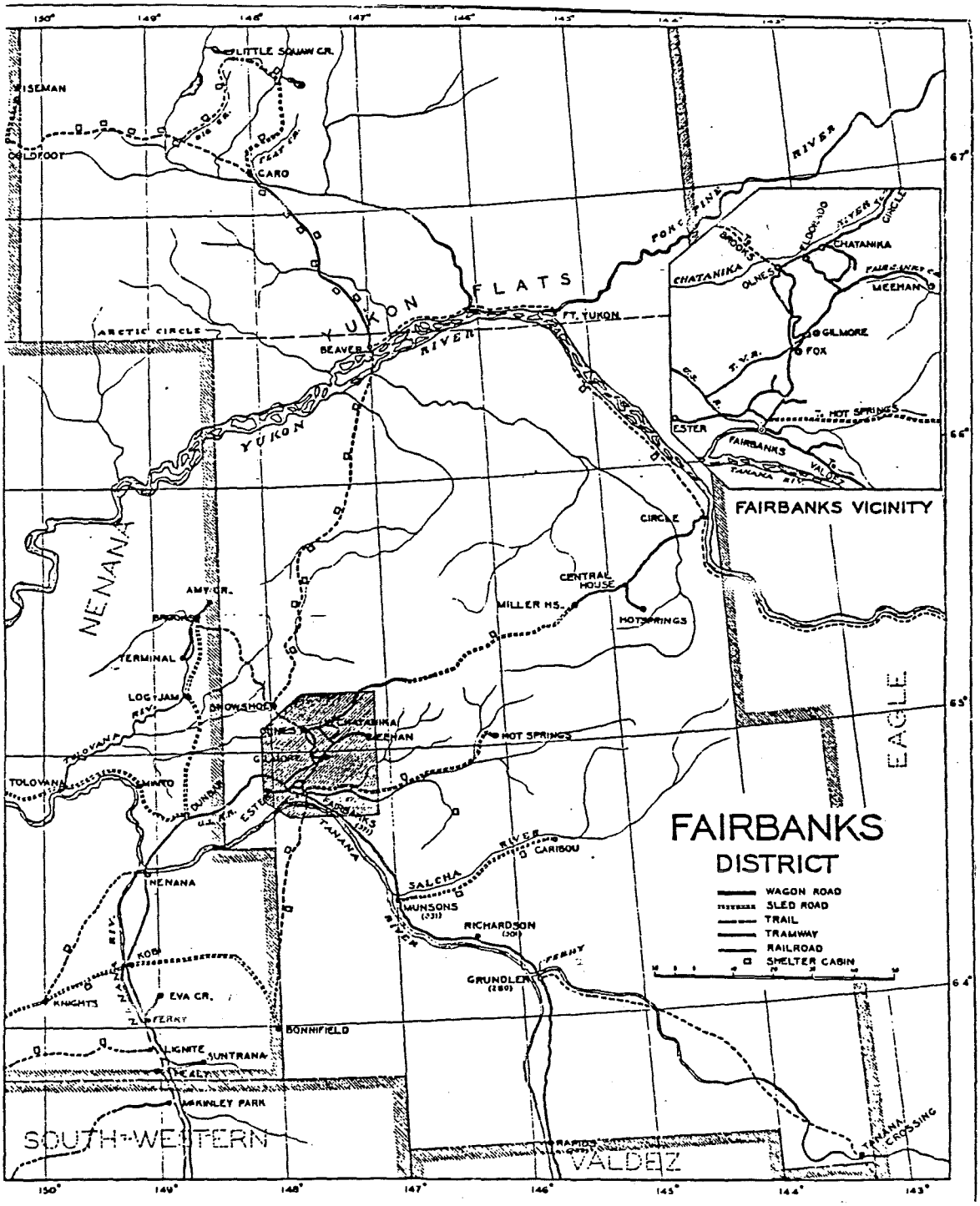

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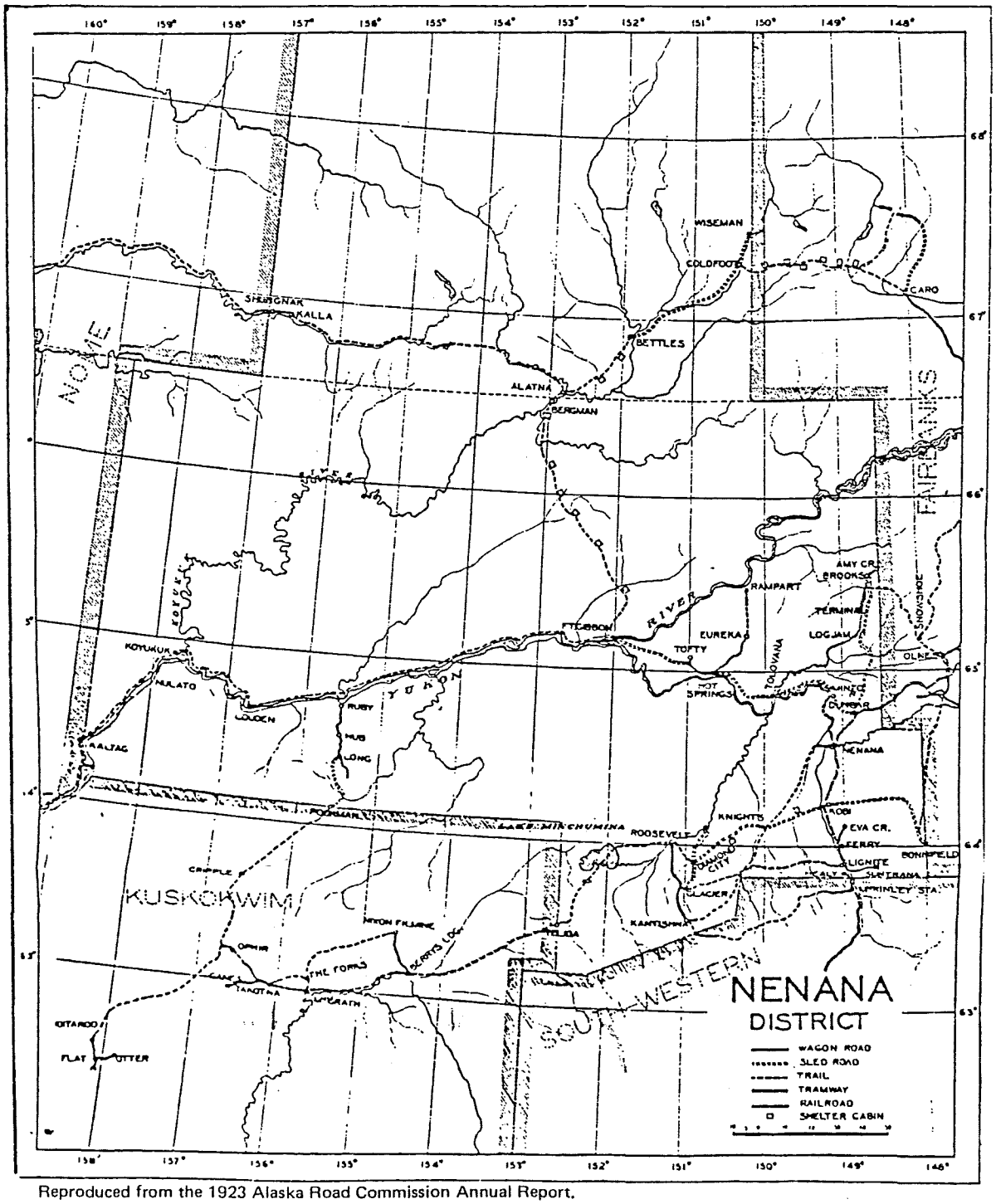
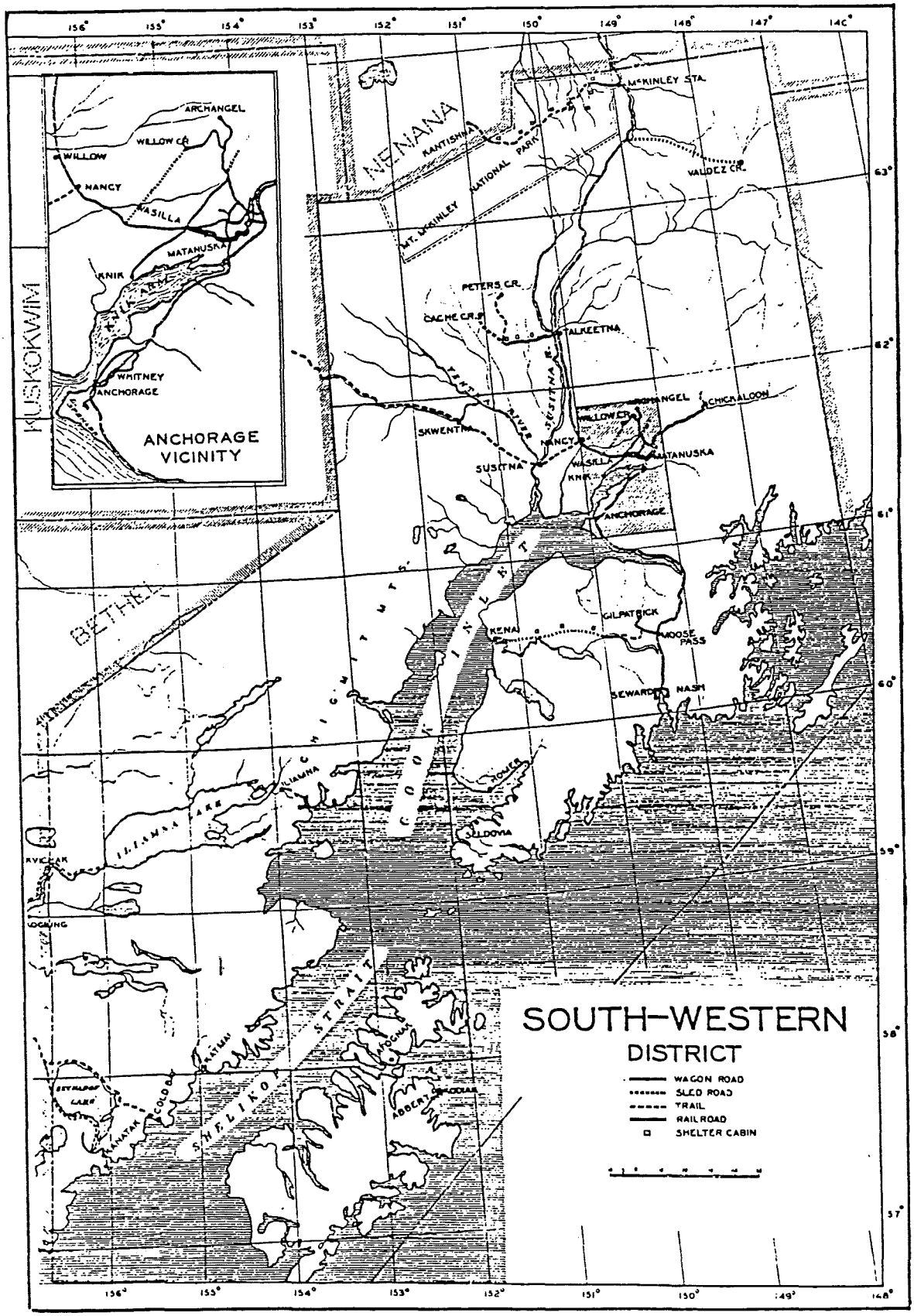
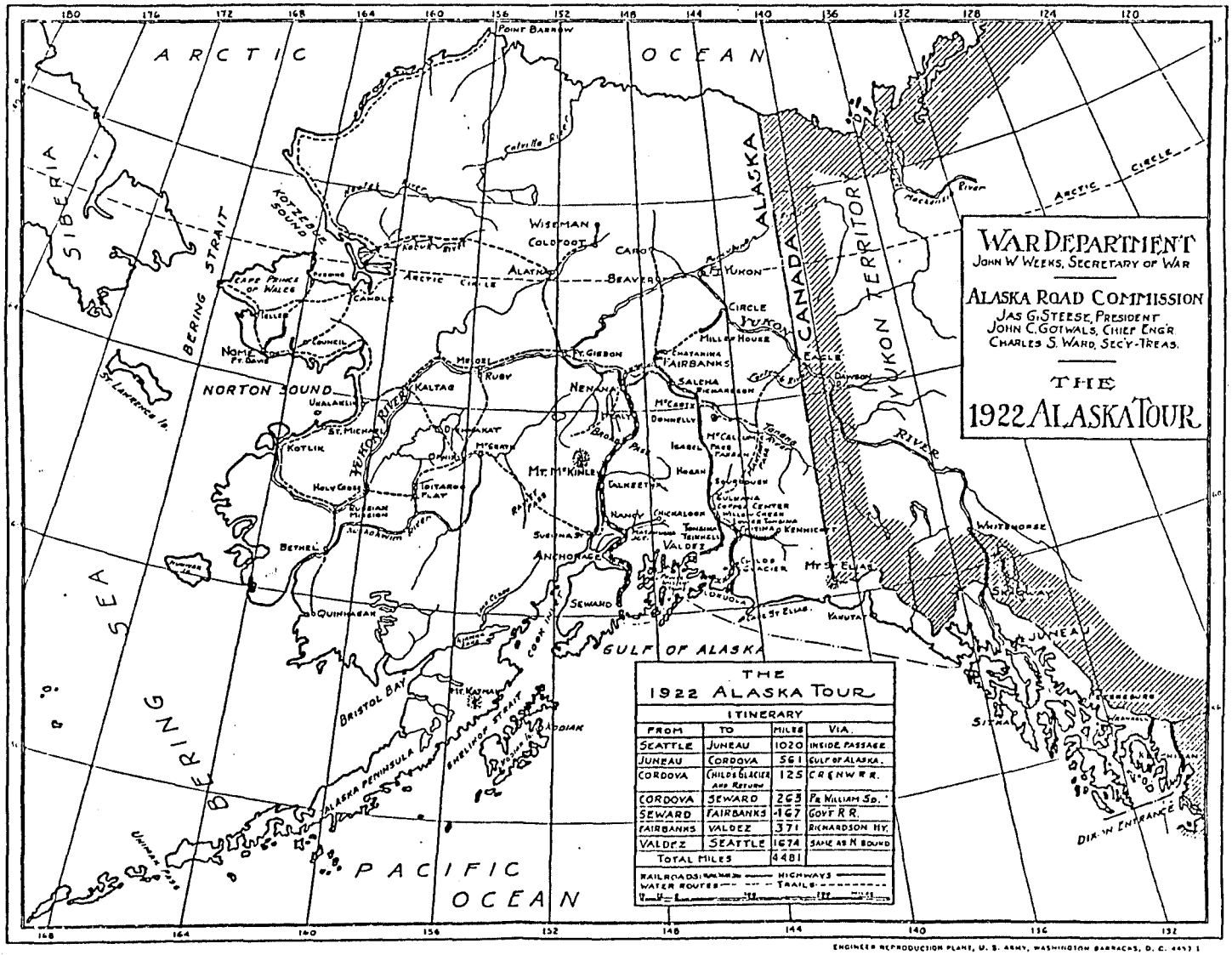


Reproduced from the 1923 Alaska Road Commission Annual Report.

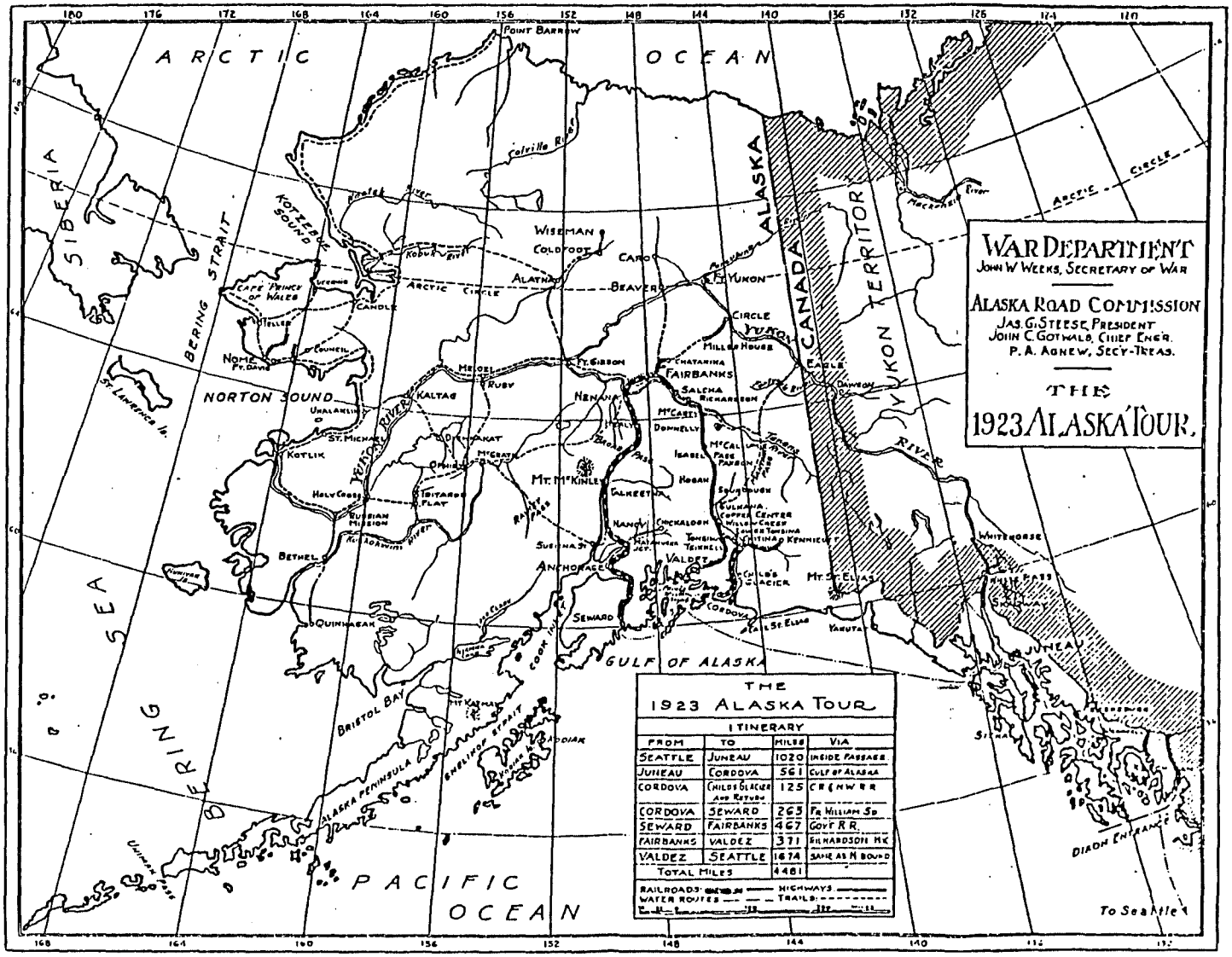


Reproduced from the 1923 Alaska Road Commission Annual Report.



ENGINEER REPRODUCTION PLANT, U. S. ARMY, WASHINGTON BARRACKS, D. C.

Reproduced from the 1923 Alaska Road Commission Annual Report.



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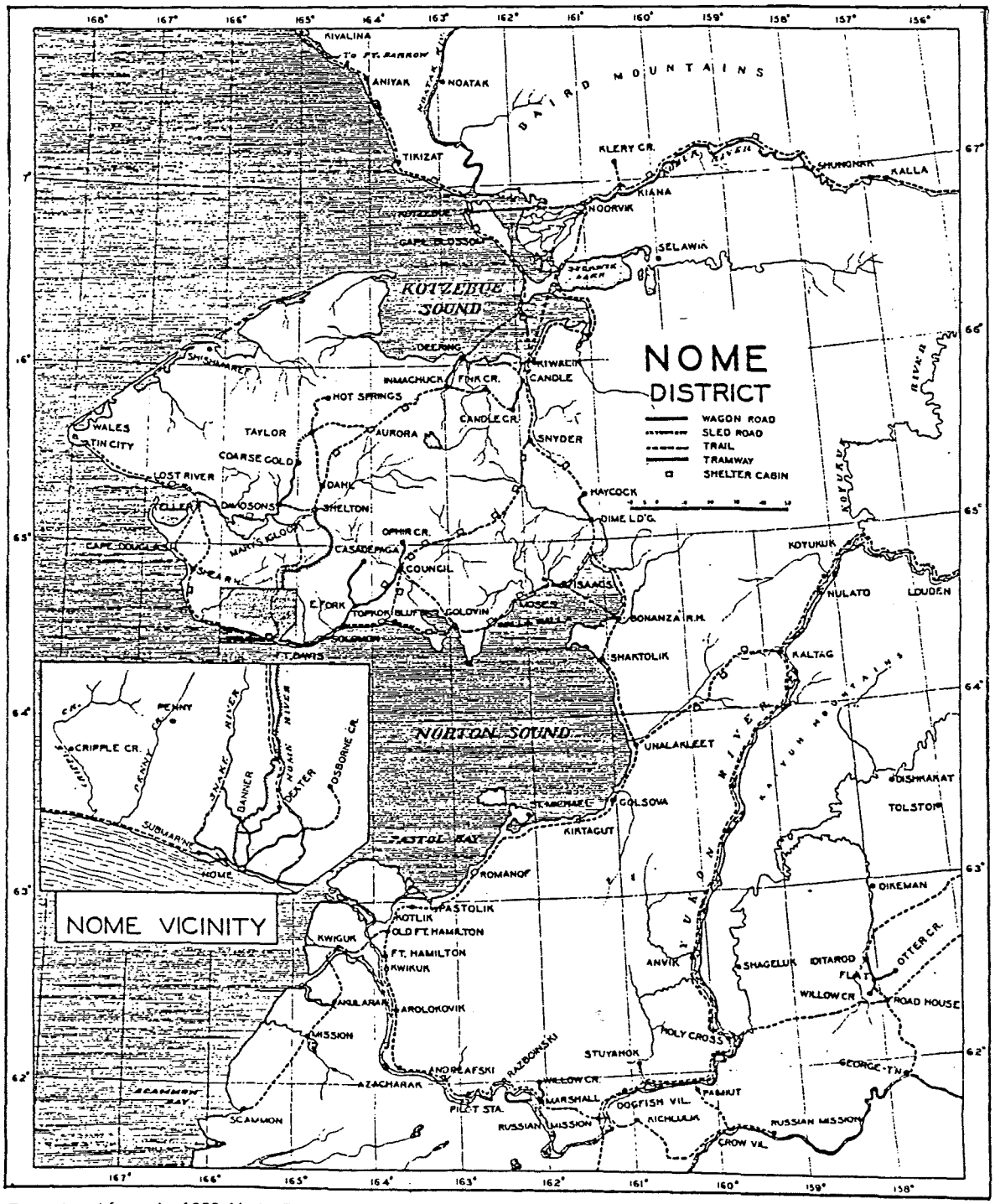

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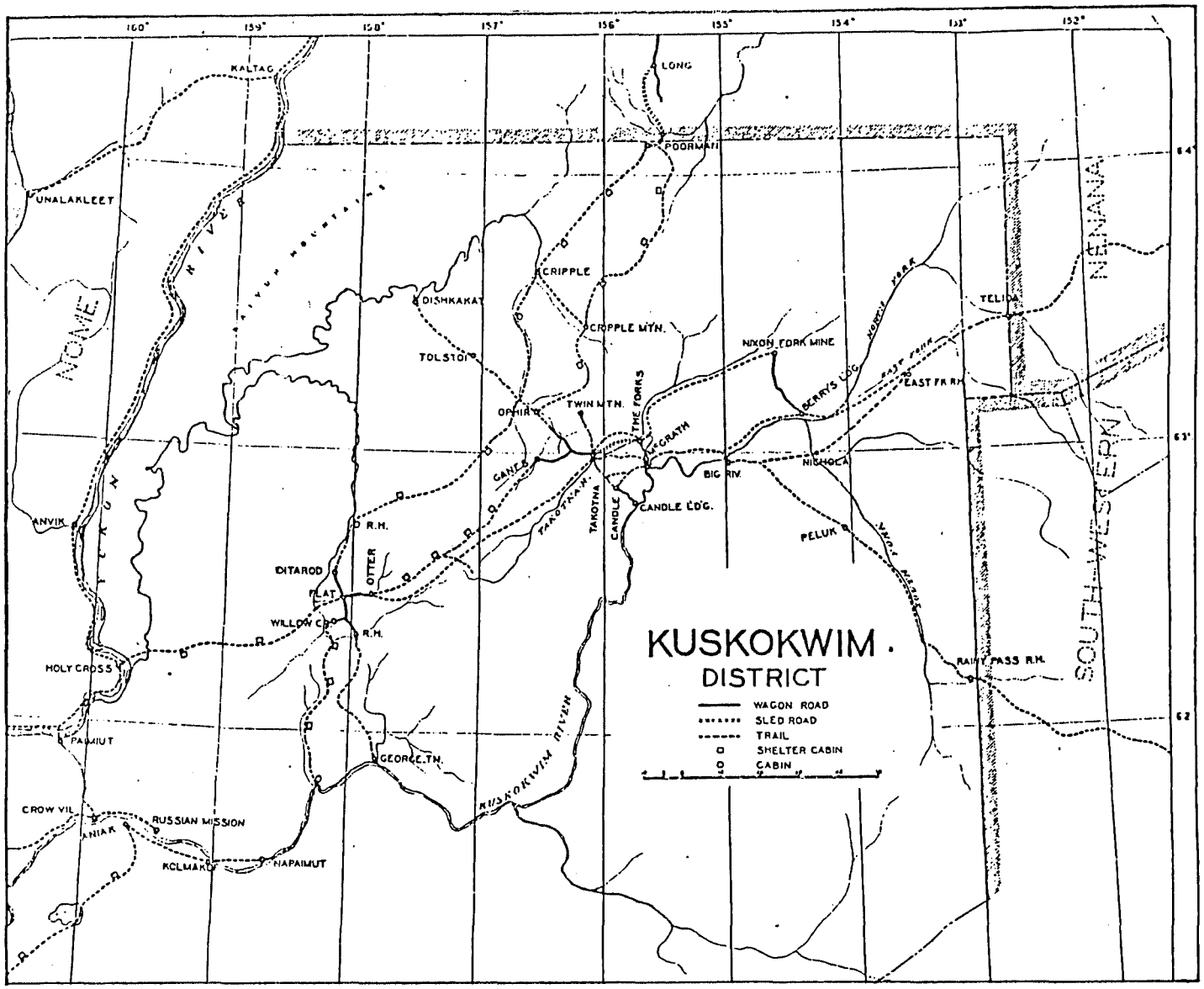

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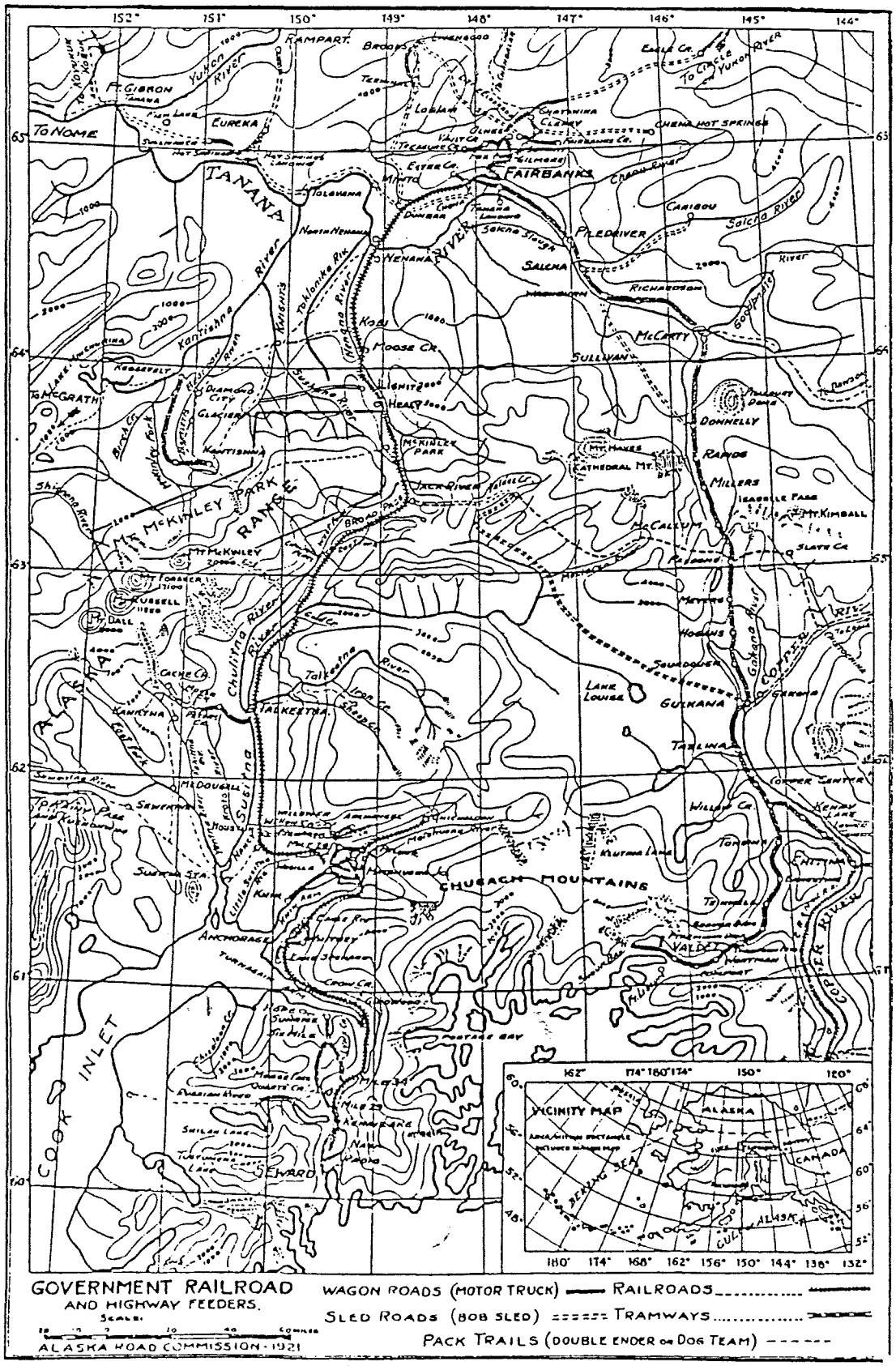

Reproduced from the 1923 Alaska Road Commission Annual Report.

This narrative could include numerous examples of Alaskan ire at the Board of Road Commissioners, but illustrative cases show that northerners were vociferously unhappy if any of their petitions were denied or delayed. Without attempting to exonerate the Board from all criticism it does seem important to show further that its staff investigated conditions on the trails and roads. Further documentation has the additional value here of giving something of the real flavor of the work. There is no more effective way to show how the necessary work was accomplished fifty years ago than by including the full report of a Russian River-Kenai Reconnaissance submitted in March, 1923:

1. The reconnaisssance 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 tavels to break trail every trip they make through the open country.

   There is very little cutting or marking of trail to guide the traveles and during a 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 eight 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 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 quiet thick and some places heavy timber is to be encountered. Estimate the cost cutting this section of seven and one half miles trail $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' equiped 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 down Kenai Lake to the lower end, under varying conditions, 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, therefor assuring early and late travel with safety each year.

The Bureau of Public Roads have made a survey for a wagon road from Mile 8-1/2 on the Moose Pass wagon road to the lower end of Kenai Lake, however there has been nothing further done to relieve conditions this section of the trail, had the money which was expended for making the wagon road survey been expended on the winter sled road this section the situation would have been much relieved, also the wagon road survey could have been made later, during the summer months the Kenai Lake affords excellent water transportation to and from the lower end of the lake to the railroad and connects at Mile 23. Therefore the sled trail is much more in need than the wagon road at present.

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 a 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 three 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 5 1/2 miles along the south bank of the Upper Kenai River, Then crossing the river near Schooner Bend, this crossing consists three seventy foot pony Howe Truses constructed of native timber also one hun-

dred 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 where ever 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 on to a deep lake about one mile long and three eighths mile wide. From where 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. Then after arriving at the north end of the lake in the low pass where the mail carrier has a shelter tent erected, and makes this his headquarters for one of the daily runs on his trip each way.

Estimated cost of repairs and reconstruction this trail section from the landing on lower Kenai Lake to the shelter tent in the low 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 widening the trail $1,200.00. Estimated grading hillside for sled road at for sled road at $500.00 per miles 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 sec-

tion 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 rquired, 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 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 constructing wagon road through this section to cost from seven to ten thousand dollars per mile. Plenty timber available for all small bridges, as there would not many be required.

Under present conditions there has been but very little work done on the last seventy miles of trail out of Kenai, should this trail 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. Heretofor 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. Therefor 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. Once 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 traping 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 coast wise winter travel also give excess 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 vi-

cinity, 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 on 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 section 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.

Moose Pass-Kenai Winter Trail.

7-1/2 Miles	Cutting Trail	@	60.00	450.00
4 "	Widening Grade		300.00	1,200.00
4 "	Hillside Grade		500.00	2,000.00
70 "	Cuting Sled Trail		60.00	4,200.00
6 Bridges	Small Log		50.00	300.00
3 Cabins	New Shelter		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 at 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 Expense	$190.40

Other such work reports are included as additional illustrations of the work required from Board personnel. These samples have been selected from hundreds of similar reports dealing with various parts of Alaska. They tell more about travel conditions than a mere summarization could convey, and they also establish that an orderly process in settling construction priorities was well established by the 1920s.

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 fifty 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.[45]

Congress did achieve a more lasting reform in 1922 by specifying that the Secretary of War was responsible for "military and post" roads in Alaska and for "other roads, bridges, and trails" as well.[46] Coupled with this change was Congressional approval of the War Department's transfer of road appropriations to Title II, Nonmilitary Activities. This change was of considerable benefit to Alaska. Roads 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.

As already stated, the railroad and road activities were separated in 1924. Board President Steese had applauded the consolidation of roads and railroads under his direction when it was made the previous year. 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."[47]

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 Road, motoring for 20 mile stretches out of Fairbanks and Valdez, respectively. 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.[48]

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

Certainly Steese's disappointment over any changes which he considered setbacks to his efforts can be understood. At times the Board members felt overwhelmed by their responsibilities and the magnitude of their task. On occasion Steese tried to express his duties in terms that might capture the imagination of distant Washington bureaucrats. Consider, he wrote in 1922, "the magni-

tude 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."[49]

Steese also wanted it understood that the Board members were not desk-bound paper shufflers: "The President and the Engineer spend eighty percent of their time in the field."[50] 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, but there is no reason to dispute Steese's statement.

Another technological advance created more work for the Board in the 1920s. Increasing numbers of airplanes were based in Alaska. Someone had to build airfields, and the powers in Washington determined that the Board had to undertake such construction. Help in this task soon came, however, when the territorial legislature appropriated money for airfields in its 1925 session, and also statutorily entrusted the Territorial Board of Road Commissioners with the job of designing and constructing such facilities.[51]

Others could confirm Steese's view of the administrative confusion in Alaska's road management. General A. W. Greely, the famed polar explorer, praised the Board's work but deplored that "unfortunately, under the uncoordinated activities, there are four other bodies engaged in road building . . . a manifest waste of administrative energy."[52]

Greely, who had been assigned to work in Alaska for the military telegraph early in his career, was pleased that travelers could finally reach Eagle without passing through Canada, and amused that Juneau's 300 automobiles shared 30 miles of road. To his readers he emphasized the significance of Fairbanks as "the center of the Alaska road system." Roads out of Fairbanks reached the adjacent mining districts and fanned east to the Salcha Valley; northeast to Circle, Eagle, and Dawson; northwest to Hot Springs -- "this last most important, the great winter mail route to Fort Gibbon (Tanana); to the entire Yukon Valley; to the Koyukuk; and to the Seward Peninsula and the Arctic."[53]

Carrying the road north from Fairbanks to the Yukon had not been easy because of the high maintenance demands for the Richardson Road, and construction priorities in other regions. But by 1924, the links to the north could be used by wagons during the summer for 100 of its 160 mile distance, and in winter travelers could drive their double ender bobsleds over the full route. Getting the road to such a state was the realization of a long-deferred dream. There were many folks living in Fairbanks who recalled the hard trails and trailless tundra they had been forced to tramp.

Like the Board of Road Commissioner, the Governor of Alaska reported each year on all territorial activities including transportation data gleaned from the Board's reports. The chief executive was ever an avid proponent 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."[54] 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."[55]

The governors always praised the work of the Board of Road Commissioners and emphasized the difficult terrain of Alaska.

> 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.[56]

After the intensive work done on the Richardson Road 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 Road 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 the governor tried to keep an accurate check on the road's traffic.

His count may have missed some furtive voyages, but he stated his tallies with some satisfaction:

1,517 persons
817 motor vehicles
30 wagons
24 double bobsleds
26 pack horses
384-1/2 tons of freight[54]

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 eighty-seven automobiles and trucks had passed along in comfort and speed. That was progress! And, after all, the number of vehicles might well have been in thousands -- and certainly would be soon.

Despite the disappointments of Steese and Alaskan residents who longed for a better road system, congressional appropriations were increasing significantly in the mid-1920s. Compared to the low appropriations of $425,000 in 1921 and $465,000 in 1922, the appropriations for the 1923, 1924, and 1925 working seasons were $650,000, $780,000, and $900,000, respectively.[58]

The $900,000 for 1925 (actually fiscal year 1926, but funds could be utilized for working season 1925) was close to the $1,000,000 annual budget stipulated in the 10 year plan of 1920.

By 1921 the Board of Road Commissioners had also become known as the Alaska Road Commission, and it was the latter term which was used at the end of the era under consideration. 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!

FOOTNOTES

1. All the quotations in this section on Eide's journey are from his reminiscenses entitled "I Hiked the Pipeline - in 1917," Alaska Magazine, September 1974, pp. 12-13, 49, 51, 53.

2. Lloyd Marvin, Not so Long Ago (New York: Random House, 1949), pp. 222,342.

3. Board of Road Commissioners for Alaska, Annual Report of the Alaska Road Commission, Fiscal Year 1918, p. 1990. Hereafter cited as Annual Report of the Alaska Road Commission and year.

4. Ibid.

5. Ibid.

6. Ibid.

7. Ibid.

8. Ibid., p. 1989.

9. Ibid., p. 3842.

10. Ibid.

11. Ibid.

12. Statement of Chas. R. Harris, Record Group 30, Records of the Bureau of Public Roads, Federal Records Center, Seattle, Washington.

13. Ibid.

14. Ibid.

15. Ibid.

16. Ibid.

17. John H. Joslin to Captain John Zug, October 25, 1914, R. G. 30, F.R.C., Seattle, Washington.

18. Ibid.

19. William Sulzer Papers, University of Alaska Archives, Fairbanks, Alaska; William R. Hunt, North of 53°: The Wild Days of the Alaska-Yukon Mining Frontier 1870-1914 (New York: MacMillian Publishing Co., Inc., 1974), pp. 233-239.

20. Annual Report of the Alaska Road Commission, Fiscal Year 1919, p. 2099.

21. Ibid.

22. Ibid.

23. Ibid., p. 3871.

24. Ibid., pp. 3872-73.

25. Ibid., pp. 3875-76.

26. Annual Report of the Alaska Road Commission, Fiscal year 1920, pp. 61-65.

27. F. M. Leach to Governor Thomas Riggs, June 12, 1919, R. G. 30, F.R.C., Seattle, Washington.

28. Governor Thomas Riggs to Chairman, Alaska Road Commission, January 5, 1920; Captain John Zug to John H. Joslin, January 8, 1920; R. G. 30, F.R.C., Seattle, Washington.

29. John H. Joslin to Captain John Zug, January 30, 1920, R. G. 30, F.R.C., Seattle, Washington.

30. Petition to Alaska Road Commission from Circle, undated, probably February, 1922, R. G. 30, F.R.C., Seattle, Washington.

31. Hawley W. Sterling to the Board, April 14, 1922, R. G. 30, F.R.C., Seattle, Washington.

32. James G. Steese to Circle residents, May 12, 1922, R. G. 30, F.R.C., Seattle, Washington

33. Annual Report of the Alaska Road Commission, Fiscal Year 1922, pp. 2237-38.

34. Ibid., Part II, pp. 6-7.

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

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

37. See first section of this narrative (1980), pp. 47-48 for an explanation of funding.

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

39. Ibid.

40. William H. Wilson, Railroad in the Clouds: The Alaska Railroad in the Age of Steam, 1914-1945 (Boulder, Colorado: Pruett Publishing Company, 1977), pp. 84-85.

41. Ibid., pp. 156-159.

42. Annual Report of the Alaska Road Commission, Fiscal Year 1923, pp. 2102-2104.

43. Annual Report of the Alaska Road Commission, Fiscal Year 1925, and other reports of the 1920s.

44. Walter W. Lukens to Engineer Officer of the Board, March 9, 1923, R. G. 30, F.R.C., Seattle, Washington.

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

46. Ibid., p. 2071.

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

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

49. Annual Report of the Alaska Road Commission, Fiscal Year 1925, p. 10.

50. Ibid.

51. Annual Report of the Alaska Road Commission, Fiscal Year 1926, p. 1956; Session Laws of Alaska, 1925.

52. A. W. Greely, Handbook of Alaska (New York: Charles Scribner's Sons, 1925), p. 41.

53. Ibid., p. 42.

54. Annual Report of the Governor of Alaska, (Washington, D.C.: Government Printing Office, 1920), p. 10. Hereafter cited as Annual Report of the Governor of Alaska and year.

55. Annual Report of the Governor of Alaska, 1919, p. 47.

56. Ibid.

57. Annual Report of the Governor of Alaska, 1924, p. 18.

58. Annual Report of the Alaska Road Commission, Fiscal Year 1925, p. 2069; Annual Report of the Alaska Road Commission, Fiscal Year 1926, p. 1954.

59. Valdez Trail Collection, University of Alaska Archives, Fairbanks, Alaska.

60. R. G. 30, F.R.C., Seattle, Washington.

61. Ibid.

62. Annual Report of the Alaska Road Commission, Fiscal Year 1924.

63. Annual Report of the Alaska Road Commission, Fiscal Years 1918-1924.

APPENDIX A

RECONNAISSANCE SURVEY - FORT GIBBON (TANANA) TO KOYUKUK AND KOBUK RIVERS TO KOTZEBUE

The purpose of this survey report in the winter of 1923-24 was to obtain information on the route for possible improvements of the trail and erection of shelter cabins. It was an old established trail, and of great use in access to the upper Koyukuk and Kotzebue area on the coast.

The trail extended north to Allakaket, Bettles, Coldfoot, and Wiseman, a distance of 180 miles. From Allakaket it branched off westward to Kotzebue, via the Alatna and Kobuk Rivers to Shungnak, Kiana, and Kotzebue, 280 miles.

The snowfall in the vicinity of Alatna was very light at the time of arrival at that place. The Christmas holidays brought the natives to the Mission of St. John in the Wilderness at Allakaket on the Koyukuk, near the mouth of the Alatna River. This gave me an opportunity to select a suitable guide from among the Kobuk natives. After having all the arrangements made for the trip, taking ten days supplies and dog food, I proceeded with Napoleon, the Kobuk guide, January 7th along the Alatna River, taking advantage of the portages, to Blackjack, a Kobuk village, where we stayed at Chief Nullyook's place for the night. From Blackjack the river was used, making short cuts across the portages of the many bends in the river. A 7 x 7 tent was used for camping out as there are no cabins along this route of travel. We had already resorted to the use of snow shoes to break trail for the dog team, the snow being heavier towards the Endicott Range. A blizzard from the northeast compelled us to seek shelter in a spruce grove, where we pitched camp for the night. It snowed during the night and the wind was getting stronger. Nothing was visible for more than a half a mile, but having

worked out a compass course, Napoleon and I started to break trail and mark the same to the Hogatza, locally called the Hog River. For the next two days we were breaking trail and found faint traces of old blazes but the snow had driven so hard that the bark of the trees was covered with snow. The line of blazed trees corresponded to the compass course and the same was followed for three hours, returning to camp at dusk. Only two days dog food was on hand and our own food supply was getting low; I decided to return to Marsan to replenish our supplies. On the return trip we met a Fur Warden from Nome with three dog teams and two natives as guides and trail breakers. Later in the day we met a Kobuk trapper and we camped at his tent for the night. Leaving the tent next morning, we traveled the Alatna River. The cold was severe, the nostrils and mouths of the dogs were getting iced. We made Pooto Hope's cabin, stopped for the day (63 degrees below zero). The next day we returned to Marsan and after replenishing our supplies, engaged Nictune, a native, to return with us to haul dog food. Leaving Marsan on the 28th of January, the Kobuk was reached on February 1st, made camp about two miles above Reed River (temperature 52 degrees below zero). Next day passed Reed River and Beaver Creek, at the mouth of Reed River overflow was concealed beneath the snow, got feet wet and sled runners iced. The faces of the dogs and the front of our parkas were frozen so made camp at 3 P.M. During the night Napoleon and Nictune had to make a fire in order to keep warm (69 degrees below zero). In the course of next morning's travel, both natives had their cheeks and chins frost bitten. We pulled in at a white trapper's cabin, below Selby Creek, where we had lunch. Here we learned that distemper was raging among the dogs along the Kobuk River and that many had died of the disease. Stayed over night at Pah River, where three Kobuk igloos are located. Proceeded next morning on Kobuk River, arriving at Shungnak on February 4th at 5 P.M. We put up at the store which has a sawmill and mining enterprise also. The eight days following, the weather remained 51 to 70 degrees below zero. During this time made a trip to the native village 7-1/2 miles below

Shungnak, where the Bureau of Education maintains a school, presided over by two teachers who also look after the reindeer herds in behalf of the Government. Owing to the epidemic of distemper amongst the dogs, the scarcity of dog food and the extreme cold, I decided not to go on to Kotzebue and went to Noorvik, where I wired Fairbanks to that effect. Left Marsan February 28th over the winter trail for Nolan and arrived at Henshaw Cabin at 5 P.M. The trail was drifted in many places. Proceeded next day to Chinoko Cabin. At this place I met two Koyukuk natives who were hauling dog food for the Geological Survey. Next day I arrived at Bettles and had a meeting with the miners and residents and talked over trail matters. Proceeded on to Coldfoot and 2-1/2 miles below Coldfoot, where Porcupine Creek flows into the Koyukuk -- a heavy overflow, 18 inches deep, was encountered. Cutting a way around, I arrived at Coldfoot at 1:30 P.M Had lunch with Mianano, a Japanese, then proceeded to Wiseman and on to Nolan, it being the center of mining activities in the district, 6 miles from Wiseman. A meeting was held there and also at Wiseman to talk over trail and road matters. There seems to be more prospecting and development on the Upper Koyukuk than there has been for some time past. On Nolan Creek, 16 men in 3 outfits, were taking out winter dumps from shafts, others were working on benches. There was considerable working ground, but the water for sluicing was and had been a drawback. Two men were sinking a shaft on Slate Creek, 2 men and 1 woman on Emma Creek, 2 men on 12 Mile Creek, 5 men and 1 woman on Porcupine Creek, 5 men on Tramway Bar, 2 men on California Creek, 1 on Bettles River, 10 on Hammond Creek and 1 on Union Gulch. Four men were mining on Wild and 3 on John River.

The question of transportation and cost of supplies was foremost. Freight from Nenana to Bettles was $90.00 per ton by boat, owned by the operating stores who handled mostly their own goods.

Leaving Wiseman on March 10th, I arrived at Nenana on March 26th, having covered 1,350 miles, of which 700 miles were traveled on snowshoes.

The money spent in former years for the improvement of trails, roads and shelter cabins north of the Yukon has been, in many cases, misapplied or wasted, either by having incompetent persons directing the work or others who directed the work for selfish purposes.[59]

APPENDIX B

To the Board
of
ALASKA ROAD COMMISSION
Juneau, Alaska.

Gentlemen:

I herewith submit to your honorable body a report of the work accomplished by me upon the Eagle, Forty-mile, Seventy-mile, and Fourth of July trails, also a reconnaissance for O'Brien and Polly creeks, as a possible route for a main trunk road to Chicken. There is also included a report in detail of the activity in the districts as requested by your Major Gotwals.

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.

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 alloted 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 alloted 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 to much expense in getting around them. There is a good base leading up to the falls upon the right limit of Seventy-mile.

Fourth of July

In July I made an investigation of the trail leading from Fourth of July to Nation. Good work had been done there with the small amount of money at Mr. Vanderveer's command in 1920. This years work will complete the trail to Nation. This work not only leads to their camp, but is the means of ingress to an extensive country lying south of Fourth of July creek. The mining operations on Fourth of July creek will be worked upon a large scale, and a road is necessary. The base is good and my estimate of construction will not exceed $500.00 per mile. It is less than ten miles to the works. I would recommend that this road be constructed if possible in the near future.

Wade Creek to Walker's Fork and Boundry Line

In traveling from Wade creek, up Robinson creek, to the ridge leading to Walkers Fork an easy grade is encountered. The road to Walker's Fork has a very good road-bed, continuing to the boundry line, and with a small amount of money could be put into good condition. At the time of my visit to Walker's Fork, Mr. Jacobson, who is a mining operator in that locality came from Dawson with a two horse team loaded with 800 lbs. of provisions. He informed me that the road from the boundry to Dawson was the worst part. It is about 5 miles from Jacobson's to the boundry following the right limit of Walker's Fork.

Canyon Creek

There is a very good road down Canyon creek following the right limit slope for a distance of five miles. From this point the creek bottom is used during the winter. The freight is brought the Forty-mile to the mouth of Canyon, thence up Canyon to Walker's Fork. There is some mining activity on Canyon and Squaw creeks this season.

Canyon to Steel Creek

Ascending the Steel creek divide from Squaw creek the winter trail is followed down to Steel creek. This is a very bad road during the winter months for traveling as the grades exceed 15% and the snow drifts upon the summit are bad. This road also leads to Wade creek for winter freighting.

O'Brien Creek

Following up O'Brien creek from the mouth in its entireity there is a very good road bed part of the way. The present winter road is, in my estimation, not practical for a permanent road owing to the many crossings of the creek requiring too many bridges. Along the right limit, however, fairly good material is found until Columbia creek is reached, then the present road could be followed to Liberty.

Reconnaissance of Outlets from O'Brien, Polly and Uhler creeks to Chicken

From the mouth of O'Brien creek the Forty-mile river would have to be bridged, following up the right limit to Polly creek, thence up Polly creek which has an easy grade, possibly a 6%. Good material is found on the left limit up to a low divide which could be followed for a short distance to the head of Uhler

creek. Uhler creek has about the same grade as Polly creek. Going down Uhler creek to the mouth which is about five miles below Franklin, another bridge would be needed, crossing to the left limit of the Forty-mile river, going up river to Franklin, thence up river opposite Two-mile creek, onto a good, dry ridge which can be followed to Chicken creek. The approach to this ridge is a little steep but can be used.

Walker's Fork

Part of the river is in bad condition due to the fact that there are numerous large boulders in the river bed. This condition can be relieved by blasting them out. My recommendation is that a small allotment be made for this purpose.

Outlet to North Fork of Forty-mile

Mr. McCandless who expected to go over this route with me was unable to go so this trip was not made. Previously, however, the road was indicated on the map. This road leads from Eagle to American creek and thence to the head of Arkansaw creek. From this point the old Government trail is followed into and down Champion creek to the proposed power site of the McCandless company on the North Fork of the Forty-mile river. This road would also form an outlet to the Charlie river district which is practically an undeveloped country. Mr. McCandless assured me that if the assays proved as good as previous ones taken, $200,000 would be available next season for construction of their plant, requiring 200 tons of freight to be handled. This will of course depend upon the assay returns of the black sand, which Mr. McCandless promised to let us know. The estimated cost of this road is $10,000 for work on the first 13 miles from Discovery Fork to the head of Arkansaw creek. This road is really necessary for the further development of the mining industry of that section and the Charlie river district.

Lumber

Some investigations have been made in regard to lumber and it was found that 60 to 70 thousand feet board measure can be secured two miles from Gravel Gulch. With a little grading the main road can be reached. There is also some good timber on O'Brien creek and at the mouth of Chicken creek. The round poles used for bridges and culverts are unsatisfactory, lasting only a year or so, making it expensive in replacing them each year. Mr. Powers has a saw mill on O'Brien creek and a recommendation here would be timely that some 3" planks be sawed and delivered along the road before they get bad in the spring. The lumber at Gravel Gulch can be sawed and hauled in the summer as it is needed.

Freight Rates

Present summer rates.		Winter rates		These rates are freighter's estimat with a trunk road to Chicken
From Eagle to Gravel Gulch	2¢ per lb.	1¢	per lb.	1¢ per lb.
Liberty	7¢ " "	2-1/2¢	" "	2¢ " "
Dome Creek	10¢ " "	3¢	" "	3¢ " "
Steel creek	15¢ " "	3-1/2¢	" "	4¢ " "
Wade creek	20¢ " "	5¢	" "	6¢ " "
Franklin & Chicken	25¢ " "	5-1/2¢	" "	8-1/2¢ " "
Up river to N. Fork	----------	4-1/2¢	" "	----------
Above Walker's Fork	----------	6¢	" "	----------
Napoleon Creek	----------	5-1/2¢	" "	----------
1¢ per lb. added for perishable				

Note:

Freighting up Forty-mile costs 16¢ to Chicken. It is uncertain as a method of transportation.

From information obtained from the miners in the vicinity of Chicken and Franklin, the cost of provisions and supplies used during the past four years cost approximately $0.75 per pound.

Activity in the District

Creeks 40 Mile	Number of Men	Class of Mining	Estimated Output
American Creek	2	Open Cut	$850.00
"	1	" "	$3,000.00
"	2	" "	Depends on water
Discovery Fork	2	" "	" " "
Dome Creek	12	Hydraulic	$40,000.00
Down stream from Steel Cr. 40-mile	15	3 Hydraulic 12 Rocking	$5,000.00 $4 to $6 per day
Up 40-mile from Steel Creek	4	2 winter drift 2 Rocking	No data " "
Franklin Creek	5	Open Cut	$4,340.00
South Fork of 40-mile	1	Winter Drifting	$400.00
Myer's Fork	2	Open Cut	$2,100.00

Stonehouse Creek	2	" "	$1,800.00
Chicken Creek	7	" "	$2,625.00
Lost Chicken	2	" "	None
Ingle Creek	3	" "	$1,200.00
Littlevig Creek	3	Winter Drifting	$2,300.00
Mosquito Fork	3	Scraper Plant	$18,000.00
Napoleon Creek	2	Open Cut	None
Montana Creek	1	" "	$700.00
Walkers Fork	5	Scraper Plant	$8,000.00
Davis Creek	2	Open Cut	$1,400.00
Wood Creek	1	" "	$375.00
Squaw Creek	3	Scraper Plant	No data
Canyon Creek	3	Open Cut & Winter drift.	$3,100.00
Wade Creek	16	1 Hydraulic 15 Open Cut & drifting	$11,300.00

Creeks 70 Mile	Number of Men	Class of Mining	Estiamted Output
Crooked Creek	3	Hydraulic	$5,000.00
Broken Neck Cr.	1	Open Cut	-------
Big Bear Bar	2	Open Cut & Rocking	$300.00
Nugget Creek	1	Hydraulic	$700.00
Alder Creek	3	"	$4,000.00
Curtis Bar	1	Open Cut	$300.00
Flume Creek	1	Hydraulic	$150.00
Barney Creek	1	"	$200.00
Fox Creek	2	"	No data
Fourth of July	7	"	Depends on water.
Ruby Creek	1	Winter Drifting	$300.00
Washington Creek	1	Prospecting	---------
Mission Creek	1	Open Cut	$300.00
Estimate	5	In outlying districts	---------

Note:

The output may be increased after September 1st owing to heavy rainfall. The output of Dome Creek will probably reach the $150,000 mark as better ground has been found since the estimate was given, $3.00 pans being common.

Mail Service

There is semi-monthly service to the creek, 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 agood 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 judgment, not a worked out district but one with a future before it, second to none in the Yukon. This district has been pruducing, 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 - Fortymile and the surrounding districts have a bright future.[60]

Fred Prin (Signature)

Foreman, A. R. C.

APPENDIX C

LAWS RELATING TO THE CONSTRUCTION OF ROADS IN ALASKA

W. D. Act approved July 9, 1918. (40 Stat. 843).

* * * * * * * * * * *

CONSTRUCTION, REPAIR AND MAINTENANCE, MILITARY AND POST ROADS, BRIDGES AND TRAILS, ALASKA: For the construction, repair and maintenance of military and post roads, bridges, and trails, Territory of Alaska $100,000 Provided That hereafter, so long as the construction and maintenance of "Military and Post" Roads in Alaska, and of other roads, bridges, and trails, in that Territory shall remain under the direction of the Secretary of War, he be authorized to submit such estimates for the consideration of Congress as are in his judgment necessary for a proper prosecution of the work.

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W.D. Act approved July 11, 1919 (41 Stat. 124)

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CONSTRUCTION AND MAINTENANCE OF MILITARY AND POST ROADS, BRIDGES, AND TRAILS, ALASKA: For the construction, repair, and maintenance of military and post roads, bridges, and trails, Territory of Alaska, to be immediately available, $100,000.

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W.D. Act approved June 5, 1920 (41 Stat. 970)

Same wording as act of July 11, 1919 except amount appropriated, $350,000.00.

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W.D. Act approved June 30, 1921 (42 Stat. Page 90).

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CONSTRUCTION AND MAINTENANCE OF MILITARY AND POST ROADS, BRIDGES, AND TRAILS, ALASKA: For the construction, repair, and maintenance of military and post roads, bridges, and trails, Territory of Alaska, to be immediately available $425,000.00; PROVIDED, That the Secretary of War is hereby authorized to receive from the Territory of Alaska, or other source, such funds as may be contributed by them to be expended in connection with funds appropriated by the United States for any authorized work of construction, repair, and maintenance of roads, bridges, ferries, trails, and related works in the Territory of Alaska, and to cause such funds to be deposited to the credit of the Treasurer of the United States, and to expend the same in accordance with the purpose for which they were contributed:

PROVIDED FURTHER, That not to exceed $10,000 of the foregoing amount shall be expended, for a preliminary investigation and report on the feasibility, desirability, and cost of the best and most practicable connection between the Nome-Shelton system of communications and the coal deposits of the Kugruk River, Chicago Creek, and the Keewalik mining district, whether by wagon road, sled road, tramway, trail or other means.

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April 6, 1922 (42 State. 491)

RESOLVED BY THE SENATE AND HOUSE OF REPRESENTATIVES OF THE UNITED STATES OF AMERICA IN CONGRESS ASSEMBLED, That the Secretary of War is authorized to direct the Board of Road Commissioners for Alaska to incur obligations prior to July 1, 1922, for the construction and maintenance of roads, bridges, and trails in Alaska of not to exceed 50 per centum of the appropriation for this purpose for the fiscal year ending June 30,

1922, payment of these obligations to be made from the appropriation for the fiscal year ending June 30, 1923.

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June 30, 1922 (42 Stat. 759)

CONSTRUCTION AND MAINTENANCE OF MILITARY AND POST ROADS, BRIDGES, AND TRAILS, ALASKA: For the construction, repair, maintenance of military and post roads, tramways, ferries, bridges, and trails, Territory of Alaska, to be expended under the direction of the Board of Road Commissioners described in section 2 of an Act entitled "An Act to provide for the construction and maintenance of roads, the establishment and maintenance of schools, and the care and support of insane persons in the District of Alaska, and for other purposes" approved January 27, 1905, as amended by the Act approved May 14, 1906, to be expended conformably to the provisions of said Act as amended to be immediately available: PROVIDED, That if an appropriation for this purpose for the fiscal year ending June 30, 1924 shall not have been made prior to March 1, 1923, the Secretary of War may authorize the Board of Road Commissioners to incur obligations for this purpose of not to exceed 75 per centum of the appropriation for this purpose for the fiscal year ending June 30, 1923, payment of these obligations to be made from the appropriation for the fiscal year ending June 30, 1924, $465,000.

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March 2, 1923 (42 Stat. 1420)

CONSTRUCTION AND MAINTENANCE OF MILITARY AND POST RODS, BRIDGES, AND TRAILS, ALASKA: for the construction, repair, and maintenance of roads, tramways, ferries, bridges, and trails, Territory of Alaska, to be expended under the direction of the Board of Road Commissioners described in Section 2 of an Act entitled "An Act to provide for the construction and maintenance of roads, the establishment and maintenance of schools, and the

care and support of insane persons in the District of Alaska, and for other purposes" approved January 27, 1905, as amended by the Act approved May 14, 1906, and to be expended conformably to the provisions of said Act as amended, to be immediately available: PROVIDED, That if an appropriation for this purpose for the fiscal year ending June 30, 1925 shall not have been made prior to March 1, 1924, the Secretary of War may authorize the Board of Road Commissioners to incur obligations for this purpose of not to exceed 75 per centum of the appropriations for this purpose for the fiscal year ending June 30, 1924, payment of these obligations to be made from the appropriation for the fiscal year ending June 30, 1925, $650,000.

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W.D. Act approved June 7, 1924.

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CONSTRUCTION AND MAINTENANCE OF ROADS, BRIDGES, AND TRAILS, ALASKA: For the construction, repair, and maintenance of roads, tramways, ferries, bridges, and trails, Territory of Alaska, to be expended under the direction of the Board of Road Commissioners described in section 2 of an Act entitled "An Act to provide for the construction and maintenance of roads, the establishment and maintenance of schools, and the care and support of insane persons in the District of Alaska, and for other purposes" approved January 27, 1905, as amended by the Act approved May 14, 1906, and to be expended conformably to the provisions of said Act as amended, $725,000 to be immediately available.

Note: Supplemental appropriation of $55,000 on account of Increase of Compensation in the Field Service contained in the Act of December 6, 1924.

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W. D. Act approved February 12, 1925

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Same wording as act of June 7, 1924 up to amount appropriated, $900,000, to be immediately available. Hereafter when an appropriation for this purpose for any fiscal year shall not have been made prior to the 1st day of March preceding the beginning of such fiscal year, the Secretary of War may authorize the Board of Road Commissioners to incur obligations for this purpose of not to exceed 75 per centum of the appropriation for this purpose for the fiscal year then currrent, payment of these obligations to be made from the appropriation for the new fiscal year when it becomes available.

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W. D. Act approved April 15, 1926

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Wording same as act of June 7, 1924 up to amount appropriated, $900,000, to be immediately available, and to include $1,000 compensation to the President of the Board of Road Commissioners for Alaska, in addition to his regular pay and allowances.

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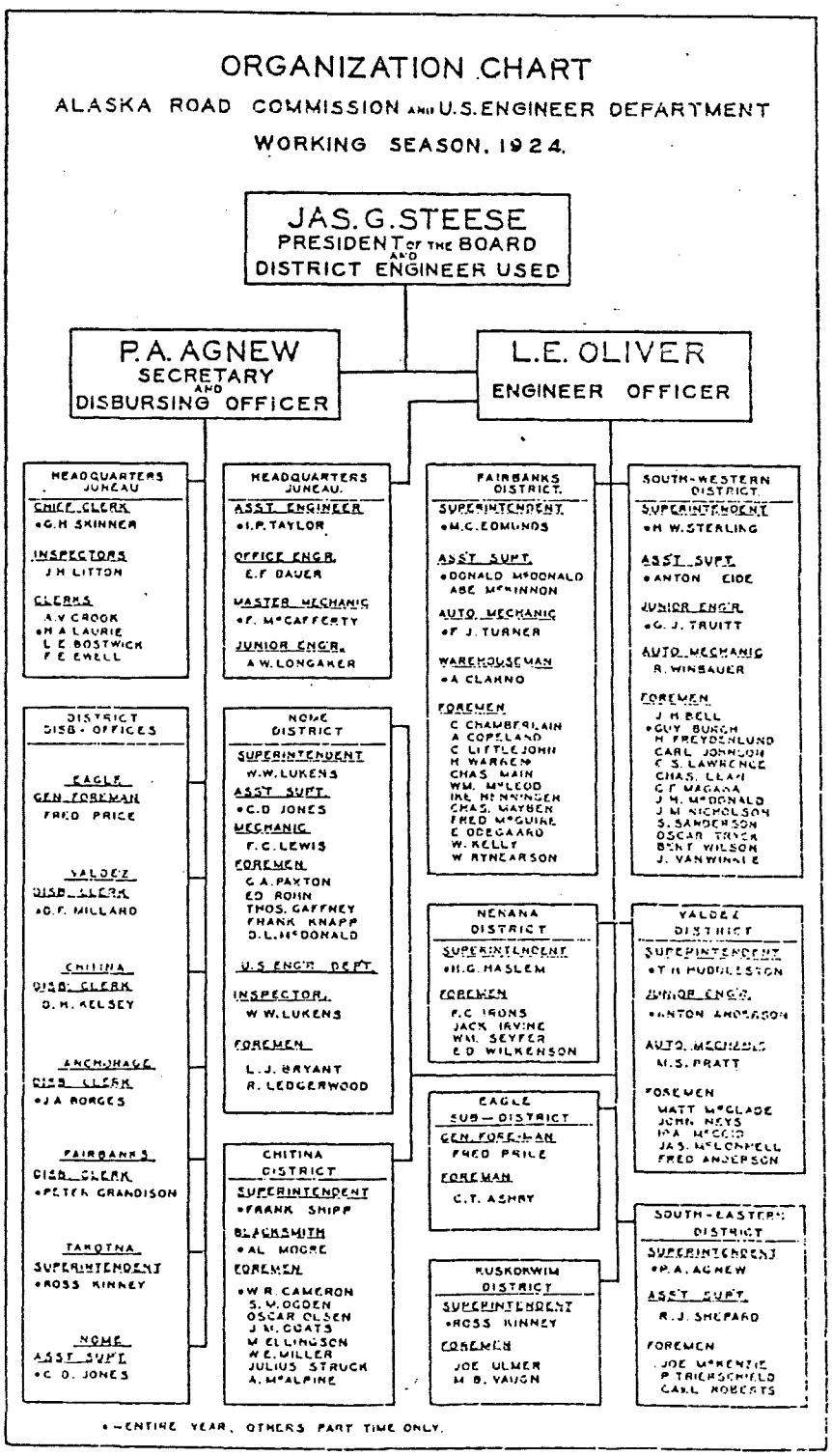
ORGANIZATION CHART
ALASKA ROAD COMMISSION AND U.S. ENGINEER DEPARTMENT
WORKING SEASON, 1924.
JAS. G. STEESE
PRESIDENT OF THE BOARD AND DISTRICT ENGINEER USED
P. A. AGNEW
SECRETARY AND DISBURSING OFFICER
L. E. OLIVER
ENGINEER OFFICER
HEADQUARTERS JUNEAU
CHIEF CLERK
•G. H. SKINNER
INSPECTORS
J. H. LITTON
CLERKS
A. V. CROOK
•H. A. LAURIE
L. E. BOSTWICK
F. E. EMELL
HEADQUARTERS JUNEAU
ASST. ENGINEER
•I. P. TAYLOR
OFFICE ENGR.
E. F. BAUER
MASTER MECHANIC
•F. McCAFFERTY
JUNIOR ENGR.
A. W. LONGAKER
FAIRBANKS DISTRICT
SUPERINTENDENT
•M. C. EDMUNDS
ASST. SUPT.
•DONALD McDONALD
ABE McKINNON
AUTO. MECHANIC
•F. J. TURNER
WAREHOUSEMAN
•A. CLARNO
FOREMEN
C. CHAMBERLAIN
A. COPELAND
C. LITTLEJOHN
H. WARREN
CHAS. MAIN
WM. McLEOD
IKE McKINNON
CHAS. MAYBEN
FRED McGUIRE
E. ODEGAARD
W. KELLY
W. RYNEARSON
SOUTH-WESTERN DISTRICT
SUPERINTENDENT
•H. W. STERLING
ASST. SUPT.
•ANTON EIDE
JUNIOR ENG'R
•G. J. TRUITT
AUTO. MECHANIC
R. WINBAUER
FOREMEN
J. H. BELL
•GUY BURCH
H. FREYDENLUND
CARL JOHNSON
C. S. LAWRENCE
CHAS. LEAK
C. F. MAGANA
J. H. McDONALD
J. M. NICHOLSON
S. SANDERSON
OSCAR TRYCK
BENT WILSON
J. VANWINKLE
DISTRICT DISB. OFFICES
EAGLE
GEN. FOREMAN
FRED PRICE
VALDEZ
DISB. CLERK
•O. F. MILLARD
CHITINA
DISB. CLERK
O. H. KELSEY
ANCHORAGE
DISB. CLERK
•J. A. BORGES
FAIRBANKS
DISB. CLERK
•PETER GRANDISON
TANOTNA
SUPERINTENDENT
•ROSS KINNEY
NOME
ASST. SUPT.
•C. O. JONES
NOME DISTRICT
SUPERINTENDENT
W. W. LUKENS
ASST. SUPT.
•C. O. JONES
MECHANIC
F. C. LEWIS
FOREMEN
G. A. PAXTON
ED ROHN
THOS. GAFFNEY
FRANK KNAPP
D. L. McDONALD
U.S. ENG'R DEPT.
INSPECTOR.
W. W. LUKENS
FOREMEN
L. J. BRYANT
R. LEDGERWOOD
CHITINA DISTRICT
SUPERINTENDENT
•FRANK SHIPP
BLACKSMITH
•AL MOORE
FOREMEN
•W. R. CAMERON
S. M. OGDEN
OSCAR OLSEN
J. M. COATS
M. ELLINGSON
W. E. MILLER
JULIUS STRUCK
A. McALPINE
NENANA DISTRICT
SUPERINTENDENT
•H. G. HASLEM
FOREMEN
F. C. IRONS
JACK IRVINE
WM. SEYFER
E. D. WILKENSON
EAGLE SUB-DISTRICT
GEN. FOREMAN
FRED PRILE
FOREMAN
C. T. ASHBY
KUSKOKWIM DISTRICT
SUPERINTENDENT
•ROSS KINNEY
FOREMEN
JOE ULMER
M. B. VAUGN
VALDEZ DISTRICT
SUPERINTENDENT
•T. H. PUDDLESTON
JUNIOR ENG'R.
•ANTON ANDERSON
AUTO. MECHANIC
M. S. PRATT
FOREMEN
MATT McCLADE
JOHN NEYS
IRA McCOID
JAS. McCONNELL
FRED ANDERSON
SOUTH-EASTERN DISTRICT
SUPERINTENDENT
•P. A. AGNEW
ASST. SUPT.
R. J. SHEPARD
FOREMEN
JOE McKENZIE
P. TRIERSCHIELD
CARL ROBERTS
•—ENTIRE YEAR, OTHERS PART TIME ONLY.

Members of the Board of Road Commissioners
for Alaska, 1918 to 1925

Presidents

Major William H. Waugh, December 30, 1917 to April 14, 1920
Lieutenant Colonel John C. Gotwals, April 15, 1920 to July 6, 1920
Major, later Colonel, James G. Steese, July 7, 1920 to date

Presidents and Engineer Officers

Major William H. Waugh, December 30, 1917 to April 14, 1920
Colonel James G. Steese, March 27, 1924 to August 4, 1924

Engineer Officers

Major William H. Waugh, April 15, 1920 to July 6, 1920
Lieutenant Colonel John C. Gotwals, July 6, 1920 to March 26, 1924
Major Lunsford E. Oliver, August 5, 1924 to date

Assistant Engineers

Captain John Zug, December 30, 1917 to April 14, 1920

Secretary and Disbursing Officers

Captain John Zug, October 18, 1917 to January 18, 1918
1st Lieutenant Sidney L. Carter, January 19, 1918 to June 30, 1921
Captain C.S. Ward, July 1, 1921 to May 2, 1922
Captain Aubrey H. Bond, May 3, 1922 to November 25, 1922
1st Lieutenant Pierre A. Agnew, March 1, 1923 to January 31, 1925

Special Disbur$ing Agent

Colonel James G. Steese, September 23, 1922 to February 28, 1923

Military Assistants

Captain C.W. Ward, May 3, 1922 to November 14, 1922
1st Lieutenant Pierre A. Agnew, December 18, 1922 to February 28, 1923
Lieutenant Colonel John C. Gotwals, March 27, 1924 to April 26, 1924
Major Lunsford E. Oliver, May 2, 1924 to August 4, 1924
Second Lieutenant Harry E. Fisher, October 2, 1924 to January 31, 1925