

We feel a great appreciation for the assistance and kindness offered us by local Danish and temporary American residents during our stay in Greenland. Their efforts played an important part in making our research a success.

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The Alaska Highway Development

Thirty-one years ago, in November of 1942, the Alaska Highway was opened for use as a military road. Built as a long-range defense measure^{1:221}, it was assumed that improvements would continue following World War II. Since that time, there have been many proposals to pave the road, but they have been blocked by political and economic considerations.

The resulting highway had a good gravelled driving surface, but was rough and uneven. After the responsibility for the highway was transferred from the United States Army to the Royal Canadian Engineers, the terms of reference under which operations were carried out did not permit major road relocations. Although temporary structures were replaced by more permanent ones and some hazardous areas were reconstructed, the alignment of the highway is essentially the same today as it was in 1943^{2:5}.

The highway is Alaska's only land link with the lower forty-eight States and a major road serving the Yukon, yet of the nearly 1,525 miles of road, to date less than 400 miles are paved. The remaining 1,100 odd miles are at best a dusty and difficult ordeal for both men and machines.

With both United States and Canadian interest increasing toward the growth and development of the northwest, there can be little doubt that a paved road would be of substantial value to both countries. The present reaction to the issue of paving is somewhat a mirror of past negotiations. The federal governments of the United States and Canada are cool toward the issue, while local interest in both Alaska and the Yukon is quite high.

RECENT ISSUES

Measures to improve the Alaska Highway have been periodically brought before the Canadian Parliament and the United States Congress, but a growing disparity of interests beginning in the 1950's, has made negotiations very difficult.

The Conservative victories in the elections of 10 June 1957 and 31 March 1958, which installed the Diefenbaker government, led to a major re-examination of Canadian government policies with significant implications for the entire spectrum of Canadian-United States relationships. As the United States Ambassador to Canada, the Hon. Livingston T. Merchant, observed^{3:637}:

... The disparity in population and power between Canada and the United States has understandably created a defensive reaction on the part of Canadians which takes the form of sensitivity to any real or fancied slight to Canadian sovereignty.

During that period, a United States bill was found objectionable in Canada in that the quality and the standards of construction for the improved road would have been placed under the direction of the United States' Secretary of the Interior. The bill was subsequently withdrawn in Congress, but

it seems to have established an important precedent, for both countries now feel that the Canadian portion of the road would be better administered by Canada.

Numerous bills were sponsored during that period for improving the road, developing railways and introducing new sea-routes for the region^{4:b-6}. In 1964 the Canadian Government sponsored a study to determine the economic benefits of reconstructing and paving the Alaska Highway. Using the most generous notions of benefit derived from an extensive study of available statistics, benefit-cost ratios were not only less than unity, but ratios of 0.3 to 0.5 were typical alternative programs for this well-established route^{5:136}.

Subsequently legislation was introduced in the United States Congress which excluded the parts that were previously objectionable to Canada and suggested an equal responsibility 50-50 capital outlay. However, the increasing cost-factor continually caused the demise of most proposals.

During the 1st Session of the 90th Congress, a new bill, S.2021, was introduced. Like most bills that preceded it, the major concern was for paving the entire highway between Dawson Creek and Fairbanks; but a new set of stipulations appeared in the bill which caused mixed emotions in Canada. Section 4 contained these stipulations^{6:2-3}.

Construction work to be performed under contract shall be advertised for a reasonable period by the Minister of Public Works, or other similar official, of the Government of Canada, and contracts shall be awarded pursuant to such advertisements with the concurrence of the Secretary of Commerce; but no part of the appropriations authorized in this Act shall be available for obligation or expenditure until the Government of Canada shall have entered into an agreement with the United States which shall provide, in part that said Government

(1) will provide, without participation of funds herein authorized, all necessary rights-of-way for the construction of the Alaska Highway, which shall forever be held inalienable as a part of the highway for public use;

(2) will not impose any highway toll, or permit any such toll to be charged, for use by vehicles or persons of any portion of the highway construction under the provisions of this Act;

(3) will not levy or assess, directly or indirectly any fee, tax, or other charge for the use of said highway by vehicles or persons of the United States that does not ap-

ply equally to vehicles or persons of such country;

(4) will grant reciprocal recognition of vehicle registration and drivers licences; and

(5) will provide for the year-round maintenance of the highway; including snow removal, after its completion in condition adequately to serve the needs of present and future traffic.

In the Second Session of the 90th Congress the final hearings were held in the House of Representatives^{7:2-3}, but owing to the negative thinking at the time, the bill died for lack of further action.

Members of the Canadian Parliament were also active during this period. For several years, Robert N. Thompson, M.P. (Red Deer) had attempted to establish an Alaska Highway Authority. The most recent attempt was in 1969 with Bill C-82. He believed that the Authority as outlined in the bill was the only way to fight the continual procrastination of the legislators and parliamentarians^{8:1}. The bill provided for the establishment of a non-Crown corporation to take over the development of the Highway within Canada^{9:1}.

An important feature of Bill C-82 was that formal Yukon representation was to be a part of negotiations and discussions concerning the Alaska Highway. During the same year, several more bills were introduced in the United States Senate and House of Representatives. Although informal discussions were held between representatives of the federal governments of the United States and Canada and those of British Columbia and Alaska, at no time were representatives from the Yukon invited to attend.

The Northern Development Conference delegates were also active in sponsoring resolutions concerning the highway. At the Fourth National Northern Development Conference held in 1967, the following resolution was adopted^{10:152}:

Resolution No. 10

WHEREAS the paving of the Alaska Highway would have the immediate benefit of greatly increased tourist traffic to the Yukon and Alaska, and a substantial reduction in the heavy maintenance costs at present prevailing owing to the unpaved condition of the highway, and would also tend to improve the economy of adjacent areas; and

WHEREAS good road access would improve social development of the North; and WHEREAS the Government of the United States of America has indicated interest in

the paving of the Alaska Highway by the introduction of Bill S.2021,

NOW THEREFORE BE IT RESOLVED ——— that the Government of Canada be urged to co-operate with the Government of the U.S.A. in bringing about the earliest possible commencement by the reconstruction and surfacing to adequate standards, of the Alaska Highway.

The response to this resolution was also negative. The federal government of Canada replied that there appeared to be no strong support toward this end from the residents of Alaska as "they feel they have more pressing transportation needs at this time." A summary of the comments was printed at the next Northern Conference^{11:13-14}:

The Canadian Government has not proceeded with the hard-surfacing program on its own because according to a cost-benefit analysis conducted by them such expenditure is not warranted. This study found that 47% of the highway use was by people and business residents in Alaska. The official position of the Canadian Government is that when the Government of Alaska wishes to proceed with such a program they will re-evaluate their position.

In the meantime, there has been a fairly extensive upgrading program conducted, consisting of bridge rebuilding, dust control and paving in the areas of heavy traffic.

Owing to the negative response, U.S. Senator Mike Gravel (Alaska) introduced a new Bill S. 2372, in the United States Senate to encourage Canadian participation. Section 2 of the bill called for the following^{12:1-2}:

Expenditures of sums herein authorized shall be subject to receipt of satisfactory assurances from the Government of Canada that appropriate commitments have been made by that Government to assume at least one-fifth of the expenditures proposed to be incurred henceforth by that country and the United States in the improvement of a portion of the Alaska Highway within the boundaries of Canada, specifically that segment of the highway extending from Whitehorse, Yukon Territory, to the Alaska boundary, with a connection from Haines Junction, Yukon Territory, to Haines, Alaska.

The new bill suggested that eighty per cent of the initial cost be borne by the United States as opposed to the 50-50 sharing proposal of two years before, and that Canada should assume the balance and undertake the general maintenance of the road. The bill called for the paving of only a segment of

the present highway, thus lowering the costs to both countries, and hopefully establishing a precedent for the paving of the entire road. Similar bills were recently proposed and subsequently defeated in the Canadian Parliament.

Several more Bills related to the paving issue were introduced in July 1969. They were identical, but took a new direction (Fig. 1). The Bills, H.R. 13094 and H.R. 13128, called for a redesignation of the Alaska Highway^{12:236-37}:

(a) A highway between Butte, Montana, through Canada to Fairbanks, Alaska, the exact route of which shall be determined as provided in this section, is hereby designated as the Alaska Highway.

(b) The route of the Alaska Highway from Butte, Montana, to the border between Montana and Canada shall follow the presently designated route of Interstate Route 15, through Great Falls, Montana, to a connection with the route designated in "D" of this section.

(c) The route of the Alaska Highway within Alaska shall be along that highway in existence on the date of enactment of this section between Fairbanks, Alaska and the border between Alaska and Canada, which highway prior to such date was also known as the Alaska Highway.

(d) The route of the Alaska Highway within Canada shall be as follows:

(1) from the border between Canada and Montana to Dawson Creek, British Columbia, the route shall be designated by the Government of Canada along existing paved highways so as to connect with the United States section of the Alaska Highway in Montana; and

(2) from Dawson Creek, British Columbia, to the border of Canada and Alaska the route shall be generally along the highway in existence on the date of enactment of this section between such points, which highway prior to such date was also known as the Alaska Highway.

(3) The Secretary is authorized to cooperate with the Government of Canada in the construction, reconstruction, and improvement of the Alaska Highway within the borders of that country (including a connecting highway to Haines, Alaska) between Dawson Creek, British Columbia, and the border between Alaska and Canada . . .

In essence the Bill covered two separate issues: the paving of the unpaved portions of

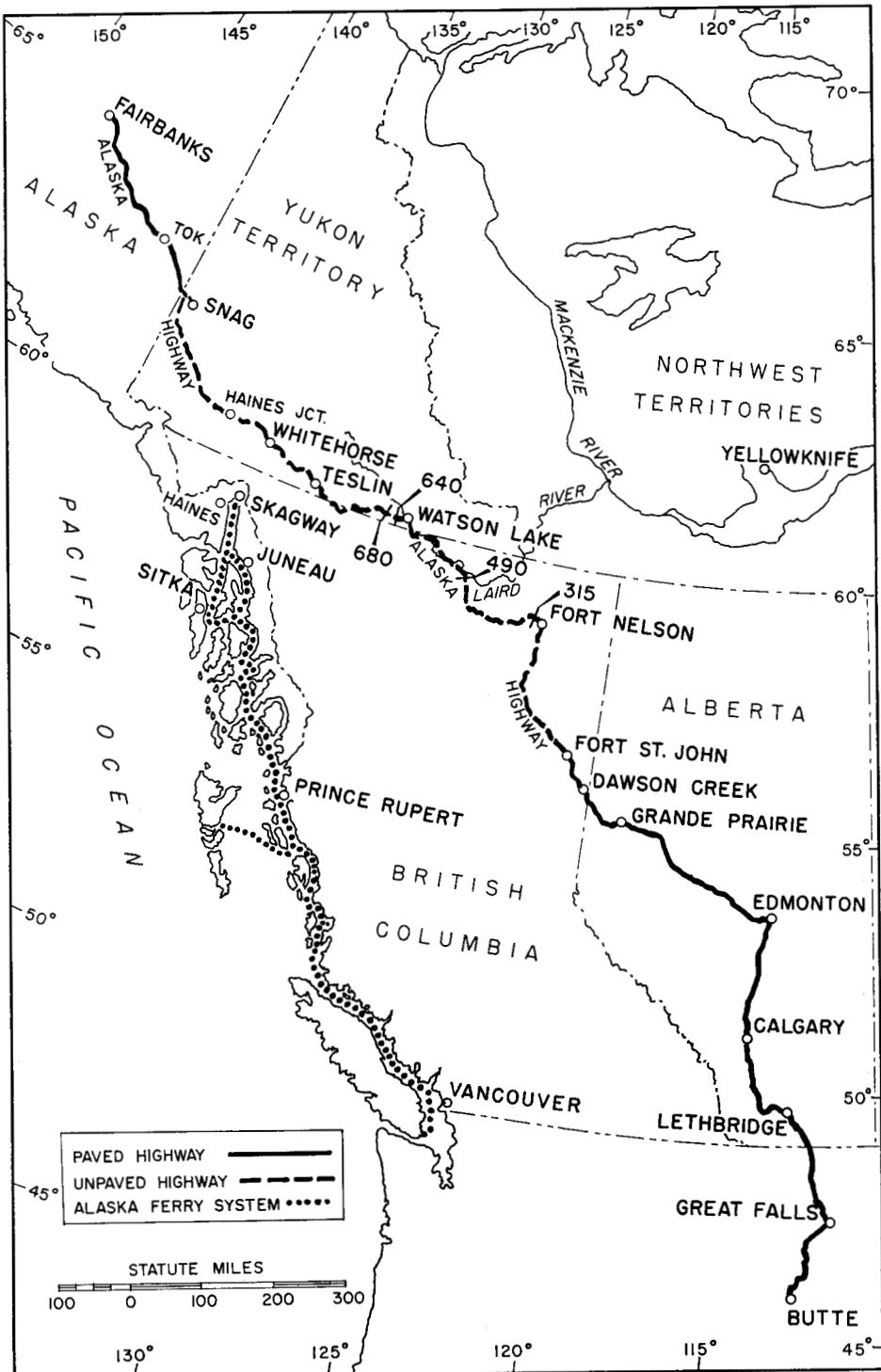


FIG. 1. Alaska Highway and adjacent region, 1973.

the Alaska Highway, and the redesignation of the Alaska Highway to include the 2,556 miles from Butte, Montana to Fairbanks, Alaska.

In spite of negative responses to the paving issue, the Fifth National Northern Development Conference continued their efforts. They felt that the discovery of oil on the North Slope of Alaska might help the cause ^{11:156}; *Resolution No. 4*

WHEREAS the logistical problems of oil and gas operations in the North can be substantially reduced through improved transportation facilities, and

WHEREAS the Alaska Highway is one of the prime road links to the North,

THEREFORE BE IT RESOLVED that the Government of Canada be urged to re-evaluate its position regarding the upgrading of this route with the ultimate objective of a paved arterial road to the Alaska border, and that the Government of Canada be urged to commence negotiations with the Government of the United States for a joint program to this end.

Again the response to the Resolution was cool. It was the feeling of observers that no resolutions or legislation would be acceptable until the Canadian North began to experience the same oil developments as were taking place on the North Slope of Alaska.

Undaunted by the negative response, Senator Gravel sponsored further legislation, which became law in 1971, to authorize negotiations between the United States and Canada. What evolved from those sessions was a proposed cost-sharing plan for the reconstruction and paving of the Alaska Highway. These plans were vetoed by President Nixon.

The President's negative decision was rooted in the assumption that adequate modes of transportation were developing and that the expected traffic on the Highway did not warrant reconstruction and paving at that time. He further cited that Canada was currently engaged in road building efforts in British Columbia and those roads would be suitable alternatives to the Alaska Highway; the Administration then concluded all negotiations on the issue.

Subsequent attempts to improve the Alaska Highway, or portions thereof have been brought before the U.S. Senate, and have failed. In the most recent attempt in late 1972, the Federal Aid to Highways Bill failed in the waning hours of the last session, owing to the breaking of the Highway trust fund for use in urban mass transit. Again, northern transportation has been shunted aside in favour of the needs of urban areas.

CURRENT PROBLEMS

There are numerous problems associated with the present proposals to improve the Alaska Highway, such as increased costs of construction and maintenance, political strife, and alternate considerations.

When we are dealing with overland transport conditions in arctic and subarctic regions, we must consider that the roads are really extensions of southern roads and ideas conceived by a society elsewhere, made for vehicles designed and constructed for social conditions typical of a totally foreign environment. This proposed highway development is then typical of a high level of social order and economic development in a wealthy society ^{5:137}.

When we evaluate the current census of the region to be served by this road in terms of the often-mentioned cost-benefit, the negative relationship can readily be seen. With roughly only 50,000 inhabitants in the Yukon and Northwest Territories combined, an expenditure of nearly \$250 million may perhaps seem out of line, but not unreasonable when *all* benefits are considered. Our colonial ideas of the nineteenth century, both in Canada and the United States must be subjugated before we can develop our northern centres as part of the mainstream of society.

Although the Canadian Government pledged \$19 million in 1972 to be spent over the following five years in bridge replacement and current maintenance, this amount falls far short of the estimated \$210 to \$260 million necessary to bring the road up to major highway status; however, the \$19 million would have represented nearly half of the Canadian portion of construction if Senator Gravel's earlier 80-20 bill had been accepted by both countries.

The underlying political aspects of the highway construction vary from being subtly humorous to being an impossible dream. In 1968, (former) Premier W. A. C. Bennett of British Columbia offered to pave the highway if British Columbia could extend her borders to include the Yukon and the Mackenzie District of the Northwest Territories. In humorous retaliation, Commissioner Hodgson of the Northwest Territories suggested that Mr. Bennett would be better advised to make peace with Alaska and attempt to regain the "Panhandle". This suggestion opened an old wound in the Yukon and soon many Yukoners were suggesting that any paving issue be tied to negotiations which would guarantee the "return" of the Panhandle to Canada. Other Yukoners suggested that they extend their southern boundary southward to 55°

north latitude to include arctic British Columbia, that "northern colony of British Columbia".

Perhaps the most interesting problem, which would face the builders of any proposed development, is which route to select. At present, there are five routes that could be considered (See Fig. 1), and each has its compensating points^{2:10-14}.

Route # 1 is the present highway and has a gravelled distance of 1,137 miles. The cost of maintenance and bridge construction for a 20-year period is estimated at \$143,137,000.

Route # 2 is the reconstruction and paving of the existing route with minor diversions. The distance involved is 1,127 miles or 10 miles shorter than *Route # 1*. The total cost to include paving and 20-year maintenance is estimated at \$242,212,000.

Route # 3 is the reconstruction and paving of the existing route with major diversions. The distance involved is 1,037 miles or 100 miles shorter than *Route # 1*. The total cost of paving and 20-year maintenance of this route is estimated at \$231,882,000.

Route # 4 is an unplanned alternative route. In 1965, Premier Bennett announced that his government was considering a major hydro-project on the Liard River. In the event of the completion of the project, the area between miles 490 and 640 of the present highway would be totally flooded, and the areas between miles 315 and 680 would be affected. It was noted as impossible to select the most feasible route to accommodate this development should it take place.

Route # 5 is an attempt to offer a major alternative route closer to the sea. The route would reduce the distance by some 188 miles and would cost \$217,474,000 for reconstruction, paving and 20-year maintenance.

ALTERNATIVES

The majority of the present plans for developing northern roads seem to be predicated on the philosophy that those inside want to get out and those outside want to get in. Since there have been few dissensions recorded with regard to winter travel on the Alaska Highway, it can be assumed that the tourist season affords the greatest number of travellers and accordingly the greatest difficulties (i.e. dust, gravel, mud, etc.). Perhaps the major considerations should be given to those roads which link to the Alaska Ferry System. At present, 1,252 miles of the Alaska Highway and the Haines cutoff are in need of paving and repair. The cost has been estimated as ranging from \$140 million to \$260 million. The travel pattern is uneven. There is heavy use of the highway in the south, and

then the traffic pattern becomes very heavy again in the vicinity of Whitehorse. This seems to suggest that great numbers of travellers are using the ferry route as opposed to the highway. If this assumption is correct, then the paving of the 320 miles between Haines and Tok, and the 100 miles between Haines Junction and Whitehorse might prove to be less expensive and more beneficial to all concerned. In this way via the Alaska Ferry System, the traveller could venture from Canada or the United States and never need to travel along the gravelled portion. The section of the road in the vicinity of Watson Lake can be considered at a later time when the Prince Rupert-Watson Lake road becomes a reality.

The present traffic on the road averages 275 vehicles per day or 100,375 trips per year. According to the Alaska Department of Highways, paving the road will represent a *saving* in gasoline, time and wear and tear of over \$4 million per year. It is also estimated that the anticipated minimum growth of travel will be ten per cent per year for the next decade. This means by 1980, the number of vehicles travelling that portion of the Highway will have tripled and the annual benefit will amount to nearly \$10 million. For the entire period, the estimates are as follows: Construction cost — \$43,200,000 Benefit — \$70,709,260^{12:211-12}.

The benefits generated by the savings will probably increase tourist travel. In turn this will necessitate increased facilities which undoubtedly bring a substantial increase in the number of visitors to the area.

The number of tourists, however, should not be the major determining factor in regard to the paving issue. Whichever route may be chosen in the future for reconstruction and/or paving should be accomplished to serve the needs of the residents of Alaska and the Yukon. Although there is a great physical and mental distance between Whitehorse and Ottawa, and Fairbanks and Washington, this should not deter the parliamentarians from considering their countrymen as equal in need to those in Ontario or West Virginia.

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NOTICE TO READERS

Because of the Institute's move, publication of both this issue and that of June may be delayed; by September it should be back on schedule. Please note the change of address on the verso of the front cover.