1970

Feasibility Study Route 161 Extension St. Francis, ME. to St. Pamphile, P.Q., 1970

Maine Department of Transportation

State Highway Commission

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FEASIBILITY STUDY
ROUTE 161 EXTENSION
ST. FRANCIS, ME. TO ST. PAMPHILE P. Q.

PLANNING & TRAFFIC DIVISION
FEASIBILITY STUDY

ROUTE 161 EXTENSION

ST. FRANCIS TO ST PAMPHILE, P. Q.

1970

Prepared By

Maine State Highway Commission
Prepared by

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PREPARED AND PUBLISHED
IN COOPERATION WITH

THE UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

PUBLISHED UNDER APPROPRIATION 11
To the Honorable Senate and
House of Representatives of the
One Hundred and Fifth Legislature

In accordance with the wishes of the 104th Maine Legislature as expressed in the provisions of L. D. 1189, AN ACT to Study Desirability of Extending Route 161 from St. Francis to Canada, the State Highway Commission herewith submits the enclosed report.

Respectfully,

MAINE STATE HIGHWAY COMMISSION

David H. Stevens, Chairman
Bertrand A. Lacharite
Steven D. Shaw
FEASIBILITY STUDY OF
ROUTE 161 EXTENSION FROM
ST. FRANCIS TO ST. PAMPHILE, P. Q.

INTRODUCTION

In accordance with the following Resolve passed by the 104th Legislature the accompanying report has been prepared:

STATE OF MAINE
IN THE YEAR OF OUR LORD NINETEEN HUNDRED SIXTY-NINE
H.P. 928 - L.D. 1189
AN ACT to Study Desirability of Extending Route 161
from St. Francis to Canada

Be it enacted by the People of the State of Maine, as follows:

Study. The State Highway Commission is directed to study and report to the 105th Legislature on the feasibility of extending Route 161 from the Town of St. Francis, Aroostook County, to St. Pamphile, Quebec, Canada.

DESCRIPTION AND COSTS OF STUDY ROUTE

The route under study, as delineated by the Location and Survey Division of the State Highway Commission, and as depicted in Figure 1, begins at the east end of the existing bridge over the Allagash River in Allagash and extends four
PROPOSED ROUTE 161 EXTENSION
ALLAGASH to ST. PAMPHILE
Scale 1" = 10 Miles
miles on State Aid Route #1 to Little Black River, and therefrom along the northwest bank of the St. John River, 21 miles, thence westerly 15.6 miles to the border at St. Pamphile, P. Q., a total distance of 40.6 miles.

Design requirements for the study route would call for a 20 foot bituminous surface treated gravel pavement with four foot gravel shoulders following substantially the existing roadway, except for limited mileage on new alignment. Ten watercourses requiring structures from 20 to 100 feet in length and 28 feet wide, curb to curb, would be crossed. Right of way requirements would total approximately 445 acres. These limited design standards, when coupled with simplified construction techniques and the low level of anticipated usage, yield the following estimate of cost at 1969 cost levels:

1) 36.6 miles @ $100,000 per mile incl. drainage needs $4,209,000 *
2) 10 bridges @ $35 - $40 per square foot 681,610 *
3) 443.6 acres of right of way at $150 per acre 66,610

$4,957,220

Say $4,960,000

* Items (1) and (2) include Preliminary Engineering, construction surveys and contingencies totaling approximately 15% of construction cost.

These costs would be increased substantially if design standards were increased. Also the final construction costs would be dependent upon the actual year of construction and construction staging.
EVALUATION OF ALTERNATE FACILITIES

Construction of State Route 161 from Allagash to St. Pamphile would make three routes for through travel available between Edmundston, N. B., and St. Jean Port-Joli, Quebec. Figure 2 shows the three routes, mileage and associated travel times.

One of the existing routes, Quebec Route #2, the Trans-Canada Highway extends from Edmundston to Riviere du Loup a distance of 79 miles and thence parallels the St. Lawrence River 60 miles to St. Jean Port-Joli. On this total length of 139 miles, it is estimated that travel speeds of 55 miles per hour can be maintained between Edmundston and St. Jean Port-Joli with resultant travel time of 152 minutes. The second route extends from Edmundston via New Brunswick Route 120 and Quebec Route 51 to Andreville and therefrom via Quebec Route 2 to St. Jean Port-Joli a distance of 129 miles with travel time of 155 minutes.

The third alternate would utilize New Brunswick Route 120 or U. S. Route 1 from Edmundston to Fort Kent, Route 161 and State Aid Route #1 from Fort Kent to Allagash, the proposed extension from Allagash to the Quebec border at St. Pamphile and a local road and Quebec Route 27 from the boundary to St. Jean Port-Joli, a total distance of 126 miles or travel time of 151 minutes.
In appraising possible usage, data obtained in 1965 at St. Anne de la Pocatiere, Quebec, was utilized. It was expanded to current traffic levels and an estimate was made of the number of vehicles which would be attracted to the two existing routes and to the study route.

Differences in travel times, which normally plays an important role in selection of routing were not significant on the three available routes. Consequently, factors such as the availability of travel oriented services, good highway geometrics and alignment, scenic attractions and delays due to customs stops would appear to have more than a minimal bearing on route selection.

With due consideration for these factors, it is estimated that the study route would have carried approximately 200 vehicles per day, on the average, during 1970 between St. Pamphile and St. Francis. Only modest increases in traffic could be expected in the future.
CONCLUSIONS

A review of the feasibility of extending State Route 161 from St. Francis to St. Pamphile, P. Q., reveals that a minimal 20 foot bituminous surface treated gravel paved road with four foot gravel shoulders could be constructed for a distance of 36.6 miles for a total cost of $4,960,000, at 1969 cost levels.

The usage of this highway would approximate 200 vehicles on an average day and modest increases could be anticipated in the future.

Alternative existing travel routes would be available to motorists using the facility and could be expected to continue to attract a significant portion of travel in the corridor.