Federal Government Historical Support for Transportation Infrastructure

Summary:

A search was conducted into various annual Federal Government Northern Affairs Department reports from 1961 to 1975, and the following summarizes information found on road and airport support for resource development. It is apparent that the Federal Government provided strong support for resource development in the North from 1961-1975.

- The reports describe various Northern Roads Programs and Northern Airports Programs designed to assist with resource development.
- Policies assisted with up to four categories of development roads:
 - o "Area development roads" which open up relatively undeveloped regions, and
 - "Mine development roads" which serve an area where two or more mining companies have made substantial progress toward largescale production. <u>These will be financed entirely by the</u> <u>Federal Government.</u>
 - "Mine access roads" which serve the property of one mining company capable of achieving production on a large enough scale to warrant federal assistance, may be financed two-thirds by the Federal Government and one-third by the company concerned.
 - "Tote roads or trails" are low standard roads built to provide temporary seasonal, or year-round access to the property of an individual company to bring in supplies or equipment for exploration, development, or small scale production. Tote trail assistance is designed to encourage developments of economic importance to the Territory even though their national importance may be marginal. Applications for assistance on tote trails to open up a mining property may be made to the Commissioner of the Territory concerned. If, in his opinion, there is justification for territorial government participation in the financing of the construction of the tote trail and if sufficient funds are available, he may authorize a Territorial contribution to the cost of building the tote trail.
- There were also support programs for airports through the Northern Resource Airports Program and the Remote Airports Program.
- Some of the mining companies that received support over the years include:
 - Canada Tungsten
 - o Pine Point Mines
 - Baffinland Iron Mines
 - Cadillac Explorations
 - Terra Mining and Exploration
 - Taurcanis Mines
 - Terra Mines
 - Echo Bay Mines
- In addition to the northern roads and airport programs, the reports also describe programs for Prospectors Assistance, Assay Services, and Northern Mineral Exploration Assistance. These have not been described in the work below.
- After 1975, the road and airport assistance programs are no longer mentioned in reports, nor is the
 Development and Incentive Program Section of Northern Affairs. This implies both the programs and the
 expertise were cut. There is no mention of why. Something happened to cause the government to
 withdraw this support.
- In 1983, there is mention of a Northern Road Policy, A Five-Year Program. No details of spending are provided.

Some Highlights

Following are some highlights describing programs and funding support, taken from the detailed annual report wording following.

- May 1961 the Minister of Northern Affairs and National Resources announced an expansion in the
 government policy for the construction of development roads in the Yukon and the Northwest Territories.
 Four categories of development roads were recognized.
 - There are "area development roads" which open up relatively undeveloped regions, and "mine development roads" which serve an area where two or more mining companies have made substantial progress toward largescale production. <u>These will be financed entirely by the Federal</u> Government.
 - o "Mine access roads" which serve the property of one mining company capable of achieving production on a large enough scale to warrant federal assistance, <u>may be financed two-thirds by the Federal Government and one-third by the company concerned.</u>
 - "tote" roads or trails are low standard roads built to provide temporary seasonal, or year-round access to the property of an individual company to bring in supplies or equipment for exploration, development, or small scale production. Tote trail assistance is designed to encourage developments of economic importance to the Territory even though their national importance may be marginal. Applications for assistance on tote trails to open up a mining property may be made to the Commissioner of the Territory concerned. If, in his opinion, there is justification for territorial government participation in the financing of the construction of the tote trail and if sufficient funds are available, he may authorize a Territorial contribution to the cost of building the tote trail.
- The whole new <u>roads policy will provide assistance in the development of a number of mining prospects</u> which are of great importance to the Yukon, the Northwest Territories and Canada as a whole.
- (1962) The Department of Northern Affairs and National Resources has contributed annually to the cost of a winter road under the "tote trail" program, as well as assisting in the construction of an airstrip, at Taurcanis Mines, which has seen a great deal of use during the past year by exploration aircraft active in the Contwoyto Lake area lying, about 125 miles to the north.
- (1962) A total of \$80,000 annually is available for airstrip construction in the Northwest Territories. Before any assistance can be given, there must be sufficient justification for the government to pay one-half the total cost of the construction of the airstrip.
- (1963) To encourage development of mineral resources, the Federal Government each year provides the sum of \$50,000 to the Territorial Government for tote trails in accordance with the terms of the Federal-Territorial Financial Agreement.
- (1967) <u>The Northern Roads program</u> which was approved by the Federal Government in 1965 calls for an annual expenditure of \$10 million for the next 10 years in both territories. It is the first phase of a long-range 20 year program designed to bring all potential areas of resource development within 200 miles of the nearest permanent road.
- (1967) <u>In addition to road and airstrip assistance</u> which is administered by the Federal Government, there is available in each Territory \$100,000 each year for construction of low class roads to provide temporary seasonal or year round access in connection with any natural resource development project.
- (1968 report) The Development Analysis Section initiates, implements and maintains <u>policies and</u>
 <u>development programs and projects designed to stimulate the exploration for non-renewable resources</u>
 <u>in the Yukon and Northwest Territories</u>. The prime activities have been concerned with carrying out
 financial and engineering evaluations of resource developments in the Yukon and Northwest Territories
 where government assistance has been requested and in administering programs designed to encourage
 resource development in the north. Included in these activities are the following:
 - Pine Point Smelter Study
 - Baffinland Iron Mines Limited railroad, roads, airstrips, harbour facilities and a town site.
- (1968 report) Roads Program to provide financial assistance for road construction was recommended for various mining projects.

- (1970 report) The Northern Mineral Exploration Assistance Program is designed to encourage mineral exploration activity in the Yukon Territory and Northwest Territories by providing grants of up to 40 per cent of the cost of approved exploration programs for minerals or oil and gas in the North. A total of 176 corporate applicants have applied for assistance in one or more programs of exploratory work.
- (1970 report) The **Northern Roads Program** was approved by the Federal Government in 1965 called for an annual expenditure of \$10 million for the following 10 years in both Territories. It is the first phase of a long-range, 20-year program designed to bring permanent roads to within 200 miles of all potential areas of resource development. The principal types of roads under the program are as follows:
 - Communication and Network Roads To provide connecting links between the Territories, the Province, and population centres with the Territories. Construction costs and 85 per cent of maintenance costs will be paid by the Federal Government. Fifteen per cent of maintenance costs is borne by the Territorial Governments.
 - Area Development Roads To lead into resource-potential areas, they are planned to fit in with and extend the overall road network plan. The Federal Government will bear the initial construction costs for this type of road with maintenance to be shared by the Federal and Territorial Governments on an 85-15 per cent basis.
 - Permanent Access Roads To lead from the nearest permanent road to a resource development
 <u>about to go into production</u>. Federal assistance under the new program may be up to, but shall
 not exceed (a) 66 2/3 of actual road cost, (b) 15 per cent of actual capital expended by the
 company for exploration or development prior to commencement of commercial production or
 exploration, (c) \$40,000 per mile.
 - Initial Access Roads Low standard winter, or year-round roads to provide an established resource exploration or development project with access to a network road. Federal assistance here will be the lesser of 5 per cent of exploration costs or 50 per cent of actual construction cost of the road, which is to be maintained by its primary user the company concerned.
 - Tote Roads Construction is the responsibility of the individual or company concerned and costs incurred for such roads may be shared up to a maximum of 50 per cent of the cost.
- (1971 report) A revised policy document entitled "Northern Road Policy 1971" was approved on
 December 21, 1971. One of the main features of the revised policy is the provision for the construction of
 Pioneer Roads. This new road category is designed to provide low cost access into undeveloped areas of
 favourable natural potential.
- (1971 report) The **Northern Resource Airports Program** approval was on T.B. Minute No. 647905, dated November 22, 1965. It is a cost-sharing scheme for constructing small airports to provide access to mineral and non-renewable resources, exploration and development sites, tourist development sites and to improve transportation facilities. They also serve as incentives to economic and social development.
 - Nature of Assistance: The policy refers to construction of airports in two categories. Under the first, Government assistance is available to defray 50% of the cost of an exploratory airport up to a maximum federal expenditure of \$20,000. For the second category, airstrips or airports built in connection with the pre-production or early production stage of natural resources exploitation, the Federal Government may contribute 50% of the cost up to a maximum of \$100,000 per airport.
- (1971 report) The Remote Airports Program is people rather than resource oriented, designed to provide small isolated communities, not warranting normal airports for scheduled airline services, with gravel allweather airstrips, 3,300 feet in length capable of meeting the essential educational, health and emergency requirements of the community.
- (Reports after 1975) The Development and Incentive Program Section of INAC no longer appears in the
 reports after 1975, implying it was eliminated. There is also no information found on various road and
 airports programs to assist resource development in subsequent reports until 1983 when a Northern
 Road Policy, A Five-Year Program is mentioned. No details of spending are provided.

Detailed Report Wording

Following is the specific wording on annual road and airstrip support programs taken directly from the various annual Federal Northern Affairs reports, from 1961-1975

Report: Mining in the North 1962, Department of Northern Affairs and National Resources, February 1962 Page 44

4. Roads and Airstrips

In previous sections the "mine access" road to Canada Tungsten and the airstrip at Taurcanis mine has briefly been described. However, it should be mentioned that there is a provision in the Northwest Territories for "tote trails" whereby the Territorial Government is to be allotted \$50,000 annually from a Federal fund. To date, road construction under this category has mainly consisted of building winter roads for mining development projects such as the Discovery-Camlaren-Taurcanis winter truck road. A "tote trail" extending 4 1/2 miles from the Canada Tungsten road to the Flat Lakes was built in 1962 on a 50% government costsharing basis, with a total estimated cost of \$10,000.00. Although Canada Tungsten provided the remaining 50%, other exploration companies, as well as the Geological Survey of Canada, used this road which presently connects with not only the Canada Tungsten Hine access road but the airstrip to Flat Lakes, where pontoon-equipped aircraft may land. Early in 1963, an application was received from Redstone Mines Limited to obtain assistance under the Tote Trail fund whereby they would undertake to expend approximately \$7,000 on reconstruction of this tote trail. There would then be a direct link from Watson Lake to the Flat Lakes, reducing transportation costs for supplies which have to be flown into Redstone Mines by float-equipped aircraft during the summer of 1963. Other companies have indicated an interest in this road and it would be surprising indeed if tourists do not take advantage of this road since it is known that wildlife abounds in the Flat River Valley.

The Department of Northern Affairs and National Resources has contributed annually to the cost of a winter road under the "tote trail" program, as well as assisting in the construction of an airstrip, at Taurcanis Mines, which has seen a great deal of use during the past year by exploration aircraft active in the Contwoyto Lake area lying, about 125 miles to the north.

Inquiries were received early in the year from Baffinland Iron Mines Limited on the "tote trail" program but at the time of writing this report, no applications had been received from this Company who expect to build a road from their iron locations to Milne Bay on northern Baffin Island.

Notices were placed in publications in the Northwest Territories advising that, in accordance with Sessional Paper #13, 1961 (Second Session), applications for tote trail assistance in connection with the development of any natural resources projects in the Northwest Territories for the fiscal year commencing April 1, 1963, would be received by the Commissioner for the Northwest Territories up to July 1st, 1963, for summer construction and up to December 1st, 1963, for winter construction. It was stressed that applications for assistance must be made before commencing work and should be submitted on formal application forms which might be obtained fran any of the Mining Recorders in the Northwest Territories, or from the Commissioner for the Northwest Territories, Langevin Block, Ottawa.

A total of \$80,000 annually is available for airstrip construction in the Northwest Territories. Before any assistance can be given, there must be sufficient justification for the government to pay one-half the total cost of the construction of the airstrip. During 1962-63, the sum of \$3,617.00 was paid on the Canada Tungsten Mining Corporation airstrip in the Flat River Valley. The government's share on the construction of this airstrip since 1960-61 has amounted to a total of \$85,867.00. On Melville Island, an airstrip and access road were built near Winter Harbour. During the season of 1962-63, the federal government had contributed

\$22,563.75. At Taurcanis Mines Limited, no additional government funds were expended to assist in extending the length of the runway. However, to date a total of \$37,500.00 has been spent by the federal government on the airstrip and \$16,000.00 on the access road from the airstrip to the mine site. It might be advantageous to mention that any company contemplating airstrip construction should submit all expenditure statements for approval by the end of the fiscal year, otherwise, the monies voted -for this purpose will lapse and funds available for the ensuing year will be decreased. There were two instances during 1962-63 where expenditure statements were not received by the end of the fiscal year and this now decreases the funds available for the 1963 season.

Report: Mining in the North 1963-64, Department of Northern Affairs and National Resources

Page 21 - Mining Services

To encourage development of mineral resources, the Federal Government each year provides the sum of \$50,000 to the Territorial Government for tote trails in accordance with the terms of the Federal-Territorial Financial Agreement. Tote trails are defined as low standard roads to provide seasonal or year-round access to the property of an individual mining, or other resource-exploiting company, for the purpose of transferring equipment and supplies sufficient to carry on exploration, development, or small scale production. Construction of the trail is the responsibility of the company concerned and the amount of the Territorial contribution is determined by the Commissioner of the Yukon. Maintenance costs are paid by the company concerned. A Tote Trail Committee has been appointed to advise the Commissioner on the disbursement of funds to those applicants who have made application prior to construction of a road. The amount of disbursement to mining, exploration and development was \$39,018.80, lumbering \$2,500.05, and agriculture \$2,510.00, making a total of \$44,028.85 during the period April 1, 1963 to march 31, 1964.

Report: Mining in the North 1964-65, Department of Northern Affairs and National Resources Page 41

Tote Trails - Northwest Territories

The federal government in accordance with the terms of the Federal-Territorial Financial Agreement makes available \$50,000 annually for the construction of tote trails. The Commissioner may authorize payment of up to one-half of the cost of approved expenditures for this type of road to provide seasonal or year-round access to the property of an individual miner or other resource exploiting company for the purpose of hauling equipment and supplies sufficient to carry on exploration, development or small scale production. During 1964, four mining companies received assistance when \$32,700 was made available for tote trails.

The Commissioner of the Northwest Territories has a Review Committee who review all applications and draw up the contracts. All applications must be in the hands of the Committee prior to the commencement of any work on any road and applications for tote trail assistance in the Northwest Territories should be directed to the Commissioner.

Report: Mining in the North 1967, Department of Indian Affairs and Northern Development Page 25

Northern Roads Program

The Northern Roads program which was approved by the Federal Government in 1965 calls for an annual expenditure of \$10 million for the next 10 years in both territories. It is the first phase of a long-range 20 year program designed to bring all potential areas of resource development within 200 miles of the nearest permanent road. The policy was designed to be sufficiently flexible to allow

revisions in priorities from year to year to keep pace with resource development. It also allowed for a shift in volume of construction from one Territory to another, depending on the requirements and based on northern territorial development.

Instead of placing emphasis on resource potential alone, the road program is based on a multiple concept having as its objective the creation of a broad network of road-loops to serve all needs.

The total Federal expenditure on northern roads for 1967-68 was \$9,850,765 and the total mileage of new and reconstructed roads was 129 miles, 47 miles in the N.W.T. and 82 in the Yukon.

Tote Roads

In addition to road and airstrip assistance which is administered by the Federal Government, there is available in each Territory \$100,000 each year for construction of low class roads to provide temporary seasonal or year round access in connection with any natural resource development project. The program is administered by the Commissioner of each Territory. Construction is the responsibility of the individual or company concerned and costs incurred for such roads may be shared up to a maximum of 50% of the cost of construction.

During 1967, 29 projects in the Yukon received assistance in the amount of \$100,000 dollars and 664 miles of road were constructed. In the Northwest Territories one project received assistance in the amount of \$1250.

Report: Mines & Minerals North of 60, 1968, Department of Indian Affairs and Northern Development

DEVELOPMENT ANALYSIS SECTION

This section initiates, implements and maintains policies and development programs and projects designed to stimulate the exploration for non-renewable resources in the Yukon and Northwest Territories.

The prime activities have been concerned with carrying out financial and engineering evaluations of resource developments in the Yukon and Northwest Territories where government assistance has been requested and in administering programs designed to encourage resource development in the north. Included in these activities are the following:

Pine Point Smelter Study

This study was initiated as a result of requests from Pine Point Mines Limited to export large quantities of lead and zinc concentrates. It was considered that the possibility of processing these concentrates in the Northwest Territories should be investigated thoroughly in view of the benefits that such an industry would have to the economy of the north. The study has now been completed and a thorough assessment made of the conclusions and the socio-economic benefits which would result from a smelter. Reports will be made public early in 1969.

Baffinland Iron Mines Limited

In view of present Government budgetary restrictions, further work on this project was suspended temporarily. This Company owns a large, high grade iron ore property on northern Baffin Island and had requested Government assistance of approximately \$32.0 million for the provision of a railroad, roads, airstrips, harbour facilities and a town site. An interdepartmental task force was established to study the project and engineering and financial studies were carried out.

Roads Program

The section was represented on both the Interdepartmental and the Branch Committees on Northern Roads. Financial assistance for road construction was recommended for Mount Nansen Mines Limited, Anvil Mining Corporation Limited, Arctic Mining and Exploration Limited, and New Imperial Mines Limited. In addition, background information was provided to the Committee on proposed area development roads in both the Yukon and Northwest Territories.

Northern Roads Program

The Northern Roads program which was approved by the Federal Government in 1965 called for an annual expenditure of \$10 million for the following 10 years in both territories. It is the first phase of a long-range 20 year program designed to bring all potential areas of resource development within 200 miles of the nearest permanent road. The policy was designed to be sufficiently flexible to allow revisions in priori ties from year to year to keep pace with resource development. It also allowed for a shift in volume of construction from one Territory to another, depending on the requirements and based on northern territorial development.

Instead of placing emphasis on resource potential alone, the road program is based on a multiple concept having as its objective the creation of a broad network of road-loops to serve all needs.

The total estimated Federal expenditure on northern roads for 1968-69 will be \$8,757,600 and the total mileage of new and reconstructed roads was 120 miles, 45 miles in the N .W.T. and 84 in the Yukon.

The following is a list of projects conducted during the year under this program ...

... list

Tote Roads

In addition to road and airstrip assistance which is administered by the Federal Government there is available in each Territory \$100,000 each year for the construction of low class roads to provide temporary seasonal or year-round access in connection with any natural resource development project. The program is administered by the Commissioner of each Territory. Construction is the responsibility of the individual or company concerned and costs incurred for such roads may be shared up to a maximum of 50% of the cost.

During 1968 in the Northwest Territories, twelve applications for tote road assistance were approved covering oil, mining, agriculture and tourist enterprises. Funds allocated under contract amounted to \$94,700.00 to construct 835 miles of year-round road and 420 miles of winter roads for a total of 1255 miles. In the Yukon, 26 applications were approved for the construction of 342 miles of tote roads. Funds allocated under contract were \$94, 197.00.

Report: Mines & Minerals North of 60, Activities 1969, Department of Indian Affairs and Northern Development

DEVELOPMENT ANALYSIS SECTION

This section initiates, implements and maintains policies and development programs and projects designed to stimulate the exploration for non-renewable resources in the Yukon and Northwest Territories.

The prime activities have been concerned with carrying out financial and engineering evaluations of resource developments in the Yukon and Northwest Territories where government assistance has been requested and in administering programs designed to encourage resource development in the north.

Further studies of the logistics and marketing aspects of the proposed development of Baffinland Iron Mines Limited were conducted. These were done essentially to update earlier economic feasibility studies necessary to assess the Company's request for assistance of approximately \$32.0 million to provide a rail road, roads, airstrips, harbour facilities and a townsite.

Financial assistance for access road construction was recommended for Scurry-Rainbow Oil Limited and for airstrip construction for Stan Reynolds Guide and Outfitter, Keewatin Arctic Camp Company Limited, Terra Mining and Exploration Limited, Echo Bay Mines Limited, Triad Oil Company and Panarctic Oils Limited under the Road and Airstrips Assistance Program. A total of \$176,275 was committed to these projects in accordance with the provisions of the program whereby the Federal Government will share the costs of approved construction.

Northern Roads Program

The Northern Roads program which was approved by the Federal Government in 1965 called for an annual expenditure of \$10 million for the following 10 years in both territories. It is the first phase of a long-range 20 year program designed to bring all potential areas of resource development within 200 miles of the nearest permanent road. The policy was designed to be sufficiently flexible to allow revisions in priorities from year to year to keep pace with resource development. It also allowed for a shift in volume of construction from one Territory to another, depending on the requirements and based on northern territorial development.

Instead of placing emphasis on resource potential alone, the road program is based on a multiple concept having as its objective the creation of a broad network of road loops to serve all needs.

The total estimated Federal expenditure on northern roads for 1969-70 will be \$9,489,000 and the following is a list of major projects conducted during the year under this program :

... see original document

Tote Roads

In addition to road and airstrip assistance which is administered by the Federal Government, \$100,000 is available in each Territory each year for the construction of low class roads to provide temporary seasonal or year-round access in connection with any natural resource development project. The program is administered by the Commissioner of each Territory. Construction is the responsibility of the individual or company concerned and costs incurred for such roads may be shared up to a maximum of 50% of the cost.

Nine applications in the amount of \$39,860.70 for tote road assistance were received covering oil, mining, agriculture and tourist enterprise in the Northwest Territories in 1969. As of December 31, 1969 \$19,214.30 had been paid out. In the Yukon, 21 applications for tote trail assistance were processed up to 17 November, 1969 and \$32,261.08 paid to applicants. \$75,222.58 has been allotted to other applicants.

Report: Mines & Minerals North of 60, Activities 1970, Department of Indian Affairs and Northern Development

Northern Mineral Exploration Assistance Program

This program is designed to encourage mineral exploration activity in the Yukon Territory and Northwest Territories by providing grants of up to 40 per cent of the cost of approved exploration programs for minerals or oil and gas in the North. A

total of 176 corporate applicants have applied for assistance in one or more programs of exploratory work.

Since the inception of the Program in 1967, 111 applications have been approved and a total of \$2,998,315 .36 has been paid in grants, leaving an outstanding commitment of \$637,644.77. Moreover, payments of \$9,022,500 have been made towards a large program of oil and gas exploration in the Arctic Islands.

Northern Roads Program

The Northern Roads Program which was approved by the Federal Government in 1965 called for an annual expenditure of \$10 million for the following 10 years in both Territories. It is the first phase of a long-range, 20-year program designed to bring permanent roads to within 200 miles of all potential areas of resource development. The policy was designed to be sufficiently flexible to allow revisions in priorities from year to year to keep pace with resource development. It also allowed for a shift in volume of construction from one Territory to another, depending on the requirements and based on northern territorial development.

Instead of placing emphasis on resource potential alone, the road program is based on a multiple concept having as its objective the creation of a broad network of road loops to serve all needs.

A number of classifications of roads are included in the first 10-year program. They include roads to tap the rich resource potential of the Territories and highways to provide communication between established communities. The principal types of roads under the program are as follows:

Communication and Network Roads – To provide connecting links between the Territories, the Province, and population centres with the Territories. Construction costs and 85 per cent of maintenance costs will be paid by the Federal Government. Fifteen per cent of maintenance costs is borne by the Territorial Governments.

Area Development Roads – To lead into resource-potential areas, they are planned to fit in with and extend the overall road network plan. The Federal Government will bear the initial construction costs for this type of road with maintenance to be shared by the Federal and Territorial Governments on an 85-15 per cent basis.

Permanent Access Roads – To lead from the nearest permanent road to a resource development about to go into production. Federal assistance under the new program may be up to, but shall not exceed (a) 66 2/3 of actual road cost, (b) 15 per cent of actual capital expended by the company for exploration or development prior to commencement of commercial production or exploration, (c) \$40,000 per mile.

Initial Access Roads – Low standard winter, or year-round roads to provide an established resource exploration or development project with access to a network road. Federal assistance here will be the lesser of 5 per cent of exploration costs or 50 per cent of actual construction cost of the road, which is to be maintained by its primary user - the company concerned.

Tote Roads

In addition to road and airstrip assistance which is administered by the Federal Government, \$100,000 is available in each Territory each year for the construction of low class roads to provide temporary seasonal or year-round access in

connection with any natural resource development project. The program is administered by the Commissioner of each Territory. Construction is the responsibility of the individual or company concerned and costs incurred for such roads may be shared up to a maximum of 50 per cent of the cost.

Eight applications in the amount of \$46,802.62 for tote road assistance were received covering oil, mining, agriculture and tourist enterprises in the Northwest Territories in 1970. As of December 31, 1970 \$28,947.62 had been paid out. In the Yukon, 28 applications for tote trail assistance were processed up to December 31, 1970 and \$20,536.04 paid to nine applicants. A further \$80,877.25 has been allotted to other applicants; of this amount \$63,022.25 is for applicants in the Yukon Territory and \$17,855.00 for applicants in the Northwest Territories.

Report: North of 60, Mines & Minerals Activities 1971, Department of Indian Affairs and Northern Development

Provision of Infrastructure

Northern Roads Program

The Northern Roads Program, which was approved by the Federal Government in 1965, called for an annual expenditure of \$10 million for the following 10 years in both Territories. It is the first phase of a long-range, 20- year program designed to bring permanent roads to within 200 miles of all potential areas of resource development. The policy was designed to be sufficiently flexible to allow revisions in priorities from year to year to keep pace with resource development. It also allowed for shift in volume of construction from one Territory to another, depending on the requirements and based on northern territorial development.

Experience in administering the Northern Roads Program over the past six years has indicated the need to make certain changes to the policy. A revised policy document entitled "Northern Road Policy 1971" was approved on December 21, 1971.

One of the main features of the revised policy is the provision for the construction of Pioneer Roads. This new road category is designed to provide low cost access into undeveloped areas of favourable natural potential.

The new policy also provides for conservation measures, which will further protect the northern land environment and minimize surface disturbance from transportation operations. It also includes provision for undertaking river crossing studies in light of future bridge constructions and for revision in road standards so that the type of road structure meets the needs of changing traffic patterns and designated load limits.

In order to achieve the objectives of the Northern Roads Policy, classification of roads were established wherein cost sharing formulas between Federal-Territorial-Private interests were defined. In this classification, there are two main categories of roads - (a) Communication and Net-work Roads and (b) Lateral Roads.

a) Communication and Network Roads are those high- ways and roads which provide a primary network of roads in the N.W.T. with connecting links to the Provinces.

Their initial cost is borne completely by the Federal Government. Federal Government supplies 85% of maintenance costs, the Territorial Government 15%. Listed under this category are:

- Trunk Highways

- Secondary Trunk Roads
- Airport Roads

Since 1965 when this multipurpose \$100 million, \$10 million-a-year program was commenced, 802 miles of new roads at a cost of \$56.340 million have been constructed. Currently, the principal target for the Program is the 521-mile Dempster Highway stretching from Dawson in the Yukon to Tuktoyaktuk on the Arctic Coast, in the Northwest Territories.

b) Lateral Roads are those roads which lead from a communication and network road to a location where resource exploration, development and exploitation is being carried out or may in the near future be carried out.

Lateral Roads are further broken down into two sub-categories, Cost Sharing and Non Cost Sharing.

Cost Sharing Roads, as the name implies, are those roads which are constructed by a resource developer but are financed jointly by the developer and the Government. Included in this sub-category are Tote Trails, Initial

Access Roads and Permanent Access Roads

Tote Trails are constructed by a resource developer and may receive a grant of up to 50% of their cost of construction to a maximum contribution of \$20,000. These provide seasonal or year round access to the property of a company engaged in exploring or developing a natural resource. The Tote Trail Program is administered by the Commissioner of each Territory.

Initial Access Roads may receive the same maximum assistance grant as tote trails, but the maximum federal contribution will not exceed \$100,000 for projects of an exploratory nature or \$500,000 for projects in the development stage. This classification provided for contributions towards more costly roads than those provided for under tote trails.

Permanent Access Roads lead from the nearest permanent road to the location of a resource development that has been brought into full production stage. These roads may receive a federal contribution of up to 2/3 of their cost, but the maximum contribution may not exceed \$40,000 per mile.

Financial assistance in the amount of \$609,986 for access-road construction to date, of which \$114,670 was disbursed in 1971, was recommended for the following companies:

Cadillac Explorations Limited Western Minerals Limited Acorn Timber Limited Anvil Mining Corporation Limited

Hudson Bay Mining and Smelting Co. Ltd. Venus Mines Limited Ace R. Parker and Associates Mount Nansen

Northern Resource Airports Program

The original program approval was on T.B. Minute No. 647905, dated November 22, 1965. It is a cost-sharing scheme for constructing small airports to provide access to mineral and non-renewable resources, exploration and development sites, tourist development sites and to improve transportation facilities. They also serve as incentives to economic and social development.

Nature of Assistance

The policy refers to construction of airports in two categories. Under the first, Government assistance is available to defray 50% of the cost of an exploratory airport up to a maximum federal expenditure of \$20,000. For the second category, airstrips or airports built in connection with the pre-production or early production stage of natural re- sources exploitation, the Federal Government may contribute 50% of the cost up to a maximum of \$100,000 per airport.

Financial assistance in the amount of \$140,699 for airstrip construction assistance to date, of which \$44,099 was disbursed in 1971, was recommended for the following companies:

Bathurst Inlet Developments Limited Triad Oil Co. Ltd. (B.P. Oil & Gas Ltd.) International Mine Services Ltd. Atlas Explorations Ltd. Western Minerals Ltd. Panarctic Oils Limited Arctic Outpost Camps B.C. Oil & Gas

A total of \$591,916 was committed to these projects in accordance with the provisions of the Road and Airstrips Assistance Program whereby the Federal Government will share the costs of approved construction.

Remote Airports Program

This program is people rather than resource oriented. The program is designed to provide small isolated communities, not warranting normal airports for scheduled airline services, with gravel all-weather airstrips, 3,300 feet in length capable of meeting the essential educational, health and emergency requirements of the community.

The program calls initially for the construction of 11 airports over an 8 to 1p-year period at an estimated cost of \$6,167,000. The program calls for the Department to set the priorities for airport construction but the actual work will be done under Ministry of Transport supervision, with a view to adhering to standards that may permit ultimate airport licensing.

Since the inception of this Program in 1969, five airports have been constructed, or are under construction at the following communities: Coppermine, Whale Cove, Cape Dorset and Pangnirtung in the N.W.T. and Old Crow in the Y.T.

Report: North of 60, Mines & Minerals Activities 1972, Department of Indian Affairs and Northern Development

Provision of Infrastructure

Northern Roads Program

The Northern Roads Program, which was approved by the Federal Government in 1965, called for an annual expenditure of \$10 million for the following 10 years in both Territories. It is the first phase of a long-range, 20-year program designed to bring permanent roads to within 200 miles of all potential areas of resource development. The policy was designed to be sufficiently flexible to allow revisions in priorities from year to year to keep pace with resource development. It also allowed for shift in volume of construction from one territory to another, depending on the requirements and based on northern territorial development.

Experience in administering the Northern Roads Program over the past six years had indicated the need to make certain changes in the policy. A revised policy

document entitled "Northern Road Policy 1971" was approved on December 21, 1971.

One of the main features of the revised policy is the provision for the construction of Pioneer Roads. This new road category is designed to provide low cost access into undeveloped areas of favourable natural potential.

The new policy also provides for conservation measures, which will further protect the northern land environment and minimize surface disturbance from transportation operations. It also includes provision for undertaking river crossing studies in light of future bridge constructions and for revision in road standards so that the type of road structure meets the needs of changing traffic patterns and designated load limits.

In order to achieve the objectives of the Northern Roads Policy, classification of roads was established wherein cost sharing formulas between Federal-Territorial-Private interests were defined. In this classification, there are two main categories of roads – (a) Communication and Network Roads and (b) Lateral Roads.

a) **Communication and Network Roads** are those highways and roads which provide a primary network of roads in the N.W.T. with connecting links to the Provinces. Their initial cost is borne completely by the Federal Government. Federal Government supplies 85% of maintenance 9osts, the Territorial Government 15%.

Listed under this category are:

- -Trunk Highways
- -Secondary Trunk Roads
- -Airport Roads

Since 1965 when this multipurpose \$100 million, \$10 million-a-year program was commenced, 836 miles of new roads at a cost of \$77.7 million have been constructed. Currently, the principal targets for the Program are the 365-mile Dempster Highway stretching from near Dawson in the Yukon to Arctic Red River in the Northwest Territories, from which point it is coincident, for a distance of 73 miles with the Mackenzie Highway to Inuvik, N.W.T. At the end of August, 1972, 166 miles of the Dempster Highway had been completed at a cost of \$6.7 million.

In keeping with the recent announcement to accelerate the construction of the Mackenzie Highway, a contract for \$2.3 million was awarded this year to build the section from Fort Simpson to Camsell Bend. The completion date for this 49-mile section of the Highway is October 31, 1973. This highway starts at mile 0 at the Alberta-N.W.T. border down the Mackenzie River Valley to Inuvik in the Mackenzie Delta, a distance of 964 miles, and terminates at Tuktoyaktuk on the Arctic coast for a total of 1,049 miles. Construction of the 296-mile section to Fort Simpson was completed in 1970.

b) **Lateral Roads** are those roads which lead from a communication and network road to a location where resource exploration, development and exploration is being carried out or may in the near future be carried out.

Lateral Roads are further broken down into two sub- categories, Cost-Sharing and Non-Cost-Sharing.

Cost-Sharing Roads, as the name implies, are those roads which are constructed by a resource developer but are financed jointly by the developer and the Government.

Included in this sub-category are Tote Trails, Initial Access Roads and Permanent Access Roads.

Tote Trails are constructed by a resource developer and may receive a grant of up to 50% of their cost of construction to a maximum contribution of \$20,000. These provide seasonal or year-round access to the property of a company engaged in exploring or developing a natural resource. The Tote Trail Program is administered by the Commissioner of each Territory.

Initial Access Roads may receive the same maximum assistance grant as tote trails, but the maximum federal contribution will not exceed \$100,000 for projects of an exploratory nature or \$500,000 for projects in the development stage. This classification provides for contributions towards more costly roads than those provided for under tote trails. To date, \$428,427 has been spent on initial access roads in the Yukon Territory.

Permanent Access Roads lead from the nearest permanent road to the location of a resource development that has been brought into full production stage. These roads may receive a federal contribution of up to 2/3 of their cost, but the maximum contribution may not exceed \$40,000 per mile.

Since 1966, \$1,880,747 has been spent on Permanent Access Roads constructed in the Yukon Territory, including an additional contribution of 2/3 of the cost of a bridge across the Pelly River to serve Anvil on the grounds that this bridge would also serve other interests.

Northern Resource Airports Program

The original program approval was by T. B. Minute No. 647905, dated November 22, 1965. It is a cost-sharing scheme for constructing small airports to provide access to non-renewable resources, exploration and development sites, tourist development sites and to improve transportation facilities. They also serve as incentives to economic and social development.

Nature of Assistance

The policy refers to construction of airports in two categories. Under the first, Government assistance is available to defray 50% of the cost of an exploratory airport up to a maximum federal expenditure of \$20,000. For the second category, airstrips or airports built in connection with the pre-production or early production stage of natural re- sources exploitation, the Federal Government may con- tribute 50% of the cost up.to a maximum of \$100,000 per airport. To March, 1973, 19 airstrips, at a cost of \$271,679 have been built under this Program.

Remote Airports Program

This program is people rather than resource oriented. The program is designed to provide small isolated communities, not warranting normal airports for scheduled airline services, with gravel all-weather airstrips, 3,300 feet in length capable of meeting the essential educational, health and emergency requirements of the community.

The program calls initially for the construction of 11 airports over an 8 to 10-year period at an estimated cost of \$6,167,000. The program calls for the Department to set the priorities for airport construction but the actual work will be done under Ministry of Transport supervision, with a view to adhering to standards that may permit ultimate airport licensing.

Since the inception of this Program in 1969, airports have been constructed at Coppermine, Pangnirtung in the Northwest Territories and Old Crow in the Yukon Territory, while construction continues at Fort McPherson, Whale Cove and Cape Dorset. Construction at the remaining communities of Eskimo Point, Aklavik, Chesterfield Inlet, Pond Inlet and Igloolik is scheduled to get underway in 1973-75.

Report: North of 60, Mines & Minerals Activities 1973, Department of Indian Affairs and Northern Development

Northern Roads Program

The Northern Roads Program, which was approved by the Federal Government in 1965, called for an annual expenditure of \$10 million for the following 10 years in both territories. It is the first phase of a long-range, 20-year program designed to bring permanent roads to within 200 miles of all potential areas of resource development. The policy was designed to be sufficiently flexible to allow revisions in priorities from year to year to keep pace with resource development. It is also allowed for shift in volume of construction from one territory to another, depending on the requirements and based on northern territorial development.

By 1971 the Northern Roads Policy was revised, modifying construction standards and providing for the Pioneer Resource Roads, thus making available low-cost access into areas of undeveloped natural resource potential.

The new policy reflects the government's approach to Northern Development for the coming decade, as announced by the Minister in 1972. Essentially, this policy provides for a form of balanced development by which the needs of people are paramount and the environment protected.

In order to achieve the objectives of the Northern Roads Policy, classification of roads was established wherein cost sharing formulas between Federal-Territorial-Private interests were defined. In this classification, there are two main categories of roads-(a) Communication and Network Roads and (b) Lateral Roads.

- a) Communication and Network Roads are those high- ways and roads which provide a primary network of roads in the Yukon and N.W.T. and connecting links to the Provinces. Their initial cost is borne completely by the Federal Government. Federal Government supplies 85 per cent of maintenance costs, the Territorial Government 25 per cent. Listed under this category are:
- Trunk Highways
- Secondary Trunk roads
- Airport Roads

Since 1965 when this multipurpose \$100 million, \$10 million-a-year program was commenced, 1,282 miles of new roads at a cost of \$97.767 million have been constructed.

Dempster Highway

The Dempster Highway continued to be identified as the major construction project during 1973. From mile 0 of the highway, just south of Dawson, Y.T., the system stretches 377 miles to Arctic Red River. The route then proceeds northwest for 40 miles to its junction point with the Mackenzie Highway (Mile 931, Mackenzie Highway). By the end of December, 1973, 178 miles of the Dempster had been completed, following the route north, north-east from Dawson. An additional 35 miles were also com-pleted, linking Fort McPherson with Arctic Red River.

Mackenzie Highway

The Prime Minister announced the acceleration of the construction of the Mackenzie Highway in April, 1972. It is the first major northern construction project that is considering the environment and the immediate and long-term well-being of the local native people as carefully as it considers construction and engineering factors.

This highway, more than 1,000 miles long, would be an all-weather link from the Alberta-N.W.T. border to the Mackenzie Delta, connecting all the communities (hitherto isolated from each other) down the Mackenzie Valley.

The only sections of the highway between Fort Simpson and Inuvik currently under construction are the 49-mile section out of Fort Simpson towards Camsell Bend and a training section, 12 miles long just south of Wrigley, which is being used for on-the-job training of native people. A contract has been completed on a 33-mile section south from Inuvik but this contract was undertaken as a stage of construction in completing the Dempster to Inuvik highway rather than completing the Mackenzie Highway.

Since the start of the Fort Simpson/Camsell Bend contract, crews of native people have been employed by Hire North in hand-clearing the highway right-of-way. Other native people have been part of D.P.W. survey crews, while others have worked as labourers and heavy equipment operators for contractors or construction crews and on the training section.

b) Lateral Roads are those roads which lead from a communication and network road to a location where resource exploration, development and exploitation is being carried out or may be carried out in the near future.

Lateral Roads are further broken down into two sub- categories-Cost Sharing and Non Cost Sharing.

Cost Sharing Roads, as the name implies, are those roads which are constructed by a resource developer but are financed jointly by the developer and the Government.

Included in this sub-category are Tote Trails, Initial Access Roads and Permanent Access Roads.

Tote Trails are constructed by a resource developer and may receive a grant of up to 50 per cent of their cost of construction to a maximum contribution of \$20,000.

These provide seasonal or year round access to the property of a company engaged in exploring or developing a natural resource. The Tote Trail Program is administered by the Commissioner of each territory.

Initial Access Roads may receive the same maximum assistance grant as Tote Trails, but the maximum federal contribution will not exceed \$100,000 for projects of an exploratory nature or \$500,000 for projects in the develop- ment stage. This classification provides for contributions towards more costly roads than those provided for under Tote Trails.

Permanent Access Roads lead from the nearest permanent road to the location of a resource development that has been brought into full production stage. These roads may receive a federal contribution of up to 2/3 of their cost, but the maximum contribution may not exceed \$40,000 per mile.

Financial assistance amounts to \$2,350,545 for bridges and access-road construction to date, of which \$111,750 was disbursed in 1973. The following companies, have received assistance:

Arctic Gold and Silver Mines Ltd.

Western Minerals Limited

Anvil Mining Corporation Limited

Hudson Bay Mining and Smelting Co. Ltd.

Venus Mines Limited

Mount Nansen Mines Ltd.

New Imperial Mines Ltd. (now Whitehorse Copper Mines Ltd.)

Canoe River Exploration Ltd.

J. Ray McDermott Canada Ltd.

Inexco Oil Co. Ltd.

Northern Resource Airports Program

The original program approval was on T.B. Minute No. 647905, dated November 22, 1965. It is a cost-sharing scheme for constructing small airports to provide access to mineral and non-renewable resources, exploration and development sites, tourist development sites and to improve transportation facilities. They also serve as incentives to economic and social development.

Nature of Assistance

The policy refers to construction of airports in two categories. Under the first, Government assistance is available to defray 50 per cent of the cost of an exploratory airport up to a maximum federal expenditure of \$20,000. For the second category, airstrips or airports built in connection with the pre-production or early production stage of natural resources exploitation, the Federal Government may contribute 50 per cent of the cost up to a maximum of \$100,000 per airport.

Financial assistance amounts to \$271,768 for airstrip construction assistance to date, of which \$61,060 was disbursed in 1973. The following companies have received assistance:

Bathurst Inlet Developments Limited

Triad Oil Co. Ltd. (B.P. Oil and Gas Ltd.)

International Mine Services Ltd.

Atlas Explorations Ltd.

Western Minerals Ltd.

Arctic Outpost Camps

B.P. Oil and Gas Ltd.

Stan Reynolds Outfitter

Coppermine River Ltd.

Echo Bay Mines Ltd.

Great Bear Trophy Lodge

Terra Mining and Exploration

Nordex Exploration Ltd.

Pacific Grant Steel Ores

Banff Oil Ltd.

Glenlyon Mines Ltd.

Remote Airports Program

This program is people rather than resource oriented. The program is designed to provide small isolated communities, not warranting normal airports for scheduled airline services, with gravel all-weather airstrips 3,300 feet in length, capable of meeting the essential educational health and emergency requirements of the community.

The program calls initially for the construction of 11 airports over an eight to 10-year period at an estimated cost of \$6,167,000. The program calls for the Department to set the priorities for airport construction but the actual work will be done under Ministry of Transport supervision, with a view to adhering to standards that may permit ultimate airport licensing.

Since the inception of this Program in 1969, five airports have been constructed, or are under construction, at the following communities: Coppermine, Whale Cove, Cape Dorset and Pangnirtung in the N.W.T. and Old Crow in the Y.T.

Report: North of 60, Mines & Minerals Activities 1974, Department of Indian Affairs and Northern Development

The Development and Incentive Program Section is responsible for the administration of policies and development programs designed to stimulate the exploration for non-renewable resources in the Yukon and Northwest Territories.

The government has developed a series of incentive programs designed to aid both companies and individuals in exploration and development activities in the North. These incentives can be broken down into three categories which include the provision of infrastructure, the provision of direct financial assistance, and the provision of technical assistance.

Provision of Infrastructure

Northern Roads Program

The Northern Roads Program, which was approved by the federal government in 1965, called for an annual expenditure of \$ 10 million for the following 10 years in both territories. It is the first phase of a long-range, 20-year program designed to bring permanent roads to within 200 miles of all potential areas of resource development. The policy was designed to be sufficiently flexible to allow revisions in priorities from year to year to keep pace with resource development. It also allowed for shift in volume of construction from one territory to another, depending on the requirements and based on northern territorial development.

By 1971, the Northern Roads Policy was revised, modifying construction standards and providing for the Pioneer Resource Roads, thus making available low-cost access into areas of undeveloped natural resource potential.

The new policy reflects the government's approach to northern development for the coming decade, as announced by the Minister in 1972. Essentially, this policy provides for a form of balanced development by which the needs of people are paramount and the environment protected.

In order to achieve the objectives of the Northern Roads Policy, classification of roads was established wherein cost-sharing formulas between federal-territorial-private interests were defined. In this classification, there are two main categories of roads:

- a) communication and network roads and
- b) lateral roads.
- a) **Communication and network roads** are those highways and roads which provide a network of roads in the Yukon and N.W.T. and connecting links to the provinces. Their initial cost is borne completely by the federal government, which

also bears 85 per cent of maintenance costs while the territorial government bears the remaining 15 per cent. Listed under this category are:

Trunk highways Secondary trunk roads Airport roads

Since 1965, when this multipurpose \$100 million, \$ 10 million-a-year program was commenced, 1,327 miles of new roads at a cost of \$104 .767 million have been constructed.

Dempster Highway

The Dempster Highway continued to be identified as the major construction project during 1974. From Mile 0 of the highway, just south of Dawson, Y.T., the system stretches 377 miles to Arctic Red River. The route then proceeds northwest for 40 miles to its junction point with the Mackenzie Highway (Mile 931, Mackenzie Highway) . By the end of November, 1974, 178 miles of the Dempster had been completed, following the route north-northeast from Dawson and an additional 35 miles were also completed, linking Fort McPherson with Arctic Red River for a total of 213 miles. Work had also started on the section from Fort McPherson west to the N.W.T.-Y.T. border and north from Arctic Red River.

Mackenzie Highway Program

The Prime Minister announced the acceleration of the construction of the Mackenzie Highway in April, 1972. It is the first major northern construction project that is considering the environment and the immediate and long-term well-being of the local native people as carefully as the construction and engineering factors.

This highway, more than 1,000 miles long, will be an all-weather link from the Alberta-N.W.T. border to the Mackenzie Delta, connecting the communities (hitherto isolated from each other) down the Mackenzie Valley.

Construction

The Mackenzie Highway is complete from Mile 0 (Alberta-N.W.T. Border) 296 miles to Fort Simpson. Between Fort Simpson and Inuvik, 140 miles are currently under construction and in varying stages of completion. In addition, another 150 miles of high- way design will soon be completed.

Hire North

Since the beginning of road construction between Fort Simpson and Inuvik, crews of native people have been employed by Hire North to clear the highway right-of-way. A 15-mile training section has been established to instruct native people in highway construction skills. As well as operating this section, Hire North is currently working between Wrigley and Fort Norman.

Environmental Aspects

Numerous studies are underway to consider community impact of the highway, entrepreneurial opportunities, revegetation, inventory on migration of natural species and soil types.

b) **Lateral Roads** are those roads which lead from a communication or network road to a location where resource exploration, development and exploitation will be carried out in the near future.

Lateral roads are further broken down into two sub- categories – cost-sharing and non cost-sharing.

Cost-sharing roads, as the name implies, are those roads which are constructed by a resource developer and financed jointly by the developer and the government. Included in this sub-category are tote trails, initial access roads and permanent access roads.

Tote trails are constructed by a resource developer and may receive a grant of up to 50 per cent of their construction cost to a maximum contribution of \$20,000. Tote trails provide seasonal or year round access to the property of a company engaged in exploring or developing a natural resource. The Tote Trail Program is administered by the commissioner of each territory.

Initial access roads may receive the same maximum percentage assistance grant as tote trails, but the maximum federal contribution will not exceed \$100,000 for projects of an exploratory nature or \$500,000 for projects in the development stage. This classification provides for contribution towards more costly roads than those provided for under the Tote Trails Program.

Permanent access roads lead from the nearest permanent road to the location of a resource development that has been brought into full production stage.

These roads may receive a federal contribution of up to two-thirds of their cost. However, the maximum contribution may not exceed \$40,000 per mile.

Financial assistance for bridge and access-road construction to date amounts to \$2,350,545.00. The following companies have received assistance:

Arctic Gold and Silver Mines Ltd.

Western Minerals Limited

Anvil Mining Corporation Limited

Hudson Bay Mining and Smelting Co. Ltd.

Venus Mines Limited

Mount Nansen Mines Ltd.

New Imperial Mines Ltd. (now Whitehorse Copper Mines Ltd.)

Canoe River Exploration Ltd.

J . Ray McDermott Canada Ltd.

Inexco Oil Co. Ltd.

Northern Resource Airports Program

This program terminated on March 31, 1974, in accordance with the terms of Treasury Board Minute No. 719903 dated August 23, 1973. However, the modification of this program and the review of other northern development programs and policies are being considered to ensure that the means of encouraging resource development in the North is most appropriate.

Remote Airports Program

This program was designed to provide major settlements with gravel all-weather airstrips 3,300 feet in length, capable of meeting the essential educational, health and emergency requirements of the community. Since its inception in 1969, airports have been constructed at Coppermine, Whale Cove and Pangnirtung in the N.W.T. and Old Crow in the Y.T.

The effectiveness of this program has been outdistanced by changes in aircraft type and increasing community requirements. Further, the program neither provides for airport lighting, communications and other air transportation facilities, nor does it pro- vide for runway improvement to meet the needs of modern turbine-engined aircraft now landing in the Canadian Arctic.

A new policy has recently been established to provide improved air transportation facilities and services at northern communities. These facilities will include all those normally found at similar airports in southern Canada.

Under the new policy, the Ministry of Transport will have overall responsibility for the construction, operation and maintenance of all airports, air navigation aids, and associated facilities and services.

However, the actual site operation of these airports will be undertaken by the territorial governments which will employ community residents to the greatest extent possible.

The improved air transportation facilities would enable the use of larger, more productive turbine-engined aircraft and should lower transportation costs to communities now served by small aircraft.

Report: North of 60, Mines & Minerals Activities 1975, Department of Indian Affairs and Northern Development

Development and incentive programs

The development and incentive program section is responsible for the administration of policies and development programs designed to stimulate the exploration for non-renewable resources in the Yukon and Northwest Territories.

The government has developed a series of incentive programs designed to aid both companies and individuals in exploration and development activities in the North. These incentives can be broken down into three categories which include the provision of infrastructure, the provision of direct financial assistance, and the provision of technical assistance.

Provision of infrastructure

Northern roads program

The northern roads program, which was approved by the federal government in 1965, called for an annual expenditure of \$10 million for the following 10 years in both territories. It is the first phase of a long-range, 20-year program designed to bring permanent roads to within 200 miles of all potential areas of resource development. The policy was designed to be sufficiently flexible to allow revisions in priorities from year to year to keep pace with resource development. It also allowed for shift in volume of construction from one territory to another, depending on the requirements and based on northern territorial development

By 1971, the northern roads policy was revised, modifying construction standards and providing for the pioneer resource roads, thus making available low-cost access into area s of undeveloped natural resource potential.

The new policy reflects the government's approach to northern development for the coming decade, as announced by the Minister in 1972. Essentially, this policy provides for a form of balanced development by which the needs of people are paramount and the environment protected.

In order to achieve the objectives of the northern mads policy, classification of roads was established wherein cost-sharing formula s between federal-territorial-private interests were defined. In this classification, there are two main categories of roads:

- a) communication and network roads and
- b) lateral roads
- a) communication and network roads are those highways and roads which provide a network of roads in the Yukon and N.W.T. and connecting links to the provinces.

Their initial cost is borne completely by the federal government, which also bears 85 per cent of maintenance costs while the territorial government bears the remaining 15 per cent. Listed under this category are:

Trunk highways Secondary trunk roads Airport roads

Since 1965, when this multipurpose \$ 100 million, \$10 million-a-year program began, 1,752 miles of new roads at a cost of more than \$148 million have been constructed.

b) Lateral roads are those roads which lead from a communication or network road to a location where resource exploration, development and exploitation will be carried out in the near future.

Lateral roads are further defined as two sub-categories – cost-sharing and non cost-sharing.

Mackenzie Highway

The Prime Minister announced the acceleration of the construction of the Mackenzie Highway in April, 1972. It is the first major northern construction project that is considering the environment and the immediate and long-term well-being of the local native people as carefully as the construction and engineering factors.

This highway, more than 1,000 miles long, will be an all-weather link from the Alberta – N.W.T. border to the Mackenzie Delta, connecting the communities (hitherto isolated from each other) down the Mackenzie Valley.

In late 1975 the Minister announced a slow down on the Mackenzie Highway construction. Current plans are to reach Wrigley Mile 440 by 1979.

Construction

The Mackenzie Highway is complete from Mile 0 (Alberta – N.W.T. Border) 296 miles to Fort Simpson.

Section A from Mile 297 (Fort Simpson) to 330 is essentially complete, but the next 16 miles, 330-346, has had little work done on it. Section B from Miles 346 to 394 is under construction by Tompkins Construction. The contractor is progressing well and it is expected the 1978 completion date will be met or bettered. Miles 395 to 411 was used as a training/operations section and has been constructed by Hire North. This section is now complete except for trimming and clean-up. Also there is rock to blast in the Willowlake Hill. Plans have been made to extend the training / operating section from 411 to 425. The section south from Inuvik. Miles 931-964 was completed in 1973 and turned over to the N.W.T. Government for maintenance.

Dempster Highway

The Dempster Highway continued to be identified as the major construction project during 1975.

From Mile 0 of the highway, just south of Dawson, Y.T., the system stretches 377 miles to Arctic Red River. The route then proceeds northwest for 40 miles to its junction point with the Mackenzie Highway (Mile 931, Mackenzie Highway).

At the end of January 1976, 355 miles of the Dempster system had been completed, leaving approximately 83 miles for completion.

Tenders have been called for construction of the section between Miles 237-265 with a closing date of March 9. The remaining section, Miles 265-290, will be tendered in 1977-78 with completion scheduled for 1978-79.

The scheduled completion date of the Dempster Highway is 1978-79.

Cost-Sharing roads

Cost-sharing roads, as the name implies, are those roads which are constructed by a resource developer and financed jointly by the developer and the government. Included in this sub-category are tote trails, initial access roads and permanent access roads.

During the year the tote trail program was expanded to allow for other transportation modes which, in some instances, may be less ex pensive or more appropriate, including low standard airstrips, small docks, helicopter landing pads and seaplane bases. This program, which has been renamed the Northern Exploration Facilities Program, will be administered by the governments of the Yukon and Northwest Territories. Assistance under this program may be up to 50 per cent of the cost of construction but shall not exceed \$30,000.00.

Initial access roads may receive the same maximum percentage assistance grant as tote trails, but the maximum federal contribution will not exceed \$100,000 for projects of an exploratory nature or \$500,000 for projects in the development stage. This classification provides for contribution towards more costly roads than those provided for under the Tote Trails Program.

Permanent access roads lead from the nearest permanent road to the location of resource development that has been brought into full production stage. These roads may receive a federal contribution of up to two-thirds of their cost. However, the maximum contribution may not exceed \$40,000 per mile.

Financial assistance for bridge and access-road construction to date amounts to \$2,350,545.00. The following companies have received assistance:

Arctic Gold and Silver Mines Ltd.

Western Minerals Limited

Anvil Mining Corporation Limited

Hudson Bay Mining and Smelting Co. Ltd.

Venus Mines Limited

Mount Nansen Mines Ltd.

New Imperial Mines Ltd. (now Whitehorse Copper Mines Ltd.)

Canoe River Exploration Ltd.

J. R ay McDormott Canada Ltd.

Inexco Oil Co . Ltd.

1976 and onwards

The Development and Incentive Program Section of INAC no longer appears in the reports after 1975, implying it was eliminated. No information on various road and airports programs to assist resource development is found in subsequent reports until 1983 when a Northern Road Policy, A Five-Year Program is mentioned. See below.

Report: 1983 Mines and Mineral Activities, Indian and Northern Affairs Canada

Northern Road Policy, A Five-Year Program

A revised Northern Roads Policy was approved on July 7, 1983. The new policy places control of policy, planning and construction for new roads and interterritorial roads with the federal government and the responsibility for maintenance with the territorial governments. It further clarifies the Government's role in all stages of the road program as far as resource roads are concerned.

Cabinet authorized a five year road program with funding of \$19.2 million per year for new road construction. Part of this program allows for federal cost sharing of initial access roads for exploration and development purposes as well as permanent access roads for the production stage of mining.

There is no detailed reporting on this in subsequent reports.