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NORTHERN ALBERTA DEVELOPMENT COUNCIL

ARRUAL REPORT

1968

To His Honour,

J. W. Grant MacEwan,

Lieutenant-Governor in Council,

Legislative Building,

Edmonton, Alberta.

May It Please Your Honour:

The undersigned has the honour to transmit herewith the sixth Annual Report of the Northern Alberta Development Council.

Respectfully submitted,

Honourabre A. O. Fimrite,

CHA IRMAN

Date: February 1st, 1969.

NORTHERN ALBERTA DEVELOPMENT COUNCIL

January 1 - December 31, 1968

MEMBERS

Hon. A. O. Fimrite

Chairman and Minister without Portfolio

Mr. Ira McLaughlin

Deputy Chairman and MIA for Grand Prairie

Constituency

Mr. R. E. Duncan

Member and Utility Company Manager

Mr. J. Stromstedt

Member and Farmer

Mr. D. Barton

Member and Businessman

Mr. Wm. G. Brese

Member and Director, Industrial Development Branch, Government of the Province of Alberta.

OFFICES

Chairman

Hon. A. O. Fimrite,

324 Legislative Building,

Edmonton 6, Alberta,

Phone: 229-3951

Deputy Chairman,

Mr. I. McLaughlin,

202 Provincial Building,

Grande Prairie, Alberta,

Phone: 532-2281.

THE COUNCIL

The Northern Alberta Development Council was formed in 1963 by an Act of the Alberta Legislature. The Council was commissioned to advise the Government on ways and means by which economic and social development in the portion of the province north of the 55th parallel could be enhanced.

Originally, five council members were appointed; two members of the Legislature from northern constituencies, one of whom was the Chairman, two members at large representing areas of the north, and a civil servant with the Department of Industry and Development.

In order to become acquainted with the problems concerning the North, the Council made a practice of touring northern areas, holding public meetings, and accepting briefs and suggestions from individuals and groups. The Council then evaluated these submissions and made recommendations to the Provincial Cabinet.

It soon became apparent that funds would be required to implement many of the recommendations made by the Council. Therefore, the Alberta Legislature approved the appropriation of a budget to the Council in order that it might be able to finance the required remedial projects. Since the Council is not a department of Government with an operating staff, it has used various existing departments or agencies to effect its programs. These have included construction of roads, bridges and airstrips, surveys of mineral or fish resources, economic studies, flood control measures and providing health service needs.

The following table shows the funds appropriated to the Northern Alberta Development Council:-

Fiscal year	\$
1965-1966	2,500,000
1966-1967	5,000,000
1967-1968	5,500,000
1968-1969	4,000,000
Tota1	17,000,000

The following breakdown of the 1968 appropriation indicates how these funds have been used:-

Northern Alberta Development Council approved appropriation: 1968 - 1969

Appropriation	\$
Drainage and flood control	150,000
Highway and bridge construction	2,825,000
Coal exploration - Research Council of Alberta	15,000
Forestry road construction	625,000
Fishery survey	20,000
Provincial park development	100,000
Airstrip construction	165,000
Domestic water and health improvement projects	100,000
Total	4,000,000

As will be noted by the preceding table, most of the Council's budget has been appropriated to bridge and road construction including market roads to newly settled areas and roads to resources. The High Level to Rainbow highway and the roads from Fairview to Clear River and from Fort Vermilion to Wadlin Lake were major construction projects in 1968.

A substantial portion of the provincial parks appropriation was used for construction of the Sir Winston Churchill Provincial Park near Lac La Biche, while airstrips were built at Fox Lake, Cadotte Lake and High Prairie. This latter strip is intended to provide better health services to adjacent isolated areas.

Improvements to the domestic water systems were made at Joussard and Anzac and work commenced on a nursing centre at La Crete. The major flood control projects involved work done on drainage systems at Highland Park, Worsley, Sucker Creek (near High Prairie) and the Letersky system near Blueberry Mountain.

In 1968 the Council's membership was increased from five to six, with the addition of a member representing the Lesser Slave Lake area. This addition provided the Council with better geographic representation in the North and added representation from a region which is receiving keen attention from the Government in terms of its development requirements.

The expanded Council will continue to play an active role in all matters affecting development in the Northern portion of the province.

A close working relationship between the Council and the Human Resources Development Authority is being developed to better co-ordinate the activities of both groups which share a joint interest in regional development programs aimed at developing both the physical and human resources of Northern Alberta.

A three-year economic survey of the north-western part of Alberta, conducted for the Council by Mr. R. N. Harvey, Edmonton business consultant, has been completed and is dealt with later in this report.

The Research Council of Alberta has recommended that the survey of potential coal strip-mining areas it is carrying out for this Council and some utility companies be continued for another year and concentrated in three triangular areas of the Fox Creek district.

The joint Federal-Provincial Rural Development Agreement for the fishery survey of waters north of the 25th baseline in the province, originally to be done over three years, has had to be extended for another two years.

In July, the Legislature sponsored a tour of Northern Alberta and Southern North-West Territories by 29 members of the Legislative Assembly, including Government Ministers. The tour was arranged by the Chairman of the Council. The Legislators visited 24 points of interest, including cities and towns, flood control projects and other improvements paid for from Council development allocations.

During the year, Council members travelled extensively through the province attending meetings and conferences and providing information on the development and resources of Northern Alberta.

Among them were the Northern Roads Conference at Fort McMurray, the Transportation Conference at Wabasca, the Resources and Northern Development Committee of the Edmonton Chamber of Commerce, the Alberta Aviation Conference at Banff, the Research Council of Alberta meetings in Edmonton. The Council as a body attended the fall session of the Grande Prairie Chamber of Commerce at which many northern communities made representations to it. Additionally, members attended many Chambers of Commerce meetings in northern communities.

ECONOMIC DEVELOPMENT

The northern portion of the Province of Alberta is rich in natural resources. For this reason the attention of investors interested in resource development industries has a northward bias in the province.

Steady progress is being made in pushing back the northern frontier. Northern development in Alberta is characterized by new transportation links being forged between resources and markets, with new town sites springing up as a consequence of resource development activities.

The concept of the north being "remote" is being dispelled as new highways, railways and airstrips provide links for people and products with the rest of the province and the rest of Canada.

To provide up-to-date comprehensive information on the entire northwestern section of the province, the Northern Alberta Development Council retained Edmonton business consultant, Mr. R. N. Harvey, to prepare an economic report dealing with present developments and opportunities for future development. This report was completed in December of 1968 and is now available for distribution.

Council representatives were involved actively in the planning and preparation for the Resources Conference which will be held in Grande Prairie on May 28 - 30, 1969 in conjunction with the official opening of the Alberta Resources Railroad. Business leaders from Canada, the United States and from abroad, are expected to attend this event which is receiving widespread publicity.

MINING

The production of synthetic crude oil from the Great Canadian Oil Sands Ltd. plant near Fort McMurray totalled 17,320,000 barrels in 1968; 45 per cent of the plant's allowable annual capacity.

At year end three steam generators were installed in an annex to the power house, resulting in a production increase to 75 per cent of capacity. Further modifications will be made to the steam system next spring so that the plant will be able to operate at its allowed capacity of 45,000 barrels per day next winter.

Two additional 165,000 barrel bitumen storage tanks recently installed provide stock for the processing plant to operate from in the event that the mining operation is temporarily shut down.

Winter operations at the G.C.O.S. plant have been generally upgraded by blasting during the summer to facilitate winter mining of the oil sands by slowing frost penetration and making for easier bucket wheel mining. Experiments using snowmaking equipment to insulate the deposit from frost penetration with a four foot depth of snow are also proving beneficial.

It had been hoped that 1968 would witness the announcement that the proposed \$190 million oil sands project of Syncrude Ltd. would be undertaken. However, the discovery of oil at Prudoe Bay in Alaska has resulted in additional study of the marketing situation. If the results of these investigations prove to be favorable, the project will proceed in 1969. The proposed Syncrude plant would produce 80,000 barrels of synthetic crude petroleum per day, from an oil sands lease north of Fort McMurray.

While there was a flurry of excitement concerning reports of finds of elemental sulphur southeast of Fort Vermilion which resulted in thousands of acres being permitted for exploration, results of exploratory drilling have subdued initial enthusiasm. It is reported that the sulphur occurrences are such that it seems unlikely they will support a commercial mining operation.

A major event on the mining scene in 1968 was the signing of a 15-year \$400 million contract between Japanese steel interests and McIntyre Porcupine Mines Ltd. which will result in the initial shipment of 2,000,000 tons of coking coal annually, utilizing the newly constructed Alberta Resources Railway.

The new Town of Grande Cache will be established approximately ten miles from the mine site. Grande Cache is expected to have a population of 4,000, domiciling the 1,000 mine workers and their families, as well as other persons involved with the many new service and retail establishments which will be required.

Investment in the mining and processing facilities are expected to amount to \$30 million. In addition to the coal project, Canadian Utilities Ltd. has under serious consideration plans to establish a sizeable power plant at Grande Cache which will utilize tailings from the mine as fuel and connect with the Alberta power grid.

AGRICULTURE

Agriculture and agricultural by-products will continue to be the greatest economic factor in the Peace River District for the foreseeable future, despite the diversification of the economy through the development of natural resources.

Favourable weather helped farmers produce an abovenormal crop with yields above average, but rain in September and October reduced quality. Ninety to 95 per cent of the crop was taken in in the Peace River area. In the Manning and Fort Vermilion areas, however, yields were not up to last year's high standard.

It was drawn to the Council's attention that severe summer frosts had adversely affected crops in Improvement Districts 146 and 147, areas not as yet included in the Crop Insurance Program. Therefore the Council forwarded a recommendation to Mr. E. A. Patching, General Manager of the Crop Insurance Corporation, that these areas be included in the 1969 Insurance Program.

Peace River apiarists, who produce approximately half Alberta's honey crop, had an average year. For the entire province a 75-80 1b average is estimated for 1968 with some producers in the region getting over 200 1bs. of honey per hive.

Homesteading in northern Alberta continues to appeal to the public. The following tables indicate the interest in homesteading for the entire province, with about 80 per cent of the totals shown being for Northern Alberta.

Applications for homestead sales and leases, year ended December 31.

1965	1966	1967	<u>1968</u>
1146	1352	1225	987
December	Homestead sales and	leases in effect, year ended	
1965	1966	1967	1968
6911	6524	6620	6279

Gross area of homestead sales and leases in effect, year ended December 31 (acres).

1965	1966	1967	1968	
1,809,089	1,714,606	1,750,967	1,677,541	

During the year, seven more drainage and flood control programs were started and completed and outstanding work on an eighth was finished by the Water Resources Branch of the Department of Agriculture with money allocated by the Council.

Phase One of the Sucker Creek Drainage Project in Improvement District 125 was half completed.

Areas where projects were undertaken for the Northern Alberta Development Council during the years 1966-67, 1967-68 and 1968-69 follow:

1966-67		% Completed
I.D. 132	North Tangent Project	100
134	Ksitvan Flood Control Project	100
138	Manning - Notikewin Project	100
139		90
139		30
132	5	60
134		30
132	•	80
	•	
1967-68		
I.D. 132	Boreen Project	100
132	Bouchard Project	100
132	Rieger Project	100
132		100
139	Deep Creek Project	100
132	Podruzny Project	100
134	Fourth Creek Project	80
138	N. Manning Project	100
139	Rabbit Creek Project	100
139	Eureka River Project	100
132	Coote Lake Project	100
*060 60		
1968-69	G. I	50
I.D. 125		100
126		100
126	Chapman Drainage	100
131		
134		100 100
134		100
138		
139		100
139	Highland Park Drainage	100

Thirty-five other water control and drainage projects in Northern Alberta have been surveyed and designed for future work.

OIL AND GAS INDUSTRY

The significant discoveries in the Rainbow-Zama and Bistcho Lake regions of Northern Alberta in 1965 have kept the oil industry keenly interested in the north-western part of Alberta.

Continued oil and gas exploration and exploitation of commercial fields not only provide a major source of revenue to Alberta, but are prominent factors in the province's development as a major supplier of North American energy needs.

Four new gas processing plants were constructed in Alberta north of a line drawn through Whitecourt, during 1968. In March, Imperial Oil Ltd. completed a plant to service the Judy Creek field at a cost of \$2 million, while in June the Pan American Petroleum Ltd. completed a plant in the Bigstone Field also at a cost of \$2 million. Banff Oil Ltd. completed a \$15 million plant in the Rainbow Field in August. This plant is significant in that it is the northernmost gas processing plant in Alberta and the sweet gas and natural gas liquids produced by the plant will be used in an integrated enhanced recovery scheme in certain Rainbow Keg River oil pools. It is estimated that this pressure maintenance scheme will enable the recovery of an extra 100 million barrels of oil that would have otherwise not been recovered.

The largest gas processing plant constructed in northern Alberta and indeed, the largest constructed in Alberta in 1968, was completed by Hudson's Bay Oil and Gas Company Limited at Fox Creek. This plant, which will service the Kaybob South Field, was built at a cost of \$28 million and has the capacity of producing 1,044 long tons of sulphur per day in addition to natural gas liquids.

To date, the Alberta Oil and Gas Conservation Board has granted approval for the construction of six new gas processing plants in northern Alberta. These plants should all be completed in 1969. Fields to be served are Simonette, Tweedie, Marten Hills, Judy Creek and Calling Lake.

During 1968 a major pipe line project was completed in northern Alberta by Peace River Oil Pipe Line Company Limited. They completed a 295 mile, 20 inch oil line from the Zama Lake area to their Valleyview pump station.

Three months earlier, Albersun Oil and Gas Ltd. completed a pipe line from the Tweedie gas field north of Lac La Biche to the Great Canadian Oil Sands Limited plant. This pipe line, which is 10 inches in diameter and covers a distance of 168 miles, will carry natural gas to aid in the operation of Great Canadian's plant.

The Alberta Gas Trunk Line Company plans to complete two major pipe lines in 1969. The first will carry gas from the Marten Hills Field to Edson, a distance of 180 miles, while the second will carry gas from the Flat Lake Field to Provost.

FORESTRY

The prospects of the establishment of a \$60 million pulp mill in the Grande Prairie area brightened considerably at year end with the signing of a lease agreement between the Alberta Government and Procter and Gamble Ltd. Two sites for a 600 ton per day kraft pulp mill are being considered; on the Smoky River 25 miles south of Grande Prairie, and on the Wapiti River 9 miles south of the city.

A final decision will be made by the company after the completion of its economic feasibility studies. It is expected that this research will be finished by mid-1969.

Buckeye Cellulose Corporation, a division of Procter and Gamble Ltd. will operate the mill. Production from the mill will be marketed in Canada and exported to the United States via the Alberta Resources Railway.

The company has a large pulpwood lease area south of Grande Prairie and an extensive reserve area for expansion of the mill. The provisional reserve is broken into three regions; one south of Grande Prairie, the other in the Central Peace and a third in the North Peace. An expansion of productive capacity from 600 tons of pulp per day to 1,300 or 1,400 tons could be confidently expected in the near future.

The demand for lumber has remained high and it is expected that the increase in production will gradually push toward the sustained yield capacity of the forested area. At present only about half the allowable cut assigned under quotas is being harvested in Northern Alberta each year. Several new sawmills are being constructed in Northern Alberta but there is a shortage of skilled labour in the industry.

The Alberta Department of Industry and Tourism retained Underwood McLellan & Associates Limited of Calgary to conduct a feasibility study on establishing a fiber board plant in the Slave Lake region. The report states that a plant costing approximately \$7 million and utilizing poplar as a raw material to produce dimension stock for furniture as well as fiber board sheets looks like a viable possibility.

To date the report has been circulated widely and several firms are examining the matter thoroughly. It is hoped that this project will proceed since it would be a valuable asset to the area in terms of resource utilization and employment possibilities.

Exceptional weather in May of 1968 contributed to an exceedingly bad year for forest fires in Northern Alberta, with 669,966 acres burned. Worst affected were the Slave Lake forest with 123 fires destroying 373,354 acres and Lac La Biche with 46 fires burning 282,723 acres.

Much of the timber is, however, recoverable if sawn quickly and this could contribute to a substantial short-term increase in lumber production.

Reforestation is being carried out on much of the burned land by Department of Lands and Forest workmen.

FIRES AND AREA BURNED BY DIVISION

Number of Fires

DIVISION	<u>1963</u>	1964	1965	1966	1967	<u>1968</u>
GRANDE PRAIRIE PEACE RIVER SLAVE LAKE LAC LA BICHE	40 97 94 66	13 38 53 42	7 22 52 23	14 45 90 35	48 31 219 58	19 22 123 46
ATHABASCA FOOTNER LAKE			24 44	11 66	22 _111	
TOTALS	297	175	172	261	489	269

Area burned - - Acres

DIVISION	1963	<u>1964</u>	1965	1966	1967	1968
GRANDE PRAIRI PEACE RIVER SLAVE LAKE LAC LA BICHE ATHABASCA FOOTNER LAKE	E 120 5,643 822 9,884	52 3,124 963 3,327 3,702	601 871 270 48 225 52,294	155 3,541 1,523 4,538 6,230 52,857	2,557 535 3,737 2,228 183 3,420	12,085 1,418 373,354 282,723 36 350
TOTALS	16,289	11,168	54,309	68,844	12,660	669,966

TRANSPORTATION FACILITIES

RAIL

The Alberta Resources Railroad trackage was completed by the Canadian National on schedule at the end of 1968 and it is to be officially opened this spring. Construction of the \$100 million, 235-mile railway begain in December 1965.

The project rates as one of the toughest lines to be built since the Transcontinental rail link through the Rocky Mountains. It required building seven major bridges, clearing 5,000 acres of land, moving 42 million cubic yards of earth, and laying 35 miles of culvert pipe, besides the 70,000 lengths of track.

Apart from the \$400 million coal contract, which came as a direct result of the railway, the line will also greatly stimulate the economy of the area through which it passes, with agriculture and forestry receiving immediate benefits.

Construction started in November of the 60-mile Canadian National Railways extension from Whitecourt to sulphur recovery plants in the Bigstone and Kaybob sour gas fields, estimated to cost some \$12 million.

ROAD

The Northern Alberta Development Council has recognized since its inception that the most vital factor in the development of the north is the provision of adequate transportation facilities.

Most of the funds allocated each year by the Council has been spent on roadworks. This expenditure has played a major part in industrial development of the area.

The plan implemented with the Department of Highways in 1965 to provide market roads into homestead areas has been successful. Although many areas have still to be serviced, an examination of the following summary indicates the excellent progress made so far under the program.

		Miles	Graded		Total Miles Graded
I.D.	1965	1966	1967	1968	
110	1.5	8.5	16.5		10.0
111	9 6	4.75	16.5	4.5	25.75
125	7.5	8.0	3.0	9.0	27.5
126	34.5	70.5	53.5	32.0	190.5
131	18.0			6.5	24.5
132	5.0				5.0
134	49.0	69.0	42.0	20.9	180.9
138	30.5	38.5	18.0	5.0	92.0
139	36.0	12.0	16.0	5.5	69.0
146			5.0		5.0
147	34.0	16.5	21.5	16.0	88.0
Totals	211.0	232.75	175.5	99.4	718.65

		Total Miles Gravelled			
I.D.	1965	1966	1967	1968	
110 111 125					
126 131			16.0	41.9	57.9
132		2.5			2.5
134		18.5	74.5	53.0	146.0
138			19.0	42.0	61.0
139	26.0	20.0	11.0	31.0	88.0
146					
147	werd to discontinue	Police Inches and the	****		
Totals	26.0	48.0	139.5	167.9	381.4

Work continued on the High Level-Rainbow Lake access road with funds supplied by the Council to the Department of Highways. An additional 38.11 miles were graded and gravelled during the year. The Chinchaga River Bridge was completed during the year and the East and West Branch Sousa Creek Bridges are both 90 per cent complete.

The portion of the Fairview-British Columbia boundary road budgeted for 1968-69 was expected to be completed by the end of the fiscal year. Construction is being hampered by unusually difficult sliding conditions in the Clear River Valley area where grading must be done in stages, allowing advance grading to consolidate before additional widening is possible. The Clear River Bridge is 80 per cent complete. The Sir Winston Churchill Park Bridge has been completed.

Construction projects in the Roads to Resources program carried out by the Department of Lands and Forests with funds allocated by the Council made good progress during the year. The Fort Vermilion to Wadlin Lake road has been completed to the 35.14 mile post, leaving about nine miles to go to the Wabasca River. Three major bridges required on this road have been constructed. Benefits will include: Imperial Lumber Co. will conduct timber operations in the area which will have a marketable value of \$1.4 million per year. Oil companies are using the roads extensively to explore the oil and gas potential in the area. New fishing and hunting areas have been opened up to the public. A future extension of the Fort Vermilion to Wadlin Lake road could lead to more direct access to the Peace River and Lesser Slave Lake areas.

Sixty-seven miles of the Bison Lake road was upgraded to third class, with eight bridges built, the roadway reditched and low spots raised. Improvements were also carried out on the Little Buffalo Road for 11 miles. All of these projects connect isolated communities with civilization as well as providing access to valuable natural resources.

AIRSTRIPS

Completion of the Fox Lake, Cadotte Lake and High Prairie airstrips conclude the Council's 1968 program of providing air access to isolated communities in Northern Alberta.

The program of airstrip development initiated and funded by the Council and implemented by the Department of Lands and Forests has been greatly appreciated by residents of the isolated communities. In some instances, joint financial agreements with the Federal Department of Transport has meant recovery of part of the construction costs.

An airport was built at Footner Lake. Under a joint-finance agreement, the Federal Department of Transport reconstructed the airstrip at Fort Vermilion which has been upgraded to all-weather standards.

A Council member attended the annual meeting of the Alberta Aviation Council in Banff and spoke briefly on the work of the Northern Alberta Development Council in the aviation field.

SOCIAL ASPECTS

Population

A steady increase in the permanent population of Northern Alberta is following in the wake of the opening up of the rich agricultural land in the Peace River Region and the exploitation of the area's natural resources.

With the rapid development of Northern Alberta, new towns and settlements are establishing quickly, so that exact population figures are difficult to obtain.

The 1966 Dominion Bureau of Statistics indicated the resident population north of the 55th parallel in Alberta was more than 92,500 people, an increase of 15.5 per cent in the five-year period from 1961 to 1966.

Since then, the resident population has been increasing at an even greater rate and an estimate of the area's population including transient workers in 1968 is over 112,000 people.

The following table shows population growth rates for selected centres in northern Alberta.

POPULATION SELECTED CENTRES - 1963, 1966, 1967, 1968

	<u>1963</u>	<u>1966</u>	1967	1968
GRANDE PRAIRIE PEACE RIVER FORT McMURRAY HIGH LEVEL HIGH PRAIRIE VALLEYVIEW FAIRVIEW SLAVE LAKE MANNING SPIRIT RIVER	9,707 3,209 1,186 - 2,305 1,306 1,701 468 1,148 983	11,417 4,087 2,614 708 2,241 1,827 1,884 1,716 1,179 1,034	11,417 5,024 3,387 1,551 2,430 1,827 1,884 1,716 1,322 1,136	11,605 5,201 4,984 2,006 2,430 1,827 1,931 1,716 1,322 1,136
DI ZILZI KZVIII		CONTRACTOR OF		200 F. 150 C. S.

SOURCE: Alberta Bureau of Statistics

Co-incident with population increases is the need for more and better housing. Spending on residential construction based on the issue of building permits has shown a steady increase year by year, taken in toto.

Northern Alberta's rapidly increasing population is creating a serious shortage of residential accommodation throughout the region and could pose a major problem in the near future.

Building permits issued 1963-68 (millions of dollars)

	1963	1964	1965	1966	1967	1968
GRANDE PRAIRIE PEACE RIVER FORT McMURRAY HIGH LEVEL HIGH PRAIRIE VALLEYVIEW FAIRVIEW SLAVE LAKE MANNING	3.90 1.50 .20 .30 .30 .80 .30	2.90 2.10 2.00 1.20 .65 .80 .70 .60	3.10 1.50 2.50 .80 .20 1.10 .40 1.50	3.20 2.20 2.37 1.55 .85 .12 .60 .45	2.18 2.01 5.73 1.13 .60 .68 .85 1.17	5.24 1.94 3.26 1.41 1.21 .13 .63 .657
SPIRIT RIVER	.22	.36	.30	.18	•57	.14

Health

The Northern Alberta Health Service, inaugurated on April 1, 1966 by Order-in-Council under the Health Unit Act, was designed to improve health services in areas not served by Health Units and includes Improvement Districts 121, 128, 144, 145, 148, 149 and 143 excluding Wood Buffalo Park which is a federal responsibility.

The staff consists of a part-time Medical Officer of Health, a Senior Nurse and a Public Health Inspector, all of whom reside in Edmonton.

The full-time Public Health Inspector visited all of the major centres on a monthly basis. The Preventive Health Service of this northern region is based on the nine Municipal Nurses of the Municipal Nursing Service.

There are three resident physicians in the area, two at Fort McMurray and one at Fort Vermilion. Others visit the area on a weekly or bi-weekly basis.

The Service has an appropriation to pay for the travelling and subsistence expenses for medical specialists to work in remote areas. In practice this is limited to eye and dental examinations. Opthalmologic examinations of a total of 574 people were carried out by specialists transported to High Level, La Crete, Wabasca-Desmarais and Fort Chipewyan and glasses were dispensed to 534 persons.

The Northern Alberta Health Service area with a population of about 12,000 would indicate that the hospital bed ratio of 6.3 per 1,000 people compares very favorably with the rest of the province whose ratio is 6.7 beds per 1,000 people.

The Emergency Air Ambulance Service conducted 116 flights in Alberta during 1968, practically all originating in northern areas.

In March, an Environmental Sanitation Workshop was held in Fort Chipewyan to assist the native people in seeking new and safer methods of obtaining their water supplies and disposing of their wastes. Two health education programs were carried out at Wabasca and Desmarais during August and September.

In 1968, 12 hamlets, villages and towns in the northern area converted from the old dumping method of waste disposal to the trench method. The Department of Municipal Affairs assisted financially and materially in these procedures.

In Fort McMurray, a garbage collection program was established on a daily pickup basis in the business area and a weekly pickup in the residential areas. Groundwork for a similar program has been done at High Level and it is hoped that this program will be underway by this spring.

A systematic street paving program has been established in Fort McMurray to reduce dust and an engineering firm has been given the task of finding a new site for a four-stage sewage lagoon for the town to eliminate pollution of the Athabasca River.

New public water distribution systems were constructed by the Department of Municipal Affairs in Fort Vermilion, Joussard and Anzac. A replot plan of Fort Vermilion was laid out in the spring of 1968 and it is expected that replotting of lots, homes and streets will begin this year.

Education

Nearly \$9 million is being allocated by the Provincial Government in upgrading educational facilities in Northern Alberta. The funds include work on High Schools at High Prairie (\$968,819 provincial government contribution), Beaverlodge (\$191,174) and Grande Prairie (\$1,165,000 estimated).

The grants will assist a total of 32 school building projects which have been or will be completed in the northern part of the province from mid-1967 to mid-1969.

Recreation

The provision by the Council of \$100,000 for improvement of provincial parks in its area of responsibility is being used to improve their access, facilities and general usability to increase the enjoyment of patrons' visits and the quality of the park experience. Agents for this work are the Department of Lands and Forests.

Major projects during the year were road construction and campground development at Sir Winston Churchill and Williamson Provincial Parks, roads in Moonshine Lake park, and various works in Winagami, Lesser Slave Lake, O'Brien and Saskatoon Island provincial parks.