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# ALBERTA

ECONOMIC CIRCUMSTANCES AND OPPORTUNITIES

One of a series of staff papers prepared by the federal Department of Regional Economic Expansion as a contribution to federal-provincial consultations on regional development policy in Canada

April, 1973

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#### INTRODUCTION

The Department of Regional Economic Expansion was established in 1969 to consolidate and strengthen the efforts of the federal government to combat regional disparities and support regional development. The Department carried forward the work of the Prairie Farm Rehabilitation Administraticn, and the administration of agreements signed under the Agricultural and Rural Development Act and the Fund for Rural Economic Development. The program of the Area Development Agency, which was designed to encourage industrial decentralization, formed the basis for introduction by the Department of a similar but more broadly based program under the Regional Development Incentives Act. Commitments made by the Atlantic Development Board were carried out and a new program of infrastructure assistance was introduced under the "special area" provisions of the Department Act.

In 1972, an internal policy review was undertaken to assess the progress being achieved and, particularly, to provide a basis upon which to meet the challenges of regional development in the mid 1970's. This paper is one of a series prepared as a result of that policy review. Separate papers have been prepared for each province (except for Prince Edward Island), the Atlantic Region, the Western Region, and a region defined for analytical purposes as the Western For Prince Edward Island, the Development Plan Northlands. currently in operation provides the framework and mechanism joint development of priorities and initiatives and in for consequence a separate federal paper is not appropriate. Each paper contains a summary of economic and social circumstances and a discussion of possible areas of opportunity for economic Together, they are designed and related social development. to serve as working papers for consultations with each of the provincial governments which, it is hoped, will result in new and improved approaches to regional economic development.

Regional economic development poses complex problems that vary from period to period and from place to place in Canada. No simple nor single solution is likely to be found. New and more flexible approaches are considered necessary and it is hoped that the discussions with the provincial governments will lead to greater and increasingly more effective federal-provincial action to overcome regional disparities and to encourage economic and social development in the slowgrowth parts of Canada. This paper is meant to be read in the context of observations and suggestions contained in a statement made on April 10, 1973, by the Honourable Don Jamieson, Minister of Regional Economic Expansion, to the Standing Committee on Regional Development of the House of Commons.

Some relevant excerpts from this statement are set out at the end of each paper as an indication of the approach to regional development being suggested.

## ECONOMIC CIRCUMSTANCES

#### BACKGROUND

From its earliest days the Alberta economy has been closely tied to the development of its rich natural resources. This development has been marked by a series of major surges which have influenced both the direction of the economy and the character of the people.

As early as 1830, there were small settlements in the area which was to become Alberta. Before 1870, the principal economic base of these settlements was the fur trade but the coming of the railway greatly stimulated diversification of this base in the 1890's. Railway expansion facilitated the development of cattle ranching in the Fort MacLeod area, coal mining around Lethbridge, Anthracite and Canmore, and wheat farming in the Parklands area.

The first 20 years of this century comprised a period of spectacular population growth and economic development. The promise of free land and subsidized railway transport brought waves of settlers to the prairies. Between 1901 and 1911, Alberta's population expanded five-fold to 374,000. Major new settlements emerged in the north in the Peace River district, the Swan River valley, the Lesser Slave Lake area and Grande Prairie. Encouraged by rising grain prices, improved grain farming technology and expanded railway and road facilities, wheat acreage between 1880 and 1906 increased from 1,000 acres to 650,000 acres and output increased from 12,000 bushels to 4 million bushels. By the end of 1914, most of the railway arteries essential for northern development were in place. Edmonton already had unrivalled hegemony over the vast, rich northern territory.

The first major petroleum developments in Alberta took place in the early decades of this century. Beginning as early as 1883, oil discoveries played an extremely important diversification role for Alberta. But the development of the

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Turner Valley oil field south of Calgary after 1914 marked the first major oil reserve exploitation. At about the same time, active trading of oil stocks began in Calgary.

Coal too grew in importance in this period. Development of the coal-producing areas on the railway from Bickerdike to Cadomin, Luscar, Mountain Park and Sterco followed the construction of the former Grand Trunk Pacific line into the Yellowhead Pass in 1911 and 1912, and continued for several years.

In general, during the 1870-1930 period, the prairies were regarded as a region for resource exploitation in the interests of national development. Alberta, along with Saskatchewan, was made a province in 1905 but the federal government did not relinquish control over the region's natural resources until 1930.

The Great Depression was a period of modest structural change in the Alberta economy. The major sector, agriculture, benefited from important irrigation developments. Manufacturing developments took place on a minor scale in food processing, wood processing, building materials and metal products.

The structural change which affected the grain farm economy of the prairies in the forties did not result in as many people leaving farming in Alberta as in Manitoba and The structural change in grain farming involved Saskatchewan. a general increase in mechanization and low levels of incomes compared with other sectors. However, Alberta's agriculture was already benefiting from irrigation developments in the thirties. This, plus a rapid growth in demand for livestock products and the increasing food demands of a rapidly growing population, resulted in a slower rate of decline in the agricultural labour force than in other prairie provinces. During the 1941-61 period, Alberta's agricultural labour force declined by about 27 per cent while in both Saskatchewan and Manitoba the decline was about 36 per cent.

The 1947 discovery of oil at Leduc more than anything else changed the economic structure of Alberta. This and subsequent discoveries at such places as Redwater, Golden Spike, Woodbend, and Swan Hills helped Alberta make Canada the leading oil producer in the Commonwealth. The value of mineral production in the province increased from \$55 million in 1947 to \$496 million in 1961. Expenditure on oil and gas exploration and development during the period 1947-60 amounted to roughly \$3.6 billion. Crude oil production during the period was roughly 11 billion barrels and natural gas production was 2.4 trillion cubic feet. Revenues accruing to the Crown amounted to some \$1.1 billion. These developments in the petroleum and gas industry had marked leverage effects on other sectors but primarily on construction, transportation, trade and finance.

The rapid growth in Alberta after the war attracted large numbers of new people to the province. By 1961, population had increased to 1,332,000 from 732,000 in 1931 and 796,000 in 1941.

#### THE SIXTIES

The sixties were boom years for Alberta. In almost every respect, the Alberta economy grew at least as rapidly and often more rapidly than the national economy. Important structural changes continued to take place but without any basic economic dislocations. Construction and manufacturing had increased their contribution to net value of production and, indeed, ranked ahead of agriculture. As in the national economy, employment growth came mainly from the service sector and, in particular, community, business and personal services. Despite a high rate of in-migration and natural increase, Alberta was able to maintain a low level of unemployment.

## Population

During the 1961-71 period, Alberta's population increased from 1,332,000 to 1,629,000. This represented a gain of 22.3 per cent and an average annual growth rate of 2.0 per cent. The province's annual population growth rate was above the 1.7 per cent growth rate of the nation, resulting in Alberta increasing its share of the national population from 7.3 per cent to 7.6 per cent.

Between 1961 and 1971, the province's birth rate remained about two percentage points above that of the nation while the death rate remained about one percentage point below. Consequently, the rate of natural increase was around three percentage points above the nation and was a contributory factor in Alberta's relative gain in population. The other major source was in-migration.

The shifts in the age distribution of Alberta's population paralleled those of the nation. The most remarkable of these movements was the increasing relative size of the 15-24 age group. A three percentage point rise over the decade reflects an age-selective migration pattern. The continuation of a 2 per cent lead over the nation in the percentage share of the population under 14 reflects higher birth rates, particularly among Indians and Métis. These characteristics are summarized in Table 1.

Further analysis shows that most of the increase in population accrued to the metropolitan areas of Calgary and Edmonton with the growth rate in Edmonton being slightly above that of Calgary. The Peace River and northeast regions grew at about the provincial average rate, while the regions around Medicine Hat, Wainwright and Lethbridge showed rates of growth below the provincial rate.

## TABLE 1

## POPULATION AGE DISTRIBUTION

ALBERTA AND CANADA, 1961 AND 1971

Year		Age	e Groupin	g	Dependency Ratio		
		<u>0-14</u> %	<u>65+</u> %	15-64	(0-14&65+/15-64)		
1961	Alta.	35.2	7.0	57.8	0.73		
1961	Canada	34.0	7.6	58.4	0.71		
1971	Alta.	31.6	7.3	61.1	0.64		
1971	Canada	29.6	8.1	62.3	0.60		

Source: Computed from Census of Canada data.

Except for the 1964-66 period, Alberta gained from net in-migration, the major source being Saskatchewan. In the six-year period 1962-67, total net in-migration was only 2,000. However, in the subsequent five years, the annual average net in-migration was over 16,000--a return to the levels of the fifties. Alberta has been attractive to interprovincial migrants, especially those from other prairie provinces, because of its relatively high levels of wages and salaries, and its growing employment opportunities in highwage activities.

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The cultural diversity of Alberta's people reflects the importance of in-migration. About one in five Albertans have a mother tongue other than English or French (Table 2). About half of these have Ukrainian or German as a mother tongue. Indians are the next largest group followed by Italian, Dutch and Polish people.

#### TABLE 2

# PERCENTAGE DISTRIBUTION OF POPULATION

BY MOTHER TONGUE FOR ALBERTA, 1951-71\*

Language Group	* 1951	* 1961	* 1971
English	69.0	72.2	77.6
French	3.6	3.2	2.9
Other	27.3	24.6	19.5
German	6.9	7.3	5.7
Indian & Eskimo	2.3	2.1	1.8
Italian	0.4	0.7	1.0
Dutch	1.1	1.8	1.3
Polish	1.6	1.3	0.8
Ukrainian	8.7	6.3	4.4

\* Mother tongue refers to the language the person first learned in childhood and still understands. For infants, this is the language most often spoken at home.

Sources: (1) 1951 data from Dominion Bureau of Statistics, 1951 Census of Canada, Table 22; (2) 1961 data from Dominion Bureau of Statistics, 1961 Census of Canada, Catalogue #99-519; (3) 1971 data from Statistics Canada, 1971 Census, Catalogue #92-758.

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At the same time as Alberta's population has been growing strongly, important spatial shifts have been developing. Residents in all parts of the province have not shared equally in the general prosperity. In particular, many secondary centres and rural areas have lagged behind.

Alberta is a rapidly urbanizing province. Population living in centres of over 1,000, as a percentage of the total, increased from 63.3 per cent in 1961 to 73.5 per cent in 1971. Over the same period, Calgary and Edmonton, the fastest growing centres, increased their share of provincial population from 46.4 to 55.2 per cent. After Edmonton and Calgary, the next fastest growing group of centres has been those of from 2,000-5,000 population. However, within this group, there has been a wide distribution of growth rates and many of the towns involved have shown little or no growth since The slowest growing population groups in Alberta have 1966. been in centres of from 5,000 to 50,000 and of less than 2,000. The towns in the 5,000 to 50,000 range include such centres as Lethbridge (2.2 per cent per year), Red Deer (1.1 per cent a year) and Medicine Hat (0.7 per cent a year). Some further selected economic data on these centres are presented in Table 3.

In 1971 the 86 major cities and towns accounted for about 75 per cent of the provincial labour force, with Edmonton and Calgary accounting for nearly 60 per cent. Labour force gains in the 1965-71 period were, in general, associated with these centres and more specifically with the Edmonton and Calgary metropolitan areas.

The major hurdle for both Edmonton and Calgary in the near future will be to provide the urban infrastructure which will be required to support a rapidly expanding population. Both centres are expected to reach a population of about one million by the end of the century. If such rapid growth takes place, new infrastructure such as light rapid transit facilities will be required. It is not expected that the two cities or the province will have any singular difficulties financing these large infrastructure items.

One important spatial aspect of Alberta's economy and social structure is the high incidence of disadvantaged people in the north. To be sure, earned income per worker is high in Alberta's north. However, with high dependency ratios and high levels of unemployment and under-employment, particularly among native people, high earned income per worker works out to be low disposable income per capita.

## TABLE 3

#### SELECTED ECONOMIC DATA FOR MAJOR INCORPORATED CENTRES IN ALBERTA

	Population 1961 1971		Taxab1 1963	otal e Income 1969	<u>Retai</u> 1961	ue of 1 Sales 1966	Value of Mfg. Shipments 1960 <sup>a</sup> 1968	
				\$M	\$M		\$M	
Edmonton (Metro)	337,568	495,702	545.8	1,221.8	388.2	551.2	414.9	648.5
Calgary	279,062	403,319	458.6	1,067.9	342.5	461.4	268.0 <sup>b</sup>	477.3
Lethbridge	35,454	41,217	52.8	98.5	55.1	67.4	24.5	125.9
Red Deer	19,612	27,674	33.2	67.1	33.8	51.6	9.8	41.4
Medicine Hat	24,484	26,518	28.6	55.5	32.1	41.0	33.0	66.0
Grande Prairie	8,352	13,079	n/a	29.5	13.9	22.3	4.4	16.2
Camrose	6,939	8,673	n/a	19.1	13.4	17.4	n/a	n/a
Wetaskiwin	5,300	6,267	n/a	<u>n/a</u>	12.3		1.5	8.6
TOTALS	716,771	1,022,449	1,119.0	2,559.4	891.3	1,230.3	756.1	1,383.9
TOTAL PROVINCE	1,331,944	1,627,874	1,532.0	3,354.1	1,272.4	1,758.1	889.7	1,667.0
MAJOR CENTRES AS % OF PROVINCE	53.8	62.8	73.0	76.3	70.0	70.0	85.0	83.0

<u>1960-63 -- 1966-71</u>

<sup>a</sup> Value of production rather than the value of shipments.

<sup>b</sup> Value of Shipments.

Source: Financial Post, Survey of Markets, 1962, 1965-66 and 1971 editions; Statistics Canada, Census of Canada, 1966, Vol. I, Incorporated Cities, Towns and Villages, Cat. #92-607, and Census of Canada, 1971: Advance Bulletin, Cat. #92-754 AP-3.

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There is a high incidence of welfare, particularly in the very small settlements in the north. Education levels are very low: the proportion of the population with less than Grade 5 education in the north is about double the provincial figure.

The list of social indicators of well-being could go on indefinitely and most of them would show that a large proportion of people in the north are disadvantaged. The disadvantaged people involved would probably not have become too distressed about this were it not for two concurrent trends. The first is the growing awareness, through exposure to television and other communications media, of their disadvantaged state and of economic developments encroaching from the south. At the same time as expectations are rising, concern is growing that the opposing culture of the south will rapidly dominate and eclipse the life-style of the north. The result is the increasing tensions which typically accompany rapid social change.

#### Labour Force and Employment

Over the 1966-72 period, the labour force of Alberta increased from 562,000 to 688,000 (Table 4). The province's labour force grew slightly relative to the nation, rising from 7.6 per cent to 7.7 per cent of the total. The relative rise reflects both strong population growth and relatively high participation rates.

The 1966-72 details on the province's labour force show the crude participation rate for males declining from 80.2 to 79.3 per cent, paralleling a somewhat similar drop for all Canada. Consequently, Alberta continued to maintain a two to three percentage point positive differential over the nation. During the same period, the crude participation rate for females in Alberta increased from 36.7 to 40.0 per cent which in most years was three to four percentage points above the national level.

The high participation rates in Alberta reflect the buoyancy of the province's economy and the relatively high per capita disposable income which has been favourable to the expansion of the service sector.

Alberta's rapid growth in labour force has been closely matched by rapid growth on the demand side of the labour market. As a result, unemployment rates have tended to be well below national levels.

## TABLE 4

#### ALBERTA'S LABOUR MARKET -- SELECTED INDICATORS, 1966-72

						Labour Force Participation Rates						
				Unemployme	ent Rate	То	tal	Ma	le	Fem	ale	
Year	Labour Force	Employment	Unemployment	Alberta	Canada	Alberta	Canada	Alberta	Canada	Alberta	<u>Canada</u>	
		Thousands	-	8		. 8		۰ <b>۴</b>				
1966	562	550	12	2.1	3.6	58.8	55.1	80.2	77.8	36.7	32.8	
1967	578	564	14	2.4	4.1	59.0	55.5	79.9	77.5	37.1	33.8	
1968	604	586	18	3.0	4.8	59.7	55.5	80.0	77.0	38.5	34.4	
1969	628	611	17	2.7	4.7	60.1	55.8	<del>-79</del> -6-	76.6	40.1	-35.2-	
1970	650	622	28	4.3	5.9	60.2	55.8	79.5	76.4	40.3	35.5	
1971	664	633	31	4.7	6.4	59.5	56.1	78.8	76.1	39.4	36.5	
1972	688	657	31	4.4	6.3	59.9	56.5	79.3	76.2	40.0	37.1	

Source: Statistics Canada.

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During the sixties, the mining sector was the main propulsive force of the Alberta economy. Because of the highly capital intensive nature of this industry, its effects on employment were mainly indirect through its backward and forward linkages to other sectors. The general prosperity of the sixties manifested itself in the rapid growth of service employment, particularly financial, commercial, business and personal services which accounted for about half the total increase in employment between 1961 and 1970. $\frac{1}{2}$ 

Despite the province's rapid population and labour force growth, the unemployment rate in Alberta has consistently been below the national average. While the rate in 1972 was roughly twice that of the 1965-67 period, at 4.4 per cent it was well below that of British Columbia (7.6 per cent) and Ontario (4.8 per cent), the other two high-income provinces and major recipients of in-migrants. The unemployment rate in Alberta has been similar to the Manitoba rate and slightly above the Saskatchewan rate, the latter province being a major source of in-migrants to Alberta.

Alberta's seasonal unemployment has declined over the years as a result of changes in the industrial composition of the labour force and, more specifically, because the service sector has assumed greater importance as an unemployment generator.

Associated with low rates of unemployment are labour shortages in specific occupational groups, an upward pressure on wages and salaries, an increasing adoption of labour-saving techniques, and an increasing pressure for a more efficient deployment of labour among industries. A rationalization process is strongly evident in agriculture and distributionoriented activities.

## Economic Indicators

A good indicator of the basic economic growth of Alberta is the growth in net value of production of goods. Table 5 indicates that whereas the net value of output of goods in all Canada between 1961 and 1970 increased by 93.5 per cent, in Alberta the increase was 113.0 per cent. The leading sector in Alberta was of course the mining sector. In the 1961-70

1/ Based on Establishment Survey estimates.

## TABLE 5

## OUTPUT GROWTH IN ALBERTA

# BY GOODS-PRODUCING SECTOR, 1961-70

<u>Sector</u><sup>a</sup>

## NET VALUE OF PRODUCTION

	44 - 14 - <b>- - - - - - - - - </b>	Albert	a	Canada		
	<u>1961</u> \$M	<u>1970</u> \$M	<pre>% Increase</pre>	<pre>% Increase</pre>		
Mining	449.7	1,292.9 <sup>C</sup>	187.5	124.7		
Electric Power	52.6	107.5	104.4	102.9		
Construction	390.2	795.6	103.9	119.8		
Manufacturing	343.8	692.9	101.5	92.1		
Agriculture	369.8	563.0	52.2	60.6		
Trapping	1.7	2.0	17.6	12.8		
Fishing -	0.9	0.8	-11.1	84.3		
Forestry	17.3	8.7	-49.7	2.5		
Total <sup>b</sup>	1,626.0	3,463.5 <sup>°</sup>	113.0	93.5		

a Ranked by size of percentage increase in Alberta over the 1961-70 period.

<sup>b</sup> Because of rounding sums may differ from totals given.

<sup>C</sup> Preliminary.

Source: Computed from Statistics Canada, Survey of Production, 1970, Cat. #61-202.

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period, net output of the mining sector increased its share of the total from 27.7 to 37.3 per cent (Table 6). By comparison, in all Canada the share of the mining sector increased only from 9.4 to 10.9 per cent. The increase in Alberta's net output of the mining sector, mainly because of oil, gas and coal developments, was 188 per cent, compared with only 125 per cent in all Canada.

Personal income per capita in Alberta has remained around the national average for most of the 1961-71 period, compared with an above-average position for most of the fifties. Both earned income per person and government transfers per person were at about national levels for most of the sixties.

Table 7 shows some of the details of personal income changes over the 1961-71 decade. Wages and salaries, the major component of personal income, accounted for a slightly increasing share of the period. The trend in farm income was slightly upward, but farm income was a relatively minor component of total personal income, accounting for about 4.5 per cent of the total in the latter part of the period. The share of government transfer payments increased over the sixties.

Data for 1961-71 on the spatial distribution of personal income per capita indicate that the two main metro areas and East Parkland grew at close to the provincial rate; Medicine Hat and East Central Prairie grew at rates above the provincial average; and Lethbridge, West Parkland and Peace River grew at below provincial average rates.

In respect of income distribution, in 1969, of a total of about 662,500 income tax returns from Alberta in 1969, 19.1 per cent were non-taxable, well above the Ontario and British Columbia percentages (14.4 per cent in each) and above the all Canada ratio (17.1 per cent). Also in 1969, 58.5 per cent of all returns fell within the under \$5,000 category and accounted for 26.7 per cent of total income. Comparative data for Ontario were respectively 52.7 per cent and 23.2 per cent and for British Columbia 52.3 per cent and 23.4 per cent. Thus, among the three high income provinces of Ontario, British Columbia and Alberta, there is a close similarity between the British Columbia and Ontario income distributions, but Alberta has a significantly higher proportion of low income people.

One of the most important indicators of how well an economy is growing is the level of investment. In the simplest terms, it is the level of investment which determines how fast new jobs will be created and how rapidly income and production will rise.

## TABLE 6

# STRUCTURAL CHANGES,

# ALBERTA AND CANADA, 1961-70

Sector<sup>a</sup>

NET VALUE OF PRODUCTION

		ALBER	TA		CANADA				
	1961 &	1970	Change in Relative Weight of Industry, 1961-70		1970	Change in Relative Weight of Industry, 1961-70			
Mining <sup>b</sup>	27.7	37.3	+9.6	9.4	10.9	+1.5			
Construction	24.0	23.0	-1.0	15.2	17.3	+2.1			
Agriculture	22.7	16.3	-6.4	9.7	8.0	-1.7			
Manufacturing	21.1	20.0	-1.1	56.9	56.5	-0.4			
Electric Power	3.2	3.1	-0.1	4.6	4.8	+0.2			
Forestry	1.1	0.3	-0.8	3.6	1.9	-1.7			
Trapping	0.1	0.1	0.0	0.0	0.0	0.0			
Fishing	0.1	0.0	-0.1	0.6	0.6	0.0			
TOTAL	100.0	100.0	0.0	100.0	100.0	0.0			

<sup>a</sup>Ranked by size of net value of production or value added in Alberta in 1961.

<sup>b</sup>Derived from preliminary data.

Source: Computed from Statistics Canada, Survey of Production, 1970, Cat. #61-202.

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## TABLE 7

## PERSONAL INCOME IN ALBERTA

#### SELECTED INDICATORS, 1961-71

	Year	Personal Income \$ M	as a	Income % of <u>1 Income</u> Canada	as a	and ries	Gover Tran Paym as a	nment asfer ents % of 1 Income Canada	Oth Pers Inc as a To		Inc Per C A	sonal come <u>Capita;</u> lta.as l % of Canada	Earned Income <u>Per Capita;</u> Alta. as a % of Canada	Government Transfer Payments <u>Per Capita;</u> Alta. as a % of Canada
	1961	2199	8.2	2.7	62.3	67.8	8.8	<u>9.0</u>	20.7	20.6	1651	100.0	101.6	98.1
	1962	2411	10.2	4.2	60.1	66.5	9.3	8.9	20.4	20.4	1761	99.8	101.3	104.4
	1963	2535	10.8	4.1	60.0	66.8	9.0	8.6	20.2	20.6	1807	98.2	98.9	103.3
	1954	2652	8.3	3.2	61.9	68.0	9.1	8.5	20.7	20.2	1856	96.0	96.2	102.9
14	1965	2941	9.4	3.5	62.7	68.7	8.7	8.3	19.2	19.5	2028	97.0	97.6	101.3
	1966	3374	10.7	3.9	61.7	69.2	9.1	8.1	18.4	18.8	2306	100.1	100.1	112.4
	1 <b>967</b>	3665	6.9	2.6	64.2	69.8	10.3	9.2	18.5	18.3	2460	99.1	98.6	111.1
	<b>196</b> 8	4111	8.1	2.8	63.8	69.0	9.5	9.8	18.6	18.3	2698	100.3	101.4	96.8
	1969	4596	5.5	2 <b>.3</b>	66.5	69.6	10.3	10.0	17.7	18.1	2948	100.2	100.6	103.6
	1970	496 <b>9</b>	4.4	1.7	67.9	70.1	10.1	10.6	17.5	17.7	3115	99.7	101.0	95.7
	1971	5544	4.9	2.0	66.8	69.8	11.5	11.3	16.8	16.9	3405	100.0	100.7	101.4

Source: Statistics Canada, National Income and Expenditure Accounts: Historical Revision, 1926-1971.

The data on Alberta's investment behaviour in Table 8 helps to explain why Alberta's economic performance in the sixties was so strong. As a percentage of the Canadian total, investment in Alberta hovered around the 10.5 per cent level for most of the 1961-71 period. This was well above Alberta's share of Canadian population. As a result, investment per capita in Alberta ranged from 31 to 55 per cent above the Canadian level.

The most striking difference between Alberta and Canada in the distribution of investment is in the category of primary industry and construction, where Alberta has consistently had a relatively high level of investment. This category in Alberta accounted for around a third of total investment and represented about 23 per cent of the national total for the group. This share of the national total has remained fairly constant throughout the period with the exception of 1961 and 1962. These high levels reflect the marked importance of petroleum and natural gas in total investment.

Alberta's share of national investment in utilities; trade, finance and commercial services; and housing, institutional services and government departments, fluctuated in each case within the range 8.3 to 10.2 per cent, and tended to be one to two percentage points lower than the Alberta/Canada total investment ratio. However, investment per capita in these categories was consistently above the national level.

The province's share of total manufacturing investment has traditionally been below its share of national population although, at 4.1 per cent in 1971, it had shown some increase from the 3.2 per cent share of 1961.

In addition to the breakdown given in Table 8, investment may be broken into two broad categories: machinery and equipment; and construction. During the sixties, only about a third of total investment in Alberta was in machinery and equipment compared with 40 per cent in all Canada. This difference was mainly due to the relatively small amount of manufacturing investment in the province. Construction was dominated by developments in gas and oil and, increasingly, by residential building.

The relatively high share of investment accruing to primary industry and construction suggests that investments were widely dispersed spatially. This is because of the importance of construction of oil and gas facilities in this category. However, the growth in residential construction was closely associated with the major urban centres, and primarily with Edmonton and Calgary.

#### TABLE 8

#### INVESTMENT IN ALBERTA- - SELECTED INDICATORS, 1961-71

					PERCENTAGE DISTRIBUTION OF TOTAL INVESTMENT BY SECTOR HOUSING Trade,									
Year	<u>Total In</u> \$M	vestment <sup>a</sup> % of Canada	Total Investment Per Capita as a <u>% of Canada</u>	Total <sup>b</sup> %		ary stries ruction	Instit Serv	utional ices & Depts.	<u>utili</u>	ties	Fina & Comme	ance	Manufact	turing
					<u>Alta.</u>	<u>Canada</u>	Alta.	<u>Canada</u>	<u>Alta.</u>	Can.	<u>Alta.</u>	<u>Can.</u>	Alta.	Can.
<b>1961</b>	1269.9	11.3	155.7	100.0	34.9	15.4	35.2	38.2	19.1	21.6	6.3	9.0	4.5	15.8
1962	1236.1	10.4	141.3	100.0	31.0	15.5	41.4	39.2	15.0	19.7	6.7	8.6	5.9	17.0
1963	1310.2	10.3	138.7	100.0	35.3	16.2	35.5	38.3	16.5	20.0	7.7	8.6	4.9	16.9
1964	1421.6	9.8	131.6	100.0	36.5	16.6	33.1	36.5	16.8	19.8	7.8	8.5	5.9	18.7
1965	1664.3	9.9	134.3	100.0	38.7	16.3	30.8	35.5	17.0	19.6	7.2	8.9	6.3	19.7
1966	1994.3	10.3	140.2	100.0	36.8	16.5	30.9	33.9	18.1	19 <b>.9</b>	6.5	9.1	5.2	20.6
1967	2094.1	10.5	143.2	100.0	35.7	16.7	33.0	35.0	18.8	20.8	7.1	9.0	5.4	18.4
1968	2173.1	10.6	144.3	100.0	34.5	16.3	32.5	37.3	19.4	21.0	7.1	8.7	6.6	16.8
19 <b>6</b> 9	2399.4	10.8	145.9	100.0	34.4	15.8	32.8	37.1	18.3	19.9	8.2	8.3	5.6	17.6
1970	2486.4	10.6	141.5	100.0	35.3	15.6	29.9	35.1	19.9	20.7	7.5	8.8	7.4	19.8
1971 <sup>C</sup>	2633.7	10.3	136.2	100.0	36.0	16.5	33.4	37.8	17.3	20.4	6.4	8.2	6.8	17.1

<sup>a</sup>Total investment = total new capital and repair expenditures on construction and machinery. <sup>b</sup>Because of rounding, sums may differ from totals given.

<sup>c</sup>Preliminary actual data.

Source: Canada, Department of Industry, Trade and Commerce & Statistics Canada, Private and Public Investment in Canada Outlook and Regional Estimates, SC Cat. #61-205, various issues.

Revenue from the petroleum sector and the high income levels combined to give Alberta the highest fiscal capacity of any province in Canada (Table 9). That is, if the Alberta government were to charge tax rates at national average levels, it would raise more revenue per capita than any other province. In 1963-64 its fiscal capacity, at \$275 per capita, was 59 per cent above the all-provinces' average. By 1971-72, it had increased to \$625 per capita or 38 per cent above the all-provinces' average.

In terms of tax effort, Alberta has consistently been at the low end of the spectrum. In both 1963-64 and 1971-72, Alberta's index of tax effort was only about 80 per cent compared with the all-Canada index of 100 per cent.

## SOCIAL SETTING

The dynamism which has characterized Alberta's economic performance in part reflects the character of its society. To a greater degree than in any other province, there is a sense of frontier individualism: a feeling that each person not only can but should make his own way. Indeed, a large proportion of the population is comprised of in-migrants or offspring of in-migrants who sought a better life and made their own way in Alberta much the same as the original pioneers. It is a society brought up on change and there is general open-mindedness about change. The only kind of change which is tenaciously resisted is that which impinges on individualism. By the same token, upward mobility is accepted and encouraged. There is less of a sense of "the establishment" than elsewhere in the west. Most innovations are judged on their own merits. There is, more than in other provinces, intolerance of forms of ownership other than "free enterprise".

In Alberta, there is a pervasive feeling of momentum: the province has expanded rapidly in the past and left to its own would continue to do so in the future. If the promise implied in its wealth of resources and people is not being fulfilled, it is because of outside constraints. Albertans increasingly view their abundant resources as their own, and themselves as the source of the cash which allows Toronto, Montreal and (above all) Ottawa to make decisions which favour other provinces. These eastern-made decisions often seem to run counter to another widespread belief in Alberta: that government development efforts, both within Canada and within the province, should focus on those regions having greatest economic potential.

## TABLE 9

# COMPARISON OF REVENUE CAPACITY AND TAX EFFORT FOR SELECTED YEARS 1963-1971

		1963-1964		1971-1972				
		INDEX	(ES		INDEXES			
	Per Capita Revenue <u>Capacity</u> \$	Per Capita RevCap. %	Tax Effort %	Per Capita Revenue <u>Capacity</u> \$	Per Capita <u>RevCap.</u> %	Tax Effort %		
Manitoba	152.76	88.3	88.4	404.07	88.9	98.4		
Saskatchewan	184.03	106.4	114.0	396.14	87.0	97.0		
Alberta	275.13	159.0	79.6	624.60	137.5	79.2		
British Columbia	216.59	125.2	107.9	547.03	120.0	93.2		
ALL PROVINCES	173.00	100.0	100.0	453.92	100.0	100.0		

## (Tax Indicator Approach)

Source: 1. COMPARING PROVINCIAL REVENUE YIELDS, James H. Lynn, Canadian Tax Foundation 1968

2. Department of Finance (Mimeo 1971)

3. Computations by Department of Regional Economic Expansion

All of these characteristics are popularly expressed by politicians, the press and individuals in a variety of ways. Hence, for example, the feeling of need for locally-based financial institutions; the feeling of alienation from the major centres of economic and political decision-making; and the get-tough attitude toward the federal government and central Canada.

Contrasted to the individualism which gives Alberta its internal dynamics is the co-operative social structure of the province's native people. Many of the more individualistic Alberta people feel that personal initiative alone would be adequate for native people to overcome their situation. The natural corollary of this view is that no special measures are required to assist them. However, the Alberta government has participated actively in special social adjustment measures in the north and would no doubt be responsive to federal government suggestions that continued joint efforts be made to improve living levels of native and other disadvantaged people in the north.

There is a growing concern about the quality of life throughout the province. Increasingly it is felt that unless future growth of Edmonton and Calgary proceeds in a more orderly fashion, the result will be a rapidly deteriorating quality of life. There is increasing anxiety throughout the province about the loss of dynamism in many secondary and tertiary centres. This latter concern has been articulated in the form of measures to encourage dispersion of economic activity already discussed.

#### **OPPORTUNITIES**

## INTRODUCTION

The overwhelming impression is that of continuing extraordinary dynamism in most sectors with considerable momentum into the future. This optimism is buttressed by several important considerations: the momentum of the province coming from a history of rapid growth; the favourable location of Alberta for exporting to British Columbia, the American west coast market, Pacific Rim nations and to Canada's north; the major cities in Alberta reflect the people who live there in terms of youth and dynamism, characteristics which are attractive to footloose industries; the potential for a large scale expansion of timber-utilizing industries, particularly in the north; and (perhaps most important) the enormous stimulus which would come from large scale development of the Athabasca oil sands and in the Mackenzie Valley transportation corridor over the next 10 to 15 years.

Before turning to trends and opportunities in individual sectors, a brief look at aggregate employment trends is worthwhile. It is expected that there will continue to be a rapid growth in employment. In the goods-producing sector, more growth than in the sixties is indicated. As in the past, strong performances in mining and manufacturing will be offset somewhat by continued declines in agricultural employment.

Services employment is likely to expand considerably during the seventies, but, because the rapid growth in social services during the sixties is unlikely to be repeated, the growth rate will be somewhat lower than during 1961-71.

In total, during 1971-81, Alberta should have little difficulty in matching its good job-creating performance of the sixties. Indeed, in 1972, employment growth was the highest since 1969. The extent to which the province continues to improve its performance depends on the speed with which major resource developments are begun. Growth in Alberta's labour force should be readily absorbed and unemployment rates are likely to continue to be below national levels.

With the exception of agriculture, all sectors are expected to show substantial increases in employment during the seventies. In agriculture output is expected to increase, but employment directly engaged in primary production is likely Employment in agriculture-oriented activities to decrease. will increase. The mining sector, which, of course, includes the strategic oil and gas industries, will do well. Substantial new employment is expected from secondary reserve recovery and from the development of the Athabasca oil sands. Substantial manufacturing investments, particularly in resource processing, are expected. Of particular importance are manufacturing opportunities in agriculture-oriented activities, timber processing and petro-chemicals. These resource and manufacturing developments would provide an important stimulus to other sectors such as construction, transportation and the various service activities. In the following paragraphs these trends and opportunities in the various sectors are considered in greater detail.

During the sixties the agricultural sector continued to play an important (but declining) role in the Alberta economy. Alberta's share of national value added by the agricultural sector fluctuated between 18 and 21 per cent. Employment in the sector declined but more slowly than in either Manitoba or Saskatchewan. The reasons for Alberta's lower rate of decline were the relatively advanced development of its agricultural sector, its greater degree of diversification and relatively stable farm incomes.

Particularly important to the sector was diversification into beef production. Rapid growth in disposable income and population in the province was the main source of increased demand for Alberta beef, but demand from neighbouring provinces and the U.S. was also high. The provincial market accounts for some three-quarters of the total market for Alberta beef. In the future, it is expected that southern Alberta will experience considerable growth in beef feedlot operations to meet further increases in national and international demand. Income from livestock usually accounts for more than half of total farm incomes in Alberta and its share can be expected to increase in the next few years.

Despite increasing diversification in the agriculture sector, cereal grains, particularly wheat, continue to play an important role; and the fortunes of Alberta's agriculture will continue to be closely tied to the Canadian and international grain situation.

Alberta has roughly 53 million cubic feet of accessible standing timber with potential for exploitation. Most of this resource is in the north. During most of the sixties the forestry sector marked time and, indeed, suffered a slight decline in employment. In the past few years, however, because of expected continuing buoyant domestic and foreign markets, there has been a significant increase in forestry operations in the Lesser Slave Lake area and further north. A new pulp mill is due to go on stream this year along with a number of other wood-building materials plants.

A number of additional forestry-related manufacturing developments are expected in the next few years. New opportunities have been identified in logging, sawmilling, particle board, stud mills, charcoal, furniture components and modular housing. The pulp wood industry has until recently been faced with reduced markets, lower prices and adverse foreign exchange rate shifts. Its potential for further expansion appears to be improving. Preliminary estimates suggest that as many as 3,000 new jobs could be involved in all new timber-related activities and that investment could well exceed \$100 million.

Alberta's main economic propulsive force is its natural resources--in particular the mining sector (including oil and gas). $\frac{1}{}$  During the sixties, the mining sector moved ahead of agriculture in terms of contribution to net value of production. In relation to all goods-producing sectors, during 1961-71 the share of mining in total value added increased from 28 to 34 per cent. By comparison, the corresponding 1971 percentage for the nation was only 10 per cent.

Alberta's mining sector carried a heavy weight in the nation's mining production. In 1971, the value of Alberta's mineral production was 28 per cent of the national total. The principal reason is, of course, the dominance of Alberta's oil and gas industry. In 1971, oil and gas accounted for some 90 per cent of Alberta's mineral production and 72 per cent of total Canadian oil and gas production (by value).

Alberta's mining sector is highly capital-intensive. By way of illustration, in 1969, value added per employee in the mining sector of Alberta was \$55,400--twice the national level and five times and three and one-half times respectively the levels in the province's manufacturing and construction sectors.

Despite high capital intensity, a high rate of investment in the sector during the sixties resulted in 10,000 new jobs during 1961-69 and a further 6,000 jobs during 1969-71. In

<sup>1/</sup> For statistics on the exploration, development, production and distribution of Alberta's oil and gas, see Table 10.

## TABLE 10

# ALBERTA OIL & GAS-- EXPLORATION, DEVELOPMENT, PRODUCTION, DISTRIBUTION & REVENUE INDICATORS

1961 - 1971 (as at Dec. 31st)

(1)	Development & Production		<u>1961</u>	<u>1966</u>	<u>1969</u>	<u>1971</u>
	Footage Drilled (000)		994 <u>2.30</u>	8227.20	8633.00	781 <u>4.90</u>
	Well Completions		1611	1644	1862	1972
	0i1		783	672	469	361
	Gas		344	236	433	691
	Dry		455	710	932	855
	Producing Oil Wells		10529	13162	13897	14065
	Producing Gas Wells		1088	1921	2692	3426
	Crude Oil Production (Million Barrel	s)	157.81	203.34	279.90	355.96
	Daily Production % of Daily Capacity	(Dec.) %	50.20	43.20	56.90	69.40
	Natural Gas Production on Trillion (		569.70	1362.60	1893.80	2376.10
	Gas Products -					
	Propane	'000 Barrels	2288.10	11388.30	16616.20	22954.30
	Butane	11 11	1596.80	7334.10	10419.40	14751.90
	Pentanes Plus	t9 97	7753.30	27360.20	36412.10	44500.10
	Sulphur	in Long Tons	434.30	1676.20	3654.00	4485.80
(2)	MARKET DISTRIBUTION					
	Crude Oil & Pentanes Plus.					
	Prairies	per cent	26.70	25.80	21.00	16.80
	B.C.		14.50	8.70	5.30	5.10
	Other Canadian Exports	<b>11 17</b>	58.80	65.40	73.70	78.10
	Natural Gas		50000		, 3, , 0	/0.10
	Alberta		29.10	18.10	17.00	16.00
	Outside Alberta		48.90	51.40	55.10	58.30
	Shrinkage, Stored, etc.		22.00	30.50	27.90	25.70
			~~•00	20.20	27.90	25.70
(3)	EXPENDITURE ON EXPLORATION & DEVELOR	MENT				
(0)		\$ Million	3.75	5.30	6.25	E 0.0
		+ militon	ر ۱ • د	J.JU	0.25	5.80

Source: Department of Mines & Minerals - Government of Alberta, Edmonton, 1972.

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the earlier period, the bulk of the new jobs were in oil and gas; in the later period they were associated with coal mining developments. Since 1971, weakness in the Japanese coal market has been the main reason for rapidly increasing coal inventories and some decline in jobs.

At present, there is a shift in emphasis taking place in the crucial petroleum industry. In the past the province has been stimulated by both exploration and production, but exploration activity has now shifted its focus to the far north and is tapering off in Alberta. More emphasis is being placed on increasing production. The rate of production of conventional crude oil now exceeds the rate of new discoveries, and since 1969 proven reserves of conventional crude have been declining. Nevertheless, at 1969 rates of production, these reserves would be sufficient to last 28 years.

With reserves of conventional crude declining and markets for petroleum increasing, more attention is being directed toward development of the Athabasca oil sands. It is estimated that about half of the 600 billion barrels in these deposits can be extracted with present technology. Over the next 10 to 15 years, the processing of the oil sands to obtain synthetic crude is likely to dwarf any other developments which may take place in Alberta. As many as 10 synthetic crude oil plants may be built over the next 10 to 15 years, each involving investments of about \$500 million and some 1,000 full-time workers. Much of the impact would be felt in northern towns. One study has indicated that, if only four plants were to be built, the town of Fort McMurray would increase in population from its present 8,000 to about 30,000 in the mid-eighties.

An extremely important source of employment in the petroleum industry during the seventies will be from secondary recovery of oil and gas reserves. Present methods permit only partial recovery of oil and gas reserves. It is expected that increased oil prices and taxation based on reserves will result in increased drilling activity to obtain greater recovery from reserves. Drilling is perhaps the most labourintensive activity in the petroleum industry.

In 1971 Alberta's 48 trillion cubic feet of natural gas reserves were well in excess of 30 years' supply at 1970 production level. Reserves increased steadily throughout the sixties. In 1972, there was a slight drop. Only 16 per cent of Alberta's 1971 production was used in the province. This was sufficient to supply 75 per cent of the population living in 95 per cent of the province's towns and 57 per cent of its villages. Closely related to natural gas developments is the problem of markets for sulphur. Sulphur is a by-product of sour natural gas. There is currently an excess supply of sulphur in the world, causing depressed prices. However, a number of possible alternative uses for sulphur such as in building materials are being investigated and some of these show promise.

Also linked to oil and gas developments in Alberta are similar developments in the Canadian Arctic and in Alaska. The announced Mackenzie Valley highway, proposed gas pipeline and possible oil pipeline, if undertaken, are likely to have considerable impact on Alberta. They will generate a large demand for construction equipment and materials, workers, technical services and maintenance work. These demands can be met from Alberta and from other parts of Canada. The number of permanent jobs which may arise in Alberta from these possible developments cannot yet be precisely estimated but it is certain to be large.

Alberta's coal deposits comprise some 48 per cent of Canada's reserves. The 1969-71 period saw a large expansion in coal mining in the province, but this has levelled off. Most of the coal developments of the late sixties were predicated on large sustained sales to Japan. However, the present hiatus in that country's economic growth has led to lower than anticipated coal purchases resulting in the accumulation of large inventories and the lay-off of workers by some producers. While there is reason for optimism about the long-term future of the Japanese market, Alberta is seeking to diversify its markets by developing new markets in Europe, central Canada and the U.S.

Besides the high grade coal which Japan has been purchasing, Alberta produces a lower grade coal which is used primarily in thermal power generating facilities. Future power demands within the province and the nation will require considerable increase in these facilities assuring Alberta of a steadily expanding market for low grade coal.

With regard to the central Canada market, Alberta is seeking changes in freight rates so that its coal can compete more effectively with U.S. coal in the 600,000 tons per year central Canada market.

During the 1961-71 period, the value of Alberta's shipments of locally manufactured goods rose at an average annual rate of 7.9 per cent from \$934 million to \$1,992 million. Alberta's share of national value added in the sector grew slightly from 3.3 to 3.5 per cent. Employment increased by more than 12,000 over the sixties. Manufacturing developments from 1961 to 1971 included expansion of petro-chemical industries, and metal fabricating industries and a broadening of activities related to the agricultural and forestry industries. However, food and beverages, and in particular slaughtering and meat packing, were the dominant sub-activities. After food and beverages, the ranking of industries in terms of employment in 1971 was metal fabricating, wood, non-metallic mineral products (largely construction materials), and printing and publishing.

Most of the new jobs in manufacturing in the sixties accrued to Edmonton and Calgary. However, because such a large proportion of manufacturing employment was already located in these cities, their rate of growth of manufacturing employment was actually lower than for the whole province.

Compared to the other two relatively high income provinces of Ontario and British Columbia, Alberta has a low representation of manufacturing in general and secondary manufacturing in particular. Consequently, the Alberta government puts considerable emphasis on the development of the manufacturing sector. Particular emphasis is put on the development of secondary manufacturing and on locating new industry in regions outside Edmonton and Calgary. To help fulfill these goals, the government has set up the Alberta Opportunity Fund as a source of funding for the development of manufacturing. Future manufacturing developments in Alberta will undoubtedly gravitate to Edmonton and Calgary with Edmonton being slightly favoured because of its locational advantage vis-à-vis northern Canada. However, many of Alberta's new manufacturing opportunities lend themselves to locations other than these two major cities and, under favourable conditions, would locate in smaller centres.

Aside from the many new activities associated with the oil sands and timber resources which have already been discussed, one of the more important expansions in the manufacturing sector is likely to be in petro-chemicals. This would probably be in the Edmonton area. Initial investment will be based on conventional ethane feedstock. Later developments may utilize synthetic crude obtained from the oil sands. The qualities of synthetic crude are particularly well suited for use by the petro-chemical industry; development of the oil sands would increase the probability of an expansion of this industry. The University of Alberta is already oriented very much toward petroleum and petro-chemical technology, and forms the nucleus for a useful research and development institution.

Principal among Alberta's manufacturing opportunities, which could be located in secondary centres and rural areas, are various agriculture-oriented activities. These activities include the production of all inputs to the agricultural sector and all stages of processing of its outputs.

Agriculture-oriented activities on the processing side present greater opportunities than those on the supply side. The opportunities on the supply side include short line farm machinery production, fertilizer plants and feed milling. Among these, fertilizer plants have the greatest potential.

The rapidly increasing gap between the U.S. demand and supply of natural gas could offer Alberta a major opportunity for upgrading of natural gas to ammonia and possibly to other nitrogenous fertilizers such as urea and ammonia nitrate. To the extent that domestic prices of natural gas could be insulated from the rising U.S. energy costs, natural gas intensive operations in western Canada would become progressively more competitive relative to similar operations in the U.S. With the availability of local sulphur and imported phosphate rock, a major expansion of the fertilizer industry in Alberta could become viable.

On the processing side the most important opportunities are meat packing, vegetable canning, frozen foods, baking mixes and vegetable oils. The Alberta meat packing industry is large, well established and provides an almost complete range of products. However, there may be some opportunities in the production of specialty meat products. As well, some study is required into possible new poultry products to determine the potential for further exports and for substitution for foreign imports.

In general there is good potential for increased vegetable processing such as potato products, soup production and canned and frozen vegetables. There are also possibilities in the growing convenience food industry.

Further long-term processing opportunities lie in the crushing of rapeseed, most of which is presently exported uncrushed. Growing markets for rapeseed oil around the Pacific Rim and in South and Central America indicate that further crushing facilities will be required during the seventies. These are likely to be established in the Peace River region of Alberta's northwest.

As for the north, other than the Peace River region, the discussion of forestry and mining clearly showed that there is no lack of development potential there. A main problem rather is to ensure that development is socially-oriented so that disadvantaged people now living there can participate fully. As might be expected in a rapidly expanding economy, for most of the 1961-69 period the construction sector of Alberta grew rapidly; at the end of the decade it ranked second to mining in its contribution to value added in the province's commodity-producing sector. The level of activity in the sector in general and in engineering construction in particular has been highly dependent upon the level of activity in the petroleum industry. In 1969 roughly 28 per cent of the value of construction work arose from oil and gas facilities. Value added by the sector throughout the period has shown a sustained upward rise, and, in this respect, differs from construction activity in the west as a whole and in all Canada, where the performance was more varied.

The 1970-71 shifts within the petroleum industry had some dampening effect on construction sector employment. However, in recent years, building construction and in particular residential construction has assumed increasing importance. This was facilitated by expansion of the mortgage money market, population growth in major urban centres, rising family incomes, and a reasonably good supply of serviceable land in urban areas such as Calgary.

It is to be expected that, with a reasonably stable financial market, Alberta's effective demand for new housing starts will be between 19,000 and 22,000 per year for the next ten years, or around 8 per cent of the level for Canada's housing starts over the period. However, among the immediate local concerns within Alberta's construction sector are those of high apartment vacancy rates in Calgary, and an excess supply of office space in both Calgary and Edmonton. This might dampen construction activity sufficiently to offset somewhat the gains in housing construction.

As already noted above, Alberta could derive important benefits from pipeline and highway construction in the Mackenzie Valley. Alberta construction firms have experience in pipeline building and should be in a good position to obtain large contracts on the Mackenzie Valley lines. Alberta is well situated to supply many of the construction materials which will be required.

Besides the Mackenzie Valley lines, there should be considerable potential for construction of pipelines within Canada, because present natural gas pipelines are now operating at close to capacity. The future of international pipeline construction requirements will continue to be in doubt until the present uncertainty about future sales to the United States is removed. Major developments of the Athabasca oil sands over the next 10 to 15 years would have important construction sector benefits for Alberta. Each of these plants would require some 2,500 to 3,000 construction workers over a three-year period, a substantial increase in Alberta's total construction employment. Furthermore, the construction involved would be high technology construction and would add significantly to the technical skills of the province's construction sector.

Both nationally and provincially, the transportation, communications and utilities sector has been a slow-growth sector. The principal reason for the slow growth has been rationalization schemes in surface transportation.

Changes in this sector have taken place on several fronts. In surface transportation, competitive innovation has primarily increased railway efficiency for heavy-density hauling. Where traffic density was light and regular service was required, increased trucking operated over an increased network of improved roads in the province.

Civil aviation has assumed an important role in the development of Alberta, particularly in the north. Commercial aviation firms operating within or from Alberta appear to have had fewer financial problems than those in the rest of the country. This is attributed in large part to the increased oil activity in the far northern region and the overall buoyancy of the economy.

In general, the mining and agricultural sectors have strong linkages with the transport sector; fluctuations in the market for the resource industries are reflected in transport activities.

The province's growth in electric power generation tended to parallel that of the nation, but without spectacular new projects such as in Manitoba and British Columbia. Installed electric generating capacity (primarily thermal) increased from 1.2 million kilowatts in 1963 to 2.7 million kilowatts in 1970; output increased from 4.5 billion kilowatt hours to 11.0 billion kilowatt hours by 1971.

The factors influencing the strong growth in domestic consumption of electricity during the sixties were sustained expansion in resource industries, buoyancy in consumer spending on housing and household facilities, and a relatively high population growth. A continued strong growth in the production and consumption of electricity is expected in the immediate future, but there are indications that there will be some slackening off in growth rates in the longer term. Second only to community, business and personal services as a generator of employment in Alberta has been the wholesale and retail trade sector. Retail trade activity has been the dominant employment generator in the group, and the rapid increase in retail trade reflects the marked growth in population and disposable income changes. Wholesale trade in the province's two major centres has shown a noticeable increase as the dominance of Winnipeg in the prairie market has weakened and as the volume and range of local purchases of industrial goods and consumer durables increase.

Structural shifts under way within wholesale and retail activities across Canada have placed heavy pressure for adjustment. The rural-urban shift in population together with improved transportation facilities, changing journey to work and shopping patterns, and an increased expenditure on consumer durables, have served to extend the trading area dominance of large and intermediate centres in their wholesaleretail function. These movements had adverse effects on the trade centre activities of some smaller centres. The increasing trade centre dominance of Edmonton and Calgary are in particular noticeable.

During the 1961-71 period, the community, business and personal services sector was the major employment generator. The sector accounted for nearly half of the province's increase in total employment. Except for the period 1962-64, employment growth in the sector at the provincial level paralleled that of the nation, and the province's share of the national total remained relatively stable at around 8 per cent.

The sector is divided into two segments: non-commercial and commercial services. At national and provincial levels, a large part of the growth in non-commercial services during the sixties was associated with expansion and organizational changes in health, education and welfare. During the sixties, employment in non-commercial services in the province increased at an annual average rate of around 7 per cent, but this relatively high rate is expected to decline by around two percentage points during the seventies. This would be because of the need for fewer educational services resulting from declining fertility rates, and greater expenditure controls at national and provincial levels in order to reduce the rate of increase in the cost of health and education services.

The increasing share of employment in these latter sectors was due not only to increases in per capita income levels but also to spatial shifts in the population and technological advance. Similarly, organizational changes directed towards a greater degree of specialization have been favourable to business services. The strong growth rates in Alberta's resource sectors and in construction were favourable to the expansion of these services.

The foregoing indicates that Alberta has done well in the past and can be expected to do well in the foreseeable future. Trends in the provincial economy point toward continued rapid economic growth. The economy has both momentum and a strong engine of growth in its resource sector. Of particular importance will be the massive developments of the Athabasca oil sands, but included also are coal, timber and rich agricultural lands. There is potential for further development of these resources and for their further processing.

The process of diversification and adjustment in agriculture is likely to continue and the number of people in the sector will continue to decline. Closely related to this process is the loss of dynamism in many secondary and tertiary urban centres.

Edmonton and Calgary will continue to be attractive locations for economic growth. Economic activity will tend to gravitate to these cities even though a number of new activities could be located just as efficiently in smaller urban centres.

A continuing problem in Alberta will be to ensure that disadvantaged people in the north share in the benefits of economic growth. The problem will not be one of lack of jobs per se, because the major job creating developments in Alberta will be in the north. The problem will be to ensure that the local people in the north have access to the new jobs and that the social transition for them will be as smooth as possible.

Important to a development approach for Alberta is a concern by the federal government to create greater balance and dynamism in the economy of the west. A more dynamic regional economy would encourage greater linkages between the provinces on the basis of past and potential comparative advantage. An expansion of the whole western economy would provide alternative markets for Alberta's manufactured goods. Success in creating a more vibrant western economy would encourage in Alberta an economic climate favourable to private sector development not only of some of its major resource opportunities and their spin-off activities, but also of many of the service and agriculture-oriented activities.

Continued rapid development in Alberta could have a favourable effect on other western provinces. In particular, major resource developments in Alberta could create a range of development opportunities in Saskatchewan and Manitoba. The linkages between Alberta and the other western provinces could be strengthened so that development in one province would contribute to a greater degree of development in the others.

Achievement of a more balanced and dynamic western economy would smooth the way for Alberta to have a buoyant economy for many years to come without excessive reliance on resource development. It would not, however, ensure that new economic activity would be spatially distributed in such a way as to benefit secondary and tertiary centres. But it would provide the provincial government with the opportunity and the means to meet its objectives of generating greater employment in secondary and tertiary centres in the province's eastern and southern parts. In the context of a buoyant Alberta economy, it would be well within the capability of the provincial government to ensure that development opportunities for secondary and tertiary centres are not left unexploited or are not left to Edmonton and Calgary by default. A joint development effort with the province of Alberta therefore could focus on socio-economic development measures in the north, a strengthening of the rural centres which have viability in the long run, and encouragement of greater resource processing in concert with provincial efforts.

Principal among those opportunities in Alberta which have potential for dispersion to secondary centres and rural areas are the various opportunities in agriculture-oriented activties. Included in these opportunities are short line farm machinery production, fertilizer plants and feed mills. But even more important in terms of job creation are the various food processing industries. These, for example, include meat packing, vegetable canning, frozen foods, baking mixes and vegetable oils.

In the north, a strong Alberta economy will bring unprecedented change. The oil sands development is likely to transform the economic and social structure of the northeast. In addition to the oil sands developments, forestry and forestry-related industries will be a major spur to economic and social change in the north. A number of opportunities have been identified in a wide range of activities bringing several thousand new jobs.

Rapid growth in Alberta's north by itself would not ensure that the condition of disadvantaged people of the north would be improved. Indeed, without a special effort, it is entirely possible that the major oil sands and timber developments in the north could pass them by. The new industries could be staffed almost completely by outsiders. The local life-style could be completely eclipsed by the urban industrial life-style of the south. The result among the local people could be social tensions or even social upheaval of unprecedented magnitude.

The challenge in Alberta in the coming decade appears to be to realize the wealth of opportunities that exist, while at the same time minimizing potential adjustment problems. Trends and prospects indicate that economic growth will be generated by the private sector within the policy framework provided by the public sector. Emphasis of government involvement in the development process might reasonably be given to joint efforts to affect the quality and distribution of growth.

# EXCERPTS FROM MINISTERIAL STATEMENT<sup>1</sup>

The economic circumstances and opportunities outlined in this paper and similar papers for other provinces and regions of Canada have been produced as part of the review of policies and programs carried out by the Department of Regional Economic Expansion over the past year. This review, and tentative policy approaches resulting from it, were discussed by the Honourable Don Jamieson, Minister of the Department of Regional Economic Expansion, in his opening statement to the Standing Committee on Regional Development of the House of Commons on April 10th. Following are excerpts from that statement:

> ....When the Department of Regional Economic Expansion was established in 1969, it was given a broad mandate to bring together a number of predecessor programs and to develop a much more comprehensive attack on regional economic disparities.... The Department was quickly organized; it gave new impetus to the programs it inherited, notably those concerned with rural development; it introduced major new programs placing an increased emphasis on federal support for public investment in infrastructure as a means of developing selected urban centres and on federal financial incentives as a means of stimulating private investment in job-creating plant and equipment; it reinforced its initial momentum with subsequent initiatives, notably those providing for different kinds of development corporations in the Atlantic Region and for assistance to agricultural service centres in the Prairie Region; and it was provided by

<sup>&</sup>lt;sup>1</sup> Statement prepared for delivery by the Honourable Don Jamieson, Minister of Regional Economic Expansion, to the Standing Committee on Regional Development of the House of Commons.

Parliament with authority to increase its expenditures from \$240 million in its first year to over \$500 million in its fourth year of operation...The bulk of its activity has been carried out under federal-provincial agreements, providing it with a unique and challenging experience with co-operative working arrangements between the two senior levels of Canadian government....

Because of new ground being broken in a complex and largely unexplored field, it was understood from the beginning, in the context of a long-term federal commitment to the basic objective, that a degree of experimentation would be required and that, with the passage of time and the accumulation of experience, modifications and even basic changes in Departmental policies and programs would have to be considered. This was reflected in a number of public statements. It was reflected also in some of the underlying law -for example, in provisions of the Regional Development Incentives Act setting time limits on the periods during which applicant companies could bring projects into commercial production and remain eligible for payment of offered incentive grants.

Against this background, a decision was made last spring to undertake a major review of policies and programs. The provincial governments were informed of the decision and were assured that the results of the review would be the subject of consultation with them as soon as possible in 1973. I would like to make it clear that, until consultations with the provinces have been completed, no final conclusions about our findings will be drawn and no final decisions about basic changes in existing programs or major new initiatives will be made.

The review has been conducted in what I consider to be a very thorough manner. A large number of studies have been made, using staff drawn from different parts of the Department and other federal agencies and a variety of outside consultants. Quantities of valuable information have been sought and obtained from the provincial governments. And, particularly in the latter stages of the review, there has been a substantial amount of inter-departmental discussion in Ottawa. Although a good deal of attention has been paid to existing programs, particularly RDIA, the review has been essentially forward-looking, concentrating heavily on analyses of regional economic circumstances and opportunities -- the types of analyses that, in our view, should make a valuable contribution to decision-making about ways and means of improving the effectiveness of federal-provincial efforts to reduce regional disparities and produce more balanced economic growth across Canada ....

In working with my officials, and in discussion with my colleagues, I have become increasingly impressed by the range of opportunities for economic development that exist in most parts of this country and by the large number of public policies and programs that bear, or could be brought to bear upon a concentrated effort to realize some of these opportunities. This is what has led me to speak publicly in recent weeks about the possibilities inherent in a "multi-dimensional approach" -- an approach that would call for the identification and pursuit of major developmental opportunities by means of the co-ordinated application of public policies and programs, federal and provincial, in cooperation where appropriate with elements of the private sector. I intend to explore this concept with the provincial governments and am prepared to consider its use as a basis for new federal-provincial initiatives in the field of regional development.

Application of the concept would require continuing analyses of regional and provincial economic circumstances and opportunities. As part of our own policy review, as I mentioned earlier in my statement, we have devoted most of our resources to analyses of this kind. Staff papers setting forth the results of our work have been prepared for the Atlantic Region and each of its four provinces, for Quebec and Ontario, for the Western Region, each of its four provinces and an area called the Western Northlands that was arbitrarily defined for analytical purposes....

Although based on a fair amount of staff work, the opportunities [outlined in the papers] do not represent federal commitments or federal proposals for provincial or regional developmental strategies. They are designed simply to illustrate the potential advantages of an approach to development based on the identification and coordinated pursuit of major developmental opportunities....

Let me be very clear on one point. Consideration of possible changes and new initiatives will in no way affect the determination of the Government to continue its efforts to reduce regional economic disparities in Canada. Our commitment to the basic objective stands firm and has indeed been intensified by the results of our policy review. What we are now seeking, what we will continue to seek, are ways and means of improving the methods used to produce greater, more satisfying and more productive employment opportunities in the slowgrowth regions of the country.

....The results of our review suggest that, although there is room for improvement, as there always is, the programs are producing beneficial results at a reasonable cost. Present commitments under all these programs will of course be honoured. The programs themselves will be continued unless and until there are clear indications, arising from federal-provincial consultations, that the funds involved can be redirected in such a way as to increase the effectiveness of the overall effort.

The present programs tend to focus on particular factors in economic development, each of which is important, and to provide financial assistance related to those factors. Most notable are the incentives program which is designed to stimulate private capital investment in manufacturing and processing facilities, and the special areas program, which is designed to stimulate public capital investment in defined growth and service centres. I have no doubt that federal government support for capital investment in slow-growth areas will continue to be an important element in regional development policy. But it may be that available support for this factor can be made more productive if it is made more flexible, so that it can respond to developmental opportunities that do not fall neatly into the categories of secondary manufacturing investment and

special areas infrastructure investment. I will therefore be exploring with the provincial governments ways in which the staff and financial resources of my Department could be used more flexibly in a manner that would be even more responsive to variations, from region to region and province to province, in economic circumstances and opportunities.

....It is my tentative conclusion that optimum results in developing our slow-growth regions will require the coordinated application of policies and programs that bear upon specific opportunities. What I am contemplating is a continuing process whereby the federal and provincial governments could identify major developmental opportunities and pursue them together, endeavouring to use the relevant policy instruments available at both levels of government. DREE programs, marked by increased flexibility, would be among the relevant instruments.

Perhaps an example would help to illustrate the suggested approach. In parts of some slow-growth regions, the forests provide an important potential foundation for increased employment and production. At the present time, my Department can help to build on that foundation by assisting in studies of the resource base and the market possibilities and by providing incentives for private investment in wood-using processing and manufacturing facilities. But optimum results may depend on a wide variety of factors. Improved access to markets, involving trade and transportation policy, may be involved. Land tenure laws or practices may affect the situation. Special efforts in both the public and the private sector may be needed to avoid environmental damage. Existing storage and distribution facilities may represent an impediment. Community development may require support for both the planning and capital investment required to accommodate industrial facilities and provide a reasonable quality of life for workers in both woods and plant activities. Manpower training or mobility programs may be desirable or necessary. These are only some of the factors that could be involved in realizing a potential opportunity. In such circumstances, optimum results may call for concerted action by a number of organizations in the private sector and in the federal, provincial and municipal segments of the public sector.

The example may help to indicate why I am

suggesting a "multi-dimensional approach". It seems to me that such an approach could be developed over-time as a means of strengthening the federalprovincial attack on regional disparities by focussing, in a manner consistent with national goals, on strategic opportunities for economic development in the regions of slow-growth throughout Canada. As I have already indicated, there appear to be many opportunities to expand employment and production in these regions in a manner that could contribute to total national wealth. It seems to me that, if properly developed, the suggested approach might attract the strong support of the private sector, which has been known to complain about the lack of government coordination in matters affecting economic development.

A good deal of thought has been given to the mechanisms that might be used to apply the concept, which would call for a high degree of interdepartmental coordination at both the federal and provincial levels of government. I think that appropriate mechanisms could be developed and I also think that, if the potential benefits to the Canadian people were demonstrable, the required degree of intergovernmental and interdepartmental coordination could be achieved.

The proliferation of public programs over the last twenty-five years has made improved government coordiantion a matter of some urgency in our society. I am not naive, however. I know that experience would suggest that coordination for its own sake, in the abstract, is difficult to achieve. But I am not talking about coordination in an abstract sense. I am talking about coordination in pursuit of limited and carefully defined objectives related to major developmental opportunities that have been identified jointly by the two senior levels of government. It seems to me that this kind of coordination should be regarded, not just as possible, but as something close to essential in this country.

I might mention in passing that, in planning the reorganization of the Department required to achieve the increased decentralization referred to in the Speech from the Throne, we are endeavouring to build in elements that would enable us to play an effective role in the development of a "multidimensional" approach to regional development in Canada. Planning for the reorganization is now moving ahead quickly and I hope, before too long, to announce our intentions in more specific terms.

One final point. Today I have spoken at some length about a possible new approach to regional development. I am optimistic about its potential and I believe that, if it were to be applied as a basis for new initiatives, with the full support of the provincial governments, it might in time increase rather dramatically the effectiveness of the national effort to reduce disparities. But I am very conscious of the danger of raising expectations to unrealistic levels. The suggested approach could be a means of bringing about important improvements in federal-provincial cooperation in matters affecting economic development. It could be a means of moving us more rapidly toward important national goals. But I am not offering it as a panacea. I do not believe in instant solutions.

