



# THE ROYAL BANK OF CANADA

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### *From the Lakes to the Mountains*

CANADA'S PRAIRIE PROVINCES cover one-third of the area of the country, excluding the Territories; they have a sixth of the country's population; they return eighteen per cent of the federal members of parliament, they account for 62 per cent of Canada's total net income from farm operations, and in 1965 for 7.8 per cent of the estimated value of shipments in all Canada's manufacturing industries.

Yet the history of Canada west of the Great Lakes is so recent that it seems to be contemporary.

Up until a few years ago the west was properly regarded as being primarily agricultural, net income from farming far exceeding that from all other sources combined. Processing was based on the products of the land, and the little other manufacturing was limited to the immediate needs of the small urban aggregations.

Today's changing skyline bears testimony to the industrial revolution which has swept the prairies. Manufacturing plants busy turning out chemicals, fertilizers, steel, cement and consumer goods; the many-storied office and apartment buildings; the head-frames of mining ventures; the hundreds of drilling rigs: all these are evidence of new-found progress and prosperity.

#### *Settlement*

The rich and free wheat-lands of the prairies brought a wave of settlement at the beginning of this century, with its peak period in 1897 to 1920. In 1961 Manitoba had 4.35 persons per square mile, Saskatchewan 4.20 and Alberta 5.35. Canada, excluding the Territories, had 8.66.

Early settlers found the going not only rough but dangerous. Typical of their experiences was that of the colonists brought from Scotland to Red River by way of Hudson Bay in 1811 by Thomas Douglas, Earl of Selkirk. They settled in the only district in western Canada where an annual precipitation of over twenty inches is combined with a July temperature of over 65 degrees. But they were harassed by the Nor'Westers, a down-east fur company in competition with the

Hudson's Bay Company. In 1816 twenty-one of the settlers were killed near the settlement by an armed band in employ of the Nor'Westers. Early frost and a plague of grasshoppers threw the colony into desperate straits. To provide seed for the next year, the settlers and their wives and children had to handpick the heads of wheat and barley cut off by the grasshoppers. In 1825 there was an invasion by mice; in 1826 the Red River rose as much as fifteen feet, and seed wheat was saved only by putting it in the church spire.

In spite of these hardships the colony grew steadily, so that in 1849 it numbered over 5,000 persons, with nearly 6,500 acres of land under cultivation.

After 1830 many travellers from the outside world got as far west as Alberta, and small settlements sprang up. By 1883 the Canadian Pacific Railway was built across southern Alberta, and ranchers spread across the country. From 1900 to 1910 the growth was spectacular, the population reaching 375,000. In 1906 there were 650,000 acres under cultivation and the wheat crop was nearly four million bushels.

Shortly after Confederation the Canadian government extinguished the aboriginal title to the vast areas of the prairies by giving the Indians reserved land, gifts in cash, and promises of assistance in agriculture and education. There were, in 1961, 72,000 Indians on 314 reserves totalling 3,300,000 acres.

#### *Transition to industry*

Now, at the end of Canada's first century of confederation, the families on small farms are a group of citizens caught in one of the pressure spots of a rapidly changing society. The small farm is on the way out, a victim of modern technological forces.

The 1961 Census showed the following percentages of total population living on farms: Manitoba 18.6; Saskatchewan 33; Alberta 21.4. The years since then have witnessed further reductions in farm population.

Transportation has played its part in the change. It is less than ninety years since Winnipeg saw its first railway engine, brought in by barge from Minne-

sota. The first through train to the Pacific coast left Montreal on June 28, 1886.

Starting in the early 1920's airplanes have been used to transport men, machinery, supplies and equipment throughout the western provinces and to otherwise inaccessible places beyond the Arctic Circle, and regular airline service connects the Canadian west with all the world. A \$2½ million air cargo terminal is being built at Winnipeg.

Since 1950 two of the world's longest oil and gas pipelines, nearly 2,000 miles in length, have been built to link the western oil fields to major cities as far east as Montreal. In addition, three major pipelines, several hundred miles in length, cross the Rocky Mountains to supply the lower mainland of British Columbia and the coastal United States.

Manitoba leads in total installed hydro-electric power, and has started the first stage of a \$1,000 million development of the Nelson river which will serve the province's power needs for at least the remainder of the twentieth century.

Saskatchewan depends upon thermal stations to produce most of its electrical capacity, but there has been a rapid increase in recent years in the tempo of hydro development. The generating capacity is expected to climb to one million kilowatts by 1969 and treble by 1988.

The plenitude of vast fuel resources has placed thermal electrical development in the forefront in Alberta, but provincial potential in water power is estimated at two million kilowatts. Since 1955 the power generating capacity rose from 477,000 kilowatts to 1,326,000 kilowatts in 1965.

### *Wheat and livestock*

In 1876 a small shipment of seed wheat was sent from Fort Garry to Toronto, the first wheat to leave the west. In 1880 12,000 bushels of wheat were reaped from a thousand acres in Alberta. In 1965 the production of spring wheat in the prairie provinces was estimated at 661 million bushels.

Fort Macleod, in Alberta, was the cow-boy centre of Canada in the early days of the range. Grant MacEwan tells in *Between the Red and the Rockies* about the biggest round-up in the history of the Canadian west, which took place at Macleod in 1885. A hundred cow-boys, sixteen chuckwagons and 500 saddle horses were used to collect more than 60,000 head of cattle.

Three million head of cattle now roam expansive ranches and farms in Alberta, and 1,163,200 head of cattle were shipped to packing plants and stockyards in 1965. Manitoba marketed 363,240 head, and Saskatchewan 704,750 head.

The first big band of range sheep was trailed from Montana to Alberta in 1884, and the first wool shipment was sent out that same year. Almost 200,000 sheep and lambs are now marketed annually.

### *Forests, furs and fish*

One does not associate the prairie provinces with forests, but they have more than 400,000 square miles of forested land, of which 219,000 square miles are productive.

All three provinces are anticipating development of the pulp and paper industry. Manitoba is busy on a \$100 million forest complex centred around The Pas but spreading the full length of the Hudson Bay railway to the port of Churchill. Saskatchewan, which has some 43,000 square miles of commercial forest made up mainly of spruce, jack pine and aspen, is looking toward a \$65 million bleached Kraft pulp mill, and at Hudson Bay, near the Manitoba border, a \$2½ million sawmill will produce 50 million board feet of kiln-dried construction studs annually. Alberta, which according to *Canada Year Book*, "has 52,569,000,000 cubic feet of accessible standing timber, almost equal to that of Quebec," gives employment to nearly ten thousand workers in the woods, in sawmills, in pulp and paper and plywood operations.

The fur brigades, each made up of four to six 34-foot-long York boats, have disappeared from the Red River, but pelts to the value of \$11 million a year are produced.

The lakes of the prairie provinces yield fish of high quality: whitefish, pickerel, trout, and the renowned "goldeye". Commercial fishing is a main source of income for residents of the north, and it provides a profitable side-line for farmers near the large lakes. In one year, Manitoba produced fish valued at \$6½ million; Saskatchewan's catch was worth \$3.1 million in 1964/65; and Alberta's \$1½ million.

### *Manitoba*

This is the mid-continent province, its International Peace Garden on the United States border being almost the geographical centre of North America. Its population in 1870, the year it became a province, was 11,963; at the Census in 1961 it had 922,000 people, and today it has almost 40,000 more.

Just across the river from Winnipeg, the capital city, lies the picturesque city of St. Boniface, the only large French-Canadian city outside the province of Quebec. The French-Canadian population of Manitoba in 1961 was 83,936.

Manitoba's greatest natural resource has been its rich soil and favourable climate. It set the world standard for wheat with its famous Number One Northern. Consolidation of farms continues, with the latest count giving it 41,000 farms covering more than eighteen million acres.

Cash income — the money farmers receive from sales — reached \$8,085 per farm in 1965. The average farm investment is about \$27,000.

Industrial development is progressing steadily, with about 1,500 firms producing goods to the gross value

of \$970 million, equal to 46 per cent of Manitoba's gross product. Manufacturing employed almost 48,000 people last year. Average weekly earnings are \$82.10 compared with \$58.30 ten years ago.

The province's economic growth is paced by such basic projects as the \$30 million fertilizer and \$800,000 estrogen plants at Brandon, a \$16 million cement plant and an \$8 million steel plant modernization. A \$3 million aluminum extrusion plant was built largely because of the Nelson River power project.

The variety of Manitoba's industrial activity is indicated by a few examples: the largest Canadian-owned garment manufacturing plant is here; the body of every Greyhound bus operating in North America originates here; Manitoba's whale skins are used by a large international manufacturer of men's belts, and the agriculture of the province supports the largest secondary industry, food and beverages, by supplying grain, livestock, poultry, vegetables, sugar beets and other specialized farm products.

It is estimated that in 1965 there were 5,300 persons directly employed in the mining industry, and the value of mineral production reached an all-time high of \$182 million, a three-fold increase since 1960. The western world's only integrated nickel operation is at Thompson, where nickel is mined, ground, smelted and refined.

Several noteworthy developments in the past year indicate that significant expansion may be forthcoming. There were 25 mining companies active, and expenditures on exploration in the Precambrian area alone amounted to some \$5 million. Oil developments, too, are encouraging, with 898 wells capable of production and a total value of crude oil in 1965 of \$12 million.

Manitoba is the only prairie province with an ocean port. Churchill, on Hudson Bay at 58 degrees north, was used in the seventeenth century by the Hudson's Bay Company to import cargoes from Europe, and in 1689 the first shipment left Churchill outward bound — 38 casks of whale oil. Today the port has a grain elevator with a capacity of five million bushels.

## *Saskatchewan*

Saskatchewan contains more than 37 per cent of all the occupied agricultural land in Canada. At the turn of the century there were only 90,000 people spread over its 252,000 square miles. In 1965 there were 951,000 people.

Since the mid-1950's the province has been surprising the world with its accelerated resource development, a succession of multi-million dollar mining projects, and a flourishing economy that is thriving upon industrial diversification.

While it must be remembered that crop conditions vary from year to year, in 1964, non-agriculture activities formed 62 per cent of the productive economy, compared with agriculture's 38 per cent, and in

the following year investment for new construction and new machinery amounted to \$786 million, double what it was ten years earlier. The same period saw average weekly earnings rise from \$58.02 to \$85.12. Personal income in 1965 totalled \$1,865 million, and per capita personal income was \$1,961.

Saskatchewan's mineral industry is making giant strides. The production value in 1965 was \$335 million, compared with \$86½ million in 1955 and \$22¼ million in 1945.

It is in oil and gas that Saskatchewan's underground wealth is showing itself. In 1944, 38 years and 229 holes after the first oil well had been drilled, a good producer was brought in. By 1964 the total petroleum output reached 500 million barrels and investment passed the \$1,000 million mark. The first commercial gas came on tap in 1934, and today a network of pipelines carries gas to homes and industry within the province and oil to the Eastern Canadian and the United States markets.

From a mere curiosity valued at \$2,500 a cubic foot to a valuable commodity produced for less than one cent per cubic foot — that is the record of helium in Saskatchewan. Apart from government-controlled wells in the United States, the Saskatchewan plant is the only source of helium in the free world. By 1967 it will have an output of 36 million cubic feet per year.

Promising to outrank oil in economic importance to the province is potash. Actual and committed investment in the industry is \$500 million, and by 1970 the capacity of plants will be ten million tons muriate a year. Saskatchewan's reserves are estimated at 20,000 million tons, about half the world's known reserves, enough to supply fertilizer for all the arable land on earth for five centuries.

Large areas of land in a strip sixty miles wide are underlain by coal with reserves totalling 36,000 million tons. The only known commercial deposits of sodium sulphate in Canada are in Saskatchewan. Annual production is at the rate of 350,000 tons, and reserves are estimated at 70 million tons.

Manufacturing has added a further fillip to Saskatchewan's revenue as the trend moves to the finished product where once the economy was based on extraction alone. The net production figure for non-agricultural industries is set for 1965 at \$777 million. The labour force rose by 55,000 between 1951 and 1965, while workers in agriculture declined by 11,000.

But, after all, Saskatchewan is a wheat-growing province. About 46 per cent of her land area is in farms, with 44 million acres cultivated.

The investment in commercial farms — land, buildings, machinery, livestock and poultry — is more than \$3,260 million, an average of about \$40,000 per farm, and the average net farm income over the past ten years has been about \$4,000 per farm.

Irrigation is being invoked to further stabilize agriculture. The vast South Saskatchewan River

project will contain more than 200,000 acres of irrigated land, the first 35,000 acres to be served by 1970.

## *Alberta*

Claiming the title "Sunny Alberta", this province has a statistical record of more hours of sunshine, summer and winter, than any other province, with an average of 2,000 to more than 2,200 hours annually.

Important changes have taken place in the pattern of Alberta's productive industries. In a few short years what was essentially a rural province with a small population has changed into a predominantly urban and urban-orientated province with a rapidly expanding population, one and a half million people today, expected to reach 2¼ million by 1981.

The greatest increase has been in the contribution of the mineral industry, from \$55 million in 1947 to \$800 million in 1965. Construction industry growth has been from \$74 million to \$982 million, and manufacturing from \$89 million to \$1,269 million. The provincial budget for 1966/67 totalled \$682 million, an increase of 38 per cent over the preceding year. Public and private investment in 1966 is estimated at \$1,770 million, or \$1,204 per capita.

This all started on a solid base of agriculture, and farming remains important. There are 47 million acres of occupied farm lands. The farm cash income from major sources in 1965 was \$597 million. Major irrigation projects in the south have opened up almost a million acres of productive land, and the province has embarked on a vast water development and conservation programme.

Mineral development started in 1869, when a gold prospector came upon a seam of coal near Fort Whoop-up and turned it into a profitable industry.

Although the coal industry has declined in the wake of oil and gas development, it appears that the low point has been reached and that now the industry is moving toward recovery. Output in 1965 was 3½ million tons, and the low cost of power generated by strip-mined coal is attracting the attention of thermal powered electric stations.

Petroleum is the most important of Alberta's mineral resources, with estimated reserves of 6,080 million barrels and 12,000 producing oil wells.

This industry has come a long way since 1886, when John "Kootenai" Brown collected oil seepage in the Waterton Lakes area and sold it as machinery grease at \$1 a gallon. In 1914 the Turner Valley oil field was opened up, and people lined the streets of Calgary in queues to buy stocks in Alberta's first oil boom. Leduc was discovered in 1947, and its development literally transformed the economy of the province. Redwater, Golden Spike, Woodbend, Swan Hills and others followed, and for twenty years Alberta has made Canada the leading oil producer in the Commonwealth. In 1965 its production totalled 184.1 million barrels.

The production of natural gas in 1965 was 1,290 million cubic feet, and there were 85 gas processing plants in operation. Exports reached 314,000 million cubic feet. Proven gas reserves amount to an impressive figure: 37,600,000,000 cubic feet. The gross value of sales of petroleum, natural gas and gas products amounted to \$704 million in 1965.

In addition to the reserves of liquid oil, Alberta has oil sands covering eight million acres containing more than 700,000 million barrels of oil. A mining, extraction and upgrading plant costing \$200 million is being readied for production by 1967.

Upon the base of agriculture and minerals, Alberta has erected an impressive manufacturing complex, growing at the rate of \$50 million a year. Some 3,000 plants are turning out a wide range of products valued at \$1,000 million a year. Personal income has tripled in twenty years and almost doubled in ten years, while average weekly earnings rose in ten years from \$62.30 to \$91.10.

## *The prairie story*

Such is the story of Canada's mid-west as the prairie provinces enter the second century of Canada's Confederation. The greatest epoch in the history of the plains is just emerging.

The long-run agricultural outlook is optimistic. With increases in the human population and the rising of living standards, the level of meat consumption is expected to double by 1980. To satisfy this need, the demand for feed grain will also double. Manufacturing is making manful strides across the prairies. Underground wealth is being brought to the surface and processed for use or export. Education is being upgraded so as to prepare young people to make the most of the opportunities held out by future years: Saskatchewan's current budget for education is \$78 million, Alberta's is \$154.8 million, and Manitoba's is \$83 million.

It must not be forgotten what the west owes to the determination, justice and cold courage of the Mounted Police who staged their great march across the plains in 1874 to "impose the Queen's law on a fretful realm".

Parliament passed an Act establishing the Northwest Mounted Police in 1873, and in the following year 274 men set out from Red River to patrol 750,000 square miles. They established their headquarters fort at Macleod, and set about their task of ousting lawless traders and building friendship with the Indians.

As an observer remarked: "There were no regiments of soldiery, no merciless cavalry, no prodigious munitions of war, no armed suppression — just tact, courage, understanding and diplomacy" directed toward making life and property secure by establishing law and order.