

Repercussions of war and oil on Edmonton, Alberta

W. C. Wonders

Volume 3, numéro 6, 1959

Mélanges géographiques canadiens offerts à Raoul Blanchard

URI : <https://id.erudit.org/iderudit/020190ar>

DOI : <https://doi.org/10.7202/020190ar>

[Aller au sommaire du numéro](#)

Éditeur(s)

Département de géographie de l'Université Laval

ISSN

0007-9766 (imprimé)

1708-8968 (numérique)

[Découvrir la revue](#)

Citer cet article

Wonders, W. C. (1959). Repercussions of war and oil on Edmonton, Alberta.
Cahiers de géographie du Québec, 3(6), 343–351. <https://doi.org/10.7202/020190ar>

REPERCUSSIONS OF WAR AND OIL ON EDMONTON, ALBERTA

by

Dr. W. C. WONDERS

Professor of Geography, University of Alberta

In 1938, Edmonton, Alberta, was a city of 88,887 population, with perhaps another 6,000 people immediately outside the city limits. These latter included persons in Beverly to the northeast and in Jasper Place to the west, many of whom in Depression years sought escape from city building restrictions and taxation. Beverly was also a coal mining community. Much of the city's sprawling area of over 27,000 acres or 43 square miles (108 km²), was vacant or farm land. Of the 110,000 lots in Edmonton, title to 75,000 had returned to the city at tax sales during the hard times. In 1938 the city's total cost of unemployment aid including hospitalization amounted to \$1,100,000.

Yet Edmonton had passed through the worst Depression years of the early thirties, and was actually in the midst of a boom, reflecting the expansion in mining activity in the Shield areas to the north. Because of its geographic situation, Edmonton as the « Gateway to the North » always has functioned as a supply base for those regions. Added to the generally improving economic conditions, the boom made for a much revived city. A \$2½ million building program for 1938 was the biggest since 1930, and trebled that of 1937. The bulk of this construction was for large new retail businesses in downtown area.

Functionally, the city filled several roles, in addition to northern supply base. As the provincial capital and seat of the provincial university it was an important political and educational centre. Many large lumber firms have their main offices, mills and yards in the city while cutting in the wooded areas to west and north. The « Edmonton area » (within a radius of 25 miles from the main post office) was an important coal producing region. In 1940 it included 32 mines and approximately 1,500 miners when operations were full time. The city was a major road, rail and air centre. It was a divisional point and Alberta district headquarters on the main transcontinental line of the C.N.R. A branch line of the C.P.R. gave access to that transcontinental route at Calgary, and the N.A.R. reached north to the Mackenzie River system and the Peace River area. Its airport, the first commercially licensed in Canada (in 1927), claimed to be the busiest in the country. In June, 1939, it was base of operations for 6 companies and over 60 aircraft. Finally, situated in the heart of Alberta's crescent of rich black soil, the city functioned as a service centre for a productive mixed-farming district, and a major part of its industry such as meat-packing was based upon agricultural products.

In 1958 Edmonton is a city of more than 252,000 — an increase of more than 180% over 1939. The population of the metropolitan area now exceeds 282,000 as compared with 95,000 in 1938. Edmonton's population increase

ranked first among all census metropolitan areas in Canada between 1941 and 1951 — an amazing 76.9%, as compared with second-ranking Calgary with 49.5% and Vancouver's third place 40.6%. (During the same period of time the Toronto metropolitan area increased its population by 22.8% to rank 10th, and Montréal 21.8% to rank 12th).¹ A Royal Commission reported, « All the signs point to the fact that these areas (Edmonton and Calgary) are still the fastest growing metropolitan areas in the country in 1955.»² Some enthusiasts claim for it the title of « fastest growing city on the continent ». Such superlatives are often of questionable value, yet the rapidity of recent growth is a marked characteristic of Edmonton.

Population increase was not uniformly rapid during the 20 years between 1938 and 1958. Instead, two sharp rises have occurred, associated with « boom » conditions. Though growth continued during the war years it was abnormally rapid in 1942-43 when population increased 9.1% compared with 3.0% and 2.7% respectively for the years before and after. From 1947-48 to the present the city has experienced another era of rapid increase of population during which it never has dropped below 5.8% annually (the 1948-49 increase was 8.6%). The two surges in population growth were the result of World War II and the discovery of petroleum at Leduc.

World War I had brought to an abrupt end one of the earliest and the city's greatest boom based on land speculation. The city actually lost population during the 1914-1918 war years. Such was not the case in World War II.

Despite enlistments, population grew with increased construction and industrial output. Among local industries which expanded greatly was meat packing, as Canada assumed a large responsibility to feed beleaguered Britain. In 1942, Edmonton's plants accounted for one quarter of the total Canadian exports of bacon and hog products!³ Unemployment in the city ceased. But though houses were built at a rate unequalled since 1929, a local construction official estimated that between 1931 and 1950, 650 new houses were needed annually while an average of only 202 were built.

For the military, the city was a centre of enlistment in all three services. The three local regiments and other army units were activated and sent overseas. Naval basic training was given in the city. The federal government took over operation of the airport and Edmonton was made one of the training centres for the British Commonwealth Air Training Plan under the R.C.A.F. Airport facilities were greatly expanded and the city later became headquarters for the Northwest Air Command of the R.C.A.F. A large aircraft repair and assembly plant was erected by the federal government and operated by a civilian company. Yet in late 1940 a news report noted « The major influx of military activity involving the arrival of many hundreds of army and air force personnel has been to Calgary rather than to Edmonton »⁴ and in early 1941 it was reported « the

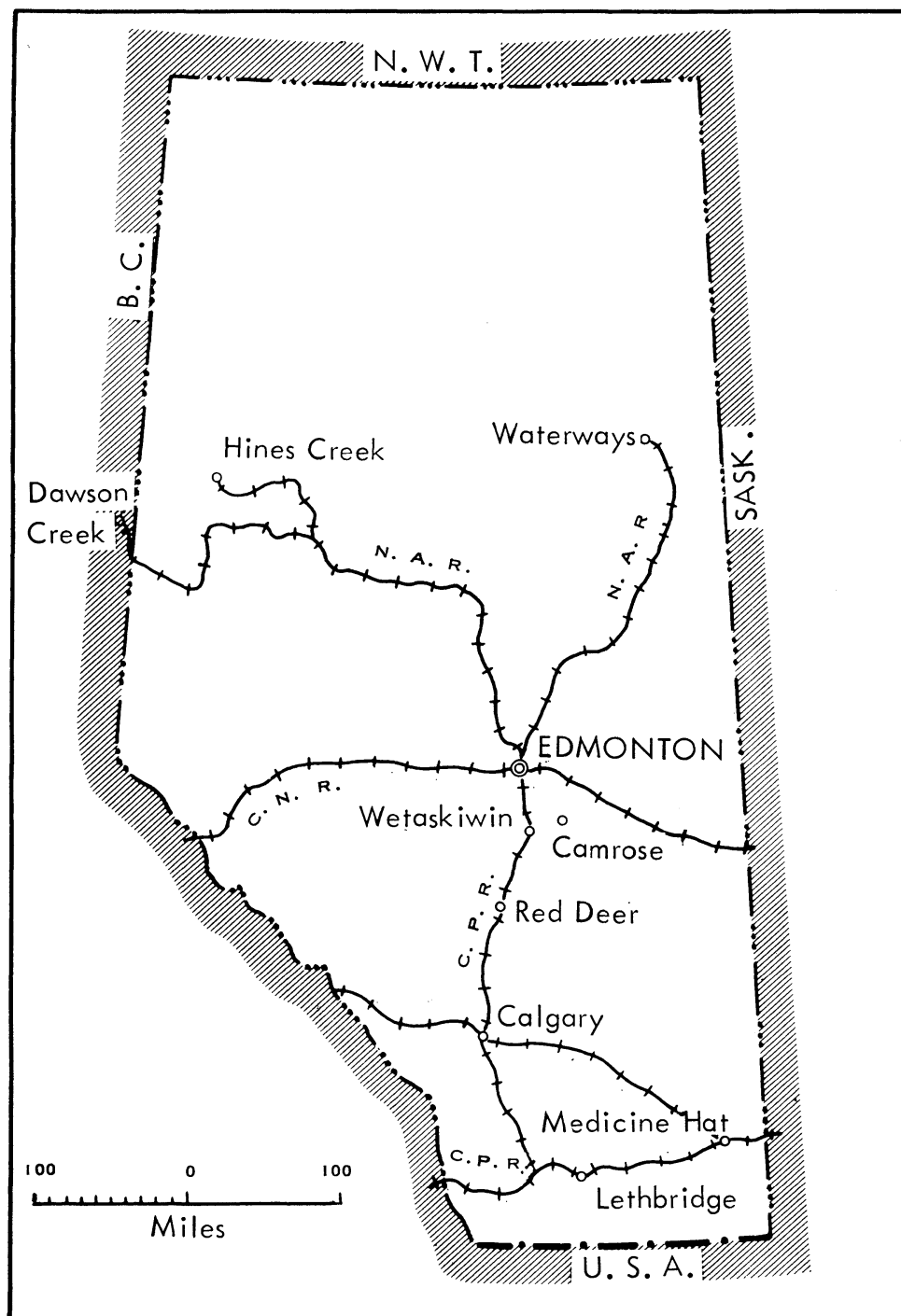
¹ Statistics from *Report of the Royal Commission on the Metropolitan development of Calgary and Edmonton*. Queen's Printer, Edmonton (January, 1956).

² *Ibid.*, p. 4.

³ EDITORIAL, the *Edmonton Journal* (10th September, 1943).

⁴ *Edmonton Journal* (15th November, 1940).

FIGURE I



Geographic situation of Edmonton and the railway network in Alberta.

city is pressing vigorously for a bigger Edmonton share in the country's war program and hopes to gain at least one new plant in the city. »⁵

It was the entry of the United States into World War II in late 1941 and the threat of Japanese invasion of Alaska which provided Edmonton with its bigger share in the war program. The city's geographic situation and the pressing need to provide transportation facilities to speed men and equipment to Alaska combined to produce a spectacular boom period. Though the northern rail-head actually was at Dawson Creek, B. C., 470 miles to the northwest, Edmonton was the farthest north large city well supplied with transportation facilities. It became the main supply base and headquarters centre for three great multi-million dollar northern projects — the Northwest Staging Route, the Alaska Military Highway, and the Canol Project. The first provided facilities for aircraft from the United States to Alaska and also to the U.S.S.R., the second provided an overland road supply route through the 1,500 miles of wilderness between Dawson Creek and Fairbanks, and the third drew on the Mackenzie Valley oil field at Norman Wells to provide aviation gasoline for the Staging Route and Alaskan bases, and gasoline and oil for Highway Traffic.

Edmonton was invaded by Americans. Service personnel and civilian employees of U.S. firms who did much of the construction work flooded over the city in a great wave. It became Headquarters, at one time or another, for the Northwest Division of the U.S.A. Engineers, the U.S.A. Northwest Service Command, and the Alaska Division, Air Transport Command, U.S.A.F., as well as being Headquarters for most of the civilian construction companies. Canadian companies also were involved in the northern projects and many Canadian personnel were employed in the field operations and in Edmonton.

The Americans found the airports necessary for the Northwest Staging Route already available due to earlier action by the Canadian government. Additional facilities to handle the much increased traffic were provided through cooperative action, with the cost being borne by Canada. Airport facilities at Edmonton especially were greatly expanded and improved. An entire U.S.A.F. base was established on the east side of the airport across from the R.C.A.F. station. What is believed to be a continental record was established in September 1943 when there were 860 landings and take-offs at the airport, exclusive of training aircraft, in one 24 hour period. Due to pressure of traffic a second \$7 million airport was constructed at Namao on the northeastern outskirts of the city.

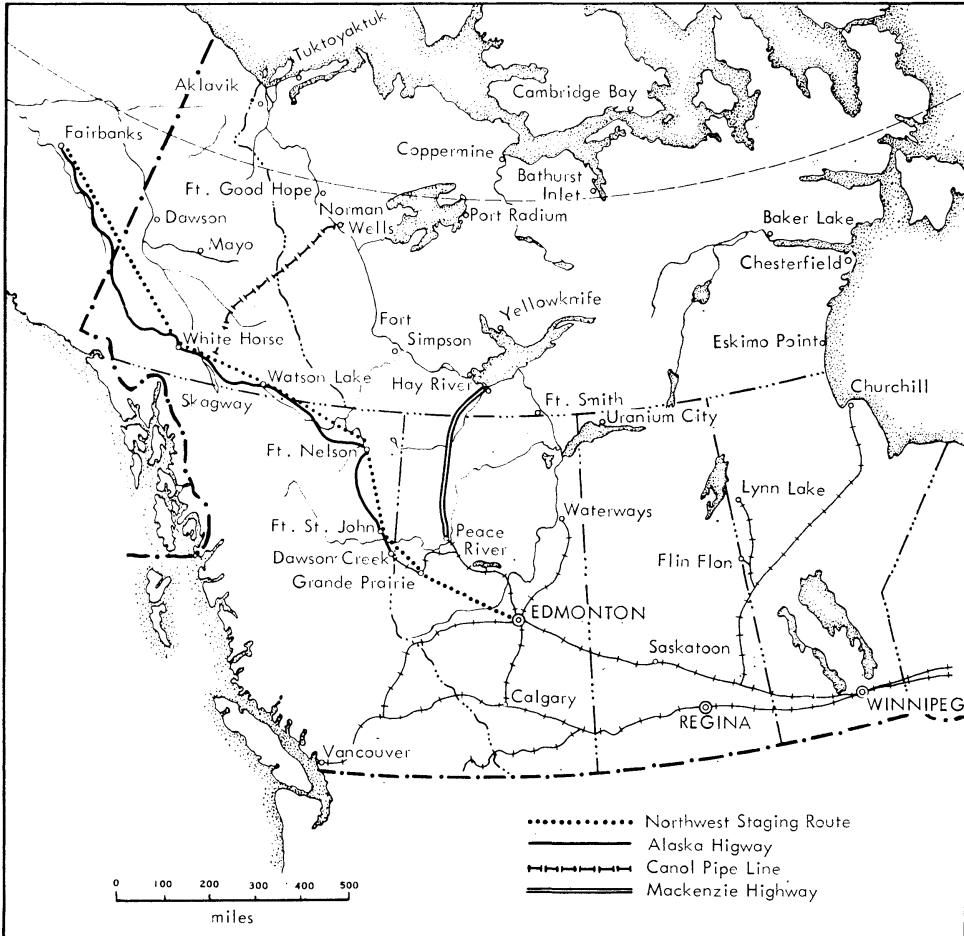
If the Americans found the airport facilities better than perhaps expected, such was far from the case in housing for the thousands of additional people who poured into the city. As noted earlier, Edmonton had been suffering a chronic housing shortage for the previous decade. Cost was no objection. In the war-time emergency anything and everything was done to try to alleviate the situation.

The great two-year invasion, at its peak in 1943, receded and by late 1944 all the main offices of American civilian firms and government departments

⁵ *Ibid.* (11th January, 1941).

were closed with only small staffs left to conclude affairs. The Canadian government purchased the various installations from the U.S.A. Exact numbers of Americans in the city at the height of the boom are unknown, but it is estimated ⁶ that 6,000 U. S. citizens were employed in Edmonton by 50 construction firms while in addition there were the staffs of the U.S. government offices and military personnel. The construction force on the Highway Project is reported to have

FIGURE II



Edmonton, gate to the Northwest.

exceeded 18,000 of whom over 11,000 were military and over 7,000 were civilians. Many of this number passed through the city en route to this project.

The invasion had several repercussions for Edmonton. The psychological impact of the unprecedented rush of activity completely upset the normal

⁶ *Edmonton Journal* (8th October, 1954).

routine and so bewildered many citizens that they still speak of those years with amazement. Many of the emergency measures left problems for postwar city government, especially regarding housing — violations of single family housing zones, unwisely located industrial pockets to hinder orderly urban expansion, degeneration of temporary housing in some instances into slum conditions. The availability of road transport via the Alaska Highway has added to the city's role in servicing Canada's western Northland. The intensified northward orientation of military defence has resulted in the continued and expanded use of military facilities provided first by World War II. Edmonton is now an important military base, the main R.C.A.F. station in western Canada, and Headquarters of Tactical Air Command. In addition it has become Headquarters for Western Army Command, a garrison city. Millions of dollars have been spent for military installations and the services are one of the major industries of the city.

Discovery of a major new oil field in February 1947 at Leduc, 20 miles south of the city, precipitated the second and current boom for Edmonton. Oil drilling firms, geophysical companies and supply houses rushed into the city. Subsequent exploration has shown this to be one of the continent's richest oil areas with the fields at Redwater to the north and Pembina to the west particularly noteworthy. By mid 1954 there were over 3,000 producing oil wells within a 50 mile radius of Edmonton and the city was claiming the title of « Oil Capital of Canada ». Major industry has been attracted to the Edmonton area as a result, including three large oil refineries with a 1958 total capacity of 45,000 barrels a day. Also on the city's eastern outskirts are the tank farms and terminals of Canada's two major pipelines to Vancouver, B. C. and to Sarnia, Ontario. The availability of oil and gas by-products has attracted petrochemical industry. A \$60 million plant produces organic chemicals, cellulose acetate, and textile yarns. Canada's first polythene plant has located in the same area. Eighteen miles northeast of the city a \$25 million plant is now in operation using cheap local natural gas to refine nickel concentrates from Lynn Lake in Northern Manitoba. The industrial base is being further broadened by service industries and such new multi-million dollar constructions as plywood plants, cement plants, an electric furnace and steel rolling mill, and a steel fabricating plant. The only local industry which has suffered from the coming of oil has been coal mining which has declined steadily. In January 1956 only 10 mines were operating in the Edmonton district, employing 209 men. By 1958 coal mining in the district has ceased, for all practical purposes.

Building, and especially home building, has been going on at an unprecedented rate in the post war years. Construction companies were unable to meet the carry-over housing shortage from the 1930's before the flood of new arrivals with the oil boom was upon them. Rents and prices soared. Many of the lower income group were forced into the suburbs. In 1954, 7,700 building permits were issued in the city, to a value of \$68,329,716 (compared with \$2,700,000 in 1939). In the same year, the President of the National House Builders'

PHOTO I

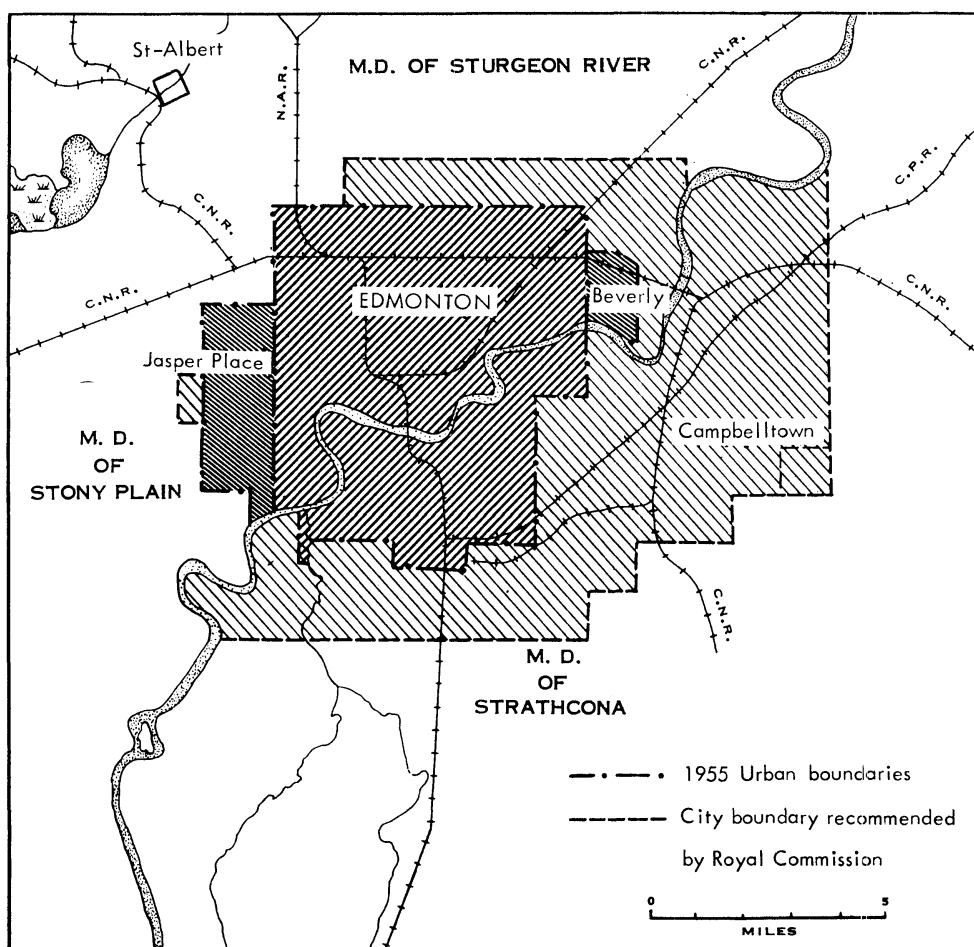


Edmonton, Alberta, looking northeast over Government Center to the Central Business District, North Saskatchewan River Valley and the Refinery Area in the distance.

Association reported ⁷ the rate of new housing starts in Canadian metropolitan areas averaged 14 per 1,000 people. Edmonton topped the list with a startling rate of 23 (Toronto was 16, and Montreal 14).

It has been fortunate that since 1949 during this period of accelerated growth Edmonton has had the services of a qualified town planner (though

FIGURE III



Projected expansion of Edmonton.

an advisory planning commission and zoning by-law existed much earlier). Despite some strenuous opposition his policies have been effected in the main. Old problems have been reduced and eliminated, and the great expansion of building over the previously unused city area has been guided carefully. The result is that today probably no other city of comparable size on the continent

⁷ *Edmonton Journal* (15th February, 1955).

shows the applied results of planning on such a wide scale. The city in theory is committed to the concept of an eventual « optimum size » of 350,000 – 400,000, after which satellite towns will be established.

The recent oil boom has brought municipal problems to the Edmonton area as well as people and industry. The main difficulty is that municipal boundaries have separated functions. The bulk of the industry has located in the Municipal District of Strathcona, while the people have located in Edmonton, and to a lesser degree in Jasper Place and Beverly. The cost of providing services and school facilities for this population has skyrocketed civic debt to the point where it now exceeds that of the province. In order to provide a more balanced tax base the city advocated amalgamation, supported by the two suburbs and opposed by Strathcona. Controversy over the establishment of a privately financed « satellite town » (Campbelltown) only five miles east of the city limits caused the provincial government to appoint a Royal Commission to investigate the entire problem of metropolitan development of Edmonton and Calgary. Its recommendations, released in February 1956, included the amalgamation of Edmonton « at the earliest possible date » with its suburbs, including Jasper Place, Beverly, and the industrial area to the east in the Municipal District of Strathcona. If effected the city will be enlarged more than two and one half times its present size to 112 square miles (280 km²), making it the largest in Canada.⁸



⁸ The metropolitan area of Toronto covers 220 square miles (550 km²), the city proper 35 square miles (88 km²).