



Information Division
Department of External Affairs
Ottawa Canada

Canadian Weekly

Bulletin

Vol. 26, No. 33

August 18, 1971

URBAN TRANSPORT IN CANADA

The Urban Transport Problem, by Dennis J. Reynolds, a senior economist with Central Mortgage and Housing Corporation, is the third in a series of six research monographs providing detailed technical and analytical documentation for the report *Urban Canada: Problems and Prospects*. It was released in July by Mr. Robert Andras, Minister of State for Urban Affairs.

"While we do not have an urban transport crisis in Canada, as Mr. Reynolds points out, we do have a great need to understand and to better move on transport and allied problems in and between our cities before we get in real trouble," Mr. Andras said.

Urban transport, he said, was a "vital key to the whole style and character of a city and changes in an area's transport system can radically change its face".

"The Ministry of State for Urban Affairs," Mr. Andras continued, "recognizes transport as one of the priority areas for research and for action co-operation and is working closely at the federal level with the Ministry of Transport in this context. We are also in the process of determining some

on-the-ground studies and projects of co-operation in certain Canadian urban areas in transportation and allied community problems, in addition to special Ministry research being started."

Mr. Reynolds' monograph follows:

"This economic, environmental and technological study assesses the urban transport problem in Canada up to the end of the century under five main headings: the future demand for urban, inter-city and rural transport; the supply of transport facilities; the plans of the major cities; the pricing of urban transport systems; and urban transport and the environment.

"The analysis indicates that the Canadian population is likely to increase to between 30 and 40 million by the end of the century and that a large part of this increase will be concentrated in the nine largest cities which can be expected to have the most serious transport problems - Montreal, Toronto, Vancouver, Ottawa, Winnipeg, Edmonton, Calgary, Hamilton and Quebec City. In addition, some 46 further cities might exceed a population of 50,000 by end-century, much of this population increase being concentrated between Quebec City and Windsor. On top of this population increase, increased car-ownership per head can be expected to double urban traffic volumes by end-century, most of the increase (60 per cent) taking place in the decade 1970-1980. However, the demand for inter-city rail-passenger services would decline and future demand for urban bus services would be uncertain.

"Most forms of transport should be able to respond to increased demand without increases in real costs (in constant \$), the major exception being urban bus services, and with some diversion of road investment from rural to urban, the supply of highways should be adequate to meet demand. However, there seemed little prospect of new and substantial technological advance in urban transport systems,

CONTENTS

Urban Transport in Canada	1
Call for Unit-Pricing	2
Students Work at Exhibition	2
Fisheries Research Pays Off	3
Armed Forces Bilingualism	3
The Stuff of History	4
McGill Gets Washington Letter	6
DBS Name Change	6
Pulp-and-Paper Pollution Probe	6

although several of the major cities at present without them might be able to successfully install mass transit systems by end-century.

"The plans of the major cities were mainly concerned with the expansions of freeway systems, although the course of events since they were drawn up may have radically modified their intentions.

CAR VERSUS TRANSIT SYSTEMS

"Concerning the pricing of urban transport systems, there seemed little doubt that under congested conditions the private car was not paying its full social costs, the major difficulty being to devise practical, efficient and equitable systems of road-pricing, increased parking charges in city centres probably being the best compromise.

"As an alternative to pricing car-use under congested urban conditions, there was a case in principle for free transit systems which would lead to small but significant diversions from car to transit, but the subsidies required (probably best raised by increased gas taxation) would be so massive that further analysis and limited experiments would be necessary before such a radical proposal could be assessed.

"Assessing the impact of urban transport on the environment, it seemed that the most important and critical effect was that on air-pollution to which the automobile seemed to be the major contributor. However, because of low over-all population density, air pollution in Canada was at much lower levels than in the United States and improvements to existing vehicles should be able to offset the effects of growth in vehicles and secure a reduction in urban vehicle pollution by end-century.

"Including the more subjective effects of road vehicles on the environment — noise, visual effects and impedance to pedestrians — these could be reduced either at source, by increasing distances between source and sufferer, or by introducing barriers to sight and sound such as walls, hedges and trees. The ideal from the environmental point of view would probably be freeways with low speed limits such as the parkways of Ottawa.

"The over-all conclusion to the analysis is that there are no easy answers to the urban transport problems in Canada or elsewhere; in particular the fundamental problem of the car/transit balance remains unresolved. However it would be quite wrong to be pessimistic about the future of urban transport, particularly in Canada, for unlike most other countries of the world the problem is of manageable proportions, resources should be adequate to meet demand, the major problems will be tackled by the major highway authorities, and in reality people and their cities can adjust on many margins and thus avoid serious breakdown. There remains a great need for general Canadian research on this problem as part of a horizontal study of the economic, physical and social forces and stresses of urbanization in Canada."

CALL FOR UNIT-PRICING

The Minister of Consumer and Corporate Affairs, Mr. Ron Basford, has called upon the major supermarket chains in Canada to introduce unit-pricing in their stores.

"I am convinced that the widespread use of unit-pricing would be of great assistance to consumers," Mr. Basford said in a letter to company presidents. "It would enable them more readily to compare the relative prices of different products in the same category, and of different sizes of containers for the same product. This applies particularly to the types of product which are purchased frequently by the average consumer."

"This provision means giving the shopper more information about the price of goods by stating the price per weight or measure as well as the total price," Mr. Basford explained. The Minister pointed out that many supermarket chains in the United States already provide price-per-unit information, and that while progress in Canada has been slow, one Ontario chain had recently introduced it.

Mr. Basford also wrote to all provincial ministers responsible for consumer affairs, enlisting their support of his request to the supermarket chains. At the Federal-Provincial Conference on Consumer Affairs last May, the ministers endorsed a call on supermarkets to undertake studies and experiments in unit-pricing.

Under the Consumer Packaging and Labelling Act given Royal Assent June 10, 1971, the Federal Minister of Consumer and Corporate Affairs is specifically charged with carrying out research into unit-pricing.

STUDENTS WORK AT EXHIBITION

The City of Montreal employs some 3,000 students during the summer months, three-quarters of whom work for the exposition Man and His World, while the rest are engaged in the numerous parks as monitors, supervisors, clerks and maintenance men.

Students who have worked for the city previously are given preference for the next year. At the beginning of the year they receive this offer of employment at wages ranging from \$1.90 to \$3 an hour depending on their competence and the demands of their work.

Man and His World encompasses a variety of jobs and students help in most of them. They become assistant designers, press and publicity personnel and hosts and hostesses. Some assist pavilion directors and heads of sectors, while others help with the inventory, upkeep, revenue, entertainment, and with sports, etc. Man and His World also employs telephonists, receptionists, information aides, as well as those to help the handicapped, and drive transportation vehicles.

FISHERIES RESEARCH PAYS OFF

An experiment in salmon-packing, involving a new system known as "partial freezing" developed by scientists of the Fisheries Research Board of Canada, has paid handsome dividends in British Columbia.

The venture involved four chilled-brine boats owned by B.C. Packers and two owned by the Canadian Fishing Company which, last summer, were sent on what is believed to be the longest salmon-packing trip on record - 4,120 miles to Bristol Bay and back. The six boats packed a total of 400,000 Bristol Bay sockeye salmon to Prince Rupert and Steveston, landing almost all in perfect condition.

Early in August, 29,000 cases of sockeye went on the market, giving the two canners a head-start for the selling season. The wholesale value of the pack was about \$1,300,000.

HELD AT 25 DEGREES

The fish were held in salt-reinforced sea-water at 25 degrees F., using a system developed at the Vancouver Technological Station of the Fisheries Research Board. Mainly involved in the project were the station's chief of biochemistry, Dr. Neil Tomlinson, and research engineer Stewart Roach. Although laboratory tests had been conducted earlier, there had been no opportunity for a full-scale commercial test until last summer.

The FRB scientists afterwards described the operation as "an unqualified success", stating that between 75 and 80 per cent of the pack was Grade A fish.

ARMED FORCES BILINGUALISM

The Department of National Defence will set up new language-training centres at 28 Canadian Forces bases in Canada and Europe by September.

The training will provide some men with a practical degree of bilingualism, and will prepare a large number for advanced language courses at other institutions.

The new language centres will not replace but will augment existing programs, such as those at the Canadian Forces Language School, St. Jean, Quebec, and military participation in the Public Service Commission language-training program.

Plans are now being made to expand the program in 1972 to cover other bases and stations. The program will cost \$1,240,500 for the first year of operation, and slightly more than \$8 million over the first five years.

The course is an advanced form of "programmed

Mr. Roach explained that a big advantage of the system is that it can be put into operation with present equipment. "Brine-freezing is very efficient - in fact no other system can be loaded as fast," he said. "We can literally put the fish in as fast as they can be put aboard."

The scientists are looking forward to another large-scale operation using partial freezing, and in the meantime have been working on improving the brine circulation system to give more efficient cooling.

PERIOD OF RESEARCH

The principle of storing and transporting salmon in refrigerated sea-water has been researched and developed over a 12-year period at the Vancouver technological station.

Under the normal system, fish are chilled to 31 degrees F. in storage tanks aboard the packers. This is an ideal method of rapidly chilling and holding salmon for short periods up to seven days. With the new system of "partial freezing", fish can be stored safely for up to 17 days.

Mr. Roach said that the term "partial freezing" is used because fish flesh does not freeze at a fixed temperature like water. The water in the salmon's flesh (salmon is 64 per cent water) is frozen out and the remaining fluids are concentrated so that their freezing point is lowered. Thus, although the salmon become firm at 29 degrees, they are still only about two-thirds frozen even at 25 degrees. But at the lower temperature spoilage caused by bacteria practically ceases.

learning" and will be carried out by civilian instructors. Each student will be loaned a cassette recorder and taped lessons with which to work. The students, all volunteers, will have to spend an average of six hours of their own time each week to keep up during the 40-week course. They will also work with their instructors for half a working day each week for review, individual help, and for a preview of the next assignment.

The new facilities are designed to accommodate 1,400 students in the first year and 2,500 a year starting in autumn 1972.

Installations at which the training centres will be established this year are CFBs Halifax, Shearwater, Greenwood, Summerside, Esquimalt, Montreal, Gagetown, Valcartier, Petawawa, Calgary, London, Winnipeg, Borden, Kingston, Moose Jaw, Chilliwack, Cold Lake, Bagotville, Chatham, Comox, North Bay, Trenton, Toronto, Uplands, Rockcliffe, Edmonton, Europe and CFHQ Ottawa.

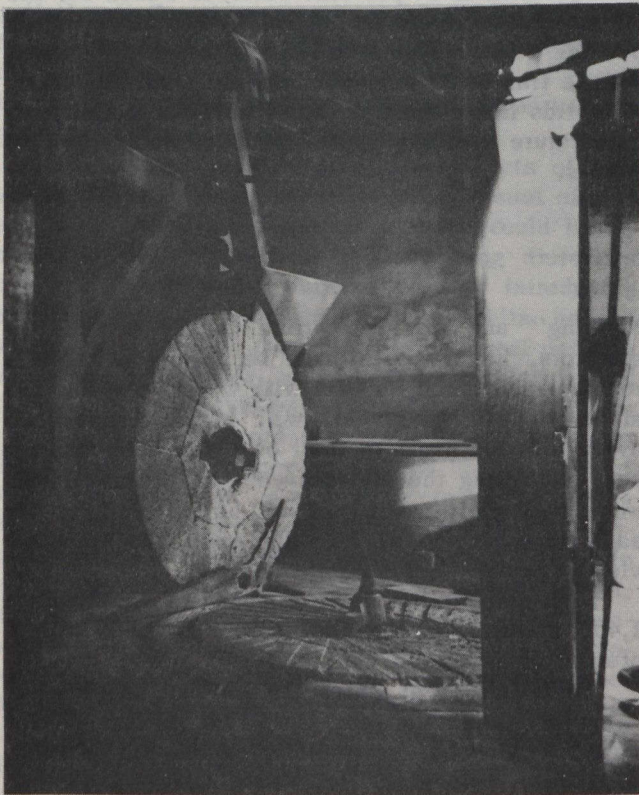
THE STUFF OF HISTORY

"Little bottles filled with mercury are carried by old-timers in the Yukon. These are handy substitutes for thermometers, for when the mercury is solid, the wise traveller in that country seeks shelter."

This is the sort of information which was taken from a contemporary account of the Yukon Gold Rush that the newly-established "material history" research section of the National Historic Sites Service is attempting to compile. The researchers approach history through the everyday stuff of Canada's past — goods illustrated in old newspaper advertisements and retail catalogues, observations from centuries-old travellers' journals, and objects found in museum collections.

Elizabeth Wylie, supervisor of the project, explains: "We're interested in Canada's social history during the European period, and the everyday things historians considered too ordinary to be worth recording."

When curators restore and furnish an interior, creation of the appropriate atmosphere depends on precise and accurate historical detail. "There is a basic peril in simply attempting to restore a house in 'period' furnishing. The furnishings often varied according to the individual's social standing and did not necessarily depend on whether his background



The millstones of Cope's grist mill in Ancaster, Ontario, which dates from 1863, were imported from a quarry near Paris, as were all high-quality millstones in North America in the nineteenth century.

was French or English, or whether his home was urban or rural. For example, as the French Canadian gained social status, he abandoned the carved pine *armoires* and other goods from the French settlers' rural 'peasant' past, and adopted current British, French, or American styles....," says Miss Wylie.

In recreating the home surroundings of a nineteenth century Quebecker, curators might refer to sources ranging from Cornelius Kreighoff's paintings to contemporary newspaper advertisements. Eaton's catalogue is a virtual encyclopedia of information, but it did not exist before 1884. The late 1880s brought mass production and a standardization of Canadian goods. Up to that time, the reflection of regional differences was more pronounced but systematically unrecorded.

One area of interest to the research section is how the use of some rooms and other interior features of Canadian homes have changed with changing social customs and economic circumstances.

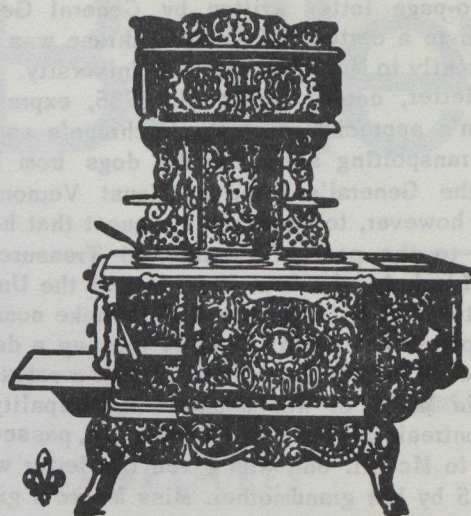
EARLY DOMESTIC HEATING

Domestic researcher Marcel Moussette is now conducting a historical study of domestic heating in Canada. One of the most important features of the stove was its adaptability to the Canadian climate, Mr. Moussette points out; otherwise, there would have been no reason for the stove to replace the fireplace. The stove was mobile and radiated heat from its metal plates rather than simply providing a limited amount of direct heat as a fireplace would. (Most of the heat in early fireplaces went up the chimney.)

It is likely that the stove also had some effect on certain features of Quebec architecture. In the 1600s the first French settlers came to Canada from western France, where fireplaces were used for indoor heating, though stoves were already being used in other parts of Europe. The early settlers lived in two-room dwellings consisting of kitchen and sleeping-quarters with a chimney located at either end or in the centre of the house. When stoves came into popular use, however, people could live in several rooms, with pipes carrying heat throughout the house. And since they were obliged to heat their houses for a large part of the year, roofs were constructed of tin or slate-tile to avoid fire. Until 1760, historical accounts make no mention of cooking stoves; apparently, cooking was still done at the hearth.

Another area of research, traditional trades and crafts, will include information on early Canadian flour mills, lime kilns, weaving techniques, and the crafts of the blacksmith and cooper. Last summer, Miss Wylie and staff photographer Georges Lupien filmed an old stone flour-mill still in operation at Ancaster, Ontario. The film record, she explained, could serve as a valuable guide for restoring a similar structure in the historic sites system.

EVERY woman who has stewed and fretted and worried at a hot oven door, shifting a roast to the top shelf and back again to the bottom shelf and turning it over in a vain attempt to get it properly cooked, will appreciate the evenly distributed heat of the Imperial Oxford oven.



This even distribution of heat is secured by our diffusive flue—an exclusive feature of the Imperial Oxford Range. Top and bottom, sides and corners, the temperature of the oven is equal and steady.

Imperial Oxford Range

The oven of the Imperial Oxford Range produces light, dainty pastry; evenly cooked, tender, juicy roasts—in fact, perfect baking and roasting.

Ask your dealer to explain to you the many exclusive features of the Imperial Oxford Range. If he doesn't handle it, write to us for our booklets and we will let you know the nearest dealer who does.



THE GURNEY FOUNDRY CO.

Limited

TORONTO HAMILTON MONTREAL

WINNIPEG VANCOUVER

CALGARY

18

McGILL GETS WASHINGTON LETTER

A two-page letter written by General George Washington to a certain Dr. John Cochrane was presented recently to Montreal's McGill University.

The letter, dated August 31, 1785, expresses Washington's appreciation of Dr. Cochrane's assistance in transporting some hunting dogs from New York to the General's home at Mount Vernon. In reference, however, to Cochrane's request that he be nominated to the post of Continental Treasurer in return for his help, the first President of the United States writes that it is not practice to make nominations to government posts: "I early took up a determination not to hazard the mortification of a refusal."

Matilda Moore of Westmount, a municipality of Greater Montreal, who is now 85 years old, passed on the letter to McGill. She was given the letter when she was 15 by her grandmother. Miss Moore's great-grandmother, Mrs. Jacob Henry Joseph, received the letter when she herself was a girl, from the Clay family, one of the leading political families in the United States during the nineteenth century.

After being treated by a special preservation process, the letter will be displayed at McGill University.

DBS NAME CHANGE

The Dominion Bureau of Statistics changed its name on August 3 to Statistics Canada, in accordance with Parliament's enactment of "The Statistics Act, 1971", which was passed early last spring and proclaimed law on May 1. Among other things, the Act changed the name of Canada's central statistical agency from "Dominion Bureau of Statistics" to "Statistics Canada" and the title of its chief officer from "Dominion Statistician" to "Chief Statistician of Canada".

Recognizing the magnitude of the task involved in developing a new identity for the national statistical agency, Parliament allowed a period of transition in which to complete the changeover.

For the benefit of users, secrecy provisions have been modified to remove unnecessarily restrictive elements and permit the publication of data not previously available. The main changes will permit publication of lists of companies or other organizations by broad employment-size ranges or by specific goods and services provided.

In the case of respondents to statistical surveys, the legislation allows Statistics Canada greater access to and use of information available elsewhere, including income-tax information. In addition, it places more emphasis on co-ordination with various provincial departments and agencies, particularly in

the use of joint collection arrangements.

Thus Statistics Canada has been given a somewhat greater authority and greater flexibility. Under its new name, the bureau intends to continue to improve the scope, timeliness and efficiency of its operations, to meet the growing need for statistical information on social, economic and financial developments in Canada.

PULP-AND-PAPER POLLUTION PROBE

Nine research contracts valued at \$545,850 have been approved by the Department of the Environment under a program established last year to reduce water pollution from pulp-and-paper operations.

The Minister of the Environment, Mr. Jack Davis, under whose jurisdiction the Canadian Forestry Service administers the program, said that eight of the awards were for continuation of research begun in 1970. One contract, valued at \$50,000, will cover a new project by B.C. Research of Vancouver to investigate microbiological characteristics of pulp and paper mill effluents.

The other contracts are:

Pulp and Paper Research Institute of Canada: \$71,000 to study amine treatment for the decolourization of pulp mill wastes; \$122,650 to evaluate ozone treatment for strengthening mechanical pulps thereby reducing the chemical pulp requirements for newsprint manufacture; and \$70,000 to study pulping using pressurized oxygen.

Ontario Research Foundation: \$50,000 to study separation, handling and utilization of fine suspended solids.

B.C. Research: \$77,000 to study the sublethal effects upon fish of bleached kraft mill effluents; \$23,500 to study the sources of toxicity and biochemical oxygen demand in the bleached kraft process; and \$40,700 to study isolation of toxic constituents from bleached kraft pulp mill effluents.

MacMillan Bloedel Research Limited: \$41,000 to study alkaline pulping processes without sulfide.

Several additional contracts are currently under negotiation with various industrial research laboratories.

The program was established in 1970 with a fund of \$500,000 to encourage increased research into water pollution abatement from pulp mills. This amount was increased in 1971 to \$1 million a year for five years, contingent upon the pulp-and-paper industry increasing its private funding of such research by at least \$1 million over the amount spent in 1970. The privately-funded research in 1970 was estimated at \$1.4 million and is expected to reach \$3 million in 1971.