

Canada's Wheat Can Grow World Food Production: End Bio-Foolery Now!

by Rob Ainsworth, Canadian LaRouche Youth Movement

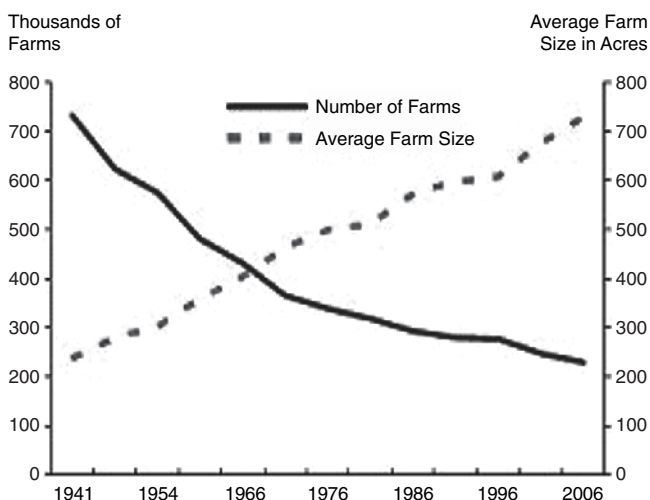
As the global food crisis continues to gather momentum, nations are being called upon for extraordinary action. Canada, one of the world's leading grain exporters, has an important role to play in any solution. With the ever-escalating economic breakdown crisis, and the rising clamor for the end of globalization, the opportunity to implement Lyndon LaRouche's visionary policies has never been greater. There are, however, significant challenges to successfully carrying out Canada's part in LaRouche's proposal to double world food production. Nevertheless, it is the case that these challenges represent unique opportunities for the nation. The following report details the crisis facing Canada's farmers, the latest in bio-foolery, and several of the great infrastructure projects which will be necessary in the coming years for the continued progress of the human race.

The State of Farming in Canada

According to the Ministry of Agriculture, Canada currently has 167 million acres of farmland in use, with the Prairie Provinces (Alberta, Saskatchewan, and Manitoba) accounting for 135 million alone. The Canadian Wheat Board forecasts that 21.2 million tons of wheat will be harvested this year, up from last year's harvest of 18.4 million tons; yet under proper conditions, production could easily reach 30 million tons, as occurred in 1996. Total production of grain of all types fluctuates around 50 million tons per year, which equals approximately 1.5-1.6 tons of grain per capita, one of the highest per capita ratios in the world (compare this to 2007 global per capita production of .315 tons). Of total 2006-07 grain production 30 million tons were exported to dozens of nations around the world. The five largest importers of Canadian grains in 2006-07, in thousands of tons, were the United States (4,576), Japan (3,474), India (2,190), Mexico (2,184), and Indonesia (1,560). China also imported over 1.3 million tons of grain, mostly barley and canola.

Canada also is an important producer of beef, hogs, and poultry. A 2007 USDA report on Canadian meat production placed 2007 beef output at 1.345 million metric tons and pork at 1.850 million metric tons; poultry production was approximately 1.165 million metric tons; most Canadian meat production goes to the United States, which currently accounts for 58% of all food export revenues (2007 per capita meat production was 132 kilograms, compared to approximate global per capita production of only 43 kilograms).

FIGURE 1
Number and Size of Farms in Canada,
1941-2006



Sources: Statistics Canada, Census of Agriculture.

Ironically, despite the incredible productivity of Canadian farms, it is almost impossible for farmers to survive, as they face great challenges from the food cartels. For example, although there are over 200,000 farms across the nation, all must purchase their farm inputs (fuel, machinery, fertilizer, seeds, etc.) from a small handful of companies, usually three or four dominant companies in each sector; similarly, farmers will likely sell their produce to one of a few international grain cartels, and transport their produce on one of two primary rail-ways. Canada's farmers are getting squeezed from both sides, a reality which is causing a mass exodus from the agricultural sector. A 2005 report issued by the National Farmers Union frames the farm crisis in the following way: "a customer puts \$1.35 on a grocery-store counter for a loaf of bread. Powerful food retailers, processors, railways, and grain companies take \$1.30, leaving the farmer just a nickel. Powerful energy, fertilizer, chemical, and machinery companies take 6 cents out of the farmers' pocket. Taxpayers make up the penny" ("The Farm Crisis and Corporate Profits"; www.nfu.ca).

Three years later, grain prices may have increased sufficiently to promise grain farmers their first profits in many years; however, these same increases, while beneficial to

some farmers, are savaging livestock producers, and having devastating effects on the world's poor. In fact, the Federal Government, rather than purchasing surplus production for shipment to food-short nations, recently paid Canadian hog producers \$50 million to slaughter 150,000 sows in an attempt to diminish the "glutted" hog markets at a time of exploding input costs; a member of the Ontario Cattlemen's Association remarked that if there is no action from the Federal and Provincial governments, the beef industry in Eastern Canada could swiftly disappear. The distress felt by farmers was noted by Ginette Lafleur, of the University of Quebec in Montreal, whose recent study of Quebec agriculture found that 5.6% of participants have thought of committing suicide, while half of them admit being in an "advanced state of psychological distress" due to the Canadian farm crisis. In Quebec's hog industry, the level of advanced distress has reached 75%. Lafleur reports that the average level of indebtedness per Quebec farm has increased from \$135,000 in 1996, to the spectacular level of \$375,000, today.

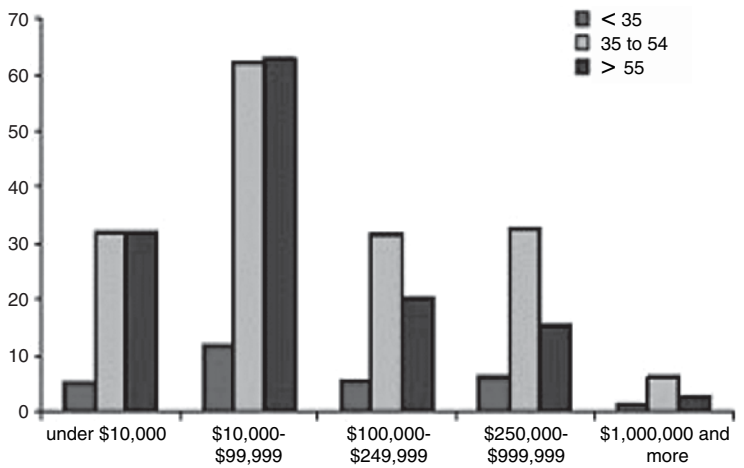
Such realities, at a time of widespread hunger, bespeak the tragic failure of the globalized economy to satisfy the rights of people everywhere to adequate food. The proponents of globalization might ask what good our farmers are, if they cannot profit under free trade; but we ought to ask what is the good of free trade, if farmers cannot afford to grow food!

Agriculture Canada's 2008 report notes that "over the past 50 years, average farm size has tripled while the number of farms in Canada has declined. In 2006, there were 229,373 farms, representing a 7% decline from 2001. This compares to a 11% decline between 1996 and 2001 (Figure 1). Some of this decline can be attributed to increasing productivity and efficiency, which allows farmers to husband larger tracts of land; nevertheless, it is a grim reality of modern farming that most farms fail because it is becoming impossible to make an honest living growing food! As in many nations, farming families maintain themselves only through supplementary, off-farm employment.

Another factor which ought to be of concern to policymakers as well as the citizenry as a whole, is the advancing age of farmers (Figure 2), with 40% of all operators now over the age of 54! As anyone involved in production well knows, the expertise and experience which makes for a successful operator cannot be gained in one or two seasons; in fact, insight of the type demanded is the product of generations, which, once lost, requires generations to regain. Furthermore, there is a devastating relationship between the profitability of farming and the willingness of young people to take on the responsibility of building a life on the land. The prospect of a life of virtual debt-slavery does not inspire young people to farm.

A further indication of the crisis facing Canadian farmers is the level of government payments to the farming sector (Figure 3), to compensate for billions of dollars of losses due, in great part, to the massive consolidation of the food supply

FIGURE 2
Age Class Distribution by Revenue Class, 2006
(Thousands of Operators)



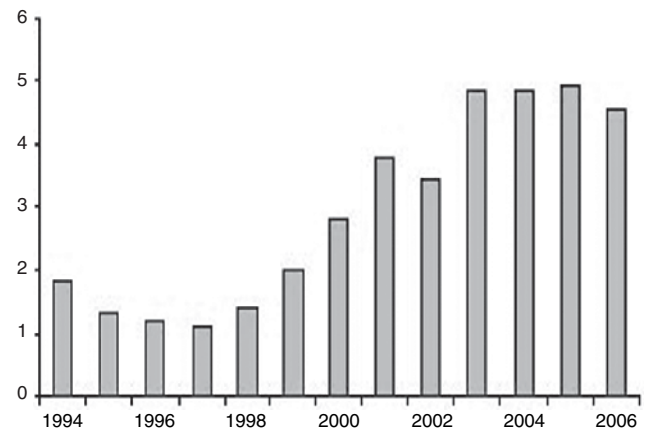
Sources: Statistics Canada, 2006 Census of Agriculture.

chain; all this while the grain cartels reap historic profits. In 2006, the government paid \$4.6 billion to keep Canada's farmers producing for another year.

Assault on the Canadian Wheat Board

With the above considerations in mind, it would seem obvious that a government which had the interests of the population at heart, would be promoting those organizations which were assisting farmers to make a productive contribution to the Canadian and world economies. However, with Prime Minister Stephen Harper's attacks against the Canadian Wheat Board (CWB) (see, "Defend the Canadian Wheat Board," *EIR*, July 4, 2008), Canada's government is demonstrating that its

FIGURE 3
Program Payments, 1994-2006
(Billions \$)



Sources: Statistics Canada and AAFC.

What Makes Canada Cool?

You can feed your car with fuel that is partially made from wheat



Lloydminster, Saskatchewan - Ethanol-blended gasoline is currently available in western Canada at Husky and Mohawk filling stations. Ethanol fuel is cool because it can be produced from renewable resources, such as wheat, corn, and other plants, and because, it emits less greenhouse gases than fossil fuels. And, there's even a co-product developed from the left-over grain - a high-quality animal feed. Husky Energy is spending about \$95 million dollars to build Western Canada's biggest ethanol plant in Lloydminster, on the Saskatchewan/Alberta border. It's scheduled to open early in 2006. The Lloydminster plant will produce 130 million litres of ethanol a year, using about 15 million bushels of wheat from local growers to do it, which will be great for the surrounding economy. The Canadian Government wants one third of Canadian gasoline to contain at least 10 percent ethanol by 2010.

A 2005 "Cool Canada" website on the nation's "fascinating achievements," praises its use of wheat for ethanol.

loyalties rest not with the people, but with the Anglo-Dutch imperial system. Since Harper became prime minister in 2006, his government has waged a war against the CWB, attempting to eliminate its "despotic" single-desk marketing authority in favor of the "free" market, that is, the agro-cartels. It is claimed that Western wheat and barley farmers, who are served by the CWB, would be free to find the best possible price on the open market, taking advantage of rising commodity prices. The CWB, in the eyes of the free marketeers, is a relic of those bygone days of stultifying government interference in the workings of international finance and trade. Claiming to have the interests of farmers in mind, Harper and his gang really intend to line the pockets of the agro-cartels, such as ADM and Cargill, which want to seize control of the 20-30 million tons of wheat and barley that are exported by the CWB each year.

Harper ordered the governor general to fire the CWB's government-appointed CEO, and place a gag order on the agency, which prevented it from promoting its single-desk marketing monopoly, although it was permitted to advocate the government's position, that is, a policy which would lead to its own demise! The government unsuccessfully meddled in the Board's farmer-run elections of 2006, which elected five out of the ten farmer-appointed directors of the CWB, attempting to install anti-Wheat Board candidates. Now, with the termination of the Australian Wheat Board, there will be additional pressure on the CWB and on the Harper government to finish off Canada's Wheat Board.

Fortunately, the CWB won a victory against the government, when a Federal court ruled against the government-imposed gag order, thus freeing up the CWB to counter the media and political campaigns of the Harper government. Yet, despite this victory, the future of the CWB and similar marketing boards is grim, unless the lunatic policies of the WTO, which has hypocritically condemned the Wheat Board for creating "market distortions," are put to rest.

Canadian Bio-Foolery

On June 26, in a mad (and all-too-British) vote for genocide, the upper house of Canada's Federal parliament passed Bill C-33, which mandates 5% ethanol in gasoline by 2010, and 2% in diesel and heating oil by 2012. These developments are accompanied by approximately \$2.2 billion in subsidies for bio-fuels to be committed over nine years, subsidies which began in

2006, when the government first announced its biofuels policy. However, even as the government moves forward with its policy, objections are being raised against it, including from farmers themselves.

Douglas Auld, Adjunct Professor in the Department of Economics at the University of Guelph, has just completed a study for the C.D. Howe Institute (www.cdhowe.org), in which he claims that "ethanol pro-

grams were launched [by the Federal and provincial governments] without adequate research or a detailed examination of their consequences." Auld, who calls for rethinking Canada's ethanol policy, explains that "total ethanol production utilizes 500,000 tonnes [metric tons] of wheat and slightly more than 1 million tonnes of corn. Corn production in Canada is concentrated in three provinces. In 2006, Ontario accounted for 57.3 percent of Canada's corn crop, Quebec for 36.4 percent, and Manitoba for most of the rest. Most ethanol production in Quebec and Ontario is corn-based, while the majority of the production in the Prairies is wheat-based."

Meeting the Federal government's targets will require massively expanding Canada's annual ethanol and biodiesel production from its current level of about 1 billion liters to 2.6 billion liters. According to industry sources, to meet 2008 production needs, close to 792,000 tons of wheat (slightly under 4% of total wheat output) and 49.6 million bushels of corn (12% of Canada's output) will be needed. To meet the requirement of 5% ethanol in gasoline will demand 150% more grain, thus utilizing as much as 10% of Canada's wheat crop and 30% of the corn crop.

The impact that such levels of demand will have on the Canadian food supply and the prosperity of farmers can only be imagined; however, it is clear that such changes have genocidal implications for humanity. It is time that Canada's politicians stop pandering to the harebrained environmentalists, join the chorus of voices already denouncing biofuels, and shut down this epically foolish program.

Great Projects

It is clear that even though Canada could do a great deal to solve the world's economic problems, there are serious obstacles to overcome. The government of this country is clearly opposed to any concerted effort to address the manifold crises facing the world; at the same time, the financial breakdown crisis, with the bankruptcies of Fannie Mae and Freddie Mac, has moved into a new phase of hyperinflationary collapse, which will inevitably impact world prices of food and agricultural inputs. Only a concerted effort by governments, such as the Four Powers (United States, Russia, China, and India) initiative proposed by Lyndon LaRouche, can prevent a complete failure of the world economy at this time (see Lyndon H. LaRouche, Jr., "Free Trade vs. National Interest: The Economics Debate About Russia," *EIR* July 4, 2008). Once such an initiative is launched, then nations like

Canada will be freed from their subservience to the Anglo-Dutch financial empire, and will be able to make their own unique contributions to the cause of human progress. Under such conditions, the following projects and their like can be built.

Central to any expansion of the productive powers of labor in Canada, and North America as a whole, is a complete rebuilding of the nation's embarrassingly decrepit rail and water infrastructure. It is shocking that a nation as vast as Canada, encompassing 9 million square kilometers, has no modern, high-speed railways! Similarly, the immense northern watersheds of the Mackenzie and Yukon rivers, which could irrigate a considerable portion of the territory west of the Mississippi and the Great Lakes, one of the world's most prolific breadbaskets, remain unutilized for any productive purpose. Fortunately, several exciting projects exist which could rapidly be implemented for the common benefit of all North America. One project is the North American Water and Power Alliance (NAWAPA), designed in the 1960s, under conditions of greater cultural optimism; another is the Bering Strait Tunnel connection to the Eurasian rail system, proposed to Canada and the United States in the Spring of 2007 by the administration of former Russian President Vladimir Putin.

NAWAPA

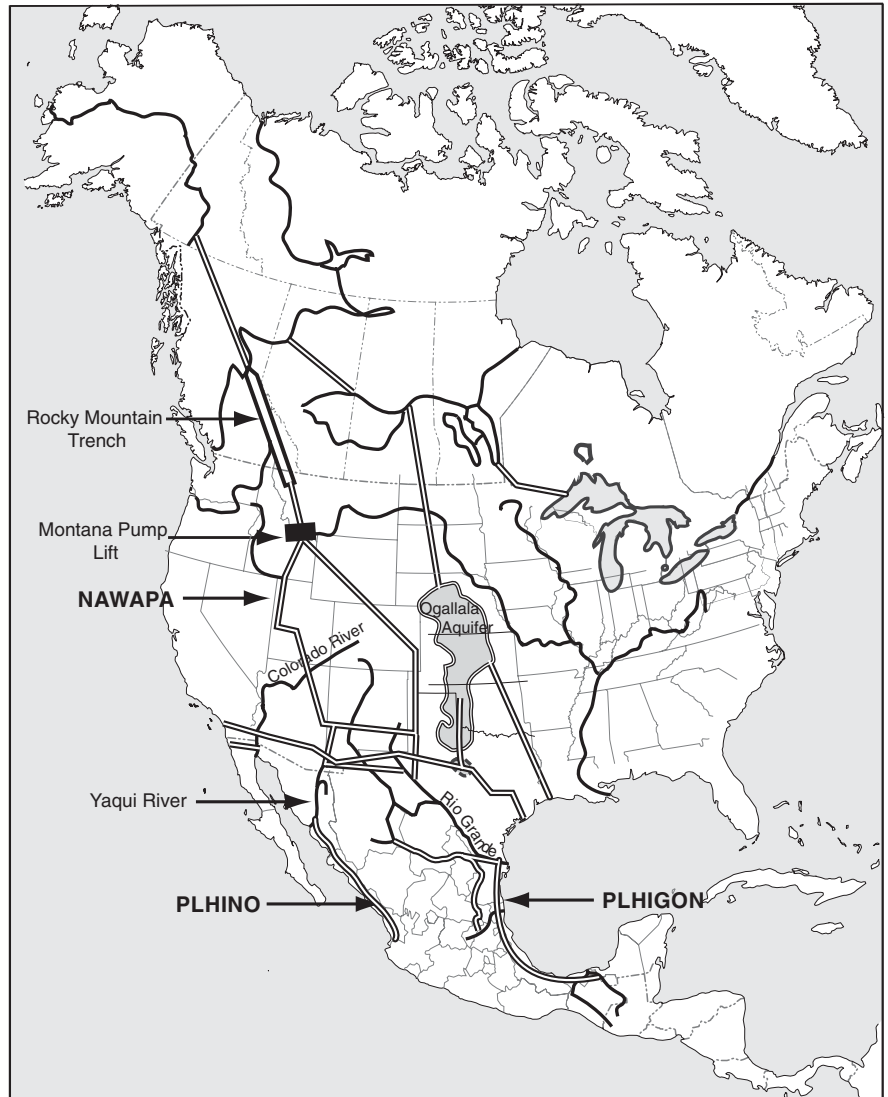
To summarize the NAWAPA project (Figure 4), I quote from a 1988 book published by the Schiller Institute, *Development Is the New Name for Peace*:

"The North American Water and Power Alliance—NAWAPA—is the most comprehensive of a series of plans developed during the 1950s and 1960s to capture and redistribute fresh water in Alaska and Canada. NAWAPA would deliver large quantities of water to water-poor areas of Canada, the lower forty-eight states of the United States of America, and Mexico....

"NAWAPA begins with construction of a series of dams in Alaska and the Canadian Yukon, trapping the water of the various rivers running through this largely undeveloped wilderness area. The drainage area to be tapped is approximately 1.3 million square miles, with a mean annual precipitation of 40 inches.

"A large portion of the water thus collected would then be channeled into a man-modified reservoir 500 miles long, 10

FIGURE 4
North America: 'NAWAPA-Plus'



Sources: Parsons Company, *North American Water and Power Alliance Conceptual Study*, Dec. 7, 1964; Hal Cooper; Manuel Frias Alcaraz; *EIR*.

The North American Water and Power Alliance (NAWAPA), developed during the 1950s and '60s by the U.S. firm Parsons Engineering, would capture fresh water in Alaska and Canada, and deliver large quantities to thirsty areas of North America. "The environmentalists and the accountants might bray in agony at hearing of such a massive project being even considered, but what of it?"

miles wide, and 300 feet deep, constructed out of the southern end of the natural gorge known as the Rocky Mountain Trench in the Canadian province of British Columbia. This would be accomplished through a series of connecting tunnels, canals, lakes, dams, and, because the trench itself exists at an elevation of 3,000 feet, even lifts. The network of projects provides plentiful opportunities for hydroelectric power development.

"To the east, a thirty-foot deep canal would be cut from the Trench to Lake Superior, to maintain a constant water level and clean out pollution in the entire Great Lakes system from

Duluth to Buffalo. Not only would this provide more water for hydroelectric power and agricultural irrigation of the Great Plains region of Canada and the U.S.A., the canal could ultimately be made navigable for lake- and ocean-going vessels from the Great Lakes into the heart of Alberta, and eventually, extended westward into Howe Sound, British Columbia. The dream of a Northwest Passage would at last become a fact, from the Gulf of St. Lawrence to Vancouver. . . .

“For the United States, the benefits of the upgraded NAWAPA proposal are virtually unlimited. The full-scale project now promises 150 million acre-feet of water per year—a 50% increase in the present consumption of 300 million acre-feet yearly. Some 55,000 megawatts per year of surplus electric power would be provided, nearly doubling present U.S. hydroelectric capacity of 70,000 megawatts. Nearly 50 million more acres of irrigable land will become available, almost doubling irrigated acreage west of the Mississippi.

“It doesn’t end there. Stabilization and control of the Great Lakes is one dramatic example of the decrease in pollution levels attainable by such methods of water management. NAWAPA would also help to stabilize water levels throughout the West, providing, among its notable benefits, the opportunity to reverse the depletion of the Ogallala Aquifer, the principal water supply for 11 million acres of prime farmland in Texas, Oklahoma, Kansas, New Mexico, and other High Plains states. NAWAPA would provide the mechanism for reversing the current salinity problem of irrigated lands by flooding selected areas to wash out the accumulated salts, and by maintaining a regime of “wasteful” irrigation to prevent such build-ups in the future. Thus ground water supplies would be recharged. In addition, increased facilities for water transport would also prove cost-saving. . . .

“The benefits for Mexico and Canada would be of a similar spectacular order. Canada would enjoy 58 million acre-feet of water and 38,000 additional megawatts of hydroelectric power, and the same kind of irrigation, transport, and clean water benefits accruing to the United States. In particular, the Northwest Passage route would be a vital aid in realizing the vast, untapped development potential of that largely wilderness nation.

“As for Mexico, a nation whose rapid agricultural and industrial development is essential to advance the living standards of its 60 million citizens and for whom increased food production ranks as a critical national priority, NAWAPA would produce an additional 40 million acre-feet of water a year, at least tripling its irrigable land, and 4,000 additional megawatts of electric power.”

The environmentalists and the accountants might bray in agony at hearing of such a massive project being even considered, but what of it? The so-called “War on Terror” has cost the U.S. government hundreds of billions, while Canada has spent tens of billions in Afghanistan, all for nothing; or consider the trillions of unrecoverable dollars poured into the dying financial system! Even if the project cost several hun-

dred billions of dollars, such a powerful transformation in the biosphere would have far-reaching and revolutionary effects upon the world economy as a whole, which cannot competently be assessed in today’s usual accounting terms (the Parsons Company originally estimated a cost of \$80 billion; the upgraded plan was estimated at \$130 billion in 1979).

The full impact of NAWAPA is only understood in terms of the transformative powers of man over nature that such a project would unleash. Under a reorganized system of publicly generated credit, with competent management, the costs would not even seem a burden, especially when agricultural output and productive activity would so quickly explode! The reference point for such a phenomenon is the Franklin Roosevelt-led recovery of the U.S. economy of the 1930s. It is also important to ask ourselves what the cost to the world will be should we *not* build the project: This is a cost measured in lives lost to needless starvation and economic collapse.

The Bering Strait Tunnel

A Bering Strait rail connection (**Figure 5**), about which *EIR* has often reported (see *EIR*, July 27, 2007, and the proceedings of the Sept. 15-16, 2007 Schiller Institute conference in Kiedrich, Germany, *EIR*, Sept. 21, and 28, Oct. 5, and 12, 2007), has long been the dream of patriots in the Americas and Eurasia. First discussed in the late 1860s by the circles of American System economist Henry C. Carey, today the project has been given a new birth in Russia by those who have been reaching out to like-minded individuals in the United States and Canada. The project itself would comprise an approximately 100 kilometer tunnel beneath the Bering Strait, as well as several thousand kilometers of connector lines to the Trans-Siberian railway on the Russian side, and to the North American rail system on the other. The construction of the Bering Strait Tunnel would complete a vital link in the Eurasian Land-Bridge—the overland transportation corridors envisioned by Lyndon LaRouche and Helga Zepp-LaRouche for opening up a new age in the development of man and the biosphere. Such corridors of development across Asia, Africa, and the Americas offer prospects never before conceivable—the creation of many new cities, the greening of deserts, and the elevation of mankind to our true and lawful dignity.

For Canada a railway renaissance would mean taking up the legacy of Canada’s last great nation-building prime minister, Wilfrid Laurier (1896-1911), who built the nation’s second continental railway and led in the settling of western Canada. Since that time, little visionary development of western Canada has occurred. The prairie provinces are like tiny pockets of civilization, still separated from the East by a vast and sparsely settled region north of Lake Superior, over 1,000 kilometers in length. Canada is held together geographically by two railroads and one highway, none of which are adequate to the task.

It is often lamented that Canada’s dominant trade and relations have never been East-West, but always North-South; one of the obvious reasons for this is the failure of the nation to build the necessary infrastructure to realize a successful do-

mestic commerce. This failure is a longstanding relic of the British Empire's control over Canada's development. As early as the 1840s, the colonies now comprising the eastern portion of the nation were prevented by the British from trading freely amongst themselves. The British knew, of course, that allowing the colonies to integrate and develop alongside the burgeoning United States, represented a mortal threat to British interests in North America; the Empire preferred to force the colonies to trade only with Britain, despite the poverty this created for Canadians.

Should the Bering Strait connection be built, and if Canada chooses to build a modern, continental high-speed rail system, combined with NAWAPA, the economic ramifications would be enormous. It is a basic principle of physical economy that the greatest multiplier effect in an economy is effected by an improvement in basic economic infrastructure. At the same time, apart from the United States, the most important purchasers of Canadian grains are Asian countries, which could be serviced by the Eurasian Land-Bridge rail connection. Similarly, the Northwest of North America is home to vast natural resources, which could be exploited but for a lack of transportation, energy, and industrial infrastructure. Therefore, these two great projects will form the basis for entirely new northwest Canadian and Alaskan economies.

For those doubters and cynics who would argue that it is senseless to build a railway from one underpopulated, underdeveloped region to another underpopulated, underdeveloped region, one only need recall the 19th-Century economic revolution brought about by railroads. Neither the American West, nor the Canadian West could be efficiently settled until the railroads were built. Canada would not exist today if not for the visionary actions of Canada's 19th-Century patriots, men who recognized the long-term benefits of continental railroad development, despite the initial cost. "Cost" is inevitably the excuse of small-minded, change-fearing fools.

Russian Prime Minister Vladimir Putin recently announced an incredibly ambitious transportation infrastructure program, valued at \$565 billion for 2010-15, which will include funds for the Russian portion of the connection. Meanwhile, much is yet to be decided in the United States, and LaRouche's Four Powers agreement must be adopted before these projects can advance. Until then, whether Canada rises to the greatness of the moment, or whether it chooses to remain a little people in a great country, remains to be seen.

FIGURE 5
Proposed Bering Strait/Alaska-Canada Rail Connector to Lower 48 States, Plus Existing Lines



A Bering Strait rail connection would spark a railway renaissance in Canada. "For those doubters and cynics who would argue that it is senseless to build a railway from one underpopulated, underdeveloped region to another underpopulated, underdeveloped region, one only need recall the 19th-Century economic revolution," in the American and Canadian West.