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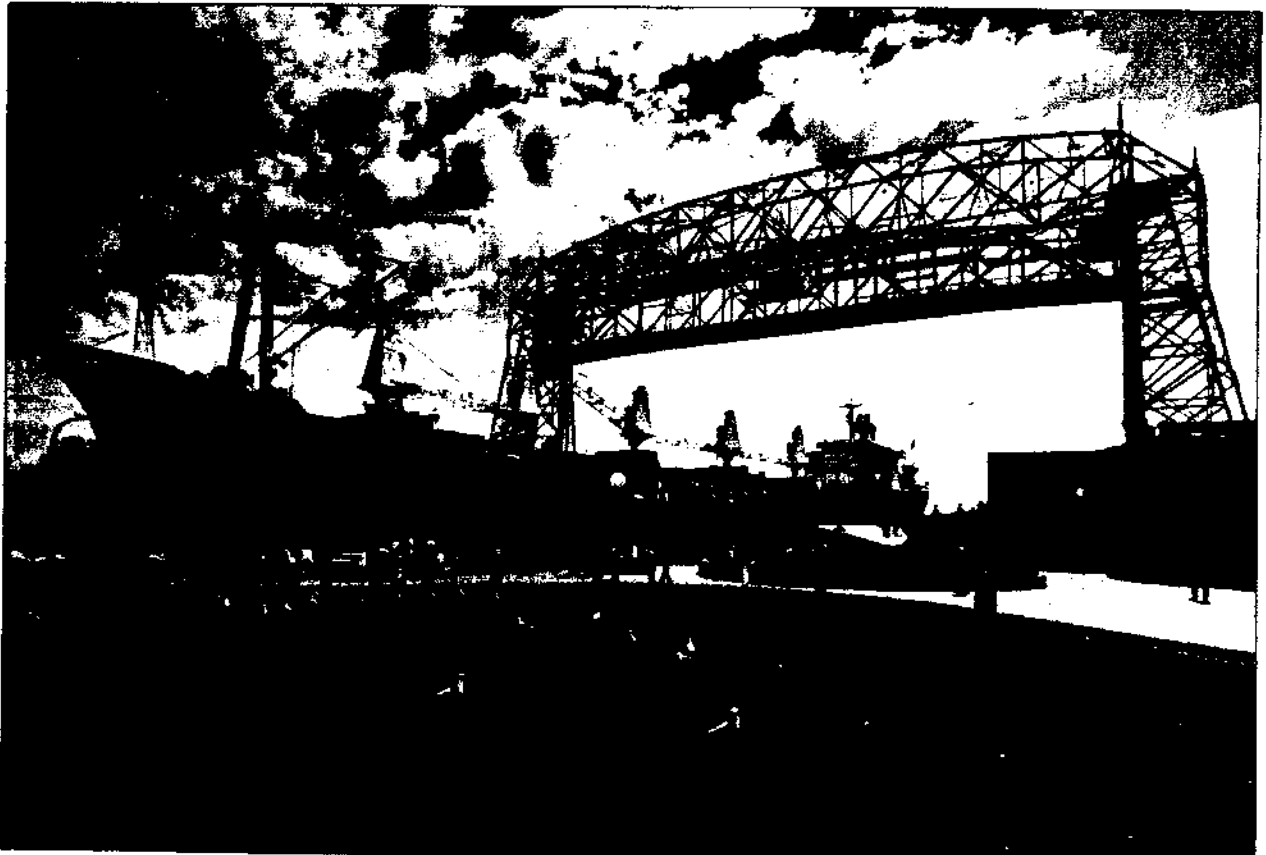
Government Policies and Great Lakes Shipping

Perspectives on U.S. and Canadian Agricultural and Maritime Policies

Proceedings of a Conference Held October 6-7, 1987

Minnesota Sea Grant Extension Program



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Minnesota Sea Grant Extension Program

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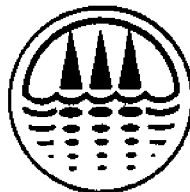

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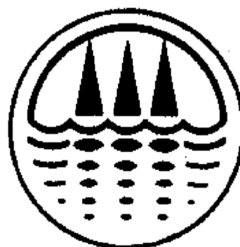

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TABLE OF CONTENTS

	Page
Speakers	
Introduction:	1
B.H. Munson	
Opening Remarks:	1
D. Helberg	
Policies in Conflict:	3
S.M. Hanson	
Maritime Policy Reviews, Panel 1:	4
M.W. Newstrand, W.A. Creelman, R. Murray	
Agricultural Export Policy Reviews, Panel 2:	9
A.G. Wilson, R.H. Sindt, B.E. Prentice	
Critical Policy Issues, Panel 3:	15
D.R. Baker, W. A. Laidlaw, G.D. Hall, P.R. Cook, J.M. Loftus	
Implementing Government Policies, Panel 4:	23
J.E. Fruin, R.H. Sindt, R.N. Stearns	
Impacts of Current Policies, Panel 5:	27
B. Beck, J. Parrington, D. Jeutter, S. Hubner	
Policy Decisions: The Future, Panel 6:	31
B.H. Munson, A.G. Wilson, J.E. Fruin, N. Meyer	
International Policies, Money, and Trade:	37
L. Egerstrom	
Closing Remarks:	39
D. Helberg	
Index	41

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List of Tables, Figures, and Photos

Item		Page	Source
Table	1	13	B.E. Prentice
	2	17	G.D. Hall
	3	18	"
	4	18	"
	5	18	"
	6	18	"
	7	36	N. Meyer
Figure 1		13	B.E. Prentice
Photo Credits		Cover	Minnesota Daily
		iv	Seaway Port Authority of Duluth
		12	Duluth News-Tribune
		16	Seaway Port Authority of Duluth
		24	Duluth News-Tribune
		26	Unknown
		30	Duluth News-Tribune
		40	Basgen Photography

INTRODUCTION

Bruce H. Munson
Minnesota Sea Grant Extension Program

The Great Lakes/St. Lawrence Seaway system does not carry the volumes of agricultural cargo that one might expect. Why? The reasons may be many, but a primary reason has to do with governmental policies in both Canada and the United States. Agricultural and maritime policies define the potential for agricultural cargoes moving through the system.

In October 1987 individuals who represented diverse agricultural and shipping interests met in Duluth to discuss some of the governmental policies affecting Great Lakes shipments of agricultural cargoes. The forum was a conference, **Government Policies and Great Lakes Shipping: Perspectives on U.S. and Canadian Agricultural and Maritime Policies.** It was the fifth in a series of conferences organized by the Minnesota Sea Grant Extension Program.

During the course of this conference Canadian and American policies relevant to Great Lakes shipping were reviewed. The mechanics of implementing these policies were discussed. The impacts of the policies were described by individuals who represented some of organizations most affected. The conference concluded with forecasts on future policy decisions and directions.

Topics that received repeated attention and comment included the impending free trade agreement between the United States and Canada, the U.S. cargo preference requirements on its PL-480 (Food for Peace) cargoes, and the general decline of grain shipments through the Great Lakes/Seaway system. These themes led many speakers to the same conclusion: government policies have to take a proactive stance towards improving the traffic on the Seaway if the system is to survive. Policy changes on both sides of the border are needed to end the current crisis.

The conference consisted of panels of experts who addressed specific topics. Each panel was moderated by a representative of one of the conference sponsors. This proceedings booklet owes its existence to the contributions of the speakers and moderators. The moderators summarized the presentations made during their panels. Their contributions to the conference and to this publication are much appreciated.

OPENING REMARKS

Davis Helberg
Seaway Port Authority of Duluth

We have some provocative things to discuss at this conference. We have no shortage of issues, especially between the U.S and Canada. Sometimes we cooperate, sometimes we compete, sometimes we co-exist.

Yesterday I came across three interesting items. The first was a copy of a letter from Wisconsin Congressman James Sensenbrenner to Al Johnson, former Duluth port staffer and now the port director in Green Bay. In response to Johnson's letter on cargo preference, Mr. Sensenbrenner said the following:

I am aware of the competitive disadvantages placed upon the industrial Midwest as a result of cargo preference. Certainly I agree with the philosophy that business thrives in an open market atmosphere. However, there is some irony if the cargo preference laws have an adverse influence on the Rust Belt, which is heavily unionized, because this is the type of protectionism the labor unions push for. The organized union influence in Congress has deteriorated some, but they, along with their special interest coalitions, still control Congress. I wish something could be done but it is a matter of arithmetic... There are not enough votes.

If the unions control Congress, do they know that? With only 17 percent of the nation's work force now belonging to unions, do they really control Congress? Some might say the Congressman is being utterly candid, and some might say he is copping out. I say I'll go on to the next item.

Here is a story that appeared last month in Traffic World, which is viewed by some as the weekly bible of the North American transportation industry. Paul Martin, president and CEO of Canada Steamship Lines and possibly a future prime minister of Canada, was interviewed about the current status of the St. Lawrence Seaway and its future. Martin said:

> If the Canadian government put the $500 million it puts annually into Via Rail, Canada's state-run passenger rail corporation, into the Seaway, we would carry every ton of grain, coal, and ore that moves down the Seaway for free. Sure the government has the resources. But what the federal government is now doing is allowing the Seaway to die. For $50 million a year you could make the Seaway the most competitive route going, and you could recoup that $50 million ten times over throughout the economy. Give the Seaway the annual interest costs on the money that is currently devoted to Via Rail and you will make the Seaway competitive for the next 25 years.

Finally, here is last Friday's weekend review by the National Sunflower Association. It announces that the U.S. Department of Agriculture (USDA) has established an export enhancement program for 60,000 tons of sunflower oil to Tunisia. Now that's great news, but the announcement has thunder rumbling all through it. The association calls it a major breakthrough because it represents the recognition on the part of our federal government that the Common Market is indeed subsidizing its production and exports. Of equal importance is the signal sent to the European Community that the U.S. will not sit on the sidelines and watch them wreck the oilseed market. Europe continues to dump its expensive oil on the market. This is the beginning of a vegetable oil war. Some U.S. observers are saying, "Good. Let the fight begin."

Strident tones ring through each of these items. There is a lot at stake these days for all of us in the agriculture and maritime industries. At best we have endured a repression, at worst a depression. Either way the appropriate term seems to be crisis. More than 30 percent of the world's merchant fleet has been laid up. Agricultural surpluses still choke the world supply lines while people continue to starve. Countries that were totally reliant on imports of agricultural commodities are now exporting.

The port of Duluth/Superior is suffering. Thunder Bay sees Prairie grain going west. Unemployed Iron Range miners decry ore imports, while unemployed longshoremen in Duluth decry the quotas on steel imports. Meanwhile, the Port Authority of Duluth joined with others not long ago and sued some federal agencies over the allocation and routing of Food for Peace cargoes. We have a longstanding anti-protectionist record at the Port Authority, yet we find ourselves opposing Canada's entry into the maritime trades in order to protect our lakes trade.

The Journal of Commerce had a very provocative editorial a month or so ago. It was entitled "Who Needs the Fleet?" It said:

> Unfortunately, the question of whether a merchant fleet is needed by the U.S. either for military or for commercial reasons has not been explicitly addressed by federal policy makers. Instead the government has simply allowed the merchant fleet to continue its slow decline, implicitly choosing to rest U.S. military supply capabilities upon the Navy's reserve fleet and ignoring the commercial issues altogether. Perhaps this is the correct policy, but before the U.S. flag disappears from the seas we would prefer to see a frank and public discussion on whether and why such a development is in the nation's interest.

All of these things would lead one to ask what's going on here. That's what we hope to explore at this conference.

Scott M. Hanson
University of Minnesota

Conflicting interests involved in the cargo preference issue can generally be divided into three groups: agriculture vs. the maritime industry, conflicts within the maritime industry, and conflicting regional interests.

Agriculture vs. the Maritime Industry

The tension between agriculture and shipping is as old as the U.S. Farmers, who have always resented the federal subsidies given to shipowners and shipbuilders, see cargo preference as the latest in a long line of such subsidies. Cargo preference is especially galling as it directly affects PL-480 shipments, which accounted for over 10 percent of all U.S. agricultural exports by value in 1985.

The shipping industry responds that the costs of cargo preference are borne not by farmers or exporters but by taxpayers, and thus do not affect total exports for the program.

The agriculture industry also argues that cargo preference has been ineffective. Although cargo preference has cost the U.S. Department of Agriculture (USDA) $1.6 billion over 30 years, in 1985 there were only about 20 U.S. flag bulk carriers in service, with an average age of 17 years. Because there are so few, they are hard to locate and book for shipments, and their age makes them inefficient to load.

The interests of the maritime industry, however, are hardly homogenous. Different sectors of the industry derive different benefits and costs as a result of cargo preference and overall maritime policy.

At first glance, U.S. shipping firms seem to be the major beneficiary of cargo preference requirements, since the law requires that they carry 50 percent of government owned or financed cargo. However, they are also subject to requirements on using U.S. labor and restrictions on buying ships built outside the U.S. Because they pay for these restrictions through higher costs, cargo preference is more a subsidy to the U.S. shipbuilding industry than to the maritime industry as a whole.

Conflict within the Maritime Industry

Since some ports have built facilities like bagging plants to take advantage of PL-480 shipments, they have a vital interest in how these shipments are distributed. Cargo preference requirements are a major determinant in how the USDA distributes these cargoes. The ports divide along regional lines (Atlantic, Gulf, Pacific, and Great Lakes) in trying to obtain their "fair share" of government shipments.

Since the fortunes of longshoremen are tied to those of the ports where they work, their interests in the cargo preference issue parallel those of the ports. While their national unions favor cargo preference, the real action takes place among locals trying to ensure that their ports get work from cargo preference shipments.

Regional Tensions

The issue also causes regional tensions. Farm states generally oppose cargo preference while coastal states support it. All four coastal regions claim that they are failing to get their fair share of cargo preference shipments. These regional differences are important in Congress. Coastal states are populous and are therefore powerful in the House of Representatives; agricultural power is more concentrated in the Senate. The Senate Agriculture Committee and the House Merchant Marine Subcommittee are the major players on this issue.

Just as congressional committees tend to voice the positions of the industries they regulate, so do the agencies of the executive branch. Regarding cargo preference, the respective agencies are the USDA on one side, and the Department of Transportation and its Maritime Administration on the other. These agencies have clashed several times, most recently in the drafting of the 1985 Farm Bill and in a 1985 Federal District Court case that required blended credit

programs to be included in cargo preference.

There are several other issues to be considered when analyzing cargo preference laws. One is conflicting subsidies. Any combination of policies that subsidizes both the providers and the consumers is inefficient. Such conflicting subsidies abound in this area. Farmers are subsidized by price supports but face higher shipping costs due to cargo preference. Shippers are subsidized by cargo preference yet face higher costs due to restrictions against using foreign-built ships. The big losers when subsidies conflict are the taxpayers, who find themselves paying for two or more expensive programs.

There is no easy solution, if any solution exists at all. In this instance, PL-480 and cargo preference are both small but integral policies. The agriculture and maritime lobbies wield much influence on government policy. When portions of those policies conflict, the temptation is to "pay off" both interest groups, even at higher costs, rather than to find a politically difficult but more efficient solution.

Cargo Preference and the Great Lakes

The Great Lakes ports, Duluth in particular, feel slighted by cargo preference requirements on PL-480 shipments. The port of Duluth is especially dependent on PL-480 shipments because of the depressed market for taconite, the region's major non-agricultural cargo. PL-480 shipments have accounted for 85 percent of the port's general cargo exports in recent years. In some years, the figure has been over 90 percent.

General cargo is a small portion of the port's total tonnage, but it accounts for a large share of the economic impact. While dry bulk cargoes like grain or taconite require few services and little labor, many Title II PL-480 shipments are packed in 50 pound bags and must be hand loaded. Such a labor-intensive procedure may account for over 50 percent of the hours worked by longshoremen at the port.

The problem all lake ports face in attracting PL-480 cargo in light of cargo preference requirements is the unavailability of U.S. ships for those shipments. There is only one U.S. shipping company offering regular international service from the western Great Lakes. U.S. charter ships find it more lucrative to operate in other coastal regions.

The port of Duluth has often seen cargoes allocated to them by the USDA but diverted to other ports to fulfill cargo preference requirements. They feel that the USDA should consider "lowest landed cost" in allocating these shipments. Since the Great Lakes ports are the closest of the coastal regions to the Great Plains, where most of the PL-480 commodities are produced, they feel they deserve a greater share of the shipments.

The process of allocating PL-480 shipments to ports should also be examined. The written laws and regulations governing the PL-480 program might not indicate how the bureaucrats actually administer the program. If the Great Lakes are to attract more PL-480 cargoes, more must be learned about the allocation of cargoes.

MARITIME POLICY REVIEWS

Panel 1

Moderator: M. William Newstrand
Panelists: William A. Creelman
Roland Murray

M. William Newstrand
Ports and Waterways, Minnesota Department of Transportation

Other transportation modes are more heavily regulated than the maritime industry, but none are affected by as many policies. Even policies not directed at shipping have an impact on it. These include agricultural, rail, trucking, import/export, and production policies. The problems resulting from this mass of policies are exacerbated by the

complexity of government in the Great Lakes area. There are two federal governments, two provincial governments, eight state governments, and all of their agencies. The question is often not what policy, but whose, what level of authority, and what existing edict does it modify or replace?

We are fortunate to have two experts in marine policy on this panel. William A. Creelman has been the Deputy Maritime Administrator for Inland Waterways and the Great Lakes, Maritime Administration, U.S. Department of Transportation, since 1985. He has a wealth of shipping experience from more than 30 years with National Marine Service, Inc. At National Marine he served on small coastal tankers and held increasingly responsible positions in traffic, operations, insurance, and administration before becoming president in 1982. He is a graduate of the U.S. Merchant Marine Academy at King's Point.

Roland Murray was born in Ontario, graduated from the University of Toronto, earned a doctorate in international law in France, and served in the Canadian Foreign Service in Cambodia, the Netherlands, Yugoslavia, and the Soviet Union. He joined Transport Canada in 1974 as Director of Shipping and Marine Services and later became Special Assistant to the President of the St. Lawrence Seaway Authority. In 1979 he was appointed Marine Coordinator with the newly formed Grain Transportation Authority, a special task force in Winnipeg charged with removing bottlenecks from Canada's grain transportation system. Mr. Murray returned to Ottawa in 1984 to take up his present position as Chief of Transport Canada's Ports Policy group.

William A. Creelman
Maritime Administration, U.S. Department of Transportation

The broad community of maritime interests has made its passionate concerns about the U.S.-Canadian free trade negotiations known in Washington. Concurrent resolutions were obtained in the House and Senate urging that maritime services be omitted from the agreement. The House and Senate Rules Committees have also acted to remove "maritime" from the special "fast-track" trade agreement authority. These concerns will surely be discussed more before final votes are taken next year. Since the agreement is still in draft form, it would be premature for me to discuss it now.

I would like to outline major transportation policy initiatives of the Reagan Administration and highlight some of our successes under former Transportation Secretary Elizabeth Dole. This department has focused on updating and modernizing the structure of government programs. Our goal has been the elimination of unnecessary government regulations, privatization wherever feasible, and the removal of artificial international barriers to free and fair trade. The administration's broad maritime policy objectives were announced in 1982. They include regulatory and promotional reform.

In terms of regulatory reform, the Shipping Act of 1916 was updated by the Shipping Act of 1984. Antitrust provisions were clarified, shipping conferences were given intermodal ratemaking authority, and carriers were permitted to rationalize operations. These and other changes have accelerated capital investments in new equipment and technology.

Maritime promotional reform has also been initiated. In the last fiscal year the administration consolidated some 30 existing essential trade routes and trade areas into eight trade routes to more clearly reflect current patterns of vessel operation.

Other steps need to be taken. In July, Secretary Dole outlined the administration's proposed Operating Differential Subsidy (ODS) legislative initiatives. They include creation of a one-year window for presently subsidized and unsubsidized operators to enter into a new ODS program with 10-year contracts; elimination of all trade-route restrictions to enable ODS operators to serve any sectors of U.S. foreign trade they desire; improvement of cash flow to operators by paying ODS semi-monthly instead of at the completion of a voyage; and permission for liner and bulk-cargo ship operators to upgrade their fleets with new, efficient vessels at competitive world prices.

Another important element of our trade policy is the need for our trading partners to

remove artificial barriers to international trade. President Reagan said it best: "The solution lies in opening markets to American goods, not in closing our markets to foreign goods." The maritime mission to the Far East is an example of our efforts in this area. Progress is being made. Our efforts will continue.

One policy change affecting this region is the December 1985 amendment to the cargo preference laws. It increased the required U.S. flag share of government-impelled Food for Peace agricultural shipments from 50 percent to 70 percent in 1987 and to 75 percent in 1988. As part of a compromise, other programs of the Commodity Credit Corporation were removed from cargo preference. The amendment also preserves 1984 levels of PL-480 cargoes for Great Lakes ports. [Editor's note: This is a temporary provision also known as the Great Lakes set-aside or reservation.]

The USDA and the Maritime Administration actively consult in the allocation of cargoes to assure the Great Lakes their required share. Cargoes allocated to Great Lakes ports during the past preference year (April 1986 through March 1987) actually exceeded the 20 percent minimum share specified in the amended law.

The Maritime Administration is also participating in a study of Great Lakes pilotage practices and regulation. The U.S. Coast Guard regulates pilotage services on the international portion of the St. Lawrence Seaway and on the Great Lakes. This is based on a 1977 Memorandum of Arrangements between Canada and the U.S. which mandates joint or identical pilotage rates.

Since the last major study in 1972, vessel transits through the Seaway have declined more than 55 percent from their 1966 peak, and U.S. domestic carriers are operating less than half as many lakers. Costs and rates in Canada and the U.S. have diverged, making it necessary to look at the entire regime. The department's draft report is due in December 1987. There are no preconceptions driving any conclusions in this study.

A concern for safety has also changed Maritime Administration programs. According to a 1986 study for the U.S. Congress' Office of Technology Assessment, the overall incident rate for marine transportation is 0.76 incidents (involving hazardous material spills, injury, or death) per billion ton-miles. The incident rate for rail is 67, and for truck it is 150! Our industry is doing something right!

The Presidential Commission on Merchant Marine and Defense, known as the Bennett Commission, will be addressing the need for a strong, viable U.S. flag merchant marine fleet as a national defense asset. This is an area where the U.S. and Canada have gone separate ways. It could set the stage for a major policy debate. We must avoid further declines in militarily useful sealift capability and in our pool of actively employed, trained seafarers.

In recent years, times have not been good in the worldwide marine industry. The Maritime Administration's Title XI program provides a measure of this distress. Title XI guarantees payment of private sector principal and interest on bonds to finance the construction or reconstruction of U.S. flag vessels. Since fiscal year 1982, we have endured an overall portfolio default rate of 26 percent. The Great Lakes fleet has been unique in having no defaults despite major market shifts. For petroleum drilling and support vessels, in contrast, more than 60 percent of our total dollar guarantees have defaulted, accounting for 42 percent of total default dollars. The collapse of world oil prices have devastated that market.

Inland marine guarantees totaled about $720 million at the 1982-83 peak. Within that group, defaults of $140 million (almost 20 percent) have occurred, mostly because our nation geared-up its agriculture to feed the world, and the rosy projections were never fulfilled. The best authorities predicted that many barges would be needed to move export grain to our seaports, and industry and government responded. As a result, we have had as much as a 30 percent equipment surplus and a major recession on the rivers.

However, on the river systems the cargo numbers for full year 1986 vs. 1985 show an increase of over seven percent at selected locks. The first half of 1987 was even

better. Upper Mississippi farm-product movements showed about a five percent increase for 1986 over 1985, and a 44.5 percent increase in the first half of 1987 compared to the same period in 1986.

These figures, coupled with at least a modest decline in barge capacity, suggest there is a reasonable expectation of market recovery. We are seeing initial signs of this now, but we have some distance to go before reaching the record traffic levels of the early 1980s.

As the inland marine industry, its carriers, and shipyards emerge from their depression, we must try to avoid past excesses. Management should focus on steady, sustainable growth. Dependence on the federal government should be minimized. We do not need another cycle of boom and bust.

Roland Murray
Transport Canada

At the end of World War II, Canada enjoyed the benefits of owning the third largest merchant fleet in the world. That has changed with the changes in the world's economy. Changes created by farsighted economic policies like the Marshall Plan have helped most traditional maritime nations regain their economic fleet. For a number of reasons the Canadian fleet was eventually sold off to foreign operators. Most of the funds derived from the sales were held in escrow because of government liens. These funds were later freed up and used to help modernize Canadian vessels. This allowed our lake fleet to take advantage of the new opportunities offered by the opening of the Seaway in 1959.

Rather than subsidize Canadian flag options, the Canadian government is concerned with the management of foreign flag service to ensure competitive services. This is why Canada has nothing in the way of cargo preference rules, although we have the Shipping Conference Exemption Act. It has recently been amended and is quite compatible with new U.S. legislation and shipping conferences.

Our coasting trade is the heart of Canadian flag operations. In this area there are several differences with the U.S. Jones Act. There are no "built in Canada" construction requirements. Our construction subsidies are available to anyone, and there's no bar to foreign ownership. Our waiver system is open enough to allow the entry of foreign ships into our trade when necessary. Our coasting trade regulations date back to the days of one registry for British Commonwealth ships. Even today, Commonwealth vessels are excluded only on the Great Lakes-St. Lawrence Seaway route, which is reserved for Canadian bottoms. Legislation now before the Parliament will extend the Great Lakes-St. Lawrence Seaway reservation for Canadian ships to the entire coasting trade, including both the East and West Coasts.

Canadian and American lake carriers have a lot in common, but they also have some basic differences. Canadian emphasis has long been on using the entire system, canals as well as lakes, while the U.S. concentrates on the lakes. Also there is a tendency in the U.S. fleet toward vertical integration within the bulk industries, while the Canadian emphasis is on common carriage.

The downturn in Great Lakes-Seaway tonnage has probably affected the common carrier most. This has led to, among other things, the conviction of some Canadian lines that their future viability is tied to the development of "salty-lakers," ships that can go to saltwater operations when they would be idle on the lakes. This sort of thing has created problems for our government. One such problem is the pilotage question, which revolves around granting the standard Great Lakes exemption to ship's officers who return to the lakes from the deep sea. Such waivers would normally be granted if the officers had remained only in the lakes, even if idle for the winter. Another problem is that the carriers feel abused because they must pay Canadian customs duties on repairs that they are forced to make abroad.

If the salty-lakers are obliged to leave the Canadian flag, as they fear, then they cannot participate in the normal lakes trade. This is an important distinction. Foreign flag vessels cannot be chartered to carry grain between

Thunder Bay and the Seaway because that is considered coasting trade. In the foreign trade, the Canadian Wheat Board leaves chartering strictly up to its customers. It is mainly non-Wheat Board trades in grains other than wheat, barley, and oats that such vessels can carry to foreign markets.

This brings us to the big problem of grain, which is king to the Canadian lake carriers. Annual grain volumes shipped through the Seaway have fallen steadily in the last decade to about five million tonnes (million metric tons) for the U.S. and 12 million tonnes for Canada, from highs of 14.5 and 17 million tonnes, respectively.

The period of the late 1970s in western Canada was characterized by a great debate on grain freight rates. The so-called Crow rates for Prairie grain, which dated from the turn of the century, were based only on mileage to either Thunder Bay or Vancouver. They did not reflect true rail costs. Consequently, by the 1980s the railroads were refusing to carry more than a limited number of cars to the West Coast at those rates, although they carried an unlimited number on the lower cost eastward run to Thunder Bay.

In 1983 Parliament passed the Western Grain Transportation Act (WGTA), which contains new rates also based on mileage rather than costs. In addition, the federal government guaranteed the railroads an annual payment of compensation between revenues from the old Crow rates and a fully compensatory regime.

This change in rate structure coincided with the beginning of a major swing away from the traditional east-west grain shipment pattern. Historically, 55 percent of Prairie grain production had gone through Thunder Bay to the eastern tidewater for export. By 1986 this had changed, and the West Coast share had reached 53 percent. It was natural to blame the WGTA rates, but they are as direction-blind as the old Crow rates.

There are, in fact, many facets to the current grain movement crisis being experienced by Thunder Bay and the Seaway. The advent of full compensation for the railroads coincided with a drop in potash and coal movements to the Pacific Rim, which eased capacity problems for railroads going west. It also coincided with the disappointing 1984 grain harvest, followed by the 1985-86 grain export war between the U.S. and the European Community. It is a tribute to the Wheat Board that they kept grain moving in the export market, albeit at heartbreakingly low prices.

Whatever the extent of the Great Lakes crisis, you can be sure that the government is concerned and is closely following it. Bear in mind that the new WGTA has already been amended once, and recommendations for further change are being studied.

The Canadian government has a very serious commitment to Thunder Bay, the Great Lakes, and the St. Lawrence Seaway. We regard it as a vital element in the total Canadian transportation system. Judging from what I've heard today, it is an equally vital part of the continental transportation system. I hope we can soon return to an age when more than 20 million tonnes of grain will move annually through the system, thus ensuring its viability.

Questions, Panel 1

Q: First I'd like to comment that the law provides that the Great Lakes set-aside will be eliminated after 1989. My question is this: what is meant in the new trade agreement by "grandfathering"?

Creelman: "Grandfathering," also referred to as a "standstill agreement" or "a freeze of existing cabotage and other laws affecting the maritime community," means that anything that preceded the free trade agreement will remain in effect. But if a bill were to be amended, the changed parts would be open to revision in both countries.

Q: What about the term "new business" in the trade agreement? If iron ore shipments are down for a few years and then increase, would the increase be new business?

Creelman: The standstill agreement applies to the legislation, not the volume of trade. The amount of business does not matter.

AGRICULTURAL EXPORT POLICY REVIEWS

Panel 2

Moderator: Arthur G. Wilson
Panelists: Robert H. Sindt
Barry E. Prentice

Arthur G. Wilson
Transport Institute, University of Manitoba

Agricultural export policy is a very live issue in a period when export subsidies and restrictions on trade are becoming increasingly adopted by many countries. These impediments to trade exist in spite of stated support for the current (Uruguay) round of negotiations under the General Agreements on Tariffs and Trade (GATT). The U.S. proposal for elimination of these impediments over a ten year period has great merit under the circumstances.

We are fortunate to have two highly qualified individuals to discuss the export policies of their respective countries. Robert Sindt, Assistant Deputy Minister of Commodity Operations, Agricultural and Stabilization Service of the U.S. Department of Agriculture, will discuss U.S. agricultural export policy. His farm background in Nebraska and his legal experience and training enable him to provide insights into current policies and to comment knowledgeably on the recently formulated U.S.-Canadian Free Trade Agreement.

Barry Prentice, who is with the Transport Institute at the University of Manitoba, will comment on the instruments and institutions of Canadian agricultural export policy. His early years on the farm were followed by training in business administration and agricultural economics. He has had extensive experience in Central America. His review of Canadian agricultural policy provides valuable background to the debate on the U.S.-Canadian Free Trade Agreement.

Robert H. Sindt
Agricultural Stabilization and Conservation Service, U.S. Department of Agriculture

The current U.S. administration vigorously pursues an agricultural policy that promotes free trade. The benefits of this approach are numerous: more jobs, more income, more production, and a higher standard of living for all nations. Trade barriers, on the other hand, undermine national interests and erode the potential to produce. The U.S. has proposed under the current GATT trade negotiations that all subsidies and restrictions affecting trade in agricultural products be phased out over the next ten years. Health and sanitary regulations imposed merely to restrict trade should be illegal. While we are promoting trade with all countries, bilateral negotiations such as those with Canada continue.

The U.S.-Canadian Free Trade Agreement

This new agreement offers crop, livestock, and horticultural producers on both sides of the border the opportunity to market their products with less interference from trade barriers. The volume of trade will increase. The general objective is to remove all tariffs and subsidies affecting agriculture over a ten year period. Effort is to be directed toward harmonizing technical rules and regulations protecting human, animal, and plant health, so that any distortion of agricultural trade arising therefrom is minimized. A mechanism will be put in place to resolve agricultural trade disputes.

Canada and the U.S. have agreed to take each other's interests into account in any export subsidy on agricultural goods exported to a third country. Canada has agreed to eliminate a transportation subsidy on the movement of grain and grain products shipped to the Pacific Northwest; to eliminate import licenses for wheat, barley, and oats and their products as soon as support levels for these products become equivalent in both countries; and to increase global import quotas for poultry, eggs, and their products to the average annual level of shipments over the past five years. Each country has agreed to exempt the other from restrictions on meat import levels, and to refrain from using direct export subsidies on shipments of agricultural

products to each other. Each country retains its rights under GATT with respect to matters not covered under the agreement.

U.S. Programs for Agricultural Exports

Exports of agricultural products are very important to the U.S. In 1986, agricultural exports were valued at $26.3 billion, with each $1 billion in exports creating 30,000 jobs. Exports in fiscal 1988 are projected to rise in both value and volume, with the U.S. retaining its share of world trade and commodity prices increasing.

The U.S. Department of Agriculture (USDA) administers several programs designed to promote agricultural exports. Such programs currently provide about $8 billion in government assistance annually. The principal programs are described below.

(1) Commercial Export Credit. This program (GSM-102) guarantees repayment of short term loans to countries purchasing U.S. farm products. The intermediate credit guarantee program (GSM-103) guarantees loans that last from three to 10 years in duration. About $4.2 billion in guarantees have been provided for fiscal 1987.

(2) Export Enhancement Program. Instituted under the Food Security Act of 1985, this program is designed to counter adverse effects on U.S. agriculture from unfair trade practices of competing countries. Government export bonuses are provided to make U.S. commodities more competitive in world markets. Sales under the program in 1987 totaled $2.4 billion through September. This represents about six percent of the total value of agricultural exports.

(3) Targeted Export Assistance Program. Under this program, eligible participants are reimbursed for a portion of foreign promotional expenses incurred while attempting to counter unfair trade practices. For this purpose, $110 million has been set aside for each fiscal year through 1988.

(4) Public Law 480. Title I of this law provides for long term, low interest, concessional sales to eligible countries. Sales for fiscal 1987 through September were valued at nearly $800 million.

Title II of this law authorizes donations of food to meet urgent humanitarian and emergency needs in recipient countries. A minimum of 1.9 million metric tons (mmt) must be donated each year. Current projections are for 2.2 mmt to be provided for fiscal 1987.

(5) Surplus Disposal. Under the 1985 Farm Bill, eligible commodities held in surplus by the Commodity Credit Corporation may be donated to needy countries. Under this program, shipments of 1.5 mmt of grain and oilseeds and 110,000 tons of diary products have been authorized for fiscal 1987.

Cargo Preference

The amendments made by the Food Security Act of 1985 to the Merchant Marine Act of 1936 affect cargo preference as it relates to USDA programs. Certain export programs are rendered preference-exempt. For the concessional export and food donation programs, on the other hand, a greater proportion of the tonnage is subject to cargo preference.

The proportion of Title I tonnage that is subject to cargo preference is gradually increasing to a maximum of 75 percent by April 1988. The buying country chooses the ocean carrier based on lowest landed cost. This determines the port of export. The USDA is therefore not directly involved in making the arrangements. Most Title I shipments consist of grain handled through private elevators. Such shipments are usually on vessels too large for the St. Lawrence Seaway. Ports like Duluth are therefore not able to receive benefit from cargo preference on this movement, which amounts to about 4.5 million tons annually as compared to the 1.9 million tons exported under Title II.

The proportion of Title II tonnage subject to cargo preference is increasing to a maximum of 75 percent by April 1988. The 1985 amendments attempt to temporarily maintain historic levels of Title II shipments from Great Lakes ports. Achievement of such a proportion is difficult due to the limited availability of U.S. flag service at these ports. The intent of the Commodity Credit Corporation is to maintain fairness and equity to all those engaged in the Title II movement.

The Great Lakes tonnage reservation should be met in 1987. The volume allocated to the port of Duluth has been limited by the number of ocean carriers willing to service the port.

The USDA holds the view that the allocation of shipments has been implemented in the most reasonable, efficient, and practical manner possible, given the competing and at times contradictory nature of the requirements.

Barry E. Prentice
Transport Institute, University of Manitoba

Canadian Export Instruments and Institutions

Agricultural exports make an important contribution to the prosperity and growth of the Canadian economy. On average these exports account for eight to 10 percent of Canada's total export earnings and contribute about half of all gross farm receipts. This is a review of Canadian policy instruments and institutions that assist in the export of grain and oilseeds.

Canada's agricultural export policy reflects a pluralism of interests. As with most countries, the formation of Canadian agricultural export policy is subservient to domestic agricultural interests. In particular, policies that support farm prices or income stabilization tend to be more dominant than programs that focus strictly on the promotion of exports.

As an important source of exchange earnings, agricultural exports are an integral part of the nation's external trade policy. The Department of External Affairs contributes between 14 and 20 percent of the money that is expended annually on the agri-food sector. These funds are used to support research for market development, export finance, food aid, and an income stabilization program for grain producers.

Western Canada accounts for most of the exportable production of grains and oilseeds. Consequently, the export of agricultural products is closely tied to Canada's western economic development policy.

Although export trade is under federal jurisdiction, the constitutional responsibility for agriculture is shared between provincial and federal governments. Many provincial programs have a bearing on agricultural exports. For example, all provincial governments fund agricultural research. In some provinces, subsidies assist production and help support income stabilization programs. Indirectly, such expenditures have a positive influence on agricultural exports.

The transportation system plays an integral part in Canadian agricultural export policy. Much of the Prairie railway branch line network and several Canadian ports are used almost exclusively for the export of agricultural products. These export shipments receive substantial direct and indirect subsidies through Transport Canada. In 1985-86, direct transportation subsidies accounted for over 26 percent of total federal agri-food expenditures.

Most recently agricultural export policy has attracted the attention of the Treasury as the demands of international competition have increased its financial requirements. During the past year the Treasury provided a $1 billion special grant to grain producers, covered a $200 million loss sustained by the Canadian Wheat Board, and gave the railways an additional $60 million to hold freight rates at 1984 levels. Over and above these expenditures, the Treasury has billions of dollars outstanding in contingent loan liabilities from previously financed agricultural export sales.

On the average, grains and oilseeds account for 60 percent of the total value of all Canadian agricultural exports. As a result, grain and oilseed exports benefit from Canada's most prominent and highly developed marketing strategy. This marketing strategy has been shaped by the competitive position of the industry relative to its international rivals.

With the bulk of exportable production originating in the middle of the continent, Canadian grain and oilseed exports must travel farther to reach tidewater than their competitors' products do. Moreover, a significant part of the transportation network is closed during the winter season. Both the

short shipping season and the long distance increase the average costs of transporting these products. This works against Canadian producers.

While the location of the Canadian Prairies is a disadvantage from a shipping perspective, it is not without its redeeming virtues. The northern location favors production of high protein grain crops and improves the quality and oil content of oilseed crops. This has given Canada an opportunity to specialize in and dominate the higher quality segment of the international market.

The incomes of Canadian grain producers are more exposed to fluctuations in world price than are the incomes of their competitors because less than 20 percent of Canadian wheat, canola, or flax is consumed in Canada. In addition, the limited size of the domestic market restricts government's latitude for financing export incentive measures. The Europeans can rely on variable import levies and contributions to the Common Agricultural Policy to subsidize their exporters. The U.S. can call on the Treasury to defend its market share. Canada, on the other hand, has had to adopt a leaner and more flexible marketing strategy.

A summary of Canadian export policy instruments and associated institutions for the export of grains and oilseeds is presented in Table 1. The first three policy instruments might be classified as "speaking softly" in term of export market development. The Canadian government has been active internationally in the GATT talks and the Cairns group, trying to establish a more reasoned and orderly market for the world grain trade. This is also pursued bilaterally through long term purchase agreements and the recent U.S.-Canadian Free Trade Agreement. Internally, the government attempts to expand agricultural exports by providing information and applying moral suasion.

The next two policy instruments in Table 1 could be termed "big stick" approaches to export market development. In situations of market failure, or when it has been necessary to provide public resources for the export of agricultural products (e.g., transportation infrastructure), the government has established quasi-governmental authorities, marketing boards, and regulatory agencies. The principal agencies that govern and

control the export of wheat, oats, and barley are the Canadian Wheat Board (CWB), the Canadian Grains Commission (CGC), and the Western Grain Transportation Agency (WGTA). The CWB operates as a statutory monopoly for the export of wheat, oats, and barley, and uses delivery quotas to regulate flow. The CGC sets maximum tariffs for grain handling and issues the official grade certificates for exports. The WGTA coordinates and regulates the grain transportation system.

The last three policy instruments in Table 1 represent the "deep pocket" approach to export market development. In addition to funding basic agricultural research, the government of Canada supports the Canadian International Grains Institute and the Protein, Oil, and Starch (POS) Pilot Plant Project. These agencies test the quality of Canadian products for export market applications and hold educational seminars for incoming buyers. Long term market development is promoted through food aid, which is distributed by the Canadian International Development Agency. This institution has been particularly successful in expanding the use of edible rapeseed (canola) oil.

Subsidies and other ad hoc expenditures that assist the export of grains and oilseeds are distributed through a variety of institutions. In general these programs operate indirectly to increase the level and

Table 1. Canadian export policy instruments and institutions: grains and oilseeds.

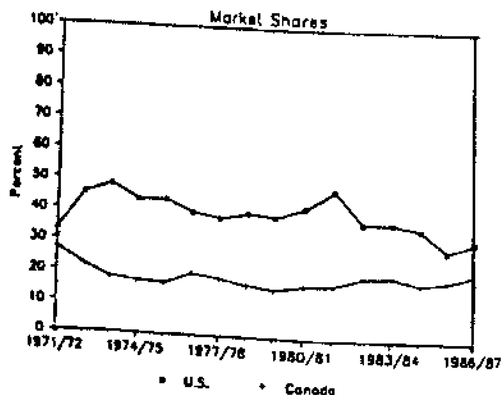
Policy Instruments	Institutions
Diplomatic Initiatives	GATT Talks, Cairns Group, Bilateral Long Term Purchase Agreements, International Wheat Council
Provision of Information	Canada Grains Council, Trade Commissioners, Agriculture Canada
Moral Suasion	CP Rail, Private Grain Handlers, Winnipeg Commodity Exchange
Marketing Boards and Crown Corporations	Canadian Wheat Board, CN Rail, St. Lawrence Seaway Authority, Export Development Corporation, Ports Canada, Canadian Grains Commission
Laws and Regulations	Canadian Wheat Board, Canadian Grains Commission, Grain Transportation Agency
Research and Market Development	Agriculture Canada, Universities, Canadian International Grains Institute, POS Pilot Plant Project, Canadian International Development Agency
Taxes and Subsidies	Canadian Wheat Board (Initial Payment, Two-Price Wheat, Advance Payments, Export Finance), Western Grain Stabilization Act, Crop Insurance, Western Grain Transportation Act
Ad Hoc Programs	Hopper Car Purchases, Prairie Branch Line Rehabilitation, Special Grain Price Compensation, 1986-87 Freight Rate Subsidy

stability of producer incomes. Producer incomes are stabilized with crop insurance programs and the Western Grain Stabilization Act. Producer income levels are increased through the credit grain sales programs and the Western Grain Transportation Act (which subsidizes the freight on grain leaving the Prairies for export markets). Ad hoc programs are generally short term in nature but may be substantial in size. Examples include the rail hopper car purchases and the special 1986-87 grain price compensation, which is expected to be paid again in 1987-88.

The focus of this discussion has been how the export marketing system fits together. While it is difficult to assess the performance of long run policy thrusts, there is evidence that it has been more successful during periods of low prices than during periods of high prices. Figure 1 presents a graph of U.S. and Canadian export market shares for wheat and wheat flour since 1971-72. Canada was not able to expand its market share during the rapid growth of the 1970s, but it has maintained its share recently, despite the cut-throat competition of its larger rivals.

The performance of Canadian market shares can probably be explained by two things: the rigorous quality standards imposed on grain and oilseed exports and the practice of signing long term purchase agreements. During periods of rising demand, Canadian

Figure 1. U.S. and Canadian market shares of world wheat and wheat flour trade since 1971-72.



producers cannot increase quantities rapidly because of quality restrictions. In period of low prices, however, importers are swayed by the "Cadillac" quality of Canadian products and are more than willing to honor their purchase commitments.

Agricultural export policy has evolved from a pluralism of interests. At the federal level, the ministries responsible for external affairs, transportation, and agriculture each help fund agricultural export policy. In addition, regional and provincial programs assist in the export of agricultural products. Canadian agriculture export policy is a rich mix of instruments and institutions that provides a comprehensive approach to the expansion of export sales. While it is not without its rigidities and contradictions, Canadian agricultural export policy appears to offer vigorous competition for its international rivals.

Questions, Panel 2

Q: You mentioned that U.S. grain sales are up. In Superior, however, 1987 grain shipments are down 19 percent compared to 1986.

Sindt: Where grain comes from varies each year, depending on what types of product are moving.

Comment from audience: U.S. Seaway grain tonnage is up 25 percent, but movement has been primarily in corn and soybeans, which are handled from other ports. The increases have not necessarily been in wheat, which we might handle here. U.S. grain volumes on the Seaway have been strong, but not in what we handle.

Q: Subsidies and import restrictions can be counter-productive and promote inefficiency. Can you describe some programs that reward efficiency?

Prentice: In Canadian grain transportation and handling, we have a new program that allows variable rates. This has encouraged shipping grain in longer unit trains, which is a change for us. Also, I'd say that anyone who is producing better grain is rewarded for efficiency.

Panel 3

Moderator: Dale R. Baker
Panelists: W. Angus Laidlaw
Gordon D. Hall
P.R. (Jerry) Cook
John M. Loftus

Dale R. Baker
Minnesota Sea Grant Extension Program

This panel will take a look at critical U.S. and Canadian government maritime and agricultural policies, and the impact they have on Great Lakes shipping. A vast amount of legislation in both countries influences agricultural and maritime policies. These policies are not always aimed at achieving the same goals. In some cases they may be at odds with each other.

We have heard reviews of the governmental and bureaucratic perspectives on maritime policies. This panel will look at critical agricultural and maritime policies, and their impact on shipping.

W. Angus Laidlaw
Dominion Marine Association

The Dominion Marine Association (DMA) has represented the Canadian-flag merchant fleet since 1903. At present there are 130 vessels in the register, with most operating on the Great Lakes and St. Lawrence Seaway, the East Coast, and in the Arctic. Last year our fleets carried 72 million tonnes of liquid and dry bulk cargo, falling short of their capacity. In 1980, by contrast, DMA vessels comfortably hauled in excess of 90 million tonnes, albeit with more capacity than at present. Carriers on both sides of the lakes have experienced considerable idle capacity each year since 1982.

While grain, coal, and iron ore compete yearly for first place on a volume basis, grain is consistently the most important. Grain shipments hovered around 20 million tonnes from 1981 to 1983, but have declined since. In 1986, 14 million tonnes of grain were shipped. Most of it was Canadian western grain that was railed to Thunder Bay and exported through transfer facilities in the lower St. Lawrence. This long haul grain is the most important source of income for Canadian ship operators.

In addition to Canadian grain, DMA carriers serve the American grain export program. Canadian grain carriers hauled over eight million tonnes of U.S. grain in 1980, a signal year, compared to about one million tonnes in 1986.

Grain's prominence in our marine community extends beyond the cargo hold. It made up a third of Seaway toll traffic last year. Grain determines the viability of the Seaway system, which is the link between maritime and agricultural policies.

Canadian grain support programs deal with transportation and stabilization. In addition, there are programs in export assistance and farm credit. These compare with U.S. programs involving price and income support through commodity programs and export expansion. It is often said that nations use trade policies to carry out domestic policies, rather than devise trade policies in accordance with trade objectives per se. Export credit programs directed toward the disposal of surplus stocks are a case in point.

The DMA is primarily concerned with programs and policies that relate to transportation support in Canada. These include the Western Grain Transportation Act, the Hopper Car Acquisition Program, the Branch Line Rehabilitation Act, and the Atlantic and Eastern Freight Rates, which are commonly known as the At and East rates. They enhance the efficient rail transport of grain, primarily western grain, for the benefit of the producer.

The marine industry in Canada has been subject to little economic regulation and no operating subsidy. The regulation was in the form of the Inland Waters Freight Rate Act. It was enacted decades ago to empower the

> The long term viability of the Seaway system depends on grain movement. Until last year, more Canadian grain went east through the waterway than through West Coast ports.
>
> W. Angus Laidlaw

government to put a ceiling on lake shipping rates for grain in the event they became punishing to the producer. Such action was never required because of the competitive nature of the industry. The act was repealed last year in the transportation deregulation initiative.

When policies have a negative impact on the Great Lakes and Seaway, the Canadian lake operators attempt to direct government's attention toward the problems.

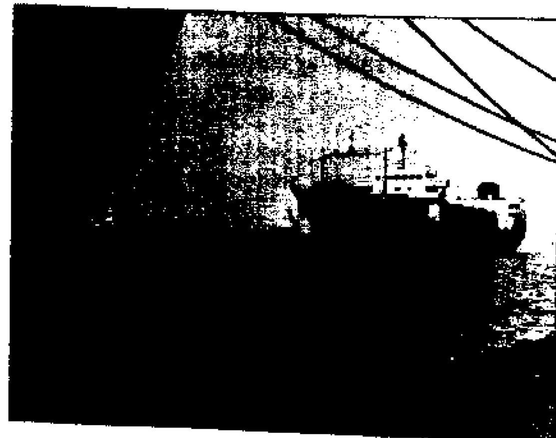
The long term viability of the Seaway system depends on grain movement. Until last year, more Canadian grain went east through the waterway than through West Coast ports. The decline in eastern movement was partly attributable to better sales by the Wheat Board in the Pacific Rim markets than in markets serviced by the Seaway. But the situation is not helped by an uncertain mixture of perception and reality: that the system is a high cost transportation alternative or that it has become a residual artery, as if it were one step away from mothballs. Changing the perception is as important as changing the reality.

Agricultural Policies

Under the Western Grain Transportation Act, which is now being reviewed, the federal government and the producer share the cost of transporting grain from Thunder Bay to the West Coast. Over time the producer will pay a steadily increasing portion of the total cost, with the maximum government share set at roughly $720 million. When moving west, grain is subsidized for the entire route, while less than half of the eastbound movement is subsidized.

In a study commissioned recently by the DMA and the Ontario government, it was shown that ignoring the government share of the subsidy makes it appear less costly to ship grain west from Winnipeg to Vancouver. When the government share is included, however, the Thunder Bay/Seaway route is about 10 percent less expensive. Another distortion caused by this subsidy is that the statutory tariff fails to reflect the higher cost to the railways of moving the grain west through the mountains.

The At and East rates, originally called the Atlantic and East of Buffalo Freight Rates, are a subsidy designed to encourage movement of grain by rail from Great Lakes ports to St. Lawrence and Atlantic Coast ports, and thus discourage diversion to U.S. railways operating east from Buffalo to the Atlantic Seaboard. The At and East subsidy covers the difference between current and 1960 rail rates. While it is not large as subsidy programs go, it is significant enough at around $32 million a year to do two things. First, it causes a distortion, because grain would otherwise have moved aboard lakers at lower cost. Second, its beneficiaries have been alarmed at the prospect of its withdrawal. The grain component of the Seaway system is vulnerable to such distortions from agricultural programs. In fairness, I should add that the entire Great Lakes/St. Lawrence system, not the Seaway entities alone, must respond to the vicissitudes of economic reality. It has to be proactive in making itself competitive, reliable, and attractive as a transportation artery.



The study I cited earlier contains a wealth of information on the myriad cost components of the system in a form not previously available. It shows a complexity within the grain movement alone that hasn't been appreciated. At the same time it dispels preconceptions and widely held notions that led many of us to believe that the system could return to its glory days by way of quick fixes, such as an unnecessary labor practice dispensed with here or an imposed cost removed there. There is, instead, a menu of legislative, regulatory, and operational changes. These would contribute to a savings in the grain delivery system that would benefit the Seaway, and would therefore benefit other commodities.

Each change would be met with some resistance. We're under no illusions that all or even any of the changes discussed have a prospect for short term installation. Nevertheless, pressure is building on policy-makers and administrators. Industry has pointed out the folly of the self-sufficiency regime, under which Canadian crown corporations such as the Seaway Authority must operate. That policy obliges the Authority to increase the tariff in the face of declining traffic in order to stay out of the public coffers for operating support. Recent legislation in the U.S., which has the effect of rebating the American portion of the toll to shippers, has resulted in a creative tension that adds a sense of urgency to the notions of cost containment and marketing.

Canada is embarking on a major deregulatory initiative in transportation. We believe that the legislative effort directed toward the railroads will have no tangible negative effect on our marine industry and the Seaway. We are about to engage our two countries in a free trade arrangement. We don't yet know the details. Let's hope that the resulting changes are positive, but let's be vigilant.

Gordon D. Hall
Lake Carriers' Association

Evolution of the LCA Fleet

Over the last 46 years of shipping, the number of Lake Carriers' Association (LCA) member vessels has dwindled by nearly 80 percent. Carrying capacity, however, has decreased only 33 percent. Capacities of the largest vessel have more than quadrupled, with vessel length increased by 40 percent (Table 2). Coupled with the move away from "straight deckers" which required shoreside unloading equipment to "self-unloaders," this has made the present LCA fleet among the most efficient in the world. Self-unloaders comprise 87 percent of LCA's member vessels today. There are only two "straight deckers" operating in the grain trade.

The 1970s brought a surge of shipbuilding on the Great Lakes (Table 3), but none have been built on the U.S. side since 1981 and none are planned.

Table 2. Evolution of Lake Carriers' Association fleet from 1941 to the present.

Year	No. Of Member Vessels	Average Age	Largest Capacity (GT)	Longest (FT)	Percentage Self-unloaders	Fleet Carrying Capacity (GT)
1941	340	32	14,000	623	10	2,994,166
1951	302	39	18,000	661	13	2,938,400
1959	313	42	25,500	711	17	3,533,000
1970	196	44	27,000	712	26	2,648,300
1980	130	36	61,000	1,000	47	2,676,310
4/87	70	32	62,200	1,013.5	87	1,920,480

Table 3. Number of U.S. vessels built on the Great Lakes.

Decade Ending	Number Built
1941	9
1951	17
1959	27
1970	0
1980	27
1986	16

A review of the cargos carried by U.S. and Canadian fleets shows ore in a rather steady decline: a 41 percent decline for 1987 through August as compared to 10 years ago (Table 4). Coal is holding steady as a percent of total tonnage hauled. Grain and storage have about doubled since 1941 (Table 5).

Table 4. Comparative freight tonnage for the year through August.

	1977 Net Tons	1987 Net Tons	Decline (Percent)
Iron Ore	53,845,664	31,568,220	41
Coal	22,594,183	21,363,815	5

Table 5. Percent of total tonnage hauled represented by each category.

	Iron Ore	Coal	Grain	Stone
1941	53	30	7	10
1951	52	27	7	14
1959	40	33	9	18
1970	46	24	11	18
1980	47	24	18	16
1986	38	27	15	20

Free Trade Agreement

Little is known about the content of the recently concluded U.S.-Canadian free trade agreement, but the LCA is pleased that the Jones Act provisions were grandfathered. This preserves the prohibition against U.S. vessels carrying cargoes from one Canadian port to another, and Canadian vessels trading from one U.S. port to another. We fear that doing otherwise would lead to the worldwide demise of the U.S. merchant marine. Due in part to past federal subsidies and lower wages, Canadian fleets are able to operate with lower costs. We believe they could have dominated shipping without the retention of Jones Act provisions.

Water Levels and Dredging

In 1987 we had substantial relief from the high water conditions of 1986. This is attributed to a lack of winter snow, below average precipitation, and above normal temperatures that caused increased evaporation. The legislative solutions considered could not have been as effective in such a limited time. Lake Superior levels are down 10 inches from a year ago. Water levels below the Soo Locks are down 29 inches. Water levels near Detroit are down 19 inches (Table 6).

Table 6. Water levels, 1987 vs. 1986.

Location	Decline (Inches)
Detroit area	19
Below Soo Locks	29
Above Soo Locks	10

With water levels falling, channel dredging takes on added importance. For every inch of shoaling in channels, our largest boats forego the carriage of roughly 240 tons of cargo. Disposal of dredged material, especially polluted material, is an expensive problem. It is imperative that reasonable disposal methods be approved in order to maintain shipping. Efforts must also be expended upstream to curtail the erosion that brings sediments into our harbors and channels.

Construction of a Replacement Lock at the Soo

Replacement of two old and largely unusable locks at the Soo with another Poe-sized lock has been authorized by Congress. Two-thirds of the U.S. fleet is restricted to the use of the Poe Lock because of vessel size. Should some accident close that lock for any substantial period of time, shipping would be greatly affected. Currently however, construction would require local sponsorship of roughly $10 million. This would normally come from the local entity or entities that stand to benefit from the project. In the case of the Soo project, however, there are no local beneficiaries. It is an international transit point with cargoes destined for every U.S. and Canadian port on the Great Lakes, as well as for overseas ports around the world. It follows that construction of this very important link for maritime commerce should receive federal funding.

P.R. (Jerry) Cook
Consultant to Thunder Bay Harbour Commission

Our Seaway is in crisis. As with all of the world's major waterways, its health and viability depend upon maintaining a sufficient volume of product flow to justify its continuing existence. Yesterday we had American and Canadian grain out and iron ore in to provide that basic need. Today we have Canadian grain only, and even that is being threatened.

Nothing in my remarks is intended to negate or downgrade the position of the port of Duluth/Superior. Quite the opposite. Their significant contribution to volume within the Upper Great Lakes alone supports the fundamental value to your nation of having the Seaway. It justifies the twining of the locks at Sault Ste. Marie. The Canadian and U.S. ports of Lake Superior have historically been the backbone of the system.

In 1986 the port of Thunder Bay provided 35 percent of the Seaway's through-traffic, which is the tonnage that transited the 15 locks of the Welland Canal and the Montreal/Lake Ontario section to or from the Atlantic. Thunder Bay and Duluth/Superior, together, contributed over 42 percent of the total traffic within the Seaway. In other words, with 40 ports in the system, the port areas of Lake Superior account for more than 40 percent of Seaway traffic. The percentages I quote are about the same every year, but the volumes are falling. In 1986 the total movement from Duluth/Superior and Thunder Bay was 43 million tonnes. In 1983 that figure was 54 million tonnes. Nevertheless, we can paraphrase the General Motors adage: what is good for the Lake Superior ports is good for the Seaway. Indeed, it is necessary for the survival of the Seaway.

We are told of the need for governments to control costs, and of current and future plans for cost recovery. We know about changing world demand, of trade deficits, protectionism, and Third World debt. We who depend for our livelihood on the Seaway are constantly being told that these problems are effectively making the Seaway no longer cost effective, that other less costly routes must be used. In Canada, we have senior representatives of government agencies publicly stating that the Seaway is too expensive in today's business climate. One recently said that the port of Thunder Bay would be regarded, in the future, as a residual port for grain. The fact is that some grain is actually being shipped to Europe from Canada's West Coast.

The conundrum in all of this, and the frustration, is that these other routes are still within North America. They face the same market place conditions and the same international problems as the Seaway. They are controlled and governed by the same governments.

The Seaway is suffering because of problems of the partnership. The solutions are political. They are not within the ability of our senior bureaucrats to control. They may be criticized for the absence of advice, but we must recognize that they are expected to be neutral. They feel that they must not indicate a bias.

All of us, at times, have expressed great pride in the uniqueness of the Seaway. It is

We all must either adapt to the new realities created by communication, deregulation, and technology, or else we will fail. The old ways of doing business will no longer work.

P.R. (Jerry) Cook

the world's only international waterway operated jointly by two countries and it serves the world's largest concentration of industry. Unfortunately, the Seaway is not a high priority at this time with either of our governments. As with all partners, when interest wanes the intent is lost, and the business suffers.

No element of the Seaway -- its operating entities, ports, stevedores, or shipping companies -- is excluded from having to adjust to meet the challenges of the times. We all must either adapt to the new realities created by communication, deregulation, and technology, or else we will fail. The old ways of doing business will no longer work. Most of us are changing. The port of Thunder Bay is much different than it was five years ago. But the Seaway in its many facets -- the entities, the pilots, and the legislation affecting it, with the exception of the recent U.S. move to eliminate tolls on the U.S. locks -- is doing very little.

If I had to find the phrase that best described the malaise in which we find ourselves it would be "lack of attitude." Our Seaway traverses the "have" part of our continent. With so many problems in the other parts of our countries it is easy for our governments to ignore the area where the economy is strong. Collectively, we must find the ways and means to change the attitude of our governments from passive to positive. We must return to the days of high hope and enthusiasm. In order to accomplish this our politicians must be inspired to make the changes that will allow the Seaway to compete on an equal basis with our other coasts.

I can become excited by recognizing the increased activity and the greater volumes that would result if there were no tolls, a longer season, firm opening and closing dates, and a more rational application of pilotage.

The responsibility for marketing the system belongs to the ports. They are world class, and ready for any challenge. They have an enviable reputation in North America as pace setters in labor management relations. Demurage on vessels and rolling stock is almost unknown, and the Seaway leads North America with the smallest incidence of damage claims. All we need is a level playing field.

In Canada, the signals of downturn are evident in unemployment and idle plants in shoreside industries. The province of Ontario is becoming concerned with the possible impact on the livelihood of thousands of its citizens and businesses. The premier of Ontario has taken the unusual step of writing a strong, critical letter to the prime minister. The port of Thunder Bay organized a delegation of senior politicians and local business leaders. They met with the minister of transport in August. They made specific recommendations and outlined steps that could be taken without legislation. The minister responded with a public statement affirming the government's support for the Seaway. During the meeting, the minister gave his blessing for a continuing dialogue between his senior officials and the port. These are only small steps. They will not accomplish a great deal unless a ground swell of opinion ignites on each side of the border. We urge each port community to take action within its city and state.

The conference of Great Lakes mayors, organized by Quebec and held in Quebec City in May 1987, attracted the mayors of Duluth and Thunder Bay. For a first meeting it was a good start, and it generated some reasonably strong recommendations. A second session will be held in Duluth in May 1988. Mayors from all communities on both sides of the Seaway are encouraged to participate.

I am not discouraged. I see light at the end of the tunnel. The time to full daylight depends upon those of us who live and work within the system. We have a partnership of two friendly governments. I am convinced that their sins are sins of neglect and not

intent. In the words of the 19th Century British poet Swinburne: "And the best and the worst of this is that neither is most to blame."

John M. Loftus
Toledo-Lucas County Port Authority

U.S. agricultural policies are in line with what the Great Lakes would like to see. Moving toward a market oriented agricultural sector means moving away from subsidies, and away from trade wars in grain. That is positive. Several other policies important to the agricultural sector still need to be discussed in detail. Among them are international negotiations regarding agricultural policies. Our government has been engaged in efforts worldwide to eliminate the dumping that's going on in the agricultural sector. The U.S. and Canada have signed an agreement that is supposed to be a major breakthrough regarding U.S. and Canadian agricultural policies. No one has seen the fine print yet, but we all hope they have agreed to eliminate some tariffs and duties.

Another issue that has to be considered by the agricultural sector is the international aid program. It does not necessarily fit with the policy behind the farm bill. While the farm bill is trying to move agriculture into more market oriented programs, the aid programs are trying to help people. In the farm bill, the PL-480 program was increased or maintained. Section 416 of the program, which disposes of surplus U.S. commodities, was expanded dramatically. These changes are beneficial to the Great Lakes. The State Department and the Agency for International Development, on the other hand, are working to improve the agricultural sectors of developing countries so they don't have to import so much food. This runs contrary to some of the USDA programs.

U.S. agricultural programs are beneficial to the Great Lakes if you look at them in a vacuum. Unfortunately, however, we have to consider agricultural programs in conjunction with U.S. maritime policies. That's where we run into problems. Our maritime policies can be seen in a wide variety of agencies and programs: the U.S. Army Corp of Engineers with dredging programs, the U.S. Coast Guard with aids to navigation, and the St. Lawrence Seaway Authority and the corporation with their efforts to maintain an efficient Seaway, promote the system, and eliminate tolls.

But these are not the most critical issue facing the Great Lakes. The critical issue, from a U.S. perspective, is cargo preference, and the way that cargo preference is currently implemented.

Cargo preference can be defined very simply: U.S.-generated cargoes have to move at various percentage levels on U.S. flag vessels. General aid programs, general cargo, and a variety of other cargoes have to travel 50 percent of the time on U.S. flag vessels. Then there are donation programs. PL-480 Title II, Section 416, increased the U.S. flag requirement as a result of the 1985 Farm Bill. Up to 75 percent has to go on U.S. flag vessels by 1988. This poses some real problems for the U.S. Great Lakes community.

PL-480 Title II cargoes are an example. The Great Lakes used to handle on the average about 24 percent of the cargoes. As a result of the 1985 Farm Bill and the increase to 75 percent on U.S. flag vessels in 1988, only about 13 percent of the Title II cargoes are shipped from the Great Lakes. Milwaukee used to be the largest Title II port in the nation. Now it is way below first place. Duluth/Superior could formerly expect to move about 50,000 tons of Title II cargo annually, but Duluth will only handle about 5,700 tons this year. The loss of those cargoes and jobs is approaching the crisis level. In addition, it means we lose service. We don't have to look very far to see how service to the Great Lakes has dropped. If foreign flag vessels coming into the lakes cannot pick up Title II cargoes, it isn't worth their while to make the trip.

We have seen the USDA and the Maritime Administration divert cargoes from our ports to the West Coast when they easily could have been loaded onto a foreign flag vessel here. This has increased the costs to the federal government and it has cost the Great Lakes maritime community a great deal. I don't want to dump on the U.S. merchant marine fleet. The Great Lakes port directors support a strong U.S. merchant marine fleet.

U.S. Great Lakes port directors believe that the agricultural policies being implemented by this government are on the right track. They are market based and are moving toward international competition. We do, however, need to address the way the cargo preference program is being implemented....

John M. Loftus

We want them serving the Great Lakes. Here, however, we're talking about international shipping.

There is a good example of a Great Lakes success story. A couple of years ago a new U.S. flag company entered the Great Lakes service to handle U.S. military cargo. The U.S. military is an important shipper that annually moves about seven million tons of cargo. Those quantities caused the Montreal based Fednav company to establish a U.S. subsidiary, employ a U.S. crew, and compete for government cargoes. Government military cargos have to move 100 percent on U.S. flag vessels, so Fednav reflagged two vessels and entered the service. We believed they met the legal requirements, with a U.S. flag vessel, a U.S. crew, and competitive rates. But we ran into a problem: the mind sets of some bureaucrats who favored certain ports on the East Coast. The Great Lakes ports had to get behind the Fednav service and fight. Only three ports derive any benefit from that service, but the entire Great Lakes community got together and made the Fednav service work. Fednav proved that we can operate out of the Great Lakes, and when the economy improves enough, as it has, we can even make money.

We are trying to encourage more U.S. flag service to the lakes. However, if the U.S. flags aren't there, we have to consider our own survival. We will do what we have to do to modify cargo preference laws so that the Great Lakes can remain a world class waterway.

U.S. Great Lakes port directors believe that the agricultural policies being implemented by this government are on the right track. They are market based and are moving toward international competition. We do, however, need to address the way the cargo preference program is being implemented, because we want the opportunity to compete with the Gulf Coast and the East Coast. We want U.S. flag service so we can compete, or else we do not want to be bound by cargo preference rules.

Questions, Panel 3

Q: What would you like to see the 1988 Great Lakes mayors' conference accomplish?

Cook: In Quebec City, the mayors discussed the entities that operate the Seaway system in the U.S. and Canada. Subsequent legislation was passed that effectively rebated the U.S. Seaway tolls. There should be no tolls on the Seaway. We should also have guaranteed opening and closing dates, and an extended season. With ice problems there would have to be exceptions, but there would be very few years that we would have trouble meeting set dates. We know a 12-month season isn't possible because of environmental problems, but most of us believe the Seaway could operate for 10 months, say from March 15 through January 15. Maybe we should start with nine months guaranteed, and gradually lengthen it to 10 months.

Loftus: The mayors have to recognize the importance of the maritime community to their cities. The other thing they have to do is not just pass resolutions, but get that information to the policy-makers in Ottawa and Washington.

IMPLEMENTING GOVERNMENT POLICIES

Panel 4

Moderator: Jerry E. Fruin
Panelists: Robert H. Sindt
Robert N. Stearns

Jerry E. Fruin
Department of Agricultural and Applied Economics, University of Minnesota

The previous sessions have given us a broad review of U.S. and Canadian maritime and agricultural policies that affect Great Lakes shipping. Scott Hanson showed how government policies designed to accomplish one objective frequently conflict with policies designed to accomplish other objectives. This can lead to increased and/or reduced imports for both programs.

The next two presentations discuss the current status and implementation of some policies that have long been controversial in the Great Lakes region: cargo preference laws and cost recovery programs.

Robert H. Sindt
Agricultural Stabilization and Conservation Service, U.S. Department of Agriculture

I'd like to discuss the application of cargo preference laws, primarily the Title II PL-480 program. It's where we have had the most tonnage historically, and it's the only program where we can impel cargoes and have a major influence on where they come from.

We appreciate the continuing effort of the Great Lakes interests in helping to see that the Title II program is effective. The Great Lakes entities are an additional competitive force. Our primary objective is to have the most cost-effective and efficient program. To the extent that it is possible, we want to let the market determine where Title II commodities come from, and what ports and transportation entities are used. The more competition we have, the better our agricultural programs will be.

The biggest factor impacting on the movement of government cargoes through the Great Lakes is the 1985 Farm Bill, specifically the provision to increase the cargo preference percentage from 50 to 75 percent between 1985 and 1988. This so-called cargo preference compromise was not supported by the administration; we preferred the old 50 percent level. The 1985 Farm Bill also mandated that 1984 Great Lakes tonnage levels be maintained for bagged, processed, and fortified commodities, to the extent that it could be done without detriment to other ports. [Editor's note: This is a temporary measure.] The impact of that legislation on our operations can be put into perspective with a historical review.

We have traditionally bought our commodities for export under the PL-480 program, or allocated them from the Commodity Credit Corporation's inventory, on the basis of lowest landed cost, which is the actual combined overall cost to procure a commodity and ship it to a final overseas destination. We use applicable ocean transportation rates and compare all suppliers and ports that have service to a particular overseas destination. The lowest overall cost determines the commodity supplier and the port of export. That narrows the number of steamship lines available.

We have not had to take special action over the years to meet the 50 percent cargo preference requirement because of the prevalence of conference rates on U.S. carriers. If a U.S. carrier was in a conference, we always booked it first. In that way we met the cargo preference requirements, and let lowest landed cost operate as it should.

In the last few years, however, we have had difficulty meeting the U.S. flag requirement that way. Given this fact and the 1985 legislation, we changed our procurement regulation last year. We can now buy commodities on a U.S. flag lowest landed cost basis. The remainder is bought on the traditional lowest landed cost basis. Our new procurement regulation includes a

provision allowing us to consider the Great Lakes reservation.

Under the 1985 Farm Bill, the 1984 percentage level required to meet the Great Lakes reservation is approximately 245,000 tons, or 20 percent of the overall tonnage. In our initial buys in the spring of 1987, however, the Great Lakes percentage was only in the mid-to-low teens. It appeared that we would have to take action to meet the congressional intent at the new cargo preference level. Since then, we have taken action to reserve tonnage for the Great Lakes during every subsequent monthly procurement. We take into account both the U.S. flag requirement and the Great Lakes reservation. A computer helps us make the most economical purchase on the basis of those constraints.

We expect to have no problem meeting the 1987 level, which requires that 70 percent be shipped on U.S. vessels. We should meet the Great Lakes tonnage requirement as well. We are trying to meet the congressional mandates in a reasonable and cost effective way.

We estimate that in 1987, to date, we've paid about $6 million more than last year in additional U.S. flag costs in moving from the 50 to 70 percent level in Title II. The additional cost of the Great Lakes reservation is about $1 million. We are reimbursed by the Maritime Administration for increased U.S. flag costs, but not for the additional costs incurred because of the Great Lakes reservation.

In 1986, cargo preference cost about $150 million for USDA programs in added cost for the landed commodity. About $22 million of that was a result of going from 50 to 60 percent in 1985. In 1988, we will go to 75 percent.

It is going to be more difficult in 1988. We try to purchase at certain levels monthly, but we cannot always buy the way we would like to because there is not always service from the Great Lakes to certain destinations. The lakes have a shot at a smaller percentage in terms of getting the tonnage they want. With 75 percent of cargoes on U.S. flag vessels next year, and a monthly total of 24 percent needed in our procurements to meet

the Great Lakes reservation, that's 99 percent. It's difficult to face such numbers and make a procurement.

Our computer has turned out some interesting figures. Under the old system, we would have allocated approximately 19.5 percent of our purchases to the Great Lakes. With the reservation, however, it's been 32 percent. The tonnage going to the lakes this year, with the reservation, is larger than it would have been under the old lowest landed cost system.

I have a few other observations regarding the lakes. The purpose of our program is to feed needy people in a timely fashion. Right now we are experiencing a lot of delays in tonnage being lifted from the lakes. At last report, we have 46 million pounds two months late and 100 million pounds one month late. We find it disturbing to have so much delayed tonnage on the lakes this year. The level of steamship service on the lakes and the limited availability of service to certain areas are factors.

Another disturbing thing is rate increases. One lake carrier increased rates by about 40 percent. Even with the reservation, such rate increases have caused carriers to "compete"

themselves out of the business. They don't get awards. We hope we don't get into a situation where, for reservation purposes, we have to make awards when we don't feel the increases are justified.

We are struggling somewhat to implement both cargo preference and the Great Lakes reservation. We've done it in a way we feel is equitable, although we know that it has caused some distortions to suppliers. In terms of the Great Lakes, an issue that must be addressed is that 75 percent of this year's tonnage is going to one port. We can't really affect where the tonnage goes, other than to make sure we meet the minimum Great Lakes reservation. We cannot allocate to individual ports.

Robert N. Stearns
U.S. Army Corps of Engineers

The Water Resources Development Act of 1986

I'd like to make a few observations before I describe how the Water Resources Development Act of 1986 affects Corps of Engineers programs and the Great Lakes. Reference has been made to the subsidized railroad rates for grain in Canada. I assume that there are some in the room who would advocate elimination of this subsidy. At the same time, it has been argued here that the tolls on the Seaway should be removed. This seems to move in the opposite direction. In addition, it has also been argued here that the Great Lakes shipping season should be longer. If there are federal costs associated with a longer season, should there be user charges to cover these costs? I believe the current direction of the U.S. government toward elimination of subsidies is the proper way to proceed.

The one thing I have not heard here is the importance of the federal budget deficit in shaping U.S. federal policy. Perhaps the deficit has been with us so long that we are taking it for granted. President Reagan recently signed a revised version of the Gramm-Rudman Act. It establishes a target deficit of $144 billion for fiscal 1988, and a deficit that declines to zero by 1993. Accomplishing these targets will be a monumental task. Even in the first year, we are faced with the unhappy prospect of either a cut in major programs or a tax increase, or both.

Seen in the context of this fiscal environment, the Water Resources Development Act of 1986 is a remarkable bill. It breathed new life into the Corps of Engineers' major programs, especially those for navigation and flood control. It authorizes projects and studies whose total cost have been estimated at roughly $16 billion, although it limits spending for construction to an average of only $1.6 billion over each of the next five fiscal years. Despite this spending constraint, it is almost impossible to overemphasize the importance of this bill to the Corps. The bill includes 50 navigation projects, 115 flood control projects, and projects for shoreline protection, conservation, and development.

What made this bill possible in the current budget environment? The key factor is cost sharing. Projects undertaken by the Corps of Engineers will now be cost shared with a local sponsor. Cost sharing begins with studies: sponsors must contribute 50 percent of the costs for any study. This requirement continues even after a project has been authorized, as long as construction has not started.

Cost sharing continues during construction, although the local contribution varies by type of project. For navigation projects, the local share ranges from 10 to 50 percent (depending on water depth) plus an additional amount equal to 10 percent of project costs. Payment may be extended over time.

Operation and maintenance (O&M) expenses will also be cost shared. In this case, however, the non-federal payments will come from the Harbor Maintenance Trust Fund rather than from a local sponsor. The O&M expenses of the St. Lawrence Seaway Development Corporation and up to 40 percent of federal O&M expenses at harbors come from the Harbor Maintenance Trust Fund. The remaining 60 percent comes from the Treasury's General Fund. Foreign and domestic interport shipments are being taxed at a rate of 0.04 percent of cargo value, or four cents for every $100. Through this tax, the user picks up a large share of federal O&M expenses.

Before assessing this cost sharing policy, I want to mention other aspects of the act that are of special interest to the Great Lakes. Section 1149 authorizes and directs the construction of a 1,294 foot lock at Sault Ste. Marie, Michigan. Although not a "harbor" project as traditionally defined, the law requires that this project be cost shared.

Section 1132 creates a Great Lakes Marketing Board. It will be asked to address a variety of marketing strategies and specific issues. Here again, there is a cost sharing requirement. In this case, 25 percent of study costs must come from non-federal sources. I would be interested in knowing of any potential sponsors.

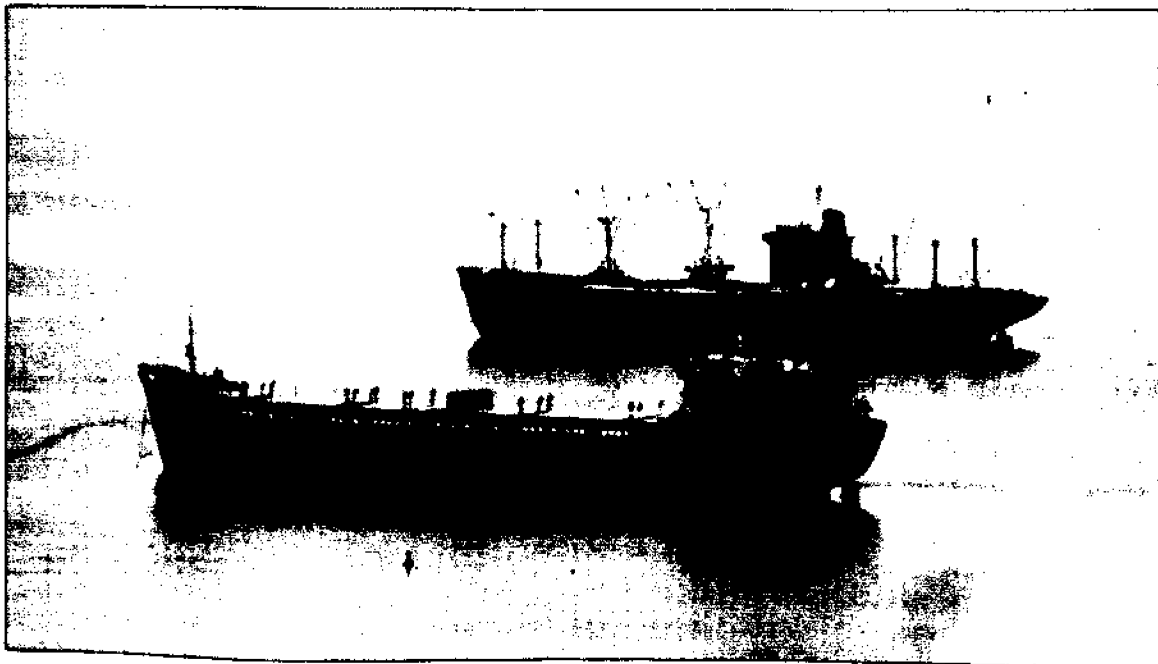
Title XIV contains the toll rebate provision. Collected tolls are transferred to the Harbor Maintenance Trust Fund. The fund is used to pay the rebate.

Finally, the act authorizes harbor projects in Grand Haven and Monroe, Michigan; in Cleveland and Lorraine, Ohio; and in Duluth/Superior.

Returning to cost sharing, perhaps the first question worth asking is: is this really serious? The administration will not offer amendments or make exceptions. Assistant Secretary John Doyle has stressed this theme: the program will work only if it is applied consistently. Corps personnel are to assume that no exceptions to the cost sharing rule will be made. This applies even to unusual cases, such as the new lock at Sault Ste. Marie and the Great Lakes Marketing Board. The answer is yes, this is serious.

The next question is: why is cost sharing such a good idea? As an economist, I find this policy easy to support. It imposes something like the market system on the choices made by local sponsors of Corps projects. Studies will be selected more carefully and will focus on realistic alternatives. Construction will be determined in part by what the local sponsor perceives it can afford. The local sponsor is not the only entity whose behavior will be modified by cost sharing. The Corps must work hard to uphold its end of the "new partnership." When non-federal dollars are involved, we must learn to be more responsive and allow local sponsors to have a greater say in the decision-making process.

I know in theory how to allocate scarce federal resources among competing ports and seacoasts. Nonetheless, because of uncertainties and the lack of good data, I have to make educated guesses. The



willingness of local sponsors to commit non-federal funds tells me that the project has a payoff from the local perspective. Their unwillingness to commit non-federal funds beyond a certain level prevents me from proposing too large a project, one that might be bad from the perspective of the local sponsor and the competing ports as well.

Cost sharing is another step in moving toward free market solutions. Where Great Lakes shipping is competitive with other ports, projects will be justifiable to the federal government and to the local sponsor who now has to foot part of the bill.

Although deficits were the catalyst that promoted changes in our program, the new cost sharing policies would be a good idea even if the budget were balanced. In the current situation, however, the likelihood of reversing this policy, or of introducing new programs that create new subsidies, is very small.

We in the Corps are very excited by our prospects. We have a positive program for the future. We believe that all parts of the maritime community will derive benefits from our proposed approach. We hope that no part of the system will benefit at the expense of others.

Questions, Panel 4

Q: Did you say there are loads that have been sitting on Great Lakes docks for two months? If so, what's the problem?

Sindt: Yes. There has been some overbooking. There may have been decisions by some carriers to leave the stuff until the next voyage. We think all the tonnage that is supposed to go from the lakes will get out before they close for the winter. Although we have no emergencies right now, we are always under pressure to carry out human assistance programs in a timely fashion.

Comment from audience (Helberg): I don't want people to get the idea that delays are unique to the Great Lakes. There are delays in other areas as well.

Q: Is there an emergency provision, that says if no U.S. carrier is available the cargo can go out any way possible?

Sindt: There is no provision that would waive the U.S. flag requirement.

IMPACTS OF CURRENT POLICIES

Panel 5

Moderator: Bill Beck
Speakers: John Parrington
Dan Jeutter
Sven Hubner

Bill Beck
Seaway Port Authority of Duluth

Government policies have had a generally adverse affect on the Great Lakes shipping industry in recent years, according to a trio of speakers representing the private sector of the maritime cargo business.

John Parrington, a Minneapolis grain export executive with Continental Grain Co., traced the history of American agriculture since World War II and its humanitarian impulse, an event that led to the creation and eventual loss of huge export markets for U.S. farmers.

Dan Jeutter, business agent for Local 1366 of the International Longshoremen's Association, explained how the contraction of government-impelled, Food for Peace cargoes debilitated a healthy labor organization in Duluth/Superior.

Sven Hubner, owner of a well-known Duluth shipping agency, blamed the decline of American agricultural commodity exports on the federal government, citing the Carter administration's grain embargo against the Russians in 1979.

John Parrington
Continental Grain Company

John Parrington, Midwest export grain manager for the Continental Grain Co. in the Twin Cities, is a strong advocate of consistency in the export grain business. A native Liverpudlian, Parrington spent much of the 1970s in Duluth/Superior, managing Continental's export grain elevator in Superior, before accepting his present position with the company's Minneapolis office.

"I was a great advocate of this port when I worked here, and I still am," Parrington said, "but we have to go beyond the fact that we navigate eight months of the year. We have to give some type of service in those four months that the lake is frozen, because people are looking for continuity. They don't want to get spring wheat, barley, corn, or beans today, and then say 'I have to find another avenue' eight months down the line."

Parrington thinks the solution to the shortened season on the Great Lakes is the development of intermodal forms of transportation. He suggests that port marketers and users think of using rail transportation to move grain to market during the months when the Great Lakes are iced over.

Consistency is also very important on the purchase side of the grain export business, Parrington said. "I just returned from an extensive trip to Europe," he told the conference, "and everything I saw was based on quality. There are no peaks and no valleys. Much of their instrumentation measures a constant. They are prepared to say: 'Look, we'll pay a little more if we can get a product with this consistency.'"

In his remarks, Parrington traced the history of U.S. grain export efforts during the past 40 years. Following World War II, the U.S. developed a distinctly humanitarian attitude towards grain production when war-ravaged Europe couldn't feed itself. Once self-help programs like the Marshall Plan and Food for Peace had assisted Europe back to its feet, American farmers turned to the awesome task of feeding the billions of hungry people in the Third World.

Parrington called the American agricultural effort "a responsibility to produce," and noted that U.S. farmers, seed growers, and implement manufacturers "did a magnificent job. We took wheat from 10 to as high as 60 bushels an acre. We took corn from 50 to 120 bushels an acre. Consequently, we had a provision out there to feed the world."

Parrington's thesis is the American agriculture did its job too well. Influenced by Dr. Norman Borlaug, U.S. seed growers kicked off the genetic revolution, exporting new strains of seeds. The genetic revolution in seed technology gave people around the world the means to provide for themselves. Besides actually teaching people to "provide for themselves," Parrington said, "we also taught them the enjoyment of eating better."

To regain that competitive edge in world export markets, American agriculture has to rigorously stress quality production, Parrington said. He noted that the traditional mistrust between the state grain inspection services on the one hand, and farmers and shippers on the other, is breaking down. "We who work in the industry know, when we put our product out to the Wisconsin Inspection Agency, that the certificate they issue is in fact what is in that vessel, and that when the vessel gets to the other side the customer will be content with the product. This is what we have to do."

Parrington thinks that U.S. grain exports are poised for an upswing. "There's a tremendous amount of activity taking place" in the grain business, he told the conference. "I think we are in the most exciting part, because we've gone from being on rock bottom. I think there is some light at the end of the tunnel."

Dan Jeutter
International Longshoremen's Association

Dan Jeutter is the young business agent for Local 1366 of the International Longshoremen's Association. Jeutter, a native Chicagoan who is pursuing a degree in economics at the University of Minnesota-Duluth, has strong words for government policies that are legislating longshoremen out of work.

"So here we are in 1987, next to America's agricultural heartland. We've got a beautiful port, natural harbor, and great port facility. We've got the St. Lawrence Seaway. The government has invested millions of dollars in the Seaway to keep it operating, and we don't have any work. We're not moving a pound of cargo across our docks. That tells me that something is wrong."

What is wrong, Jeutter said, is a set of outdated cargo preference laws that mandate the movement of government-impelled cargoes in U.S. flag ships. Because of the draft restrictions on the St. Lawrence Seaway, few U.S. flag ships call on Great Lakes ports. The cargo preference laws serve to protect a handful of jobs on U.S. flag ships while penalizing longshoremen across the entire Great Lakes region.

It wasn't always that way, Jeutter said. "When the Seaway opened in 1959, we had the new port facility that was just built by the state of Minnesota, and it was going to employ thousands of people in the industry, and in related trades all over the region. For a while, that turned out to be true. In fact, in 1963-64 and all through the 1960s, the USDA would call the Port Authority to ask if there was room in the warehouses because they needed to send up 10,000 or 20,000 tons of USDA cargo, what we today call PL-480 government cargo. It consisted of grains raised here in the Midwest that the government was either giving away or selling to countries overseas.

"We had become dependent on that cargo over the years. When I joined the union in 1971, we moved over 100,000 tons of PL-480 cargo across the docks here. We had 250 full-time longshoremen in the trades. We had the associated industries: the linehandlers and the shipchandlers, who provide foodstuff to the vessels. We had the railroad people and the trucking industry. We had literally thousands of people working in this industry in the late 1960s and the 1970s."

The transformation in just 15 years has been dramatic, Jeutter said. "This year, we expect to move maybe 5,000 to 7,000 tons of PL-480 government cargo across the docks here. We have about 78 union members, longshoremen, and they are kind of hangers-on from the old days. On a good day, we will put maybe 10 people to work on the docks in Duluth. The trucking industry is non-existent. The railroad has laid off hundreds and hundreds of people. The industry, from our end of it, has just literally gone to hell."

We're not out of the business because of technological changes. We're not out of the business because they're loading ships with computers. We are out of the business by legislative fiat. We have literally been legislated out of the business up here.

Dan Jeutter

"I don't mean to give the impression that nothing can be done about the situation," Jeutter said. "We need to mobilize politically. We need to get our senators and congressmen together and lobby Washington. We're not out of the business because of technological changes. We're not out of the business because they're loading ships with computers. We are out of the business by legislative fiat. We have literally been legislated out of the business up here."

"I like to think I am representing the views of the people who work for a living down here. I guess, in a nutshell, we need to turn policies around. We need to bring more cargo to Duluth and to Superior."

Sven Hubner
President, Guthrie-Hubner, Inc.

Guthrie-Hubner is an independent Duluth shipping agency that combines two of the more illustrious names in 20th century Upper Great Lakes maritime circles. Founder Alistair Guthrie left his stamp on the shipping industry in Duluth/Superior for half a century. Present owner Sven Hubner is a Dane whose arrival in Duluth nearly coincided with the opening of the St. Lawrence Seaway.

"I was on the second ship coming up through the Seaway in May of 1959," Hubner

said. "Believe me, it was no picnic. Nobody knew what they were doing. We didn't know on the ship. It was a completely new adventure for us. Things have improved greatly since then. Traffic is moving quite smoothly. When the Seaway opened, we all thought there would be gold in the streets, and business would be wonderful. It was for a good many years, but after a while, business began to slack off. You've got to ask yourself why that happened. It's a good question."

Hubner thinks the answer to the question lies in two basically unrelated directions: government policies and weather. "Government policy we can do something about," Hubner said. "At least we can try to influence it. The weather we can't do a damn thing about but just hope and pray that it will be in our favor."

Hubner said the government policies that the port must contend with are frequently international in scope. He cited the 1979 Carter grain embargo against the Soviet Union.

"The politics affecting us are a glaring example of the time when President Carter had the ill-conceived idea that we should embargo our grain sales to Russia because of the Russian invasion of Afghanistan," Hubner said. "All of our competitors, like Canada, Argentina, South Africa, and the European Common Market, were sitting on the sidelines just waiting for an opening like that. We lost one of the biggest customers we've ever had. It's doubtful that we'll ever get them back, especially not to the degree we had at that time. The end result is that the Russians are still in Afghanistan and we are sitting on the sidelines, watching our competitors take away our business."

Hubner noted that the restrictions of the St. Lawrence Seaway, including draft size, tolls, and winter closing for repairs, all hamper the ability of the Great Lakes to compete successfully in international grain markets. Draft restrictions on the Seaway call for a ship no larger than 730 feet in length, with a 75-foot beam, and a 26-foot draft. He compared the Seaway with the Panama Canal. The Canal, built 45 years earlier than the Seaway, can handle ships

1,000 feet in length, with a 105-foot beam, and a 40-foot draft. The Seaway is the only North American waterway on which tolls were imposed from its inception, which is discriminatory to the states in the Great Lakes basin, he said.

As to the necessity for repairs to the locks along the Seaway, Hubner thinks that the administrators of the system do things backwards. "We are told all the time that the Seaway has to close for three months in the winter for repairs. Why does it have to be in the winter? I think we could close down in the summertime." Hubner said, noting that salty traffic on the Seaway and the Great Lakes is lowest in June and July, and picks up as the new harvest comes into the port elevators.

In the economic clouds, Hubner sees a hint of a silver lining. Before the embargo, Hubner explained, much of the grain moving from the Great Lakes to Russia went to Baltic ports, where draft restrictions are similar to those in the Seaway. Recently, Algeria has become a major customer of Duluth/Superior with purchases of durum wheat. This is primarily because Algerian ports have draft restrictions similar to those on the Seaway. Hubner thinks the Great Lakes ports must concentrate on shipments to ports with draft restrictions similar to ours.

Questions, Panel 5

Q: When we were lobbying our Washington representatives, we did not get any support from the ILA. That's where we ran into a problem in negotiating for the Great Lakes set-aside.

Jeutter: We supported that through the Great Lakes Maritime Association. I do not deny that there are conflicts between East Coast and Great Lakes maritime interests. The shippers talk to the East Coast or the Gulf Coast because of the numbers. We've only got 78 longshoremen left here, while the Gulf and East Coast ports still have 125,000 people in the ILA alone. They outnumber us and are able to marshal the senators from non-coastal states to support them.

Q: How can we regain some of the markets we lost?

Parrington: We have to be peddlers. We have to visit research labs and make them aware of our quality. In European research labs they are much more familiar with Canadian grain than with ours. Our product is as good as or in many cases better than Canada's, but we have to peddle it -- give them samples to analyze. There is a market in Europe. The stocks they have are limited in quantity. Their intervention stocks do not meet minimum specifications; they are feed grains. We ought to be over there knocking on doors. This will require industry's presence; government cannot do it alone. Maybe it should be all three: industry, academia, and government.

Q: Please elaborate on the idea of a summer shutdown for maintenance.

Hubner: The rationale is that our busy season is in the early spring and the late fall. In December we have customers standing in line, and they want to keep on shipping. Of course, safety is a consideration if we operate in winter, but shutting down the Seaway in July and August for required maintenance would allow us to keep the Seaway open when it really counts.

Comment from audience: With the right equipment, you can operate in winter.

Comment from audience (Helberg): You're right. The technology is there. Sometimes we hear that there is not enough demand, but we have allowed a self-fulfilling prophecy. Shippers know they have to be out by mid-December. The message is: we're open until X, weather permitting, but we may have to assess you a fine of $20,000 per day.

POLICY DECISIONS: THE FUTURE

Panel 6

Moderator: Bruce H. Munson
Panelists: Arthur G. Wilson
Jerry E. Fruin
Neil Meyer

Bruce H. Munson
Minnesota Sea Grant Extension Program

This panel offers perspectives on what the future may hold for shipping on the Great Lakes. Previous panels have established that government policies dictate the potential limits for agricultural exports shipped from Great Lakes ports. Policies change. Our three panel members will identify changes that they see forthcoming in both Canada and the U.S.

Presenting a Canadian perspective is Arthur G. Wilson, Professional Associate, Transport Institute, University of Manitoba. Dr. Wilson's farm background and experience as a member of the Canadian Grains Council permit him to offer a unique vision of the changes that may be seen over the next few years.

Presenting a U.S. perspective is Jerry E. Fruin, Associate Professor of Agricultural and Applied Economics, University of Minnesota, and Transportation Economist with the Minnesota Extension Service. Dr. Fruin has researched the economics of transporting bulk cargoes by rail, barge, and ship.

Neil Meyer, Professor of Agricultural Economics at University of Idaho, spent the 1986-87 academic year studying Canadian agricultural and transportation policies at the University of Saskatchewan in Saskatoon.

Dr. Meyer's conclusions about future transportation policies in Canada may cause concern for those interested in expanding shipping on the Great Lakes.

Arthur G. Wilson
Transport Institute, University of Manitoba

Underlying policy in the U.S. and Canada is the philosophy that free enterprise and open competition result in the maximization of welfare. Both countries have instituted policies to encourage free trade and promote competition. At the same time, both are attempting to reduce their financial commitments through cost recovery for services provided at public expense.

The thrust of future policies will be toward provision of a "level playing field" for each of the transportation modes: road, rail, and air. These policies will be affected by the impending free trade agreement. Adjustments will be required to provide a level playing field for trade between Canada and the U.S.

Policy Projections for Canada

Future policies affecting the St. Lawrence Seaway fall into three categories: administration and operations, carriers, and traffic.

1. Administration and Operations: The need for the Seaway is predicated upon the traffic that can be generated. This depends upon the competitiveness of the Seaway relative to other transportation routes. National policy will ensure competitiveness so the on-going costs of the Seaway can be met. Policies that ensure the Seaway remains in continuous operation during the shipping season can be expected. Adequate maintenance of the physical plant will be a policy objective. Legislation to prevent work stoppages on the system, whether in support services or on the vessels themselves, is on the horizon.

2. Vessels: Policy to reinstate a subsidy on Canadian-built Seaway vessels is not expected in view of the capacity that now exists. In addition, fast capital cost write-offs on vessels may be in jeopardy. Subsequent changes in policy will enable each transportation mode to compete in the absence of special privilege.

3. Traffic: Policies that affect Canadian grain have a major impact on Seaway operations. Canadian markets for grain in western Europe are declining. Shipments to the Soviet Union are variable above the floor established by long term agreements. Grain deficits in communist countries will decline as they adopt improved technology. Growth markets for grain are in developing countries best served through Pacific Coast ports. These growth markets utilize grain in non-traditional forms. Although world trade in grain is expected to increase by about two percent per year, growth in the volume moving through the Seaway is not assured.

Policies Affecting Grain Production and Marketing

1. Railway Freight Rates: Amendments to the Western Grain Transportation Act of 1983 can be anticipated. Rates will be modified to more closely reflect real costs. This may also affect costs associated with movement over the Rocky Mountains to the west. Adjustments of these rates may enhance the competitive position of the Seaway. However, if the producers begin to absorb most of the cost of moving grain by rail to export position, they may choose to convert some grain into meat and other products. This would result in less Seaway traffic.

Another future policy change which has implications for the Seaway is the termination of the At and East rail rates. These rates were fixed at 1961 levels and designed to render eastern Canadian ports competitive with eastern U.S. ports for the export movement of grain and flour. These rates have worked against Canadian ports and encouraged inefficiency.

2. Markets in Relation to Seaway Traffic: The present policy, which tries to maintain the status quo in east/west grain traffic, will change in order to maximize the net returns from sales. This may be accomplished by the Canadian Wheat Board substituting ports on the Lower St. Lawrence for Thunder Bay as the basis for pricing grain moving through the Seaway. Such a policy change would

render the Seaway route less competitive, since current prices received by the Board for grain at Lower St. Lawrence ports approximate those obtained at Pacific Coast ports. At the same time, a reorganization of agriculture can be expected in the affected area (Manitoba and eastern Saskatchewan), further reducing the potential movement through the Seaway.

3. Removal of Institutional Constraints: Future policies will be designed to improve the welfare of Prairie grain producers. The pressure of economics will lead to policies that relax the constraints on movements of Canadian grain through U.S. ports in the Gulf of Mexico and the Pacific Northwest. This will reduce Seaway traffic.

Inland grain cleaning will become economical with the consolidation of the rail and elevator plant. This will be assisted by variable rail rates on large scale movements of grain, which will be introduced with regulatory approval.

Maintaining the identity of Canadian grain to export position may be accomplished by arrangements between the Canadian Grain Commission and the Federal Grain Inspection Service, and also by agreements with the carriers. This will allow the passage of grain in bond through the U.S. Such movement may also be facilitated by designation of all points in the U.S. as export outlets for Canadian grain under the Western Grain Transportation Act. A policy to quote Canadian grain export prices from American ports would then become advantageous. Such a policy would necessitate guaranteed access to transportation capacity in the U.S.

4. Product Modification: Because of the expanding markets' needs, policies are changing to widen the Canadian wheat product offerings. Associated increases in output could lead to greater traffic on the Seaway.

The increasing cost relative to value of transporting Canadian grain to export destination will lead to policies that encourage conversion of grain into more valuable forms. For wheat, this could include flour segmentation, where the protein component would be concentrated and shipped, and the residue used in feed or alcohol and in other industries. Such transformation would detract from shipments on the Seaway.

In conclusion, future Candian policy changes concerning grain will have both positive and negative effects on the volumes moving through the Seaway. In aggregate, such policies are not expected to encourage additional movements of grain along this route. The Seaway's advantages on a more level playing field will lie in providing continuous and timely delivery, not in large scale single shipments.

Future policies will result in greater competition within the transportation system. These policies will result in change. Positive reaction to change will ensure that the Seaway remains essential to the large scale bulk movement of goods in both Canada and the U.S.

Jerry E. Fruin
Department of Agricultural and Applied Economics, University of Minnesota

Our view of the future is, of course, influenced by our perceptions of trends in the present. In many countries, including the U.S., Canada, and a number of the European Economic Community countries (most notably the United Kingdom and France), the current trend is toward less regulation and less governmental participation in business, and toward market-oriented decisions and freer trade. However, these trends are not universal. There is much resistance to deregulation and market-oriented concepts like user fees from special interests. There is also pressure from developing countries for regulation and/or cartelization in areas like telecommunications, shipping, and mineral extraction. My first point is that the deregulation/market-orientation mood of our government, although strong now, may not continue indefinitely.

My second point is that, as we look to the future, there will be a continued leveling of standards of living around the world, at least in the industrialized world and the newly industrialized countries. More and more people around the world will have the

resources or disposable income to pick and demand consumer goods. This will lead to increased trade and subtle shifts in national comparative advantages over time. The decline of our steel and auto industries is one of the results of this trend. We can expect others. Such shifts are caused by the worldwide distribution of resources and labor, and should be exploited for the mutual benefit of affected nations. Protectionism is generally not a solution, since it only shifts or delays the pain of needed adjustments.

Third, a view of the future should recognize that the transportation infrastructure of the U.S. and Canada is now essentially mature. This is the result of over 100 years of construction of railroads, canals, locks, harbors, roads, and interstate highways. There are no obvious needs for which the public will willingly pay. Consequently, we will in the future be more concerned with the maintenance and/or improvement and expansion of existing facilities than with major new projects. Reliance on user charges as a source of revenue will increase as a result of government deficits and the difficulty of the transport infrastructure competing successfully for general tax funds in light of other social needs.

As a consequence of increased reliance on user charges, there will be increased user participation in decisions regarding expenditures and services. This will contribute to the reduction and restructuring of the transportation infrastructure. Some obsolete roads, ports, and waterways will be abandoned, de facto if not officially, just as we have abandoned a third of our railroad mileage in the last 20 years. Increased reliance on user charges will cause conflicts between different types of users. Special interest user groups will conflict with each other and with the general public over the allocation of fixed costs to various types of use.

Fourth, in the area of agricultural policy, we can in the future expect less government influence on what farmers produce. Production decisions will be based more on supply and demand. In the near future, the vast stocks of surplus agricultural commodities in North America will be used up. From the point of worldwide food security, this is not necessarily good and is even potentially damaging, since these stocks provide a food buffer for the world. If we rely on supply and demand conditions without buffer stocks, commodity prices and the resulting supply responses will be more volatile. This volatility will lead to boom and bust cycles for agriculture and for the agricultural transportation system.

As a result, I predict that during the next decade, perhaps as early as 1993, there will be a food shortage somewhere in the world. The resulting increased U.S. grain prices and movements will lead to a crisis in grain transportation. There will be chaotic conditions similar to what we saw in the late 1970s.

Why a crisis in the early 1990s? Because it will take another three to five years for world food stocks to be worked down, and for food demand and production capacity to become balanced. By that time, we will also have eliminated the surplus railcars and barges that resulted from overbuilding in the late 1970s and early 1980s.

When world food supplies are in balance, world food production reductions as small as three to four percent will produce regional shortages and booming markets. Such declines in food production are not unusual. They result from normal weather fluctuations, and can be expected once or twice a decade.

How will transportation and agriculture respond to such a "food shortage"? There will be transportation shortages. There will be a bull market for some agricultural commodities. Will we respond by overplanting and overbuilding and starting a new boom and bust cycle, or have we learned from our experiences in the 1970s and 1980s?

Neil Meyer
Professor of Agricultural Economics,
University of Idaho;
and Visiting Professor of Civil Engineering,
University of Saskatchewan (1986-87)

Policy Decisions Affecting Rationalization of the Prairie Grain Transportation System

Radical changes in the Canadian grain handling system could increase efficiency and

incomes to Canadian grain producers. When Praire grain handling systems were set up, local delivery points permitted producers to deliver grain by horse and return home the same day.

Today, return trips could be made in a day even if grain assembly points were 160 kilometers away. That is far more elevator consolidation than is presently being considered. A key related question is how many tonnes annually the optimum-sized elevator can handle. That quantity influences the assembly area needed to keep elevator operations efficient.

The existing branch line grain collection system is inadequate for the larger capacity equipment being used to transport grains today. Major new investments are required to update the physical plant. In some cases, the annual interest cost of the new investment exceeds the annual value of the product shipped (i.e., the Big River branch line improvement in Saskatchewan).

In many rural areas the main highway leading to the assembly point runs parallel to the railroad tracks. Can Canada afford these duplicate transportation systems? The problem is one of who pays and who benefits from system changes. The branch line rail system is paid for directly by the railroads and indirectly by the federal government, through grains payments, branch line rehabilitation, and tax measures like investment credit. The local road system is paid for by rural municipalities and the provincial government. Generally, producers feel that rationalizing the system will increase their costs by increasing trucking distances and road-improvement taxes.

In August 1986, Saskatchewan had 577 grain collection points, 67,278 kilometers of roads, and 6,700 kilometers of grain-dependent branch lines. The result is a large infrastructure for collecting, handling, and transporting grain.

Abandoning rail lines saves money for the railroads and possibly for the federal government, but it may increase road maintenance and improvement costs for rural municipalities and provinces. It may also increase trucking costs for producers. When changes to the present system are considered, producers are not sure their benefits will outweigh their costs or compensate for the risk of change. Therefore, rural political sentiment has favored retaining the present system. Nevertheless, financial pressures from the world grain market are being felt on every farm and ranch in Canada. These pressures are forcing re-evaluation of how grain is produced and exported, along with renewed efforts to improve the system's performance.

Revision of the system should take advantage of two things: economies of scale and reducing the per-unit cost of moving grains. This is important because exports compete in a world market. Reductions in transportation and handling costs offer producers a chance to gain more market share and/or receive a higher price.

Bypassing the Seaway

Using rail to move grain all the way from assembly point to export position eliminates several handlings. This provides an opportunity to reduce costs and improve quality. A model developed at North Dakota State University and adapted to Canadian conditions was used to estimate costs for direct rail shipments. The Upper Great Plains Transportation Institute (UGPTI) model predicts shipment costs under a range of operating conditions and assumptions.

The UGPTI model is designed to aid in the analysis of agricultural or bulk commodity movements. It can estimate the costs of single car shipments, multi-origin and multi-destination shipments, trainload shipments (single or multi-origin shipments to a single destination), and unit train shipments (single origin shipments to a single destination). It has adjustments for inflation and for the fact that 70 percent of the grain hopper cars used in Canada are purchased by the federal and provincial governments and given to the railroads in exchange for maintaining them.

Using the Model to Estimate Costs

Cost estimates are based on rail miles from Saskatoon to St. Lawrence export points via Thunder Bay, and to export points in Montreal, Vancouver, and Prince Rupert. The present system scenario to Montreal includes

Table 7. Per-tonne cost[1] of transporting wheat from the Saskatoon area to export position using present system, trainload, and unit train configuration.

Destination	Present System	Train-load	Unit Train
Thunder Bay	$58.38	$49.16	$45.75
Montreal	80.11[2]	82.79	74.67
Vancouver	59.81	48.25	45.60
Prince Rupert	59.81	49.28	45.95

the cost of moving grain by rail to Thunder Bay and then by ship to Montreal (Table 7).

The base case or present system assumes a 10 kilometer haul to the local elevator, plus local elevator fees, railroad charges, and terminal charges. The trainload case assumes a 40 kilometer delivery by truck to a country elevator, plus road maintenance and area elevator charges. The unit train case assumes no assembly on a branch line and a single destination 80 kilometers away, plus road maintenance fees, regional elevator tariffs, and rail costs.

The per-tonne unit train estimates were $45.75 to Thunder Bay, $74.67 to Montreal, $45.60 to Vancouver, and $45.95 to Prince Rupert. These unit train estimates represent savings over both of the other systems. Compared to the present system, unit-train savings were $12.63 to Thunder Bay, $5.44 to Montreal, $14.21 to Vancouver, and $13.86 to Prince Rupert.

Implications of Railroad Changes for the Seaway

A combination of elevator consolidation, branch line abandonment, and special rail rates should reduce costs for grain transportation and handling. Although producers would truck grain farther to assembly points, that may or may not increase trucking costs.

1. These figures are based on the UGPTI model. Costs are expressed in Canadian dollars, weights are in metric tons. The complete report explaining the model and its assumptions is available from Neil Meyer.

2. The present system figure is built on single-car railroad shipment rates. For present system shipments to Montreal, costs are based on moving grain by single railroad cars to Thunder Bay and then by ship to Montreal.

The danger of such changes to the Seaway comes from the efficiences of direct rail shipments to export points. As the railroads' fixed costs become a smaller proportion of total costs, because of increased equipment use and a smaller proportion of fixed investment, they are better able to compete with the present system. The potential savings of over $5 per tonne for direct rail shipments to Montreal could easily increase if more lines were abandoned. The result would be strong competition for the existing system.

This is further complicated geographically, by where new market growth occurs. Rail movements to the western ports appear cheaper than to eastern ports. If world freight rates were sufficiently low, Canadian grains destined to all parts of the world could move west, further depriving the Seaway and ports in central Canada of the volume needed to maintain competitiveness. If the Seaway is to remain competitive, efficiency must be increased and costs reduced. Without these changes, the future is not bright.

Questions, Panel 6

Q: Why do you think the markets will be to the west?

Meyer: Most U.S. cash markets have been western. When time is a factor, those shipments go through West Coast ports rather than through the Panama Canal. I don't consider PL-480 markets to be real markets, because we are buying what we sell.

Comment from audience: The Soviet Union is Canada's big cash market, and they buy to the east.

Meyer: That has been a very good market for Canada. The Chinese have been a good market for the U.S.

Q: Why do you foresee a shortage in 1993?

Fruin: World stocks are being reduced. Eventually they will match world demand. We are selling corn for less than it costs to produce it. Once the bins are empty, a one-year reduction of just three to five percent will mess things up. This may not happen in the next three years, but after that we will be in the inelastic part of the demand curve.

Lee Egerstrom
St. Paul Pioneer Press Dispatch

It is phenomenal that there can be such pressure building on both sides of the U.S.-Canadian border for protectionism, while at the same time our two countries are negotiating a far-reaching free trade agreement. You wonder how such a contradiction can occur.

You have to look behind the reasons for our economic problems and how we have moved from boom to bust in agriculture and shipping. We are in a severe liquidity crisis. We need a level playing field in the world capital market before we are going to see cargo move in any massive quantity again.

Looking back, the real reason for the run on North American grain stocks in the early 1970s was not the global drought. It was the result of severing the link between gold and the dollar in 1971. The dollar fell right through the floor, and suddenly grains and other commodities denominated in dollars became very inexpensive.

In 1980 the industrialized countries started manipulating money supplies to dampen inflationary expectations that were raising prices for so many agricultural commodities, minerals, forestry products, and energy. The policies of manipulating money supplies worked. Since 1980, when interest rates and the value of the dollar started to rise, the commodities sectors of the global economy have been subsidizing an economic recovery for the industrialized, "high-tech" service sectors of our economies. This is particularly true in North America.

The movement of grain fell dramatically during the 1980s. This occurred worldwide, not just in the U.S. and Canada. The total value of the trade fell 40 percent between 1981 and 1985. Most traded commodities are denominated in dollars. Wheat shipments fell from 1,013 million metric tons (mmt) in 1981 to 84.9 mmt in the 1985-86 shipping year. The U.S. share of that wheat market fell from 48.2 to 25 mmt. In coarse grains, where the U.S. has an even larger share of the market, the total global movements fell from 107.8 to 83.3 mmt, and the U.S. share fell from 70.7 to 36.4 mmt in four years.

You cannot blame domestic farm programs and trade policies in Canada, the U.S., Europe, or Argentina. Every domestic public policy in the world didn't go bad simultaneously.... There have to be macroeconomic reasons for collapsing trade markets.

Lee Egerstrom

You cannot blame domestic farm programs and trade policies in Canada, the U.S., Europe, or Argentina. Every domestic public policy in the world didn't go bad simultaneously. And you can't blame former President Jimmy Carter's Soviet grain embargo, although politicians on our side of the border have done so since 1980. The embargo is not the reason why Europe stopped buying spring wheat and durum shipped through the port of Duluth, or why Mexico stopped buying wheat from Canada, or why Nigeria stopped buying farm commodities from Brazil and Argentina. There have to be macroeconomic reasons for collapsing trade markets.

In our attempts to fight inflation by tightening money supplies, we have effectively beggared the Third World countries back into the Stone Age. They are out of our markets, except for trade resulting from economic assistance. We have been scuttling the value of the world grain markets at the same time that the Third World has become so indebted that it cannot buy, despite demand and physical need. This situation won't change until we start addressing the global debt crisis on one hand, and a stable money supply on the other.

This week marked the 59th month of economic progress, in aggregate terms, for the U.S. It is the longest period of sustained economic growth in modern history. But it is limited to the coastal megapolises and interior pockets, such as the Twin Cities, Milwaukee, and Chicago. Rural America, on the other hand, with its resource economy of agriculture, mines, forestry, lumber, and energy, has been transformed into a type of Third World culture.

North of the border, the six percent economic growth, in aggregate terms, being enjoyed by Canada is the strongest in any of the countries in the Organization for Economic Cooperation and Development (OECD). That makes some of us who border Canada feel good, because capital moves across the border and strengthens communities like the Twin Cities. But there is nothing to suggest that the maritime provinces or the western Prairie provinces are sharing in this economic prosperity.

Middle America, rural America, and the Prairie provinces have been redefined by the capital market. Our future is now indelibly linked with that of the Third World. The floodgates for our shipping won't open until there is improvement in both trade volume and commodity value. And that won't happen as long as the global money supply remains a manipulative tool for fighting inflation in the developed countries.

The GATT conference has convened, and negotiations on new trading rules could last for four to five years. The OECD heavy-hitters, such as Japan, the U.S., Canada, the European Community, and other developed countries, are seeking a quick-fix position on where the GATT talks should go. Yet four or five years down the road, the Third World countries will probably outvote us at the GATT talks by about 5:1. There are about 94 or 96 countries at the talks and the number may increase. The powers of the northern hemisphere won't work out GATT agreements for their convenience while telling the Third World: "This will be good for you." The other countries won't accept such a patronizing attitude.

There is going to be a rebellion. That is why the U.S. is trying to get a fast-track agreement on agricultural trade rules. If it isn't settled in 1988, agriculture will probably remain excluded from the GATT rules, or it will be so limited it won't amount to anything.

Lord Plumb, the president of the European Parliament, has called for another world food conference to be held in Brussels next year. His call seems to have fallen on deaf ears in Ottawa and Washington. A new world food conference could be a European Community ploy to derail agriculture from a fast track in the GATT talks, but I hope that Canada and the U.S. do not rule out participating in the conference. Such a conference would provide an opportunity to evaluate what has gone right and wrong since the 1974 World Food Conference in Rome. If that happened, the world would have to come to grips with the capital market.

It is the height of hypocrisy for the industralized nations to talk about the need for freer trade while sitting back and manipulating market demand by manipulating the money supply, when developing countries cannot use their own currencies in international trade. The world will have to focus on how to re-level the capital market playing field. I don't know how that will be done. I do know that the companion work is to strengthen institutions such as the International Monetary Fund, the World Bank, and the inter-regional development banks so they can more aggressively address the world debt problem.

The debt crisis that exploded in the early 1980s was largely due to what became, in practice, flexible-term lending. We ran up the value of the dollar, and the Third World's debt load was carried up with it. At the same time, world market demand was weakened by the higher cost dollar and by higher cost credit, so the value of Third World commodities declined and their export earnings fell.

By 1983, Latin America's debt equalled 56 percent of its combined gross domestic product. This external debt, which was held by banks in North America, Europe, and other developed countries, was equal to 325 percent

of all annual Latin American export earnings. There is no way you can schedule payments or reschedule loans for something like that.

We must give some thought to Lord Plumb's call for another world food conference. The answer to our agricultural trade problems will not be found in agricultural policies. The answer to our energy problems will not be found in domestic energy policies. Our commodity sectors and the Third World are standing shoulder to shoulder, carrying an unnatural burden for the emerging service sectors in the developed countries. International awareness is needed for this burden to be lifted.

Good business is just that. With shipping and the grain trade, it is ennobling to think that we are playing a role in ending hunger and improving the lot of people. Economic development must be part and parcel of our work.

CLOSING REMARKS

Davis Helberg
Seaway Port Authority of Duluth

We are in a crisis, there is no doubt about it. Nevertheless, good things continue to happen. We have been told we have to look for other cargoes. We are doing that with all of the stamina and energy that we can muster.

It's interesting and gratifying to know that the three major types of general cargo now moving through Duluth are relatively new. They did not move through here four years ago. We have landed more cargo for the new grain bagging plant that was constructed by the Port Authority on property owned by General Mills. We just had 12,000 tons of bagged grain move through here. Without the bagging plant, that wouldn't have happened. We have pinto beans moving through the private sector in large quantities. Forest products, one of our future strengths, will move through this port.

The coal dock in Superior is having a good year. They will move about 10 million tons of low sulphur western coal in 1987. They set a record in 1986 with more than 8 million tons. In 1985 they set a record with 6.5 million tons. In all likelihood, we will need a second major coal dock in this port in the 1990s, especially when some future administration gets serious about acid rain.

Everyone in this business is looking for a niche. We have to find things we can do efficiently and competitively. The cargos are out there. It's our job to continue to find them.

The policies that give us heartburn or, more rarely, encouragement are set by Congress and Parliament. It's important to remember that federal agencies implement but do not necessarily set policies, although the way policies are implemented also concerns us from time to time. The best example of this is the fact that our Port Authority joined with other Great Lakes interests in 1986 to sue the USDA, the Secretary of State, the Secretary of Transportation, and others over how cargo preference was being implemented in the Food for Peace allocation. That case is moving forward. The point is that policy is set by our elected representatives in Washington and Ottawa. Those are the places we must go for change, especially if that change is going to affect agricultural policies and Great Lakes maritime policies.

We have made progress. In the 1960s and 1970s, the Great Lakes maritime interests had a reputation for being hit and run artists. We would marshal our forces, march on Washington, and pound on desks. We'd embarrass some senior bureaucrats, come back puffed up with some short term gain, and then wouldn't be heard from again for months. We had no follow-up and no strategy. We might have won some short term benefits, but we didn't gain in the long run.

In the 1980s, with a new generation of leadership, there is a new spirit. Also, when

times are tough, we all become foxhole buddies. The way we are approaching things in Washington and Ottawa now is what we probably should have been doing in the 1960s and 1970s. We are going at it collectively, which is more effective.

It wasn't until in the 1980s that we finally got the Seaway construction debt eliminated, which eased the requirement for toll collection. After a six year debate in which the Great Lakes interests held steadfast, we accepted user fees, but we got the U.S portion of Seaway tolls effectively eliminated through the rebate system. That is a long term benefit.

We were beaten on the 1985 Farm Bill. Some commodity organizations capitulated to the pressure of the bogus threat by the eastern maritime lobby. Although we lost, we gained two things: a change in the calendar year used to compute the percentage carried by U.S. flag ships, so it coincides with the Great Lakes navigation season, and the Great Lakes set-aside. Some people see the four-year set-aside as a weaning period to get us out of the program. We see it as four years to make things right again. We've got two years to go.

Many of us now have full time representation in Washington. This gives us a daily voice on issues and policies that affect us. I think many will join a current initiative: the International Association of Great Lakes Ports. It is the only international port association active on the Great Lakes. We are also taking our case to Ottawa. Port directors from both the U.S. and Canada are meeting there to help government officials better understand what we want and what we expect. I can't speak for my Canadian friends as to whether we will also have representational activities in Ottawa, but it is under consideration.

We are in a crisis, but the ball game is not over. We are here for the long run. This kind of conference is important in terms of understanding, enlightenment, illumination, and getting to meet some of the people we all must work with more closely. It gives us a chance to air our problems and to discuss our opportunities. I believe we have achieved that.

INDEX

Individual	Page
Baker, D.R.	15
Beck, B.	27
Cook, P.R.	19
Creelman, W.A.	5
Egerstrom, L.	37
Fruin, J.E.	23, 33
Hall, G.D.	17
Hanson, S.M.	3
Helberg, D.	1, 39
Hubner, S.	29
Jeutter, D.	28
Laidlaw, W.A.	15
Loftus, J.M.	21
Meyer, N.	34
Munson, B.H.	1, 31
Murray, R.	7
Newstrand, M.W.	4
Parrington, J.	28
Prentice, B.E.	11
Sindt, R.H.	9, 23
Stearns, R.N.	25
Wilson, A.G.	9, 32

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