

1119

**THE ECONOMIC EFFECTS OF TRANSPORTATION ON
AGRICULTURE**

HEARING
BEFORE THE
SUBCOMMITTEE ON
AGRICULTURE AND TRANSPORTATION
OF THE
JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES
NINETY-SEVENTH CONGRESS
FIRST SESSION

DECEMBER 7, 1981

Printed for the use of the Joint Economic Committee



U.S. GOVERNMENT PRINTING OFFICE

92-151 O

WASHINGTON : 1982

10/11

JOINT ECONOMIC COMMITTEE

(Created pursuant to sec. 5(a) of Public Law 304, 79th Congress)

HOUSE OF REPRESENTATIVES

HENRY S. REUSS, Wisconsin, *Chairman*
RICHARD BOLLING, Missouri
LEE H. HAMILTON, Indiana
GILLIS W. LONG, Louisiana
PARREN J. MITCHELL, Maryland
FREDERICK W. RICHMOND, New York
CLARENCE J. BROWN, Ohio
MARGARET M. HECKLER, Massachusetts
JOHN H. ROUSSELOT, California
CHALMERS P. WYLIE, Ohio

SENATE

ROGER W. JEPSEN, Iowa, *Vice Chairman*
WILLIAM V. ROTH, Jr., Delaware
JAMES ABDNOR, South Dakota
STEVEN D. SYMMS, Idaho
PAULA HAWKINS, Florida
MACK MATTINGLY, Georgia
LLOYD BENTSEN, Texas
WILLIAM PROXMIRE, Wisconsin
EDWARD M. KENNEDY, Massachusetts
PAUL S. SARBANES, Maryland

JAMES K. GALBRAITH, *Executive Director*

BRUCE R. BARTLETT, *Deputy Director*

SUBCOMMITTEE ON AGRICULTURE AND TRANSPORTATION

SENATE

JAMES ABDNOR, South Dakota, *Chairman*
PAULA HAWKINS, Florida
LLOYD BENTSEN, Texas

HOUSE OF REPRESENTATIVES

MARGARET M. HECKLER, Massachusetts,
Vice Chairman
GILLIS W. LONG, Louisiana
RICHARD BOLLING, Missouri

CONTENTS

WITNESSES AND STATEMENTS

MONDAY, DECEMBER 7, 1981

	Page
Abdnor, Hon. James, chairman of the Subcommittee on Agriculture and Transportation: Opening statement	1
Jepsen, Hon. Roger W., vice chairman of the Joint Economic Committee: Opening statement.....	2
Kassel, Raymon L., director, Iowa Department of Transportation	4
Blanchette, Robert W., Administrator, Federal Railroad Administration	6
Heiberg, Maj. Gen. E. R., III, Director, Civil Works, Office of the Chief of Engineers, Department of the Army.....	14
Fitzpatrick, Martin F., Jr., Director, Office of Transportation, U.S. Department of Agriculture.....	30

SUBMISSIONS FOR THE RECORD

MONDAY, DECEMBER 7, 1981

Blanchette, Robert W.: Prepared statement	8
Fitzpatrick, Martin F., Jr.: Prepared statement	34
Heiberg, Maj. Gen. E. R., III: Prepared statement.....	19

THE ECONOMIC EFFECTS OF TRANSPORTATION ON AGRICULTURE

MONDAY, DECEMBER 7, 1981

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON AGRICULTURE AND TRANSPORTATION
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10:05 a.m., in room 5110, Dirksen Senate Office Building, Hon. James Abdnor (chairman of the subcommittee) presiding.

Present: Senators Jepsen and Abdnor.

Also present: Douglas N. Ross, professional staff member.

OPENING STATEMENT OF SENATOR ABDNOR, CHAIRMAN

Senator ABDNOR. I call the hearing to order. The Subcommittee on Agriculture and Transportation will now be in session.

I just want to say it's a pleasure to welcome the participants that we have asked to come here today and give us their statements on transportation.

We are trying to find out the economic effects of transportation on agriculture. Agriculture has been a big subject with me, and something that I feel many of us here in Congress, and those in high administrative positions—not suggesting at all that you people here today aren't in that category—pay far too little attention to agriculture and some of its problems and the importance that it plays in the overall economy.

Because without an efficient and adequate transportation network, the interdependent specializations of our economy, which have given rise to our prosperity, would not exist. Our ability to move products and people virtually anywhere has enhanced our standard of living immensely. It is an obvious fact that food-producing areas of the United States are some distance away from the urban centers where most of the population resides. By virtue of this fact, transportation is a vital and integral part in the provision of foodstuffs.

In the past 40 years, the United States has emerged as the major supplier of food to the entire world. Our Nation accounts for 40 percent of world wheat exports and 60 percent of world coarse grain trade. In prior testimony before my subcommittee, witnesses from both public and private domains have indicated that gains in farm income can only come from increases in farm exports. In order to expand exports, we must be sure that our transportation infrastructure is capable of an increased capacity.

I spent some time over the weekend studying and it certainly looks like the export movement of farm products in all forms are going to be on the increase in the next 10 years. And it behooves all of us to make sure that we have the proper facilities to insure that those sales can be made.

We must also take steps to maintain our competitive edge and our world leadership. And to accomplish that goal, we must also be sure that our products can be shipped to world markets at the lowest possible cost.

The important contribution of agriculture exports to our international balance of payments cannot be overstated. Without the \$27 billion surplus in agriculture trade in fiscal year 1981, our dismal payments deficit would have been even worse.

The potential for future agricultural exports dictates the need for a close examination of the present circumstances and possible future problems in the delivery of agricultural products. It is impossible to place too much emphasis on the importance of a modern and efficient transportation system, including rail, water, and road networks, utilizing each network's unique advantage to the fullest.

It is my belief that agriculture is a major contributor to our economic position, and the intention of this hearing is to determine how we can enhance the vitality of agriculture and, in turn, increase the prosperity of America.

I am going to call a very, very short recess for just a few seconds. The vice chairman of our Joint Economic Committee should be here in just a minute, and I especially would like to have him here to hear our panel today.

And also, he has a distinguished guest he wants to introduce.

So, if you don't mind, we will just take a brief few seconds here. [A brief recess was taken.]

Senator ABDNOR. The subcommittee will come back to order.

It is indeed a pleasure for me to introduce Senator Jepsen, who is our vice chairman of the Joint Economic Committee, a man I greatly respect.

I'm very happy, Senator, you were able to get here this morning. We are glad to have you back after a very busy weekend.

Senator Jepsen, I understand you are going to introduce someone from your State who is an expert on the subject matter we are talking about today.

OPENING STATEMENT OF SENATOR JEPSEN

Senator JEPSEN. Thank you, Mr. Chairman.

I do appreciate the opportunity to be here this morning, to discuss the effects of transportation on agriculture. This subject has a tremendous impact, not only on Iowans and the people of our native Midwest, but on the Nation as a whole.

Seated with me this morning is Raymon Kassel, director of the Iowa Department of Transportation. Mr. Kassel will address this topic in terms of how it affects an agricultural State such as Iowa.

The United States ships 43 percent of the world's trade in wheat, 63 percent of its trade in coarse grain, 82 percent of the trade in soybeans, 30 percent of the trade in cotton, and 22 percent of the world trade in rice. From a different perspective, 1 of every 3 acres

in this country produces goods for export. In Iowa, over 28 tons of goods are transported each year for every resident.

Transportation is vital because of the importance of agricultural exports. Transportation accounts for 20 percent of our national economy. Mr. Chairman, without transportation, these products have no value and no market, our industry has no outlet, our people no income and no employment. This point is driven home even further, for example, when you consider that as much as 80 percent of Iowa's population is either directly or indirectly employed as a result of agriculture, including the dependents of employees.

Iowa exports approximately 600 million bushels of grain each year, at an average cost of 65 to 70 cents per bushel, not counting the transportation costs involved in transporting the grain to an elevator or terminal. A lack of productivity in transportation adds to the carrying cost of goods in transit. Any delay in transport adds over 1 cent per bushel per day, which on 600 million bushels is more than what it would cost to restructure the bankrupt Rock Island and Milwaukee Railroads and rehabilitate them and other needed lines in Iowa. This is based on Iowa exports alone, and only a few days interest costs.

Transportation delays, such as at Lock and Dam 26 in Alton, Ill., add labor and equipment time and charges to agricultural transportation, and directly reduce farm income, increasing costs 10 to 15 percent. Port congestion and railroad slow orders, common throughout the Iowa grain-producing area, add many days travel time to the cost of moving grain. This increase in labor costs and equipment again comes directly from the farmer's pocket. In addition, many shippers have had to buy their own rail cars, due to the industry shortage. Yet because of the slow performance of the rail system during peak demand, they get little benefit from their investment and pay increased costs.

In addition, the Houston-Iowa Grain Committee, which was formed at my request and with which I have worked closely and continually, has made recommendations to expedite the movement of railroad grain cars through the Port of Houston. The committee, in my opinion, provides an excellent example of cooperation between railroad labor, management, and parties affected by rail transportation.

The Senate Subcommittee on Transportation, of the Appropriations Committee, report has noted the interest of the Houston railroads in financing these improvements with the assistance of the Federal Railroad Administration. Progress in this area will have a notable and positive impact on both farmers and shippers.

In closing, a good transportation system provides us with benefits far greater in value than the cost of operating and maintaining transportation. It is the key to the accessibility of our resources, and the key to our economic life. It is central not only to national and local trade, development, and economic activity, but essential also to America's position in the international market place.

Mr. Chairman, you and your subcommittee are faced with many important and far-reaching questions concerning agriculture and transportation, both in the present and future. I commend you for holding this important hearing on this vital problem.

It is now my distinct pleasure to introduce to you Mr. Raymon Kassel, director of the Iowa Department of Transportation. Senator ABDNOR. Mr. Kassel, it's a pleasure to have you.

**STATEMENT OF RAYMON L. KASSEL, DIRECTOR, IOWA
DEPARTMENT OF TRANSPORTATION**

Mr. KASSEL. Thank you. It's a pleasure to be here with you talking about agriculture and transportation. I can relate it directly to the state of Iowa.

Currently, the State of Iowa is in danger of losing not only 2,150 miles of rail service but competitive service throughout the State's entire rail system. If the loss of service on these lines could be avoided and competition throughout the system is preserved with improvements in service, the direct fiscal impacts to the state of Iowa would be substantial.

Costs that could be avoided have been estimated to be \$27 million in additional transportation charges due to the loss of service, approximately \$87 million in additional freight rate charges due to the impact of market dominance, and \$33 million in continued interest costs of goods in transit due to slow, subnational averages in turnaround times.

In addition to avoidance of these \$147 million in costs every year, an Iowa savings of \$171 million would be generated each year as a result of transportation productivity improvements due to rehabilitation. In short, direct annual impacts to Iowa's economy of \$318 million would be realized if rail service continues on essential lines, if rehabilitation occurs where needed, and competition is preserved throughout the State. This still recognizes, as Iowa has for many years, that economically unviable and nonessential rail lines continue to need to be abandoned. We have supported this policy with our direct testimony at Interstate Commerce Commission hearings accordingly.

These concerns become more significant to this hearing today when it is realized that the majority of these costs or savings opportunities that are foregone are at the direct expense of our agricultural sector of the State economy—at the direct cost of farm income. The loss of such farm income has a much broader set of implications to our entire economy, private, public, State, and local government.

To illustrate this point further, consider that elevator bids for both corn and soybeans in northwest Iowa are 15 to 20 cents less per bushel than anywhere in the entire State of Illinois and most of Nebraska. This, of course, is still at elevators that have rail service, and is due mostly to the higher costs of transportation. Those high costs are the result of more than just the poor condition of our transportation system, but much of the loss could be recaptured if the rail system was only capable of operating at 75 percent of the level it used to achieve in 1971. Throughout Iowa, bid prices are lower as a result of transportation costs.

In Iowa, we could be losing as much as \$210 million a year from farm income resulting from inadequate transportation opportunities. That \$210 million of lost farm income translates into over 10,000 jobs and \$850 million in gross State product every year, cost-

ing the State \$85 million in general fund revenue. Further repercussions from lower grain prices are also apparent. The value of farm land due to lower grain prices can amount to up to \$500 per acre less value based on the lack of adequate transportation alone. Even conservatively, Iowa's 27 million acres of cropland could be undervalued due to inadequate transportation opportunities by as much as \$5 billion. That amounts to \$100 million in local property taxes to support local government, schools, et cetera, every year. The high cost of poor transportation is most pervasive.

Two short papers by the Iowa Department of Transportation are attached which explore these issues, opportunities, and questions further, I urge their review.¹

Senator ABDNOR. Thank you, Mr. Kassel. We appreciate having your statement and your statistics. I know what transportation means to the great agricultural State of Iowa and your concerns. I can cite the same situation in my State of South Dakota. We raise a lot of farm products. Even though we don't have a lot of people, we still raise a lot of crops, and they have to be moved because they are important not only to the Nation but to the world.

But do you think we're on the right track toward solving some of our transportation problems? Do you think we're making some movement in the right direction?

I know it takes time.

Mr. KASSEL. I think you are on the right track with this subcommittee, and I would urge that you look—try maybe looking at agricultural transportation—we can start forming the foundation for the national transportation policy. I think that's one of the things we lack, and I would urge your subcommittee to try to address that. Really, we have only one transportation system and parts to it—rivers, highways, and rail—and they all have to function together intermodally. We don't have that national transportation policy.

I think if we can get one that deals just with agriculture, many of the problems we have in agriculture, if we could solve those, would also help us in the shipment of coal. That's very similar to agriculture and the problems they face. It's a very similar system anytime you're moving those bulk commodities, so I urge you, if at all possible, to see if we can't, by this subcommittee, sort of arrive at a national transportation policy.

Senator ABDNOR. Thank you. I appreciate that and the words of encouragement, because this subcommittee is one way to carry through on this policy, with you and the good Senator pushing me and helping me. We'll continue on this. Thank you very much.

I feel extremely fortunate today on the subject of the National Transportation System to bring in three outstanding witnesses who are leaders in their various fields here in the Government. We want you to know we appreciate you're being here and giving us your time today.

A friend of mine, who has been doing an outstanding job as Federal Railroad Administrator, Robert Blanchette, is here, and I am sure he will speak on behalf of where we're going with the railroads.

¹ The information referred to may be found in the subcommittee files.

Also my friend, Major General Heiberg, we worked with in public works. Both he and I know the importance of the waterway system and transportation. And we're anxious to hear from him.

And of course, Mr. Fitzpatrick, who is the Director of the Office of Transportation for the Department of Agriculture, probably has the biggest job of all—figuring out what we're talking about with these other things. You have to get the job done and make sure those products get to their destination.

So if you three gentleman would care to come forward, we would appreciate you doing so.

I guess we'll treat you as a panel, gentlemen, because when we get all through with this, it's all one system. If you don't mind, we will at least handle it that way.

Mr. Blanchette, would you care to start off?

**STATEMENT OF ROBERT W. BLANCHETTE, ADMINISTRATOR,
FEDERAL RAILROAD ADMINISTRATION**

Mr. BLANCHETTE. Thank you, Mr. Chairman.

I welcome the opportunity to appear here before you. With your leave and in the interests, of your time, I would ask that my prepared statement be included in the printed record and I be allowed to summarize it.

Senator ABDNOR. Fine. we will put your entire prepared statement in the record.

Mr. BLANCHETTE. Mr. Chairman, the thrust of my prepared statement, is essentially that as to the railroad mode, we have to view the relationship between agriculture and railroad transportation as a partnership, because we have found through painful experience that it is indeed a partnership, and one of the problems is, if one of the partners is in trouble, then the others are as well. So the problems of agriculture are railroad problems and vice versa.

The trust of my remarks is that agriculture and agricultural needs in transportation demand healthy railroads that can function in a normal, conventional business environment, not one of panic and crisis, not one of hysteria.

We have seen the impact of agriculture on transportation and some of our railroad problems. The collapse of the Penn Central and many of the Northeast bankrupt railroads had a devastating impact on agriculture in the Northeast quadrant of the United States.

But far more importantly, a far more immediate effect was the results on agriculture which has been referred to already by Senator Jepsen and Mr. Kassel, of the collapse of the Rock Island system and the bankruptcy of the Milwaukee. You and I saw personally the physical impact of that when we toured the Miles city line of the Milwaukee this spring, and I certainly appreciate your taking me through that problem.

I think the record should also reflect your unstinting and indefatigable work in seeing to it that resources will be brought to bear to rehabilitate that Miles city line, and those resources will be brought to bear thanks in large measure to your efforts.

In addition to that, I think the record should also reflect on the great work done by Senator Jepsen some years ago which is coming

to fruit in eliminating the congestion in the export grain movement through the Port of Houston.

Those are all instances where you and others have had to come to the rescue, to shore up a sagging system, to make up for deficits in our thinking in the past. Hopefully, we can avoid these future events with a healthy railroad structure, one that can serve agriculture's needs, one that can meet the needs of the shippers, one that can meet our export demands and bring resources of its own to bear.

I think that under the Staggers Act, under the new operating mode for railroads, we will see a healthier railroad system. And I can assure you that I've talked to the railroad industry, and in a healthy environment with the financial resources, America's railroads will not turn their backs on the needs of our agriculture.

Thank you, Senator.

[The prepared statement of Mr. Blanchette follows:]

PREPARED STATEMENT OF ROBERT W. BLANCHETTE

Mr. Chairman and members of the Subcommittee, I appreciate this opportunity to discuss the role of railroad transportation in the continuing development of the agricultural economy.

Railroads and agriculture have been interdependent for more than a century. In recent years, we have seen repeated instances which demonstrate that the fortunes of railroads and agriculture are integrally tied. Large agricultural export movements and limitations on port capacity have caused railroad backups and delays with adverse effects throughout the producing areas of the Midwest. The car shortages of the last decade strained both the railroads and agri-business. More recently, car surpluses have placed a financial burden on the railroads and the agricultural shippers who own or lease railcars. The growth of unit train operations and the development of sub-terminals have generated productivity improvements and cost efficiencies which have benefited both railroads and the agricultural community. In contrast, the

cessation of service on the Rock Island caused a major agricultural transportation crisis, which was alleviated only by the Federal government's action in directing the Kansas City Terminal Railway to continue the Rock Island's essential services. The collapse of the Rock Island continues to generate major problems. In short, transportation problems are agriculture problems, and vice versa.

Today, this Subcommittee will explore means to assure that transportation bottlenecks do not inhibit America's competitive abilities and that our national agricultural transportation system operates efficiently. I should like to concentrate my comments on the railroad mode, recognizing that the total system is a multi-modal one. I believe that railroads will serve the needs of agriculture best under the philosophy enacted by the Congress last year in the Staggers Act. That historic legislation directed that railroads operate as business enterprises, free to make those decisions necessary to continue in business. A business enterprise operating competitively in the free market will address and resolve the bottleneck and efficiency issues which concern this Subcommittee.

The ability to compete equally in a free market environment--a new operating mode for America's railroads--is

critically necessary for the survival of the railroad transportation system on which the continued prosperity of America's agri-business depends. Due in large measure to oppressive over-regulation and uneven government treatment of transportation modes, we have had to pay for an entire railroad system in the Northeast. We have abruptly lost a major grain-hauling railroad, and thousands of miles of another railroad serving the agricultural needs of the country have been abandoned.

I see railroads and agriculture as partners, not as competing interests. I believe that the provisions of the Staggers Act are essential to the survival of the rail system. Those same provisions recognize the unique nature of agriculture's transportation needs and the intense competitive marketing system in which agri-businesses operate. Contracts for agricultural commodities are the only contracts which can be challenged on the basis of discrimination. Agricultural shippers who suffer discriminatory treatment have statutory protection assuring them equitable relief.

The contract provisions of the Staggers Act are the key to resolving many of the concerns facing agricultural shippers today. Contracts can give agricultural shippers the assurance of future rate and service level predictability, which is

essential in a business which makes commercial contracts for future deliveries. With contracts, shippers can also be assured that investments in loading facilities will not go unused. Contracts can also permit railroads to make investments in fixed facilities and equipment with certainty that future traffic levels will be sufficient to pay for those capital expenditures.

The government's role in agricultural transportation should concentrate on policy and on responses to emergency situations. I have outlined our policy that railroad transportation be conducted in a free market environment. In addition, there have been, and will continue to be, situations which so threaten the public well-being that they require temporary intervention by the Federal government. An example of this is the Milwaukee Road's Miles City Line. That line, which the Milwaukee's reorganization process cannot continue to support, is essential to the movement of grain from South Dakota and is the only way coal can reach a major rural power plant, which provides electricity to over 600,000 customers in four states. Because the line needs substantial rehabilitation, the private sector cannot justify the investment necessary to continue operating the line. The Federal government has made a commitment to rehabilitating the line because the service it provides is essential. The Federal

assistance, however, is only of an interim nature; Federal financial assistance of this type can be expected to decrease in the future. We will assure that the line is rehabilitated but it is up to the states and shippers involved to develop a financially sound method of continuing the line in operation.

Port area congestion can have a negative impact on the quality of rail transportation from the port all the way back to the producing areas. The importance of a smooth flow of agricultural exports resulted in a temporary Federal participation in the Port of Houston. Together with the railroads and Congressional representatives, such as the Vice-Chairman of this Committee, Senator Jepsen, we have improved the railroad operations in Houston and that improvement has reached back to the upper midwest with improved transit times and quicker car turn-arounds.

The most important recent Federal participation in agricultural rail transportation was, of course, the Federally-funded directed service over the Rock Island. Just a few weeks before a record harvest, the Rock Island, a major grain-hauling railroad, was unable to continue operations. The shutdown threatened devastating effects on agriculture. Using its emergency authority, the government funded operation of the Rock Island properties. Again, the Federal participation was

limited, in this case to a 5 1/2 month period. During that time, the immediate agricultural crisis was averted and the private sector had time to adjust and move to a more permanent solution. Private railroads have been operating most of the Rock Island lines for 1 1/2 years, without Federal subsidies.

These emergency situations are good examples of the interdependence of railroads and agriculture. We must learn something from the crises of the last decade. If the railroad system is to continue to serve agriculture, it must be allowed to operate as a business enterprise. We cannot require railroads to perform uneconomic services and then express surprise and dismay when they declare bankruptcy. We must recognize railroads for what they are--business enterprises. They should be free to operate as business enterprises within the confines of the Staggers Act. I can assure you that in such an environment, the railroads of this country cannot and will not turn their backs on the needs of the nation's agricultural community.

Senator ABDNOR. Thank you, Mr. Blanchette, for that statement. General Heiberg.

STATEMENT OF MAJ. GEN. E. R. HEIBERG III, DIRECTOR, CIVIL WORKS, OFFICE OF THE CHIEF OF ENGINEERS, DEPARTMENT OF THE ARMY

General HEIBERG. Good morning, sir. I would like to take advantage of the same thing Mr. Blanchette did, and I'll put my whole prepared statement in the record and try to be brief in my summary.

I would like to note, I brought with me here in case we have some problems with the questions, both Mr. Shwaiko and Mr. Lawhun who have helped me testify before and also Mr. Olson, who's worked on our national waterway study which I'll make reference to.

The corps is completing the national waterway study which was authorized by the Congress in 1976, and I'm going to give you some observations from that study this morning. As this subcommittee is well aware, the work on rivers, harbors, and other waterways is under the jurisdiction of the Department of the Army, under the direction of its Secretary and the supervision of the Chief of Engineers. In addition, the corps also works on statistics of waterborne domestic commerce.

I'm going to respond very briefly to the three broad inquiries in your letter, the subcommittee's letter of November 9, and then be prepared to answer your questions.

Mr. Blanchette characterized in his prepared statement the agricultural transportation system as a multimodal system, which is dramatically true, and I note also, Mr. Kassel made that point very clearly. I've been privileged to spend many days on a major waterway system, including six long trips I made with the Mississippi River Commission where I got a chance to watch all this from top to bottom, at least from St. Louis down, and it's dramatic, the way you can appreciate the part that rail, highway, water, and the terminals have to play together to get that valuable export grain and other agricultural products from farm to port and on to the ship. It's a dramatic show as you take a look at the system.

As we know, agriculture depends heavily on water transportation to haul its goods to domestic and foreign customers, as well as the other side, bringing fertilizers and other necessary inputs for growing agricultural products up the river. Major waterways serving the agricultural commodities include the upper and lower Mississippi, the Illinois, the Great Lakes St. Lawrence Seaway system; however, other waterways do move substantial quantities of agricultural inputs and commodities also.

Exports of farm products dramatically increased from 1970 to 1980 with corn exports quadrupling and soybeans and wheat doubling. Waterborne traffic by barges in those commodities increased at similar rates. Domestic waterborne shipments of processed food and kindred products increased by 90 percent during that same decade.

For export movements, which is what we are directing our attention to, barge movement accounts for 61 percent of the soybeans,

half of the corn, and 29 percent of the wheat. Illinois, Iowa, Minnesota, Washington, Oregon, Missouri, Idaho, Arkansas, Indiana, and Mississippi are the chief customers for waterway transport, primarily export grains.

New Orleans is the major grain export port related to the waterway system followed by the Great Lakes Ports and the Pacific Northwest Ports of Seattle and Portland. Let me mention some percentages which I think are of interest to this subcommittee.

Of U.S. production, turning first to soybeans, 24 percent of U.S. production went by barge to an export port, for wheat the percentage is 16, and for corn the percentage is 15. Projections of exports of U.S. agriculture should result in growth in barge transport of grains and in exports from U.S. Coastal and Great Lakes Ports. The major impacted waterways which I want to particularly highlight are the Mississippi River, the Illinois Waterway, the Ohio River, the Missouri River, the McClellan Kerr Waterway System, and the Columbia-Snake Waterway.

The total of agricultural commodities shows a doubling in waterborne tonnage from 1977 to the turn of the century. As we've noted here, all modes of transportation have a role in moving grain to market, depending on the distance of movement, location of origin and destinations of the grain, and available routings. Trucks serve as collectors in movements to both rail and barge terminals for larger volumes, longer haul shipments. Barge transport of grain is especially significant in the export movement of high volume and long distances.

The foreign destinations of U.S. grain exports are worldwide to ports of nations large and small with a variety of ship sizes serving the global grain trade. An analysis of the need for transportation for agricultural products must be made in conjunction with the total load of all commodities on the transportation system. This would include the fertilizers and agricultural chemicals, of course.

Agricultural commodities comprise about 10 percent of the U.S. waterborne commerce. But having said that, they are the leading commodities on the Upper and Lower Mississippi River, the Illinois Waterway, and the Columbia-Snake Waterway. Given the demonstrated critical importance of the Nation's waterway system in transporting agricultural products to both domestic markets and export points, this system must continue to be maintained and improved to insure that additional transportation bottlenecks do not develop in the future.

As I noted earlier, the agricultural sector depends on the waterway system to move much of its products to world markets. Nearly 50 percent of the grain exports, which dominate agricultural exports, move to ports by barge during part of their trips. Specifically over half the soybeans, about half of the corn exports, and nearly a third of the wheat exports move by barge.

Transportation of agricultural products, foreign and domestic, on the waterway system is expected to at least double from the base year of 1977 to the turn of the century according to the forecasts produced by our national waterways study. This contrasts to increases forecast for all commodities from about 24 to 51 percent for that same period.

With that forecast in mind, it's not surprising, then, that agricultural products' share of the total waterborne commerce is expected to grow from its recent level of 11 percent to 16 to 18 percent. The other commodities showing marked changes have been noted here before—coal, which grows from 11 percent to a range of 20 to 28 percent.

I might note here that the big decrease that accounts for the other side of that equation is petroleum. We will be depending less on petroleum transportation over the next couple of decades.

The national waterway study identified 6 dominant waterway reaches for movement of agricultural products out of the 21 forecast reaches. Inland waterways which dominate the growth picture include four reaches of the Mississippi River from Minneapolis to the gulf, the Illinois Waterway, and the Columbia-Snake Waterway.

The commercial water transportation through the year 2000 were analyzed in the national waterway study under various sets of commodity forecasts. I should point out that the NWS—national waterway study—findings are based primarily on evaluation of physical data as contrasted with the corps' more traditionally detailed economic evaluations conducted for specific projects. I should also note that the administration's program for cost recovery for inland waterways, when enacted, as well as shifts in other economic parameters, will alter these projections somewhat. Let me briefly summarize these analyses.

Physical constraints to traffic are expected to occur by the end of this century at 22 U.S. lock sites located in 9 reaches of the inland and Great Lakes systems.

Line-haul costs due primarily to anticipated delays, which are going to increase, can be expected to increase by about 37 percent. That's a real dollar increase over the next 20 years if these bottlenecks develop as they are projected.

In addition to physical capacity constraints, the reliability of the waterway system is an important concern. System reliability can be expected to decline as the average age of locks increases; 52 locks—that's 42 here in the U.S. and 8 Canadian—are going to be over 50 years old by the year 2000.

In summary, many critical components of the existing waterway system are of a past technological era and will have to be replaced or modernized if the waterway system is going to meet its full potential as a critical element of an integrated national transportation system.

To dramatize this point, if you think we have 19 years before we get to the year 2000 and that's what you're thinking, as you know, Senator, it takes the corps 20 to 25 years to make and execute a decision on a waterway project. Construction alone, for example, of the first lock at Locks and Dam 26 on the Mississippi, is taking us 10 full years to complete. That's just the construction time. As you know, we don't have a decision yet on the second lock.

Responsive maintenance of dredged channels is another problem that requires both financial resources as well as timely resolution of environmental issues associated with dredging and dredged material disposal. A failure to maintain adequate depths can impact on the carrier industry in the short run by increasing costs and

creating increased safety hazards. The ultimate consequence of an inadequate operation and maintenance program can be to create bottlenecks equally as serious as those created by inadequate lock capacity.

The fundamental problems associated with our aging navigation system, reduced efficiency, and increasing costs are compounded by the growing demands for commercial navigation. This growing use contributes to the capacity problem. The competition for public investment funds will increase in the future. In fact, it's here right now, given the increasing rates of infrastructure deterioration. Therefore, a highly selective program for inland waterways modernization is required.

The U.S. waterways are effective movers of bulk commodities. The Nation is now faced with the need to export increased quantities of grain and coal and to continue to import large quantities of raw materials.

To meet these national needs, waterways planning has to fully reflect the role of the waterways in the U.S. economy. The constraints which I identified, unless removed, will impact on the effectiveness of our inland waterway system and the national economy. Movement of agricultural commodities is particularly subject to loss of effectiveness if identified constraints are allowed to continue.

Several measures can be taken to resolve our water transportation problem. We need to develop a national program for our waterways that would:

First, provide for cost sharing that would recover the costs of the inland waterways from their direct beneficiaries and relieve Federal taxpayers of the burden of waterway costs in the future. This is unpopular in many corners, but this Nation has to wrestle this question to the ground.

Second, undertake modernization on a systems basis, as opposed to the traditional project-by-project approach. Such modernization, with user fees, will increase the overall efficiency of the Nation's entire transportation system.

Third, emphasize timeliness, so that waterway modernization is synchronized with changing transportation problems. Remember the leadtime requirements for major waterway decisions that I mentioned earlier.

Fourth, provide for continuous assessment of the technological improvements needed to provide for a modern water transportation system.

Fifth, coordinate transportation planning with defense planning; and last, complete construction of critical projects such as Locks and Dam 26 and the Tennessee-Tombigbee Waterway, which will improve our ability to transport efficiently grain and other bulk commodities.

These measures should be pursued with full realization of the increasing State and local roles regarding water use decisions and with recognition of the importance of waterways in the Nation's overall economic development. These are important considerations for effective private, local, State, and Federal decisionmaking and investments.

Sir, in summary, the inland waterway system is a critical link in the exporting of grain. The system should be modernized to be able to respond to increasing demands and to continue to provide an efficient, low-cost, energy-efficient means of moving the high volumes of bulk commodities. With the administration's cost recovery proposals in place, economically justified construction and maintenance, as determined in the marketplace, can proceed on schedule with far less pressure on the Federal budget. This would enhance further our opportunities to strengthen our national economy.

Sir, this concludes my presentation.

[The prepared statement of General Heiberg follows:]

PREPARED STATEMENT OF MAJ. GEN. E. R. HEIBERG III

MR. CHAIRMAN, MEMBERS OF THE SUBCOMMITTEE:

Good morning! I am pleased to make my first appearance before your Committee in this your first of a series of hearings entitled "Economic Effects of Transportation on Agriculture."

For the record, I am Major General E. R. Heiberg III, Director of Civil Works, Office, Chief of Engineers, Headquarters, Department of the Army. I am responsible to the Chief of Engineers for staff supervision of the planning, design, construction, operation and maintenance of civil works activities of the U.S. Army Corps of Engineers. These activities include the management and improvement of the Nation's rivers, waterways, and harbors in the interests of navigation, flood control, and multiple-use purposes.

The Corps of Engineers is now completing the National Waterways Study, authorized and directed by the Congress in the Water Resources Development Act of 1976 (Public Law 94-587). I will present some observations from this study in my testimony today.

Although the subject matter of your series of hearings is "Transportation," my testimony will be limited to those aspects of transportation within the responsibility and jurisdiction of the U.S. Army Corps of Engineers. Federal responsibility for navigation improvement of rivers and harbors has been the duty of the Corps of Engineers almost exclusively, starting with legislation appropriating

funds in 1820 for a survey of certain tributaries to the Mississippi River and of portions of the Ohio and Mississippi Rivers, and in 1824 for the removal of obstructions to navigation from the Ohio and Mississippi Rivers.

In later years, periodic grants of authority from the Congress appropriated funds, and authorized improvements, for specific projects. Then, in 1935, Congress provided generally that investigations and improvements of rivers, harbors, and other waterways shall be under the jurisdiction of, and shall be prosecuted by, the Department of the Army under the direction of its Secretary and the supervision of the Chief of Engineers. In addition, various laws were enacted since 1866 which govern the collection and publication of statistics on waterborne domestic commerce, to include in 1912 the requirement to adopt a uniform system of classification for freight and upon rivers or inland waterways to collate ton-mileage statistics as far as practicable.

I will respond in turn to the three broad inquiries in your letter of November 9 and then respond to your questions.

Present and Future Transportation Needs

For Agricultural Products

Agriculture depends heavily on water transportation to haul its goods to domestic and foreign customers and to bring fertilizers and other

necessary inputs for growing agricultural products. Over 173 million tons - or \$35 billion in agricultural products - were exported in 1980. The major waterways serving agricultural commodities are the Upper and Lower Mississippi, Illinois, and Great Lakes - St. Lawrence Seaway systems. Other waterways, however, do move substantial quantities of agricultural inputs or commodities.

Exports of farm products increased more than 162% from 1970 to 1980. Corn exports quadrupled and soybeans doubled. Waterborne traffic by barges in these commodities increased at similar rates. Domestic waterborne shipments of processed food and kindred products increased by 90% in the decade.

Although waterways carried a large share of increased agricultural trade in the 1970's, rail and truck play a vital role. The first national survey of grain transport shows that trucks dominate intrastate short distance movements of corn and soybeans, although rail handles 54% of intrastate wheat. Interstate, longer hauls show that rail handles 58% of wheat, 48% of corn and 28% of soybean movements. Barge accounts for 42% of soybeans, 34% of corn and 24% of wheat movements.

For export movements, barge accounts for 61% of the soybeans, half of the corn and 29% of the wheat. Rail accounts for 57% of the wheat, 37% of corn and 23% of soybeans. About 90% of corn, wheat and soybeans served by domestic waterborne commerce is bound for ports of export.

Thus, trucks specialize in short hauls, waterways specialize in corn and soybeans and wheat for export and rail specializes in wheat growing areas and corn in areas further from the inland waterway systems.

Illinois, Iowa, Minnesota, Washington, Oregon, Missouri, Idaho, Arkansas, Indiana and Mississippi are the states for which waterway transport is a key to marketing farm products, primarily export grains.

New Orleans is the major grain export port related to the waterway system, followed by Great Lakes ports and the Pacific-Northwest ports of Seattle and Portland. The major grain export terminals served primarily by rail are Houston and Galveston. The significance of the barge transportation of grain to points of export is shown by the following percentages of U.S. production that moved by barge to points of export: soybeans, 24; wheat, 16; and corn, 15.

Projections in the Global 2000 Report to the President show a continuation of the strong U.S. position in world grain production and export. Dominant growth is anticipated in the three major export grains. This in turn is expected to result in growth in barge transport of grains and in exports from U.S. Coastal and Great Lakes ports. The major impacted waterways are the Mississippi River, the Illinois Waterway, the Ohio River, the Missouri River, the McClellan Kerr Waterway System, and the Columbia-Snake Waterway. The total of

agricultural commodities shows a doubling in waterborne tonnage from 1977 to the turn of the century.

In summary, all modes of transportation have a role in moving grain to markets depending upon the distance of movement, location of origins and destinations of the grain and available routings. Trucks serve as collectors in movements to both rail and barge terminals for larger volume, longer haul shipments. Barge transport of grain is especially significant in the export movement of high volume and long distances. The foreign destinations of U.S. grain exports are world wide to ports of nations large and small. A variety of ship sizes serves that global grain trade. An analysis of the need for transportation for agricultural products must be made in conjunction with the total load of all commodities on the transportation system. This would include the fertilizers and the agricultural chemicals. Agricultural commodities comprise about ten percent of the U.S. total waterborne commerce but are the leading commodities on the Upper and Lower Mississippi River, the Illinois Waterway and the Columbia-Snake Waterway.

Transportation Bottlenecks

Given the demonstrated critical importance of the Nation's waterways system in the transportation of agricultural products to both domestic markets and points of export, it is crucial that this system continue to be maintained and improved to insure that additional transportation

bottlenecks do not develop in the future. The ability of our waterway system to serve as an efficient, reliable mode of transportation for the movement of U.S. products must be viewed in the context of the physical capacity of the existing system and forecasts of total future commodity movements. The major commodities currently moving on the inland waterway system, and consequently competing for the limited capacity of the system, are agricultural products, coal, iron ore and steel and petroleum products.

The agricultural sector depends on the waterway system to move much of its products to world markets. Nearly 50 percent of the grain exports which dominate agricultural exports, move to ports by barge. Specifically, over 60 percent of soybeans exports, 50 percent of corn exports, and 29 percent for wheat exports move by barge. The U.S. share of the world's exports in major grains has increased from 46 percent in 1970 to 62 percent in 1977.

The water transportation infrastructure serves the most basic of U.S. industries -- energy, iron and steel and agriculture. The revitalization of the U.S. economy through growth in the domestic economy and improvement of the balance of payments is strongly supported by waterways. The role of waterways in key defense industries and energy movements also demonstrates the importance of a viable waterway and port system to the Nation's defense.

Transportation of agricultural products - foreign and domestic - on the waterway system is expected to at least double from the base year of 1977 to the turn of the century according to forecasts produced for the National Waterways Study. This contrasts to increases forecast for all commodities from 24-51 percent for the same period.

Agricultural products share of the total waterborne commerce is expected to grow from its recent level of 10.6 percent to 16-18 percent. The other commodities showing marked changes are: Coal which grows from 11.1 percent to a range of 20-28 percent; petroleum which drops from its 50 percent share to 22-27 percent, a halving; and metallic ores and steel which increases from 7.8 percent to the 10-12 percent range. The importance of these other commodities in terms of potential bottlenecks is where that growth, or decline, occurs in relation to the agricultural growth.

The National Waterways Study identified six dominant waterway reaches for movement of agricultural products out of the 21 forecast reaches. Inland waterways which dominate the growth picture include four reaches of the Mississippi River from Minneapolis to the Gulf, the Illinois Waterway and the Columbia-Snake Waterway.

The commercial water transportation needs through the year 2000 were analyzed in the National Waterway Study under various sets of commodity forecasts. I should point out that the NWS findings are based primarily on evaluation of "physical" data, as contrasted with our more traditional, detailed economic evaluations conducted for

specific projects. I should also note that the Administration's program for cost recovery for inland waterways when enacted, as well as shifts in other economic parameters, will alter these projections somewhat. I will give you a brief summary of these analyses:

a. Physical constraints to traffic are expected to occur by the end of this century at 22 U.S. lock sites located in nine reaches of the Inland and Great Lakes System.

b. Linehaul costs due primarily to anticipated delays, can be expected to increase by about 37 percent over the next 20 years if these bottlenecks develop.

c. In addition to physical capacity constraints, the reliability of the waterway system is an important concern. System reliability can be expected to decline as the average age of locks increases. Fifty two locks -- 44 U.S. plus eight Canadian - will be in excess of 50 years old by the year 2000. In summary, many critical components of the existing waterway system are of a past technological era and will have to be replaced or modernized if the waterway system is to meet its full potential as a critical element of an integrated national transportation system.

d. Responsive maintenance of dredged channels is a problem which requires both financial resources as well as timely resolution of environmental issues associated with dredging and dredged material disposal. A failure to maintain adequate navigation depths can impact on the carrier industry in the short run by increasing costs and creating increased safety hazards. The ultimate consequence of an

inadequate operation and maintenance program can be to create bottlenecks, equally as serious as those created by inadequate lock capacity.

e. The fundamental problems associated with our aging navigation system--reduced efficiency and increasing costs--are compounded by the growing demands for commercial navigation. This growing use contributes to the capacity problems. The competition for public investment funds will increase in the future, given the increasing rates of infrastructure deterioration. Therefore a highly selective program for inland waterways modernization is required.

Policy Implications of National Waterways Study

The U.S. Waterways are effective movers of bulk commodities. The Nation is now faced with the need to export increased quantities of grain and coal - today one-half of U.S. grain exports move to ports by barge - and to continue to import large quantities of raw materials such as crude petroleum, iron ore and bauxite.

To meet these national needs, waterways planning must fully reflect the role of the waterways in the U.S. economy. The constraints I previously identified -- unless removed -- will impact on the effectiveness of our inland waterway system and the national economy. Movement of agricultural commodities is particularly subject to loss of effectiveness if identified constraints are allowed to continue.

There are several measures that could be taken to resolve water transportation problems. We need to develop a national program for our waterways that would:

- a. Provide for cost sharing that would recover the costs of the inland waterways from their direct beneficiaries and relieve Federal tax payers of the burden of waterway costs in the future.
- b. Undertake modernization on a systems basis as opposed to the traditional project-by-project approach. Such modernization, with user fees, will increase the overall efficiency of the Nation's entire transportation system.
- c. Emphasize timeliness so that waterway modernization is synchronized with changing traffic patterns.
- d. Provide for continuous assessment of the technological improvements needed to provide for a modern water transportation system.
- e. Coordinate transportation planning with defense planning, and
- f. Complete construction of critical projects such as Locks and Dam 26 and the Tennessee-Tombigbee Waterway which will improve our ability to transport efficiently grain and other bulk commodities.

These measures should be pursued with full realization of the increasing state and local roles regarding water use decisions and with recognition of the importance of waterways in the Nation's overall economic development. These are important considerations for effective private, local, state and Federal decisionmaking and investments.

In summary, Mr. Chairman, the inland waterway system is a critical link in the exporting of grain. The system should be modernized to be able to respond to increasing demands and to continue to provide an efficient low cost, energy efficient means of moving high volumes of bulk commodities. With the Administration's cost recovery proposals in place, economically justified construction and maintenance, as determined in the market place, can proceed on schedule with far less pressure on the Federal budget. This would enhance further our opportunities to strengthen our national economy.

Mr. Chairman, this concludes my presentation. I will be pleased to respond to any questions you may have.

Senator ABDNOR. Thank you, General. The last witness is Mr. Fitzpatrick.

STATEMENT OF MARTIN F. FITZPATRICK, JR., DIRECTOR, OFFICE OF TRANSPORTATION, U.S. DEPARTMENT OF AGRICULTURE

Mr. FITZPATRICK. Thank you, Mr. Chairman. I, too, would like to summarize my prepared statement.

I would like to thank you and commend you for holding these hearings on agricultural transportation. I am Director of the Office of Transportation, U.S. Department of Agriculture. This Office was established in 1979 to serve as a focal point for transportation activities of the Department.

Agriculture's use of transportation services experienced strong growth through the 1970's. Much of this growth came from increased exports of grains and soybeans. This growth did not continue in 1980-81, due in part to the suspension of large sales to the Soviet Union during that period. Exports of grains, soybeans, soybean products, and cotton were 146 million metric tons in the 1979-80 crop marketing year, but only 142 million metric tons in 1980-81. The Department has forecast an increase to 160 million metric tons in 1981-82.

Agricultural products usually move long distances. Therefore, the transportation requirements are relatively greater than a reference to tons would suggest. For example, agricultural traffic accounts for only a tenth or so of the tons transported on the inland waterways, but it accounts for about a third of the ton-miles.

One agricultural product in particular that moves long distances is wheat. In 1981-82 crop year, wheat exports are expected to increase by nearly 11 million metric tons over the 1980-81 level of 41 million metric tons.

The Department expects growth of agricultural exports to continue in the 1980's. Projections of exports were made recently and submitted to the President and the Congress, as required by the Agricultural Act of 1980. These projections show 1985 exports of grain and soybeans to be 168 million metric tons, an increase of 48 million metric tons over average exports in 1977-79; 59 percent of this increase is in coarse grains.

The USDA Economic Research Service in July 1980 made projections of exports to the years 1985, 1990, and 2000. These showed further increases of 23 million metric tons from 1985 to 1990, and of 58 million metric tons from 1990 to the year 2000.

Agricultural exports are essential to maintaining farm incomes. The Department has estimated that of 337 million acres harvested in 1979, the product obtained from 116 million acres was exported. Mr. Chairman, the last thing U.S. farmers need is to have their income potentials hampered by marketing problems. Transportation is critical to continued growth in agricultural exports and to achievement of reasonable farm incomes.

Without adequate service on a timely basis at reasonable cost, export markets will diminish. Domestic outlets will not quickly adjust to the added supplies of production from more than 100 million acres of land. Agricultural transportation has proceeded uneventfully for the past 18 months or so except for congestion at

points of entry through Mexico and long railcar turnaround time on movements into Mexico. This situation, Mr. Chairman, has been alleviated through the work of our Office and the Federal Railroad Administration in working with the Government of Mexico.

Following the suspension the U.S.S.R. in January 1980, complaints about railcar shortages for grain loading nearly ceased, and unregulated barge rates were rapidly adjusted to lower levels. Similar conditions have continued somewhat unabated to present.

Rail freight rates in general have continued to increase, but railroads in several producing regions instituted new multiple car and unit train services for grain that may have helped restrain the rise in transportation costs for agriculture, as Mr. Blanchette indicated in his remarks. Changes in the underlying economic conditions for transportation and in Federal policies with respect to transportation have been and are of concern to agriculture.

Among the prominent concerns of the last decade or so were railcar shortages for grain, cotton, and perishables; deferred maintenance of rail lines; railroad bankruptcies and branch line abandonments; more rapid increase in rail rates than in general inflation; OT-5 conditions imposed on use of nonrailroad-owned cars; deregulation or regulatory relaxation for railroads.

Senator ABDNOR. May I interrupt? What is OT-5?

Mr. FITZPATRICK. Mr. Chairman, OT-5 refers to the agreements that railroads and shippers have relating to a railroads obligation to pull shipper-owned cars. Consideration is being given by the railroads to terminate these agreements because of the great car surplus that exists presently. We, along with FRA, are monitoring the situation very closely, since the shippers have a very great investment in privately owned cars.

Prominent concerns also include potential cost impacts of the Panama Canal Treaty, rising diesel fuel prices and fuel allocations considered by many owner-operated truckers to be so unfair that they tried to shut down trucking at the national level; variable State laws and regulations adversely affecting the efficiency of interstate trucking; decreased fundings in constant dollars of highway programs by both the Federal and State governments; and many others. Obviously, I cannot comment in depth on all of these concerns in the remaining time available to me.

The congressionally mandated study of waterway user charges, when available from the Department of Transportation, will contain information that will help agricultural and other groups decide what methods to support. The Office of Transportation will actively seek the views and work with agricultural interests to help them understand the findings of that study and the implications for efficiency of the transportation system of user charge alternatives. The administration will give full consideration to those views.

As noted earlier, conditions of car supply have been good from the viewpoint of grain shippers since early 1980. Some jumbo covered hopper cars have been idle at all times for the past several months. Some railroads have refused to renew OT-5 agreements for use of nonrailroad-owned hopper cars, and might delay renewals until shortages become acute.

A second transportation concern of agricultural interests is that of criteria to be used in "market dominance" tests in cases of proposed rate increases. Under provisions of the Staggers Rail Act of 1980, rates are subject to review by the Interstate Commerce Commission only after findings that the railroads enjoy "market dominance" over the traffic to be affected by the increases. The Commission has proposed to discontinue use of several market dominance criteria used between 1977 and 1980 under provisions of the Railroad Rehabilitation and Regulatory Reform Act of 1976. Instead, the Commission proposed to use only ratio of revenue to variable cost and product and geographic competition criteria. A particular concern of some shippers is that the Commission proposes to ignore shipper investments in railcar fleets and other rail-oriented facilities in decisions as to whether railroads have market dominance.

A third issue that will be considered carefully by agricultural interests is that of any proposals for change in Federal highway user charges for trucks. Agriculture is a larger user of long-haul trucking where heavy loading becomes critical in terms of reducing the cost of transport per unit of product. Livestock, meats, fruits and vegetables, and poultry and dairy products are moved predominantly by trucks, and except for fluid milk and slaughter livestock, most of these hauls are long distance. The Department of Transportation currently is studying impacts of truck weights on highway costs, and is expected to have recommendations about cost recovery alternatives for consideration by Congress next year.

You asked for my ideas as to how America's transportation system might become more integrated and efficient for agriculture. I think my ideas match those of the Assistant Secretary of Agriculture for Marketing and Inspection Services, C. W. McMillan. Earlier this year, he made it clear that we in USDA are to work toward improved productivity in the food and fiber system. Improved productivity in the agricultural transportation system is to be sought if it is not offset by reduced productivity elsewhere in the food and fiber system.

Mr. McMillan gave us the following guidelines: The primary objective of the agricultural transportation policy of the United States is to increase the efficiency of the movement of agricultural products and farm inputs consistent with improving net farm income, minimizing the impact of marketing costs on the consumers' food and fiber bill, and/or reducing the taxpayers' burden in providing facilities used in transporting agricultural traffic. This is particularly desirable given the expanding demands for transportation of agricultural products, especially for exports. This objective can best be met by an efficient and commercial viable transportation system. Such a system should be achieved primarily through market forces.

Before I conclude, Mr. Chairman, I would like to commend Mr. Blanchette and General Heiberg for the cooperation they have shown the USDA. I think more than ever before this administration is committed to strong communications between agencies. As you know, in agriculture, it's important that the USDA have a voice in both the Army Corps and the Federal Railroad Administration, and I have had a very good working relationship with

these individuals. We do not always agree, but I know I have an ear with those agencies.

Thank you, sir, for this opportunity.

[The prepared statement of Mr. Fitzpatrick follows:]

PREPARED STATEMENT OF MARTIN F. FITZPATRICK, JR.

MR. CHAIRMAN AND MEMBERS. MY NAME IS MARTIN F. FITZPATRICK, JR. I AM DIRECTOR OF THE OFFICE OF TRANSPORTATION, U.S. DEPARTMENT OF AGRICULTURE. THIS OFFICE WAS ESTABLISHED IN 1979 TO SERVE AS A FOCAL POINT FOR TRANSPORTATION ACTIVITIES OF THE DEPARTMENT. I AM HERE AT YOUR REQUEST TO DISCUSS AGRICULTURE'S PRESENT AND FUTURE NEEDS FOR TRANSPORTATION, ESPECIALLY FOR EXPORT, AND SOME OF THE BOTTLENECKS OR OTHER TRANSPORTATION PROBLEMS FACING AGRICULTURE.

AGRICULTURE'S USE OF TRANSPORTATION SERVICES EXPERIENCED STRONG GROWTH THROUGH THE 1970'S. MUCH OF THIS GROWTH CAME FROM INCREASED EXPORTS OF GRAINS AND SOYBEANS. THIS GROWTH DID NOT CONTINUE IN 1980-81, DUE IN PART TO THE SUSPENSION OF LARGE SALES TO THE SOVIET UNION DURING THAT PERIOD. EXPORTS OF GRAINS, SOYBEANS, SOYBEAN PRODUCTS AND COTTON WERE 146 MILLION METRIC TONS IN THE 1979-80 CROP MARKETING YEAR, BUT ONLY 142 MILLION METRIC TONS IN 1980-81. THE DEPARTMENT HAS FORECAST AN INCREASE TO 160 MILLION METRIC TONS IN 1981-82.

AGRICULTURAL PRODUCTS USUALLY MOVE LONG DISTANCES. THEREFORE, THE TRANSPORTATION REQUIREMENTS ARE RELATIVELY GREATER THAN A REFERENCE TO TONS WOULD SUGGEST. FOR EXAMPLE, AGRICULTURAL TRAFFIC ACCOUNTS FOR ONLY A TENTH OR SO OF THE TONS TRANSPORTED ON THE INLAND WATERWAYS, BUT IT ACCOUNTS FOR ABOUT A THIRD OF THE TON MILES.

ONE AGRICULTURAL PRODUCT IN PARTICULAR THAT MOVES LONG DISTANCES IS WHEAT. IN 1981-82 CROP YEAR, WHEAT EXPORTS ARE EXPECTED TO INCREASE BY NEARLY 11 MILLION METRIC TONS OVER THE 1980-81 LEVEL OF 41 MILLION METRIC TONS.

THE DEPARTMENT EXPECTS GROWTH OF AGRICULTURAL EXPORTS TO CONTINUE IN THE 1980'S, BUT AT A SLOWER RATE OF INCREASE THAN OCCURRED IN THE 1970'S. PROJECTIONS OF EXPORTS WERE MADE RECENTLY AND SUBMITTED TO THE PRESIDENT AND THE CONGRESS AS REQUIRED BY THE AGRICULTURAL ACT OF 1980. THESE PROJECTIONS SHOW 1985 EXPORTS OF GRAINS AND SOYBEANS TO BE 168 MILLION METRIC TONS, AN INCREASE OF 48 MILLION METRIC TONS OVER AVERAGE EXPORTS IN 1977-79, FIFTY-NINE PERCENT OF THIS INCREASE IS COARSE GRAINS.

THE ECONOMIC RESEARCH SERVICE IN JULY 1980 MADE PROJECTIONS OF EXPORTS TO THE YEARS 1985, 1990, AND 2000. THESE SHOWED FURTHER INCREASES OF 23 MILLION METRIC TONS FROM 1985 TO 1990 AND OF 58 MILLION METRIC TONS FROM 1990 TO 2000.

WE BELIEVE THAT AGRICULTURAL EXPORTS ARE ESSENTIAL TO MAINTAINING FARM INCOMES. THE DEPARTMENT HAS ESTIMATED THAT OF 337 MILLION ACRES HARVESTED IN 1979, THE PRODUCT OBTAINED FROM 116 MILLION ACRES WAS EXPORTED. YET DESPITE STRONG GROWTH OF EXPORTS THROUGHOUT THE 1970'S, NET FARM INCOME IN 1967 DOLLARS EXCEEDED THAT OF 1969 IN ONLY ONE YEAR SINCE 1975. NET FARM INCOME WAS 20 BILLION DOLLARS IN 1980-81 AND IS NOW PROJECTED TO BE BETWEEN \$22 BILLION AND \$27 BILLION IN 1981-82.

THESE RELATIVELY LOW INCOMES OF RECENT YEARS ARE NOT DUE TO LOW PRODUCTION OR UNWILLINGNESS TO SELL. EXCEPT FOR A DROUGHT - INDUCED DOWNTURN IN CROP PRODUCTION IN 1980, PRODUCTION HAS INCREASED ALMOST EVERY YEAR SINCE 1969. BY 1979, PRODUCTION WAS 25 PERCENT HIGHER THAN IN 1969.

IN ADDITION TO MEETING INCREASING DOMESTIC DEMANDS, EXPORTS INCREASED 139 PERCENT BETWEEN 1969 AND 1979. LAND USED TO PRODUCE EXPORTS INCREASED FROM 61 MILLION ACRES IN 1969 TO 116 MILLION ACRES IN 1979. YIELD PER ACRE INCREASED 23 PERCENT OVER THE SAME PERIOD.

THERE APPEARS TO BE FEW PROSPECTS FOR SIGNIFICANT IMPROVEMENT IN NET FARM INCOME IN 1982. ABUNDANT SUPPLIES OF AGRICULTURAL COMMODITIES IN THE WORLD WILL RESULT IN A SHARP BUILD-UP OF STOCKS. RECORD GLOBAL CROPS OF WHEAT, COARSE GRAINS, AND RICE WERE ACHIEVED THIS YEAR. WEAKNESS IN ECONOMIC ACTIVITY IN MANY DEVELOPED AND DEVELOPING COUNTRIES LIKELY WILL KEEP DEMANDS IN CHECK, ALTHOUGH NUMEROUS GOVERNMENTS REPORTEDLY ARE TAKING STRONG MEASURES TO SPUR ECONOMIC ACTIVITY.

THE LAST THING U.S. FARMERS NEED IS TO HAVE THEIR INCOME POTENTIALS HAMPERED BY MARKETING PROBLEMS. TRANSPORTATION IS CRITICAL TO CONTINUED GROWTH IN AGRICULTURAL EXPORTS, AND TO THE ACHIEVEMENT OF REASONABLE FARM INCOMES. WITHOUT ADEQUATE SERVICE ON A TIMELY BASIS AT REASONABLE COST, EXPORT MARKETS WILL DIMINISH. DOMESTIC OUTLETS WILL NOT QUICKLY ADJUST TO THE ADDED SUPPLIES OF PRODUCTION FROM MORE THAN A HUNDRED MILLION ACRES OF LAND.

AGRICULTURAL TRANSPORTATION HAS PROCEEDED UNEVENTFULLY FOR THE PAST 18 MONTHS OR SO, EXCEPT FOR CONGESTION AT POINTS OF ENTRY TO MEXICO AND LONG RAILCAR TURNAROUND TIMES ON MOVEMENTS INTO MEXICO. FOLLOWING THE SUSPENSION OF SALES TO THE USSR IN EARLY JANUARY 1980, COMPLAINTS ABOUT RAILCAR SHORTAGES FOR GRAIN LOADING NEARLY CEASED, AND UNREGULATED BARGE RATES WERE RAPIDLY ADJUSTED TO LOWER LEVELS. SIMILAR CONDITIONS HAVE CONTINUED SOMEWHAT UNABATED TO PRESENT. RAIL FREIGHT RATES IN GENERAL HAVE CONTINUED TO INCREASE, BUT RAILROADS IN SEVERAL PRODUCING REGIONS INSTITUTED NEW MULTIPLE-CAR AND UNIT-TRAIN SERVICES FOR GRAIN THAT MAY HAVE HELPED RESTRAIN THE RISE IN TRANSPORT COSTS FOR AGRICULTURE.

BUT THIS DOES NOT MEAN THAT FARMERS AND AGRICULTURAL SHIPPERS ARE COMPLACENT ABOUT RECENT OR IMPENDING CHANGES IN THE CONDITIONS AFFECTING AGRICULTURAL TRANSPORTATION. CHANGES IN THE UNDERLYING ECONOMIC CONDITIONS FOR TRANSPORTATION AND IN FEDERAL POLICIES WITH RESPECT TO TRANSPORTATION HAVE BEEN AND ARE OF CONCERN TO AGRICULTURE. AMONG THE PROMINENT CONCERNS OF THE LAST DECADE OR SO WERE RAILCAR SHORTAGES FOR GRAIN, COTTON AND PERISHABLES; DEFERRED MAINTENANCE OF RAIL LINES; RAILROAD BANKRUPTCIES AND BRANCHLINE ABANDONMENTS; MORE RAPID INCREASE IN RAIL RATES THAN IN GENERAL INFLATION; OT-5 CONDITIONS IMPOSED ON USE OF NONRAILROAD-OWNED CARS; DEREGULATION OR REGULATORY RELAXATION FOR RAILROADS; POTENTIAL COST IMPACTS OF THE PANAMA CANAL TREATY; RISING DIESEL FUEL PRICES AND FUEL ALLOCATIONS CONSIDERED BY MANY OWNER-OPERATOR TRUCKERS TO BE SO UNFAIR THAT THEY TRIED TO SHUT DOWN TRUCKING AT THE NATIONAL LEVEL; VARIABLE STATE LAWS AND REGULATIONS ADVERSELY AFFECTING THE EFFICIENCY OF INTERSTATE TRUCKING; DECREASED FUNDINGS IN CONSTANT DOLLARS OF HIGHWAY PROGRAMS BY BOTH THE FEDERAL AND STATE GOVERNMENTS; AND OTHERS. OBVIOUSLY, I CANNOT COMMENT IN DEPTH ON ALL OF THESE CONCERNS IN THE REMAINING TIME AVAILABLE TO ME.

THE CONGRESSIONALLY MANDATED STUDY OF WATERWAY USER CHARGES WHEN AVAILABLE FROM THE DEPARTMENT OF TRANSPORTATION, WILL CONTAIN INFORMATION THAT WILL HELP AGRICULTURAL AND OTHER GROUPS DECIDE WHAT METHODS TO SUPPORT. THE OFFICE OF TRANSPORTATION WILL ACTIVELY SEEK THE VIEWS AND WORK WITH AGRICULTURAL INTERESTS TO HELP THEM UNDERSTAND THE FINDINGS OF THAT STUDY AND IMPLICATIONS FOR EFFICIENCY OF THE TRANSPORTATION SYSTEM OF USER CHARGE ALTERNATIVES. THE ADMINISTRATION WILL GIVE FULL CONSIDERATION TO THOSE VIEWS.

AS NOTED EARLIER, CONDITIONS OF CAR SUPPLY HAVE BEEN GOOD FROM THE VIEWPOINT OF GRAIN SHIPPERS SINCE EARLY 1980. SOME JUMBO COVERED HOPPER CARS HAVE BEEN IDLE AT ALL TIMES FOR THE PAST SEVERAL MONTHS. SOME RAILROADS HAVE REFUSED TO RENEW OT-5 AGREEMENTS FOR USE OF NONRAILROAD-OWNED HOPPER CARS, AND MIGHT DELAY RENEWALS UNTIL SHORTAGES BECOME ACUTE.

A SECOND TRANSPORTATION CONCERN OF AGRICULTURAL INTERESTS IS THAT OF CRITERIA TO BE USED IN "MARKET DOMINANCE" TESTS IN CASES OF PROPOSED RATE INCREASES. UNDER PROVISIONS OF THE STAGGERS RAIL ACT OF 1980, RATES ARE SUBJECT TO REVIEW BY THE INTERSTATE COMMERCE COMMISSION ONLY AFTER FINDINGS THAT THE RAILROADS ENJOY "MARKET DOMINANCE" OVER THE TRAFFIC TO BE AFFECTED BY THE INCREASES. THE COMMISSION HAS PROPOSED TO DISCONTINUE USE OF SEVERAL MARKET DOMINANCE CRITERIA USED BETWEEN 1977 AND 1980 UNDER PROVISIONS OF THE RAILROAD REHABILITATION AND REGULATORY REFORM ACT OF 1976. INSTEAD, THE COMMISSION PROPOSES TO USE ONLY RATIO OF REVENUE TO VARIABLE COST AND PRODUCT AND GEOGRAPHIC COMPETITION CRITERIA. A PARTICULAR CONCERN OF SOME SHIPPERS IS THAT THE COMMISSION PROPOSES TO IGNORE SHIPPER INVESTMENTS IN RAILCAR FLEETS AND OTHER RAIL ORIENTED FACILITIES IN DECISIONS AS TO WHETHER RAILROADS HAVE MARKET DOMINANCE.

A THIRD ISSUE THAT WILL BE CONSIDERED CAREFULLY BY AGRICULTURAL INTERESTS IS THAT OF ANY PROPOSALS FOR CHANGE IN FEDERAL HIGHWAY USER CHARGES FOR TRUCKS. AGRICULTURE IS A LARGE USER OF LONG-HAUL TRUCKING WHERE HEAVY LOADING BECOMES CRITICAL IN TERMS OF REDUCING THE COST OF TRANSPORT PER UNIT OF PRODUCT. LIVESTOCK, MEATS, FRUITS AND VEGETABLES, AND POULTRY AND DAIRY PRODUCTS ARE MOVED PREDOMINANTLY BY TRUCKS, AND EXCEPT FOR FLUID MILK AND SLAUGHTER LIVESTOCK, MOST OF THESE HAULS ARE LONG DISTANCE. THE DEPARTMENT OF TRANSPORTATION CURRENTLY IS STUDYING IMPACTS OF TRUCK WEIGHTS ON HIGHWAY COSTS, AND IS EXPECTED TO HAVE RECOMMENDATIONS ABOUT COST RECOVERY ALTERNATIVES FOR CONSIDERATION BY CONGRESS NEXT YEAR.

YOU ASKED FOR MY IDEAS AS TO HOW AMERICA'S TRANSPORTATION SYSTEM MIGHT BECOME MORE INTEGRATED AND EFFICIENT. I THINK MY IDEAS MATCH THOSE OF THE ASSISTANT SECRETARY OF AGRICULTURE FOR MARKETING AND INSPECTION SERVICE, C.W. MCMILLAN. EARLIER THIS YEAR, HE MADE IT CLEAR THAT WE IN USDA ARE TO WORK TOWARD IMPROVED PRODUCTIVITY IN THE FOOD AND FIBER SYSTEM. IMPROVED PRODUCTIVITY IN THE AGRICULTURAL TRANSPORTATION SYSTEM IS TO BE SOUGHT IF IT IS NOT OFFSET BY REDUCED PRODUCTIVITY ELSEWHERE IN THE FOOD AND FIBER SYSTEM. MR. MCMILLAN GAVE US THE FOLLOWING GUIDELINES:

THE PRIMARY OBJECTIVE OF THE AGRICULTURAL TRANSPORTATION POLICY OF THE UNITED STATES IS TO INCREASE THE EFFICIENCY OF THE MOVEMENT OF AGRICULTURAL PRODUCTS AND FARM INPUTS CONSISTENT WITH IMPROVING NET FARM INCOME, MINIMIZING THE IMPACT OF MARKETING COSTS ON THE CONSUMERS' FOOD AND FIBER BILL, AND/OR REDUCING THE TAXPAYERS' BURDEN IN PROVIDING FACILITIES USED IN TRANSPORTING AGRICULTURAL TRAFFIC. THIS IS PARTICULARLY DESIRABLE GIVEN THE EXPANDING DEMANDS FOR TRANSPORTATION OF AGRICULTURAL PRODUCTS, ESPECIALLY FOR EXPORTS. THIS OBJECTIVE CAN BEST BE MET BY AN EFFICIENT AND COMMERCIALY VIABLE TRANSPORTATION SYSTEM. SUCH A SYSTEM SHOULD BE ACHIEVED PRIMARILY THROUGH MARKET FORCES.

MR. CHAIRMAN, THIS COMPLETES MY STATEMENT. THANK YOU FOR THIS OPPORTUNITY TO PRESENT SOME OF AGRICULTURE'S NEEDS FOR AND CONCERNS ABOUT TRANSPORTATION.

Senator ABDNOR. Thank you, Mr. Fitzpatrick. I appreciate the testimony from all three of you gentlemen. Clearly, you have all very well understood the need for an integrated future transportation system. It does depend upon working together for a common goal.

I guess a third form of transportation we might have had here today would have been Mr. Barnhart with the highway transportation. I guess you can separate passenger transportation from commodities in the same way of the waterway, pretty much as a commodity, or highways, of course, as both transportation for individuals up and down the highways, as well as commodities. Of course, Mr. Fitzpatrick has to work with all three.

Has that always been the case? I know you are working closely together. Is that something new, or have we been doing that for a long time, would you say? I realize you're new on this end. Have we really worked together like we are today?

Mr. BLANCHETTE. Well, I think that we have since January 21, to my knowledge, Mr. Chairman. I won't comment on prior experiences. It was noted earlier, the absence of a national transportation, a fact that has been bemoaned for at least 30 years to my knowledge and perhaps before that.

But I think that you can take the thread of our respective testimony and find a very interrelated and common point. Kind of a business orientation to it—a lack of meaningless rhetoric. Without saying that there has not been total cooperation in the past, I really can't comment on that. But I look forward to a good dialog in the future.

Senator ABDNOR. It is interesting to see how far we have come. I haven't been here that many years. And I recall having to wait and wait for cars for shipping of grain out in the Midwest, and now we are being told here that we actually have them not being used enough. Are we going to be finding shippers who have gone out and leased cars, and in some instances even purchased cars? Are they suffering now because of it? I guess that's what you're telling us here, isn't it?

Mr. FITZPATRICK. Yes, Mr. Chairman. There are many shippers and farmers suffering from holding leased and owned cars. I must say the railroads are also suffering because they too have large fleets of cars. Most of the railroads in the country have cooperated very well with the shippers and have tried to develop an equitable situation.

Senator ABDNOR. What do we need? More sales or more lines to run them all up and down?

Mr. FITZPATRICK. We need more sales, and we are very optimistic about future prospects.

Senator ABDNOR. I was just wondering, Mr. Blanchette, with the Staggers Act in effect now—what, a year?

Mr. BLANCHETTE. A year. Just over a year.

Senator ABDNOR. Are you quite satisfied with the way it is progressing? I mean, if you had to name any one area where it could be improved on, could you do that, where the legislation needs changes?

Mr. BLANCHETTE. Together with Mr. Schiefelbein, my deputy administrator, whom you know, we addressed that issue several

weeks ago before the Senate Commerce Committee. And we obviously can see some areas of concern. I know for example in Mr. Fitzpatrick's testimony of the 10 areas that he said agriculture had concerns in transportation, 6 of them were railroad related and railroad oriented.

I think, however, at this juncture, I could not come forward with any specific amendment to the Staggers Act. I think it's a good piece of legislation. It took out over a century—a century—of shackles and fetters on the railroad industry. Obviously, after 100 years of operating in a totally regulated environment, 12 months is not enough time to suggest very much, except that I am very pleased with the way the railroads and shippers generally have availed themselves of one of the principal business tools of the Staggers Act, the contract rate.

I think a lot more work has to be done. The Commission is developing expertise in a new environment. I am confident that the way they have addressed these issues is statesmanlike, so I think in this new environment we are making progress and making headway. I would be loath to change it now.

I would like to see it work more. I would like to see the railroads get to understand how they can operate in this new environment better, and I think the shippers, in turn, will have to understand some of the old rules. But the new rules are not bad rules, and with some more time and increasing expertise developed at the ICC, the extent that we can help at the Federal Railroad Administration, I assure you, we will. I think we're on the right course. We know the problems. We are working on them, and I think the Congress passed a good piece of legislation last year.

Senator ABDNOR. I am sure that's good advice. To give you a chance to operate them, to see if we do have any bugs in the legislation. I guess it does take time for the private sector of the railroads to adjust to it, too. It's a whole new approach, I'm sure. There are operations for them.

When you are looking at the problems of the railroads now, do you tie it to an overall pattern for railroads in the future? Do the railroads come to you with problems and troubles? The decision that you make, is that dependent upon long-run, long-term transportation policies?

Mr. BLANCHETTE. Yes, of course. Obviously, the railroads have to compete in a transportation—in a total transportation environment. We have seen some good, positive signs about railroads in the last year. I am very concerned, as you know, and you are, about the leftover problems that still plague us in the agricultural area—the problem of the Milwaukee Railroad, the problems of the Rock Island. We still have railroads throughout the country that do not attract a reasonable rate of return on their investment, and we cannot afford that. We have seen too much in the past of marginal railroads and what it has meant when they fail.

So we have a long way to go in the railroad industry, but I think for the first time in many years there appears to be positive hope.

It used to be in the old days on the Penn Central, Mr. Chairman, we had a slogan: "Daylight at the end of the tunnel is probably an oncoming train." [Laughter.]

But I think that the daylight we see now is positive daylight, so I am hopeful for it. But we always have to—railroads will always have to compete in a total transportation environment.

Senator ABDNOR. I'm sure there are some marginal areas in this country that railroads service—we have abandonments going on, and yet it's a very vital source of transportation. The only hope, I guess, is to depend on the highways to get them to areas where railroads are possible?

Mr. BLANCHETTE. Not necessarily. Where a major trunkline railroad cannot justify the existing pattern, there are a variety of remedies that can be taken outside of just putting more trucks on the highways. Subterminals have developed in the grange area. We're finding in the Northeast that short line operators with lower overheads, more flexible marketing patterns, can fill the gap. We're trying to work with all the States in the Northeast to fill the gap that is occurring when Conrail abandons a line.

The answer to overcapacity is not necessarily strict abandonment and diversion of traffic to trucks. That can be a remedy, but there are a lot of other things where the railroad mode can still serve. As you know, we are trying with a variety of noncarrier States, your own State of South Dakota, to fill the gap where the railroad itself will not take the ownership responsibility for a line of rail. Noncarrier entities, shipper associations fill in there. They contract with an operator. So it isn't necessarily the case that where a trunk line seeks out that the railroad mode cannot function.

Senator ABDNOR. I think that's true. I have watched this deterioration of railroad system in South Dakota and I think many of the users and businesses in the State have depended on it, as well as farmers and all; just thought the problems were going to go away by themselves even when they were a little slow getting around to participating in some of the solutions. Hopefully, we are on the right track. I'm just a little concerned here. I know a number of businesses and groups have gone out and leased cars, bought these cars. At the same time we've got railroads now who answered the call of supplying more cars, and these are the kinds of disruptions and problems we're going to be finding for a while.

I don't know if there's going to be an easy answer to that or not. There's going to be some serious repercussions from this, do you think, Mr. Fitzpatrick?

Mr. FITZPATRICK. Mr. Chairman, I don't think the repercussion will be too serious especially if the grain begins to move soon. I believe it will. USDA is very optimistic about Soviet grain sales in the near future.

Senator ABDNOR. Are you satisfied we have all the transportation facilities in line pretty well to take care of the expanded grain exports that we're anticipating in the years ahead?

Mr. FITZPATRICK. I think we're better prepared than ever, from my perspective, to handle heavy grain exports coming down the pipeline because we've done a lot of things. The FRA, for example, has done a lot of things to help improve the efficiency of the railroads at major grain ports particularly Houston.

Senator ABDNOR. I'm speaking to General Heiberg now. This transportation study you've been working on, that's about to come out for the public examination, isn't it?

General HEIBERG. Yes, sir. We've shared parts of it with the public in a series of hearings over the last year and a half. There aren't going to be any surprises in it. We're in the process now of staffing it with the other agencies in the Government to make sure that it's prepared to come up through the administration to the Congress over the next few months. Hope to have it to the Congress, I believe, in early spring.

Senator ABDNOR. Of course, that's going to get us into the user fee that has been proposed by the administration. We have just completed a bill in the Senate Public Works Committee on the deepwater seaport which is somewhat of a new concept to the operation of ports in the future, and we're looking at this for waterways. You were just naming—it almost scared me when I heard the number of locks you say that are 50 years old or more. From what I've been hearing about the cost of locks, it's imperative we have them. As a matter of fact, the ones that we have in operation are in good condition. We still have a problem of increased demand for locks that are even going to be sufficient and big enough, as is the case out in Portland. They have serious problems and need additional locks, not just replacements.

If we were to follow through on this cost recovery, do you think that it could be a severe problem in water transportation for agriculture, for instance? Could they possibly accept those added costs and still make a profitable operation out of water, from water transportation? I mean, it's going to have an adverse effect on what is already an extremely severe crisis for agriculture now? I mean, do you think from your studies that there is an area that water transportation can carry its entire load?

General HEIBERG. Our studies are not looking at that side of it, sir, but rather we're looking at it from a system approach and the physical side of it. We're not focusing on who will pay. The study by the Departments of Transportation and Commerce is looking at the user charge issue, and we are not involved directly with that.

I am concerned as an administrator of the inland waterway system. I am concerned that if we get into a long argument or an impasse on the issues of user fees, that needed improvements will not go forward quickly. That's a concern of mine and I think everybody has a concern over that. We'd like to find out what the answers are and move ahead.

Senator ABDNOR. Well, do you see large increases in waterway transportation in the near future?

General HEIBERG. Yes, sir. The national waterway study clearly identifies the areas of grain and coal movements, as all the projections we've seen as areas of increases. I mentioned very briefly in my prepared statement we do see, on the good news side, the petroleum movement coming down over the next two decades, which will help alleviate the pressure on the inland waterway system and the other parts of the transportation system.

Senator ABDNOR. Didn't you use the figure 37 percent of an increase in your prepared statement? How was that again? The water rates would—

General HEIBERG. Yes, sir. The 37 percent pertained to the increased cost. That's a constant dollar cost, a real cost increase, as we project the congestion that we see over the next 20 years. That

doesn't mean that we have to sit here and take those. We can make system decisions, I hope, over the next year or two, that would help hold those kinds of costs down.

Senator ABDNOR. When you look at the long railroad planning, the long picture for railroads, are you taking into consideration the linking up of waterways in some places, Mr. Blanchette?

Mr. BLANCHETTE. I think that is the kind of long-range planning that the railroad companies themselves ought to engage in. I see the Norfolk & Western is buying stock interest in Piedmont Airlines. There has been a bias in the past, a Government bias, against what we use to call total transportation companies. One wonders whether in the present environment that same governmental bias ought not to be reassessed.

We in the Government, at the FRA, are not drawing maps and structuring mergers and transactions. We think the private sector is eminently qualified to do that. But if they do do that in the private sector, then maybe it would be at the same time propitious for Government to reassess its position, that which has been hitherto prejudicial to that.

Senator ABDNOR. We have Mr. Kassel here from Iowa. Do you think the State transportation departments, are they working closely with all you gentlemen also in your own State—I think Mr. Kassel had to leave, unfortunately.

Do you find a great deal of interest in the States?

Mr. BLANCHETTE. We have worked—I sense it in conversations with Buzz Fitzpatrick that he's had the same experience. We have found a commendable increase in the expertise of the States—at the State level. We have worked, for example, in Kansas, Iowa, South Dakota, North Dakota, Minnesota, Texas, and Oklahoma on some of the problems involving the Rock Island and Milwaukee. We've been very encouraged by the level of experience, the level of knowledge and the level of insight at the State level.

We've had the same experience in the Northeast with the reindroduction of Conrail into the private sector, so I am very encouraged that the States have been forthcoming and have been helpful. So that dialog to me is an increasingly good one.

Senator ABDNOR. That's good, because I think it's going to take that to bring it all together. From my own experience this summer when I held water hearings, particularly in the West, on the possibility of inland water fees and deepwater ports, there's a certain amount of—well, I guess I can call it competition from one mode of transportation from the rail to the truck to the water. You know, one group competing with another. And really what we need to do is get them all working together, because certainly there is a great need for it, as Mr. Fitzpatrick knows. He's in the end of selling this grain now, and I personally don't think we've even touched the future of export sales in this country, particularly as far as people like Secretary Baldrige and Secretary Block are successful in doing away with some of the barriers we've experienced with some of these other countries in our present sales. If we overcome that so that we are all treating each other fairly, the potential for shipments are really massive.

I'm living in hopes that that's going to happen. I've always heard we're going to eat our way out of the surplus. Well, I'm still wait-

ing. It's just around the corner. It really is, I guess, if we could supply the world with the food that they need, if they can afford to pay for it. I suppose if that happens, we're going to be in a position to have the transportation to provide it.

I would like to think that we've come a long way in this last year. I think we can see that we actually have too many cars now. That was a big problem not long ago in trying to ship this grain. I think that the waterway, the transportation for the future, we can really make this thing happen.

As we said earlier in our agricultural hearings here, I don't think many people in Government as well as in the private sector realize the great contribution agriculture makes. First it is the surplus we create by our huge sales of farm products. It helps immensely in reducing the deficit we have in foreign trade. Add the fact that because of the agricultural productivity of this country, we make a great contribution to the overall economy by enabling the consumer to put a lesser amount of our dollar take-home pay into food than any other nation of the world. When you take out tobacco and liquor—don't count that as food. Some do. If you eliminate that, you're only talking about 13.5 percent, with some countries paying 30—Russia, well over 30. So we are able to contribute to the overall economy, just by the fact they don't have to put—the average individual doesn't have to put so many dollars into their food bill.

I know this, that the farmers of this country have got to have increased income. I'm equally convinced that it's going to have to come from foreign sales, in what I see over the years of my being in Congress. It doesn't seem to make that much difference which party is in power. It's going to have to come from foreign sales, because we're just producing too much. One out of three, I think, acres is what we ship.

I think if nothing else, I'm happy to see that we're on the right track and the right road. What do you think could be done to still yet improve the picture, Mr. Fitzpatrick? You look at all phases of transportation, not just the railroads. How does the future look to you?

Mr. FITZPATRICK. Well, Mr. Chairman, I'm very optimistic about the future. I believe the Staggers Rail Act of 1980 and the Motor Carrier Act of 1980, can be beneficial to agriculture. There are some problems. We've heard problems from the farm country. We are monitoring those problems very closely. The members of this committee and the members of the Senate Agriculture Committee and other Members of Congress have asked us to conduct a major assessment of the effects of transportation deregulation on agriculture, and we will begin that assessment the first of the year.

As Mr. Blanchette indicated, there is not hard evidence that is well documented at this point. But we hope to find out if this new regulatory environment is working and how well it is working for agriculture, and what are the problems, and work very closely with FRA and other agencies to alleviate those problems.

Senator ABDNOR. Would you suggest any one thing that we, as a Congress, could do to help make the future even brighter for transportation here, as you've been looking over the mode of transportation for farm products?

Mr. FITZPATRICK. Yes, Mr. Chairman. I think that a national transportation policy is very important and this committee can be very influential in encouraging such a national policy. There is a strong need to encourage cooperation between the private sector, State and local government agencies and the Federal Government. It has to be a team effort, and everyone must participate. The Federal Government will no longer have all the handouts and moneys to give to solve the problems independently. In fact, they never did solve the problems independently.

Senator ABDNOR. Mr. Blanchette, do you see transportation costs going up at a rapid rate in the years ahead? Or do you think we're kind of getting—it has gone up. I know what petroleum fuel has done. But do you think we're getting to an area, a point of leveling off?

Mr. BLANCHETTE. I can only speak for the railroad mode, and I think the still inherent efficiency for the steel wheel and the steel rail is one of the bright parts of our transportation picture. And if we can increase labor and management productivity, increase productivity in the railroad industry, we know what the tools are to reach those goals, we will see a leveling off of transportation costs to the extent that you can filter out the productivity gains from general economic conditions. It will obviously be—railroads are very cyclical, very dependent on the economy, and so you will have countereffects if we don't recover from our present economic dilemma, if we don't recover from the high interest rates. Those have to go into the picture.

But, from the point of view of the mode itself as a functioning part of our transportation system, there are great potentials for productivity gains, and if they're not chewed up by other factors, I think you will see a leveling off of costs and we will shake down some of the dyspepsia that we have had in the midwest in the agricultural thing; we'll get some stable railroads in, some stable railroad operating patterns, and I think you will see a leveling off in transportation costs.

Senator ABDNOR. Do you feel that way, too, General Heiberg, in the case of railroad transportation? What we're talking about in the future, in the case of locks and all this?

Do you think we're going to see large increases in water transportation, not only the rate costs of water transportation?

General HEIBERG. I mention the concern of continued inefficiencies in the water transportation system.

But I'd like to take your question as an opportunity to endorse a statement, now that the other three witnesses have made, with respect to a need for a national transportation policy.

I have been watching this system, as a corps officer, awhile now. It's not a party thing. It's a question I think we are at least on the verge of turning the corner on, with respect to having the Department of Transportation and the Nation taking a look at the need for an integrated policy. We've really had a problem with that, on the corps side, for the past years.

That has come down to the business of being unable to go ahead with needed waterway projects to solve a problem, in that we didn't have an administration together on the issue. This administration, since it came in, has made very clear signals and given

good witness to having a strong desire for going to that national transportation policy that will answer, as Mr. Kassell said, not just grain questions but coal questions. There's a lot of similarities there in our national waterways system, on how to handle those.

We need to get these questions answered. The Secretary of Transportation—we used to call him the "Secretary of Trains," sir, in the Corps of Engineers, because we could never get the Secretary of Transportation, we felt, very interested in the waterways side of the equation. That is certainly not the case of this Secretary of Transportation. I have been privileged to hear him talk to the waterways industries on a couple of occasions. He's given extremely good witness to his recognition of the entire transportation policy challenge this Nation now faces.

Also, with my associates here—I am optimistic, over the next year or two, we can get these problems wrestled to the ground, and have a national transportation policy that includes the various parts that we represent.

Senator ABDNOR. I'm certainly happy to hear you say that, and all you gentleman say that, because by working together a lot of problems can be overcome, as we work for the national policy.

I guess I feel that when we are through, we have to have something comparable in rates and all forms of transportation. We never do. We wind up by having water transportation rates half again as high as rail. And that's one of the areas I guess I will be working in, from the public works part of it.

But I think it's imperative, because they are all closely integrated and have to be working together on this. So, we certainly are working in the same direction, by going in the right direction now.

Again, I keep harping away on the agriculture economy. I guess that was my great concern to start with, and what our hearings are all about. But I just know the price of farm commodities, what they are today on the open market—that this can't continue to go that way. The entire economy has to improve, but I don't know one area that's been suffering as long as the agriculture economy. It didn't start this year or even last year.

I was telling a group here—about 10 days ago we had a hearing—when I first came to Congress, we could sell wheat for over \$5 a bushel. Today these people are selling it for \$3.60. I think in those nine years their operating costs have more than doubled or tripled.

It's through productivity that agriculture has already come up with a great amount of productivity. I guess we're all going to have to do that in all areas, particularly transportation.

One answer obviously is foreign sales, and if we can work out these problems, have a good transportation system, and have a fair opportunity to participate in world trade, I think we can come up with a much brighter picture.

I notice your projection of future sales. It won't be as rapid an increase as we've had in the past. Do you think that could be changed here?

Mr. FITZPATRICK. That's correct. Our present production projection as USDA indicates that exports for the next 10 years will not increase as fast as they did in the last 10 years.

Senator ABDNOR. Why do you say that?

Mr. FITZPATRICK. Well, those are based on conservative figures from the Economics and Research Service of USDA.

I am, however—and I think the Secretary of Agriculture is—more optimistic. Sales depend upon good products, good marketing, and good salesmanship, and I think we've got some terrific salesmen in the Department of Agriculture: Secretary Block, Secretary Lyng, and Secretary Lodwick. And I think in the future, in the near future, they will be able to generate greater sales with Japan, China, and the Soviet Union.

Senator ABDNOR. Really, we have not fared as well as we might have in the Middle East, have we?

Mr. FITZPATRICK. No, sir. There are several markets in that area also.

Senator ABDNOR. And some of the African countries?

Mr. FITZPATRICK. Many of the lesser developed countries throughout the world.

Senator ABDNOR. But one of the problems we have, as I said, is the barriers we're confronted with in our foreign trade.

I have a little amendment on the agricultural bill that will ask the Department of Agriculture to give us a report on the problems and barriers within 180 days after passage of the bill. I think maybe that's one area where we should be playing a greater part.

Obviously railroads, the more they can ship and carry, the less they will have to increase the rates as we go down the road.

So, what I'm saying, I guess, is we have a problem and by all working together—the private sector, the State governments, the divisions of the Federal Government, and in Congress—I think we can find some answers down the road now.

I know you gentlemen all are very, very busy people, far too busy to sit here chatting with me all morning, with the jobs and positions you have. But I do thank you for coming out. Maybe in the next year we may ask you to come back again and see how we are doing, as we go farther down the road.

I thank you all very, very much. The subcommittee stands adjourned.

[Whereupon, at 11:30 a.m., the subcommittee adjourned, subject to the call of the Chair.]