



Testimony of

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“How Reliability of the Inland Waterways System Impacts Economic Competitiveness”

House Committee on Transportation and Infrastructure
Subcommittee on Water Resources and Environment

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Chairman Gibbs and Members of the Subcommittee:

My name is Mike Steenhoek, Executive Director of the Soy Transportation Coalition (STC). Established in 2007, the Soy Transportation Coalition is comprised of eleven state soybean boards, the American Soybean Association, and the United Soybean Board. The goal of the organization is to position the soybean industry to benefit from a transportation system that delivers cost effective, reliable, and competitive service. The STC is governed by a board of directors of soybean farmers from the sponsoring entities. We are therefore a farmer-funded and farmer-led organization.

Over the past few years, much of U.S. agriculture, in general, and the soybean industry, in particular, has been a silver lining in an overall cloudy economy. American farmers are increasingly productive in growing quality, abundant food. Customers, both domestic and, increasingly, overseas, are demanding this production. For the soybean industry, over half of what American farmers produce is destined to the international marketplace – one quarter of total production will be delivered to China alone. Not only do these transactions enhance the U.S. economy – particularly in rural America – it also serves the higher purpose of feeding millions of people who, for the first time in their family’s history, are able to incorporate more protein into their diets. This pastoral, traditional industry has truly become one of the world’s most dynamic and compelling.

One of the primary reasons U.S. agriculture is so viable and competitive is our expansive and efficient transportation network of roads, bridges, railroads, inland waterways, and ports. Figure 1 below provides an efficient snapshot of the role of transportation – particularly inland waterways – in ensuring the competitiveness of the U.S. soybean industry. The chart provides a cost comparison of producing and delivering a metric ton of soybeans from both the U.S. and Brazil – our primary competitor – to a customer in Shanghai. Both of the origination points – Davenport, Iowa, and North Mato Grosso, Brazil – are approximately 950 miles from their respective port regions. While the movement from North Mato Grosso to

the port relies on trucking, the movement from Davenport to the export terminals in Southern Louisiana enjoys the efficiency America’s inland waterway system provides. As the chart validates, the main reason the U.S. soybean industry and many other agricultural products are the most economical choice for our customers on the international marketplace is due to our superior transportation system. Other countries can produce quality products at a lower price. However, it has been and continues to be our ability to deliver those products to our customers in a cost-effective manner that allows our industry to be so competitive. Transportation – particularly the inland waterway system – is not simply a contributing factor of agriculture’s success, it is a predominant one.

Figure 1: Costs of transporting soybeans: U.S. vs. Brazil (per metric ton; 4th quarter, 2011)

<u>Davenport, Iowa to Shanghai</u>	<u>North Mato Grosso, Brazil to Shanghai</u>
Truck - \$10.22	Truck - \$115.05
Barge - \$28.91	-----
Ocean - \$55.33	Ocean – \$49.65
Total Transportation - \$94.46	Total Transportation - \$164.70
Farm Value - \$425.00	Farm Value - \$358.24
Cost to Customer - \$519.46	Cost to Customer - \$522.94
Transportation as % of Customer Cost – 18.18%	Transportation as % of Customer Cost – 31.50%

Source: USDA

Unfortunately, while Brazil and other countries are aggressively investing in their infrastructure, we remain anemic in investing in ours. It can be accurately stated that the U.S. is more a spending nation, not an investing nation. A high percentage of taxpayer dollars are used to meet immediate wants and needs, rather than providing dividends to future generations.

According to our recent analysis funded by the soybean checkoff, the Upper Mississippi, Ohio, and Illinois Rivers accommodated the following volumes of grain and oilseeds in 2010:

- Upper Mississippi River: 236 million tons
- Ohio River: 49 million tons
- Illinois River: 24 million tons

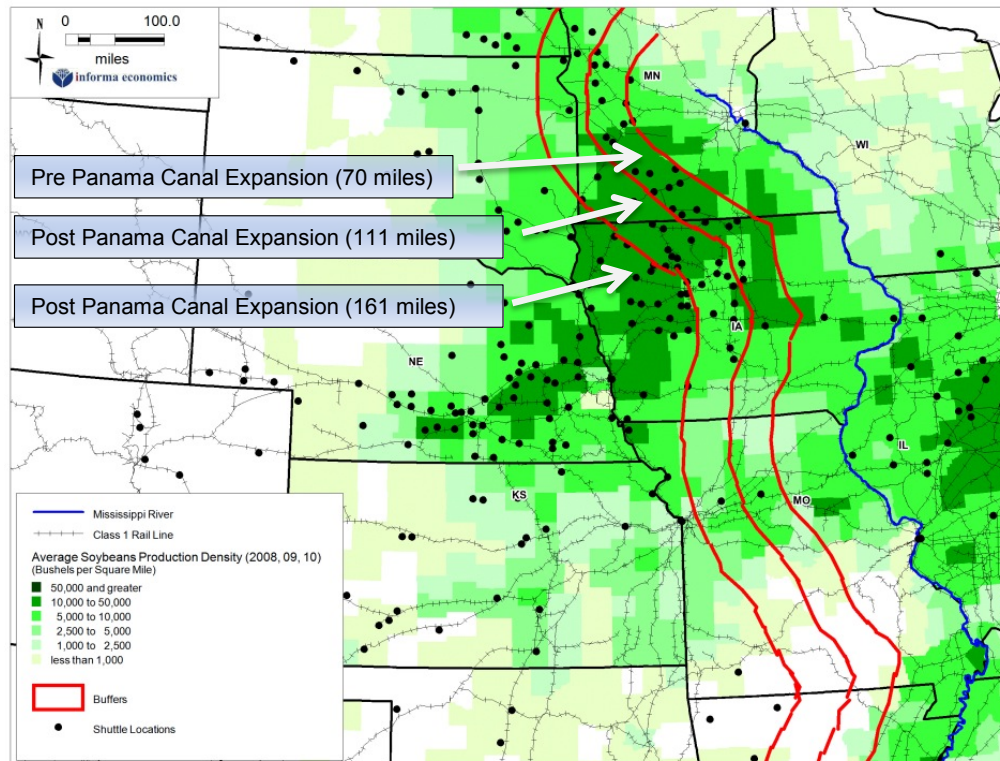
The U.S. Department of Agriculture reports that 58 percent of U.S. soybean exports in 2011 departed from the Mississippi Gulf port region. Approximately 90 percent of that volume arrived at the port region via barge.

The widely advertised expansion of the Panama Canal has the potential to increase the commercial viability of the U.S. inland waterway system – provided that we make prudent investments in our ports and lock and dam inventory. According to our recent soybean checkoff-funded research, the greater efficiencies of maritime transportation resulting from the expanded Panama Canal will have a positive ripple effect on those who utilize the inland waterway system. Our research predicts that grain and oilseeds transiting the Panama Canal will increase 30 percent by 2020/2021. After the canal expansion in 2014, ocean vessels will be able to accommodate up to 13,300 additional metric tons of soybeans (approximately 500,000 bushels) per voyage, which amounts to an additional \$6 million in cargo value. Customers will realize up to a 35 cent per bushel savings due to this greater efficiency of maritime transportation.

Figure 2 below highlights how sizable areas of the country will experience greater access to the efficiencies of barge transportation subsequent to the Panama Canal expansion. According to the soybean

checkoff-funded research, the draw area to our major navigable waterways could expand from 70 miles to 161 miles. As a result, there will be increased areas of the country that will be able to avail themselves of the safe, environmentally friendly, and economically competitive inland waterway system. From a shipper perspective, this will most likely have a favorable impact on area rail rates since there is wide evidence that transportation costs go down – and economic competitiveness goes up – when there is more than one shipping option in a particular region. However, these potential efficiency gains from the Panama Canal expansion will only occur if the U.S. sufficiently invests in our links in the logistics chain that connects with the Panama Canal. If we fail to do so, we will simply shift the bottleneck from Panama to the United States.

Figure 2: Increased draw area for inland waterways transportation following the Panama Canal expansion



Source: “Panama Canal Expansion: Impact on U.S. Agriculture.” Funded by the soybean checkoff

The soybean checkoff recently completed a study, “America’s Locks and Dams: A Ticking Time Bomb for Agriculture?”. The research, conducted by the Texas Transportation Institute at Texas A&M University, projected the impact of potential lock and dam failures on the competitiveness of our industry. Unfortunately, there is an established and growing consensus that such failures are not a matter of if they occur, they are a matter of when.

Figure 3 highlights the cost to U.S. agricultural producers of various lock closures of various durations along the inland waterway system. American farmers are demonstrating the ability to increase supply and customers are expressing a growing appetite for this production. However, the below figure illustrates that failing to connect supply and demand can have a pernicious impact on our economic competitiveness.

Figure 3: Cost to Agricultural Producers of Lock Closures (\$ millions):

<u>Lock</u>	<u>2 Weeks</u>	<u>1 Month</u>	<u>3 Months</u>	<u>1 Year</u>
LaGrange	\$2.7	\$4.8	\$21.2	\$30.4
Lock 20	\$2.8	\$4.9	\$15.4	\$44
Lock 25	\$2.8	\$4.9	\$15.4	\$44.1
Markland	\$0.89	\$1.02	\$3.8	\$4.9
Lock 52	\$2.9	\$3.1	\$11.9	\$13.9

Source: “America’s Locks and Dams: A Ticking Time Bomb for Agriculture?” Funded by the soybean checkoff

One of the primary deliverables of this analysis was to evaluate the impact of these likely lock failures on a local level, rather than simply the national level. Both our elected leaders and constituent groups repeatedly demonstrate how issues have more resonance when understanding the local impact rather than the aggregate impact. The micro argument is more persuasive than the macro argument. The analysis documents how many Congressional districts in this nation have negative exposure to a potential lock and dam failure. America’s economic competitiveness is not simply impacted by our increasingly unreliable inland waterway system, the economic health of our local communities will be impacted as well.

Our dilapidated lock and dam inventory is increasingly plagued by unscheduled maintenance and mechanical breakdowns. According to the Army Corps of Engineers, navigation outages on the Ohio River alone have increased more than three-fold since 2000, increasing from 25,000 hours to 80,000 hours. This unfortunately results in discouraging further investment by those who utilize the inland waterway system toward modernization of river terminals, towing equipment, or barge fleets. Our nation has the lofty and laudable goal of doubling exports by 2015. However, our nation – by not sufficiently maintaining our lock and dam inventory – is perpetuating a major impediment to this worthwhile goal being ultimately achieved.

Compounding the frustration due to having to depend on an increasingly unreliable inland waterway system is widespread discouragement due to our inability as a nation to adequately address this challenge. Those who utilize our inland waterway system have long recognized and articulated the alarming condition of our locks and dams. Unfortunately, this recognition and communication have not been met with tangible solutions.

The Soy Transportation Coalition and many others who are gravely concerned with the condition of our inland waterway system are concluding that there is a need for fresh thinking to be incorporated into this important issue. Abiding by the same strategy will most assuredly yield the same results. We have continued working with the Texas Transportation Institute to examine some alternative approaches to managing our lock and dam system. The results of this additional analysis will be completed over the next month. It is our hope that we can complement the work of other advocates of the inland waterway system in determining solutions to this protracted problem.

One of the arguments our ongoing analysis is examining “how money is allocated is just as important as how much money is allocated.” One of the deliverables in our research is comparing major maritime infrastructure projects in other countries and compare them to those in the U.S. – particularly in the ability to complete projects on time and within budget. It is discouraging to observe how many other countries are able to construct their major infrastructure projects much more efficiently than we can. The Panama Canal expansion project is a great example. This \$5.25 billion project commenced in 2007 and is scheduled to be

completed in late 2014 or early 2015. The expansion project is more imposing and complex than any project we have underway or planned in our inland waterway system, yet all indications are that the project will be completed within budget and only a handful of months behind schedule. Compare this to our Olmsted Lock and Dam project that had an original cost estimate of \$775 million and has recently been updated to over \$3 billion with a significant time horizon remaining before it will be completed. When examining the various reasons for our repeated cost overruns and project delays, it quickly becomes evident that a major contributing factor is the piecemeal and unpredictable manner in which we finance these projects.

Major investments of any nature – particularly infrastructure investments – require a system of funding that provides the money up front in a lump sum, or at least provides certainty that the incremental installments will be allocated. Our current system provides neither. In fact, if I were to design a funding system for infrastructure projects that would guarantee repeated cost overruns and project delays, I would design the system we currently have. It is our hope that we can have a productive discussion with other stakeholders that will result in better stewardship of the scarce resources we have to allocate to these inland waterway projects.

The other argument in our ongoing analysis is “a predictably good inland waterway system is better than a hypothetically great one.” During this period of fiscal scarcity, we are concerned that our nation is failing not only in providing new and expanded locks and dams, but also in maintaining and preserving our current inventory. Each lock and dam is a link in a larger logistics chain. If one fails, our ability to deliver on customer demands is greatly impaired.

Committing to many of these major investment projects and failing to deliver on them, while allowing our remaining locks and dams to fall further into disrepair is a recipe for disaster. A preferable approach may be to first demonstrate stewardship of current locks and dams by providing assurance to users that a lock and dam, in the event of a major failure, will be operational within 48 or 72 hours, for example. If we allocate our resources that way and can provide this degree of predictability to those who utilize our inland waterway system, we will provide a superior message to the one we are currently sending. The Soy Transportation Coalition looks forward to working with other stakeholders in examining this potential approach.

Thank you for the opportunity to testify and for exploring this important topic. I would be pleased to answer any questions.