

Texas Ports and Texas Exports

Testimony of

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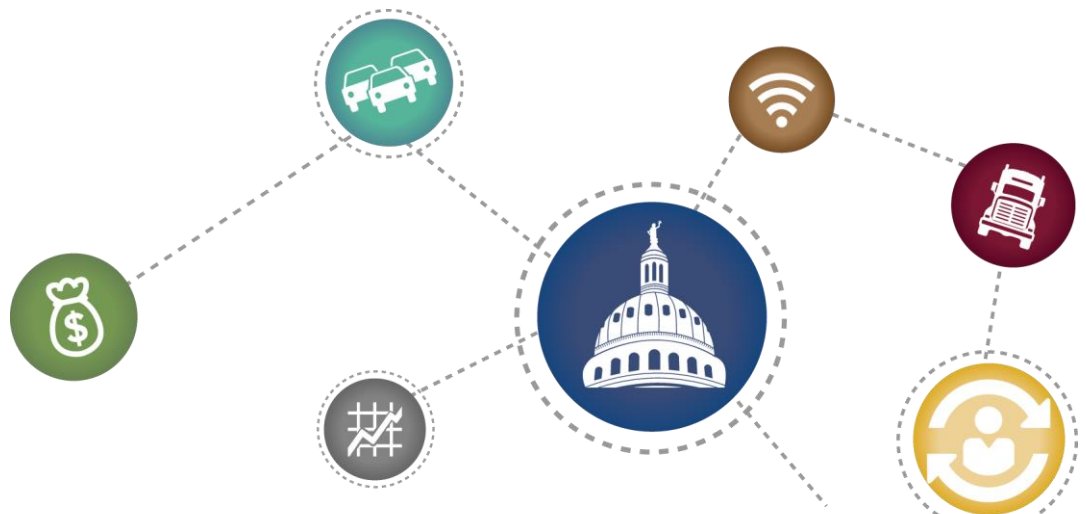
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to

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Introduction

Good morning. I am Ginger Goodin, Director of the Texas A&M Transportation Institute Policy Research Center, and I am joined today by Jim Kruse, Director of the TTI Center for Ports and Waterways who will present testimony shortly on state financing of coastal ports. My testimony today focuses on Texas exports, their use of Texas ports, and potential impacts of Panama Canal expansion.

Much of my testimony is drawn from a series of reports we recently completed. These reports examined the export supply chains of six commodities:

- Cotton
- Electronic Instruments
- Liquefied Natural Gas, or LNG
- Plastic Resin
- Timber, Wood, and Wood Products, and
- Vehicle Parts.

These reports are available to the general public on our website, TTI.TAMU.EDU/Policy, and have been further shared via our Twitter account, @TTI, and other social media.

Background

In 2014, Texas was the number one exporting state in the United States and had been for 13 consecutive years. That year, Texas merchandise exports amounted to \$288 billion and supported an estimated 1.1 million jobs, with the top five export trading partners (in terms of value) being Mexico, Canada, Brazil, China, and South Korea. Texas' largest export commodity (in terms of value) in 2014 was petroleum and coal products, which accounted for \$58.0 billion (or 28 percent of Texas' total merchandise export value) in 2014. Texas' other top four export commodities were computer and electronic products; chemicals; machinery (except electrical), and transportation equipment. Texas' strategic location in terms of trade with Mexico, Central America, and South America; major gateways; extensive multimodal surface transportation infrastructure; diverse workforce; and pro-business climate facilitate the state's competitive position in international trade.



Export commodities can be moved by multiple modes of transportation: road, rail, pipelines, water, air, and a number of intermodal options. The freight transportation system of a region or state—its infrastructure capacity and condition, modes, and supporting policies—therefore has a direct and indirect impact on international trade, specifically exports. For example, freight transportation infrastructure investments that increase system capacity could reduce travel times and costs, which can translate into increased economic productivity, enhanced labor and market access, and increased economic competitiveness that can result in increased exports. On the other hand, the mode of transportation has a direct impact on the cost, efficiency, and reliability of moving export products to overseas markets.

The type of merchandise and the destination also influence the mode(s) of transportation used. For example, for a shipper exporting perishable merchandise, speed/travel time is a major factor in choosing the mode of transportation. Seafood and flowers will thus most likely ship by truck and air. For other commodities, such as bulk cotton, rail and marine vessels will potentially be more cost efficient and profitable to reach the export destination.

Texas Exports and Modes

Mexico. 68 percent of the value of Texas' exports to Mexico moves by truck. In addition, 8 percent of the value of Texas' exports to Mexico moves by rail or truck on the domestic leg of the trip and departs on rail on the exit leg of the trip. The remaining 24 percent moves by water, air, pipeline, multiple modes, or an unknown mode. 92 percent of Texas' exports (in terms of value) by truck to Mexico exited the United States through gateways in Texas. Only 8 percent of Texas' exports by truck to Mexico exited a gateway in another state (the most notable being New Mexico). 97 percent of Texas' exports where the exit mode is rail to Mexico exited through gateways in Texas. The remaining 3 percent exited through gateways in Arizona or California.

Canada. 70 percent of the value of Texas' exports to Canada moves by truck. 20 percent of the value of Texas' exports to Canada moves by rail. The remaining 10 percent moves by water, air, multiple modes, or an unknown mode. 52 percent of Texas' exports by truck to Canada exited through gateways in Michigan, 19 percent exited through gateways in Montana, and 14 percent exited through gateways in North Dakota. All other gateways accounted for the remaining 15 percent.

The Rest of the Americas. Almost 99 percent of the value of Texas' exports to the rest of the Americas is shipped by water. A little over 1 percent of the value of Texas' exports to the rest of the Americas moves by air to the export destination. In the case of Texas exports that move by water, 33 percent are delivered by truck to the marine port, 12 percent are delivered by train, and 36 percent are delivered by pipeline. The remaining 19 percent are delivered to the marine port by marine vessel, multiple modes, or an unknown mode.



Eastern Asia. 72 percent of the value of Texas' exports to Eastern Asia is shipped by water. The remaining 28 percent moves by air to the export destination. Of those Texas exports that are trucked to a marine port for export, approximately 70 percent are trucked to a California port from where they are transported by marine vessel and 27 percent are trucked to a Texas port, from where they are exported. The remaining 3 percent exit the U.S. through other ports, such as Florida, Georgia, Louisiana, New Jersey, and Washington. The potential thus exist that some of Texas' exports that are currently shipped through a California port can be diverted to a Texas port and the expanded Panama Canal. Similarly, of those Texas exports that are railed to a marine port for export, approximately 41 percent are railed to a California port from where they are transported by marine vessel, 44 percent are railed to a Texas port, from where they are exported, and 14 percent are railed to a port in Louisiana.

Gateway Efficiencies

Texas' marine ports, border ports of entry, and airports are critical gateways for the state's exports to global markets. In addition, a substantial amount of Texas' exports are shipped through the Ports of Los Angeles and Long Beach.

Marine Ports

Texas marine ports are at a disadvantage compared to the Ports of Los Angeles and Long Beach, which have more frequently scheduled liner services to China. For example, a lack of scheduled liner services impacts the competitiveness of the export supply chain because exporters must pay for storage at Texas ports (timber, for example), which adds time and costs. On the other hand, West Coast port labor issues and port congestion can disrupt Texas' exports to Asia that are shipped through the Ports of Los Angeles and Long Beach. Labor disputes at West Coast ports therefore add time (and thus cost) to Texas' export supply chains, such as the electronic instrument export supply chain.

Border Ports of Entry

A number of factors could result in border delays. These relate to both border infrastructure (such as design of the border facilities, inadequate crossing capacity, and inadequate road capacity serving the crossing) and operations (including inadequate staffing to process vehicles). Excessive wait times to cross the border increase the cost of transportation and therefore the cost of trade. For example, cotton exports to Mexico are often delayed due to documentation requirements, the number of agencies involved in the border-crossing process, and the available number of customs and inspection staff. Existing border-crossing facilities were also not designed for southbound commercial vehicle inspections of Mexican imports, so recent manual truck inspections on the U.S. side of the border have created congestion at ports of entry and approaching facilities.



Panama Canal Expansion

The Panama Canal expansion will decrease the all-water distance from the Gulf Coast ports to Asia, with associated decreases in ocean liner costs, and will be able to handle 80 percent of the world's tanker fleet (as opposed to 8 percent currently).

Cotton Export Supply Chain

Using the expanded Panama Canal will decrease the all-water distance from the Gulf Coast ports to Asia with associated decreases in ocean line costs that would potentially be passed on to exporters in the form of lower ocean freight rates. It is therefore believed that Gulf Coast ports could see an increase in cotton shipments to Asia as a result of the Panama Canal expansion. One prediction is that a 10 percent reduction in ocean freight rates would result in increased cotton exports to Asia via some Gulf and Atlantic ports through the Panama Canal. The Ports of Savannah and Houston were predicted to see large increases in cotton exports to Asia. Specifically, the Port of Houston was predicted to see a 30 percent increase in cotton exports to Asia if ocean freight rates reduce by 10 percent.

On the other hand, land crossings into Mexico such as Hidalgo to Brownsville and rail to the West Coast ports were predicted to see a reduction in cotton exports. Hidalgo to Brownsville is predicted to see a 40 percent reduction in cotton exports, and the West Coast ports -- Los Angeles and Long Beach -- are predicted to see a 40 percent reduction in cotton exports if ocean freight rates decrease by 10 percent. Cotton exports to Mexico are foreseen to cross at Laredo, with Laredo-El Paso seeing a 12 percent increase in cotton exports.

Cotton exporters will ultimately choose the least expensive and fastest route to the export destination. The ultimate route and the impacts of the Panama Canal expansion will only become clearer once the Panama Canal lock fees have been established.

Plastic Pellets Export Supply Chain

The opening of the expanded Panama Canal is expected to result in an increase in cargo handled at Gulf Coast ports, although the magnitude is unclear and will largely depend on the tolls levied by the Panama Canal Authority and the response from railroads to ensure that the rail and water option through the ports of Los Angeles and Long Beach remains competitively priced..

Some industry experts, however, believe that post-Panamax vessels – containerhips that exceed the current dimensions of the Panama Canal – will not traverse the Gulf but would rather transload in the Caribbean or Cuba to smaller ships that will provide feeder services to Gulf Coast ports. Since it is unclear how this arrangement would affect freight rates, the impact of the Panama Canal on plastic resin exports through Gulf Coast ports is uncertain at this time.



Liquefied Natural Gas Export Supply Chain

LNG exports could potentially benefit more than containerized shipping from the Panama Canal expansion. Today, the Panama Canal can only serve about 8 percent of the LNG tanker fleet. The expanded Panama Canal will, however, be able to accommodate 80 percent of the world's LNG tanker fleet.

The canal's expansion could thereby reduce overall LNG shipping costs by approximately 25 percent. Texas will be well positioned to serve global demand for LNG given the two FERC-approved export LNG terminals currently under construction in Freeport and Corpus Christi and the increased competitiveness offered by the expanded Panama Canal through lower overall LNG shipping costs.

Conclusion

With your permission, Jim Kruse will now address state financing of coastal ports, and we will then take questions. Thank you for inviting us to appear today.

