

Unnatural Disaster: Assessing the Jones Act's  
Impact on Puerto Rico

Opening Remarks:

**COLIN GRABOW**, Policy Analyst,  
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Panelists:

**LUIS RIVERA MARÍN**, Secretary of State, Government of Puerto Rico  
**VICENTE FELICIANO**, Founder and President, Advantage Business Consulting  
**JOHN DUNHAM**, President, John Dunham & Associates

Moderator:

**ANNE KRUEGER**, Senior Research Professor of International Economics,  
School for Advance International Studies, John Hopkins University

12 noon to 1:30 p.m.

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**COLIN GRABOW:** Good afternoon. Welcome to today's event, "Unnatural Disaster: Assessing the Jones Act's Impact on Puerto Rico." My name is Colin Grabow, and I am a policy analyst here at the Cato Institute's Herbert A. Stiefel Center for Trade Policy Studies.

For most of my time here at Cato, I have been working on a project called the Project for Jones Act Reform. Officially launched last year, the project's first major deliverable, an opening salvo, if you will, was a policy analysis released last June which sought to provide an overview of the Jones Act and its many costs and flaws.

Since then, we've published any number of op-eds and blog posts, around 30 by my count, and have more policy analyses on the way. The next such policy analysis to be released will take a comprehensive look at the law's economic costs that go just beyond the increased cost of shipping but also look at other effects such as increased congestion, lost productivity, and the fact that our trading partners keep their markets more closed to our exports than otherwise be the case in retaliation for the Jones Act.

Other papers set for release this year will look at the law's environmental consequences as well as assess the merits of its national security justification or lack thereof.

Beyond these already released and forthcoming papers, we also have podcasts and videos about the Jones Act, and I invite all of you to look at those, including one that was recently

released about the bizarre phenomenon of cattle ranchers in Hawaii placing their cows aboard airplanes to ship them to the West Coast as a direct result of the increased cost of shipping due to the Jones Act.

We also have a monthly newsletter, the *Jones Act Gazette*, which is basically a monthly roundup of our latest writings and activities around the Jones Act as well as those of others, and all of this can be found at a dedicated Jones Act webpage, [CATO.org/JonesAct](http://CATO.org/JonesAct).

This brings me to today's event. For months, we've had internal discussions here about our desire to do an event solely focused on the Jones Act's impact on Puerto Rico because it's such a big part of the Jones Act discussion. I think it's impossible to have a discussion about the Jones Act and not talk about Puerto Rico.

Finally, we were able to pull together what I think is an excellent group of speakers as well as an outstanding moderator, who I'd now like to introduce. Anne Krueger is a senior research professor of International Economics at Johns Hopkins University School of Advanced International Studies. She's also a senior director of the Center for International Development, of which she is the founding director, and the Herald L. and Caroline Ritch Emeritus Professor of Sciences and Humanities in the Economics Department at Stanford University.

Anne Krueger was the first deputy managing director of the International Monetary Fund from 2001 to 2006, and before that, she taught at Stanford and Duke Universities. From 1982 to 1986, she was vice president for Economics and Research at the World Bank. Professor Krueger is a distinguished fellow and past president of the American Economic Association, a senior research fellow at the National Bureau of Economic Research, and a member of the National Academy of Sciences, the American Academy of Arts and Sciences, the Econometrics Society, and the American Philosophical Society.

Perhaps most importantly, Anne is no stranger to Puerto Rico, having led a team several years ago which authored a report on Puerto Rico's economy at the request of the Commonwealth's government.

I will also note that she wrote an excellent column about the Jones Act earlier this month that I invite everyone to check out if they have not already done so.

Please join me in welcoming today's moderator, Anne Krueger.

[Applause.]

**ANNE KRUEGER:** Thank you very much.

Before I introduce our speakers, I just want to say a couple of words. The main thing I want to say is I actually have a disagreement with Colin because he says it's Puerto Rico that you can assess. I think Jones Act is detrimental in many ways. Certainly. Puerto Rico and Hawaii and

other islands are among them, but it does more damage to the U.S. economy on the mainland than is normally thought about. We think about Puerto Rico, even though we don't necessarily do what we should, but we do think about it. Whereas what happens on the mainland is something else, and the fact that we do not have the kind of water shipping that we should have is a function also of the Jones Act. And please don't forget that just because you hear about the fact that it should be repealed simply of Puerto Rico, which it should, but there are other reasons too.

Anyway, just to back up a bit, Puerto Rico has been in a slump for a long time. You can call it stagnation; you can call it a slump. What you cannot call it accurately is a recession. It has gone on too long, and it has been too structural and not amenable to Keynesian cures. It was thought to be a recession. So for years, the legislature approved "balanced budgets," in quotes, which I'm sure they believed were balanced budgets, but which did not turn out that way. They turned out instead to be budgets that were in deficit as a result of which Puerto Rico got itself into great trouble, and that's I think a part of what I want to say.

The other part of that one is—and it's important—that it's a sad situation in the following way. If you ask has Puerto Rico done things to make things better for itself, by and large, I would argue that many of the things Puerto Rico has done has made it worse. Has the United States government, Congress, done things that help Puerto Rico? By and large, they have made it worse, the result of which is that each group, the Congress and Puerto Rico, can blame the other for what's going wrong and say, "Well, they need to change that," which is true, but they forget that they need to change it too. So what we're talking about today is one of the things that happens to Puerto Rico because of something the U.S. does that is clearly discriminatory.

The Jones Act does not apply, for example, to the Dominican Republic, right next door, and that makes their energy and other things much cheaper. And I could go on, but I'm sure we'll hear more about that later. But there are things the U.S. government does beyond the Jones Act that are difficult too, but the Jones Act is the one we are going to concentrate on today.

The Jones Act has been with us for 99 years. I think a hundredth year would be a wonderful time to get rid of it.

[Laughter.]

**ANNE KRUEGER:** It's outlasted any usefulness it may ever have had, if it ever had any, and it has been costly, obviously to many people, except possibly the shipping companies that have had a quasi-monopoly or oligopoly among them.

So, with that, let me turn and let me introduce our first speaker, who is the Lieutenant Governor of the State of Puerto Rico, and 2 years now, is it?

**LUIS RIVERA MARÍN:** Yes.

**ANNE KRUEGER:** Right, 2 years. Thank you very much. So Lieutenant Rivera Marín is our first speaker, and he's going to tell us how it looks like for the trenches. Thank you.

**LUIS RIVERA MARÍN:** Thank you, Anne. Good afternoon to you all. It's truly a privilege to share a panel with such distinguished co-panelists, and I want to thank the Cato Institute for promoting this conversation and for promoting what for us brings our prices. I've heard stories about the effect of Jones Act in different economies and different jurisdictions. I heard about the effect it has had in bringing road salt to New Jersey in the past. I never heard about flying cows as an effect with Hawaii.

But certainly for Puerto Rico, we've had an effect in terms of—since Puerto Rico is an island, the only way we can bring in commodities and basic resources, which was magnified just recently after Hurricanes Maria and Irma, is through our ship lanes and airports.

Certainly, we have reviewed many, many studies, including, Ms. Krueger's report on Puerto Rico, where the effect of the Jones Act on shipping costs is highlighted. At the end, it's the consumer that takes care of all this burden, and it's through the cost that it's affected.

Before my tenure in State for the last 2 years, I was the director for Tourism for the island, and before that, I was an energy regulator. And I can recall what happened in the origins of the Jones Act as a mean to protect the maritime industry during wartimes, and you must review the thread of price controls and the Office of Price Control led by John Kenneth Galbraith at that time.

What we did when we allowed the markets to work on the energy side, it was that prices were lowered. Right now, we have filed a petition to get a conditioned waiver for the transport of LNG from the mainland, from the Gulf States to Puerto Rico.

As Ms. Krueger just highlighted, I had a meeting just last week with Danilo Medina, the Dominican Republic president and his industry ministers, and they bring and they source their LNG from the terminals in the Gulf Coast. And they do get a lower price, and they realize savings that are translated in the costs that are the hotels, that industry, and the families and household pay in the Dominican Republic. There's no way you can harmonize that reality whereby we as a U.S. territory, we don't have access. So it's a well-known fact.

If you look at the Joint Task Force report from Congress just back in December of 2016, the conclusion is Puerto Rico needs to transition to natural gas. The Department of Energy, on the same token, that's the advice: Transition to natural gas. We've done our part. Just a few weeks ago, the governor signed into law and major energy reform, whereby we are concessioning transmission and distribution of energy in the island, and we are engaging in public-private partnerships for the production of energy in the island.

Actually one of such projects have already awarded, whereby Units 5 and 6 in San Juan will be producing energy with natural gas, but we are entering into contracts. And we want to

purchase that gas from the U.S. mainland. At the moment, we source our gas from Trinidad, Tobago. Mainly, we source energy from ports like Estonia, Russia, and if U.S. public policy is to promote energy independence and promote national security by such independence, Puerto Rico is its third border. It's the Caribbean border of the United States. So we believe that through our petition, whereby we are promoting a condition waiver. So, as long as there is no U.S.-flagged vessel allowed to carry natural gas from U.S. ports that we can use foreign-flagged vessels, and that's public policy because through the Passenger Vessels Act, while there are no cruise ships built in the U.S. shipyards, foreign-flagged cruise ships are allowed currently to serve to U.S. ports. And our cruise ship industry is flourishing because of that possibility.

On the same token, public policy in the U.S. allows merchant marines from the Academy to work in foreign-flagged LNG vessels so they get their training. So our petition is completely aligned with U.S. public policy in terms of allowing those forces of the market to work.

Critics say that will cost U.S. jobs. Jobs in Puerto Rico are also U.S. jobs. It's a point that we need to stress. If we have an aspiration that there should be energy independence, that includes the island, and that should be incorporated into public policy. On the same token, Puerto Rico, as Ms. Krueger just detailed, has gone through years of economic stagnation. Certainly, the energy input is one such, as detailing in reports. If you take the period from 2005 to 2015, the U.S. average is close to 11 cents per kilowatt hour. Our average is 20 cents, and it has peaked to more than 30 cents. That's triple. That's really burdening our economic. It doesn't allow Puerto Rico to be competitive. It doesn't allow Puerto Rico to build jobs, and we rely on industries that are critical for the mainland.

Just recently, after Hurricane Maria, when you talk about national security, there was a major disruption because of our energy system, which relies on fossil fuels, on bunker fuel that is not friendly to the environment, that is not cost efficient. So we as people with aspirations, we want to transition to LNG, but we want to do it with American-sourced energy sources.

Today we were just talking about the geopolitics and the risk and the national security issues. Last year, you have Maduro signing an agreement with Trinidad's Prime Minister calling for the source and providing LNG to Trinidad refineries to allow them higher capacity to their Hibiscus platform, and today you have a major disruption in terms of the local politics in Venezuela, where people are on the streets with arms as we speak. So is that PetroCaribe a policy one that Puerto Rico—that the United States wants Puerto Rico to enter? Does the \$2 billion our public utility company pays in purchasing fuel wants to—should we turn those into rubles or dollars to the U.S., so we promote jobs in the terminals, so we allow LNG to come into the island through a foreign-flagged vessel condition that there is an American-built ship that the market forces—I still believe in the invisible hand of Adam Smith whereby the market forces allow the competition.

In the meantime, like it happens in the cruise ship, allow us to tap into the LNG market, whereby there are terminals that have the capacity where we can have a reliable cost-efficient source of clean fuel, so Puerto Rico can flourish, shine, and prosper. That is the case we have

brought up before the Department of Homeland Security and the Department of Defense: Allow Puerto Rico to become competitive. Everybody agrees that we need to transition to an LNG. Let's do it with American gas. Let's build American jobs in Puerto Rico in the terminals, and that should be the net effect of this initiative.

So, certainly, Jones Act hinders our capacity to develop our economy, to allow our households to have clean, cost-efficient, and sustainable energy sources, and it hurts me that when I speak with my counterpart, Miguel Vargas, the Foreign Minister in the Dominican Republic, say, "I get my gas from the Gulf." And I cannot do so. So the effect can be in disruption. Puerto Rico manufacture more drugs and medical devices than any country or any state for the U.S., and we saw critical, major logistics disruptions in the health market.

We have NORTHCOM, SOUTHCOM presence. We have DEA. We are part of a corridor where many of the opioids and drugs go through and come to the market. All those helicopters, all those assets require American-sourced energy, and through this waiver to the Jones Act, where we can access LNG from American ports, Puerto Rico's future is brighter.

**ANNE KRUEGER:** Thank you. Thank you very much. We'll come back, I'm sure, with questions and more discussion later, but before we do that, we have more to hear. Our next participant is Vicente Feliciano, who is now president of Advantage Business Consulting, which he's been doing for some time. When we were doing the Puerto Rico report, 4 or 5 years ago now, Vicente was one of our best and most helpful sources and guides in the whole thing, and I'm pleased to see him coming here and helping again. Thank you, Vicente.

**VICENTE FELICIANO:** Thank you. I was told I can use the podium, and I was told I had 7 minutes. So we're going to work within that constraint.

Thank you very much. It's a pleasure to be here. I would like to acknowledge Manuel Reyes among the people I know because Manuel was instrumental in getting the research that we performed and the research the John performed off the ground.

Those two pieces of research were game changers in the sense that up to that point, the U.S. government and the Puerto Rico government realized that there was a major burden related to the Jones Act on Puerto Rico. However, they both at least claim that they didn't know how to assess it, that there was no data to ascertain how big it was. So that was a contribution of these two research pieces.

Our research, we used a database of some 40,000 containers. That's about 15 percent of the containers arriving to Puerto Rico in a 9-month period, and our figure was that it cost—after standardizing for container size and nautical miles, it cost 151 percent, two and a half times the cost of international shipping—Jones Act, two and a half times international shipping.

Now, we validated our work with some previous work by the U.S. Department of Transportation. So the Department of Transportation stated it's 2.7 times. We had 2.5, 170

percent, 151 percent. So that made us quite comfortable that our figures were in the ballpark of somebody else's effort, and this really makes the claim of the Jones Act shippers that they don't increase the cost of transportation rather a shameful proposition.

Now, I would like to stop a bit here. When we talk about Jones Act, we think about maritime transportation. Actually, the differences in land transportation are huge between international shippers and Jones Act shippers because Puerto Rico is served through only four ports from the U.S. by Jones Act shippers, and 90 percent of the containers come from one port, Jacksonville. So if a ship comes from Europe with 10,000 containers, docks in Miami, 200 containers are going to Puerto Rico, you have to put those containers on trucks and drive them to Jacksonville. It adds to the transportation cost.

Now, what if they come from California? Well, you have to get them across the continent to mostly Jacksonville. Now, it costs 7,000 bucks to transport a container from California to Jacksonville. Then you add the \$2,400 to San Juan. We had the data to do the benchmarks, and that was the beauty of our analysis. We had actual data from importers, and we thought that Chile was a good benchmark, similar distance from California to San Juan. They both have to go through the Panama Canal. It costs \$2,500 to get a container from Chile to San Juan. So the cost of using Jones Act shipping to get a container from California to San Juan is almost four times the cost of international shipping.

Now, recently, one importer of Puerto Rico, Pan American Grain, they were fine because they were using the label of California Rice on their product. It turns out that they were bringing Rice from China. They were bringing rice originally from California, but some of it, they switched to China. One of the reasons is transportation cost. So right now, Puerto Rico imports rice from China, wheat from Canada, gasoline from Europe, natural gas from Trinidad because of the Jones Act, and those are U.S. jobs.

By the same token, much of the U.S. represents major transportation cost as markets. It's very difficult for a manufacturer in Puerto Rico to access the California market because of these transportation costs. So the Puerto Rico economy is not as entwined to the U.S. economy partly because of the Jones Act.

Now, the number of port service, four. It used to be 10. It's down to four. These are the 10 ships that took advantage of the exemption to the Jones Act during the post-hurricane period. Now, it is worth noting that at a time when people were literally dying, when some ORs went black because they didn't have electricity and the diesel ran out, the Jones Act shippers lobbied against an exemption. An exemption was granted 10 days. During those 10 days, you had to find the merchandise, find an available ship, get it to port, and load it to qualify. Ten ships qualified. They brought lifesaving products such as generators, gasoline, diesel, baby food, water, et cetera. But what is interesting is that out of the nine, only one came from a port that is currently serviced by Jones Act carriers. In other words, the cost of land transportation is a major cost for—of the Jones Act to Puerto Rico.

And I would like to end by a quote from a world renowned economist, Dr. Anne Krueger. This gal said, "Exempting Puerto Rico from the U.S. Jones Act could significantly reduce transport costs and open up new sectors for future growth. In no mainland state does the Jones Act have so profound an effect on the cost structure as in Puerto Rico. Furthermore, there are precedents for exempting islands, notably the U.S. Virgin Islands."

Thank you very much.

**ANNE KRUEGER:** Thank you.

[Applause.]

**ANNE KRUEGER:** Our third speaker is John Dunham, who is president of John Dunham & Associates, which is a consulting firm. He works on a lot of public policy issues and has worked on some of the things with the Port Authority of New York and others relative to transport. John?

**JOHN DUNHAM:** Thank you, Dr. Krueger. Hopefully, everyone can hear me. I'm suffering from terrible allergies, so I apologize right up front. And I want to thank Cato, and I want to thank MIDA and Manuel for allowing us to do this presentation and this research.

The Jones Act is a very interesting law. It's 100 years old—99 years old. That's close enough, right?

**VICENTE FELICIANO:** We'll round it up.

**JOHN DUNHAM:** Round it up. Round it up.

And it was promoted by a Senator in Washington State named Wesley Jones in 1920, and his purpose—but it's not stated in the act—was really for the Port of Seattle to control the trade between the mail in the United States and what was then the territory of Alaska. And they've done that. They've also had a huge number of unintended consequences because of the cabotage law, not only for Puerto Rico, for Hawaii and for Alaska, but mainly actually for the mainland United States.

[Technical interruption.]

**JOHN DUNHAM:** Am I not working? Can you hear me if I'm not working? Am I working now?

**VICENTE FELICIANO:** You're working all right. It's just they are not listening to you.

[Laughter.]

**JOHN DUNHAM:** Oh, okay. Am I working now? Oh, I can hear myself. Sorry about that. Hopefully, you heard the history of the Jones Act there.

The problem, though, with dealing with the Jones Act is that like all regulations—all regulations, regulations against robbery, regulations against pollution, cabotage regulations—they're all built, and they all have winners and losers. In the case of the Jones Act, the winners are those companies that are lucky enough to own the '96 Jones Act vessels, and the losers tend to be everybody else.

The problem is that to get a law changed requires a huge effort. To get something passed in Washington, as we all know, requires a monstrous lift. To keep something the same requires almost no lift, and that's what's happened over the last 100 years. People have been losing out because of this, even though there are winners that continue to promote it.

And it's been a massive failure. When the Jones Act was enacted in 1920, the United States fleet accounted for about 25 percent of the international shipping tonnage. Today it's less than one half of 1 percent. There's virtually no U.S.-flagged fleet anymore. As I mentioned, there are only 96 or 97 Jones Act-eligible ships, and about two-thirds of those are going between Alaska and the mainland United States carrying oil. There's virtually no U.S. Jones Act fleet.

Now, simple economics. I've been studying economics for a long time, and there's this guy named Adam Smith back in Scotland, a long, long time ago that came up with this idea of supply and demand. If you have a lot of supply for any product, the costs tend to go down. If you reduce supply, the costs tend to rise. So simple economics tells you that when you reduce the number of vessels in the trade, when you reduce the amount of shipping available, costs are going to rise.

The problem is identifying what those costs are and how they affect any economy because there's really no easy data available. This isn't something I can just go out and grab some data from the BLS and do some magical mumbo jumbo with and "Wow! I have an answer." This is something that requires very, very complex and detailed modeling to come up with.

So we built a study around a bunch of assumptions because I really don't have real data. Nobody does, but we use a number of different assumptions. The first thing we did was we built a base case. We built an analysis of what international freight rates were to Puerto Rico, and we did this across the entire economy, about 200 products that we used in this model, and that model gives us our baseline. To ship internationally to Puerto Rico, it costs X dollars per container or X dollars per ton for each commodity.

And then we shocked that system with really seven different assumptions. Again, there's not real data. We used what we could get. We picked up some quotes from freight forwarders for FAK rates, freight all kind rates, and used the difference between those rates and our international shipping rates as one of our assumptions. We used all of the studies that have

been produced since 1960, I think, is when this really started getting looked at to come up with another differential.

We came up with a number that actually the shipper, the steamship lines kind of goofed and allowed to be released in one of their reports that actually gave us the shipping cost for soup. We used that as an example. We used the survey that you all did. We used an average of all of those. We used differentials in chartering costs because those we could get, and then we used aglomeration that was all of our—you know, what we thought was the best assumption.

We shocked the system with those, and we came up with what the differential in cost would be for shipping. Add to that the transportation—or the wholesaling and retailing margins. We were able to take 200 of those products and come up with a price differential in Puerto Rico resulting from those increased shipping costs. We took all of those through the entire production process. So we started with oil, converted oil to energy, energy to providing hotel services throughout the entire economy.

And the model, as one would expect, came up with higher costs and job losses for the island, no matter what scenario we used. The lowest cost was about \$150 per resident for the Jones Act. That was the steamship line's number, and that led to about 5,000 lost jobs, 5,000 jobs that would exist in Puerto Rico were the Jones Act not there.

The largest cost was about \$275—I'm sorry—\$375 per resident on the island, and that resulted in about 15-, 16,000 lost jobs. Now, this is a model. Most economics is models. It's very hard. Even if we're looking at Census data, it's survey data. It's very, very hard to come up with the actual, actual numbers, but we have a good range, and that range is all negative. And that range all affects the economy of Puerto Rico throughout the entire production process. It's not just one thing. It's not just consumer cost. It's all the business costs to do business on the island.

It's open architecture. We can run anything through this. When you are doing these models, the key is not to hide stuff, to be open about it, to be open about your assumptions. Somebody can quibble with those assumptions, and we can run a different number. When you see an analysis that's done on the Jones Act in Puerto Rico and there's no data presented, there's no model presented, all you're looking at then is somebody's opinion. You're not looking at a real analysis of the issue.

And I want to go back to something that the good doctor said. The Jones Act cost Puerto Rico. The Jones Act cost Hawaii. We know that. But the real cost of the Jones Act are in the continental United States, and nobody talks about that.

Just think. The busiest highway, the busiest highway corridor in the U.S., is the I-95 corridor from Miami really up to New York and beyond. This entire corridor is paralleling the Atlantic Ocean. There's absolutely no reason to be shipping bulk cargo by truck up and down that corridor, except for the fact that you can't get ships to move stuff. There's no reason to be

shipping containers from the Port of New York down to—or up to Providence when you can run ships to do that. Shipping by water is the least expensive way to transport products.

The Jones Act increases the cost but more importantly has completely eliminated the ships available to do that, and the consequences are huge not only in Puerto Rico and not only for the people of Puerto Rico, but for all of us.

So I'll leave you with that. If anyone wants more detail, we have all the detail available.

**ANNE KRUEGER:** Thank you. Let me just add a couple of things which just reinforce some of the points that you all have made.

The first one just on the cost to the mainland of all of this, one of the numbers I've seen is that in Europe, which has rivers, but no more than continental United States, 40 to 60 percent of goods going between countries goes by water. In the U.S. mainland, one half of 1 percent, and that has to be largely—not internally, but probably largely Jones Act effect. And it does jam not only the 95 route, north and south, it also jams the Pacific route in California, at least as choked at 95. And you get the same kinds of effects because things do not go by ship, even from, let's say, Los Angeles to Seattle and places like that because it's more expensive than going by truck.

On the other hand, without the Jones Act, it would be far cheaper to go by water. So it is not simply a matter of losing a few cents here and there, and all of us are paying for that not only in the sense that we're citizens and Puerto Rico deserves better, but also just in the sense that in the mainland, it's as if we have a tax on everything we buy that comes in by truck and otherwise. And that's almost everything. It is not something that is simply Puerto Rico, and I think it's important to remember that the biggest damage is done there but not the only damage.

The second kind of comment is that it is astonishing how much of the loss there has been in the merchant marine as a result of the Jones Act. The United States was the third largest in the world, and now we're way off, off the chart at the bottom end, not the top end. And with that, as was said, jobs were lost and things like that, but the shipbuilding industry itself is gone now. Europe has faced the same competitive pressures from the Asia and especially Korea and so on—and Japan—that we did or would have on building ships.

The response in Europe was to specialize in the kinds of ships for which it still took skills and which was still a good thing.

In the U.S., there's been on change. Just our relative costs have gone up, and this is my last comment. The numbers I've seen say that the cost of building the same ship here as you might build anywhere in the—Asia, in particular, in the low-cost countries, is probably about five and a half, six times what it is there.

So, first, you get the very high-cost ships. Then you get all of this business, of course, of they've got to hire all-American crew for national security reasons. Why? Well, we don't trust foreigners in our ports. We have foreigners in our ports the whole time because, of course, they come in on ships coming from Europe and elsewhere. It makes no sense to talk about things this way. So many of the arguments, there's simply the lobbying I think of the shipbuilders who want to maintain what they're doing in a comfortable, cozy, protected environment, but meanwhile the number of ships has gone down. And I think it's stated—I couldn't prove it and give you a source, but I heard the average safe life of a ship and economic life of a ship is about 20 years. Average age of the Jones ship fleet is 35 years, which tells you there's a lot more danger and a lot less modern technology, communications, and so forth than there would otherwise be. The costs go on and on. It's really hard to imagine.

But let me now give each of you a chance to respond to comments others have made, and then I'll open it up for the floor. And let's just go in the same order. I'll start with you.

**LUIS RIVERA MARÍN:** I certainly agree that the preferred shipping method is through the sea trade and sea shipping lanes, and the fact that the artificial barriers caused by Jones Act limitations exacerbate the fact. It's exacerbated by the fact that on the energy side, the pipelines are two capacity. So oil by products and natural gas, the capacity of the pipelines moving throughout the continental U.S. are over capacity. Then that preferred method by shipping is not allowed because of the fleets' limitations that was detailed here. So, certainly, the fact that those ships are not available are a burden and have an effect of what we paid for, for the energy prices.

It's curious that the industry says that they have alternatives, and they are talking about new vessels that are 40-foot ISO containers that carry a limited amount, and we did model that alternative. And it would mean that Puerto Rico for just our two units, in San Juan 5 and 6, that have been transitioned to LNG, we would need 27,000 of these containers making 519 round trips a year, and there's no ships that have that capacity. So the disruption in logistics is major.

And when I hear the effect it has on families, the cost on the families, the jobs that it costs, certainly we modeled the price differential of being able to access natural gas at the spot prices in the Gulf, and that would cost more than \$300 million to our utility company.

So the job and the income and opportunities that are lost because of the inefficiencies created by this artificial barrier or protectionist measure certainly is costing Puerto Rico dire.

**ANNE KRUEGER:** Thank you. Vicente?

**VICENTE FELICIANO:** Two quick things. One, John's figures are strictly based on difference in maritime transportation cost. They do not incorporate the issue of land transportation cost.

In addition, because the Puerto Rico economy is hampered by the Jones Act, Puerto Rico needs more transfer payments from the federal government on an ongoing basis than would be the

case if the Jones Act is repealed and we can be more competitive and have more jobs and do more things by ourselves. So a lot of the requests for federal transfers are the result of this problem.

**ANNE KRUEGER:** Thank you. John?

**JOHN DUNHAM:** I think there's some good points that have been raised. To Dr. Krueger's point, the Jones Act has really hampered the U.S. economy, and one thing to look at is the administration has just put tariffs on imported steel and aluminum. One of the biggest components of building a ship is—you know what? It's steel and aluminum. There are not ships built in the United States now, virtually none, and that has really hurt the steel and aluminum industries in this country.

Bethlehem Steel in Pennsylvania specialized in steel for ships. Stop building ships, bye-bye Bethlehem Steel. That's a huge cost to places like Bethlehem, Allentown, and the Susquehanna Valley of Pennsylvania. Those are real jobs. Those are real people that are affected by this 100-year-old law that nobody even knows about.

The inland transportation cost in the United States is really important. We didn't model it because it wasn't our job. That wasn't what we were asked to do.

**VICENTE FELICIANO:** No, no.

[Laughter.]

**JOHN DUNHAM:** We are hired to study. But one thing that I've worked on a lot is food, the food industry. That's one of our company's big clients, and one of the things that happens every time there's a harvest season in the United States, particularly for sugar beets and soybeans, is every railcar in the country gets sucked up moving this stuff. And you can't move steel. You can't move scrap. You can't move cars. You can't move general cargo because everything is chockablock full with soybeans or sugar beets. There's just not enough capacity in the rail network to handle all that.

If you could move more by water—and this is bulk cargo. This is the stuff that moves by water. Water is the best for handling. You can move coal by water. All of these things would free up the rail system. That would lower rail prices. That would improve rail service, which is absolutely abominable throughout the country, and these are all effects that are caused by something that was designed for the Port of Seattle to control Alaska.

**ANNE KRUEGER:** Okay. I guess it's time to open it up for questions. We'll start with you, sir.

**JOHN D. McCOWN (Blue Alpha Capital):** On LNG, I guess a question. A couple of weeks ago—

**ANNE KRUEGER:** Please identify yourself first. I'm sorry. I should have asked ahead of time.

**JOHN D. McCOWN (Blue Alpha Capital):** John McCown with Blue Alpha Capital.

The International Gas Union came out with the 2019 energy report. That's the group that measures all LNG, and 2 weeks ago, when they had the 2018 data, that annual report showed that Puerto Rico moved 100 percent of its LNG—came from Trinidad, and Trinidad, I guess is the fourth or fifth largest provider. So I guess it was a better deal for Puerto Rico to get it from there than Qatar or Australia, which are the biggest LNG exporters.

I guess my question is that same annual report showed that the DR, which brought in a little bit more LNG than Puerto Rico, brought 85 percent of their LNG from Trinidad and only 15 percent from the U.S. This is 2018.

So I guess my question is, How does that square with the—I guess the point that you're making? I mean, obviously, the DR is not constrained by the Jones Act, and yet in 2018, with roughly the same quantity as Puerto Rico, 85 percent came from the DR. I don't know a lot about LNG, but I assume it's somewhat a commodity. A freight rate kind of affects it. Trinidad is a fairly big exporter. In fact, I think the data shows that Trinidad's price of LNG in the summer was actually less than the U.S. was getting.

Now, I know you get into spot for long term, but I guess I look at that, what I assume is correct, that DR last year bought 85 percent of their LNG from Trinidad.

**LUIS RIVERA MARÍN:** I think the dynamics, the market dynamics upon the availability of natural gas for export in the mainland is changing very rapidly, and the capacity and the terminals that are being opened shall increase the capacity to serve markets, including the Dominican Republic and Puerto Rico.

So, in the long term, if you look at similar analysis, you see that we would be working on a 5-year span probably while we transfer our technology to LNG source of fuel, but at the same time that Trinidad—for example, when we compare U.S. and Trinidad, their expected capacity, it's dwelling into a 15-year window.

So I guess what we are looking at is a long-term solution for our energy needs, and we've been, I guess, for the last 50 years dealing with our incapacity to meet energy demands for the island properly. I think while our strategies are on a long-term basis and aligned with the U.S. strategy whereby you are opening more terminals, thus, increasing the capacity for U.S. to export, and that's our objective to tap into those markets, recognizing the stable price on LNG moving forward and certainly looking at the reliability of the U.S. source.

**ANNE KRUEGER:** Vicente?

**VICENTE FELICIANO:** I don't know about the recent statistics, I'm afraid. I'm not privy to it.

But some interesting statistics a couple of years back showed that one of the main suppliers of LNG to Puerto Rico was the Dominican Republic. Now, there's no LNG produced in the Dominican Republic. At some point, the federal government initiated an investigation of "Was there a runaround of the Jones Act here?"

**JOHN D. McCOWN (Blue Alpha Capital):** The U.S. was actually exporting LNG until fairly recently.

**VICENTE FELICIANO:** Yeah. Well, after that, an investigation started. All of a sudden, the imports from the DR dried up, and so that's the statistics of imports of LNG in Puerto Rico.

**JOHN DUNHAM:** Sir, I think you just answered your question. Up until I think 3 years ago, it was actually virtually illegal to export any petroleum from the United States. I think LNG could only be exported to Japan. So the U.S. didn't have terminals. It didn't have an infrastructure to export LNG.

As a matter of fact, gas producers in this country are tapping wells, and they're not producing because prices are so darn low. Gas in the United States, the LNG prices, are about a quarter of the price in Qatar, which is the largest exporter and serves the European market. So terminals are being built, and when terminals are built, then there will be shipments.

Trinidad is shipping LNG because it has terminals. The United States, until last year, really didn't have any.

**ANNE KRUEGER:** No. The gentleman over here with his hand up.

**MAX TRUJILLO (MJT Policy):** Thank you. Max Trujillo from MJT Policy, a government relations firm here in Washington.

Today it was just announced a compromise has been reached, at least in principle, between the White House and Congress regarding a \$2 trillion infrastructure project. This sounds like an opportunity for the Jones Act discussion to come into play as it has an impact on infrastructure, particularly in Puerto Rico, all throughout the ports and rails, as you mentioned, throughout the country.

I want to get your sense of the viability of the debate moving it from a single issue to a multistate issue, and what are your thoughts overall on how to get the debate moving forward? Thank you.

**VICENTE FELICIANO:** I think that's for you.

[Laughter.]

**LUIS RIVERA MARÍN:** Well, personally, I've been focusing my discussion at least on where we are moving forward on our petition regarding energy, and certainly, it has come up that other regions of the nation share our challenges. When you look at the Northeast, it's energy also, whereby because infrastructure limitations, there is a lack of access when you compare it to other regions. And that limits the ability to prosper.

I would guess when we look at the globe and the global economy and the major investments that countries like China is making, certainly we truly support the administration's initiative to invest in repairing our infrastructure, that it's under fatigue, and to improve it, so new technologies, new capacities, new sources of energy can be properly tapped and become potential for exports that at the end shall make the U.S. more competitive. So we are very optimistic about that policy.

**ANNE KRUEGER:** Anybody else want to comment? Chenti?

**JOHN DUNHAM:** I think regulatory reform, like looking at the Jones Act or other regulations, is one way to increase infrastructure capacity without building stuff. So that's something that should be part of any infrastructure bill, and also the energy infrastructure, for the most part, the rail infrastructure is privately financed, so that's not really a government. You're not going to see a lot of government money going into that. Even if you built more seaports, you're not going to have more ships to go to them. So that's not going to really do much.

**ANNE KRUEGER:** Next question. Okay. Right there, sir.

**DAVID KRUCOFF (Douglass County, Maryland):** Good afternoon. My name is David Krucoff. I'm with Douglass County, Maryland, which is the future of the District of Columbia.

My question to you is about politics also. If you could follow up on what is the administration's official policy on the Jones Act, if there is one, and I just want to make a comment real quick that we are in a bubble. We are receptive to points about increasing the incentives to be capitalistic in this room, but did we invite the delegation from Washington State, the lobbyist that advocates, for the Jones Act shippers to this event? We need to get out of our bubbles and advocate and unify. First, the politics, please, if you would comment more thoroughly on Republicans, Democrats, Trump administration, that kind of thing. Thank you.

**ANNE KRUEGER:** Thank you. There was two over here. First you and then you. The first row and then the third row, right on the corner. I can't see well enough to see who's who with the lights on.

**ATTENDEE:** So my name is Dave Anspach [phonetic], no affiliation, retired. I saw on the website about putting that billboard sign over—I guess an expressway over New York city, near New York city, Long Island or something like that about if you're congested on the railway and the Jones Act. Do you if that's had any effect? Has there been a popular groundswell against this thing, or is it still true believers in this room today that are still—I guess thanks.

**JOHN DUNHAM:** Is that for me? I never saw the billboard. I actually am a transportation economist. I came out of transportation. I worked for the Port Authority in New York. And the Jones Act is one of those inside baseball things. Nobody knows anything about this law. Nobody. Unless you like to take cruises to nowhere or something like that and you can't do it now because of the Jones Act, by the way. You don't know about this thing. This is total inside baseball, and it's something that is going to have to be done by—if you're going to change it, you've got to get Congressmen and Congress-ladies to care about it.

**ANNE KRUEGER:** Okay. Then the next question in the third row and then the second row, and then I'll get back to the back there. I see hands.

**RICHARD MADDEN:** Hello. Rich Madden, full-time merchant mariner, part-time safety and security advocate for the maritime industry. I've actually got multiple questions, and I'm not sure how much freedom I'll have here, but I'd like to, one, challenge a couple of the assumptions or a couple of the numbers that you've been talking about.

The number was thrown out of 96 vessels, and that's 96 deep-draft vessels operating in the Jones Act.

**JOHN DUNHAM:** It was 96 or 97, yeah.

**RICHARD MADDEN:** I just want to emphasize that that's actually close to 40,000 vessels operating in the Jones Act trade. This includes deep-sea vessels, tugs and barges, workboats. So you have a large number of vessels operating under the Jones Act, which seems a little disingenuous that we only address the 96 or 97.

The other number I want to throw out there or that I want to challenge are the idea of real jobs, real people that Mr. Dunham threw out. The Jones Act statistically adds something like \$100 billion to the gross domestic product. Of that \$100 billion, \$40 billion of that are wages to the 650,000 workers in the Jones Act industry. So you're talking close to \$62,000 per Jones Act worker, which is above the median income in the U.S., and according to NPR that I was listening to on the way in today, we're looking for middle-class, middle-income jobs. We don't have those, and they're not being built.

So those are my challenges to you. I'm really not looking for a response, but I will take a look at—you can respond to them if you will, but I'd also like to address specifically Puerto Rico and the LNG trade and power down there.

Of the 30 cents per kilowatt hour that you were talking about, how much of that is actually energy cost versus infrastructure cost? Because I understand in the wake of Hurricane Irma and Maria, I believe it was, there was a lot of damage to the infrastructure in Puerto Rico. So how much of this is the rebuilding versus the actual energy cost?

**LUIS RIVERA MARÍN:** Mostly, when you look at our rate structure component, you have in PREPA, the largest source of operational cost as fuel purchases, and because we rely on bunker fuel in the production as probably 70 percent of our fuel portfolio, that's why everybody—it's a common fact that everybody agrees that we need to transition into LNG in order to be more efficient, be able to meet MATS standards and environmental standards because Puerto Rico is subject to the same EPA regulations and the same EPA requirements as the rest of the nation. Nevertheless, we don't have access to the costs associated by being able to tap into cleaner, more efficient, less costly source of energy for our turbines.

So when you look at that 30 cents, the main component is fuel, and it was directly correlated to when the barrel of oil was near \$150 per barrel, and at that point in time, we suffered directly consequence while the LNG cost was not as volatile as bunker fuel in our case.

**VICENTE FELICIANO:** Yeah. And I want to take issue about jobs created by the Jones Act. There are jobs that are tied to the Jones Act, but there are jobs that are lost because of the Jones Act. And like I think the three economists in this panel would argue—

**ANNE KRUEGER:** And the Governor.

**VICENTE FELICIANO:** —the loss of jobs more than offsets the jobs tied to the Jones Act. So the Jones Act diminishes. It subtracts from total employment in the U.S.

**ANNE KRUEGER:** John?

**JOHN DUNHAM:** I'd—sir?

**RICHARD MADDEN:** Also talking about—back to the LNG, back to jobs, like back on the LNG in Puerto Rico, the Americas back to 2011 brought in three Jones Act vessels or gave coast-wide certifications to three potential LNG vessels, the LNG Gemini, Leo, and Virgo. So this is 2011, 8 years ago. Currently, two of those ships are laid up in Norway, I believe. Has there been any attempt to use these vessels for importing LNG to Puerto Rico?

**LUIS RIVERA MARÍN:** My belief is that those are mothballed in the North Sea, and that those vessels require—they're retrofitted, and they don't qualify because they are not owned by U.S. companies or nationals, as required by the Jones Act. But my belief is they are owned by a South Korean company.

**ANNE KRUEGER:** And if they're going to be retrofitted overseas, that can't be done, again, for the Jones Act reasons because of the excise tax any overseas retrofitting. John?

**JOHN DUNHAM:** I just want to address the two points you made about my numbers. I agree with you. There are about 40-some-odd-thousand Jones Act-qualified vessels. The vast majority of those are trap rock barges, grain barges, tugboats, ferry boats, tenders that are

servicing oil wells, not things that are carrying cargo in international-type trade. Those don't exist. So it's kind of a disingenuous number to use in this discussion.

But you are absolutely right. That number is true.

**ANNE KRUEGER:** 40,000 is the number I've seen for barges.

**JOHN DUNHAM:** Yeah. It's mostly barges.

**RICHARD MADDEN:** Okay. But you're talking about coast-wide trade throughout the U.S. So if you're talking about coast-wide trade specifically on the East Coast, which I'm most familiar with, there is a lot of tug barge traffic all up and down the East Coast with containers, with petroleum, with bulk grain. So to say that it's not happening, to say that we're not taking trucks off the road, again, is a little bit disingenuous, and again to—

**JOHN DUNHAM:** But I didn't say—

**ANNE KRUEGER:** Let's just focus on this. So finish up, and then we'll move on.

**RICHARD MADDEN:** Okay. In terms of traffic on the road, is the congestion on the road, more trucks on the road, is this an effect of the Jones Act, which I expect you will say it will, it is, or is it an effect of the harbor maintenance tax, which affects all cargo coming on and off vessels in the U.S.?

**JOHN DUNHAM:** I've actually written a study against the harbor maintenance tax, which I think is an insane excise tax.

Of course, it's not 100 percent due to the Jones Act. That's an effect. If you get rid of the Jones Act tomorrow, there's going to be no vehicles on I-95; that's silly. But what the fact is, that there are very few vessels in the Jones Act trade that can carry a lot of cargo. You're not going to carry huge amounts of coal on river barges. You can carry a lot of coal on a bulk freighter. So the cost structure is very different.

**ANNE KRUEGER:** Okay. Sorry.

**JOHN DUNHAM:** I'll leave it at that.

**ANNE KRUEGER:** There was a question further back, right where you're standing. Right there. Thank you.

**KEVIN HORNBERGER:** Kevin Hornberger, State Representative for Maryland on the Upper Bay.

One of the things that wasn't discussed is that apparently the Jones Act also applies to dredge and dredge spoils, and I was wondering if you could comment on that as we dovetail in with the infrastructure comment that currently dredge spoils are applicable to the Jones Act.

**JOHN DUNHAM:** I'm sure they are, right? Because you are going to have to transport between two U.S. ports, and where you are, dredging is extremely important.

**KEVIN HORNBERGER:** We're talking about moving it from one spot to the other.

**ANNE KRUEGER:** We can't hear when you don't have the mic.

**KEVIN HORNBERGER:** We're in the process in Maryland of creating islands using dredge spoils from the Port of Baltimore, and it's been interpreted that even that is applicable to the Jones Act. So if you could speak to that and whether or not it should be a repealed-back provision.

**JOHN DUNHAM:** You wouldn't be able to bring in a foreign vessel in to do that.

**ANNE KRUEGER:** There was another question just right in the center, the lady.

**JEN RICCARDI (European Union):** Hi. Jen Riccardi with the European Union.

If you accept the policy goals of Jones Act are valid, that you want a vibrant merchant marine in the U.S., that you want a shipbuilding industry, are there other, better policies that the federal government could be pursuing to encourage those policy goals other than the restrictions of Jones Act?

**VICENTE FELICIANO:** You tax and you build the vessel with tax dollars. I mean, you tax a larger economy, and you build the vessel tax dollars.

Does that make sense? I don't think so. I think that we do well with all the foreign things that we import and all the products that we export. I don't think that they're valid, the objectives. You could achieve them otherwise, but—

**JOHN DUNHAM:** But then it would be transparent. It's much easier to hide things, you know.

[Laughter.]

**ANNE KRUEGER:** We have certainly seen a lot of evidence that the Jones Act has resulted in a very cozy monopoly, both on the shipping side and on the construction of ships side. And it seems to me that whatever the answer is, it is not that we need to produce all our vessels because, obviously, there are other places that produce them more efficiently, more quickly, and more cost effectively and more with modern technology.

On the other hand, that doesn't mean that it's not relevant for defense because, quite obviously, in terms of security, having the vessels is more important than where they're built. Let's not have any instance where we need them, but if we do need them all the time between you place the orders for the ships and what have you, it would be so much that you couldn't do it, anyway. So I don't think that the shipbuilding capacity, because of national security, is as important as having the ships.

And then I would say we'd do better with those resources. There's quite—literature on the monopoly effects of their lack of incentives. So I think that would dominate with that one.

There was another question back over on this side, and then we're coming back down here.

**VICENTE FELICIANO:** Could I interrupt?

**ANNE KRUEGER:** Oh, sorry.

**VICENTE FELICIANO:** On the monopoly issue, Jones Act carriers were charged with monopoly practices in the Puerto Rico trade, and some of them ended up in jail. Right now, there's a proposal to monopolize the service at the port; that is, the cranes that service international and Jones Act shippers at the port. There's a transaction that has still not been approved of one of the Jones Act carriers taking over an independent company and being the only one servicing carriers coming into Puerto Rico. That's the sort of monopolistic practice that we are concerned about.

**ANNE KRUEGER:** A question right there, and then we're coming back over here.

**JOHN HEIMLICH (Airlines for America):** Yeah. My question—sorry. John Heimlich, Airlines for America.

My question has to do with sort of aligning the political lift with the economic benefit, and I think of the Jones Act in sort of three simple pieces, sort of owned, operated, and built. Tell me if I'm wrong, but my sense is that 90-some percent of the economic dislocation is in that where the ship is built provision. In other words, if we lifted—reformed that provision, we'd get a lot of economic benefit, even if we still left in place the mandates that the vessels had to be owned and operated by U.S. personnel, and that we'd have this influx of vessels that would have more opportunity for maintenance jobs, marine personnel and whatnot.

I mean, if you think about to—and so many people talk about should we repeal the act, but I think it could be a more surgical discussion. If you think about it today, if we sort of replicated the Jones Act for the airline industry, what we're basically saying is you can't fly airbus equipment, you can't fly Bombardier, you can't fly Embraer. You can only fly born equipment, and yes, there are some airbus equipment now produced in Alabama. But that aside, think how many fewer jobs we'd have if you only allowed vessels made—or to be more expensive to

operate. So, I mean, can't we think of this discussion also in terms of sort of sort of honing in on that U.S.-built provision?

**VICENTE FELICIANO:** There's a bit of that. As has been mentioned, in the Puerto Rico trade and also very significant for Florida, you allow cruise ships, which are not U.S.-owned, not U.S.-built, and not U.S.-crewed.

Now, the exemption requested by the government of Puerto Rico is another step of nibbling away or opening the door. So while the repeal is best, politically it's probably this one-step-at-a-time process, and I was mentioning before a private conversation. That we visualize this bit, and let's keep the distances. We visualize this as the Civil Rights movement: We shall overcome. It's not going to happen tomorrow. It's not going to happen over a year. But there's going to be movement towards the repeal, and yes, it has to be in steps.

**JOHN HEIMLICH (Airlines for America):** Yeah.

**ANNE KRUEGER:** If I recall correctly, from one of the studies actually done here at Cato, the operating cost per day of a ship, U.S. Jones Act ship, are about three times the cost of operating other ships. The shipbuilding cost is about six times the others. So, yes, that's part of it, but the operating cost is still three times after you take that out.

Obviously, we would all agree that anything you do to weaken it is good, but on the other hand, I don't think that would solve the problem.

Now, I promised this gentleman over here for some time, and then we'll go over here.

**LUIS RIVERA MARÍN:** May I add a few words?

**ANNE KRUEGER:** Sorry.

**LUIS RIVERA MARÍN:** It would be that our petition is precisely predicated on the principle that the law, the act provides for this type of waiver, and that we shall trust that market forces and the demand created would bring the efficiencies. And it's conditioned on the availability of a vessel. In the meantime, while there's no vessel available, then we seek that waiver or condition.

**ROB QUARTEL:** I'm Rob Quartel, former U.S. Federal Maritime Commissioner. I have headed a shipbuilding technology company, and I today had a couple of technology companies in the IT space.

A couple quick comments and then a question. So to the lady from the EU, the Merchant Marine Act of 1920 was in fact for the purposes of national security, build a bigger fleet, blah-blah-blah. We can argue about whether that was effective. The answer, it has not been if you look at the Gulf Wars.

The Jones Act is Section 27 of the Merchant Marine Act and only a handful of words that pulls all the worst aspects of that law together, and as he has said up here, it was intended to protect a rail line and a shipping line from Seattle to Alaska from Chinese and Canadian competition. And it has the effect, as intended, which is to destroy international shipping along the coast and cast cargoes into rail and trucks. So that's just a point. That's one point, but for the audience, the Jones Act was not for the purposes of national security.

My friend behind me illustrates one of the things that is endemic on the apologists for the law, which is they throw out a lot of chaff, irrelevant stuff. It is true there are 40,000—I wouldn't call them vessels. Calling barges vessels is like calling a bath tub a vessel.

[Laughter.]

**ROB QUARTEL:** Of the 40,000, 39,000 or so are barges, and yes, they do have a robust trade. And they last longer, but they're easy to build. And they cannot carry the kinds of cargoes that we really are concerned about, which is deep-draft ships.

And so what people like to do on the other side is conflate vessels, 40,000 vessels, with problem, which is we don't have enough complex large ships for LNG, for grain, for anything that requires a big ship, which is real trade, and we only have about 96 of those. And of those, 60-some are tankers.

The other thing that they conflate it with is \$100 billion worth of economic activity. Well, it is true that the maritime industry as a whole has that much activity, but the Jones Act doesn't. Ninety-eight percent of all—less than 1 percent of everything is Jones Act, and everything else, 98 percent of that, is foreign trade. So you could say that of that \$100 billion, \$98 billion is due to our, thankfully, foreign trading partners who use foreign ships. It has nothing to do with the Jones Act.

There may be 10,000 jobs associated with Jones Act facilities, et cetera, but not all the ones you're talking about.

And, oh, by the way, an American merchant mariner on average makes over \$120,000 for 6 months' work, so 62 is misleading.

So my question is, How are you planning to get past all of this utter BS? LNG is a good case in point. It would take 9 months for Crowley to load a single LNG tanker at the rate they load containers—they load what are called "ISO-tainer"—for gas. So it's an irrelevant comparison. How—what's your political strategy?

**LUIS RIVERA MARÍN:** Thank you for that question. I must say we have a factually based argument in our petition, and we certainly hope for to find the proper ground with those that are evaluating it.

Certainly, when you look at the market and how market forces allow efficiencies within it, Crowley and TOTE are good examples because now they have ordered LNG-powered vessels. So they are taking advantage of it. Please allow us to take the same advantage.

**VICENTE FELICIANO:** Yeah. There's something else about the political strategy. Obviously, if Puerto Rico goes by itself, it will not have traction, and the strategy of the government has been to take advantage of the possibility of the northeastern states to benefit from the exemption to the natural gas. So it is a building coalition. At some point, I'm sure the bridges will be made with Hawaii and Alaska. As you know, by our political conditions, we have no voting Congressmen. We have no Senators, but these states do.

**ROB QUARTEL:** But you have a Florida congressional delegation which is up in arms, despite the fact that there are more Puerto Ricans in Florida than there are in Puerto Rico. So what are you doing about that?

**LUIS RIVERA MARÍN:** Well, I think what's great about our nation is that in terms of politics, we have a cycle, and because of Puerto Ricans, Senator Scott is sitting in the Senate.

**JOHN DUNHAM:** You also have in Florida a lot of cruise ship line operators, all foreign-owned, by the way, that can't do—cruises to nowhere. It's illegal. They can't do cruises to Key West. They can't do a lot. There's a lot of different opportunities that are killed by the Jones Act.

But this is inside baseball. This is totally inside baseball. Nobody knows this thing exists. So you've got a third of the Congressmen for you. You've got a third against you. You've got a third in the middle. You've got to sway one more than the other side. That's the political reality.

**ANNE KRUEGER:** Right over here.

**ATTENDEE:** Thank you. My question kind of—

**ANNE KRUEGER:** Identify yourself, please.

**ATTENDEE:** Todd from the House Homeland Security Committee.

My question relates to response after Maria and Irma. Aside from the energy struggles that the island has had, how has the Jones Act impacted response and recovery to the hurricanes?

**LUIS RIVERA MARÍN:** Well, I would say that when we looked at the graphic, whereby I believe 10 ships took advantage of the waiver, the Jones Act waiver, we had a limited window of just a few days. You saw energy there. Probably half of those, I think. We've been served very well by our shippers in terms of frequency and in terms of the ability to bring in goods, but the disruption caused by this incident, what's truly extraordinary happening in the island, and there

was not only a disruption in the ports, but in the roads and especially in a week or 10 days after the storm.

So we had logistic issues just within the island that were monumental. So we would like to see this more on a long-term solution for the island, but certainly, we work very hard. And we are working with FEMA, with health agencies, particularly DHS, regarding how we make sure if we have an event similar like Irma and Maria. We make sure we can stop the suffering. We can allow the flow of goods. That means not only Jones Act, but our airports, our airfields, what if we have a major earthquake. What could be the effect on our island condition bringing in goods are certainly a concern that we have, and we are actually working very hard, the local government with federal agencies, that we make sure we can anticipate and we have readiness, and we harden our assets, including our ports and airports and health facilities.

**VICENTE FELICIANO:** Yeah. You could split in two phases. The first phase, that was the list that I provided. This is life-saving cargo. I mean, people are dying. There's not enough shipping capacity at one point to get this out, and if the exemption had lasted longer, perhaps fewer people would have died.

Now, the other part is once you're past that initial crisis, you have FEMA saying, "Oh, I need these ships to bring my stuff." Well, the total cargo capacity—and this is past the exemption—just shrank, and here is Mr. Manuel Reyes who had lots of problems with his—the people in his association because shelves were empty. Shelves were empty because there was not enough shipping capacity to bring—and you know who decided what got shipped or not? The shippers. At that point, that was close to being God. I mean, you couldn't—there was not shipping capacity. You would go to one of the shippers, and they would decide, "Okay. I'll ship you."

**ATTENDEE:** They're carriers.

**VICENTE FELICIANO:** Oh, sorry. One of the carriers, and they would say, "I'll ship you, and I wouldn't ship you because there is not enough capacity." So you could divide it in that section.

And a final point regarding the northbound trade, because the carriers from Puerto Rico go up north empty, that's a huge inefficiency that is passed on, on the rates. And so that is reflected in the high shipping rates to Puerto Rico.

**ANNE KRUEGER:** Okay. John, do you have any last words?

**JOHN DUNHAM:** No. I'm fine.

[Laughter.]

**ANNE KRUEGER:** Colin, do you want to say anything just to wrap up?

**COLIN GRABOW:** [Speaking off microphone.]

**ANNE KRUEGER:** Okay. Well, in that case, let us please thank all three panelists for what's been a very interesting discussion.

[Applause.]