Chairman DeFazio, Ranking Member Graves, Congressman Young, and distinguished members of the subcommittee, thank you for the opportunity to be here today. My name is Mead Treadwell, and I live in Anchorage, Alaska. I am the Co-Chair of the Woodrow Wilson Center’s Polar Institute, 1 Chair of the Iceland-based NGO Arctic Circle’s Mission Council on Arctic Shipping and Ports, 2 and Chair of the Polar Advisory Board at Iridium Communications, Inc. I am also the former Lieutenant Governor of Alaska (2010-2014) and Commissioner and Chair of the U.S. Arctic Research Commission (2001-2010) under President Bush and President Obama. While I am here through my affiliation with the Wilson Center, the following thoughts and opinions are my own.

Thank you also for the title of this hearing. The United States cannot afford to “do nothing” about the general lack of marine infrastructure in the Arctic. Inaction undercutss efforts to develop a safe, secure and reliable Arctic marine transportation system. Your hearing is well-timed. Just this week, the eight-nation Arctic Council Ministerial occurred in Finland. There, Secretary of State Pompeo challenged Russia and China to help maintain the Arctic as a peaceful, lawful
region as they expand their infrastructure and presence. In doing so, he underscored the need for a stronger U.S. presence.

The US infrastructure gaps you will hear about today are little different from those outlined in the Arctic Marine Shipping Assessment that was adopted by the Arctic Council in 2009. Those shortages range from a shortage of icebreakers, an absence of Arctic deep water ports and ports of refuge, an absence of bunkering and refueling capabilities, an absence of salvage capability, and difficulties in communications, charting, ice monitoring and situational awareness.

There are three ways we can more speedily fill the gaps we discuss again today.

1. First, we can appropriate capital funds for infrastructure, justified by security or economic development. Security plans, civil plans, commercial plans all identify similar needs. We need to have these plans mesh together better. All sides appear to be “going it alone,” where Polar Security Cutters are described as “mobile bases” for the Navy and Coast Guard, and civil and commercial authorities are left to justify and finance northern ports, communications, and icebreaking services on their own. If we work better together, we can get more done, faster.

2. Second, we can create a business, an Arctic Seaway Development Corporation, modeled on the St. Lawrence Seaway, where we bring nations together to offer a reliable, voluntary, tariff-based service that will attract and justify infrastructure investment. That’s the purpose of S. 1177, “The Shipping and Environmental Arctic Leadership Act,” developed by an extensive process at the Arctic Circle and the Wilson Center, with consultations with Arctic states and observing nations from across the globe. Sometimes

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3 For a transcript of Secretary Pompeo’s remarks in Finland, please visit: [https://www.state.gov/secretary/remarks/2019/05/291512.htm](https://www.state.gov/secretary/remarks/2019/05/291512.htm)

dubbed “Uber for Icebreakers,” the business plan requires just a small percentage of the traffic served by Suez, diverted to the Arctic, to pay for the icebreakers we need.

Mr. Chairman, if the Arctic were an isthmus, rather than an ocean, and it had been a glacier that retreated rather than sea ice, we would be building a canal right now, and looking at tariffs to help pay the bill — just as Suez and Panama do. Russia has developed a tariff based system that the Secretary of State this week criticized because it is compulsory in an ocean that we believe the rule of law requires be open for freedom of navigation. The proposal we have is a voluntary “best practice” that insurers and ship owners, encouraged IMO rules, should sign up for. It wins business on establishing reliability on an ocean which has failed to attract regular service because reliable infrastructure is not in place.

3. Third, we can sell more resources and induce more private capital to invest in the American Arctic. Russia is cleaning our clock in serving global LNG markets from Yamal, and the vast gas resources we’ve found at Prudhoe Bay and Point Thomson and the Canadians have found in the Mackenzie Delta are still lying fallow. Pipelines planned to bring gas south in both Alaska and Canada have been so expensive as to not be able to compete with new gas supplies in North America. If we look at shipping LNG directly, we have just 600 miles to get through the ice zone, while the Russians must traverse 2600 miles of ice to make it to the Bering Strait. Economic activity in the North will help pay for infrastructure in the North.

Let me give some examples of ways we are making progress on all three approaches:

- Many of us here pushed the last three administrations to include funding for new icebreakers to meet critical U.S. needs. At last, a contract was issued this past month for the U.S. to start construction on a new heavy Polar Security Cutter, and for preliminary work to be done on two more PSCs—half of the six vessel goal announced by the President in his 2017 address to the Coast Guard Academy.
We have also made progress in developing a system of ports in the US Arctic, including a deepwater port capable of servicing large ships like the new Polar Security Cutters. In 2015, Congress established a Port Clarence Council with the State of Alaska and Bering Straits Native Corporation to develop a strategy for developing Port Clarence, America’s only deep water port in the Arctic. At least eight other western and Northern Alaska communities, including Nome and Adak, Utqiagvik and Prudhoe Bay, have aspirations and plans to support increased Arctic shipping.

In 2018, the International Maritime Organization (IMO) approved a joint-proposal between the U.S. and Russia to establish a two-way shipping lane through the Bering Strait. I’m proud of the work we did first at the State of Alaska, and later at the Wilson Center, to encourage negotiations between the U.S. Coast Guard and the Russian government to get this started.

Iridium’s new polar-orbiting network of satellites is providing enhanced communications, marine and aviation tracking capability pole-to-pole, and is available to support the Global Maritime Distress Safety System (GMDSS). Other ice and ship-monitoring space-based radar systems are coming along, too.

For 152 years, the United States has been an Arctic nation. But it has never faced the imperatives it does today now that its third coast, the Arctic, has become accessible. Our challenge in the Arctic is to unlock its value while maintaining our values. We want the benefits of shorter shipping routes and untapped natural resources. We want to maintain our values—respect for traditional ways of life, food security, and the natural environment; the inviolability of our maritime boundaries; and the right of any vessel to freedom of navigation and passage. We can do both.

Mr. Chairman, let me conclude with some specific recommendations.

1. Let’s keep up the funding for icebreakers we have authorized and follow through on the system of ports needed in Alaska. To meet our goals of safety, security, and reliability
in the Arctic, the military, civil, and commercial sectors need to work together. Whether it is a defense authorization bill, a Coast Guard authorization bill, or a general transportation authorization bill, I urge the Congress to move away from the “stovepipe” approach as you push our agencies to make appropriate plans for the Arctic.

2. The best way to fulfill our infrastructure gaps in the Arctic is to generate new revenues. I urge this committee to sponsor companion legislation and hold hearings on S. 1177, “The Shipping and Environmental Arctic Leadership Act,” which would do just that.

3. The largest driver of shipping in the Arctic Ocean today is LNG exports from Sabetta on the Yamal Peninsula in Russia. Why can’t the United States and Canada, which have ample gas reserves on the Arctic coast, also export their gas and other natural resources to Asian, North American, or European markets? I believe we can, and am — in my private business — encouraging this to happen. Making it happen won’t require Congressional funding, but it will require Congressional and diplomatic support.

Pass S. 1177, “The Seal Act”

Based on the premise that American taxpayers—like those of other Arctic coastal states—should not have to bear the full cost of developing an international seaway so that Asian producers can sell goods more efficiently to European consumers, S. 1177, “The Shipping and Environmental Arctic Leadership (SEAL) Act,” would create a congressionally chartered seaway development corporation—similar to the Saint Lawrence Seaway—with the power to collect voluntary shipping fees in exchange for providing access to icebreakers, ports, and port-side facilities. Its singular task would be to establish a working relationship with the other Arctic coastal states to develop an integrated marine transportation system capable of offering seamless, reliable service to ships using the Arctic Ocean. Fees collected by the corporation would be used to lease spare icebreakers (“Uber for Icebreakers”) and fund marine infrastructure and other projects needed to ensure safe, secure, and reliable shipping in the Arctic Ocean.

Passing S. 1177, introduced by Senator Murkowski and Senator Sullivan in April, would send a clear message that the United States remains committed to maintaining its role as a key player in
polar governance and cooperation. It would also encourage the military, civil, and commercial sectors to work together to strengthen the US presence. Revenues received would help finance, build, and operate key marine transportation infrastructure such as Polar Security Cutters, deep draft ports, places of refuge, port-side facilities, and additional equipment or systems.

**Encourage LNG and Other Exports from the American Arctic**

Today, the single greatest driver of vessel activity in the Arctic Ocean is Russia’s ongoing development of multiple Liquified Natural Gas (LNG) export facilities with direct access to the Northern Sea Route (NSR). In 2013, Yamal LNG—a joint-venture including Novatek, the Russian government, and other entities—began construction of an LNG plant at Sabetta on the Yamal Peninsula. Four years and $27 billion later, the *Christophe de Margerie*—a revolutionary first-in-its-class icebreaking LNG carrier—completed a winter traverse of the NSR, stopping at Sabetta to take onboard the first LNG shipment from the plant that it successfully delivered to a buyer in South Korea. In February of this year, the company announced that it had offloaded more than 130 cargoes and shipped more than 10 million tons since start-up began in December 2017. By my own estimate, total LNG production from the Arctic could amount to as much as 80 million tons per year in the next 15 years if tidewater capacities in Russia, Alaska, and Canada come to market—making Arctic states the world’s dominant suppliers of LNG.

With Russia’s success in bringing such large and growing amounts of Arctic LNG to markets in Europe and Asia, it seems increasingly plausible—if not imminently doable—that we in Arctic America do the same from Prudhoe Bay, Point Thompson, and—in Canada—from the MacKenzie River Delta. Alaska also has sizable deposits of precious metals and rare earth minerals (REMs) that could be exported via ship in the future. Right now, these projects would need no additional funding from Congress. But they will require Congressional and diplomatic support in the years ahead.

Mr. Chairman, thank you for the opportunity to be here today. I am happy to answer any questions you may have. I would also be very pleased to provide additional information to committee members and staff at any time.