

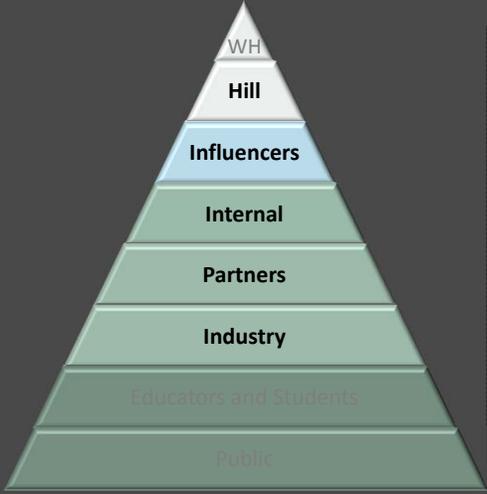


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Be Certain.

MARAD
Research Results and
Communications Implications
July 19, 2016

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Research conducted among key audiences



1. Historical data review
2. Vision/mission review
3. Communications review
4. Media review
5. Qualitative research:
 - MARAD Internal Staff
 - Congressional aids/staff
 - Key stakeholders
 - Industry stakeholders
 - Industry/MARAD thought-leaders

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Qualitative Research Methodology

- **Interviews were conducted between October 24, 2014 and February 11, 2015**
- **We interviewed approximately 75 people, including MARAD leadership, industry stakeholders, congressional staff and industry thought leaders**
- **In-person and by teleconference, strictly non-attributable**
- **Some of the organizations we interviewed included:**
 - Port of Los Angeles, Port of Long Beach, Great Lakes Ports Association, Maritime Institute, Unified Port of San Diego, Port of Oakland, CALSTA, Port of NY/NJ, American Association of Port Authorities, National Waterways Conference, Totem Ocean Trailer Express, Excelerate Energy, AASHTO, NDTA, American Maritime Congress, American Waterways Council, Marine Resources Group/Foss Maritime, Ocean Shipholdings, STAR Center, American Maritime Officers, APL Maritime, MCA Associates, Tote Service, Maersk Line, American Roll-on Roll-off, Sailors Union of the Pacific, Marine Firemen's Union, Matson, NASSCO, Aker Philadelphia Shipyard, Argent Group, K&L Gates, Crowley Holdings, Seacor and the American Club

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The maritime industry

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What challenges exist within the maritime industry? – ranked by mention

1. Recruiting and retaining the workforce
2. Crumbling Marine Infrastructure
3. Challenges to the Jones Act
4. Uncertainty about Government spending and regulations
5. Lack of awareness and understanding, Congress, States, the American people
6. Enforcement of, threats to, cargo preference, & declining military cargo
7. Competition, commodity pricing, cost differential, uneven capacity
8. Funding for MSP and government investment
9. Tonnage tax/IRS
10. Lack of capacity at gateway ports



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What opportunities exist within the maritime industry? – ranked by mention

1. LNG growth and crude oil, lift export ban and require US flag
2. Short sea shipping, Marine Highways Development
3. Reallocate/Fully implement the Harbor Maintenance tax
4. Dollar-for-Dollar matching programs, particularly for ports
5. MSP reform, close the gap
6. Working with the states, new private - public partnerships
7. Improve Military to Mariner Program
8. Modernize the infrastructure/shipyards
9. Partnerships the shippers and non-traditional partners
10. Innovation, new business models
11. Retain/expand Tiger Grants, Title XI, other programs
12. Expansion of the Panama Canal, Arctic shipping Lane



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How do you see the maritime industry changing over the next 5 years?

Consolidation, energy, world order

- “There will be movement through most business sectors and continued consolidation among players; fewer and bigger..”
- “Consolidation – you can see that happening now.”
- “Energy is going to change over the next five years.”
- “We should be at the bottom now. The next 5 years should pick up, but the boom from 2003-2008 will not be repeated.”
- “Demand will ultimately stabilize and come into much better balance”
- Chinese Maritime Silk Road, larger ships, super ports

But one thing everyone agrees on:

- “Bigger ships, bigger terminals, more cargo at once...”



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Implications of changes

1. Population will increase by 30% by 2060 (~100 million people) (or 400 million by 2050)
2. Freight will double over the next 15 years and the current infrastructure will not support it.
3. Economy can only grow as fast as the transportation infrastructure can support – ports are/will be the bottleneck
4. Freight will increase by 14 Billion TEU by 2050
5. By 2020, we will have a \$1T tax bill on transportation across all modes
6. South America will be the next major market for imports/exports
7. Where is the tipping point for congestion on the roads?
8. Shippers may be forced to move to the water/air



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What does the U.S. need to do to stay competitive?

- **“Internationally, we simply are not, and will never be.”**
- **“Revitalization. We sit here with shore-side terminal infrastructure designed and built for a different era.”**
- **“Reexamine regulatory and market barriers... then get to the national plan to move this stuff to market at the lowest cost and transport time.”**
- **“There needs to be a concerted commitment from the USG that it will ship its cargo on U.S. flag ships and support a viable fleet... then things will fall into place and succeed.”**
- **“Super ships will have an impact on the ports, change trade lanes and increase burdens on intermodal connectors.”**
- **“To stay competitive domestically, the Jones Act has to stay in place and that will continue to foster investment.”**



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What happens if we don't get it right?

1. **Impedes rapid and real economic growth**
2. **Unsustainable infrastructure tax bill (\$1T by 2020)**
3. **Lose influence/control of economic and national security destinies**
4. **Inability to project power globally**
5. **Increased congestion on highways and rail, increased safety issues, environmental issues and cost for maintenance**
6. **Lost national resource/capability/jobs**
7. **Increased dependence on foreign countries and mariners**
8. **Delays/failures in global/domestic supply chain**
9. **If our maritime industry is lost, we will not be able to recover it. Great Britain as an example**



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What does it look like if it's ideal? (Vision)

1. **True commitment to an economically viable international US flag fleet to assure US competitiveness and National security**
2. **Meet US future needs. Seamless and optimally integrated system of cargo/freight coordinated with the states, with the right mix of ships**
3. **Commitment to recruiting, educating, training and retaining the best mariners in the world and providing a long-term career path**
4. **Port and Infrastructure expansion and modernization, prioritized, investment strategy, funded by new partnerships & business models**
5. **Steady demand for shipbuilding and repair, in modernized ship yards building innovative ships, using the latest technologies**
6. **Assurance & stability of longer-term gov't funding and regulations**
7. **Maritime is an equal partner to rail and highway and integral to the national freight strategy**



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How do you see waterborne transportation fitting in with the rest of the overall transportation system?

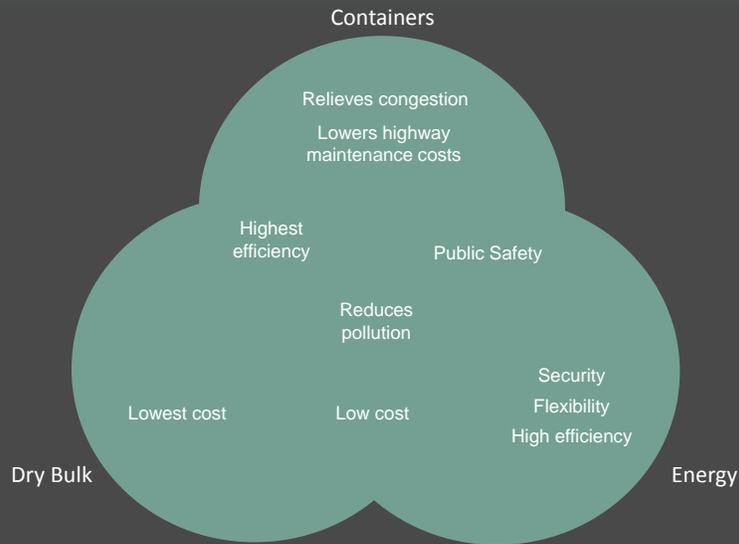
- "There needs to be a significant amount of investment in intermodal infrastructure so that the modes are adequately connected to ports."
- "It is integral. The roads are over-congested and the rails are limited so you need waterways."
- "In globalization, the ports are the gateway to the world."
- "We need to have a coherent policy where we are going to dictate certain cargos to waterborne traffic to alleviate congesting other modes."
- "I'd like to see better integration and see it as a system of systems so it is more than just trucks and highways at DOT."
- "Infrastructure is a huge deal and the ports have fallen behind. They need to be integrated and their critical needs need to be funded and focused on."



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What is the value or key benefits of waterborne transportation in comparison to the other modes of transportation?



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Industry priorities- ranked by mention

1. Help them be more cost effective, improve operations, serve customers better, on-time delivery
2. Educate Congress, States & public. Develop identity, popularizer
3. Protect the Jones Act/MSP
4. Find alternative financing/partnerships/business models
5. Focus resources, prioritize investments, look long term
6. Improve/retain Mariners
7. Stabilize regulations and funding
8. Increasing cargo & protecting/enforcing cargo preference
9. Short sea shipping/Marine Highway system
10. Alternative propulsion systems



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Research implications: Priorities

Fuel US economic growth and assure National security by increasing capacity and mobility, modernizing shipbuilding and infrastructure, increasing investment and partnerships

1. **Integrated & optimized US Freight Strategy (movement of raw materials and consumer goods), shippers to end users**
2. **Maritime transportation to maximize capacity, relieve congestion, lower costs & improve environment (Short Sea Shipping)**
3. **Increase capacity and modernize waterways, ports, intermodal connectors (new partnerships, investment, models)**
4. **World's best mariners, recruitment, retention, training, marketed and in demand globally**
5. **State of the art modern & innovative shipyards, building & repair**
6. **Competitive US Flagged fleet, reforms + mariners + ships getting greater amounts of trade**
7. **Assured National Security, MSP + RRF + Mariners + Ships**



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The Competition - China



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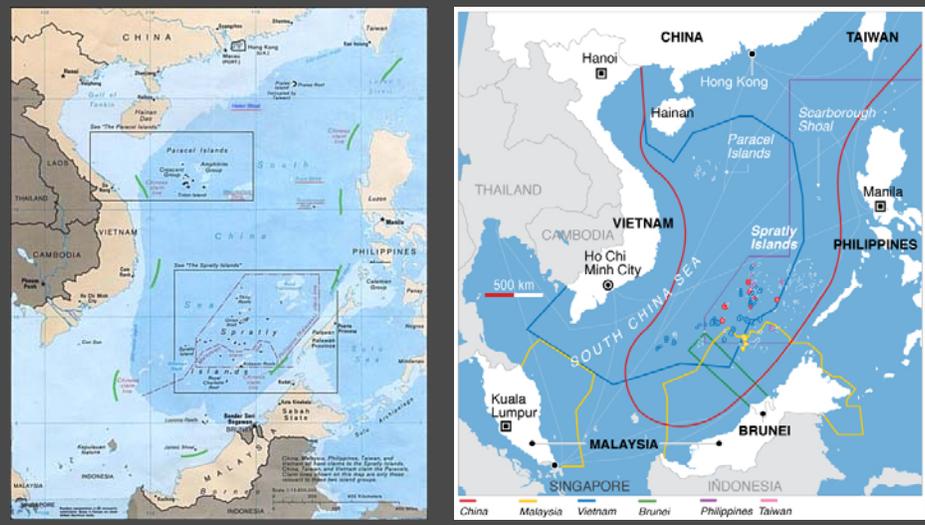
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The New Silk Roads



Implications of China's Strategy



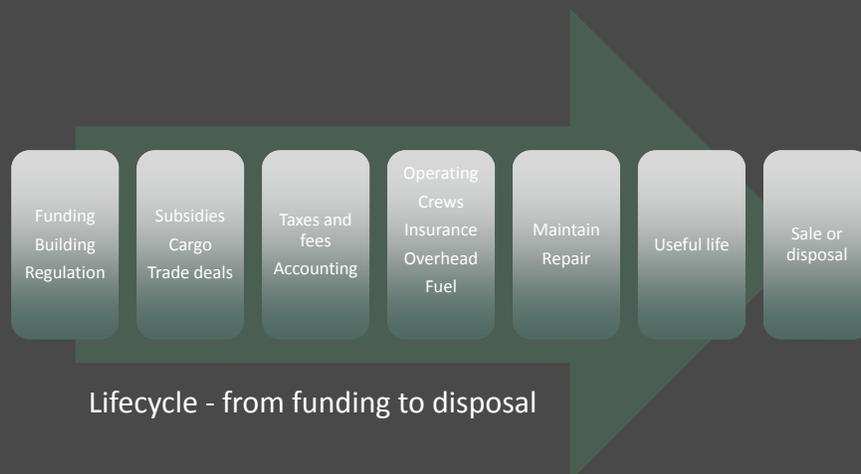
Research implications: Enhance US shipbuilding capacity

Shipyards and ship building in the US occurs much the way it has for centuries, the building of deep-sea vessels is cost prohibitive and large vessels shipyards are dependent on USN contracts.

1. If the Jones Act provision is eliminated ship building (other than military) will likely cease
2. New sources of capital are needed to modernize and innovate, Tiger grants are under threat in Congress
3. Consider using Capital Construction Fund to fund Title XI and shipyards - GE Capital & CitiBank have billions in CCF on borrowed time.
4. Work with community colleges near shipyards to develop skill-sets required
5. Don't remove the Foreign Ship Repair Tax, use to subsidize
6. Innovation and incentives to build smaller cleaner, more efficient ships
7. Promote tax incentive, private incentives and contract incentives where possible

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Research implications: Viewing the Int'l US Flagged differently



Research implications: Ready Reserve Fleet

- **Combat signs of discontent & disconnect from military, and attempts to shift RRF and other defense related activities to MSC. Some in military saying current fleet does not meet requirements, current requirements are rooted in the Korean war, we don't have the right mix for a modern conflict**
- **Valuable role with DoD and Industry, but needs to better align to the goals of TRANSCOM, requirements need to be updated to reflect "shift to the Pacific"**
- **MARAD should aid in developing requirements and provide rigorous analysis for best RRF mix. MUST be able to make the case with current DATA that RRF is more cost effective than transferring the capability to MSC**
- **Consider move away from US built requirement, allow purchase of MSP vessels. Make changes to the law that would allow for a recapitalization of vessels that align to DoD requirements**



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Research implications: Infrastructure and Ports

Commitment to prioritized and consistent funding for a holistic investment into infrastructure

- **Prioritized plan for infrastructure upgrades – locks, dams, etc.**
- **Solve port capacity issues – limited by surrounding communities, unable to expand**
- **Initiative to build two new ports, and expand several to meet growing demand, use matching dollars, private-public funding**
- **Improve/develop intermodal connectors to increase throughput**
- **Better local and state planning and coordination**
- **Be sure Maritime is included in freight upgrades for DoT**
- **Prepare for/analyze the impacts of the Panama Canal expansion**
- **Upgrading ports to meet the needs of future ships**
- **Infrastructure development should not be a zero sum game**



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Research implications: Increase the use of short sea shipping routes

- Rebrand and integrate it into the National Freight Strategy
 - Anti-congestion (I-95 VA-MA, I-5 LA-Seattle, I-10 Houston – FL), Increase capacity, optimize movement and mobility
- Create in partnership with states
 - Integrate strategy with states – If I can take 700 trucks a day off I-95, it is worth millions in congestion and wear and tear to multiple states
- Attach to the new Highway Bill, as part of the freight strategy, pilot for proof of concept, treat as a freight solution, not a maritime program.
 - Investment needs to be made at the terminals and intermodal connectors, solving throughput limitations is the key to integration
- Work with the shippers - Start with Amazon and Walmart
- Where is tipping point when congestion and pollution is unsustainable? Will legislation be required as a forcing function, requiring hazardous materials, and weight cargo?

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Amazon's Strategy?



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Research implications: More and better Mariners

Treat developing Mariners as a system from birth to death - recruitment, education, training, certification, hiring, benefits, continuing education, marketing, retention, post-seafaring and retirement.

Differentiate US mariners and add value. Increase their worth so they are the only/best choice for expensive, high-tech ships, with small crews.

Provide programs that rotate, educate and employ people on shore and off shore, for continued education, in all aspects of the industry. Provide long-term career path for mariners, licensed and unlicensed, working with companies and unions.

Revamp/promote the Military to Mariner program



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MARAD Questions



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What do you think about MARAD now?

Many comments focus on previous leadership and the damage they did and how it is improving.

- “Through some fault of their own and some not, they don’t have a lot of relevance in the industry. Everyone knows they are the red-headed stepchild of the DoT.”
- “They haven’t been a strong enough advocate for the industry...its never had a good reputation in 15 years”
- “Approachable.”
- “They are like the little engine that could.”
- “The engagement is very hopeful in many aspects.”



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How should MARAD change?

- “They have to rebuild the core of professionals in the maritime world”
- “They need to identify their missions and key objectives, and get aggressive and do it”
- “They should be more of a player in international and domestic policy development”
- “Create a vision that the American people will support and invest in”
- “It needs to make itself relevant”
- “There needs to be some ability to do enforcement”
- “They need to do more as a promotional agency and get out there and promote”
- “There needs to be more engagement with the state DoTs”
- “They need a uniform policy all the time” (regionally)
- “We would like to see them assert themselves more”



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If MARAD could do only ONE thing in the next three years what would it be?

1. **Get the National Maritime Strategy right, and advocate**
2. **Articulate a compelling long term vision that people will invest in, set priorities and maintain a “laser-like focus”**
3. **Increase relevancy, be the “Go To”, “Big Picture People”, “Storehouse” & “Integrator” of all information, research & plans**
4. **Labor, Labor, Labor**
5. **Fix international US Flagged fleet/MSP**
6. **Gain Parity within DoT, get leadership to embrace Maritime**
7. **Integrate federal, state, local, public and private maritime**
8. **Advocate in Congress, trigger legislation and hearings**
9. **Facilitate & protect from with the rest of the government, bigger role in planning & regulatory development, reduce the bureaucratic processes**
10. **Ensure the US is a leading maritime nation**



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Where can MARAD add the greatest value?

- “Liaising with Congress to promote stable laws and regulations”
- “Until they get money, they can help with national and state planning”
- “There priority has to be on the deep-sea fleet”
- “Help our states understand marine transportation in general”
- “National freight strategy and planning is hugely important to us”
- “Be more of a driver and say this is where we are going and we need you to be on board” (to bring the disparate industry together)
- “Save the MSP program and the foreign trade fleet”
- “Make real progress on the marine highway as a way to grow the industry”
- “Being an integrator with other federal and state agencies”
- “Enforcing existing legislation”



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What advice do you have for the administrator?

Most respondents mention Chip is “on the right course,” “doing a great job” and “he is the right man at the right time”

- “Spend some time with us and hear directly from our owners and key people, not just us, and others throughout the country, it would go a long way”
- “Come visit us more”
- “Make the hiring of staff a priority”
- “Use us. We are all on the same team.”
- “Keep both arms swinging”
- “Communicating with management in the industry...and be our advocate particularly within the government”
- “Don’t try to be all things to all people”
- “Keep reaching out to local stakeholders”
- “Don’t be afraid to cut with the past”
- “Listen and be open to ideas that originate from outside the agency”



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Research implications:

- Low awareness, even lower understanding of the activities and value of MARAD
- No clear differentiation from other organizations
- Employees share a strong ‘sense of affiliation’ but they have a limited ‘big picture view’ of the organization as a whole
- Feeling of lack of focus & inability to prioritize
- Feeling of lack of respect from both DoT and DoD



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What do stakeholders want from MARAD?

1. **Be the integrator** of research & knowledge, for analysis & data to justify priorities, investments, programs & subsidies
2. **Convene/educate/aid** the state and local governments and compile their plans
3. **To have a big picture understanding**, a vision & priorities
4. **Foster innovation**, investment & new business models
5. **Protect from, and facilitate** with other government agencies. To gain increased advocacy from DoT and DoD and an equal voice in the National Freight Strategy
6. **Communicate, educate and be fierce advocates** with policy makers. Rally stakeholders & industry around key issues and messages. Create awareness & appreciation among the American public



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What does Congress want from MARAD?

1. **A clear and compelling vision for Maritime**
2. **To clearly state the purpose of each component/priority using data, analysis and a systems approach**
3. **To evaluate strategic choices, and the trade-offs**
4. **Provide a clear investment strategy with priorities**
5. **“Push the envelop” with strong recommendations**
6. **To educate members, particularly 38 port states**
7. **Advocate hard for key legislative issues**



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Players in maritime transportation

Standard Matrix of the Federal Marine Transportation System
By Department/Agency

FEDERAL INTEREST	MAJOR CATEGORIES	USDA		DOC			DoD	DOI	DoI	DOL	DHS			DOS	DOT		FMC	NTSB	EPA																
		PSA	APHIS	AMCS	AMS	CBP	EDA	ITA	NDAA	USACE	NAVY	TRANSDOT	USFBI	BOEM	BSEE	USGS	BLS	OSIA	TSA	ICE	CBP	OST	BTS/RTA	SLSDC	FHWA	MARAD	ARA	Treasury	FMC	NTSB	EPA				
Enhance Safety	Safety						X	X	X						X	X	X																	X	X
Protect the Environment	Environmental Protection	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Facilitate Commerce	Trade Facilitation	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
	Trade Promotion	X	X	X	X	X																		X	X	X	X	X	X	X	X	X	X	X	X
Facilitate Commerce	Vessel Construction																						X	X	X	X	X	X	X	X	X	X	X	X	X
	Vessel Operations																						X	X	X	X	X	X	X	X	X	X	X	X	X
	Federal Channels, Waterways, and Sea Lanes						X	X		X	X												X	X	X	X	X	X	X	X	X	X	X	X	X
Ensure National Security	Port/Vital Transfer Infrastructure						X	X	X		X												X	X	X	X	X	X	X	X	X	X	X	X	X
	Security						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Cross-Cutting	Research & Development			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
	Human Resources						X	X	X														X	X	X	X	X	X	X	X	X	X	X	X	X



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Comprehensive matrix



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What does success look like?

