

## The Way Forward

### US Commercial Ship Building: A Strategic National Asset

*China, Brazil and now India have declared that their commercial shipyards are “Strategic National assets”*

*“US-built coastal ships are the trucks of the US Marine Highway”*

#### **Introduction**

The United States needs a fleet of modern coastal container and trailer ships and modern commercial shipyards that are up to the task. This new fleet is essential to the nation’s economic security and viability. It will be one element of a strategy to address the nation’s freight capacity requirements at a time of crisis in landside infrastructure funding. New ships will replace an aging, inefficient Jones Act container fleet at a time when strict, new environmental standards are enforced for the North American Emissions Control Area. Construction of these vessels and their deployment along America’s coastal corridors will create tens of thousands of new direct, indirect and induced jobs on the water, in the ports, and in our yards. We expect that a new fleet of American container feeder ships, servicing a vibrant US coastal marine highway, will join rail in offering competitive intermodal transportation services for domestic and import/export goods.

Today, the United States is the largest economy in the world. However, America’s standing as a commercial sea power has been in decline since the mid-twentieth century. The U.S. is 97 percent reliant on foreign ships to transport its imports and exports. Ships flying the American flag in international commerce are few in number. This state of affairs has prompted congressional hearings and an awaited study by the Maritime Administration into impediments to US flag registry. Fewer still were actually built in an American shipyard and thus are Jones Act qualified to serve in the domestic coastwise trade.<sup>1</sup>

Further, it is becoming more apparent that while US shipyards can be competitive in producing certain, smaller vessel types the United States will no longer possess the ability to build most merchant ships on a commercially viable world class scale. America has gone from the number one ship building nation in the world to ranking below many small nations and, arguably, to be one that no longer registers on any measurable scale anywhere in the world. This is true regardless of the fact that U.S. ingenuity invented most of the world’s modern ship building techniques including welding, block and series construction—and containerization, now the backbone of the oceangoing world trade.

To be sure, U.S. shipyards will continue to construct military ships. Indeed, it is the stated policy of publically traded companies such as General Dynamics, Huntington Ingalls Industries (HII),

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<sup>1</sup> “The United States now ranks 18th in number of oceangoing vessels, having fallen from a top-ten ranking just a few years ago. The U.S.-flag merchant fleet ranks 20th on a deadweight tonnage basis. Today, the U.S. fleet’s share of ocean borne commercial foreign trade, by weight, continues to be less than five percent.” (Transportation Institute, <http://www.trans-inst.org/present-status.html>.)

and Lockheed Martin that they would rather build ships for the military, than for commercial trade. Building ships for the military is profitable—Wall Street wholeheartedly supports military shipyards because the U.S. government needs the ships for its Navy and is willing to pay top dollar for the vessels.

*Is it a foregone conclusion that we can no longer build commercially viable ships in the United States?* Hopefully not. Indeed, we are convinced that this trend and the downward spiral of the commercial ship building industry can and must be reversed.

As our Nation's transportation infrastructure continues to crumble, gridlock worsens and there appears to be consensus that fewer government funds will be available to maintain, upgrade and expand America's land-based transportation systems we need, more than ever, to take advantage of America's Marine Highways. Our coastal marine corridors are the country's natural transportation assets on which this Nation was built, but today they are also the most underutilized.

How many ships do we need to develop a viable hub and spoke port network? We would need in the range of 300-500 vessels constructed in U.S. shipyards over the next 25 years in order to transform our Nation's coastal highways from unused assets into vibrant water connectors. Today the corresponding number of coastal feeder ships servicing northern Europe and the Mediterranean is approximately 2,000. In contrast the US has zero ships and a few barges in feeder service.

The challenges will be two-fold. First we must overcome the waning interest of shipyard owners to build commercial ships. Second we must immediately modernize commercial shipyards and adopt modern shipbuilding methods and techniques that are effectively and efficiently utilized worldwide. Based on our experience in the international ship construction world we firmly believe that with the proper supervision, U.S. shipyards can build commercially viable coastal container ships.

The United States faces an imminent transportation infrastructure crisis and marine transportation should figure into an appropriate "National Response" that is grounded in economic reality. Shipyards are strategic assets and the use of our coastal waters to efficiently transport domestic cargo is "mission critical" to the future of America's transportation system and economy. The U.S. Marine Highway is an important element in a viable strategy to address America's imminent transportation crisis. America's Marine Highways are uniquely positioned to help mitigate land-based vehicle congestion with the most environmentally sound and fuel efficient ships ever to traverse the waterways of the United States.

So as a start, we must reinvigorate the U.S. commercial shipbuilding sector in order to build the required ships for our coastal corridors. This endeavor will require a sea change in thinking, short term incentives for shippers to affect the modal change, and significant, one-time capital investments to modernize our outdated commercial yards. While -challenges lie ahead, we believe America is up to the challenge.

## **The Status of US Commercial Yards**

Today, there are a dwindling and alarmingly low number of viable U.S. shipyards that are in a position to construct commercial ships. And, arguably, there are no viable world scale repair yards in the United States. While there are several viable shipyards owned by huge industrial corporations they are dedicated solely to service the needs of the military and the U.S. Government. The question becomes: *Where will the nation build the commercial ships needed for the non-contiguous trades, America's marine highways, drill ships and rigs, tugs, wind farm vessels (the list goes on).*

The answer is in shipyards such as Aker Shipyard in Philadelphia, Pennsylvania, Bay Shipbuilding Company in Sturgeon Bay, Wisconsin, and Avondale Shipyard in Louisiana where the huge needs of the commercial shipping sectors can be met. In order to succeed it will take the combined calculus of modernization, recapitalization and proper management disciplines. Fortunately for the United States, we have some great opportunities and resources available on the world market. To this end, there is a significant amount of surplus equipment<sup>2</sup> available from overseas shipyards for relatively low costs. In addition, there are folks in Europe with world renowned and modern shipbuilding management skills who are ready, willing and able to help U.S. shipyards rebound. Further, the ships that will be needed for America's coastal service have been built before, albeit overseas. Dedicated management coordinating with a motivated labor force can take advantage of this repetitive series construction which will substantially reduce the man hours utilized to produce many series of ships.

It must be understood that there must be full commitment and support of American Labor to retool and retrain the men and women who will accomplish the physical task of assembling new ships and marine equipment in revitalized shipyards. In this regard, the Unions and their members are leading the way both in Washington and in the shipyards. In fact, it is the Unions who are pushing management and insisting that their skill building marine assets cannot be allowed to disappear from the American landscape. Put succinctly, the Unions understand what is at stake.

## **How can we save and re-energize our commercial yards?**

At the outset the simple answer is to create an environment where there is a demand for commercial ships. Having created the demand, the shipyards must be in a position to produce the vessels at commercially acceptable prices. This will require capital investment.

Demand can be created by public policy initiatives. The model can be found in Europe.

In 1992 the European Union countries recognized that transportation conditions were deteriorating and in need of a new approach. Growing freight traffic contributed to highway

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<sup>2</sup> There are hundreds of proven designs that can be easily licensed worldwide including the availability of internet connected design and engineering teams that would provide support to U.S. shipyards. This can be used for purchasing the base components from the worldwide network of low cost providers.

congestion, highway infrastructure deterioration, increasing repairs and maintenance costs, and higher levels of emissions. In part to deal with the ever growing volumes of container traffic, the EU launched a series of policy incentive initiatives to reduce environmental impacts and help encourage modal shifts to their combined railway, inland waterway and short sea shipping systems. Programs include: PACT, and Marco Polo I (2003-2006) and Marco Polo II (2007-2013).

These programs had an underlying stated objective of transferring billions of freight ton miles off of the existing roads. Assistance is provided to businesses willing to improve intermodal connections in five specific types of actions cited in Marco Polo II and outlined below:

**Modal Shift Initiatives** focused on shifting as much cargo as possible from the roads to short sea shipping, rail and inland waterways.

**Catalyst Actions** are defined as a change in the way non-road transportation is conducted.

**Common Learning Actions** are defined as ways to enhance the knowledge of freight logistics.

**Motorways of the Sea:** defined as door to door services which will shift freight from long road distances to a combination of short sea shipping, rail and other modes of transport.

**Traffic Avoidance Actions** are defined as: any plan that reduces freight transport demand by road with a direct impact on emissions.

Marco Polo II is still in force today and over the years the three programs have been instrumental as the foundation for improving the performance and impacts of the freight system. At the outset of the programs at the end of the last century, total transshipments of containers by rail and water were 16 percent of the total volume. Two decades later 40 percent of transshipments are by water, and 40 percent are by rail. The public policy worked.

To affect this modal shift today there are more than 2,000 short sea/feeder ships connecting all the ports along a fully developed inter-coastal, intra-country seaborne container network that is now fully integrated with inland waterways, railroads and the roadways.

Capital will be needed to modernize and capitalize the yards and to build the fleet of new ships. How can the requisite capital be raised? By incentive programs that will create demand and use of the US Marine Highway.

**A modal shift already supported in public policy under the Energy Independence and Security Act of 2007, which recognized the benefits of using navigable water as an “extension of the surface transportation system “** because our existing road transportation infrastructure is at it breaking point. Further, there is a diminishing source of money available to expand the existing transportation network systems let alone fix what we already have or, for that matter, effect a modal shift. However

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there are existing and proposed incentives programs that leverage private investment, can reduce government costs, are environmental beneficial, and incentivize use of the coastal Marine Highway.<sup>3</sup>

A non-exclusive list of the programs follows:

1. Sustainable Transportation Credits (STCs) (attached) or shipper tax credits
2. Harbor Maintenance Tax exemption for non-bulk cargo (proposed in legislation e.g. HR 1533)
3. TIGER Grants available for infrastructure elements of Marine Highway Projects (existing)
4. Off-set Highway and Bridge maintenance and repair credits (existing and)
5. Credits for all the items listed on the DOT Calculator including: (proposed)
  - a. Truck ton miles avoided
  - b. Avoided Fuel Costs
  - c. Avoided Gridlock Congestion Costs
  - d. Avoided Maintenance Costs
  - e. Avoided or deferred road Capital and Expansion costs
  - f. Avoided Bridge Maintenance Costs
6. Offset credits for All items listed on the EPA's Smartway and FLEET calculators (Partially Proposed)
7. Credits for Job creation in all sectors related to the Marine Highway ( Jobs Programs credits are available)
8. Credits for moving Military intra base container Cargos between the 16 designated Strategic Port Network ( \_
9. Logistic Education Credits (Available)
10. Credits from any other existing governmental programs that could be re-classified to be eligible
11. Available state education, transportation and environmental initiatives that may apply.
12. States with IRB Capacity
13. State Labor Union Pension Funds
14. Tax Free State IRBs
15. Tonnage Tax
16. Capital Construction Tax Offsets

This list is not all inclusive and it can be added to. However all incentives should meet standards to assure they are in the state or national interest. There should be measurable, sustainable, tradable and/or revenue neutral.

Who are the stake holders?

Federal government

State Governments

States with Commercial Shipyards

Regions governed by the 1990 Clean Air Act

Major Metropolitan Cities with mandated Emission Caps

States with Major Hub Port Cities

States with Major spoke Port Cities

States and Metropolitan areas with Gridlock and Bridge Choke Points as defined by the DOD

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<sup>3</sup> Refer to the USDOT Report to Congress "America's Marine Highways", April 2011, [http://www.marad.dot.gov/documents/MARAD\\_AMH\\_Report\\_to\\_Congress.pdf](http://www.marad.dot.gov/documents/MARAD_AMH_Report_to_Congress.pdf)

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DOD /National Security which is imperiled by Major Bridge or tunnel destruction during times of mobilization and/or nation emergencies.

Citizenry who use our highways

Truckers who move containers up and down our highways

Railroads

Shippers

Consumers

Manufactures

Importers and Exporters

Shipyards States with IRB Capacity

State Labor Union Pension Funds

In conclusion, the United States needs a vibrant Marine Highway connecting our seaports. We also need US-built coastal ships that will the trucks of the Marine Highway. The present day need for modern green coastal ships is real, so the revival of vibrant modern commercial shipyards is mission critical for the nation. Commercial shipyards are indeed National Strategic Assets.

Finally, the marine highway is a critical element in the strategy to address our landside transportation infrastructure funding crisis. Water is the mode of the past and future and we as a nation need commercial yards to create the assets and jobs that will make the entire system functional. The future of our transportation system and our economy depends on it.