## Plan

### Plan: The United States federal government should substantially increase short sea shipping subsidies in the United States.

## 1AC Solvency Contention

### Subsidies solve – even a small subsidy produces a shift to cleaner transport and increases the economy

Waterway Journal 11 [Editorial in the Waterway Journal Weekly, 3/7/11, http://www.waterwaysjournal.net/news030711.html]

Once again, we delve into the failure of the Obama administration to support maintenance and modernization of the inland waterways infrastructure. The marine industry and related components are being held hostage by an administration that spoke favorably about inland waterways transportation but has not followed through. We are reminded often that foreign governments are investing in water transportation while Nero fiddles and Rome burns. Maritime leaders are sometimes asked why we are not improving and making more use of our waterways. Unfortunately, these queries have been presented for more than a decade. It is bewildering to us because President Obama has stressed continually the importance of creating jobs to ease unemployment woes. Improving waterways infrastructure would create jobs and help us to catch up on waterways maintenance that has been lagging for decades. It is bewildering to us because government insists that protecting the environment is one of its most important goals. Water transportation is the most environmentally friendly mode of transport in existence other than, perhaps, pipeline. It is bewildering to us because clean air and reducing polluting emissions is near the forefront of the administration’s agenda (tax and trade legislation and clean air regulations by the Environmental Protection Agency). Increased use of water transportation along America’s marine highways—not just those in the newly touted “highway” program—would help to stem the rapidly increasing number of trucks that travel our highways. It would reduce fuel consumption and save on other natural resources (rubber, oil, et al). It is bewildering to us because highway safety is on the lips of many in government, and increased use of water transport would help to stem the growing congestion on highways, thus helping to prevent accidents. It is bewildering because a vast amount of U.S. exports and imports depend upon water transportation, which is the cheapest form of transportation where it is available. While trains and barges often carry similar cargoes, they also carry cargoes particularly suited to the individual modes—less costly bulk materials, and overly large and heavy cargoes for barges. While these modes are competitive, they are also complementary, and in many instances cannot exist without each other. We know Congress is aware of all we have delineated here. We know a majority of congressional delegates have in the past given approval to a new Water Resources Development Act, which now has gone nowhere. The president and the administration are the stumbling blocks. Infrastructure repairs are faltering, and unemployment figures remain higher than the president predicted they would be. A good guess would be that up to 90 percent of all products offered in some major stores are made in foreign lands. Poor government management has caused many of the problems we face today. On March 1 the Government Accountability Office released a report covering only a portion of government activity, and it identified hundreds of billions of dollars in duplication and waste. The findings support the contention that government is too large to be efficient. The GAO reported it had gone over only a portion of government operations and found some $200 billion in waste. In the meantime, while Rome is burning (or we are sleeping) we read that Russia, China, Colombia, Argentina, Brazil and India are subsidizing their marine highways equally instead of favoring gas-guzzling trucks. One reader notes that heavy trucks—not passenger cars—destroy our bridges and highways. “Why build ever more highways and bridges when we don’t use our neglected marine highways?” he asks. “Waterways are the greenest of green transport systems.” In European news, major organizational entities have issued a joint manifesto urging the European Union to “lift all barriers to make full use of its existing asset—the waterway network.” Inlandnavigation.org carries news of dozens of projects focusing on the shifting of cargo to water transport and a wide variety of efforts being undertaken to enhance this goal. We have been reporting these facts for years. Apparently few pay attention. What’s wrong with this picture? What’s wrong is that for a small fraction of the amount of money our government has invested in economic stimulus (much unsuccessfully), our inland waterways system could be entirely rehabilitated and improved, thus protecting the environment, reducing transportation costs and increasing highway safety. Why doesn’t the administration do it?

### Subsidies solve – Marco Polo program proves

Madden, 12 [Rich Madden, gCaptain, 1/25/12, http://gcaptain.com/forum/youblog/8017-americas-marine-highway.html]

Leadership of the U.S. Maritime Administration aside, what is needed is a plan. Fortunately, the European Union (EU) has provided a prime example with the European Commission’s “Integrated Maritime Policy.” This policy strives not to replace policies on specific maritime sectors, but to coordinate them in order to save time and money. The EU has adopted a long term outlook on shipping with their plans and policies extending out 10 years. They have placed specific emphasis on short sea shipping with the creation of the European Shortsea Network (ESN). Through the ESN, the different countries are able to coordinate their activities, as well as steer prospective customers towards service providers. Unfortunately, even with the best planned and coordinated short sea shipping system, there is a need for government subsidies, at least in the startup period. The European Commission has addressed this need with the Marco Polo program. The Marco Polo program provides grants in the following areas : Modal shifts from road to rail and waterborne systems Catalyst actions which promote modal shift Motorways of the sea between major ports Traffic avoidance Common learning actions The Marco Polo budget between 2007 and 2013 was close to $590 million – not extravagant on an annual basis. It is however impressive, in that the monies are in the form of grants, not loans to be repaid. The U.S. Maritime Administration and Mr. Matsuda do not have to reinvent the wheel. The framework of a viable maritime policy and specifically, a shortsea shipping policy exists and could be implemented in relatively short order. The possibility of long term job creation and energy savings should be enough to make the current Administration and representatives of any Congressional district with a navigable waterway salivate. The subsidies involved would appear to be relatively small in comparison to the overall transportation budget. So, in the end, the question remains – Why do we not have a comprehensive Marine Highway system in the U.S.?

### Federal action key – too many obstacles to private action alone –

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 69-70]

Without strong leadership from the Federal government, however, the nation's rivers and coastal waterways will continue to be underutilized for domestic container and trailer freight transportation. It is difficult for private operators to support the scale of investment needed to initiate large scale operations. Private operators are particularly disadvantaged by the fact that many of the important public benefits of water transportation, including congestion reduction, environmental sustainability, and system resiliency, cannot be captured in the form of higher revenues or lower costs to company profits. Government action is required to help overcome these challenges and assist the expansion of Marine Highway services in a significant manner. With the passage of the Energy Act, Congress set the course for greater Federal government involvement in attaining the national benefits of the America’s Marine Highway. The Energy Act established important objectives for MARAD to meet, including the designation of Marine Highway Corridors and Projects, promotion and governmental coordination of development of the Marine Highway, encouragement of the use of America’s Marine Highway solutions in State and local planning, establishment of an America’s Marine Highway Advisory Board, support for research on Marine Highway (in coordination with EPA), and allowing Marine Highway container and RoRo vessels to qualify for CCF benefits. As discussed in this report, the USDOT and MARAD, in cooperation with the EPA and other agencies, has undertaken numerous actions to comply with these requirements of the Energy Act.

### Plan will trigger a shift away from trucking

Canadian Sailings, 9 [Canadian Sailings, SHORT-SEA SHIPPING Opportunities exist but right message needs to be delivered. Highway H2O Conference, January 12, 2009]

From a user's perspective, Ms. Lyden-Kluss said she believes that shippers can - and will - work with longer transit times if they are given incentives. "That is if they are guaranteed delivery time and significant cost benefits," she said. "Shippers are looking for 'green shipping' opportunities due to the increasing pressure to reduce the carbon footprint of their transportation chain. Rail and road systems are less eco-friendly."

\*\*\*Lyden-Kluss is the executive director of the North American Marine Environment Protection Association

### Cargo has stressed US transportation networks- ports overloaded, roads congested, environment hurt – Only SSS solves

Perakis and Denisis, ‘8 [ANASTASSIOS N. PERAKIS\* and ATHANASIOS DENISIS, Department of Naval Architecture & Marine Engineering, University of Michigan, A survey of short sea shipping and its prospects in the USA, MARIT. POL. MGMT., DECEMBER 2008, VOL. 35, NO. 6, 591–614]

US international trade, especially imports of containerized cargo, is growing steadily with an average growth rate of 7% since 1980. Container traffic through the US ports reached 45 million TEUs in 2007 (figure 1). The US Department of Transportation (DOT) forecasts that by 2020, even at moderate rates of domestic growth, the international container trade will double from its current levels [1]. This cargo flow surge has placed significant stress on the US transportation network. The major coastal ports are currently operating near their maximum capacity, suffering from ‘bottlenecks’ and delays in container movements. According to the American Association of Port Authorities (AAPA), the average ‘dwell’ time of containers sitting idle in the yard is six to seven days for the US ports, compared with only one to two days or even hours in some Asian ports.

Furthermore, the increase of general cargo transportation, which is been carried mostly by trucks, has caused environmental and societal problems, such as traffic congestion, air pollution, highway accidents and increased energy consumption. In 2007, congestion cost an estimate of $78 billion in wasted fuel and lost time [2]. Truck traffic contributes significantly to congestion on major coastal interstate highways, such as the I-95 and the I-5. Highway or even rail expansions are too costly and require a significant amount of time to accommodate this imminent freight traffic growth. The US Federal Highway Administration (USFHWA) estimates that the average cost of highway construction is $32 million per lane mile, without including the cost of interchanges, bridges, or other environmental costs.

Short sea shipping (SSS) is a sustainable and environmentally friendly solution for the capacity and mobility problems of the US freight transportation system. Although there is no worldwide consensus on the definition of SSS, the definition given from the US Maritime Administration (MARAD), ‘as a form of commercial waterborne transportation that does not transit an ocean and utilizes inland and coastal waterways to move commercial freight’, is the most widely accepted. The focal point of SSS in the US is the transportation of containerized general cargo. SSS offers many advantages over the land-based transportation modes; it is more energy efficient, more environmentally friendly, safer and requires less public expenditures on infrastructure. It can add more capacity to the transportation network, which is necessary in order to accommodate the future growth of the international trade, at a relatively low cost. Overall, SSS can generate more public and environmental benefits.

## INH –

### Potential of marine highways is currently unfilled

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 6]

To date, the potential of America’s Marine Highway to mitigate problems in the surface transportation system is not being met. As of December 2010, MARAD, which administers the America’s Marine Highway program for USDOT, was monitoring only 32 Marine Highway and related domestic waterborne freight services that move containers and trailers. These and other marine transportation services moved approximately 2.05 million twenty-foot equivalent units (TEU) of loaded domestic containers and trailers10 in 2008, of which just 11 percent (by weight) were moved in the contiguous domestic trades that compete with land-based transportation modes.11 These 230,000 TEU compare to 3.85 million intermodal domestic rail container movements (consisting of containers and trailers ranging from 20 to 53 feet in length) in 2008; 12 highway domestic-only movements, which are difficult to measure accurately, would be much higher. USDOT believes that the full benefits of America’s Marine Highway can only be realized if they are recognized, correctly valued, and facilitated within a comprehensive national freight strategy.

## Advantage UQ –

### Freight tonnage will increase dramatically by 2035 – status quo cannot meet the need

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 4-5]

It has become increasingly evident that the current system of freight transportation in the United States will be hard-pressed to meet the nation’s future transportation needs with regard to maintaining national economic competitiveness, environmental sustainability, public safety, and emergency preparedness. Freight tonnage of all types, including exports, imports, and domestic shipments, is expected to grow 73 percent by 2035 from 2008 levels.5 Land-based infrastructure expansion opportunities are limited in many critical bottleneck areas due to geography or very high right-of-way acquisition costs, particularly in urban areas where surface traffic congestion is the most severe. In many locations, existing infrastructure is suffering from overuse and will place growing demands on scarce public and private resources simply to sustain it. Accordingly, traffic congestion will almost certainly worsen significantly if the reliance on road and rail is not reduced.

# OIL DEPENDENCE ADV (OD)

## OD – UQ: Dependence Increasing

### Foreign oil dependence has never been higher

Shedlock 2012 ( Mike Shedlock, Global economic analyst and investment advisor for SitkaPacific capital management, contributing economic and financial educator to Business Insider, “Don’t Believe Obama’s Claims About Foreign Oil Dependency” March 02, 2012, Business Insider, <http://articles.businessinsider.com/2012-03-02/markets/31115632_1_foreign-oil-dependence-president-obama>)

As rising gas prices are putting pressure on politicians to act, President Obama called on Congress to vote quickly to eliminate subsidies for the oil industry, returning to a favorite target of the president. Obama repeated his case, outlined in a speech last week, that there is "no silver bullet" to rising gas prices. He highlighted his administration's effort to reduce dependence on foreign oil and boost development of alternative energy. This week he introduced a new prop to illustrate his point. As Obama spoke, a chart popped up on television screens behind him. His graph showed U.S. dependence on foreign oil falling since 2005 -- from 60% of net imports to 45% in 2011. The White House handed out copies to the crowd. Obama told them to take it home -- "it makes for a great conversation piece at parties." "Now, one reason our dependence on foreign oil is down is because of policies put in place by our administration and my predecessor’s administration. And whoever succeeds me will have to keep it up." The Facts show that President Obama is disingenuous at best, and a blatant liar at worst. I lean towards the latter. That looks pretty good, doesn't it? But what the heck does it have to do with reduction in foreign demand, and more importantly, Obama's role (or lack thereof) in achieving those gains. For the answer to those most pertinent questions, let's display the usage in terms of foreign demand. I almost went apoplectic today reading on line that the President is now claiming to have cut our dependency on foreign oil, and that the US has imported less each year of his Presidency. Foreign oil imports have indeed dropped throughout his Presidency, but as the attached charts show, there is a reason for that drop - a tremendous decline in USA usage overall. This is because of a declining economy, NOT because of "alternate sources" or any of the other lies tossed our way by the government. Of more interest is the fact that although the amount of foreign oil has declined, it has grown as a percentage of our overall supply. During the Obama Presidency we have become more dependent on foreign oil, not less! His entire speech was disingenuous at best. . President Obama absolutely did not cut dependency on foreign oil. In fact, foreign oil dependency rose from roughly 37 percent to 40 percent under his administration. To be more precise, foreign petroleum usage in his administration went from 37 percent to a peak of 41 percent last year, currently at 39.9 percent. The only way Obama can take credit for the decline in consumption caused by the recession, is to take credit for the recession itself.

### Oil dependence set to grow by 19% in 20 years

Financial Express 2010 (“US dependence on OPEC oil to rise in next 20 years,” February 17, 2010, Financial Express citing National Association of Regularity Utility Commissioners, Proquest, <http://search.proquest.com.proxy.lib.umich.edu/docview/237666545?accountid=14667>)

US dependence on Organisation of Petroleum Exporting Countries (OPEC) for energy is not set to fall in the near future despite focus on renewable energy. According to a report by National Association of Regulatory Utility Commissioners (NARUC), America's reliance on foreign energy will grow by 19 per cent over the next 20 years, expanding the transfer of US wealth to the Organisation of Petroleum Exporting Countries (OPEC) by more than $600 billion. The two-year study broadly examined the social, economic and environmental impacts of continued restrictions on developing America's oil and gas resources. "The study highlights the importance of developing our domestic petroleum resources in an environmentally responsible manner," said American Trucking Associations Vice President Rich Moskowitz. "Continuing restrictions on the development of US energy resources will adversely impact our economic well-being and our national security." The study predicts the economic results of maintaining current restrictions on accessing America's federally owned onshore and offshore energy resources. The results, when compared with the effects that could be expected from a reasonable energy policy on federal energy resources, will include: Import costs for crude oil, petroleum products and natural gas will be $1.6 trillion higher.

## OD – UQ: Trucking Spec.

### Oil dependence increasing due to truck shipping

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 21]

The U.S. Department of Energy projects that overall energy consumption by the U.S. transportation sector will continue to grow gradually for decades into the future, principally due to light- and heavy-duty highway vehicles (see Figures 2 and 3).51 The highest growth in energy consumption as measured both in absolute and relative terms will be for heavy-duty highway vehicles, particularly freight trucks. Freight trucks are expected to account for 38 percent of the expected overall increase in energy consumption in the transportation sector by 2035, even though freight trucks currently account for less than 17 percent of total energy consumption in this sector.52 When light-duty vehicles (e.g. cars and pickup trucks), commercial light trucks, buses, and freight trucks are counted collectively, growth in energy consumption in the highway sector will account for 78 percent of the 4.6 quadrillion BTU growth in transportation energy demand by 2035. This growth is expected to occur despite aggressive new standards established by the Energy Act of 35 miles per gallon average fuel economy for cars and light trucks. By 2035, the transportation sector is predicted to remain as the second-largest energy user in the nation after the electric power generation sector.53 Further, the transportation sector is expected to continue to dominate petroleum and other liquid fuel consumption through 2035 (see Figure 2).

## OD – Links (Trucks Key)

### Truck shipping maintains US dependence on oil

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 5]

The nation’s heavy reliance on truck transportation for the movement of domestic freight (two- thirds of all domestic freight tonnage was moved by truck in 2008) has also contributed to the nation’s dependence on petroleum. Truck transportation uses significantly more fuel per ton- mile of freight moved than does water or rail. The U.S. Department of Energy (USDOE) reports that energy use by the transportation sector will continue to grow through the year 2035, and that freight trucks will account for the largest share (38 percent) of this growth.7

## OD – Impacts: Extinction

### Failure to shift from an oil-dependent transportation sector results in extinction --- economic collapse escalates to nuclear war

Bearden, 6/12/2000 (Thomas – Association of Distinguished American Scientists and LTC, U.S. Army (Retired), Why The Energy Crisis Needlessly Exists and How to Solve It, p. [www.cheniere.org/techpapers/Unnecessary%20Energy%20Crisis.doc](http://www.cheniere.org/techpapers/Unnecessary%20Energy%20Crisis.doc))

History bears out that **desperate nations take desperate actions**. Prior to the final economic collapse, the stress on nations will have increased the intensity and numberof their conflicts, to the point where the arsenals of weapons of mass destruction (WMD) now possessed by some 25 nations, are almost certain to be released. As an example, suppose a starving North Korea [7] launches nuclear weapons upon Japan and South Korea, including U.S. forces there, in a spasmodic suicidal response. Or suppose a desperate China--whose long-range nuclear missiles (some) can reach the United States--attacks Taiwan. In addition to immediate responses, the mutual treaties involved in such scenarios will quickly draw other nations into the conflict, escalating it significantly. Strategic nuclear studies have shown for decades that, under such extreme stress conditions, once a few nukes are launched, adversaries and potential adversaries are then **compelled to launch on perception** of preparations by one's adversary. The real legacy of the MAD concept is this side of the MAD coin that is almost never discussed. Without effective defense, the only chance a nation has to survive at all is to launch immediate full-bore pre-emptive strikes and try to take out its perceived foes as rapidly and massively as possible. As the studies showed, rapid escalation to full WMD exchange occurs. Today, a great percent of the WMD arsenals that will be unleashed, are already on site within the United States itself [8]. The resulting great Armageddon will **destroy civilization** as we know it, and perhaps most of the biosphere, at least for many decades. My personal estimate is that, beginning about 2007, on our present energy course we will have reached an 80% probability of this "final destruction of civilization itself" scenario occurring at any time, with the probability slowly increasing as time passes. One may argue about the timing, slide the dates a year or two, etc., but the basic premise and general time frame holds. We face not only a world economic crisis, but also a world destruction crisis. So unless we dramatically and quickly solve the energy crisis — rapidly replacing a substantial part of the "electrical power derived from oil" by "electrical power freely derived from the vacuum" — we are going to incur the final "Great Armageddon" the nations of the world have been fearing for so long. I personally regard this as the greatest strategic threat of all times — to the United States, the Western World, all the rest of the nations of the world, and civilization itself { } { }. What Is Required to Solve the Problem To avoid the impending collapse of the world economy and/or the destruction of civilization and the biosphere, we must quickly replace much of the "electrical energy from oil" heart of the crisis at great speed, and simultaneously replace a significant part of the "transportation using oil products" factor also.

## OD – Impacts: Heg Scenario

### Oil dependency hamstrings the U.S. military and foreign policy goals --- that escalates to great power conflict

Crawford 2010/2011 (Colin – J.D. Wake Forest University School of Law, Green Warfare: An American Grand Strategy for the 21st Century, Wake Forest Journal of Business and Intellectual Property Law, p. Lexis)

[\*248] In addition to the potential for economic growth, even the most ardent climate change skeptics will concede that the United States' dependence on fossil fuels has implications for national security and foreign policy. Security analysts have made the case for framing this debate in terms of "natural security," as the scarcity of natural resources will inevitably affect the United States' foreign policy calculus for years to come. n24 Despite the fact that the U.S. imports most of its oil from Canada and Latin America n25 - not the Middle East - many emerging markets are just beginning their love affair with the sticky, black hydrocarbon. n26 The corresponding increase in demand from emerging economies will continue to drive up energy prices, necessitating importation of oil from countries with less friendly dispositions toward the United States. n27 It is important to note how energy policy intersects with virtually all other aspects of governance. Not only will increased prices constrain U.S. fiscal policy and make it more expensive to project American power around the globe, they create pressures that will heavily influence American foreign policy in the coming decades, whether through resource wars or climate-induced humanitarian crises. n28 International trade and maritime policy in particular will be [\*249] greatly affected. Because "90 percent of global commerce and two thirds of all petroleum supplies travel by sea," and global energy demand will continue its inexorable rise, the Indian Ocean - already heavily used by "nuclearized" powers such as Pakistan, India, China, and Israel - will dramatically increase in strategic importance to the world's great powers. n29 The proximity of nuclear states in the Asia-Pacific region, along with increased pressures commensurate with rising energy demand, are already heightening military tensions among the major players in the region, including China and Russia in particular. n30 Geopolitical constraints will become increasingly difficult to manage as fuel prices continue to rise, and intervention will be needed to combat piracy and protect merchant shipping. n31 Make no mistake, the United States' continued dependence on fossil fuels poses significant problems for the national interest. The strategic implications are clear as U.S. foreign policy throughout entire regions is framed in the context of energy. n32

### Collapse of leadership causes global nuclear war

Kagan 2011 (Robert, Senior Associate – Carnegie Endowment for International Peace, “The Price of Power”, The Weekly Standard, 1-24, http://www.weeklystandard.com/articles/price-power\_533695.html?nopager=1)

Today the international situation is also one of high risk.  • The terrorists who would like to kill Americans on U.S. soil constantly search for safe havens from which to plan and carry out their attacks. American military actions in Afghanistan, Pakistan, Iraq, Yemen, and elsewhere make it harder for them to strike and are a large part of the reason why for almost a decade there has been no repetition of September 11. To the degree that we limit our ability to deny them safe haven, we increase the chances they will succeed. • American forces deployed in East Asia and the Western Pacific have for decades prevented the outbreak of major war, provided stability, and kept open international trading routes, making possible an unprecedented era of growth and prosperity for Asians and Americans alike. Now the United States faces a new challenge and potential threat from a rising China which seeks eventually to push the U.S. military’s area of operations back to Hawaii and exercise hegemony over the world’s most rapidly growing economies. Meanwhile, a nuclear-armed North Korea threatens war with South Korea and fires ballistic missiles over Japan that will someday be capable of reaching the west coast of the United States. Democratic nations in the region, worried that the United States may be losing influence, turn to Washington for reassurance that the U.S. security guarantee remains firm. If the United States cannot provide that assurance because it is cutting back its military capabilities, they will have to choose between accepting Chinese dominance and striking out on their own, possibly by building nuclear weapons. • In the Middle East, Iran seeks to build its own nuclear arsenal, supports armed radical Islamic groups in Lebanon and Palestine, and has linked up with anti-American dictatorships in the Western Hemisphere. The prospects of new instability in the region grow every day as a decrepit regime in Egypt clings to power, crushes all moderate opposition, and drives the Muslim Brotherhood into the streets. A nuclear-armed Pakistan seems to be ever on the brink of collapse into anarchy and radicalism. Turkey, once an ally, now seems bent on an increasingly anti-American Islamist course. The prospect of war between Hezbollah and Israel grows, and with it the possibility of war between Israel and Syria and possibly Iran. There, too, nations in the region increasingly look to Washington for reassurance, and if they decide the United States cannot be relied upon they will have to decide whether to succumb to Iranian influence or build their own nuclear weapons to resist it. In the 1990s, after the Soviet Union had collapsed and the biggest problem in the world seemed to be ethnic conflict in the Balkans, it was at least plausible to talk about cutting back on American military capabilities. In the present, increasingly dangerous international environment, in which terrorism and great power rivalry vie as the greatest threat to American security and interests, cutting military capacities is simply reckless. Would we increase the risk of strategic failure in an already risky world, despite the near irrelevance of the defense budget to American fiscal health, just so we could tell American voters that their military had suffered its “fair share” of the pain? The nature of the risk becomes plain when one considers the nature of the cuts that would have to be made to have even a marginal effect on the U.S. fiscal crisis. Many are under the illusion, for instance, that if the United States simply withdrew from Iraq and Afghanistan and didn’t intervene anywhere else for a while, this would have a significant impact on future deficits. But, in fact, projections of future massive deficits already assume the winding down of these interventions.Withdrawal from the two wars would scarcely make a dent in the fiscal crisis. Nor can meaningful reductions be achieved by cutting back on waste at the Pentagon—which Secretary of Defense Gates has already begun to do and which has also been factored into deficit projections. If the United States withdrew from Iran and Afghanistan tomorrow, cut all the waste Gates can find, and even eliminated a few weapons programs—all this together would still not produce a 10 percent decrease in overall defense spending.  In fact, the only way to get significant savings from the defense budget—and by “significant,” we are still talking about a tiny fraction of the cuts needed to bring down future deficits—is to cut force structure: fewer troops on the ground; fewer airplanes in the skies; fewer ships in the water; fewer soldiers, pilots, and sailors to feed and clothe and provide benefits for. To cut the size of the force, however, requires reducing or eliminating the missions those forces have been performing. Of course, there are any number of think tank experts who insist U.S. forces can be cut by a quarter or third or even by half and still perform those missions. But this is snake oil. Over the past two decades, the force has already been cut by a third. Yet no administration has reduced the missions that the larger force structures of the past were designed to meet. To fulfill existing security commitments, to remain the “world’s power balancer of choice,” as Leslie Gelb puts it, to act as “the only regional balancer against China in Asia, Russia in eastern Europe, and Iran in the Middle East” requires at least the current force structure, and almost certainly more than current force levels. Those who recommend doing the same with less are only proposing a policy of insufficiency, where the United States makes commitments it cannot meet except at high risk of failure. The only way to find substantial savings in the defense budget, therefore, is to change American strategy fundamentally. The Simpson-Bowles commission suggests as much, by calling for a reexamination of America’s “21st century role,” although it doesn’t begin to define what that new role might be.  Others have. For decades “realist” analysts have called for a strategy of “offshore balancing.” Instead of the United States providing security in East Asia and the Persian Gulf, it would withdraw its forces from Japan, South Korea, and the Middle East and let the nations in those regions balance one another. If the balance broke down and war erupted, the United States would then intervene militarily until balance was restored. In the Middle East and Persian Gulf, for instance, Christopher Layne has long proposed “passing the mantle of regional stabilizer” to a consortium of “Russia, China, Iran, and India.” In East Asia offshore balancing would mean letting China, Japan, South Korea, Australia, and others manage their own problems, without U.S. involvement—again, until the balance broke down and war erupted, at which point the United States would provide assistance to restore the balance and then, if necessary, intervene with its own forces to restore peace and stability.  Before examining whether this would be a wise strategy, it is important to understand that this really is the only genuine alternative to the one the United States has pursued for the past 65 years. To their credit, Layne and others who support the concept of offshore balancing have eschewed halfway measures and airy assurances that we can do more with less, which are likely recipes for disaster. They recognize that either the United States is actively involved in providing security and stability in regions beyond the Western Hemisphere, which means maintaining a robust presence in those regions, or it is not. Layne and others are frank in calling for an end to the global security strategy developed in the aftermath of World War II, perpetuated through the Cold War, and continued by four successive post-Cold War administrations. At the same time, it is not surprising that none of those administrations embraced offshore balancing as a strategy. The idea of relying on Russia, China, and Iran to jointly “stabilize” the Middle East and Persian Gulf will not strike many as an attractive proposition. Nor is U.S. withdrawal from East Asia and the Pacific likely to have a stabilizing effect on that region. The prospects of a war on the Korean Peninsula would increase. Japan and other nations in the region would face the choice of succumbing to Chinese hegemony or taking unilateral steps for self-defense, which in Japan’s case would mean the rapid creation of a formidable nuclear arsenal. Layne and other offshore balancing enthusiasts, like John Mearsheimer, point to two notable occasions when the United States allegedly practiced this strategy. One was the Iran-Iraq war, where the United States supported Iraq for years against Iran in the hope that the two would balance and weaken each other. The other was American policy in the 1920s and 1930s, when the United States allowed the great European powers to balance one another, occasionally providing economic aid, or military aid, as in the Lend-Lease program of assistance to Great Britain once war broke out. Whether this was really American strategy in that era is open for debate—most would argue the United States in this era was trying to stay out of war not as part of a considered strategic judgment but as an end in itself. Even if the United States had been pursuing offshore balancing in the first decades of the 20th century, however, would we really call that strategy a success? The United States wound up intervening with millions of troops, first in Europe, and then in Asia and Europe simultaneously, in the two most dreadful wars in human history.  It was with the memory of those two wars in mind, and in the belief that American strategy in those interwar years had been mistaken, that American statesmen during and after World War II determined on the new global strategy that the United States has pursued ever since. Under Franklin Roosevelt, and then under the leadership of Harry Truman and Dean Acheson, American leaders determined that the safest course was to build “situations of strength” (Acheson’s phrase) in strategic locations around the world, to build a “preponderance of power,” and to create an international system with American power at its center. They left substantial numbers of troops in East Asia and in Europe and built a globe-girdling system of naval and air bases to enable the rapid projection of force to strategically important parts of the world. They did not do this on a lark or out of a yearning for global dominion. They simply rejected the offshore balancing strategy, and they did so because they believed it had led to great, destructive wars in the past and would likely do so again. They believed their new global strategy was more likely to deter major war and therefore be less destructive and less expensive in the long run. Subsequent administrations, from both parties and with often differing perspectives on the proper course in many areas of foreign policy, have all agreed on this core strategic approach.  From the beginning this strategy was assailed as too ambitious and too expensive. At the dawn of the Cold War, Walter Lippmann railed against Truman’s containment strategy as suffering from an unsustainable gap between ends and means that would bankrupt the United States and exhaust its power. Decades later, in the waning years of the Cold War, Paul Kennedy warned of “imperial overstretch,” arguing that American decline was inevitable “if the trends in national indebtedness, low productivity increases, [etc.]” were allowed to continue at the same time as “massive American commitments of men, money and materials are made in different parts of the globe.” Today, we are once again being told that this global strategy needs to give way to a more restrained and modest approach, even though the indebtedness crisis that we face in coming years is not caused by the present, largely successful global strategy. Of course it is precisely the success of that strategy that is taken for granted. The enormous benefits that this strategy has provided, including the financial benefits, somehow never appear on the ledger. They should. We might begin by asking about the global security order that the United States has sustained since Word War II—the prevention of major war, the support of an open trading system, and promotion of the liberal principles of free markets and free government. How much is that order worth? What would be the cost of its collapse or transformation into another type of order? Whatever the nature of the current economic difficulties, the past six decades have seen a greater increase in global prosperity than any time in human history. Hundreds of millions have been lifted out of poverty. Once-backward nations have become economic dynamos. And the American economy, though suffering ups and downs throughout this period, has on the whole benefited immensely from this international order. One price of this success has been maintaining a sufficient military capacity to provide the essential security underpinnings of this order. But has the price not been worth it? In the first half of the 20th century, the United States found itself engaged in two world wars. In the second half, this global American strategy helped produce a peaceful end to the great-power struggle of the Cold War and then 20 more years of great-power peace. Looked at coldly, simply in terms of dollars and cents, the benefits of that strategy far outweigh the costs.  The danger, as always, is that we don’t even realize the benefits our strategic choices have provided. Many assume that the world has simply become more peaceful, that great-power conflict has become impossible, that nations have learned that military force has little utility, that economic power is what counts. This belief in progress and the perfectibility of humankind and the institutions of international order is always alluring to Americans and Europeans and other children of the Enlightenment. It was the prevalent belief in the decade before World War I, in the first years after World War II, and in those heady days after the Cold War when people spoke of the “end of history.” It is always tempting to believe that the international order the United States built and sustained with its power can exist in the absence of that power, or at least with much less of it. This is the hidden assumption of those who call for a change in American strategy: that the United States can stop playing its role and yet all the benefits that came from that role will keep pouring in. This is a great if recurring illusion, the idea that you can pull a leg out from under a table and the table will not fall over.

## OD – Impacts: Great Power War

### US dependence on foreign energy supplies makes US-Russia and US-China war inevitable

Klare 4 (Klare, Michael. Author of Blood and Oil: The Dangers and Consequences of America's Growing Dependency on Imported Petroleum, expert on oil dependency as professor of Peace and World Security Studies and director of the Five College Program in Peace and World Security Studies. Interview with the Carnegie Council on September 30, 2004. <http://www.carnegiecouncil.org/resources/transcripts/5017.html>)

This is troubling enough, but to conclude my panorama, **the United States is not the only country that is militarizing its foreign oil policy. So are Russia and China**. For Russia, it's not so much a need to acquire oil, because they have a lot of it, but because the **Russians are** attempting to reestablish their prominence as a major power. It's the explicit strategy of Vladimir Putin and his associates for Russia to be a dominant player in the oil flow from the Caspian Sea area to the West. They are **expanding their Caspian Sea fleet**. They are building new bases in the area. They maintain troops in Armenia, in Tajikistan, in Georgia, and also in Abkhazia. So in the Republic of Georgia **you now have Russian troops and American troops within very close proximity**. And the Russians are fighting a brutal war in Chechnya, which is ultimately driven on Russia's part by its absolute determination to control this critical strategic crossroads right in the heart of its oil pipeline empire in the Caspian Sea region. Grozny was the Houston of the former Soviet Union. It was the major concentration of refineries, and all of the pipelines from southern Russia met in Grozny. This was an absolutely pivotal center in their oil empire. **They are absolutely determined to control this area**, at least in part, because of this legacy and its strategic location. So Russia is a key player in this area. **China is also becoming very interested in the Caspian Sea region and in the Persian Gulf as well. China's demand for oil is expected to quadruple** during the first quarter of the 21st century. Their oil output, like that in the U.S. and in Europe, is in decline. They are becoming increasingly dependent on imported oil. Their leaders see Central Asia, the Caspian, and the Persian Gulf as the main source of China's future oil. **China is copying the United States and Russia by militarizing its foreign oil policy**, providing arms and military assistance, and even troops it's believed, to the government of Sudan in its war against the SPLA in the south. China is the leading investor in Sudan's major oil company in the southern part of the country. China provides arms and technology to Iran, one of its major suppliers. And through the Shanghai Cooperation Organization, China is developing close military ties with Kazakhstan, Uzbekistan, and Kyrgyzstan, holding joint military maneuvers, providing them with weapons. So now **you have a three-power military competition underway in the Central Asia Caspian region, all** involving not so much necessarily direct presence, but **building up military alliances** with local governments, and in some cases insurgent forces, ethnic separatist groups; like the Russian presence in Abkhazia. If you look back in history for a similar moment, **where you have so many powers competing for geopolitical influence in a volatile area, the example that comes to mind is** the struggle in the Balkans before **World War I,** when the Austrian Empire and the Russian Empire and the British and the French were all competing for influence, providing military assistance to the local powers, getting involved in internal disputes, and we know what happened in Sarajevo in 1914. **I see no evidence that any of these countries is backing off from their determination to dominate militarily the area where all of this oil is being sought**. Because of the geographic shifts in the production of oil to areas of instability, growing competition for access to that oil, and the militarization of foreign oil policy, we are risking a very high level of violence emerging. Whether the net supply of the world rises for a while or declines, oil will be increasingly in competition. In a situation where these supplies are all the subject of military rivalries and intervention, this will lead to an ongoing series of oil wars for as long as we continue to depend on this substance

### Oil dependence causes global war

Rosen ’10 [Mark Rosen (Deputy General Counsel at the Center for Naval Analyses & Professor of Homeland Security Law and Policy at George Washington University) 2010 “Energy Independence and Climate Change: The Economic and National Security Consequences of Failing to Act” University of Richmond Law Review, Lexis]

There is a growing consensus in U.S. national security circles that American dependence on imported oil constitutes a threat to the United States because a substantial portion of those oil reserves are controlled by governments that have historically pursued policies inimical to U.S. interests. For example, Venezuela, which represents eleven percent of U.S. oil imports, "regularly espouses anti-American and anti-Western rhetoric both at home and abroad ... [and] ... promotes ... [an] anti-U.S. influence in parts of Latin and South America ..." 72 that retards the growth of friendly political and economic ties among the United States, Venezuela, and a few other states in Latin and South America. This scenario plays out in many different regions. Russia, for example, has used its oil leverage to exert extreme political pressure upon Ukraine and Belarus. 73 Longstanding Western commercial relations with repressive regimes in the Middle East - i.e., Iran, Sudan, and Saudi Arabia - raise similar issues because of the mixed strategic messages that are being sent. Of course, large wealth [\*989] transfers have allowed the Taliban in Saudi Arabia to bankroll terrorism. 74 A. Chokepoints and Flashpoints For the foreseeable future, the U.S. military will most likely be involved in protecting access to oil supplies - including the political independence of oil producers - and the global movements of using oil to help sustain the smooth functioning of the world economy. The security challenges associated with preserving access to oil are complicated by geographical "chokepoints," through which oil flows or is transported, but which are vulnerable to piracy or closure. 75 "Flashpoints" also exist as a result of political - and sometimes military - competition to secure commercial or sovereign access to oil in the face of disputed maritime and land claims that are associated with oil and gas deposits. Together, these challenges have necessitated that the United States and its allies maintain costly navies and air forces to protect sea lanes, ocean access, and maintain a presence to deter military competition in disputed regions. A selection of today's chokepoints and flashpoints follow. The Strait of Hormuz. This strait is the narrow waterway that allows access from the Indian Ocean into the Persian Gulf. Two-thirds of the world's oil is transported by ocean, and a very large percentage of that trade moves through Hormuz. The northern tip of Oman forms the southern shoreline of the strait. 76 Hormuz is protected by the constant transits of the U.S. Navy and its allies. Even though the strait has not been closed, the Persian Gulf has been the scene of extensive military conflict. 77 On September 22, 1980, Iraq invaded Iran, initiating an eight-year war between the two countries that featured the "War of the Tankers," in which 543 ships, including the USS Stark, were attacked, while the U.S. Navy provided escort services to protect tankers [\*990] that were transiting the Persian Gulf. 78 There have been past threats by Iran to militarily close the strait. 79 Additionally, there are ongoing territorial disputes between the United Arab Emirates and Iran over ownership of three islands that are located in approaches to the strait. 80 Closure of the strait would cause severe disruption in the movements of the world's oil supplies and, at a minimum, cause significant price increases and perhaps supply shortages in many regions for the duration of the closure. 81 During the War of the Tankers, oil prices increased from $ 13 per barrel to $ 31 a barrel due to supply disruptions and other "fear" factors. 82 Bab el-Mandeb. The strait separates Africa (Djibouti and Eritrea) and Asia (Yemen), and it connects the Red Sea to the Indian Ocean via the Gulf of Aden. The strait is an oil transit chokepoint since most of Europe's crude oil from the Middle East passes north through Bab el-Mandeb into the Mediterranean via the Suez Canal. 83 Closure of the strait due to terrorist activities or for political/military reasons, could keep tankers from the Persian Gulf from reaching the Suez Canal and Sumed Pipeline complex, diverting them around the southern tip of Africa (the Cape of Good Hope). 84 This would add greatly to transit time and cost, and would effectively tie-up spare tanker capacity. Closure of the Bab el-Mandeb would effectively block non-oil shipping from using the Suez Canal. 85 In October 2002 the French-flagged tanker Limburg was attacked off the coast of Yemen by terrorists. 86 During the [\*991] Yom Kippur War in 1973, Egypt closed the strait as a means of blockading the southern Israeli port of Eilat. 87 The Turkish Straits and Caspian Oil. The term "Turkish Straits" refers to the two narrow straits in northwestern Turkey, the Bosporus and the Dardanelles, which connect the Sea of Marmara with the Black Sea on one side and the Aegean arm of the Mediterranean Sea on the other. Turkey and Russia have been locked in a longstanding dispute over passage issues involving the Turkish Straits. 88 The 1936 Montreux Convention puts Turkey in charge of regulating traffic through the straits; 89 yet Turkey has been hard pressed to stop an onslaught of Russian, Ukrainian, and Cypriot tankers, which transport Caspian Sea oil to markets in Western Europe. 90 Because of the very heavy shipping traffic and very challenging geography, there have been many collisions and groundings in the past, creating terrible pollution incidents and death. 91 Thus far, none of these incidents have been attributed to state-on-state-conflict or terrorism; 92 however, the confined waterway is an especially attractive target because of the grave economic and environmental damage that would result from a well-timed and well-placed attack on a loaded tanker. The issues surrounding the straits are also a subset of larger problems associated with the exploitation of Caspian oil, including severe pollution of the Caspian Sea as a result of imprudent extraction techniques, as well as the ever-present potential for conflict among the various claimants to the Caspian's hydrocarbon resources due to an inability of the various Caspian littoral states to agree on their maritime boundaries - and their [\*992] legal areas in which to drill. 93 Any one of these problems could become a major flashpoint in the future. China vs. Japan. The Daiyu/Senkaku islands located in the East China Sea have become an increasingly contentious dispute because both claimants have, in the past, used modern military platforms to patrol the areas of their claims in which there are suspected oil and gas deposits in the seabed. 94 In September 2005, for example, China dispatched five warships to disputed waters surrounding its oil and gas platforms, which were spotted by a Japanese maritime patrol aircraft. 95 There have been other similar military-to-military encounters. 96 Given the fact that both countries have modern armed forces and are comparatively energy starved, it is not difficult to envision serious conflict erupting over these disputed areas. The Arctic Super Highway. Traditionalists would probably not include the Arctic as a security

chokepoint. The oil connection is reasonably well known: "22 percent of the world's undiscovered energy reserves are projected to be in the region (including 13 percent of the world's petroleum and 30 percent of natural gas)." 97 However, given the very small margins that transporters earn transporting oil from point A to B, 98 shipping companies are always in search of shorter routes to transport oil to market. As the thawing of the Arctic Ocean continues as a result of climate change, 99 this may create new shipping routes that transporters of [\*993] oil and other goods will use to maximize their profits and minimize their transit times. As supplies of readily exploitable crude oil are reduced, the probability increases that some of this trade will result from exploitation activities in the land and littoral areas adjacent to the Arctic Sea. This development is concerning for a number of reasons: (1) the area is very remote and could provide a safe haven to pirates seeking to hijack cargoes; (2) the environmental sensitivity of the area, and the concomitant difficulty of mounting a cleanup effort, means that an oil spill in that marine environment will be much more persistent than an oil spill in temperate waters; 100 (3) the Arctic presents unique navigational difficulties due to the lack of good charts, navigational aids, and communications towers, as well as the impacts of extreme cold on the operational effectiveness of systems; 101 (4) the unsettled nature of claims by various countries, including the United States, to the seabed continental shelf resources in the littoral areas off their coastlines creates the potential for military competition and conflict over these claims. 102 The International Maritime Organization ("IMO") is now circulating draft guidelines for ships operating in Arctic areas to promote - but not require - ship hardening against an iceberg strike, better crew training, and environmental protection measures. 103 These guidelines are merely advisory and can only be implemented via the flag states. 104 Also, neither IMO nor any of the UN Law of the Sea Institutions have mandatory jurisdiction over any of the flashpoint issues relating [\*994] to competing continental shelf claims in the Arctic, 105 meaning that any disputes will remain unresolved for a long time. The above is only a selected list of potential flashpoints in which oil is the main culprit. Disputes between China and six other nations of the Spratly Islands, and other territories in the South China Sea, remain unresolved. 106 The Spratly Islands could become a flashpoint in the future, involving the United States or its allies, because of the proximity of those areas to the major sea routes to Japan and Korea. 107 The strategic straits of Malacca, Lombok, and Sunda in Southeast Asia are absolutely essential to the movement of raw materials to Japan, Korea, and China. 108 Because of Lombok's depth and strategic location, it is a major transit route for very large crude carriers that move between the Middle East and Asia. 109 Lombok is an undefended waterway that is only eighteen kilometers in width at its southern opening, making it an attractive chokepoint for hijacking or eco-terrorism in which the waters of the environmentally sensitive Indonesian archipelago would be held hostage. 110

## OD – Impacts: China War

### Oil dependence leads to superpower conflict with China

Luft 4 (Gal, writer LA Times, accessed Institute for the Analysis of Global Security. February 2, 2004. “U.S., China Are on Collision Course Over Oil” <http://www.iags.org/la020204.htm>)

Sixty-seven years ago, oil-starved Japan embarked on an aggressive expansionary policy designed to secure its growing energy needs, which eventually led the nation into a world war. Today, another Asian power thirsts for oil: China. **While the U.S. is absorbed in fighting the war on terror, the seeds of what could be the next world war are quietly germinating. With 1.3 billion people and an economy growing at a phenomenal 8% to 10% a year, China, already a net oil importer, is growing increasingly dependent on imported oil**. Last year, its auto sales grew 70% and its oil imports were up 30% from the previous year, making it the world's No. 2 petroleum user after the U.S. **By 2030, China is expected to have more cars than the U.S. and import as much oil as the U.S. does today. Dependence on oil means dependence on the Middle East**, home to 70% of the world's proven reserves. With 60% of its oil imports coming from the Middle East, **China can no longer afford to sit on the sidelines of the tumultuous region. Its way of forming a footprint in the Middle East has been through providing technology and components for weapons of mass destruction and their delivery systems to unsavory regimes in places such as Iran, Iraq and Syria**. A report by the [U.S.-China Economic and Security Review Commission](http://www.uscc.gov" \t "_blank), a group created by Congress to monitor U.S.-China relations, warned in 2002 that "this arms trafficking to these regimes presents an increasing threat to U.S. security interests in the Middle East." The report concludes: "A key driver in China's relations with terrorist-sponsoring governments is its dependence on foreign oil to fuel its economic development. This dependency is expected to increase over the coming decade." Optimists claim that the world oil market will be able to accommodate China and that, instead of conflict, China's thirst could create mutual desire for stability in the Middle East and thus actually bring Beijing closer to the U.S. History shows the opposite: **Superpowers find it difficult to coexist while competing over scarce resources. The main bone of contention probably will revolve around China's relations with Saudi Arabia,** home to a quarter of the world's oil. **The Chinese have already supplied the Saudis with intermediate-range ballistic missiles, and they played a major role 20 years ago in a Saudi-financed Pakistani nuclear effort** that may one day leave a nuclear weapon in the hands of a Taliban-type regime in Riyadh or Islamabad. Since 9/11, a deep tension in U.S.-Saudi relations has provided the Chinese with an opportunity to win the heart of the House of Saud. The Saudis hear the voices in the U.S. denouncing Saudi Arabia as a "kernel of evil" and proposing that the U.S. seize and occupy the kingdom's oil fields. The Saudis especially fear that if their citizens again perpetrate a terror attack in the U.S., there would be no alternative for the U.S. but to terminate its long-standing commitment to the monarchy — and perhaps even use military force against it. The Saudis realize that to forestall such a scenario they can no longer rely solely on the U.S. to defend the regime and must diversify their security portfolio. In their search for a new patron, they might find China the most fitting and willing candidate. **The risk of Beijing's emerging as a competitor for influence in the Middle East and a Saudi shift of allegiance are things Washington should consider as it defines its objectives and priorities in the 21st century.** Without a comprehensive strategy designed to prevent China from becoming an oil consumer on a par with the U.S., a superpower collision is in the cards. The good news is that we are still in a position to halt China's slide into total dependency.

## OD – Impacts: Economy

### Oil is the biggest internal link to the economy – empirically proven

SAFE 6 (Securing America`s Future Energy – nonpartisan organization dedicated to reducing America’s dependence on oil by educating policymakers and advocating for comprehensive energy reform. “Oil Dependence: A Threat to U.S. Economic & National Security” <http://www.secureenergy.org/sites/default/files/155_Briefing-OilDependence.pdf>)

According to the International Energy Agency’s World Energy Outlook 2004**, the world’s increased dependence on oil from unstable regions means that the “vulnerability to a price shock induced by oil-supply disruption will increase.”** Essentially**, oil dependence means that the condition of the global economy hinges on the ability of oil producers to keep the oil flowing**. Demand for oil is “demand inelastic” because there are no ready substitues for oil and consumers have little flexibility to switch to other fuels for their daily oil consuming activities (such as transportation). When this reliance on oil is combined with tight supply conditions and growing oil demand, even relatively small shortages in supply can lead to sudden and large rises in the price of oil and have wide ranging ramifications for the economy. (As a rule of thumb, every 10% increase in the price of oil lowers U.S. GDP growth by up to 0.1 percentage points.) As Alan Greenspan noted before the Joint Economic Committee in April in 2002**, “all economic downturns in the United States since 1973... have been preceded by sharp increases in the price of oil**.” Numerous plausible events could interrupt global oil supplies and send prices sharply higher, threatening the stability of the global economy: Saudi Arabia is rife with terrorist threats and political tensions. Though the Kingdom has improved the security of its energy infrastructure since a wave of violence that began in May 2003, great concern remains. Two-thirds of Saudi oil output is processed in one huge facility (Abqaiq), the vast majority of Saudi exports are shipped from one of three terminals (Ras Tanura, Ras al-Ju’aymah, and Yanbu), and more than 50% of reserves are held in just eight fields, including the super giant Ghawar field, the largest in the world, which accounts for about 50% of Saudi Arabia’s total oil production capacity.12 Iran, the world’s fourth largest oil producer and exporter, **has threatened to use the “oil weapon”** to retaliate again action taken in response to its nuclear program. **Nigeria is the site of ongoing civil conflict**. In March of 2003, oil companies removed staff and suspended production in the Niger Delta, shutting in 10-20% of the country’s production. In September of 2005, Chevron temporarily shut down a pumping station and Shell evacuated personnel due to threats from local militia. In Iraq, oil facilities are a favorite target of the insurgency. There is also fear that **violence could spill over** into neighboring countries. Venezuela’s president frequently threatens to “cut off the oil,” and draws attention to the likely economic consequences for the U.S. In late-2002 and early-2003, labor strikes and general unrest reduced Venezuela’s output by more than 60 percent. Al Qaeda calls oil “the artery of the life of the crusader nation” and is actively targeting the vast and vulnerable oil supply chain. In Russia, the world’s second largest producer and exporter, uncertainty remains in the wake of the Yukos affair and other recentralization efforts. FSU states are the site of frequent instability (e.g. revolutions in Georgia, Ukraine, Uzbekistan), ethnic conflict, and rampant corruption. The precarious balance between supply and demand will continue to strain the system and infrastructure will always be vulnerable to natural disasters. Indeed, hurricanes were responsible for the single largest losses of energy output in 2004 (Ivan) and 2005 (Katrina). History provides ample evidence of the potential economic consequences of oil dependence. From 1970-2000, oil shocks are estimated to have cost the U.S. economy an estimated $7 trillion (in 1998 dollars.)13 In 1973, the Arab oil embargo had a macroeconomic effect akin to those that would result from a simultaneous increase in consumer and businesses taxes. Consumption and investment slowed everywhere as the world economy was thrown into recession; Roughly a year after the embargo had begun, real gross national product (GNP) had declined at a rate of 7.5% per annum.14 Schools and offices were closed to save on heating oil and factories were forced to lay off workers and cut production; Current account deficits soared and central banks cut interest rates to encourage growth; In the aftermath of the oil shock associated with the Iranian Revolution in 1979, quarterly GDP growth in the following year remained low and decreased by as much as 7.8 percent in the second quarter of 1980 (annualized in 2000 dollars). Oil prices spiked and American consumers switched in droves to purchasing smaller, imported cars, causing the U.S. auto industry to suffer tremendously.15 The doubling of oil prices between 2003 and 2005 had a stalling effect on American employment and wage growth. On the whole, however, the economy was resilient because it was in a better position to weather high oil prices than in the past. Rising prices cause less damage today because the U.S. economy is half as energy intensive as it was in the 1970s, meaning it takes half as many Btu’s of energy to produce $1 of GDP. The moderate prices of other goods, falling long-term interest rates and rising home values also made it easier to absorb higher energy prices. Moreover, prices increased gradually, whereas an abrupt price spike would have had a much greater impact. However, **given the tight balance of today’s market, even a modest supply disruption could result in a dramatic rise in the price of oil.**

### Volatility of oil can destroy US economy

Sandalow 8 (David Sandalow, Energy & Environment Scholar at Brookings, former secretary of state for oceans, environment, science, and senior director on the staff of the National Security Council during the Clinton administration. “Ending Oil Dependence”. The Brookings Institute. <http://www.brookings.edu/~/media/Files/Projects/Opportunity08/PB_Energy_Sandalow.pdf>)

**Oil dependence exposes the U.S. economy to the volatility of world oil markets. Price increases can occur suddenly and, because there are no widely available substitutes for oil, consumers and businesses may be unable to respond by changing consumption patterns**. At the national level, **the climb in oil prices** during the past few years **has imposed considerable costs**. Between summer 2003 and summer 2006, world oil prices rose from roughly $25 per barrel to more than $78 per barrel. **Each $10 increase requires roughly $50 billion of additional foreign payments** (approximately 0.4 percent of GDP) per year. In 2006, U.S. foreign payments for oil were more than $250 billion.

### Dependence on oil exacerbates economic crisis – kills GDP

Cooper 11 (James Cooper, writer, The Fiscal Times. “When Oil Prices Double, Recession Often Follows”. April 25, 2011. <http://www.thefiscaltimes.com/Columns/2011/04/25/When-Oil-Prices-Double-Recession-Often-Follows.aspx>)

There are plenty of risks in the economic outlook right now, including global supply disruptions following the multiple disasters in [Japan](http://www.thefiscaltimes.com/Articles/2011/04/13/US-Economy-Japan-Crisis-is-Taking-a-Toll.aspx" \t "_self), [sovereign debt](http://www.thefiscaltimes.com/Blogs/Debt-Watch/2011/02/11/Debt-Watch-The-G20-Should-Ride-to-Europes-Rescue.aspx" \t "_self) problems in Europe, [budget gridlock](http://www.thefiscaltimes.com/Articles/2011/04/19/Interest-Rate-Fears-Rise-as-Debt-Limit-Deal-Fades.aspx" \t "_self) in the U.S., and [China’s inflation](http://www.thefiscaltimes.com/Columns/2011/04/22/The-Next-China-A-Powerful-Consumer-Society.aspx" \t "_self) and rate hikes. **What economists are most worried about, though, is oil.** West Texas Intermediate crude ended above $112 per barrel in New York trading Thursday before the Easter break. Brent crude, the European benchmark, was just over $124. The average price for U.S. gasoline, at $3.85 per gallon on Friday, continues its march toward the $4.11 peak hit in 2008. Already, **rapid growth in emerging markets in Asia and South America is pressuring tight global oil supplies. That’s what pushed oil prices to $147 in 2008,** adding to the problems in the U.S. economy. The Paris-based International Energy Agency in its April report estimated that effective spare production capacity within OPEC, which supplies about 40 percent of the world’s oil, stands at 3.91 million barrels per day. Based on OPEC’s March production of 29.2 million barrels a day, that means OPEC is producing at just over 88 percent of capacity – leaving a thin margin close to the level that helped drive oil prices up in the previous decade. **The turmoil in Libya has already taken most of the country’s 1.7 million barrels per day off the market, and any further supply losses would be acutely felt. How would oil in the $140-$150 per barrel range play ou**t? Economists say much would depend on the speed of the rise. **In the U.S., a spike to that range over the narrow space of a quarter would cause a sharp pullback in consumer spending, mainly on high-priced discretionary items such as cars and home goods. The surge would generate ripple effects throughout the economy**, including outsized impacts on transportation, distribution, and construction, while increasing the chance of a new [recession](http://www.thefiscaltimes.com/Articles/2011/02/24/Oil-Soars-Stocks-Plunge-Fueling-Recession-Fears.aspx" \t "_self). The recent price rise has already pushed up U.S. inflation to an annual rate of 6.1 percent from December to March, cutting [spending](http://www.thefiscaltimes.com/Columns/2011/04/11/Consumer-Spending-Slowdown-Threatens-Recovery.aspx" \t "_self) growth sharply last quarter and hammering consumer confidence. In the U.S., the 40 percent spike in both crude oil and gasoline over the past six months has already wrecked previously upbeat forecasts for U.S. growth and [inflation](http://www.thefiscaltimes.com/Articles/2011/03/02/Inflation-Rears-its-Ugly-Head-as-Gas-and-Food-Prices-Rise.aspx" \t "_self) for the first half of 2011. Some economists believe first-quarter GDP growth, to be reported on Apr. 28, dipped below an annualized 2 percent rate and some have shaved nearly a full percentage point off their forecasts for the first half, compared to expectations only a few months ago. The worry now is that energy prices may not settle down as forecasters and policymakers have expected, which could add a further downdraft to growth and more updraft to inflation, not just in the U.S. but across the global economy. For now, most economic forecasts assume that the oil price spike so far is both manageable and transitory, knocking perhaps a few tenths of a percent off what global growth would otherwise have been this year and adding a few tenths to inflation. However, analysts don’t dismiss the possibility that the recent price rise could continue. **Political unrest in the [Middle East and Africa](http://www.thefiscaltimes.com/Articles/2011/04/19/Libyan-Conflict-Cost-to-US-Soars-above-600-Million.aspx" \t "_self) could intensify and create structural changes in global oil supply,** and the nuclear energy disaster in Japan could shift more energy demand toward oil. Say what you will about the various causes of past U.S. recessions, but economists at HSBC offer a sobering observation. **Since the 1970s, a doubling of the real price of oil, which is the oil price relative to overall inflation, within the span of a year has almost always been followed by declining GDP.** The two exceptions are the 1990-91 recession, when prices spiked but did not quite double, and 1987, when prices did double, followed by slower growth but no recession. Today, a doubling would require prices to rise to about $150.

## OD – Impacts: National Security

### Oil dependence allows rogue states leverage over U.S. foreign policy; and enemies to cherry pick our supply lines

Parthemore and Nagl 10\*Christine Parthemore is a fellow at the Center for New American Security \*\*Dr. John Nagl is President of the Center for New American Security [<http://www.cnas.org/files/documents/publications/CNAS_Fueling%20the%20Future%20Force_NaglParthemore.pdf>, “Fueling the Future Force Preparing the Department of Defense for a Post-Petroleum Era” September 2010]

The growing world demand for petroleum presents major geostrategic risks. High prices and rising demand are a boon to major suppliers and reserve holders such as Iran and Venezuela, which are unfriendly to the United States. It also affects the international behavior of rising powers such as China, which is on a quest to secure access to natural resources that is in turn expanding its influence around the globe. In Mexico, one of the top suppliers of petroleum to the United States, pipelines serve as an increasingly attractive target for dangerous cartels to fund activities that could undermine the Mexican government, destabilize the region and decrease U.S. homeland security.4 American foreign policy itself has been colored by its growing petroleum demands since the 1970s oil crises and subsequent declaration of the Carter doctrine, which stipulated that the United States would consider threats to the Persian Gulf region threats to its “vital interests” due to the strategic importance of its petroleum reserves.5 Dependence on petroleum for 94 percent of transportation fuel is also a dangerous strategic risk for the United States given the leverage oil can provide to supplier countries. Many European allies have experienced such leverage in action with Russia periodically threatening to reduce or cut off natural gas exports to countries highly reliant on their supplies (and in some cases carrying through with these threats). Similarly, national oil companies and OPEC can choose to increase or decrease their production rates to drive changes in the market. The more the United States reduces its dependence on petroleum, the better it can hedge against petroleum suppliers exerting political leverage over U.S. interests, including in times of crisis. At the operational level, heavy reliance on liquid fuels also constitutes a force protection challenge for DOD. Fuel supply convoys have been vulnerable to attack in both Iraq and Afghanistan, where the services have struggled to adapt to the challenges of terrorism, insurgency and violent extremism. In addition to minimizing these risks in the current wars, DOD must also conceptualize and plan for what the future will likely hold for America’s security. The Navy’s battle against pirates off the coast of the Horn of Africa foreshadows the littoral and unconventional challenges that await the United States in the coming decades, as populations continue to migrate toward the world’s coastal area. These types of problems often manifest at major shipping chokepoints (including petroleum transit chokepoints), and addressing them will include distinctive fueling requirements. The Air Force, likewise, confronts dramatic changes in manned and unmanned flight, in addition to the proliferation of space technologies, all of which could dramatically alter fuel needs. In another example, one recently published AirSea battle concept focused on China notes that the type of conflict it outlines could require hardening fueling infrastructure, improving aerial refueling, “stockpiling petrol, oil, and lubricants” and potentially “running undersea fuel pipelines between Guam, Tinian and Saipan.”6 As the character of warfare changes, DOD will have to continue to consider the attraction of fuel supply lines to opponents.

### Continued dependence on foreign oil forces U.S. to risk national security.

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As a major contributor to the global demand for oil the United States is paying to finance and sustain unfriendly regimes. Our demand drives up oil prices on the global market, which oftentimes benefits oil-producing nations that don’t sell to us. The Center for American Progress finds in “[Securing America’s Future: Enhancing Our National Security by Reducing oil Dependence and Environmental Damage](http://www.americanprogress.org/issues/2009/08/pdf/energy_security.pdf),” that “because of this, anti-Western nations such as Iran—with whom the United States by law cannot trade or buy oil—benefit regardless of who the end buyer of the fuel is.”Further, the regimes and elites that economically benefit from rich energy resources rarely share oil revenues with their people, which worsens economic disparity in the countries and at times creates resource-driven tension and crises. The State Department cites oil-related violence in particular as a danger in [Nigeria](http://travel.state.gov/travel/cis_pa_tw/tw/tw_928.html), where more than 54 national oil workers or businesspeople have been kidnapped at oil-related facilities and other infrastructure since January 2008. Attacks by insurgents on the U.S. military and civilians [continue](http://www.americanprogress.org/issues/2010/01/oil_imports_security.html/) to be a danger in [Iraq](http://travel.state.gov/travel/cis_pa_tw/tw/tw_921.html). Our oil dependence will also be increasingly harder and more dangerous to satisfy. In 2008 the United States consumed 23 percent of the world’s petroleum, 57 percent of which was [imported](http://tonto.eia.doe.gov/energy_in_brief/foreign_oil_dependence.cfm). Yet the United States [holds less than 2 percent of the world’s oil reserves](http://www.eia.doe.gov/emeu/international/reserves.html). Roughly 40 percent of our imports came from Canada, Mexico, and Saudi Arabia, but we can’t continue relying on these allies. The majority of Canada’s oil lies in [tar sands](http://greeninc.blogs.nytimes.com/2009/02/19/obama-and-canadas-controversial-oil-patch/), a very dirty fuel, and Mexico’s main oil fields are projected [dry up within a decade](http://www.americanprogress.org/issues/2009/08/pdf/energy_security.pdf). Without reducing our [dependence on oil](http://www.americanprogress.org/issues/2009/08/pdf/energy_security.pdf) we’ll be forced to increasingly look to more antagonistic and volatile countries that pose direct threats to our national security.

### Reliance on foreign oil threatens national security and causes global warming.

Lefton and Weiss ’10 ( [Rebecca Lefton](http://www.americanprogress.org/aboutus/staff/LeftonRebecca.html) - Policy Analyst focusing on international climate and energy policy at the Center for American Progress. , [Daniel J. Weiss](http://www.americanprogress.org/experts/WeissDaniel.html) -  Senior Fellow and the Director of Climate Strategy at American Progress, where he leads the Center's clean energy and climate advocacy campaign., Oil Dependence is a Dangerous Habit, January 13, 2010, <http://www.americanprogress.org/issues/2010/01/oil_imports_security.html>)

A recent [report](http://www.americanprogress.org/issues/2010/01/us_trade_trap.html) on the November 2009 U.S. trade deficit found that rising oil imports widened our deficit, increasing the gap between our imports and exports. This is but one example that our economic recovery and long-term growth is inexorably linked to our reliance on foreign oil. The United States is spending approximately $1 billion a day overseas on oil instead of investing the funds at home, where our economy sorely needs it. Burning oil that exacerbates global warming also poses serious threats to our national security and the world’s security. For these reasons we need to kick the oil addiction by investing in clean-energy reform to reduce oil demand, while taking [steps](http://www.americanprogress.org/issues/2010/01/oil_imports_security.html/) to curb global warming.

## OD – Impacts: Support Rogue Regimes

### The money put into foreign oil feeds unfriendly regimes.

Beddor et al ‘9 (Christopher Beddor - staff writer at the China Economic Review, Winny Chen - research associate with the Centre for American Progress, Rudy deLeon - Senior Vice President of National Security and International Policy at American Progress in Washington, D.C. , Shiyong Park - intern with the National Security team at the*Center for American Progress* Action Fund, and Daniel J. Weiss - Senior Fellow and the Director of Climate Strategy at American Progress, where he leads the Center's clean energy and climate advocacy campaign., Securing America’s Future Enhancing Our National Security by Reducing Oil Dependence and Environmental Damage, August 2009, <http://www.americanprogress.org/issues/2009/08/pdf/energy_security.pdf> )

But in the lead up to the ACESA vote and in the weeks since House passage, conservative opponents of clean, domestic energy have wildly misrepresented the bill’s content and cost, while resorting to scare tactics and half-truths in service of the status quo. On the contrary, America’s reliance on imported fossil fuels instead of clean, domestic sources of energy has long been costly to our economy, our environment, and our national security— and will become even more so if we fail to act now. America’s dependence on foreign oil transfers U.S. dollars to a number of unfriendly regimes, while robbing the United States of the economic resources it desperately needs for domestic development and American innovation. American petrodollars fund regimes and economic investments that do not serve U.S. interests. And our enormous appetite for oil—America burns a full quarter of the world’s oil—feeds the global demand that finances and sustains corrupt and undemocratic regimes around the globe. The perilous implications of this arrangement—increasing power and influence of oil exporters, many of whom comprise the world’s worst regimes—will become more explicit if global demand increases as some current forecasts predict. 1 What’s more, the United States will increasingly turn to exporting countries that have opposing interests as oil production in friendly nations becomes depleted or less viable. Ultimately, the United States will become more invested in the volatile Middle East, more dependent on corrupt and unsavory regimes, and more involved with politically unstable countries. In fact, it may be forced to choose between maintaining an effective foreign policy or a consistent energy supply as U.S. consumers face higher energy prices.

## OD – SSS Solves

### MHS decreases foreign oil dependence – triggers shift from trucks

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 21-22]

There has long been recognition of the need to reduce our nation’s reliance on fossil fuels as an energy source, particularly because this reliance exposes our economy to price shocks and supply disruptions caused by foreign geopolitical events. The Federal government has made important strides in improving the fuel economy of automobiles and light duty vehicles, and the President recently announced that USDOT/National Highway Traffic Safety Administration (NHTSA) and EPA will issue fuel efficiency and GHG emissions standards for commercial medium- and heavy-duty vehicles beginning with model year 2014.54 Even with potential improvements in truck fuel efficiency, however, policies that encourage the use of freight transportation modes that are already several times more fuel efficient than trucking per unit of freight can help reduce our nation’s overall energy consumption in the transportation sector. USDOT believes that the potential for modal shifts of domestic cargo from land-based transportation (particularly highway) to water currently exists in specific transportation markets and longer distance routes. An expanded or enhanced Marine Highway system could lead to more Marine Highway services being available to more shippers in more of these markets. Research has measured the potential benefits of using more energy-efficient transportation services. One recent study found that while trucks, on average, can carry one ton of freight for approximately 155 miles on a gallon of diesel fuel (i.e., 155 ton-miles of freight per gallon, equivalent to 842 BTU per ton-mile55), rail achieves 413 ton-miles of freight per gallon (316 BTU per ton-mile), and a tug-and-barge operation can get as much as 576 ton-miles of freight to a gallon of fuel (227 BTU per ton-mile).56 Additionally, self-propelled oceangoing vessels can have significant energy efficiencies over land-based modes, particularly in the case of larger vessel sizes.57

### Reliance on trucking spurs foreign oil dependence – SSS is the more fuel efficient and will solve over-reliance

Ng and Perakis, ‘9 [Jacob Ng (UNDERGRADUATE STUDENT DEPARTMENT OF NAVAL ARCHITECTURE AND MARINE ENGINEERING UNIVERSITY OF MICHIGAN) and Dr. A. N. Perakis, (Ph.D. SNAME FELLOW MICHIGAN PHOENIX MEMORIAL ENERGY INSTITUE FELLOW DEPARTMENT OF NAVAL ARCHITECTURE AND MARINE ENGINEERING UNIVERSITY OF MICHIGAN), The Environmental & Economic Benefits of Short Sea Shipping by ‘Container-On-Barge’ 2 MAY 2009 p. 5-6]

Energy efficiency is important to the consideration of environmental friendliness. Fossil fuels are a non-renewable form of energy and continued use will eventually lead to their depletion. Greater fuel consumption will also increase the amount of air pollution generated. MARAD estimates that for 1 traditional barge tow carrying 456 FEUs utilizing 75 barrels of oil, 228 double-stacked rail cars utilizing 300 barrels of oil and 456 trucks utilizing 645 barrels of oil are respectively needed to transport the equivalent capacity4. In specific terms of fuel efficiency, inland shipping is the most energy efficient form of transport. The Texas Transportation Institute published research on fuel efficiency and reported that inland river towing as an alternative means of transportation is 3.7 times more fuel efficient than trucking and 1.4 times more fuel efficient than rail. With energy prices poised to remain at high levels from burgeoning global demand, SSS can provide a less expensive alternative to providers and users of the service.

### SSS significantly improves energy efficiency – produces dramatic fuel savings and less fuel used

Perakis and Denisis, ‘8 [ANASTASSIOS N. PERAKIS\* and ATHANASIOS DENISIS, Department of Naval Architecture & Marine Engineering, University of Michigan, A survey of short sea shipping and its prospects in the USA, MARIT. POL. MGMT., DECEMBER 2008, VOL. 35, NO. 6, 591–614]

The main benefits of SSS are the following:

1. Improved energy efficiency. The transportation sector utilizes about 30% of all the energy used in the US and freight transportation consumes about 43% of that. Ships are the most energy efficient transportation mode, while trucks are the least efficient (table 4). Economies of scale are in favour of SSS. One 1500-ton barge can carry the equivalent load of 60 trucks or 15 rail cars. Based on the number of miles one ton can be carried per gallon of fuel, an inland barge can travel 514 miles, a train 202 miles, and a truck only 50 miles [34]. This can be translated to significant fuel cost savings.

### Marine highways lessens dependence on foreign oil

Lahood, 11 [Ray Lahood, US Dept of Transportation, Fast Lane: Official Blog of the USDOT, 4/8/11, http://fastlane.dot.gov/2011/04/americas-marine-highway-system-delivering-goods-more-efficiently-reducing-dependence-on-foreign-oil-.html]

America's marine highway system: delivering goods more efficiently, reducing dependence on foreign oil To win the future, America must invest in the multi-modal transportation system that makes our livelihoods possible. Whether its roadways, railways, or runways, how effectively we move goods and people determines how effectively our economy thrives. And when oil prices rise dramatically and greenhouse gases threaten our environment, the link between transportation and economic strength only grows tighter. On Tuesday, I had the opportunity to speak about an increasingly crucial part of our transportation network--America's marine highways--at the North American Marine Highways and Logistics Conference. America's marine highways will shift some of our nation's cargo traffic--particularly in areas where there are known bottlenecks--from roadways to waterways. Since we announced our initiative a year ago, DOT's Maritime Administration (MARAD) has designated 18 marine highway corridors and awarded $215 million in TIGER grants to marine highway and port projects. These are essential arteries of commerce that will bypass congested roads around busy ports, reduce greenhouse gases, and create jobs for our skilled mariners and shipbuilders across the country. In addition to transporting goods more quickly, easily, and efficiently, our marine highway system will also save a valuable resource: fuel. That's right; with gas prices pinching everyone, marine highways offer a fuel-efficient, cost-effective way to haul goods from one place to another. Last week, President Obama set the goal of cutting America’s energy imports by one-third. And he proposed that we meet this objective, in part, by reducing our transportation system’s enormous demand for oil. Marine highways are one crucial ingredient in the President's recipe for energy independence. They’ll help us send fewer of our hard-earned dollars overseas in a tough fiscal time. They’ll decrease our emission of the carbon pollution that threatens our environment. And they’ll spur economic development and support economic expansion. That’s why I was so pleased to send America’s marine highway plan to Congress on Tuesday. It details how marine highways fit within our larger system for moving goods. It reflects the best ideas of the maritime industry as a whole. And it offers a roadmap to a smarter, brighter future. When we finish America’s fully-integrated, national marine highway system, our legacy will be more than routes on water. It will be a country less dependent on foreign oil. It will be a 21st century way to move people and goods. And it will be a future that America is prepared to win.

### Marine freight movement increases energy efficiency

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 21-22]

Collectively, however, research supports the inherent fuel efficiencies of marine transportation services. As such, shifting cargoes from pure long-distance land movements to water transportation in certain corridors would result in energy savings. These corridors include coastal corridors and those along inland waterways and the Great Lakes. Additional research, some sponsored by MARAD, will identify specific markets and routes within these corridors where shifting from land transportation to water transportation would yield the greatest potential energy savings. Water will not be the most energy-efficient means in all travel corridors, of course, particularly where routes are more circuitous or navigable waterways are not within reasonable proximity to shippers and significant drayage is required. Similarly, origin-to- destination trucking can have energy-efficiency advantages over water and rail transportation, particularly for short haul freight movements where goods must be trucked to and from vessel and rail loading facilities. Fewer than 10 percent of large trucks typically travel to places more than 200 miles away, although these trucks account for 30 percent of the large truck mileage.59 Shifting cargo to more energy-efficient transportation modes could have important long-term social and economic benefits for our nation. Fuel efficiency, however, is but one of an array of considerations that affect the choice of shipping mode by private industry, and even here only indirectly through its impact on shipping costs. In many cases, the quality, convenience, frequency, speed, and reliability of a transportation service are critical factors in shippers’ choices of a transportation mode that outweigh higher costs of a particular service attributable to higher fuel consumption. Accordingly, except under situations of extraordinarily high fuel prices that significantly increase shippers’ costs, the broader range of national benefits associated with reducing fuel consumption by using water transportation will not be realized unless national policies promote the use of America’s Marine Highway.60

### Marine energy use virtually nonexistent

Kennedy, 8 [Sean D. Kennedy, J.D. 2008, Tulane University School of Law, Short Sea Shipping in the United States - The New Marine Highways, 33 Tul. Mar. L. J. 203, Winter, 2008]

Short Sea Shipping energy consumption is virtually insignificant, as demonstrated by data from British Department of Transport showing that maritime transport consumes 0.12-0.25 mega-joules per ton/km, compared to 0.70-1.20 for highway transport and around 0.60 for rail traffic. Short sea shipping is seen as environmentally friendly as its CO<pow 2> emissions stand at 30g per ton/km against 41g for rail and 207g for highways. n29

## OD - AT: Cars are key

### Status quo is solving the passenger vehicles now –

WhiteHouse ’11 [WhiteHouse.gov., Driving Efficiency: Cutting Costs for Families at the Pump and Slashing Dependence on Oil, 7/29/11, http://www.whitehouse.gov/sites/default/files/fuel\_economy\_report.pdf]

Since cars and light trucks account for 45 percent of total oil consumption in our economy, improving light-duty fuel economy is one of the most powerful levers we have for reducing oil dependence. The fuel economy standards will reduce oil consumption by an estimated 2.2 million barrels a day by 2025. To put that in context, that’s more oil than we import from any country except Canada (Chart 5). As the vehicle fleet turns over and older vehicles are replaced with more efficient ones, the oil savings from these standards will grow, ultimately reaching over 4 million barrels a day – nearly as much as we import from all OPEC countries combined. Over the life of the program, the new standards will save an estimated 12.2 billion barrels of oil – equivalent to nearly four years’ worth of fuel consumption by light-duty vehicles.

# WARMING ADVANTAGE (GW)

## GW – UQ (Warming Now)

### Warming is real, anthropogenic and reversible if we act now

Pew Center 11 (Pew Center on Global Climate Change, The Pew Center on Global Climate Change is as a non-profit, non-partisan, and independent organization dedicated to providing credible information, straight answers, and innovative solutions in the effort to address global climate change. The Center engages business leaders, policy makers, and other key decision makers at the international, national, regional, and state levels to advance meaningful, cost-effective climate policy and action, “Climate Change 101: Understanding and Responding to Global Climate Change,” January 2011, http://www.c2es.org/docUploads/climate101-science.pdf)

The scientific evidence is unequivocal. Natural climate variability alone cannot explain this trend. Human activities, especially the burning of coal and oil, have warmed the earth by dramatically increasing the concentrations of heat-trapping gases in the atmosphere. The more of these gases humans put into the atmosphere, the more the earth will warm in the decades and centuries ahead. The impacts of warming can already be observed throughout the United States, from rising sea levels to melting snow and ice to more drought and extreme rainfall. Climate change is already affecting ecosystems, freshwater supplies, and human health around the world. Although some amount of climate change is now unavoidable, much worse impacts can be avoided by substantially reducing the amount of heat-trapping gases released into the atmosphere. A study released by the U.S. National Academy of Sciences in 2010 said, “Climate change is occurring, is caused largely by human activities, and poses significant risks for —and in many cases is already affecting—a broad range of human and natural systems.”1 The climate will continue to change for decades as a result of past human activities, but scientists say that the worst impacts can still be avoided if action is taken soon. Global average temperature data based on reliable ther- mometer measurements are available back to 1880. Over the last century, the global average temperatures rose by almost 1.5°F (see Figure 1), and the Arctic warmed about twice as much.2 Based on data from the U.S. National Climatic Data Center, the 27 warmest years since 1880 all occurred in the 30 years from 1980 to 2009; the warmest year was 2005 fol- lowed closely by 1998.3 Over the past 50 years, the data on extreme temperatures have shown similar trends of rising temperatures: cold days, cold nights, and frosts occurred less frequently over time, while hot days, hot nights, and heat waves occurred more frequently.4 Warming has not been limited to the earth’s surface; the oceans have absorbed most of the heat that has been added to the climate system, resulting in a persistent rise in ocean tem- peratures (see Figure 1).5 Over time, the heat already absorbed by the ocean will be released back to the atmosphere, causing an additional 1°F of surface warming; in other words, some additional atmospheric warming is already “in the pipeline.”6 GREENHOUSE GASES: MAKING THE CONNECTION Although global temperatures have varied naturally over thousands of years, scientists studying the climate system say that natural variability alone cannot account for the rapid rise in global temperatures during recent decades.7 Human activities cause climate change by adding carbon dioxide (CO2) and certain other heat-trapping gases to the atmosphere. When sunlight reaches the earth’s surface, it can be reflected (especially by bright surfaces like snow) or absorbed (especially by dark surfaces like open water or tree tops). Absorbed sunlight warms the surface and is released back into the atmosphere as heat. Certain gases trap this heat in the atmosphere, warming the Earth’s sur- face. This warming is known as the greenhouse effect and the heat-trapping gases are known as greenhouse gases (GHGs) (see Figure 2). CO2, methane (CH4), and nitrous oxide (N2O) are GHGs that both occur naturally and also are released by human activi- ties. Before human activities began to emit these gases in recent centuries, their natural occurrence resulted in a natural greenhouse effect. Without the natural greenhouse effect, the earth’s surface would be nearly 60°F colder on average, well below freezing. However, humans are currently adding to the naturally occurring GHGs in the atmosphere, causing more warming than occurs naturally. Scientists often call this human-magnified greenhouse effect the “enhanced greenhouse effect.” Evidence from many scientific studies confirms that the enhanced greenhouse effect is occurring.8 For example, scientists working at NASA’s Goddard Institute for Space Studies found more energy from the sun is being absorbed than is being emitted back to space. This energy imbalance is direct evidence for the enhanced greenhouse effect.9 Greenhouse Gas Levels Rising. In 2009, the U.S. Global Change Research Program (USGCRP) released the most up- to-date and comprehensive report currently available about the impacts of climate change in the United States.10 The report says that average global concentrations of the three main greenhouse gases—CO2, CH4, and N2O—are rising because of human activities. Since pre-industrial times, CO2 has increased by 40 percent, CH4 by 148 percent, and N2O by 18 percent. CO2 is the principal gas contributing to the enhanced greenhouse effect. Many human activities produce CO2; the burning of coal, oil, and natural gas account for about 80 percent of human-caused CO2 emissions. Most of the remaining 20 percent comes from changes in the land sur- face, primarily deforestation. Trees, like all living organisms, are made mostly of carbon; when forests are burned to clear land, the carbon in the trees is released as CO2. The USGCRP report says that the current trajectory of rising GHG concentrations is pushing the climate into uncharted territory. CO2 levels are much higher today than at any other time in at least 800,000 years. Through all those millennia, there has been a clear correlation between CO2 concentrations and global temperatures (see Figure 3), add- ing geological support for the strong connection between changes in the strength of the greenhouse effect and the earth’s surface temperature. Scientists are certain that the burning of fossil fuels is the main source of the recent spike in CO2 in the atmosphere. Multiple, independent lines of evidence clearly link human actions to increased GHG concentrations.11 Moreover, there is strong evidence that this human-induced rise in atmospheric GHGs is the main reason that the Earth has been warming in recent decades. The USGCRP report says, “The global warm- ing of the past 50 years is due primarily to human-induced increases in heat-trapping gases. Human fingerprints also have been identified in many other aspects of the climate sys- tem, including changes in ocean heat content, precipitation, atmospheric moisture, and Arctic sea ice.” The U.S. National Academy of Sciences draws the same conclusion: “Many lines of evidence support the conclusion that most of the observed warming since the start of the 20th century, and especially the last several decades, can be attributed to human activities.”12 Looking Ahead. The more GHGs humans release into the atmosphere, the stronger the enhanced greenhouse effect will become. Scenarios in which GHGs continue to be added to the atmo- sphere by human activities could cause additional warming of 2 to 11.5°F over the next century, depending on how much more GHGs are emitted and how strongly the climate system responds to them. Although the range of uncertainty for future temperatures is large, even the lower end of the range is likely to have many undesirable effects on natural and human systems.14 Land areas warm more rapidly than oceans, and higher lati- tudes warm more quickly than lower latitudes. Therefore, regional temperature increases may be greater or less than global averages, depending on location. For example, the United States is projected to experience more warming than average, and the Arctic is expected to experience the most warming.15 The future climate depends largely on the actions taken in the next few decades to reduce and eventually elimi- nate human-induced CO2 emissions. In 2005, the U.S. National Academy of Sciences joined with 10 other science academies from around the world in a statement calling on world leaders to take “prompt action” on climate change. The statement was explicit about our ability to limit climate change: “Action taken now to reduce significantly the build- up of greenhouse gases in the atmosphere will lessen the magnitude and rate of climate change.”17

## GW – Human Induced and Real

### Warming is real and human induced – drastic emissions reductions are key to avoid dangerous climate disruptions

-now is key

-AR4 = IPCC

Somerville 11 – Professor of Oceanography @ UCSD

Richard Somerville, Distinguished Professor Emeritus and Research Professor at Scripps Institution of Oceanography at the University of California, San Diego, Coordinating Lead Author in Working Group I for the 2007 Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 3-8-2011, “CLIMATE SCIENCE AND EPA'S GREENHOUSE GAS REGULATIONS,” CQ Congressional Testimony, Lexis

In early 2007, at the time of the publication of WG1 of AR4, the mainstream global community of climate scientists already understood from the most recent research that the latest observations of climate change were disquieting. In the words of a research paper published at the same time as the release of AR4 WG1, a paper for which I am a co-author, "observational data underscore the concerns about global climate change. Previous projections, as summarized by IPCC, have **not exaggerated** but may in some respects even have **underestimated the change**" (Rahmstorf et al. 2007). Now, in 2011, more recent research and newer observations have demonstrated that climate change continues to occur, and in several aspects the magnitude and rapidity of observed changes frequently **exceed the estimates of earlier projections**, including those of AR4. In addition, the case for attributing much observed recent climate change to human activities is **even stronger now** than at the time of AR4. Several recent examples, drawn from many aspects of climate science, but especially emphasizing atmospheric phenomena, support this conclusion. These include temperature, atmospheric moisture content, precipitation, and other aspects of the hydrological cycle. Motivated by the rapid progress in research, a recent scientific synthesis, The Copenhagen Diagnosis (Allison et al. 2009), has assessed recent climate research findings, including: -- Measurements show that the Greenland and Antarctic ice-sheets are losing mass and contributing to sea level rise. -- Arctic sea-ice has melted far beyond the expectations of climate models. -- Global sea level rise may attain or exceed 1 meter by 2100, with a rise of up to 2 meters considered possible. -- In 2008, global carbon dioxide emissions from fossil fuels were about 40% higher than those in 1990. -- At today's global emissions rates, if these rates were to be sustained unchanged, after only about 20 more years, the world will no **longer have a reasonable chance** of **limiting warming** to less than 2 degrees Celsius, or 3.6 degrees Fahrenheit, above 19th-century pre-industrial temperature levels, This is a much- discussed goal for a maximum allowable degree of climate change, and this aspirational target has now been formally adopted by the European Union and is supported by many other countries, as expressed, for example, in statements by both the G-8 and G-20 groups of nations. The Copenhagen Diagnosis also cites research supporting the position that, in order to have a reasonable likelihood of avoiding the risk of **dangerous climate disruption**, defined by this 2 degree Celsius (or 3.6 degree Fahrenheit) limit, global emissions of greenhouse gases such as carbon dioxide must peak and then start to **decline rapidly** within the next five to ten years, reaching near zero well within this century.

### Human caused GHGs are the cause of warming

The Guardian 10 (The Guardian is the Newspaper of the Year in the UK, "Are Humans Definitely Causing Global Warming?," 12/20/2010, http://www.guardian.co.uk/environment/2010/dec/30/humans-causing-global-warming)

Just as the world's most respected scientific bodies have confirmed that world is getting hotter, they have also stated that there is strong evidence that humans are driving the warming. The 2005 joint statement from the national academies of Brazil, Canada, China, France, Germany, India, Italy, Japan, Russia, the UK and the US said: "It is likely that most of the warming in recent decades can be attributed to human activities." Countless more recent statements and reports from the world's leading scientific bodies have said the same thing. For example, a 2010 summary of climate science by the Royal Society stated that: "There is strong evidence that the warming of the Earth over the last half-century has been caused largely by human activity, such as the burning of fossil fuels and changes in land use, including agriculture and deforestation." The idea that humans could change the planet's climate may be counter-intuitive, but the basic science is well understood. Each year, human activity causes billions of tonnes of greenhouse gases to be released into the atmosphere. As scientists have known for decades, these gases capture heat that would otherwise escape to space – the equivalent of wrapping the planet in an invisible blanket. Of course, the planet's climate has always been in flux thanks to "natural" factors such as changes in solar or volcanic activity, or cycles relating the Earth's orbit around the sun. According to the scientific literature, however, the warming recorded to date matches the pattern of warming we would expect from a build up of greenhouse gas in the atmosphere – not the warming we would expect from other possible causes.

### Warming is real, anthropogenic, and happening now

Braganza 11 (Karl, Manager, Climate Monitor at the Bureau of Meteorology in Australia, The Bureau presently operates under the authority of the Meteorology Act 1955, which requires it to report on the state of the atmosphere and oceans in support of Australia's social, economic, cultural and environmental goals. His salary is not funded from any external sources or dependent on specially funded government climate change projects. Karl Braganza does not consult to, own shares in or receive funding from any company or organisation that would benefit from this article, and has no relevant affiliations, “The greenhouse effect is real: here’s why,” 6/14/2011, http://theconversation.edu.au/the-greenhouse-effect-is-real-heres-why-1515)

In public discussions of climate change, the full range and weight of evidence underpinning the current science can be difficult to find. A good example of this is the role of observations of the climate system over the past one hundred years or more. In the current public discourse, the focus has been mostly on changes in global mean temperature. The greenhouse effect is fundamental science It would be easy to form the opinion that everything we know about climate change is based upon the observed rise in global temperatures and observed increase in carbon dioxide emissions since the industrial revolution. In other words, one could have the mistaken impression that the entirety of climate science is based upon a single correlation study. In reality, the correlation between global mean temperature and carbon dioxide over the 20th century forms an important, but very small part of the evidence for a human role in climate change. Our assessment of the future risk from the continued build up of greenhouse gases in the atmosphere is even less informed by 20th century changes in global mean temperature. For example, our understanding of the greenhouse effect – the link between greenhouse gas concentrations and global surface air temperature – is based primarily on our fundamental understanding of mathematics, physics, astronomy and chemistry. Much of this science is textbook material that is at least a century old and does not rely on the recent climate record. For example, it is a scientific fact that Venus, the planet most similar to Earth in our solar system, experiences surface temperatures of nearly 500 degrees Celsius due to its atmosphere being heavily laden with greenhouse gases. Back on Earth, that fundamental understanding of the physics of radiation, combined with our understanding of climate change from the geological record, clearly demonstrates that increasing greenhouse gas concentrations will inevitably drive global warming. Dusting for climate fingerprints The observations we have taken since the start of 20th century have confirmed our fundamental understanding of the climate system. While the climate system is very complex, observations have shown that our formulation of the physics of the atmosphere and oceans is largely correct, and ever improving. Most importantly, the observations have confirmed that human activities, in particular a 40% increase in atmospheric carbon dioxide concentrations since the late 19th century, have had a discernible and significant impact on the climate system already. In the field known as detection and attribution of climate change, scientists use indicators known as *fingerprints* of climate change. These fingerprints show the entire climate system has changed in ways that are consistent with increasing greenhouse gases and an enhanced greenhouse effect. They also show that recent, long term changes are inconsistent with a range of natural causes. Is it getting hot in here? A warming world is obviously the most profound piece of evidence. Here in Australia, the decade ending in 2010 has easily been the warmest since record keeping began, and continues a trend of each decade being warmer than the previous, that extends back 70 years. Globally, significant warming and other changes have been observed across a range of different indicators and through a number of different recording instruments, and a consistent picture has now emerged. Scientists have observed increases in continental temperatures and increases in the temperature of the lower atmosphere. In the oceans, we have seen increases in sea-surface temperatures as well as increases in deep-ocean heat content. That increased heat has expanded the volume of the oceans and has been recorded as a rise in sea-level. Scientists have also observed decreases in sea-ice, a general retreat of glaciers and decreases in snow cover. Changes in atmospheric pressure and rainfall have also occurred in patterns that we would expect due to increased greenhouse gases. There is also emerging evidence that some, though not all, types of extreme weather have become more frequent around the planet. These changes are again consistent with our expectations for increasing atmospheric carbon dioxide. Patterns of temperature change that are uniquely associated with the enhanced greenhouse effect, and which have been observed in the real world include:

* greater warming in polar regions than tropical regions
* greater warming over the continents than the oceans
* greater warming of night time temperatures than daytime temperatures
* greater warming in winter compared with summer
* a pattern of cooling in the high atmosphere (stratosphere) with simultaneous warming in the lower atmosphere (troposphere).

How do we know it’s us? By way of brief explanation, if the warming over the 20th century were due to some deep ocean process, we would not expect to see continents warming more rapidly than the oceans, or the oceans warming from the top down. For increases in solar radiation, we would expect to see warming of the stratosphere rather than the observed cooling trend. Similarly, greater global warming at night and during winter is more typical of increased greenhouse gases, rather than an increase in solar radiation. There is a range of other observations that show the enhanced greenhouse effect is real. The additional carbon dioxide in the atmosphere has been identified through its isotopic signature as being fossil fuel in origin. The increased carbon dioxide absorbed by the oceans is being recorded as a measured decrease in ocean alkalinity. Satellite measurements of outgoing long-wave radiation from the planet reveal increased absorption of energy in the spectral bands corresponding to carbon dioxide, exactly as expected from fundamental physics. It is important to remember that the enhanced greenhouse effect is not the only factor acting on the climate system. In the short term, the influence of greenhouse gases can be obscured by other competing forces. These include other anthropogenic factors such as increased industrial aerosols and ozone depletion, as well as natural changes in solar radiation and volcanic aerosols, and the cycle of El Niño and La Niña events. By choosing a range of indicators, by averaging over decades rather than years, and by looking at the pattern of change through the entire climate system, scientists are able to clearly discern the fingerprint of human-induced change. Case closed The climate of Earth is now a closely monitored thing; from instruments in space, in the deep ocean, in the atmosphere and across the surface of both land and sea. It’s now practically certain that increasing greenhouse gases have already warmed the climate system. That continued rapid increases in greenhouse gases will cause rapid future warming is irrefutable.

### Global warming is anthropogenic and an imminent threat – prefer our evidence - scientifically proven, repeated, and peer-reviewed

Romm 10 (Jon, Editor of Climate Progress, Senior Fellow at the American Progress, former Acting Assistant Secretary of Energy for Energy Efficiency and Renewable Energy, Fellow of the American Association for the Advancement of Science, “Disputing the “consensus” on global warming,” http://climateprogress.org/2010/06/16/scientific-consensus-on-global-warming-climate-science/)

A good example of how scientific evidence drives our understanding concerns how we know that humans are the dominant cause of global warming. This is, of course, the deniers’ favorite topic. Since it is increasingly obvious that the climate is changing and the planet is warming, the remaining deniers have coalesced to defend their Alamo — that human emissions aren’t the cause of recent climate change and therefore that reducing those emissions is pointless. Last year, longtime Nation columnist [Alexander Cockburn wrote](http://www.counterpunch.org/cockburn04282007.html" \t "_blank), “There is still zero empirical evidence that anthropogenic production of CO2 is making any measurable contribution to the world’s present warming trend. The greenhouse fearmongers rely entirely on unverified, crudely oversimplified computer models to finger mankind’s sinful contribution.” In fact, the evidence is amazingly strong. Moreover, if the relatively complex climate models are oversimplified in any respect, it is by omitting amplifying feedbacks and other factors that suggest human-caused climate change will be worse than is widely realized. The [IPCC concluded](http://ipcc-wg1.ucar.edu/wg1/Report/AR4WG1_Print_Ch09.pdf" \t "_blank) last year: “Greenhouse gas forcing has very likely (>90 percent) caused most of the observed global warming over the last 50 years. This conclusion takes into account … the possibility that the response to solar forcing could be underestimated by climate models.” Scientists have come to understand that “forcings” (natural and human-made) explain most of the changes in our climate and temperature both in recent decades and over the past millions of years. The primary human-made forcings are the heat-trapping greenhouse gases we generate, particularly carbon dioxide from burning coal, oil and natural gas. The natural forcings include fluctuations in the intensity of sunlight (which can increase or decrease warming), and major volcanoes that inject huge volumes of gases and aerosol particles into the stratosphere (which tend to block sunlight and cause cooling)…. Over and over again, scientists have demonstrated that observed changes in the climate in recent decades can only be explained by taking into account the observed combination of human and natural forcings. Natural forcings alone just don’t explain what is happening to this planet. For instance, in April 2005, one of the nation’s top climate scientists, NASA’s James Hansen, led a team of scientists that made “precise measurements of increasing ocean heat content over the past 10 years,” which revealed that the Earth is absorbing far more heat than it is emitting to space, confirming what earlier computer models had shown about warming. [Hansen called](http://www.columbia.edu/~jeh1/imbalance_release.pdf" \t "_blank) this energy imbalance the “smoking gun” of climate change, and said, “There can no longer be genuine doubt that human-made gases are the dominant cause of observed warming.” Another 2005 study, led by the Scripps Institution of Oceanography, compared actual ocean temperature data from the surface down to hundreds of meters (in the Atlantic, Pacific and Indian oceans) with climate models and [concluded](http://www.sciencemag.org/cgi/content/abstract/1112418" \t "_blank): A warming signal has penetrated into the world’s oceans over the past 40 years. The signal is complex, with a vertical structure that varies widely by ocean; it cannot be explained by natural internal climate variability or solar and volcanic forcing, but is well simulated by two anthropogenically [human-caused] forced climate models. We conclude that it is of human origin, a conclusion robust to observational sampling and model differences. Such studies are also done for many other observations: land-based temperature rise, atmospheric temperature rise, sea level rise, arctic ice melt, inland glacier melt, Greeland and Antarctic ice sheet melt, expansion of the tropics (desertification) and changes in precipitation. Studies compare every testable prediction from climate change theory and models (and suggested by paleoclimate research) to actual observations. How many studies? Well, the IPCC’s definitive treatment of the subject, “Understanding and Attributing Climate Change,” has 11 full pages of references, some 500 peer-reviewed studies. This is not a consensus of opinion. It is what scientific research and actual observations reveal. And the science behind human attribution has gotten much stronger in the past 2 years (see a recent literature review by the Met Office [here](http://www.metoffice.gov.uk/corporate/pressoffice/2010/pr20100305.html)). That brings us to another problem with the word “consensus.” It can mean “unanimity” or “the judgment arrived at by most of those concerned.” Many, if not most, people hear the second meaning: “consensus” as majority opinion. The scientific consensus most people are familiar with is the IPCC’s “Summary for Policymakers” reports. But those aren’t a majority opinion. Government representatives participate in a line-by-line review and revision of these summaries. So China, Saudi Arabia and that hotbed of denialism — the Bush administration — get to veto anything they don’t like. The deniers call this “politicized science,” suggesting the process turns the IPCC summaries into some sort of unscientific exaggeration. In fact, the reverse is true. The net result is unanimous agreement on a conservative or watered-down document. You could argue that rather than majority rules, this is “minority rules.” Last April, in an article titled “Conservative Climate,” Scientific American noted that objections by Saudi Arabia and China led the IPCC to remove a sentence stating that the impact of human greenhouse gas emissions on the Earth’s recent warming is five times greater than that of the sun. In fact, lead author Piers Forster of the University of Leeds in England said, “The difference is really a factor of 10.” Then I discuss the evidence we had even back in 2008 that the IPCC was underestimating key climate impacts, a point I update here. The bottom line is that recent observations and research make clear the planet almost certainly faces a greater and more imminent threat than is laid out in the IPCC reports. That’s why climate scientists are so desperate. That’s why they keep begging for immediate action. And that’s why the “consensus on global warming” is a phrase that should be forever retired from the climate debate. The leading scientific organizations in this country and around the world, including all the major national academies of science, aren’t buying into some sort of consensus of opinion. They have analyzed the science and observations and expressed their understanding of climate science and the likely impacts we face on our current emissions path — an understanding that has grown increasingly dire in recent years (see “An illustrated guide to the latest climate science” and “An introduction to global warming impacts: Hell and High Water“).

## GW – Prefer Our Evidence

### Prefer our scientific assessments over single scientists or fringe theories

Alley 10 – Professor of Geoscience @ Penn State

Richard, Professor of Geoscience @ Penn State, authored over 200 refereed scientific papers, which are "highly cited" according to a prominent indexing service, erved with distinguished national and international teams on major scientific assessment bodies, 11-17-2010, “CLIMATE CHANGE SCIENCE; COMMITTEE: HOUSE SCIENCE AND TECHNOLOGY;

SUBCOMMITTEE: ENERGY AND ENVIRONMENT,” CQ Congressional Testimony, Lexis

Background on Climate Change and Global Warming. Scientific assessments such as those of the National Academy of Sciences of the United States (e.g., National Research Council, 1975; 1979; 2001; 2006; 2008; 2010a; 2010b), the U.S. Climate Change Science Program, and the Intergovernmental Panel on Climate Change have for decades consistently found with increasingly high scientific confidence that human activities are **raising the concentration** of CO2 and other greenhouse gases in the atmosphere, that this has a warming effect on the climate, that the **climate is warming** as expected, and that the changes **so far are small** compared to those projected if humans burn much of the fossil fuel on the planet. The basis for expecting and understanding warming from CO2 is the fundamental physics of how energy interacts with gases in the atmosphere. This knowledge has been available for over a century, was greatly refined by military research after World War II, and is directly confirmed by satellite measurements and other data (e.g., American Institute of Physics, 2008; Harries et al., 2001; Griggs and Harries, 2007). Although a great range of ideas can be found in scientific papers and in statements by individual scientists, the scientific assessments by bodies such as the National Academy of Sciences **consider the full range** of available information. The major results brought forward are based on multiple lines of evidence provided by different research groups with different funding sources, and have repeatedly been tested and confirmed. Removing the work of any scientist or small group of scientists would still leave a strong scientific basis for the main conclusions. Ice Changes. There exists increasingly strong evidence for widespread, ongoing reductions in the Earth's ice, including snow, river and lake ice, Arctic sea ice, permafrost and seasonally frozen ground, mountain glaciers, and the great ice sheets of Greenland and Antarctica. The trends from warming are modified by effects of changing precipitation and of natural variability, as I will discuss soon, so not all ice everywhere is always shrinking. Nonetheless, **warming is important in the overall loss of ice**, although changes in oceanic and atmospheric circulation in response to natural or human causes also have contributed and will continue to contribute to changes. The most recent assessment by the IPCC remains relevant (Lemke et al., 2007). Also see the assessment of the long climatic history of the Arctic by the U.S. Climate Change Science Program (CCSP, 2009), showing that in the past warming has led to shrinkage of Arctic ice including sea ice and the Greenland ice sheet, and that sufficiently large warming has removed them entirely.

### Prefer our evidence - scientific consensus

Oreskes 04 (Naomi, Ph.D. in geological research and history of science from Stanford, Professor of History and Science Studies at UC San Diego, Adjunct Professor of Geosciences at the Scripps Institution of Oceanography, 12/3/04, Science, Vol 306, No 5702, p 1686, “The Scientific Consensus on Climate Change” http://www.sciencemag.org/content/306/5702/1686.full)

Policy-makers and the media, particularly in the United States, frequently assert that climate science is highly uncertain. Some have used this as an argument against adopting strong measures to reduce greenhouse gas emissions. For example, while discussing a major U.S. Environmental Protection Agency report on the risks of climate change, then-EPA administrator Christine Whitman argued, “As [the report] went through review, there was less consensus on the science and conclusions on climate change” (1). Some corporations whose revenues might be adversely affected by controls on carbon dioxide emissions have also alleged major uncertainties in the science (2). Such statements suggest that there might be substantive disagreement in the scientific community about the reality of anthropogenic climate change. This is not the case. The scientific consensus is clearly expressed in the reports of the Intergovernmental Panel on Climate Change (IPCC). Created in 1988 by the World Meteorological Organization and the United Nations Environmental Programme, IPCC's purpose is to evaluate the state of climate science as a basis for informed policy action, primarily on the basis of peer-reviewed and published scientific literature (3). In its most recent assessment, IPCC states unequivocally that the consensus of scientific opinion is that Earth's climate is being affected by human activities: “Human activities … are modifying the concentration of atmospheric constituents … that absorb or scatter radiant energy. … [M]ost of the observed warming over the last 50 years is likely to have been due to the increase in greenhouse gas concentrations” [p. 21 in (4)]. IPCC is not alone in its conclusions. In recent years, all major scientific bodies in the United States whose members' expertise bears directly on the matter have issued similar statements. For example, the National Academy of Sciences report, Climate Change Science: An Analysis of Some Key Questions, begins: “Greenhouse gases are accumulating in Earth's atmosphere as a result of human activities, causing surface air temperatures and subsurface ocean temperatures to rise” [p. 1 in (5)]. The report explicitly asks whether the IPCC assessment is a fair summary of professional scientific thinking, and answers yes: “The IPCC's conclusion that most of the observed warming of the last 50 years is likely to have been due to the increase in greenhouse gas concentrations accurately reflects the current thinking of the scientific community on this issue” [p. 3 in (5)]. Others agree. The American Meteorological Society (6), the American Geophysical Union (7), and the American Association for the Advancement of Science (AAAS) all have issued statements in recent years concluding that the evidence for human modification of climate is compelling (8). The drafting of such reports and statements involves many opportunities for comment, criticism, and revision, and it is not likely that they would diverge greatly from the opinions of the societies' members. Nevertheless, they might downplay legitimate dissenting opinions. That hypothesis was tested by analyzing 928 abstracts, published in refereed scientific journals between 1993 and 2003, and listed in the ISI database with the keywords “climate change” (9). The 928 papers were divided into six categories: explicit endorsement of the consensus position, evaluation of impacts, mitigation proposals, methods, paleoclimate analysis, and rejection of the consensus position. Of all the papers, 75% fell into the first three categories, either explicitly or implicitly accepting the consensus view; 25% dealt with methods or paleoclimate, taking no position on current anthropogenic climate change. Remarkably, none of the papers disagreed with the consensus position. Admittedly, authors evaluating impacts, developing methods, or studying paleoclimatic change might believe that current climate change is natural. However, none of these papers argued that point. This analysis shows that scientists publishing in the peer-reviewed literature agree with IPCC, the National Academy of Sciences, and the public statements of their professional societies. Politicians, economists, journalists, and others may have the impression of confusion, disagreement, or discord among climate scientists, but that impression is incorrect. The scientific consensus might, of course, be wrong. If the history of science teaches anything, it is humility, and no one can be faulted for failing to act on what is not known. But our grandchildren will surely blame us if they find that we understood the reality of anthropogenic climate change and failed to do anything about it. Many details about climate interactions are not well understood, and there are ample grounds for continued research to provide a better basis for understanding climate dynamics. The question of what to do about climate change is also still open. But there is a scientific consensus on the reality of anthropogenic climate change. Climate scientists have repeatedly tried to make this clear. It is time for the rest of us to listen.

## GW – Links (Trucks Key Source)

### Increased reliance on trucking will result in skyrocketing GHG emissions

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 23-4]

There is a global recognition of the need to reduce the amount of GHG emissions released into the atmosphere as a result of human activities. Scientists are monitoring rising global temperatures and weather events, including droughts and more severe hurricanes, which are likely influenced by rising GHG emissions. The United States is second only to China as the world's leading producer of GHG, and within the United States, the transportation sector is second only to electricity generation as the source of GHG emissions (see Figure 4). Although significant reductions in GHG emissions per vehicle mile are expected from light duty vehicles (cars and light trucks) due to the mileage standards imposed by the Energy Act, USDOE projects that overall GHG emissions from all transportation sources will increase by 195 million metric tons as of 2035, or 10 percent, from 2008 levels. Approximately 116 million metric tons of this increase, or 59 percent, will be attributable to growth in heavy truck emissions.61 These USDOE projections are subject to change, however. The Energy Act directs USDOT, acting through NHTSA, to develop a fuel efficiency improvement program and adopt a fuel economy standard for medium- and heavy-duty trucks.62 Also, in May 2010, the President announced that USDOT/NHTSA and EPA will issue fuel efficiency and GHG emissions standards for commercial medium- and heavy-duty vehicles beginning with model year 2014. Accordingly, NHTSA recently issued a “Notice of Intent to Prepare an Environmental Impact Statement for New Medium- and Heavy-Duty Fuel Efficiency Improvement Program.”63 Because the rulemaking process is just beginning, it is too early to assess the impact this program will have on GHG emissions.

### Trucks emit large amounts of GHGs

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 5]

The nation is committed to curbing its GHG emissions, of which transportation is second only to electricity generation as a source. USDOE projects that GHG emissions from all transportation sources will increase by 195 million metric tons (10 percent) as of 2035 compared to 2008, of which 59 percent of the increase will be attributable to growth in heavy truck emissions.8 However, some of the projected growth in both truck energy consumption and GHG emissions is likely to be curtailed through a regulatory initiative recently announced by the President. In particular, the President directed EPA and USDOT to take steps to reduce GHG emissions and fuel consumption by developing the first-ever GHG and fuel economy standards for medium- and heavy-duty trucks, in an announcement made on May 21, 2010.9

## GW – Impact Framing

### The magnitude of warming outweighs all other impacts.

Doebbler 11 (Curtis, Al-Ahram Weekly Issue No. 1055, International Human Rights Lawyer, "Two Threats To Our Existence," 7/13/2011, http://weekly.ahram.org.eg/2011/1055/envrnmnt.htm)

Climate change is widely acknowledged to be the greatest threat facing humanity. It will lead to small island states disappearing from the face of the earth, serious global threats to our food and water supplies, and ultimately the death of hundreds of millions of the poorest people in the world over the course of this century. No other threat -- including war, nuclear disasters, rogue regimes, terrorism, or the fiscal irresponsibility of governments -- is reliably predicted to cause so much harm to so many people on earth, and indeed to the earth itself. The International Panel on Climate Change, which won the Nobel Prize for its evaluation of thousands of research studies to provide us accurate information on climate change, has predicted that under the current scenario of "business-as-usual", temperatures could rise by as much as 10 degrees Celsius in some parts of the world. This would have horrendous consequences for the most vulnerable people in the world. Consequences that the past spokesman of 136 developing countries, Lumumba Diaping, described as the equivalent of sending hundreds of millions of Africans to the furnace. Yet for more than two decades, states have failed to take adequate action to either prevent climate change or to deal with its consequences. A major reason for this is that many wealthy industrialised countries view climate change as at worst an inconvenience, or at best even a potential market condition from which they can profit at the expense of developing countries. Indeed, history has shown them that because of their significantly higher levels of population they have grown rich and been able to enslave, exploit and marginalise their neighbours in developing countries. They continue in this vein.

### Warming is the largest impact - magnitude and probability outweigh

The Washington Post 12 (“A warning written in mud,” 3/7/2012, LexisNexis] SL

AS THE REPUBLICAN presidential primary race drags on, the politics of global warming seem ever more divorced from scientific reality. The process of scientific inquiry, meanwhile, offers yet more warnings about what might happen if fractured climate politics stymie long-term action. Emitting massive amounts of carbon dioxide doesn't just change the chemistry of the atmosphere; it makes the oceans more acidic. Predicting the impact on ocean ecosystems involves educated speculation, which often involves applying evidence of what has happened before. In the latest edition of the journal Science, [a team of researchers reckons](http://www.sciencemag.org.proxy.lib.umich.edu/content/335/6072/1058.abstract) that today's human-emitted CO2 is increasing ocean acidity far faster than previous, naturally occurring episodes scientists have studied, which themselves appear to have had very alarming results. The harrowing history is recorded in mud samples millions of years old, taken from the sea floor near Antarctica: It reveals a mass extinction of single-celled organisms that no doubt caromed far up the food chain. A similar effect today could kill off coral, plankton and mollusks, constricting the diets of a range of fauna that rely on them, including salmon - and humans. Assuming similar results now, ocean acidification's most extreme possible effects might not occur for many years. Yet today's rate of acidification is 10 times that of the most comparable surge in atmospheric carbon in the last 300 million years, Barbel Honisch, a scientist involved in the study, tentatively estimates. Scientists cannot and need not be definitive about exactly what will happen and when all over the earth. As ever with climate change, there is a range of risks involving mind-bogglingly complex planetary systems that scientists can attempt to anticipate, and probably many they have not considered. The point is there are enough dangers of such magnitude and probability that humans should invest in reasonable policies to avoid them.

## GW – Impacts: Extinction

### Warming is an existential threat

Mazo 10 – PhD in Paleoclimatology from UCLA

Jeffrey Mazo, Managing Editor, Survival and Research Fellow for Environmental Security and Science Policy at the International Institute for Strategic Studies in London, 3-2010, “Climate Conflict: How global warming threatens security and what to do about it,” pg. 122

The best estimates for global warming to the end of the century range from 2.5-4.~C above pre-industrial levels, depending on the scenario. Even in the best-case scenario, the low end of the likely range is 1.goC, and in the worst 'business as usual' projections, which actual emissions have been matching, the range of likely warming runs from 3.1--7.1°C. Even keeping emissions at constant 2000 levels (which have already been exceeded), global temperature would still be expected to reach 1.2°C (O'9""1.5°C)above pre-industrial levels by the end of the century." Without early and severe reductions in emissions, the effects of climate change in the second half of the twenty-first century are **likely to be catastrophic** for the stability and security of countries in the developing world - not to mention the associated human tragedy. Climate change could even undermine the strength and stability of emerging and advanced economies, beyond the knock-on effects on security of widespread state failure and collapse in developing countries.' And although they have been condemned as melodramatic and alarmist, many informed observers believe that unmitigated climate change beyond the end of the century could pose an **existential threat** to civilisation." What is certain is that there is no precedent in human experience for such rapid change or such climatic conditions, and even in the best case adaptation to these extremes would mean profound social, cultural and political changes.

### Warming causes extinction

Tickell 08 (Oliver, Environmental Researcher, The Guardian, August 11, http://www.guardian.co.uk/commentisfree/2008/aug/11/climatechange)

We need to get prepared for four degrees of global warming, Bob Watson told the Guardian last week. At first sight this looks like wise counsel from the climate science adviser to Defra. But the idea that we could adapt to a 4C rise is absurd and dangerous. Global warming on this scale would be a catastrophe that would mean, in the immortal words that Chief Seattle probably never spoke, "the end of living and the beginning of survival" for humankind. Or perhaps the beginning of our extinction. The collapse of the polar ice caps would become inevitable, bringing long-term sea level rises of 70-80 metres. All the world's coastal plains would be lost, complete with ports, cities, transport and industrial infrastructure, and much of the world's most productive farmland. The world's geography would be transformed much as it was at the end of the last ice age, when sea levels rose by about 120 metres to create the Channel, the North Sea and Cardigan Bay out of dry land. Weather would become extreme and unpredictable, with more frequent and severe droughts, floods and hurricanes. The Earth's carrying capacity would be hugely reduced. Billions would undoubtedly die. Watson's call was supported by the government's former chief scientific adviser, Sir David King, who warned that "if we get to a four-degree rise it is quite possible that we would begin to see a runaway increase". This is a remarkable understatement. The climate system is already experiencing significant feedbacks, notably the summer melting of the Arctic sea ice. The more the ice melts, the more sunshine is absorbed by the sea, and the more the Arctic warms. And as the Arctic warms, the release of billions of tonnes of methane – a greenhouse gas 70 times stronger than carbon dioxide over 20 years – captured under melting permafrost is already under way. To see how far this process could go, look 55.5m years to the Palaeocene-Eocene Thermal Maximum, when a global temperature increase of 6C coincided with the release of about 5,000 gigatonnes of carbon into the atmosphere, both as CO2 and as methane from bogs and seabed sediments. Lush subtropical forests grew in polar regions, and sea levels rose to 100m higher than today. It appears that an initial warming pulse triggered other warming processes. Many scientists warn that this historical event may be analogous to the present: the warming caused by human emissions could propel us towards a similar hothouse Earth to adapt.

## GW – Impacts: War/Prolif

### Global warming leads to conflict in all major hotpots

McGinn 10 – Fellow in Strategic Studies @ Naval War College

Dennis McGinn, senior policy advisor to the American Council on Renewable Energy and is an international security senior fellow at the Rocky Mountain Institute, previously served as chairman of the U.S. Naval Institute Board of Directors, 12-1-2010, “ENERGY CHALLENGES; COMMITTEE: HOUSE SELECT ENERGY INDEPENDENCE AND GLOBAL WARMING,” CQ Congressional Testimony, Lexis

Last year, global climate researchers revised those predictions, now forecasting that the planet could warm by as much as 6.3 degrees Fahrenheit by the end of the century even if the world's leaders fulfill their most ambitious climate pledges, a much faster and broader scale pace of change than the IPCC forecast just two years ago. Their other findings include that sea level could rise by as much as six feet by 2100 instead of 1.5 feet, as the IPCC had projected, and the Arctic Sea may experience an ice-free summer by 2030, rather than by the end of the century. Let me give you some examples, from a military perspective, of what the future could be like if we fail to adequately address the causes and effects of climate change. In Africa, projected rising temperatures will dramatically reduce water availability, soil moisture, arable land and food production. Combined with increased extreme weather events - climate impacts will act to accelerate the destabilization of populations and governments already dealing with more traditional causes of conflict. Climate-driven crises are already happening there. Lack of water and changing agricultural patterns are at the root of crises in Darfur and Somalia, present day examples of failed social structures and governments, leading to widespread humanitarian crises, conflict, piracy and terrorism. In South and Central America - melting glaciers in Venezuela and the Peruvian Andes will directly impact water supplies and hydroelectric power. The Peruvian plains, northeast Brazil and Mexico will experience longer and more serious droughts. Land degradation and loss of food production will hit hard in Latin America - particularly Brazil whose economy is fueled by food exports - possibly leading to social disruptions and significant migration. We need only reflect on present immigration and security challenges along the U.S. southern border to get a glimpse of what the future could hold: immigration driven not by a search for a better economic life but in search of basic needs. In Bangladesh, the growing threat of more frequent and intense typhoons in the Bay of Bengal has the potential for wiping out essential coastal agriculture and fishing areas, just as it did in 1991 resulting in the U.S. military led Operation Sea Angel. Greater and more prolonged coastal typhoon damage would create an unprecedented humanitarian crisis, which could drive literally millions of refugees northwest toward India in search of relief. As the Himalayan glaciers recede, Asian nations like China, India and Pakistan will have to deal with internal and external unrest due to a much less reliable source of water from four great rivers --- creating floods at some times of the year, prolonged drought during others-- to meet the needs of growing populations. This past summer, we saw massive flooding in Pakistan that continues to affect more than twenty million people in a nuclear- armed nation, with an ongoing extremist insurgency that has direct bearing on the outcome of allied operations in Afghanistan. 40 percent of Asia's four billion people live within 45 miles of the coast - with coastlines and infrastructure that could be inundated by rising seas. Even the most modest projections of increased temperature and sea level rise include widespread flooding and loss of significant percentages of coastal delta farmland and heavily populated areas. In the Middle East, the vast majority of highly diverse populations already depend on water sources external to their borders. A greatly increased competition for diminishing supplies of water for agriculture and basic human needs would significantly ratchet up tensions in this historically critical and politically unstable region. These potential climate change effects will not just create crisis events happening far away from American soil or along our borders. Disasters like Hurricane Katrina in 2005 reveal, in a very stark way, how a natural disaster-caused humanitarian crisis can quickly lead to suffering, civil unrest and the need for a massive, expensive and sustained mobilization of resources. In fact today, more than five years after Hurricane Katrina produced widespread destruction along the Gulf Coast, thousands of people have not returned to their homes and hundreds of millions of dollars in damaged infrastructure remain. As CNA Military Advisory Board member Vice Admiral Richard Truly said climate change is not like "some hot spot we're trying to handle." "It's going to happen to **every country** and **every person** in the whole world at the same time." ii And while the effects of global warming create this potential environmental havoc, its principal dynamic will be to shift the world's balance of power and money.iii Drought and scant water supply have already fueled civil conflicts in global hot spots like Afghanistan, Nepal and Sudan, according to several new studies. The evidence is fairly clear that sharp downward deviations from normal rainfall in fragile societies **elevate the risk of major conflict**.iv Climate impacts like extreme drought, flooding, storm, temperatures, sea level rise, ocean acidification, and wildfires - occurring more frequently and more intensely across the globe - - will inevitably create political instability where societal demands for the essentials of life exceed the capacity of governments to cope. As noted above, fragile governments will become failed states, and desperation and hopelessness will drive whole populations to be displaced on a scale far beyond what we see today. And into this turmoil and power vacuum will rush paramilitaries, organized crime, extremists producing a highly exportable brand of terrorism.

### Global warming leads to nuclear war

Dyer 9 – PhD in ME History

Gwynne, MA in Military History and PhD in Middle Eastern History former @ [Senior Lecturer](file://localhost/wiki/Senior_Lecturer) in War Studies at the [Royal Military Academy Sandhurst](file://localhost/wiki/Royal_Military_Academy_Sandhurst), Climate Wars

THIS BOOK IS AN ATTEMPT, peering through a glass darkly, to understand the politics and the strategies of the potentially apocalyptic crisis that looks set to occupy most of the twenty­first century. There are now many books available that deal with the science of climate change and some that suggest pos­sible approaches to getting the problem under control, but there are few that venture very far into the grim detail of how real countries experiencing very different and, in some cases, overwhelming pressures as global warming proceeds, are likely to respond to the changes. Yet we all know that it's mostly politics, national and international, that will decide the outcomes. Two things in particular persuaded me that it was time to write this book. One was the realization that the first and most important impact of climate change on human civiliza­tion will bean acute and permanent crisis of food supply. Eating regularly is a non-negotiable activity, and countries that cannot feed their people are unlikely to be "reasonable" about it. Not all of them will be in what we used to call the "Third World" -the developing countries of Asia, Africa and Latin America. The other thing that finally got the donkey's attention was a dawning awareness that, in a number of the great pow­ers, climate change scenarios are already playing a large and increasing role in the military planning process. Rationally, you would expect this to be the case, because each country pays its professional military establishment to identify and counter "threats" to its security, but the implications of their scenarios are still alarming. There is a probability of wars, including even nuclear wars, if temperatures rise two to three degrees Celsius. Once that happens, all hope of international cooperation to curb emissions and stop the warming goes out the window.

### Global warming causes migration, global nuclear war, and proliferation

Schwartz and Randall 03 (P Peter Schwartz and Doug Randall, co-founder and current chairman of the Global Business Network organization focused on scenario thinking and planning; of the Global Business Network, “An Abrupt Climate Change Scenario and Its Implications for United States National Security,” October 2003, http://www.climate.org/PDF/clim\_change\_scenario.pdf)

The United States and Australia are likely to build defensive fortresses around their countries because they have the resources and reserves to achieve self-sufficiency. **With diverse growing climates,** wealth, technology, and abundant resources, **the United States** could likely survive shortened growing cycles and harsh weather conditions without catastrophic losses. Borders will be strengthenedaround the country **t**o hold back unwanted starving immigrants from the Caribbean islands (an especially severe problem**), Mexico, and South America**. Energy supply will be shored up through expensive (economically, politically, and morally) alternatives such as nuclear, renewables, hydrogen, and Middle Eastern contracts. Pesky skirmishes over fishing rights, agricultural support, and disaster relief will be commonplace. Tension between the U.S. and Mexico rise as the U.S. reneges on the 1944 treaty that guarantees water flow from the Colorado River. Relief workers will be commissioned to respond to flooding along the southern part of the east coast and much drier conditions inland. Yet, even in this continuous state of emergency the U.S. will be positioned well compared to others. The intractable problem facing the nation will be calming the mounting military tension around the world. As famine, disease, and weather-related disasters strike due to the abrupt climate change, many countries’ needs will exceed their carrying capacity**.** This will create a sense of desperation, which is likely to lead to offensive aggression in order to reclaim balance. Imagine eastern European countries**,** struggling to feed their populations with a falling supply of food, water, and energy**,** eyeing Russi**a**, whose population is already in decline, for access to its grain, minerals, and energy supply. Or, picture **J**apan, suffering from flooding along its coastal cities and contamination of its fresh water supply, eying Russi**a**’s Sakhalin Island oil and gas reserves as an energy source to power desalination plants and energy-intensive agricultural processes. Envision Pakistan, India, and China – all armed with nuclear weapons – skirmishing at their borders over refugees, access to shared rivers, and arable land. Spanish and Portuguese fishermen might fight over fishing rights – leading to conflicts at sea. And, countries including the United States would be likely to better secure their borders. With over 200 river basins touching multiple nations, we can expect conflict over access to water for drinking, irrigation, and transportation. The Danube touches twelve nations, the Nile runs though nine, and the Amazon runs through seven. In this world of warring states, nuclear arms proliferation is inevitable**.** As cooling drives up demand, existing hydrocarbon supplies are stretched thin**.** With a scarcity of energy supply – and a growing need for access **--** nuclear energy will become a critical source of power, and this will accelerate nuclearproliferation as countries develop enrichment and reprocessing capabilities to ensure their national security. China, India, Pakistan, Japan, South Korea, Great Britain, France, and Germany will all have nuclear weapons capability, as will Israel, Iran, Egypt, and North Korea.

## GW – Impacts: Hunger

### Global warming leads to water scarcity, preventing advances in African agriculture – causes famine

Rwanda Focus 12 (“East Africa; Talk of Modern Farming Is Futile Without Water,” 5/14/2012, LexisNexis, <http://www.lexisnexis.com.proxy.lib.umich.edu/hottopics/lnacademic/>?) SL

East Africa is currently experiencing plenty of rainfall (floods in some areas) after about five months of extremely dry weather. In some areas, pastoralists were forced to migrate in search of water after most water sources dried up. Two years ago the entire cattle, goat and sheep population was wiped out in north-western Kenya following a devastating drought that lasted over a year. Global warming presents two extreme weather conditions - very wet and extremely hot which call for careful planning in order to strike a balance. Just about a month since the start of this year's belated main rain season, seasonal rivers in parts of Rwanda and western Uganda are back to life. During a recent trip to Uganda, I saw for the first time, more than two rivers between Kigali and the Gatuna. There could be more far away from the highway. Between Ntungamo to Mbarara, I saw a river, several kilometers long, flowing along the road and crossing several swamps that have now turned into small lakes. Suddenly, the scotched grassland has sprout, giving the entire country-side a fresh green cover. But all this will be short-lived as the dry season will return sooner than later. There has been a lot of talk about global warming and how to mitigate its effects but no concrete action has been taken to with this phenomenon. The real challenge, as things appear now, is in striking a balance between these two extreme weather conditions - plenty of water and severe drought. East Africa can therefore no longer afford to take this situation for granted. We must not watch as the water from the current rains flow away or evaporate into the atmosphere because we shall need it tomorrow.

All East African member states are currently talking about modernizing agriculture, the major source of livelihood to a majority of east Africans. But it is doubtful if those who depend on farming as well policy makers fully appreciate the core aspects of modern farming. Often, modernization of agriculture has been viewed within the lens of use of modern tools of cultivating the land and harvesting; planting improved seeds and appropriation of large chunks of land for large-scale production. And scientists have indeed done a wonderful job of producing improved varieties of cereal such as rice and maize, roots crops such as cassava and potatoes as well as fruits and vegetables. Despite these innovations, productivity remains low and famine looms large because the most important component of modern farming - provision of adequate water - has not yet been tackled. This means that despite availability of improved seeds, pesticides, tractors and all modern inputs, our farmers continue to depend on rain-fed agriculture just like the early man did during the stone-age. We cannot talk about producing for the market while continuing to depend of seasonal rain, whose timing we have absolutely no control over. Any investment in modern farming must therefore urgently look into rolling out massive infrastructure projects aimed at harvesting and storing water during the time of plenty (such as now) for uses during the increasingly more frequent and prolonged droughts. It is not uncommon to see farmers lose entire maize crop at flowering stage because of a small dry spell when just two weeks of irrigation could save the day. Governments and their development partners need to look into investing in underground community water reservoirs to store run-off water for use during dry seasons so that farmers can produce through out the year. We also need well constructed valley dams to store the water that collects in these seasonal swamps. This is especially necessary in the cattle corridors where cattle keepers have sometimes lost herds for lack of water while some have been forced to migrate to neighboring countries in search of water. Such movements have resulted into bitter conflicts between cattle keepers and cultivators. There is a school of thought that suggests that apart from oil, water is likely to be most sought after item globally in the coming years. The same school of thought suggests that a third world war will be sparked off by conflict over water. Recent disagreement between the upper Nile states and Egypt over the colonial agreement that gives the latter near absolute control over the Nile is a pointer to possible confrontations. Whether war over Nile water can galvanize the entire African continent and finally escalate into a world war is a different matter.

### Warming hurts the staple food crops.

Siegel-Itzkovich 12 (Judy, Jerusalem Post, Section: SCIENCE, Pg. 6, “Global warming affects original cultivated cereal crops,” 5/13/2012, LexisNexis] SL

Although farmers know better than ever how to grow food, global warming may indirectly affect our diet by diminishing the amount of available nutritients. A 28-year comparative study of wild emmer wheat and wild barley populations has revealed that these progenitors of cultivated wheat and barley, which are the best hope for crop improvement, have been affected by climate changes, which presents a real concern for their being a continued source of crop improvement. Prof. Eviatar Nevo of the University's evolution institute, who has studied the phenomenon, notes that wheats and barleys are the staple food for humans and animals around the world. Their wild progenitors have undergone genetic changes over the past three decades that imply a risk for crop improvement and food production, he said. Premature flowering time and genetic changes that are taking place in these important progenitor wild cereals, most likely due to global warming, can negatively affect them and thus indirectly cause food production to decline. Wheats are the universal cereals of Old World agriculture, he said. The progenitor - wild emmer wheat and wild barley, which originated in the Near East - provide the genetic basis for ameliorating wheat and barley cultivars. Earlier studies have shown that they themselves are under constant genetic erosion and increasing susceptibility to environmental stresses. Nevo's new study, published in the Proceedings of the [US] National Academy of Sciences (PNAS) set out to examine whether the wild cereal progenitors are undergoing evolutionary changes due to climate change that would impact future food production. Ten wild emmer wheat and an equal number of wild barley populations from different climates and habitats across Israel were sampled first in 1980 and then again at the same sites in 2008 and grown in a common greenhouse. The results indicated that over the relatively short period of 28 years, all 20 wild cereal populations examined, without exception, showed a dramatic change in flowering time. All populations sampled in 2008 flowered, on average, about 10 days earlier than those sampled in 1980. These cereal progenitors are adapting their time of flowering to escape the heat, Nevo explains. The study also found that the genetic diversity of the 2008 sample is for the most part significantly reduced, but that some new drought-adapted variants have appeared that could be used for crop improvement. Ongoing global warming in Israel is the only likely factor that could have caused earliness in flowering and genetic turnover across the range of wild cereals here, he says. "This indicates that they are under environmental stress that may erode their future survival. Multiple effects of the global warming phenomenon have been observed in many species of plants and animals," he adds. "But this study is pioneering in showing its infuence on flowering and genetic changes in wild cereals. These changes threaten the best genetic resource for crop improvement and thereby may damage food production." A number of species did show positive adaptive changes resulting from global warming, such as earliness in flowering or migration into cooler regions. But overall, says Nevo, the genetic resources of these critical wild cereals are undergoing rapid erosion and cannot be dismissed as a concern for future generations. "Wild emmer wheat is the world's most important genetic resource for wheat improvement, and it is up to us to preserve it," he said. "We are utilizing our institute's gene bank for transforming genes of interest to the crop. However, a much more extensive effort needs to be made to keep the natural populations thriving, by preventing urbanization and global warming from eliminating them."

## GW – SSS Solves

### Water shipping decreases transportation emissions

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 24-5]

The greater use of water transportation could generally reduce emissions of carbon dioxide (CO2), an important GHG, relative to other transportation modes. International Maritime Organization data reflect general values ranging from 117 grams up to 264 grams of CO2 per ton-mile of freight for trucks, 15 grams up to 73 grams of CO2 per ton-mile for U.S. railroads, and from less than 10 grams to up to 88 grams of CO2 per ton-mile for self-propelled oceangoing ships.64 In terms of the movement of containers and trailers, the range of CO2 emissions for rail is likely to be from 51 grams up to 73 grams per ton-mile; for self-propelled ships the range would be from 53 grams (small containership) to 88 grams (small RoRo) per ton-mile. The use of larger self-propelled ships would likely lead to a lower range of CO2 emissions. Many Marine Highway services, particularly those linking to the inland waterway system and along shorter coastal routes, will rely on tug-and-barge operations. A study by the Texas Transportation Institute calculates that tug-and-barge operations can carry freight at a carbon cost of as little as 17.5 grams of CO2 per ton-mile.65 Future regulation of carbon emissions or monetization of their impacts would incentivize greater private use of and public support for Marine Highway services, but until such time, the benefits of water transportation, in terms of GHG emissions reductions, will not be reflected in comparative modal shipping rates.

### SSS drastically reduces air pollution and GHG

Perakis and Denisis, ‘8 [ANASTASSIOS N. PERAKIS\* and ATHANASIOS DENISIS, Department of Naval Architecture & Marine Engineering, University of Michigan, A survey of short sea shipping and its prospects in the USA, MARIT. POL. MGMT., DECEMBER 2008, VOL. 35, NO. 6, 591–614]

2. Reduced air pollution. Petroleum-based transportation is responsible for air pollution. Residuals emitted as gaseous components and as particulate matter from the internal combustion engines are a major source of air pollution, which has major negative impact on human health and the environment. Common air pollutants are the carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM), volatile organic compounds (VOC) and sulphur oxides (SOx). In addition to harmful air pollutants, freight transportation accounts for approximately 9% of the total green- house gas emissions in the US, of which 60% is attributed to truck transportation [35, 36]. Sea transportation is the most environmentally friendly mode in terms of fuel emissions per ton-mile of cargo. With the exception of sulphur dioxide, due to the existence of sulphur in marine fuel, SSS is a much cleaner transportation mode than truck and rail in both air pollutants and greenhouse gas emissions, such as carbon dioxide (CO2) (table 5). Environmental research on air pollution cannot precisely measure the negative impact of freight transportation on human health. Even the measurement principles of these effects are being debated. There are wide gaps in the knowledge of the chemical processes in the atmosphere, spatial distribution of emissions, and very limited knowledge on the combined effects of different processes. However, it is clear that increasing the share of sustainable intermodal transportation, such as SSS, is a way of reducing air pollution. The International Maritime Organization has proposed stricter regulation for air pollutant emissions form ships, in order to make shipping more environmentally friendly.

### SSS leads to environmental sustainability

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 21]

America’s Marine Highway offers the potential of significantly enhancing the environmental sustainability of the nation’s transportation system. In particular, water transportation is often the most energy-efficient means of moving cargo between two points, with corresponding reductions per ton-mile in greenhouse gas (GHG) emissions. Similarly, with appropriate technology and regulation, water transportation is an environmentally-friendly transportation mode that can reduce noise and air pollution and have minimal impacts on water quality.

## GW – AT: Past Tipping Point (On Brink)

### Action now can still solve

Harvey 11 (Fiona Harvey, environment correspondent at the Guardian newspaper, “Worst ever carbon emissions leave climate on the brink,” 5/29/2011, http://www.guardian.co.uk/environment/2011/may/29/carbon-emissions-nuclearpower)

Greenhouse gas emissions increased by a record amount last year, to the highest carbon output in history, putting hopes of holding global warming to safe levels all but out of reach, according to unpublished estimates from the International Energy Agency. The shock rise means the goal of preventing a temperature rise of more than 2 degrees Celsius – which scientists say is the threshold for potentially "dangerous climate change" – is likely to be just "a nice Utopia", according to Fatih Birol, chief economist of the IEA. It also shows the most serious global recession for 80 years has had only a minimal effect on emissions, contrary to some predictions. "I am very worried. This is the worst news on emissions," Birol told the Guardian. "It is becoming extremely challenging to remain below 2 degrees. The prospect is getting bleaker. That is what the numbers say." Birol said disaster could yet be averted, if governments heed the warning. "If we have bold, decisive and urgent action, very soon, we still have a chance of succeeding," he said.

### On the brink now – still have time to solve

Biello 10 (David, award winning journalist and associate editor for Scientific American, Scientific American, “How Much Global Warming Is Guaranteed Even If We Stopped Building Coal-Fired Plants Today?,” 9/9/2010 <http://www.scientificamerican.com/article.cfm?id=guaranteed-global-warming-with-existing-fossil-fuel-infrastructure>) SL

Humanity has yet to reach the point of no return when it comes to catastrophic climate change, according to new calculations. If we content ourselves with the existing fossil-fuel infrastructure we can hold greenhouse gas concentrations below 450 parts per million in the atmosphere and limit warming to below 2 degrees Celsius above preindustrial levels—both common benchmarks for international efforts to avoid the worst impacts of ongoing climate change—according to a [new analysis in the September 10 issue of *Science*](http://www.sciencemag.org/cgi/content/abstract/sci;329/5997/1330?). The bad news is we are adding more fossil-fuel infrastructure—oil-burning cars, coal-fired power [plants](http://www.scientificamerican.com/topic.cfm?id=plants), industrial factories consuming natural gas—every day.  A team of scientists analyzed the existing fossil-fuel infrastructure to determine how much greenhouse gas emissions we have committed to if all of that kit is utilized for its entire expected lifetime. The answer: an average of 496 billion metric tons more of carbon dioxide added to the atmosphere between now and 2060 in "committed emissions".  That assumes life spans of roughly 40 years for a coal-fired power plant and 17 years for a typical car—potentially major under- and overestimates, respectively, given that some coal-fired power plants still in use in the U.S. first fired up in the 1950s. Plugging that roughly 500 gigatonne number into a computer-generated climate model predicted CO2 levels would then peak at less than 430 ppm with an attendant warming of 1.3 degrees C above preindustrial average temperature. That's just 50 ppm higher than present levels and 150 ppm higher than preindustrial atmospheric concentrations.  Still, we are rapidly approaching a point of no return, cautions climate modeler Ken Caldeira of the Carnegie Institution for Science's Department of Global Ecology at Stanford University, who participated in the study.

## GW – AT: Adaptation

### Tipping points prevent adaptation – significant emission cuts are key

Hansen 8 – Professor of Earth and Environmental Science

James E. Hanson, head of the NASA Goddard Institute for Space Studies in New York City and adjunct professor in the Department of Earth and Environmental Science at Columbia University, Al Gore’s science advisor, “Briefing before the Select Committee on Energy Independence and Global Warming,” US House of Representatives, 6-23-2008, “Twenty years later: tipping points near on global warming,” <http://www.columbia.edu/~jeh1/2008/TwentyYearsLater_20080623.pdf>

Fast feedbacks—changes that occur quickly in response to temperature change—amplify the initial temperature change, begetting additional warming. As the planet warms, fast feedbacks include more water vapor, which traps additional heat, and less snow and sea ice, which exposes dark surfaces that absorb more sunlight. Slower feedbacks also exist. Due to warming, forests and shrubs are moving poleward into tundra regions. Expanding vegetation, darker than tundra, absorbs sunlight and warms the environment. Another slow feedback is increasing wetness (i.e., darkness) of the Greenland and West Antarctica ice sheets in the warm season. Finally, as tundra melts, methane, a powerful greenhouse gas, is bubbling out. Paleoclimatic records confirm that the long-lived greenhouse gases— methane, carbon dioxide, and nitrous oxide—all increase with the warming of oceans and land. These positive feedbacks amplify climate change over decades, centuries, and longer. The predominance of positive feedbacks explains why Earth’s climate has historically undergone large swings: feedbacks work in both directions, amplifying cooling, as well as warming, forcings. In the past, feedbacks have caused Earth to be whipsawed between colder and warmer climates, even in response to weak forcings, such as slight changes in the tilt of Earth’s axis.2 The second fundamental property of Earth’s climate system, partnering with feedbacks, is the great inertia of oceans and ice sheets. Given the oceans’ capacity to absorb heat, when a climate forcing (such as increased greenhouse gases) impacts global temperature, even after two or three decades, only about half of the eventual surface warming has occurred. Ice sheets also change slowly, although accumulating evidence shows that they can disintegrate within centuries or perhaps even decades. The upshot of the combination of inertia and feedbacks is that additional climate change is already “in the pipeline”: even if we stop increasing greenhouse gases today, more warming will occur. This is sobering when one considers the present status of Earth’s climate. Human civilization developed during the Holocene (the past 12,000 years). It has been warm enough to keep ice sheets off North America and Europe, but cool enough for ice sheets to remain on Greenland and Antarctica. With rapid warming of 0.6°C in the past 30 years, global temperature is at its warmest level in the Holocene.3 The warming that has already occurred, the positive feedbacks that have been set in motion, and the additional warming in the pipeline together have brought us to the **precipice of a planetary tipping point**. We are at the tipping point because the climate state includes large, ready positive feedbacks provided by the Arctic sea ice, the West Antarctic ice sheet, and much of Greenland’s ice. **Little additional forcing is needed** to trigger these feedbacks and magnify global warming. If we go over the edge, we will transition to an environment far outside the range that has been experienced by humanity, and there will be no return within any foreseeable future generation. Casualties would include more than the loss of indigenous ways of life in the Arctic and swamping of coastal cities. An intensified hydrologic cycle will produce both greater floods and greater droughts. In the US, the semiarid states from central Texas through Oklahoma and both Dakotas would become more drought-prone and ill suited for agriculture, people, and current wildlife. Africa would see a great expansion of dry areas, particularly southern Africa. Large populations in Asia and South America would lose their primary dry season freshwater source as glaciers disappear. A major casualty in all this will be wildlife.

## GW – AT: China

### No worries about Chinese pollution – they are acting now to prevent warming.

Coonan 10 (Clifford Coonan, “China's renewed effort to clean up its act,” 9/3/2010, http://www.independent.co.uk/life-style/newenergyfuture/chinas-renewed-effort-to-clean-up-its-act-2068595.html)

When it comes to environmental issues, China tends to generate negative headlines – its badly polluted skies, its dirty rivers, and its melting glaciers are all images we associate with China’s remarkable economic rise. What is less well known is that China is leading the world in adopting key green technologies to help to fuel the country’s economic boom. The central government in Beijing has set a target of generating 15 per cent of all electricity from renewable sources by 2020, and the effects of China going green will be felt all around the world. There is a lot to do. China assumed the mantle of the world’s largest carbon emitter from the United States in 2007, and its people are forced to live with the consequences of rapid industrialisation, mostly driven by burning fossil fuels. Coal provides nearly 70 per cent of China’s energy needs, and this is not likely to end any time soon, but what is crucial is the mix of how China supplies its energy. According to REN21’s 2010 Renewables Global Status Report, China added 37GW of renewable power capacity, more than any other country, to reach 226GW of total renewables capacity. Globally, nearly 80GW of renewable capacity was added, including 31GW of hydropower and 48GW of non-hydro capacity. China was the top market for windpower, doubling its windpower capacity for the fifth year in a row. China added 13.8GW of windpower, representing more than one-third of the world market – up from just a 2 per cent market share in 2004. China has nearly doubled its hydropower capacity during the five years to 2009, adding 23GW in 2009 to end the year with 197GW. Moreover, more than 70 per cent of the world’s solar hot-water heaters are in China, and they are the main source of hot water for many households. In July, China’s National Development and Reform Commission announced an alternative energy planning programme which would invest 5,000 billion yuan (£470bn) between 2011 and 2020, creating 15 million jobs in the sector. The plan was announced by Jiang Bing, the head of the National Energy Administration, who said the bureau envisages that, by 2015, natural gas would account for 8.3 per cent of energy, with hydropower and nuclear power jumping from 7 per cent to 9 per cent of primary energy consumption. Windpower, solar power and biomass would increase from less than 1 per cent now to almost 2.6 per cent of the total. There are other groundbreaking projects taking place. China installed the first major offshore wind project outside of Europe last year, adding 63MW by year-end for a project that reached 102MW earlier this year. Shi Pengfei of the China Hydropower Engineering consulting group believes China has the best and the newest wind turbines. “By the end of 2009, China’s total capacity of windpower operations increased by 92.26 per cent compared with the same period of 2008,” Shi said. Although China adopted some muscular negotiating tactics at the Copenhagen summit on climate change, and some countries accuse Beijing of hijacking the talks, the smart money is on China’s efforts to boost green technology and clean energy options. China has pledged to cut the intensity of carbon emissions per unit of its gross domestic product (GDP) in 2020 by 40 to 45 per cent against 2005 levels. While this will not cut the overall amount of emissions, it is a step in the right direction. “Post-Copenhagen, China needs to continue its domestic efforts to improve green tech and sustainability, and I’m confident it will. China should also see a strong demand for it to play a leadership role internationally,” said Yang Ailun, the head of Climate and Energy at Greenpeace China. “China is committed to developing clean energy because of all the domestic imperatives to do so. It’s good for energy security and it’s good for economic development. Announcing a target was an effort to be seen as willing to do its fair share,” Yang said. The Chinese government is investing serious resources to stop pollution, and binding reduction targets have been included in the central government’s 11th Five-Year Plan to control the discharges of key water pollutants, such as chemical oxygen demand (COD) and sulphur dioxide. China’s Vice-Minister of Environmental Protection, Li Ganjie, said in December if it achieves a reduction in these pollutants, this would result in a reduction of 250 million tons in CO2 emissions. Yang believes the main potential in clean energy lies in energy efficiency and clean energy technology. “One area of particular interest is how to make more efficient cars – China is already a world leader in electric cars. Other areas include wind energy, and solar energy, where China is already a top-three manufacturer. The solar market is mainly manufacturing for export but growth is slowing, so it’s now crucial for the government to give support for the domestic market,” he said. Huang Min, the founder of the Himin Solar Energy Group in Dezhou, is on a quest to convince his fellow Chinese of the need to go green. “China has already made a promise on emissions reduction. It shows China can behave like a big country and it shows the Chinese government is committed. This promise is not only a challenge, but a huge business opportunity. This pledge lifts China on to the global political and economic stage,” said Huang. When it comes to issues of sustainability, China is too big to be ignored.

## GW—AT: SO2 Screw

### Dimming particulates decreasing now

Westerly Sun 10

Earth Talk, 12-2010, “Global dimming a result of pollution,” http://www.thewesterlysun.com/news/article\_f919852a-039e-11e0-8702-001cc4c03286.html

Columbia University climatologist Beate Liepert notes a reduction by some 4 percent of the amount of solar radiation reaching the Earth's surface between 1961 and 1990, a time when particulate emissions began to skyrocket around the world. But a 2007 study by the National Aeronautics and Space Administration found an **overall reversal of global dimming** since 1990, probably due to stricter pollution standards adopted by the U.S. and Europe around that time.

### Warming outweighs dimming

Reynolds 10 – PhD in Atmospheric Sciences

Michael, PhD in Atmospheric Sciences, “Report from the On-board Scientist: Aerosols, Volcanoes and Global Dimming,” http://www.aroundtheamericas.org/log/report-from-the-on-board-scientist-aerosols-volcanoes-and-global-dimming/

On the other hand, aerosols can add heat to the atmosphere which partially offsets the cooling effect. As the Earth heats up from the sun, it radiates heat back to space. Aerosols absorb some of the heat radiation and reduce the amount of heat radiation escaping out to space. This is the same heat-blocking effect attributed to greenhouse gasses, and in this way aerosols can have a heating effect on global climate. Nevertheless, the net effect of aerosols is to reduce the rate of global warming from greenhouse gasses. Does this mean we should all go build fires and drive our cars? No, because the offset that aerosols make on all of all these activities is **smaller than the impact those activities make on global warming**. Models and data now show that aerosols reduce the increase in global temperature by a factor of approximately 50% (there is uncertainty in the actual amount). So, they slow down the process but do not stop it. And they create pollution and effect health at the same time.

## GW – AT: Co2 Ag

### Co2 doesn’t boost yields – any evidence of growth is short-term and hypothetical

Jackson 9 – Research molecular biologist @ USDA

Eric, 2009, “The international food system and the climate crisis,” The Panama News, Lexis

A major weakness in the forecasts of the IPCC and others when it comes to agriculture is that their predictions accept a theory of “carbon fertilization,” which argues that higher levels CO2 in the atmosphere will enhance photosynthesis in many key crops, and boost their yields. Recent studies show **that this is a mirage.** Not only does any initial acceleration in growth slow down significantly after a few days or weeks, but the increase in CO2 reduces nitrogen and protein in the leaves by more than 12 percent. This means that, with climate change, there will be less protein for humans in major cereals such as wheat and rice. There will also be less nitrogen in the leaves for bugs, which means that bugs will eat more leaf, leading to important reductions in yield.

### Warming leads to weather disasters – this is comparatively worse for agriculture than the benefits of co2 fertilization

-top ag experts agree

Gillis 11

Justin Gillis, Editor @ NYT, 6-11-2011, “A Warming Planet Struggles to Feed Itself,” Factiva

Now, the latest scientific research suggests that a previously discounted factor is helping to destabilize the food system: climate change. Many of the failed harvests of the past decade were a consequence of weather disasters, like floods in the United States, drought in Australia and blistering heat waves in Europe and Russia. Scientists believe some, though not all, of those events were caused or worsened by human-induced global warming. Temperatures are rising rapidly during the growing season in some of the most important agricultural countries, and a paper published several weeks ago found that this had shaved **several percentage points off potential yields**, adding to the price gyrations. For nearly two decades, scientists had predicted that climate change would be relatively manageable for agriculture, suggesting that even under worst-case assumptions, it would probably take until 2080 for food prices to double. In part, they were counting on a counterintuitive ace in the hole: that rising carbon dioxide levels, the primary contributor to global warming, would act as a powerful plant fertilizer and offset many of the ill effects of climate change. Until a few years ago, these assumptions went largely unchallenged. But lately, the destabilization of the food system and the soaring prices have **rattled many leading scientists**. “The success of agriculture has been astounding,” said Cynthia Rosenzweig, a researcher at NASA who helped pioneer the study of climate change and agriculture. “But I think there’s starting to be premonitions that it may not continue forever.” A scramble is on to figure out whether climate science has been too sanguine about the risks. Some researchers, analyzing computer forecasts that are used to advise governments on future crop prospects, are pointing out what they consider to be gaping holes. These include a failure to consider the effects of extreme weather, like the floods and the heat waves that are increasing as the earth warms. A rising unease about the future of the world’s food supply came through during interviews this year with more than 50 agricultural experts working in nine countries.

### Turn – pollution leads to ozone – tanks ag – outweighs any benefit from CO2

Monbiot 7 – Professor @ Oxford

George, Professor @ Oxford Brookes University, Heat: How to Stop the Planet from Burning, pg. 7

But now, I am sorry to say, it seems that I might have been right, though for the wrong reasons. In late 2005, a study published in the Philosophical Transactions of the Royal Society alleged that the yield predictions for temperate countries were 'over optimistic'. The authors had blown carbon dioxide and ozone, in concentrations roughly equivalent to those expected later this century, over crops in the open air. They discovered that the plants didn't respond as they were supposed to: the extra carbon dioxide did not fertilize them as much as the researchers predicted, and the **ozone reduced their yields** by 20 per cent." Ozone levels are rising in the rich nations by between 1 and 2 per cent a year, as a result of sunlight interacting with pollution from cars, planes and power stations. The levels happen to be highest in the places where crop yields were expected to rise: western Europe, the midwest and eastern US and eastern China. The expected ozone increase in China will cause maize, rice and soybean production to fall by over 30 per cent by 2020, These reductions in yield, if real, arc enough to **cancel out the effects** of both higher temperatures and higher carbon dioxide concentrations.

## GW – AT: Ice Age

### Global warming is faster and comparatively worse

-an ice age won’t start mass ice production for hundreds of thousands of years

Chameides 8 – Professor of Environment @ Duke

Bill Chameides, PhD, Yale University, “Pulse of the Planet: A New Ice Age IS Coming ... but Don't Hold Your Breath,” 11-17-2008, http://www.nicholas.duke.edu/thegreengrok/iceage-nature

Skeptics have been arguing that we should forget about global warming -- a new ice age is imminent. Maybe, some say, it's already started. In fact, a new study does predict the coming of an ice age, one promising to be more permanent than others. Is it imminent? Depends on how you characterize 10,000 years. It may surprise you to know that in our current climate, ice ages are more the norm than not. Over the past three million years, covering the end of the Pliocene and the present Pleistocene epoch, the Earth’s climate has oscillated between cold times (called ice ages or glaciations) and warmer times, interglaciations. In the recent past (the last one million years or so) the ice ages have lasted for about 100,000 years, and the warmer periods tens of thousands of years. The last ice age ended about 12,000 years ago. The questions most relevant to us are: when will the next ice age occur and should we be concerned about a global cold wave or the current global warming? The answers lie in the mechanism behind the climate swings. The oscillations between ice ages and warm periods can be qualitatively explained by the Milankovitch theory (for more details see here). The theory's basic tenet is that the ice age–interglacial swings are triggered by changes in the Earth’s orbit about the sun (eccentricity), rotational changes of the Earth on its axis (precession), and changes in the tilt of the axis (obliquity, which is what causes the seasons). The orbital changes affect how much sunlight reaches the Earth at different latitudes. These changes in solar radiation are then amplified by feedbacks involving carbon dioxide and other greenhouse gases, the ice albedo, and the large temperature swings inferred between ice ages and interglacials. One of the major puzzles in the Milankovitch theory is the so-called Mid-Pleistocene transition. Before about one million years ago, the glacial periods lasted about 40,000 years (which corresponds to the frequency of obliquity changes). Then the glaciations transitioned to a 100,000-year cycle (which corresponds to the frequency of changes in eccentricity). Why this transition? Scientists continue to discuss the cause. Now Tom Crowley of the University of Edinburgh (previously at Duke University) and William Hyde of the University of Toronto have added a new wrinkle to the debate in a paper just published in Nature. Using a simplified, coupled climate-ice sheet model, they conclude that the shift in the ice age cycling kicked off a slow transition to a new climate regime, one that will be characterized by a permanent ice sheet in the northern mid-latitudes. They argue that this transition is being driven by snow-ice albedo effects. A permanent ice sheet in the mid-latitudes of the North Hemisphere sounds like bad news. But panic is a little premature. Tom Crowley states that "our model predicts a rapid transition [to an ice age] beginning in the **10,000-100,000 years**. But the timing of this transition is surely model dependent -- it could easily be a quarter of million years or so -- still short from the context of geology but **almost infinite** from the viewpoint of society. Our results **in no way** can be interpreted as justification for continued use of fossil fuels, as that problem is **near term and very significant**."

### Warming increases volcanic activity

Thompson 7 - MA from GA Tech

Andrea Thompson, Graduate from Georgia Tech with a B.S. in Earth and Atmospheric Sciences in 2004 and a Master's in the same subject in 2006. 2007, http://www.livescience.com/environment/070830\_gw\_quakes.html

Earthquakes, volcanic eruptions, tsunamis and landslides are some of the additional catastrophes that climate change and its rising sea levels and melting glaciers could bring, a geologist says. The impact of human-induced global warming on Earth's ice and oceans is [already noticeable](http://www.livescience.com/php/multimedia/imagegallery/igviewer.php?imgid=626&gid=42&index=0): Greenland's glaciers are melting at an increasing rate, and sea level rose by a little more than half a foot (0.17 meters) globally in the 20th century**,** according to the Intergovernmental Panel on Climate Change. With these trends in ice cover and sea level only expected to continue and likely worsen if atmospheric carbon dioxide levels continue to rise, they could alter the stresses and forces fighting for balance in the ground under our feet—changes that are well-documented in studies of past climate change, but which are just beginning to be studied as possible consequences of the current state of global warming. "Although they've described it in the past, nobody's thought about it in terms of future effects of climate change," said Bill McGuire of the University College London's Hazard Research Center. McGuire's speculations of increased geological activity have not yet been published in a journal, but he has written an article about them published in the Guardian Unlimited. Rebounding crust One particular feature that can change the balance of forces in Earth's crust is ice, in the form of glaciers and ice sheets that cover much of the area around Earth's poles plus mountains at all latitudes. The weight of ice depresses the crust on which it sits. As the ice melts, the crust below no longer has anything sitting on top of it, and so can rebound fairly rapidly (by geological standards). (This rebounding is actually occurring now as a result of the end of the last Ice Age: The retreat of massive ice sheets from the northern United States and Canada has allowed the crust in these areas to bounce back.) Areas of rebounding crust could change the stresses acting on [earthquake faults](http://www.livescience.com/php/trivia/?quiz=quake) and volcanoes in the crust. "In places like Iceland, for example, where you have the Eyjafjallajökull ice sheet, which wouldn't survive [global warming], and you've got lots of volcanoes under that, the unloading effect can trigger eruptions," McGuire said.

Causes an ice age

NASA 98

[http://www.gsfc.nasa.gov/gsfc/service/gallery/fact\_sheets/earthsci/eos/volcanoes.pdf] Volcanoes and Global Climate Change, Earth Science Enterprise Series/ May

The eruption of a super volcano "sooner or later" will chill the planet and threaten human civilization, British scientists warned Tuesday. And now the bad news: There's not much anyone can do about it.Several volcanoes around the world are capable of gigantic eruptions unlike anything witnessed in recorded history, based on geologic evidence of past events, the scientists said. Such eruptions would dwarf those of Mount St. Helens, Krakatoa, Pinatubo and anything else going back dozens of millennia. "Super eruptions are up to hundreds of times larger than these," said Stephen Self of Britain's Open University. "An area the size of North America can be devastated, and pronounced deterioration of global climate would be expected for a few years following the eruption," Self said. "They could result in the devastation of world agriculture, severe disruption of food supplies, and mass starvation. These effects could be sufficiently severe to threaten the fabric of civilization." Self and his colleagues at the Geological Society of London presented their report to the British government's Natural Hazard Working Group. "Although very rare, these events are inevitable, and at some point in the future humans will be faced with dealing with and surviving a super eruption," Stephen Sparks of the University of Bristol told LiveScience in advance of Tuesday's announcement. Supporting evidence The warning is not new. Geologists in the United States detailed a similar scenario in 2001, when they found evidence suggesting volcanic activity in Yellowstone National Park will eventually lead to a colossal eruption. Half the United States will be covered in ash up to 3 feet (1 meter) deep, according to a study published in the journal Earth and Planetary Science Letters. Explosions of this magnitude "happen about every 600,000 years at Yellowstone," says Chuck Wicks of the U.S. Geological Survey, who has studied the possibilities in separate work. "And it's been about 620,000 years since the last super explosive eruption there." Past volcanic catastrophes at Yellowstone and elsewhere remain evident as giant collapsed basins called calderas. A super eruption is a scaled up version of a typical volcanic outburst, Sparks explained. Each is caused by a rising and growing chamber of hot molten rock known as magma. "In super eruptions the magma chamber is huge," Sparks said. The eruption is rapid, occurring in a matter of days. "When the magma erupts the overlying rocks collapse into the chamber, which has reduced its pressure due to the eruption. The collapse forms the huge crater." The eruption pumps dust and chemicals into the atmosphere for years, screening the Sun and cooling the planet some models predict, causing many plant and animal species to disappear forever. "The whole of a continent might be covered by ash, which might take many years — possibly decades — to erode away and for vegetation to recover," Sparks said. Yellowstone may be winding down geologically, experts say. But they believe it harbors at least one final punch. Globally, there are still plenty of possibilities for super volcano eruptions, even as Earth quiets down over the long haul of its 4.5-billion-year existence. "The earth is of course losing energy, but at a very slow rate, and the effects are only really noticeable over billions rather than millions of years," Sparks said.

# AIR POLLUTION ADV (AP)

## AP – UQ Links: Trucks Key

### Current trucking activity intensifies harmful toxins in the air

New Hampshire Department of Environmental Services ’12[New Hampshire Department of Environmental Services, 2012, “Motor Vehicles and Toxic Air Pollutants” [http://des.nh.gov/organization/commissioner/pip/factsheets/ ard/documents/ard-5.pdf](http://des.nh.gov/organization/commissioner/pip/factsheets/%20ard/documents/ard-5.pdf), VP]

Toxic air pollutants (TAPs), or hazardous air pollutants (HAPs), are those pollutants that have the potential to cause serious adverse health effects in humans; for example, neurological, cardiovascular, liver, kidney, and respiratory effects or effects on the immune and reproductive systems. The U.S. Environmental Protection Agency classifies these pollutants based on their potential cancer risk due to inhalation as either possible, probable, or known human carcinogens. Motor vehicle exhaust contains numerous TAPs, such as benzene, formaldehyde, 1,3-butadiene, and diesel particulate matter. Some additional TAPs emitted by motor vehicles include acrolein, cadmium, chromium and lead. Motor vehicles are such an integral part of our society that everyone is exposed to their emissions. Using 1996 data, EPA estimates that on-road mobile sources (cars, trucks, and buses) are responsible for over 3,000 cases of cancer; and non-road mobile sources (construction equipment, recreational vehicles, boats, trains, aircraft) are responsible for an additional 1,850 cases of cancer each year in the US. Using this data for New Hampshire, almost 65 percent of all human health risk from toxic air pollutants comes from on-road and non-road mobile sources. How are Toxic Air Pollutants from Motor Vehicles Formed? TAPs are typically emitted from cars and trucks through f mechanisms. First, some TAPs, such as benzene, toluene and xylenes, are components of gasoline that can be emitted into the air when gasoline evaporates during refueling or when gasoline remains in a hot engine after it is shut off. Second, these same compounds can also be emitted through the tailpipe and crankcase when the fuel is not completely burned in the engine, or as engine “blow-by.” Third, a significant amount of benzene, formaldehyde, and acetaldehyde emissions from automobiles is formed in the exhaust as a result of the chemical reactions that occur when other components of gasoline are not completely burned in the engine. Finally, some TAPs, such as formaldehyde and acetaldehyde, can also be formed through a secondary process when other toxic pollutants from car and truck engines undergo chemical reactions in the atmosphere.

### Trucks are key to air pollution and disease

Clean Air Trust 2000 [ “The Dirty Truth about Big Trucks”, Clean Air Trust ,<http://www.cleanairtrust.org/trucks.dirtytruth.html>, 2000, VP]

We've all seen smoke billowing from a big truck and assumed it's a big polluter. We've been right. Trucks are a major source of smog, of toxic chemical pollution, and of fine particle soot linked to cancer and respiratory problems. It doesn't have to be this way. Most big trucks don't even use pollution control devices -- even though they could, and should. In fact, big trucks could be more than 90 percent cleaner than they are today -- especially if we clean up the fuel. The U.S. Environmental Protection Agency has an opportunity to make big trucks cleaner. But will they -- or will they succumb to pressure from engine manufacturers and big oil companies? Here are some basic facts about pollution from big trucks: Right now, the federal government classifies any vehicle above 8,500 pounds as a "heavy-duty" truck. That includes everything from some of today's largest pickup trucks to the biggest of big-rigs. Buses are also legally classified as "heavy-duty" trucks. Big trucks are legally allowed to emit as much pollution as several dozen of today's cars. But many big trucks actually emit as much pollution as 150 cars! Big trucks and buses are one of the biggest sources of pollution -- especially in urban areas. Diesel soot is a toxic air pollutant linked to human cancer. A new analysis by state and local clean air regulators concludes that more than 125,000 Americans will get cancer from diesel fumes. Other studies have linked diesel exhaust to the development of asthma. In many cities, diesel exhaust is the biggest source of fine particulate soot. For example, in New York City, diesels (mainly trucks and buses) constitute more than 50% of the particle soot. Diesel engines (including construction equipment) also emit about 30 permit of all smog-forming nitrogen oxides (NOx). That percentage will grow as future cars get cleaner In addition to causing cancer, health studies have shown that fine particle soot can shorten our lives in other ways -- in fact, that up to 50,000 people die prematurely each year because of it.

### Trucks are the Nation’s largest Green House Gas contributors

Kraemer, 10. The North American Steel Interstate Coalition, <http://steelinterstate.org/topics/slowing-climate-change>

[Evidentiary experience](http://climate.nasa.gov/evidence/" \t "_blank) of prevailing negative consequences of Climate Change is mounting. The fallout from a changing global climate have even been well documented by scientists. Here's a[primer](http://www.whrc.org/resources/primer_fundamentals.html" \t "_blank) on climate change agents. An unstable environment with millions of displaced people[would be a threat](http://securityandclimate.cna.org/) to global [security.](http://www.dni.gov/testimonies/20080625_testimony.pdf) Heavy Trucks are the Nation's Fastest Growing Source of Greenhouse Gas Emissions In the U.S., the [transportation sector is the second largest contributor to greenhouse gases](http://www.pewclimate.org/technology/overview/transportation" \t "_blank). From 1990 to 2006, "Transportation greenhouse gas [GHG] emissions increased 27 percent, accounting for almost one-half of the increase in total U.S. GHG emissions for the period.[[Transportation's Role in Reducing U.S. Greenhouse Gas Emissions: Volume 1, Synthesis Report to Congress](http://ntl.bts.gov/lib/32000/32700/32779/DOT_Climate_Change_Report_-_April_2010_-_Volume_1_and_2.pdf" \t "_blank), U.S. Department of Transportation, April, 2010, p. ES-3.] Since 1990, GHG emissions from medium and heavy-duty trucks have increased 77 percent, growing at three times the rate of emissions from light-duty vehicles." [The Pew Center on Global Climate Change confirms](http://www.pewclimate.org/technology/factsheet/FreightTransportation" \t "_blank), that heavy trucks are causing big increases in transportation greenhouse gas emission growth rates. Despite a 42 percent increase [projected between 2007-2030] in VMT [Vehicle Miles Traveled is a measurement of transportation growth patterns] light-duty vehicle GHG emissions are projected to decline nearly 12 percent, in response to expected increases in fuel economy from corporate average fuel economy (CAFE) regulations, advanced technologies, and alternative fuels.

### Trucks are leading pollutant in US

Gorgez, 2k. Clean air trust publisher, <http://www.cleanairtrust.org/trucks.dirtytruth.html>

How much pollution comes from a big truck compared to a car? Big trucks are legally allowed to emit as much pollution as several dozen of today's cars. But many big trucks actually emit as much pollution as 150 cars! What sort of impact does big truck pollution have on the air we breathe? **Big trucks and buses are one of the biggest sources of pollution** -- especially in urban areas. Diesel soot is a toxic air pollutant linked to human cancer. A new analysis by state and local clean air regulators concludes that more than 125,000 Americans will get cancer from diesel fumes. Other studies have linked diesel exhaust to the development of asthma. In many cities, diesel exhaust is the biggest source of fine particulate soot. For example, in New York City, diesels (mainly trucks and buses) constitute more than 50% of the particle soot. Diesel engines (including construction equipment) also emit about 30 permit of all smog-forming nitrogen oxides (NOx). That percentage will grow as future cars get cleaner. What else is wrong with fine particle diesel soot? In addition to causing cancer, health studies have shown that fine particle soot can shorten our lives in other ways -- in fact, that up to 50,000 people die prematurely each year because of it.

### Trucks release harmful air pollutants

EPA 3/12 (Environmental Protection Agencyhttp://www.epa.gov/airquality/peg\_caa/carstrucks.html, March 06, 2012)

Today, motor vehicles are responsible for nearly one half of smog-forming volatile organic compounds (VOCs), more than half of the nitrogen oxide (NOx) emissions, and about half of the toxic air pollutant emissions in the United States. Motor vehicles, including nonroad vehicles, now account for 75 percent of carbon monoxide emissions nationwide. The total vehicle miles people travel in the United States increased 178 percent between 1970 and 2005 and continues to increase at a rate of two to three percent each year. In the United States, there are more than 210 million cars and light-duty trucks on the road. In addition, the types of cars people drive have changed greatly since 1970. Beginning in the late 1980s, Americans began driving more vans, sport utility vehicles (SUVs), and pickup trucks as personal vehicles. By the year 2000, these "light-duty trucks" accounted for about half of the new passenger car sales. These bigger vehicles typically consume more gasoline per mile and many of them pollute three to five times more than cars. The Clean Air Act takes a comprehensive approach to reducing pollution from these sources by requiring manufacturers to build cleaner engines; refiners to produce cleaner fuels; and certain areas with air pollution problems to adopt and run passenger vehicle inspection and maintenance programs. EPA has issued a series of regulations affecting passenger cars, diesel trucks and buses, and so-called "nonroad" equipment (recreational vehicles, lawn and garden equipment, etc.) that will dramatically reduce emissions as people buy new vehicles and equipment.

## AP – I/L – Trucks from Ports

### Trucks are ports are a key source

Mooney, 12 [Jake Mooney, City Limits, 4/5/12, http://www.citylimits.org/news/articles/4563/traffic-pollution-accidents-are-trucks-to-blame/2]

Much of the city’s truck traffic starts and ends at its ports – a vast chain of facilities spread across waterfront areas of the two states that border New York Harbor. The heavy-duty trucks that move shipping containers in and out of these terminals, often to locations where their cargo can be broken up and distributed farther, are called drayage trucks, and in recent years the Port Authority has been working to make them cleaner.<

## AP – Impacts: Extinction

### Air pollution will lead to human extinction

Driesen 03 [David, Associate Prof. Law – Syracuse U., Buffalo Environmental Law Journal, “"LEARING SUSTAINABILITY": SYMPOSIUM ARTICLES: SYMPOSIUM HELD AT THE UNIVERSITY AT BUFFALO LAW SCHOOL, OCTOBER 13, 2001: Sustainable Development and Air Quality: The Need to Replace Basic Technologies with Cleaner Alternatives”, Fall 02-Spring 03, 10 Buff. Envt'l. L.J. 25]

Air pollution can make life unsustainable by harming the ecosystem upon which all life depends and harming the health of both future and present generations. The Rio Declaration articulates six key principles that are relevant to air pollution. These principles can also be understood as goals, because they describe a state of affairs that is worth achieving. Agenda 21, in turn, states a program of action for realizing those goals. Between them, they aid understanding of sustainable development's meaning for air quality. The first principle is that "human beings. . . are entitled to a healthy and productive life in harmony with nature", because they are "at the center of concerns for sustainable development." While the Rio Declaration refers to human health, its reference to life "in harmony with nature" also reflects a concern about the natural environment. Since air pollution damages both human health and the environment, air quality implicates both of these concerns. Lead, carbon monoxide, particulate, tropospheric ozone, sulfur dioxide, and nitrogen oxides have historically threatened urban air quality in the United States. This review will focus upon tropospheric ozone, particulate, and carbon monoxide, because these pollutants present the most widespread of the remaining urban air problems, and did so at the time of the earth summit. 6 Tropospheric ozone refers to ozone fairly near to the ground, as opposed to stratospheric ozone high in the atmosphere. The stratospheric ozone layer protects human health and the environment from ultraviolet radiation, and its depletion causes problems. By contrast, tropospheric ozone damages human health and the environment. 8 In the United States, the pollutants causing "urban" air quality problems also affect human health and the environment well beyond urban boundaries. Yet, the health problems these pollutants present remain most acute in urban and suburban areas. Ozone, carbon monoxide, and particulate cause very serious public health problems that have been well recognized for a long time. Ozone forms in the atmosphere from a reaction between volatile organic compounds, nitrogen oxides, and sunlight. Volatile organic compounds include a large number of hazardous air pollutants. Nitrogen oxides, as discussed below, also play a role in acidifying ecosystems. Ozone damages lung tissue. It plays a role in triggering asthma attacks, sending thousands to the hospital every summer. It effects young children and people engaged in heavy exercise especially severely. Particulate pollution, or soot, consists of combinations of a wide variety of pollutants. Nitrogen oxide and sulfur dioxide contribute to formation of fine particulate, which is associated with the most serious health problems. 13 Studies link particulate to tens of thousands of annual premature deaths in the United States. Like ozone it contributes to respiratory illness, but it also seems to play a [\*29] role in triggering heart attacks among the elderly. The data suggest that fine particulate, which EPA did not regulate explicitly until recently, plays a major role in these problems. 16 Health researchers have associated carbon monoxide with various types of neurological symptoms, such as visual impairment, reduced work capacity, reduced manual dexterity, poor learning ability, and difficulty in performing complex tasks. The same pollution problems causing current urban health problems also contribute to long lasting ecological problems. Ozone harms crops and trees. These harms affect ecosystems and future generations. Similarly, particulate precursors, including nitrogen oxide and sulfur dioxide, contribute to acid rain, which is not easily reversible. To address these problems, Agenda 21 recommends the adoption of national programs to reduce health risks from air pollution, including urban air pollution. These programs are to include development of "appropriate pollution control technology . . . for the introduction of environmentally sound production processes." It calls for this development "on the basis of risk assessment and epidemiological research." It also recommends development of "air pollution control capacities in large cities emphasizing enforcement programs using monitoring networks as appropriate." A second principle, the precautionary principle, provides support for the first. As stated in the Rio Declaration, the precautionary principle means that "lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation" when "there are threats of serious or irreversible damage." Thus, lack of complete certainty about the adverse environmental and human health effects of air pollutants does not, by itself, provide a reason for tolerating them. Put differently, governments need to address air pollution on a precautionary basis to ensure that humans can life a healthy and productive life.

## AP – Impacts – Cancer 🡪 Extinction

### Cancer threatens humanity’s existence

Sarkar ’11 [“The Emperor of all Maladies” by Siddarth Mukherjee, Reviewed by Elisha Sarkar. Physician, scientist and writer. Professor of Medicine at Columbia University. Heratologist, oncologist. Cancer Leadership award, Pulitzer Prize, Time 100 most influential people. May 6th 2011. <http://www.timeswellness.com/article/54/2011050620110505164707953c16bad3d/The-Emperor-of-All-Maladies--A-Biography-of-Cancer.html>]

In many ways, Siddhartha Mukherjee’s The Emperor of All Maladies is a celebration of its existence – much like in the case of the biography of a human being. Its polymorphism, its immortality even after it kills its patients and threatens humanity its unchanging ability to grow in a way that no other disease has ever. It has perplexed some of the greatest minds. It has broken its sufferers’ spirits and has forced doctors to think of out-of-the-box therapies. Mukherjee depicts cancer not only as an illness but as a character that grows on you (literally!) He digs into medical journals, library archives, Susan Sontag's books and works by literary greats to come up with a Pulitzer-winning masterpiece - a historical novel, a popular science book and a beautiful piece of literature, all rolled into one.

Mukherjee writes, "We tend to think of cancer as a 'modern' illness because its metaphors are so modern. It is a disease of overproduction, of fulminant growth - growth unstoppable, growth tipped into the abyss of no control. Modern biology encourages us to imagine the cell as a molecular machine. Cancer is that machine unable to quench its initial command (to grow) and thus transformed into an indestructible, self-propelled automation."

## AP – Impacts: Disease

### Diesel fuel used by trucks bad for both environment and health

Richards, 07 [etal. Krivoshto, Albertson, Derlet] Corresponding author: John R. Richards, MD, Department of Emergency Medicine, U.C. Davis Medical Center, Journal of the American Board of Family Medicine, <http://www.jabfm.org/content/21/1/55.long>

Diesel is the fuel of choice for use in mass transportation vehicles such as trucks, buses, and trains. Diesel fuel and the products of its combustion represent one of the most common toxins to which people living in both urban and rural areas of the world are exposed. On an equal horsepower basis, diesel exhaust is 100 times more toxic than gasoline exhaust, even when carbon monoxide is considered.[2](http://www.jabfm.org/content/21/1/55.long#ref-2) The Environmental Protection Agency estimates truck exhaust accounts for 20% of all vehicle-produced microscopic soot and 30% of all smog-causing chemicals in the United States.[1](http://www.jabfm.org/content/21/1/55.long#ref-1) As for passenger cars, fewer than 1% of new American cars have diesel engines. In contrast, diesel engines power 37% of all new cars sold in Europe, with rates as high as 62% in France.[3](http://www.jabfm.org/content/21/1/55.long#ref-3) One reason for this discrepancy is the suboptimal quality of diesel fuel sold in the United States; roughly half of the supply has been found to be below the standards recommended by equipment manufacturers.[1](http://www.jabfm.org/content/21/1/55.long#ref-1) The majority of patients who present to urban primary care clinics and emergency departments may have had a potentially significant chronic exposure to diesel exhaust because many of them live near busy streets and highways. In Japan and Europe, epidemiologic surveyors have demonstrated high acute and chronic respiratory disease morbidity rates from occupational and proximity exposure to diesel exhaust.[4](http://www.jabfm.org/content/21/1/55.long#ref-4) The National Institute for Occupational Safety and Health estimates millions of workers are occupationally exposed to the combustion products of diesel fuel in their respective workplaces. Diesel exhaust is a complex mixture of toxic compounds with wide variability of deleterious effects in human and animal studies. This represents a significant limitation to epidemiologic research on diesel exhaust because the over-reporting of exposure may affect study outcomes.[5](http://www.jabfm.org/content/21/1/55.long#ref-5) Thus, no standard for exposure limits exists at this time. Patients most likely to be in proximity to diesel exhaust on the job and thus suffer from occupational exposure include (1) shipping, receiving, and loading dock workers; (2) bus, truck, and forklift drivers; (3) railroad workers; (4) mine workers; (5) diesel engine repair and maintenance garage workers; (6) construction site, tunnel, and bridge workers. In 2006 the California Air Resources Board estimated that diesel exhaust pollution directly accounts for 2400 deaths and, annually, nearly 3000 hospital admissions for respiratory and cardiac-related diseases, at a total cost of $19 billion.[6](http://www.jabfm.org/content/21/1/55.long#ref-6) Besides on-the-job exposure to diesel exhaust, patients may be exposed to diesel exhaust from myriad and commonplace sources ([Table 1](http://www.jabfm.org/content/21/1/55.long#T1)). Primary care physicians should be aware of the acute and chronic deleterious health effects from diesel exhaust and its potential to exacerbate other chronic disease states. We thoroughly searched medical and scientific literature databases to identify those articles that specifically addressed the relationship between diesel exhaust pollution and illness.

### Diesel exhaust in pollution causes Lung Cancer

GlobalPost, June 13, 2012. News Desk and winner of the Peabody award, <http://www.globalpost.com/dispatch/news/health/120613/diesel-engine-exhaust-fumes-cancer-carcinogenic-carcinogen-who>

Diesel engine exhaust fumes can cause cancer in humans, the World Health Organisation (WHO) declared. Further, the fumes belong in the same deadly category as smoking, asbestos, ultraviolet radiation, arsenic and mustard gas, the WHO reportedly said. They caused lung cancer and increased the risk of bladder cancer, and the WHO experts, [cited by the New York Times](http://www.nytimes.com/2012/06/13/health/diesel-fumes-cause-lung-cancer-who-says.html?_r=1), said they were more carcinogenic than secondhand cigarette smoke. The reclassification of diesel exhausts from its group of probable carcinogens to its group of substances that have definite links to cancer came after a week-long meeting of the France-based International Agency for Research on Cancer (IARC). The decision was reportedly unanimous and based on "compelling" scientific evidence. [Reuters quoted](http://www.reuters.com/article/2012/06/12/us-cancer-diesel-who-idUSBRE85B0ZN20120612) the IARC as saying: "People are exposed not only to motor vehicle exhausts but also to exhausts from other diesel engines...[such as diesel trains and trucks] and from power generators." [Bloomberg cited](http://www.businessweek.com/ap/2012-06/D9VBOJK80.htm) Kurt Straif, director of the IARC department that evaluates cancer risks, as saying diesel fumes affected not only pedestrians on the street, but passengers and crew on ships, railroad workers, truck drivers, mechanics, miners and people operating heavy machinery." The director of New York's Clean Fuels and Vehicles Project, Rich Kassel, meantime [told CNN](http://edition.cnn.com/2012/06/12/health/diesel-fumes-cancer/index.html) the WHO simply confirmed what has been suspected for some time. "Anybody who lives in Beijing, Mexico, New York or any congested city has probably felt the feeling of holding their breath when the bus pulls away from the curb leaving you in a ... puff of black smoke," he said.

### Air pollution causes cancer , damage to the immune system and the reproductive system

EPA 7 (Latest Findings on NationalAir Quality STATUS AND TRENDS THROUGH 2006,U.S. Environmental Protection Agency

Office of Air Quality Planning and StandardsAir Quality Assessment DivisionResearch Triangle Park, North Carolina

EPA-454/R-07-007 January 2008, http://www.epa.gov/air/airtrends/2007/report/toxic.pdf)

People exposed to toxic air pollutants at sufficient concentrations may experience various harmful health effects, including cancer and damage to the immune system, as well as neurological, reproductive (e.g., reduced fertility), developmental, respiratory, and other health problems. In addition to exposure from breathing air toxics, risks are also associated with the deposition of certain toxic pollutants onto soils or surface waters, where they are taken up by plants and ingested by animals and eventually magnified up through the food chain. Like humans, animals and plants may be harmed by air toxics exposure. Air toxics also may cause adverse environmental and ecological effects.

### Chemicals released from trucks have been linked to cancer, birth defects, and other serious illnesses

UCSUSA 08 (Cars, Trucks, & Air Pollution, [http://www.ucsusa.org/clean\_vehicles/why-clean-cars/air-pollution-and-health/cars-trucks-air-pollution.html april 4,2008](http://www.ucsusa.org/clean_vehicles/why-clean-cars/air-pollution-and-health/cars-trucks-air-pollution.html%20april%204,2008), Union of Concerned Scientists )

Transportation is the largest single source of air pollution in the United States. It causes over half of the carbon monoxide, over a third of the nitrogen oxides, and almost a quarter of the hydrocarbons in our atmosphere in 2006.¹ With the number of vehicles on the road and the number of vehicle miles traveled escalating rapidly, we are on the fast lane to smoggy skies and dirty air. The Ingredients of Air Pollution Air pollution is associated with the full life-cycle of cars and trucks. This includes air pollution emitted during vehicle operation, refueling, manufacturing, and disposal. Additional emissions are associated with the refining and distribution of vehicle fuel. Motor vehicles cause both primary and secondary pollution. Primary pollution is emitted directly into the atmosphere; secondary pollution results from chemical reactions between pollutants in the atmosphere. The following are the major pollutants from motor vehicles: Particulate matter (PM). These particles of soot and metals give smog its murky color. Fine particles, PM that is less than one-tenth the diameter of a human hair, pose the most serious threat to human health as they can penetrate deep into lungs. In addition to direct emissions of fine particles, automobiles release nitrogen oxides, hydrocarbons, and sulfur dioxide, which generate additional fine particles as secondary pollution. Hydrocarbons (HC). These pollutants react with nitrogen oxides in the presence of sunlight to form ground level ozone, a primary ingredient in smog. Though beneficial in the upper atmosphere, at the ground level this gas irritates the respiratory system, causing coughing, choking, and reduced lung capacity. Nitrogen oxides (NOx). These pollutants cause lung irritation and weaken the body's defenses against respiratory infections such as pneumonia and influenza. In addition, they assist in the formation of ground level ozone and particulate matter. Carbon monoxide (CO). This odorless, colorless, and poisonous gas is formed by the combustion of fossil fuels such as gasoline and is emitted primarily from cars and trucks. When inhaled, CO blocks the transport of oxygen to the brain, heart, and other vital organs in the body. Fetuses, newborn children, and people with chronic illnesses are especially susceptible to the effects of CO. Sulfur dioxide (SO2). Power plants and motor vehicles create this pollutant by burning sulfur-containing fuels, especially diesel. Sulfur dioxide can react in the atmosphere to form fine particles and poses the largest health risk to young children and asthmatics. Hazardous air pollutants (toxics). These chemical compounds, which are emitted by cars, trucks, refineries, gas pumps, and related sources, have been linked to birth defects, cancer, and other serious illnesses. The Environmental Protection Agency estimates that the air toxics emitted from cars and trucks account for half of all cancers caused by air pollution. Benzene, acetaldehyde, and 1,3-butadiene are examples of toxic air pollutants associated with motor vehicle emissions. Greenhouse gases. Motor vehicles also emit pollutants, such as carbon dioxide, that contribute to global climate change. The transportation sector currently accounts for over a quarter of all U.S. greenhouse gas emissions.

## AP - Impacts: Benzene

### Benzene has negative effects on bone marrow causes anaemia and even death from long expousre

Chiodo and Rolfe 2002(the Ministry for the Environment's Health effects of Eleven Hazardous Air Contaminants and Recommended Evaluation Criteria Chiodo and Rolfe, 2002,). http://www.mfe.govt.nz/publications/air/air-quality-tech-report-43/html/page9.html).

Benzene is a known carcinogen and has been classified as a Group A carcinogen of medium potency by the US EPA, and a Group 1 carcinogen by the International Agency for Research on Cancer (IARC). Benzene also has haematological effects and is mutagenic. The major effect of long-term exposure to benzene is on the blood. Benzene causes harmful effects on the bone marrow and can cause a decrease in red blood cells leading to anaemia. With exposures from less than five years to more than 30 years, individuals have developed, and died from, leukaemia. It can also cause excessive bleeding and can affect the immune system, increasing the chance for infection. Short-term exposure to high levels of benzene can cause drowsiness, dizziness, unconsciousness and death.

### Exposure to benzene can casue protein damage , DNA damage and can cause leukemia

EPA 98( U.S. EPA. Carcinogenic Effects of Benzene: An Update (Final). U.S. Environmental Protection Agency, Office of Research and Development, National Center for Environmental Assessment, Washington Office, Washington, DC, EPA/600/P-97/001F, 1998.)

Benzene affects bone marrow cells in several different ways. Based on our current understanding, these effects are produced by the interactive effects of multiple metabolites. Genotoxic effects are a critical component of the leukemogenic properties of benzene. As more information becomes available about the epigenetic effects of benzene and the role these effects play in the leukemogenic process in general, it is likely that these will be shown to have an important role. Evidence supports the hypothesis that more than one toxic effect contributes to the leukemogenic process, especially because benzene metabolic products may be able to cause general disruption of protein functions in bone marrow cells. Protein damage is likely to result in pleiotropic effects, including general toxicity, alteration of growth factor responses, and DNA damage. Therefore, the overall picture of benzene-induced leukemogenesis is an increased rate of genetic damage to hematopoietic cells that occurs in the context of disrupted bone marrow function. This situation could encourage not only the production of cells with key genetic changes, but also the selection and expansion of such cells due to the abnormal marrow. However, data are not sufficient at this time to state precisely which of the various documented effects, genotoxic or otherwise, are the critical ones for benzene-induced leukemogenicity.I

## AP – SSS Solves

### Water shipping decreases air pollution – past problems of unclean vessel emissions have been solved

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 5]

The expanded use of the America’s Marine Highway offers other potential environmental benefits to the public. In addition to energy and carbon benefits, it removes freight traffic from land-based modes and thereby reduces the air pollution, noise, and vibration caused by heavy vehicles moving through urban and rural residential areas. In many cases, these benefits would improve the quality of life and livability of the affected neighborhoods. The actual impact depends, of course, on the extent to which Marine Highway services are used and a number of other factors.

Although water transportation is fuel efficient and produces comparatively small amounts of GHG per freight ton-mile, the issue of vessel emissions of air pollutants has been of particular interest in ports and coastal areas. Whereas standard tug-and-barge units burn highway grade diesel fuel, some coastal and most international shipping relies on the combustion of residual fuel oil (called "bunker fuel") that contains high levels of sulfur and other impurities that contribute to regional and global pollution.

Fortunately, major progress has been made in recent years to reduce the environmental impact of vessel emissions. In May 2004, as part of the Clean Air Nonroad Diesel Rule, EPA implemented new requirements for nonroad diesel fuel that decreased the allowable levels of sulfur in fuel used in marine vessels by 99 percent compared to levels allowed before the effective date of 2007.66 These fuel improvements, which went into effect in 2007, have created significant environmental and public health benefits by reducing particulate matter (PM) emissions from new and existing engines. In March 2008, EPA issued a final rule that implemented a three-part program that will greatly reduce emissions from marine diesel engines below 30 liters per cylinder displacement.67 These engines include marine propulsion engines used on vessels from recreational and small fishing boats to towboats, tugboats and Great Lake freighters, and marine auxiliary engines ranging from small generator sets to large generator sets on oceangoing vessels. The rule will cut PM emissions from these engines by as much as 90 percent and mono- nitrogen oxides (NOx) emissions by as much as 80 percent when fully implemented.

### Sea shipping 73% cleaner than trucking

Sun and Craft, ’11 [Christina Sun and Carter Craft (principal of Outside New York, a small consulting firm that provides a broad range of services including project management, program development, waterfront planning, communications, and fundraising) From Trucks to Tugs, Urban Omnibus: A project of the Architectural League of New York, 5/25/11, http://urbanomnibus.net/2011/05/from-trucks-to-tugs-short-sea-shipping/]

The environmental implications are also significant — and crucial to bear in mind. Less traffic means less congestion, which means better air quality for everyone. 73% fewer air emissions are released with every ton of cargo moved by barge rather than by truck. An increase in sea shipping also means fewer gas-guzzling trucks on our roads, an important shift in the face of maxed-out global oil production and the increasingly risky and destructive practices we are employing to get at what’s left.

### SSS prevents harmful air pollution created by truck and rail

Ng and Perakis, ‘9 [Jacob Ng (UNDERGRADUATE STUDENT DEPARTMENT OF NAVAL ARCHITECTURE AND MARINE ENGINEERING UNIVERSITY OF MICHIGAN) and Dr. A. N. Perakis, (Ph.D. SNAME FELLOW MICHIGAN PHOENIX MEMORIAL ENERGY INSTITUE FELLOW DEPARTMENT OF NAVAL ARCHITECTURE AND MARINE ENGINEERING UNIVERSITY OF MICHIGAN), The Environmental & Economic Benefits of Short Sea Shipping by ‘Container-On-Barge’ 2 MAY 2009 p. 6]

There is increasing global focus on the effects of air pollution. Carbon Dioxide (CO2) and Methane (CH4) are major greenhouse gases that increase temperatures by trapping heat within the Earth’s atmosphere. This temperature rise causes widespread effects on climate change and ecosystems. Sulfur Dioxide (SO2) is an irritant in its original form. SO2 also combines with moisture in the air to form acidic precipitation that takes the form of acid rain. Acid rain has a devastating effect on fauna as it changes the pH of soil. There has been extensive destruction to the Scandinavian forests due to acid rain. Oxides of Nitrogen (NO X) cause respiratory and eye irritation. NOX also leads to the formation of photochemical smog that is seen in cities like Los Angeles and Beijing. The OECD reports that maritime transport produces less air emissions generally in comparison to transportation by truck/rail. Although shipping produces more SO2 pollution, this is poised to decrease in response to more stringent maritime pollution regulations in the near future.

## AP – AT: Increase Pollution

### Efforts to reduce fuel consumption by ships has already begun

Kaltenstein  ’11 [John Kaltenstein is Clean Vessels Program Manager for Friends of the Earth - U.S. Kaltenstein works predominately on ship air pollution issues. Expanding Short Sea Shipping in California Environmental Impacts and Recommended Best Practices. 2011. Pages 8&9 July 14, 2012]

Bio-fouling caused by the attachment of marine organisms to a ship’s hull and propeller increases drag through the water. Many shipping lines and other maritime business interests are paying increasing attention to bio-fouling, as it can raise fuel consumption by 10 to 25 percent (Greater 2010), and are investigating the use of special paints, anti-fouling coatings, and optimal hull cleaning regimens. Even the California Air Resources Board (CARB) is working on the issue, and intends to establish an efficiency program devoted to harbor craft – which includes tugboats like the one that will be used in the proposed San Francisco Bay short sea shipping project – as part of California’s AB 32 implementation efforts (see CARB 2008). CARB plans to introduce a voluntary program by 2012 that will promote harbor craft maintenance and operational best practices. Specific items from the program focus on regular maintenance of engines, vessel speed optimization, improved hull smoothness, annual hull inspections and maintenance, as well as the use of improved navigational technologies (e.g., GPS, electronic charts, etc.) (CARB 2008). In aggregate, these elements can reduce fuel consumption considerably (see Green et al. 2008).

### Measure are underway to reduce ship CO2 emissions

Kaltenstein  ’11 [John Kaltenstein is Clean Vessels Program Manager for Friends of the Earth - U.S. Kaltenstein works predominately on ship air pollution issues. Expanding Short Sea Shipping in California Environmental Impacts and Recommended Best Practices. 2011. Pages 8&9 July 14, 2012]

Vessels can also significantly reduce air emissions at berth, potentially by more than 90 percent, by plugging in to electrical shore power (see Cruise Ship Environmental Task Force 2003; Dock Watts LLC 2004). Foss’ hybrid tugboat can even charge its batteries via shore-based power, further enhancing its low-emission profile.14 CARB expects its shore power rule to save 122,000 to 242,000 metric tons of carbon dioxide by 2020 (CARB 2007). In addition, as the electrical grid in California integrates more renewable energy sources, carbon dioxide reductions related to shore power use will increase.

### Applications are available substantially limit black carbon emissions

Kaltenstein  ’11 [John Kaltenstein is Clean Vessels Program Manager for Friends of the Earth - U.S. Kaltenstein works predominately on ship air pollution issues. Expanding Short Sea Shipping in California Environmental Impacts and Recommended Best Practices. 2011. Pages 8&9 July 14, 2012]

Controlling and reducing emissions of black carbon will therefore result in significant health and climate benefits. Adopting fuel efficient practices such as those described above, as well as specific pollution control measures, can decrease black carbon emissions from ships in a cost-effective manner (see

Corbett et al. 2010). Some possible measures include in-engine adjustments, slide valves instead of conventional fuel valves, and water-in-fuel emulsions

(Norway et al. 2010). Also, new vessel fuel rules ushered in by CARB and EPA will result in greater use of distillate fuel by ships operating in U.S. waters.

The use of distillate fuel, in turn, enables the application of devices such as diesel particulate filters which substantially limit black carbon emissions (Id).

### Ship owners will have pressure to lower emissions and utilize ready technology

Heim ’09[ Aimee Heim: works at General Dynamics NASSCO: Major ship design, construction, and repair company. A Shipbuilder’s Assessment of America’s Marine Highways. July 30, 2009. Page 25. July 15, 2012.]

Ship owners will experience increased pressure to utilize technology in order to reduce particulate emissions from their vessels, much as the trucking community is moving towards cleaner truck engines. The U.S. and Canada have recently proposed a North American Emission Control Area (ECA) to the International Maritime Organization (IMO) that would extend 200 miles from the North American coastline. Should the U.S. Environmental Protection Agency ratify the proposed agreement, NOx emissions reduction requirements from vessels operating within the EAC would likely come into effect in 2016. Most of the current Jones Act fleet was built prior to IMO regulation of emissions. AMH presents an opportunity to utilize advanced engine technologies while working proactively to reduce emissions within controlled areas.

### Reports state maritime transport less emissions and are still set to decrease more

NG ’09[Jacob NG: UNDERGRADUATE STUDENTDEPARTMENT OF NAVAL ARCHITECTURE AND MARINE ENGINEERING UNIVERSITY OF MICHIGAN. The Environmental &

Economic Benefits of Short Sea Shipping by ‘Container-On-Barge’May 2nd 2009. Page 6. July 15, 2012.]

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# ECONOMY ADVANTAGE (E-)

## E- UQ –

### Economy faltering absent stimulus

Bloomberg, 6/21 [Bloomberg News, 6/21/12, http://www.bloomberg.com/news/2012-06-21/commodities-fall-to-lowest-since-2010-as-fed-cuts-growth-outlook.html]

Commodities tumbled into a bear market as U.S. reports on manufacturing, jobless claims and home sales signaled a faltering economy after the Federal Reserve refrained from announcing another round of stimulus. The Standard & Poor’s GSCI Spot Index of 24 raw materials fell 2.8 percent to settle at 559 at 3:56 p.m. New York time. The gauge has dropped 22 percent from this year’s highest close of 715.52 on Feb. 24, entering a bear market. Earlier, the measure touched 558.14, the lowest since November 2010. Metals and energy led today’s slump.

Manufacturing in the Philadelphia region contracted in June at the fastest pace in almost a year. Existing U.S. home sales fell more than forecast by analysts, and jobless claims topped estimates. Yesterday, the Fed, led by Chairman Ben S. Bernanke, reduced its 2012 forecast for economic growth, and policy makers decided against a third round of debt purchases.

“We got nothing significant from Bernanke, and data continues to paint a horrible picture,” said Steve Mathews, the chief investment officer of Flintlock Capital Asset Management LLC in New York, which manages $105 million of assets. “We have to wait until the next Bernanke event to know if the Fed will indeed do something to perk the economy.”

The GSCI index surged 92 percent from the end of December 2008 to June 2011 as the Fed kept borrowing costs at a record low and bought $2.3 trillion of debt in two rounds of so-called quantitative easing.

## E- Link - General

### Marine shipping key to the economy – but infrastructure investment key first

LaHood, 11 [Ray LaHood, US Secretary of the Department of Transportation and Chair of the Committee on the Marine Transportation System, The Coast Guard Proceedings of the Marine Safety and Security Council, “The Marine Transportation System,” Summer 2011, www.uscg.mil/proceedings, p. 4]

The U.S. Marine Transportation System (MTS) is critical to the overall health of our nation’s economy, including the creation of jobs throughout the country. It carries 78 percent of our international trade, and is one of the most efficient, effective, safe, and environmentally sound ways to transport people and goods.

America’s “marine highways” have great untapped capacity to relieve congestion and wear-and-tear on our roads while enhancing highway safety, reducing carbon emissions, and increasing international trade. But in order to achieve President Obama’s National Export Initiative goal of doubling our nation’s exports between 2010 and 2015, the MTS will require our continuing commitment to ensure that our waterways and maritime infrastructure can handle the increased traffic.

## E – Link - Externalities

### SSS solves negative truck externalities – leads to economic growth

Perakis and Denisis, ‘8 [ANASTASSIOS N. PERAKIS\* and ATHANASIOS DENISIS, Department of Naval Architecture & Marine Engineering, University of Michigan, A survey of short sea shipping and its prospects in the USA, MARIT. POL. MGMT., DECEMBER 2008, VOL. 35, NO. 6, 591–614]

Freight transportation is a major component of international trade. Freight transportation systems transport cargoes from their origins to their destinations, distributing natural resources and other commodities. Therefore, efficient transpor- tation networks are key elements for economic growth. However, the rapid expansion of trucking as the dominant mode of domestic freight transportation in the US (table 3) [33] has caused environmental and societal problems, such as air pollutions traffic congestion, accidents, noise, road damage, etc. These significant side effects are called negative externalities or external costs and are hidden costs imposed on the economy and the society. Reduction of the transportation-related externalities can be achieved by the implementation of new technologies and by the establishment of new public policies. It can also be achieved operationally by changing transportation patterns and/or switching from road transportation to greener modes, such as the water mode (SSS), thus creating a modal shift. SSS is a sustainable mode of freight transportation that has environmental and societal advantages over the other modes.

### Marine highways save roads and increase economy

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 19]

Marine Highway services can accommodate the heaviest of containers and trailers without adverse impact to land-based or marine infrastructure, although in some cases terminal container yards and roads may require strengthening. Use of America’s Marine Highway could therefore reduce lifecycle maintenance and replacement costs of surface infrastructure along selected corridors where heavy industrial or agricultural cargoes are carried. Actual impacts and savings would depend on the number of heavy and overweight cargoes transferred to water, enforcement of truck weight limits, the availability of drayage roads for overweight cargoes, the condition of the existing highway and bridges, and other factors. Similarly, shippers using America’s Marine Highway could benefit by realizing efficiencies of heavier container weights per shipment. In cases where cargo reaches the highway weight limits before the container's volume is completely utilized, shippers can find additional savings in the water option by utilizing all of the container's volume. For example, a shipper fitting 20 percent more cargo by weight into a container being shipped by water can experience an immediate and material savings on transportation costs. This is particularly attractive to U.S. exporters of the heavy industrial and agricultural commodities that will play an important role in the nation's economic recovery. America’s Marine Highway may therefore offer a more competitive alternative for shippers of overweight and oversize cargoes.

## E- Link – Capital Costs

### SSS far cheaper than trucking – roads more expensive than waterways and trucks create extensive damage to roads

Perakis and Denisis, ‘8 [ANASTASSIOS N. PERAKIS\* and ATHANASIOS DENISIS, Department of Naval Architecture & Marine Engineering, University of Michigan, A survey of short sea shipping and its prospects in the USA, MARIT. POL. MGMT., DECEMBER 2008, VOL. 35, NO. 6, 591–614]

6. Lower infrastructure expenditures. The capital costs needed for the short sea terminal infrastructure are significantly lower then the infrastructure expenditures for the expansion and maintenance of highways. Currently, the cost for a new highway lane is around $32 million per lane mile and a new interchange on average costs around $100 million according to the US FHWA. Infrastructure costs associated with trucking operations on high- ways include the wear and tear costs of pavement, reconstruction and rehabilitation of bridges, system enhancement costs, and other miscellaneous items. Costs for pavement reconstruction, rehabilitation and resurfacing are estimated to represent 25% of the total Federal cost obligation. They are allocated to combination trucks on the basis of vehicle miles travelled (VMT) weighted by its passenger car equivalents. The user-fees paid by combination vehicles include Federal taxes on fuels used, excise tax on the sale of heavy trucks, a tax on tires and a heavy vehicle use tax. The external road damage costs are discussed extensively in Newbery [38]. These costs occur mainly when heavy vehicles cause damage to the road surface, in the form of increased road repair costs and increased vehicle operating costs for the other road users. The damage a vehicle causes to the road pavement increases at the fourth power of the axle road. Therefore, pavement damage is caused almost entirely by heavy trucks. One 80 000 lb tractor-trailer truck does as much damage to road pavement as 9600 cars (US Highway Research Board, NAS, 1962).

### Despite minimization strategies, trucks create severe bridge and road damage

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 19]

Much of the wear and tear on our nation’s road system is due to use by heavy trucks. The effect of truck weights on pavement and bridge maintenance costs is influenced by many factors such as vehicle gross weight, number and spacing of axles, pavement thickness and type, bridge type and span length, volume of truck traffic, numbers of overloaded trucks, effectiveness of enforcement of weight limits, etc. FHWA's Cost Allocation Study estimated that a five-axle combination truck with a gross vehicle weight of 80,000 pounds operating on urban interstate highways causes almost $0.41 in pavement damage per vehicle mile traveled (VMT) (this cost falls to less than $0.13 per VMT on rural interstates).47 Adverse impacts can be greater, however, particularly for overloaded trucks that operate at gross vehicle weights exceeding 80,000 pounds.48 Research indicates that certain truck configurations can be used to minimize the additional damage caused by trucks heavier than 80,000 pounds on pavements. However, these trucks would still cause stresses that exceed bridge design levels and shorten bridge life. Building or strengthening bridges to accommodate trucks heavier than 80,000 pounds throughout the highway system would impose substantial, although as yet un-quantified, costs to the nation.49

## E – Link – Transportation Effic.

### Transportation efficiency key to the economy – demand is outpacing capacity now

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 11]

The efficiency of the surface transportation system underlies the efficiency of the entire national economy. As recently stated by the National Surface Transportation Policy and Revenue Study Commission:

Transportation is the thread that knits the country together, providing the mobility that is such an important part of overall quality of life and is so deeply embedded in our culture and history. Highways, transit, rail, and water systems provide unprecedented access to jobs, recreation, education, health care, and the many other activities that sustain and enrich the lives of American families.22

The Federal Highway Administration (FHWA) of USDOT reports that the U.S. surface transportation system moved an average of 53 million tons of freight each day (including bulk movements on water) worth $36 billion in 2002, and estimates that by 2008 this freight tonnage had increased by 11.2 percent, reaching 58.9 million tons per day. Nearly 10 percent of this tonnage is imports and exports.23 The surface transportation system also accommodated more than 13.6 billion passenger miles each day in 2007.24

Although the surface transportation system has handled traffic levels exceeding original design plans, demand for freight and passenger movement has grown more rapidly than capacity for the last several decades. The rapid growth in demand and the resulting capacity constraints became evident in parts of the U.S. freight transportation system during the 1990s and became a growing source of national concern particularly in the last decade. As noted recently by the Transportation Research Board, rising freight congestion threatens to impair economic productivity with the most visible congestion occurring at certain important nodes of the system and their surrounding areas, including the largest seaports and at terminal operations at inland hubs like Chicago.25 Similarly, the issue of congestion for travelers on highways, transit, and rail systems has become severe in certain urban areas that are the major contributors to the nation’s economic productivity. For commuters, traffic congestion can seriously impinge on quality of life.

### SSS 🡪 economic recovery and growth

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 6]

America’s Marine Highway offers a cost-effective means to improve the economic efficiency, environmental sustainability, public safety and security, and resiliency of our transportation system. It also employs ships and mariners, providing jobs in peacetime and human and capital resources to deploy in time of war or natural disaster. Demand for ships to operate on Marine Highway corridors will also provide new business at the nation’s commercial shipyards.

## E- Link - Jobs

### SSS leads to new job growth

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 12-13]

Expanded use of Marine Highway services has the potential to generate orders for new vessels. These orders could help to revitalize the U.S. shipbuilding industry and support the nation’s skilled shipyard labor base through the construction of self-propelled vessels specifically designed for container and trailer freight movement and passenger trades, such as roll-on/roll-off (RoRo) trailer ships and ferries (see section below on The Marine Highway and National Defense). The direct number of jobs created per vessel constructed would vary by vessel size and type. Building a larger self-propelled coastal ship to transport trailers and containers might generate up to 600 job years of direct labor at the shipyard35 Indirect jobs (jobs at steel producers and other suppliers to the shipyard) and induced jobs (jobs supported in the general economy due to spending of workers’ wages) would add significantly to the overall employment impact. Construction of Marine Highway vessels built to a standard design and in serial production runs would also reduce per vessel costs and could lead to more vessel orders and jobs over the longer term. Growth in Marine Highway activity will also support land-based job opportunities – such as short-haul truck drivers and logistical business positions at Marine Highway ports. Job creation on vessels and in ports due to the growth of the America’s Marine Highway system depends largely on the numbers and locations of Marine Highway corridors and services that eventually emerge, future growth of domestic freight movements, future funding of infrastructure in water- and land-based transportation modes, and the complex tradeoff of jobs among these modes as one modal system gains proportionately more traffic than another. Ultimately, however, the principal source of new employment from America’s Marine Highway will be its contribution to the efficiency and flexibility of the nation’s supply chain, as described in the following sections of this report. By having access to a reliable transportation alternative that can be expanded at modest cost when compared to surface transportation services, U.S. businesses can better react to changing supply chain circumstances, such as rising fuel costs, and thereby realize productivity gains and improved profitability. Profitable and productive businesses experiencing growth are the chief sources of new demand for workers throughout the economy.

### SSS produces new jobs

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 12-13]

America’s Marine Highway can support the creation and sustainment of desirable jobs for Americans. These jobs are provided through direct employment in marine transportation services and shipbuilding, as well as other services that support marine transportation. Water transportation positions are beneficial to both workers and the nation. The Bureau of Labor Statistics (BLS) reports that earnings for water transportation positions are higher than most other occupations with similar educational requirements for entry-level positions.28 As of 2008, the nation’s domestic and international water transportation industry supported approximately 65,200 direct jobs, with an additional 97,000 jobs in port-related activities and 104,500 jobs in shipbuilding and repair.29 The water transportation industry generated some $36.1 billion in gross output in 2007, of which $10.7 billion was value added.30 Many of the water transportation jobs exist in the inland waterway and coastal systems moving bulk products to our gateway ports. Marine Highway services can take many forms, ranging from self-propelled vessels operating between coastal ports to tug-and-barge services serving ports along inland and coastal waterways, and can serve various freight markets and schedules. A typical tug-and-barge service carrying containers between ports offers employment opportunities for the vessel crew, stevedores, and terminal workers who facilitate the intermodal transfer of cargo to and from the barges. Such job growth may or may not substitute for jobs in other transportation modes, depending on the markets affected and the design of the service (see below).

## E- Link - Congestion

### Congestion hurts the economy – reduces productivity, wastes fuels and causes transport delays –

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 16]

As a general rule, if highway vehicle travel grows at a higher rate than road capacity, congestion will increase, and markedly so once the highway's design capacity has been exceeded. Between 1980 and 2003, rural and urban interstate lane miles increased by 17 percent, whereas ton-miles of freight moved by intercity trucks increased by 128 percent. Also during this period, the vehicle miles of automobiles (which share the roads with trucks) increased by 50 percent.37 Accordingly, traffic congestion on the nation’s roads has been increasing, leading to lost productivity from delay, greater unreliability in transportation services, and wasted fuel. The Texas Transportation Institute reports that the congestion “invoice” for the cost of extra time and fuel in 439 U.S. urban areas in 2007 amounted to $87.2 billion. Over that year, approximately 2.8 billion gallons of fuel were wasted and 4.2 billion commuter hours were lost to traffic gridlock.38 FHWA reports that 11 percent of the National Highway System (NHS) experienced recurring, peak-period congestion in 2002. It forecasts that by 2035 increasing truck and passenger vehicle traffic volumes will result in 40 percent of the NHS experiencing such congestion if there are no additions to highway network capacity (see Figure 1). This congestion will slow traffic on nearly 20,000 miles of the NHS and create stop-and-go conditions at times on an additional 45,000 miles.39

### SSS ensures future economic growth and maintains economic stability

Connor 4 [Peter H. Connor, The Development of Short Sea Shipping in the United States: A Dynamic Alternative

Submitted to the Department of Ocean Engineering in Partial Fulfillment of the Requirements for the Degree of

Master of Science in Ocean Systems Management at the Massachusetts Institute of Technology, June 2004]

U.S. waterborne trade, transportation, and the U.S. economy in general are dependent on the efficient flow of goods and people through U.S. ports and inland waterways (Transportation, 2001). This is why it is so important to have an efficiency supply chain or goods coming into this country. With the increase in trade, congestion could decrease the quantity of goods that are physically able to enter and exit the country. By revitalizing our maritime transportation system with short sea shipping, we are allowing our economy to grow in the future, thus increasing our economic security. It will also allow us to build our reserve civilian and military shipping fleets making us more prepared and capable in crisis. Furthermore, SSS will help to remove some dangerous cargoes from populated areas and provide an additional tool in combating terrorism.

### Highway traffic congestions wastes nearly $80billion annually

Perakis and Denisis, ‘8 [ANASTASSIOS N. PERAKIS\* and ATHANASIOS DENISIS, Department of Naval Architecture & Marine Engineering, University of Michigan, A survey of short sea shipping and its prospects in the USA, MARIT. POL. MGMT., DECEMBER 2008, VOL. 35, NO. 6, 591–614]

3. Mitigating highway congestion. SSS can alleviate traffic congestion by shifting freight from the highways to inland and coastal waterways. Major highways, along the three US coasts (east coast, west coast and the Gulf of Mexico), suffer from congestion. Trucks currently carry about 60% of the domestic general cargo tonnage and contribute significantly to this problem. Trucks delivering their cargo compete with cars for space on highways. This congestion is costly as well. According to the annual urban mobility report from the Texas Transportation Institute [2], traffic congestion continues to worsen in American cities of all sizes, creating a $78 billion annual drain on the US economy in the form of 4.2 billion lost hours and 2.9 billion gallons of wasted fuel for 2007. The congestion cost of an additional truck trip is the added delay that it causes to other users of the highway. The added delay occurs because the average speed of the vehicles will begin to decrease progressively once the density of vehicles on the road reaches high volume to capacity ratios. This congestion, which is generally associated with peak-hour traffic, is referred to as recurring congestion. A solution to the highway congestion problem could be a change in transportation patterns from shippers, especially for long-haul trips, with distances greater than 500 miles. Shippers should explore alternative modes of transportation, such as SSS, and consider using SSS instead of truck transportation. Trucks will do the short-haul, pick-up and delivery, at the start and the end of the transportation chain.

### SSS will reduce highway and port freight congestion

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 12]

America’s Marine Highway is available to bring significant freight congestion relief along certain corridors. A study for USDOT estimated that there were a total of approximately 78.2 million trailer loads of highway and rail intermodal cargo that moved between origins and destinations 500 miles apart along the U.S. contiguous coasts in 2003.26 This long-haul coastal truck and intermodal traffic accounted for 15 percent of total 527 million trailer loads of U.S. intercity truck and intermodal rail traffic in 2003. These movements do not include empty trailer movements or the container and trailer traffic moving on inland surface freight corridors that are also served by the U.S. inland waterway system. Moreover, they do not include potential freight on short-haul Marine Highway services.27 As will be discussed in more detail below, congestion at major ports can occur as freight volumes increase, as was demonstrated early in the last decade when some ports experienced double-digit year-on-year growth in international freight volumes. One benefit of expanding the Marine Highway system is that international containers could be transferred at major ports to and from Marine Highway services, bypassing the need to use congested urban landside access routes. Vessel operators serving purely domestic trades could bypass deep draft ports altogether, also reducing congestion at these ports. Most of the nation’s smaller ports can handle substantial growth in container movements (subject to acquiring specialized equipment) with little or no congestion at the ports or on adjacent roads.

### Rail congestion occurring and costly

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 16]

Rail networks are also not immune from congestion concerns. The past several decades have seen widespread concentration of rail services by Class I railroads, resulting in fewer miles of line operated. These fewer lines tend to have much denser rail traffic as carriers attempt to maximize the efficiency of their networks, increasing congestion. In areas where major rail networks intersect, such as in the Chicago region, congestion can be so severe that many shippers now plan for about a day just for a single train to traverse the city itself.40 Travelers are negatively impacted as passenger trains share the same infrastructure networks as freight trains. As a consequence, some cross-country Amtrak passenger trains are consistently delayed.

### SSS can solve congestion and leads to reliable transfer of cargo

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 17]

America’s Marine Highway can play a role in alleviating this congestion on some of our surface transportation corridors, with its abundant capacity to carry freight to and from many locations across the country. This is particularly true because many of the areas of greatest land-based congestion, as shown in Figure 1, are also those areas that Marine Highway operators could best serve through ocean, inland waterway, and lake access. While important at a national level, the Marine Highway can be especially effective in reducing congestion for all users along certain coastal surface corridors (e.g., the I-5 (Pacific), I-95 (Atlantic), and I-10 (Gulf) highway corridors), including at border crossings into Canada, and in urban areas with large ports.

The Government Accountability Office (GAO) has identified congestion around large urban ports as a major source of inefficiency in the national transportation system. The GAO notes the following:

The major challenges to freight mobility share a common theme – congestion. National studies point to such problems as overcrowded highways and freight-specific ‘chokepoints’ that stifle effective intermodal transfer of cargoes. All 10 ports GAO studied faced similar congestion-related problems. For example, many of the ports are in dense urban areas, limiting the ability to expand rail yards, roadways, and other infrastructure.41 The Marine Highway system has existing capacity to transfer containers and trailers away from congested highways and rail systems that serve ports to less congested ports and inland terminals. In 2000, FHWA estimated that each vehicle-mile traveled by trucks adds between $0.18 and $0.33 (reflecting typical or average conditions) to the cost of congestion on urban roadways; this value will only increase as congestion becomes more severe.42 Reducing this source of congestion can therefore have significant value to the public. In addition to reducing surface congestion, the movement of cargo to inland terminals can benefit exporters and importers, many of which have found that their businesses are made easier if they can assemble export shipments or deploy imports at points free from the congestion.43 Perhaps most importantly, it can offer shippers reliable and predictable service that is essential to just-in-time inventory systems. The America’s Marine Highway Program is designed to identify the most promising water corridors for the movement of passengers and freight to help relieve surface congestion and to facilitate the transition to greater use of this underutilized national asset.

## E – Links - Commerce

### MTS key to commerce and consumer prices

Zelasney, 11 [MR. JOE ZELASNEY, Policy Advisor Committee on the Marine Transportation System, Keeping America’s Commerce Flowing Federal support of the marine transportation system, in The Coast Guard Proceedings of the Marine Safety and Security Council, “The Marine Transportation System,” Summer 2011, www.uscg.mil/proceedings, p. 15]

The MTS is immense, consisting of thousands of miles of navigable channels and hundreds of port complexes and terminals as well as a wide range of specialized vessels, from river barges to gigantic oceangoing ships that ply our nation’s waterways. The marine trans- portation system allows worldwide distribution of our nation’s agricultural and manufactured products and carries 43.5 percent by value and 77.6 percent by weight of all U.S. international trade.1

Though vessels are the most obvious elements of the MTS, the system is a large and diverse enterprise sus- tained by water and landside infrastructure, opera- tional support services, and interconnections with other modes of transportation (or “intermodal” connections). A reliable and cost-effective supply chain ultimately im- pacts the productivity and competitiveness of U.S. pro- ducers and the prices paid by U.S. consumers. The performance of the marine transportation system in- fluences where businesses locate, how they operate, and impacts demand for the goods and materials they produce.

## E- Link - Ports

### Ports key

Nagle, 11 [MR. KURT NAGLE President and CEO American Association of Port Authorities “America’s Seaports Promote Prosperity A strong infrastructure supports a strong economy,” In The Coast Guard Proceedings of the Marine Safety and Security Council, “The Marine Transportation System,” Summer 2011, www.uscg.mil/proceedings, p. 24-5]

As primary gateways for overseas trade, U.S. seaports are critical links for access to the global marketplace and enable America’s exports to compete internationally. In-vestment in America’s port infrastructure and inter- modal connections—both land and waterside—helps the nation prosper and provides an opportunity to bol- ster the country’s economic and employment recovery. A strong infrastruc- ture helps American agricultural and mineral producers export their prod- ucts, while U.S. manufacturing and assembly firms ben- efit from import transportation sav- ings because they often rely on im- ported parts, com- ponents, and bulk commodities. Seaports are so much more than safe harbors for ships to load and unload cargo. They help us build and grow international trade, which strengthens the national economy. At the same time, seaports stoke local economic engines by providing high-paying jobs while supporting employment in other industry sectors—ranging from freight logistics to retailing—that rely on the efficient movement of goods. Our seaports are also dynamic transportation hubs that must constantly adapt to meet ever-changing global trade demands. This is why keeping them mod- ern, navigable, safe, and sustainable is such a core pri- ority for the American Association of Port Authorities (AAPA)—as it should be, we believe, for the nation.

## E – I/L – US Key to the Globe

### The US Economy is key to the world economy.

Hall ’10 [Kevin Hall, 2010 (staff writer). April 30, 2010. “U.S. economy grew briskly in first quarter, government says.” P. http://www.miamiherald.com/2010/04/30/1606734/us-economy-grew-briskly-in-first.html]

If sustained, the upturn in U.S. consumption would be good news for the whole world, since the United States remains the key global economic engine. "What was particularly encouraging about today's GDP numbers is that U.S. consumption appears to be on a strong recovery path," said Frederic Neumann, co-head of Asian Economic Research for the global Hong Kong bank HSBC. Friday's GDP numbers were in line with a revised forecast from the International Monetary Fund, which predicted earlier in April that the world's economy would grow at a rate above 4 percent this year, significantly better than its initial 1.9 percent forecast.

### US economic declines undermine the world economy.

Kampf, 9 [David Kampf, 2009 (former communications director for PEPFAR. May 7, 2009, p. http://www.worldpoliticsreview.com/article.aspx?id=3717)]

The worldwide economic turmoil underlines the importance of the United States -- for better or worse -- to the global market. As the U.S. goes, so goes the world. When the American bubble burst, the speed with which the contagion spread beyond its borders is an illustration.

### The US is key to the global economy.

McCormick, 8 [David McCormick, 2008 (former under secretary for International Affairs in the U. S. Treasury Department, May 12, 2008, Newsweek. P. Lexis/Nexis)]

Our friends around the world should gain confidence from the fact that U.S. policymakers and their international counterparts are taking aggressive, targeted actions to stabilize the financial markets, to reduce their impact on the economy and the individuals negatively affected by the turmoil and to protect against the same mistakes' being repeated. There are already some early indicators that these actions are beginning to have the desired effect, as markets appear to be gaining confidence and the availability of credit has improved modestly. Flexibility and resilience in the face of such unexpected financial-market turmoil and economic hardship are among America's greatest strengths. Our objective is to help individuals and markets recover as quickly as possible, while avoiding actions that cause new problems that would hurt our economy in the long run**. This storm, too, shall pass, and the United States will emerge, as it always has, as a driver of growth and innovation for the global economy.**

## E – Impacts - Extinction

### Economic collapse leads extinction

Friedberg and Schoenfeld, 2008 [Aaron, Prof. Politics. And IR @ Princeton’s Woodrow Wilson School and Visiting Scholar @ Witherspoon Institute, and Gabriel, Senior Editor of Commentary and Wall Street Journal, “The Dangers of a Diminished America”, 10-28, <http://online.wsj.com/article/SB122455074012352571.html>]

Then there are the dolorous consequences of a potential collapse of the world's financial architecture. For decades now, Americans have enjoyed the advantages of being at the center of that system. The worldwide use of the dollar, and the stability of our economy, among other things, made it easier for us to run huge budget deficits, as we counted on foreigners to pick up the tab by buying dollar-denominated assets as a safe haven. Will this be possible in the future? Meanwhile, traditional foreign-policy challenges are multiplying. The threat from al Qaeda and Islamic terrorist affiliates has not been extinguished. Iran and North Korea are continuing on their bellicose paths, while Pakistan and Afghanistan are progressing smartly down the road to chaos. Russia's new militancy and China's seemingly relentless rise also give cause for concern. If America now tries to pull back from the world stage, it will leave a dangerous power vacuum. The stabilizing effects of our presence in Asia, our continuing commitment to Europe, and our position as defender of last resort for Middle East energy sources and supply lines could all be placed at risk. In such a scenario there are shades of the 1930s, when global trade and finance ground nearly to a halt, the peaceful democracies failed to cooperate, and aggressive powers led by the remorseless fanatics who rose up on the crest of economic disaster exploited their divisions. Today we run the risk that rogue states may choose to become ever more reckless with their nuclear toys, just at our moment of maximum vulnerability. The aftershocks of the financial crisis will almost certainly rock our principal strategic competitors even harder than they will rock us. The dramatic free fall of the Russian stock market has demonstrated the fragility of a state whose economic performance hinges on high oil prices, now driven down by the global slowdown. China is perhaps even more fragile, its economic growth depending heavily on foreign investment and access to foreign markets. Both will now be constricted, inflicting economic pain and perhaps even sparking unrest in a country where political legitimacy rests on progress in the long march to prosperity. None of this is good news if the authoritarian leaders of these countries seek to divert attention from internal travails with external adventures.

### Economic decline causes nuclear war.

Mead ’92 [Mead, Summer 1992 (Walter Russell Mead – avid fan of the show The Price is Right and the movie Saving Private Ryan, New Perspectives Quarterly, p. 30)]

What if the global economy stagnates-or even shrinks? In the case, we will face a new period of international conflict: South against North, rich against poor, Russia, China, India-these countries with their billions of people and their nuclear weapons will pose a much greater danger to world order than Germany and Japan did in the '30s.

### Economic collapse causes global war

Auslin, 9 – resident scholar at AEI (Michael “Averting Disaster”, The Daily Standard, 2/6, <http://www.aei.org/article/100044>

As they deal with a collapsing world economy, policymakers in Washington and around the globe must not forget that when a depression strikes, war can follow. Nowhere is this truer than in Asia, the most heavily armed region on earth and riven with ancient hatreds and territorial rivalries. Collapsing trade flows can lead to political tension, nationalist outbursts, growing distrust, and ultimately, military miscalculation. The result would be disaster on top of an already dire situation. No one should think that Asia is on the verge of conflict. But it is also important to remember what has helped keep the peace in this region for so long. Phenomenal growth rates in Japan, South Korea, Hong Kong, Singapore, China and elsewhere since the 1960s have naturally turned national attention inward, to development and stability. This has gradually led to increased political confidence, diplomatic initiatives, and in many nations the move toward more democratic systems. America has directly benefited as well, and not merely from years of lower consumer prices, but also from the general conditions of peace in Asia. Yet policymakers need to remember that even during these decades of growth, moments of economic shock, such as the 1973 Oil Crisis, led to instability and bursts of terrorist activity in Japan, while the uneven pace of growth in China has led to tens of thousands of armed clashes in the poor interior of the country. Now imagine such instability multiplied region-wide. The economic collapse Japan is facing, and China's potential slowdown, dwarfs any previous economic troubles, including the 1998 Asian Currency Crisis. Newly urbanized workers rioting for jobs or living wages, conflict over natural resources, further saber-rattling from North Korea, all can take on lives of their own. This is the nightmare of governments in the region, and particularly of democracies from newer ones like Thailand and Mongolia to established states like Japan and South Korea. How will overburdened political leaders react to internal unrest? What happens if Chinese shopkeepers in Indonesia are attacked, or a Japanese naval ship collides with a Korean fishing vessel? Quite simply, Asia's political infrastructure may not be strong enough to resist the slide towards confrontation and conflict. This would be a political and humanitarian disaster turning the clock back decades in Asia. It would almost certainly drag America in at some point, as well. First of all, we have alliance responsibilities to Japan, South Korea, Australia, and the Philippines should any of them come under armed attack. Failure on our part to live up to those responsibilities could mean the end of America's credibility in Asia. Secondly, peace in Asia has been kept in good measure by the continued U.S. military presence since World War II. There have been terrible localized conflicts, of course, but nothing approaching a systemic conflagration like the 1940s. Today, such a conflict would be far more bloody, and it is unclear if the American military, already stretched too thin by wars in Afghanistan and Iraq, could contain the crisis. Nor is it clear that the American people, worn out from war and economic distress, would be willing to shed even more blood and treasure for lands across the ocean.The result could be a historic changing of the geopolitical map in the world's most populous region. Perhaps China would emerge as the undisputed hegemon. Possibly democracies like Japan and South Korea would link up to oppose any aggressor. India might decide it could move into the vacuum. All of this is guess-work, of course, but it has happened repeatedly throughout history. There is no reason to believe we are immune from the same types of miscalculation and greed that have destroyed international systems in the past.

### The impact is extinction

Torgerson 99 (Douglas, Professor and Chair of the Department of Political Studies – Trent University, Ontario, The Promise of Green Politics: Environmentalism and the Public Sphere, p. 145-146)

By adopting an uncompromising posture, green radicalism serves to high-light the danger that green reforms might well be absorbed and rendered ineffective by the established order. Against reforims, green radicals emphasize the need to thoroughly transform prevailing institutions and ways of viewing the human/nature relationship. In the absence of coherent and plausible programs for radical transformation, however, desperate scenarios of crisis and catastrophe become inviting: “The very best thing for the planet,” one radical green has thus declared, “might be a massive worldwide economic depression”: “Amid the terrible hardships this would create for countless people, at least the machinery would stop for a while, and the Earth could take a breather.”5 Needless to say, this repugnant hope ignores the obvious range of potential consequences arising from such a scenario. Social insecurity and human misery could intensify human conflicts and promote neglect of environmental concerns as people desperately sought to protect themselves, there could also be increased terrorism, even warfare of a **type** and **scale** that would prove enormously destructive to **life on earth**.

## E- Impacts - Poverty

### Economic decline leads to increased poverty- Greece proves

Synder 6-3 Michael Snyder is the editor of theeconomiccollapseblog.com [“10 Things That We Can Learn About Shortages And Preparation From The Economic Collapse In Greece” 6-3-12 [http://world.hawaiinewsdaily.com/2012/06/10-things-that-we-can-learn-about-shortages-and-preparation-from-the-economic-collapse-in-greece/]//gv](http://world.hawaiinewsdaily.com/2012/06/10-things-that-we-can-learn-about-shortages-and-preparation-from-the-economic-collapse-in-greece/%5d//gv)

When the economy of a nation collapses, almost everything changes. Unfortunately, most people have never been through anything like that, so it can be difficult to know how to prepare. For those that are busy preparing for the coming global financial collapse, there is a lot to be learned from the economic depression that is happening right now in Greece. Essentially, what Greece is experiencing is a low level economic collapse. Unemployment is absolutely rampant and poverty is rapidly spreading, but the good news for Greece is that the global financial system is still operating somewhat normally and they are getting some financial assistance from the outside. Things in Greece could be a whole lot worse, and they will probably get a whole lot worse before it is all said and done. But already things have gotten bad enough in Greece that it gives us an idea of what a full-blown economic collapse in the 21st century may look like. There are reports of food and medicine shortages in Greece, crime and suicides are on the rise and people have been rapidly pulling their money out of the banks. Hopefully this article will give you some ideas that you can use as you prepare for the economic chaos that will soon be unfolding all over the globe.

### Poverty Leads To War

Biggs 11 Cate Biggs is the lead writer of Grasping Global Poverty [“The 5 Ps of Poverty Why Countries are Poor: Peace” http://graspglobalpoverty.wordpress.com/the-5ps-of-global-poverty-why-are-poor-countries-poor-in-the-first-place/why-are-poor-countries-poor-peace/]//gv

War takes an enormous toll on a society. For a poor country, there is perhaps nothing as bad for economic growth as a war. Military service (in conventional armies or rebel groups) removes young, able bodied citizens whose labor and talents could otherwise be harnessed for development. Military expenditures crowd out social and economic investment. Death and disability – of soldiers and civilians – hollow out generations of human potential. Fear and trauma haunt and debilitate survivors. Physical devastation of infrastructure and livelihoods destroys communities and sets them back, sometimes hundreds of, years. Research by Paul Collier and others has found that the occurrence of one civil war doubles the risk of another war breaking out. The current US Ambassador to the UN, Susan Rice, wrote about this phenomenon when she was at the Brookings Institution, calling it a “doom spiral,” where poverty leads to war which leads to more poverty, and on, and on. Energies of multiple generations are diverted away from growth, and towards survival and reconstruction. Foreign investors are deterred by risk. Factions in neighboring countries often take advantage of vulnerable resources and populations. Wars that are fought on your own territory are obviously the worst, because of the destruction and displacement that occurs. Displacement is one of those terms that sounds less harsh than it is. In reality, displacement can mean loss of everything, life on the run or in refugee camps – a complete reversal of fortune. Your neighbors’ peace is also important. Civil wars often cross borders: rebels go on resource hunts in other countries, arms proliferate in the region, refugees strain already fragile (and sometimes hostile) neighboring societies. Ethnic, family, and religious ties can spread violence across boundaries. Outsiders get dragged in because of complicated alliances and proxies, or are motivated by opportunism to enter the fray. The ongoing civil war in the Democratic Republic of the Congo is a perfect case in point, involving not only neighboring Rwanda and Uganda, but spreading regionally at intervals.

### Poverty constitutes and ongoing thermonuclear genocide against the poor that outweighs the damage of nuclear war and gives rise to conflict internationally

Gilligan 1997 [James Gilligan, 1997, Director of the Center for the Study of Violence – Harvard Medical School, Violence: Reflections on a National Epidemic p. 195-6]

The 14 to 18 million deaths a year caused by structural violence compare with about 100,000 deaths per year from armed conflict. Comparing this frequency of deaths from structural violence to the frequency of those caused by major military and political violence, such as World War II (an estimated 49 million military and civilian deaths, including those caused by genocide – or about eight million per year, 1939-1945), the Indonesian massacre of 1965-66 (perhaps 575,000 deaths), the Vietnam war (possibly two million, 1954-1973), and even a hypothetical nuclear exchange between the U.S. and the U.S.S.R. (232 million), it was clear that even war cannot begin to compare with structural violence, which continues year after year. In other words, every fifteen years, on the average, as many people die because of relative poverty as would be killed in a nuclear war that caused 232 million deaths; and every single year, two to three times as many people die from poverty throughout the world as were killed by the Nazi genocide of the Jews over a six-year period. This is, in effect, the equivalent of an ongoing, unending, in fact accelerating, thermonuclear war, or genocide, perpetrated on the weak and poor every year of every decade, throughout the world. Structural violence is also the main cause of behavioral violence on a socially and epidemiologically significant scale (from homicide and suicide to war and genocide). The question as to which of the two forms of violence – structural or behavioral – is more important, dangerous, or lethal is moot, for they are inextricably related to each other, as cause to effect.

# Other Advantages

## Road Safety Adv.

### Trucks significantly diminish road safety

Perakis and Denisis, ‘8 [ANASTASSIOS N. PERAKIS\* and ATHANASIOS DENISIS, Department of Naval Architecture & Marine Engineering, University of Michigan, A survey of short sea shipping and its prospects in the USA, MARIT. POL. MGMT., DECEMBER 2008, VOL. 35, NO. 6, 591–614]

4. Improved road safety. The US National Traffic Safety Administration estimated that 5282 fatalities occurred in crashes involving large trucks in 1998. The majority, about 75% of people killed in large truck collisions, were occupants of other vehicles or non-motorists [37]. In addition to the high private costs due to loss of life, road accidents cause additional costs to society, such as medical costs, police costs, material damages, which are only partially covered by the existing insurance systems. Furthermore, accidents may also generate additional non-recurrent congestion problems when traffic is dense. Sea transportation is the safest mode in terms of fatalities and injuries.

### Trucking results in 5K fatalities yearly

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 5]

USDOT reports that approximately 5,000 fatalities per year were associated with heavy truck crashes over the last two decades (fatalities fell to just over 4,200 in 2008, however). Whereas USDOT, other agencies, and the industry are working hard to improve the safety of heavy vehicles, there are inherent dangers caused by the mixed operation of light and heavy vehicles in the same traffic streams. Our transportation system’s current reliance on land-based transportation modes also creates potential safety problems involving the movement of hazardous materials through urban and residential areas. Although both water and land-based systems are vulnerable to major disruptions due to damage to key structures such as bridges and channels caused by natural or manmade disasters, the redundancy created by Marine Highways can help mitigate the disruptive impact of those events.

## Noise pollution Adv.

### Trucks are the main contributor to highway noise pollution

Perakis and Denisis, ‘8 [ANASTASSIOS N. PERAKIS\* and ATHANASIOS DENISIS, Department of Naval Architecture & Marine Engineering, University of Michigan, A survey of short sea shipping and its prospects in the USA, MARIT. POL. MGMT., DECEMBER 2008, VOL. 35, NO. 6, 591–614]

5. Reduced highway noise. Noise is generally perceived by urban residents as an important problem associated with road traffic, both in highways and local streets. In addition to being unpleasant annoyance, noise con- tributes to health problems. People feel more directly affected by noise than by any other form of pollution. Measuring the magnitude of noise pollution is complex. Volume is measured in acoustically weighted decibels [dB (A)]; a level above 65 dB (A) is considered unacceptable and incompatible with certain land uses in OECD countries. According to the US Environmental Protection Agency (EPA) estimates, trucks are responsible for about two- thirds of the highway vehicle noise emissions. However, noise emissions from highway vehicles are considered not to pose significant human health hazards. There are several characteristics that affect allowable noise levels, such as speed, traffic levels, vehicle weight, and population density. Currently, the EU has established a maximum noise limit of 70dB for urban areas. By removing trucks off the highway, SSS alleviates noise pollution.

### Marine transport solves noise pollution

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 26]

The transfer of freight from trucks and railroads to the Marine Highway in urban areas can help to reduce the noise and vibration caused by heavy trucks and trains as they move through or past residential areas. Vessels typically operate along coastal areas and waterways with only minor noise and vibration impacts, removed by distance from residences and muffled because the vessels travel on water rather than highway pavements (Portland cement concrete and asphalt concrete) or rails. Simply reducing the number of trucks and trains can also improve the livability of communities by reducing public encounters with large freight vehicles on roadways and rail crossings. However, environmental impacts of freight operations in port communities will vary depending upon the local circumstances such as the percentage of freight transferred from vessels and carried by drayage vehicles and rail, the age of the truck and locomotive engines, whether port service equipment has emissions controls, the degree of congestion on highways in port communities, etc.

## National Security/Navy Adv.

### Marine highways provide strategic benefits to military – shores up national security

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 28]

Several aspects of America’s Marine Highway are potentially beneficial to our national security. For example, certain vessels suitable for Marine Highway services, such as RoRos, could provide cost-effective military sealift capabilities at lower cost than alternatives such as procuring and maintaining comparable vessels in the government-owned fleet of cargo vessels. Even in the case of vessels not suited for military sealift, coastwise Marine Highway vessels would provide employment to trained officers and unlicensed seamen, many of whom could be available to crew government-owned sealift vessels in times of war or national emergency.70 Finally, shipbuilding activities required to produce and repair vessels to serve the Marine Highway can assist in maintaining this critical national defense manufacturing base.

### Merchant Mariners key to national security

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 13]

Merchant mariners are critical to the national security and economic needs of the nation. In addition to their importance as human resources for the nation’s transportation system, many play a vital role in for crewing ships during national emergencies and wartime situations (see section below on The Marine Highway and National Defense). Qualified mariners must be ready and available when a national emergency occurs – the time required to train new mariners would make it impractical to mobilize U.S. sealift in an emergency if mariners were not already on hand.

The United States is also well-positioned to meet the demand for new mariners. There are seven merchant marine academies in the United States that graduate over 700 ship officers and engineers annually.33 Private operators, labor unions, and other associations also provide training. Over the last decade, at least 19 maritime high schools began operations in the United States.34 In 2008, MARAD announced a new curriculum for these schools that will help prepare the next generation of high school graduates for maritime jobs.

### Marine highway employs Mariners – ensures preparedness when needed

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 29]

Many of the vessels engaged in Marine Highway activities will not be militarily useful, particularly tug-and-barge units or smaller, shallow draft self-propelled vessels that might be used in the inland waterways.74 Nonetheless, all Marine Highway vessels will employ U.S. mariners. The availability of trained and experienced mariners to crew RRF and other vessels in time of emergency has a high value to the nation, especially given the length of time it takes to train a new worker. Ninety percent of the RRF vessels have a nucleus crew of 10 mariners, kept available at a cost to the government. To operate, however, the RRF ships require full crew complements of nearly 30 highly skilled mariners. A robust Marine Highway fleet would provide an important source of mariners experienced at operating ships to meet sealift mobilization requirements. These mariners would not need to be supported at government expense but rather would be engaged in commercial activities until needed in times of national emergency.

### Marine highways secure Rapid Reserve Force – ensure fast mobilization

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 28-9]

Benefits to Sealift Capability and Resulting Cost Savings

To help ensure U.S. capability to project a global national security presence and sustain military operations abroad, the Department of Defense’s (DOD) Chief of Naval Operations (CNO), in partnership with USDOT’s Maritime Administrator, operates several programs to ensure sealift capability using a mix of government and commercial vessels.71 The U.S. government fleet includes 49 government-owned Ready Reserve Force (RRF) cargo vessels, operated by MARAD and maintained in a readiness posture to allow them to put to sea in a matter of days. An additional 311 commercial U.S.-flag vessels in the Voluntary Intermodal Sealift Agreement (VISA) program are essentially on “retainer” for U.S. government emergency operations. The Maritime Administrator also administers the Maritime Security Program (MSP) which enrolls 60 modern, militarily-useful U.S.-flag commercial ships operating in the international trades to receive stipends and preference cargoes in exchange for access to their vessel capacity and global intermodal transportation logistics networks (MSP ships must also be enrolled in the VISA program). Collectively, U.S.-flag ships, in compliance with cargo preference law and under the leadership of the DOD’s U.S. Transportation Command, have carried more than 90 percent of the U.S. military supplies destined for Middle East combat theatres,72 including Iraq and Afghanistan. The RRF vessels – and their crews – are a critical component of the U.S. Merchant Marine and regularly support defense and emergency response operations. During the first Gulf War, RRF ships carried nearly 700,000 tons of cargo on 123 voyages to the area of operations. Since then, the RRF has supported more than 400 additional operations and exercises for the DOD, including 267 missions for operations in Iraq and Afghanistan, and provided emergency relief for U.S. citizens in the wake of Hurricanes Katrina and Rita. Maintaining this sealift capability solely for these contingencies is costly, however, as large vessels must be procured, laid up in a non-revenue status, and maintained for long periods when not needed. The annual program cost for the 49 RRF ships was an estimated $277 million in FY 2009.73 Moreover, many of the vessels in the RRF are nearing the end of their practical service life and must be replaced by newer ships. The estimated cost for this recapitalization for the entire RRF is in the billions of dollars. Significant costs savings could potentially be realized by coordinating and planning the RRF recapitalization effort in conjunction with the development of high- or medium-speed RoRos for service on America’s Marine Highway. To address this challenge, MARAD and CNO staffs are exploring a “dual use” ship concept that marries commercial capabilities and national defense features (see text box). National defense features include provisions for adequate range, speed, and specific cargo handling and communications capabilities beyond the needs of commercial vessels, but which are necessary to meet the needs of DOD during military mobilizations. These dual use vessels could contribute significantly to the America’s Marine Highway mission, trigger much-needed business for U.S. shipbuilders, be largely self-supporting, and – when activated for emergency – support the nation’s defense mission. The costs to the government of developing such vessels (including paying the cost of DOD requirements without commercial applications) could be less than those involved in the construction, lay-up, maintenance, and mobilization costs involved in building capacity solely for contingency operations. Careful analysis of the cost tradeoffs between using dual use vessels versus conventional RRF vessels for DOD sealift will be required as the dual use ship concept advances.

### Robust commercial ship buildings ensures efficient military ship building – key to naval superiority

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 31-2]

The U.S. shipbuilding industry has long been considered strategically important to the nation, serving distinct military and commercial markets. Because the construction and procurement methods in these two markets are quite different, shipyards tend to specialize in building and repairing either military or commercial ships. The six largest U.S. shipyards perform the great majority of military work (almost 90 percent as of 2000) and do comparatively little commercial work (about 11 percent of the industry's commercial revenues as of 2000).75 The more than 280 commercial shipyards in the United States have a strategic role in their ability to build and repair militarily-useful commercial vessels and can also be called upon to build and repair U.S. military vessels if the need arises. The commercial shipyards also produce large numbers of commercial vessels such as tugs, barges, and service boats that, while not militarily useful for sealift purposes, play an important role in sustaining commercial trade of the nation.

The order book for military vessels alone cannot sustain the U.S. industrial shipyard base. This is particularly true for the commercial shipyards, and there is growing concern about the ability of some of the six largest shipyards to survive on military orders. As pointed out by members of the shipbuilding industry, any lull in commercial vessel construction can adversely impact our national shipbuilding capabilities, as skilled workers are laid off and efficiencies and institutional knowledge gained during the production process are lost. Construction of self-propelled Marine Highway vessels represents the potential for a substantial new market for U.S. shipyards, with some estimates ranging up to 30 vessels for long distance routes.76 This new activity would be particularly important because a serious gap in commercial self-propelled vessel shipbuilding is forecast, which is illustrated in Figure 5. Vessel production for Marine Highway services could help fill this gap in production and contribute substantially to sustaining this important national industrial capacity. In addition, by establishing a more stable order book for new ships, shipyards will be in a better position to train and retain the skilled labor needed to lower productions costs and become more competitive. The jobs these orders would generate are needed by American workers as well. The Bureau of Labor Statistics reported that, as of 2009, national employment in shipbuilding had fallen by 3 percent since 2008.77

## Hazardous Materials Adv.

### Marine highways ensure safe transfer of hazardous materials

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 33]

Use of America’s Marine Highway can improve public safety and security via several important mechanisms. By shifting freight from trucks on congested highways, the Marine Highway could lower the exposure of the public to the adverse effects of truck crashes. It is well-suited to the safe transportation of hazardous materials and reduces the need to transport these materials through population centers, thereby minimizing the risk to the public from releases of toxic cargoes. It also provides potential capacity in times of emergency for the provision of passenger transportation and freight service even after other surface movements are disrupted, facilitating response and recovery to both natural and manmade disasters.

### Hazmat transfer safer on water than land

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 34-5]

The transportation of hazardous materials (hazmat) is naturally more complex than the movement of non-hazardous freight. The most hazardous of these materials are classified under Toxic by Inhalation Hazards (TIH). The safety, security, and liability issues surrounding the movement of these materials combine to encourage their transport by means that: a) provide the greatest separation between populations and the hazmat; and b) present the lowest risk of a release. While release of hazmat, especially TIH, is an infrequent occurrence, an incident can have very serious consequences. Not only does it endanger human lives, health, and the environment, it also has the potential to incapacitate critical transportation corridors or entire areas in the event of damage to infrastructure or forced evacuations. America’s Marine Highway offers several strengths in the carriage of TIH and other hazmat, including: ␣ An established safety record in the carriage of cargo that compares favorably with highway and rail;83 ␣ Extensive experience in the movements of some bulk TIH products such as anhydrous ammonia and chlorine; ␣ The ability to carry hazardous cargo at sea or on rivers that typically provide significant separation from residences and businesses in the event of an accidental release; ␣ Little vulnerability to bridge or tunnel failures, including acts of sabotage targeting these structures; and ␣ Lower cost of transportation, including economic and societal costs. The high potential costs of moving hazmat by land were clearly illustrated on July 18, 2001, when a CSX train derailed in Baltimore’s Howard Street Tunnel causing a chemical tank car to rupture and catch fire. The blaze spread to adjacent rail cars and burned for five days, which the National Transportation Safety Board reported caused $12 million in response and cleanup costs.84 The fire damaged infrastructure (including the street system above the tunnel) and shut down parts of the city. Additionally, the accident blocked the primary north-south rail corridor that serves the nation’s I-95 freight corridor – a corridor that serves as a key route for the movement of hazmat, freight, and passengers. If this cargo had been moved along the Marine Highway corridor that runs adjacent to I-95, a release of this type, had it occurred, would likely have been much less disruptive to adjacent surface transportation systems. Other examples of hazmat incidents illustrate the danger and high potential cost of land transportation of hazmat cargo.85 As an alternative to land-based movement, water transportation of TIH and other hazmat materials could mitigate the risk of TIH releases, in large part by bypassing large cities and residential areas altogether. However, its full potential in this regard is not being met in part because many of the true costs of rail transportation of TIH are not borne by TIH shippers under current U.S. transportation policy. In 2007, 64 percent of TIH moved by rail, amounting to 105,000 rail-car shipments.86 Not all of this carriage is voluntary on the part of rail carriers, however. Under Federal law, the railroads have common-carrier obligations to carry hazmat cargo and are limited in their ability to raise their rates to cover the costs of the risk (e.g., higher insurance costs) of carrying such cargoes.87 As a result, shippers are able to move TIH cargo at rates that may be below the actual costs to railroads once the cost of insurance and risk are included.88

# Solvency

## Solve – Subsidies Spec.

### USFG should subsidize sea shipping

Connor 4 [Peter H. Connor, The Development of Short Sea Shipping in the United States: A Dynamic Alternative

Submitted to the Department of Ocean Engineering in Partial Fulfillment of the Requirements for the Degree of

Master of Science in Ocean Systems Management at the Massachusetts Institute of Technology, June 2004]

The U.S. should provide subsidy programs to promote short sea shipping. Europe's example of this is their Marco Polo Program. This program encourages the removal of trucking from roadways by providing start up funding to new companies that want to provide this type of service. The U.S. through its Maritime Administration has begun to promote short sea shipping. It has hosted two annual short sea shipping conferences to begin industry wide discussion. The initial aim was at shipping between the U.S. mainland and offshore territories, but within the last year, MARAD has tried to integrate discussion with Canada and Mexico. Though some companies claim to have some short sea services in place, the Port Inland Distribution Network (PIDN) being built out of New York is aimed at providing short sea shipping between the Port of New York/New Jersey and Albany and will be one of the first SSS networks since the conferences have been held.

### No shift in the squo - Federal subsidy key to cost competitiveness

Cambridge 4 [Cross Border Shortsea Shipping Study: Final Study, prepared for Transport Canada prepared by Cambridge Systematics, Inc. with Moffatt & Nichol Engineers, May 2004, http://resources.wcog.org/border/sss\_phase1report.pdf]

It should be noted that because of the newness of the service, issues associated with reliability and other service characteristics, shippers typically expect shortsea services to be offered at significant discounts as compared to trucking. Either congestion at the border will have to become much worse or operations will need to be subsidized if shortsea shipping is to be truly competitive with trucking in most instances given the current cost structure.

### Subsidies deter shippers from choosing trucking

Aikins 9 [Larry R. Aikins, Commissioner of Port of Red Wood City Port Commission Meeting Minutes, BOARD OF PORT COMMISSIONERS, REGULAR MEETING, 4/8/09, http://www.redwoodcityport.com/p7iq/html/Minutes2009\_4\_8.htm]

Commissioner Aikins commented that until traffic has reached capacity limitations, people are not going to feel the real urgency of this situation. We are already pretty much at limitations for rail traffic using the LA/LB to Bay Area corridor. Trucks will be the main competition to Marine Highway transportation. As soon as fuel prices rise again to $4.00+ per gallon, then the economics will make sense. The market will eventually dictate that shipping by sea is the practical way to go. If the Federal Government stepped in with subsidies to offset the cost of using trucks on highways and provided funds to marine highway shippers, the process of diverting truck traffic would be accelerated.

### Subsidies solve – Marco Polo program proves

Madden, 12 [Rich Madden, gCaptain, 1/25/12, http://gcaptain.com/forum/youblog/8017-americas-marine-highway.html]

Leadership of the U.S. Maritime Administration aside, what is needed is a plan. Fortunately, the European Union (EU) has provided a prime example with the European Commission’s “Integrated Maritime Policy.” This policy strives not to replace policies on specific maritime sectors, but to coordinate them in order to save time and money. The EU has adopted a long term outlook on shipping with their plans and policies extending out 10 years. They have placed specific emphasis on short sea shipping with the creation of the European Shortsea Network (ESN). Through the ESN, the different countries are able to coordinate their activities, as well as steer prospective customers towards service providers. Unfortunately, even with the best planned and coordinated short sea shipping system, there is a need for government subsidies, at least in the startup period. The European Commission has addressed this need with the Marco Polo program. The Marco Polo program provides grants in the following areas : Modal shifts from road to rail and waterborne systems Catalyst actions which promote modal shift Motorways of the sea between major ports Traffic avoidance Common learning actions The Marco Polo budget between 2007 and 2013 was close to $590 million – not extravagant on an annual basis. It is however impressive, in that the monies are in the form of grants, not loans to be repaid. The U.S. Maritime Administration and Mr. Matsuda do not have to reinvent the wheel. The framework of a viable maritime policy and specifically, a shortsea shipping policy exists and could be implemented in relatively short order. The possibility of long term job creation and energy savings should be enough to make the current Administration and representatives of any Congressional district with a navigable waterway salivate. The subsidies involved would appear to be relatively small in comparison to the overall transportation budget. So, in the end, the question remains – Why do we not have a comprehensive Marine Highway system in the U.S.?

### Subsidies solve – even a small subsidy produces a shift to cleaner transport and increases the economy

Waterway Journal 11 [Editorial in the Waterway Journal Weekly, 3/7/11, http://www.waterwaysjournal.net/news030711.html]

Once again, we delve into the failure of the Obama administration to support maintenance and modernization of the inland waterways infrastructure. The marine industry and related components are being held hostage by an administration that spoke favorably about inland waterways transportation but has not followed through. We are reminded often that foreign governments are investing in water transportation while Nero fiddles and Rome burns. Maritime leaders are sometimes asked why we are not improving and making more use of our waterways. Unfortunately, these queries have been presented for more than a decade. It is bewildering to us because President Obama has stressed continually the importance of creating jobs to ease unemployment woes. Improving waterways infrastructure would create jobs and help us to catch up on waterways maintenance that has been lagging for decades. It is bewildering to us because government insists that protecting the environment is one of its most important goals. Water transportation is the most environmentally friendly mode of transport in existence other than, perhaps, pipeline. It is bewildering to us because clean air and reducing polluting emissions is near the forefront of the administration’s agenda (tax and trade legislation and clean air regulations by the Environmental Protection Agency). Increased use of water transportation along America’s marine highways—not just those in the newly touted “highway” program—would help to stem the rapidly increasing number of trucks that travel our highways. It would reduce fuel consumption and save on other natural resources (rubber, oil, et al). It is bewildering to us because highway safety is on the lips of many in government, and increased use of water transport would help to stem the growing congestion on highways, thus helping to prevent accidents. It is bewildering because a vast amount of U.S. exports and imports depend upon water transportation, which is the cheapest form of transportation where it is available. While trains and barges often carry similar cargoes, they also carry cargoes particularly suited to the individual modes—less costly bulk materials, and overly large and heavy cargoes for barges. While these modes are competitive, they are also complementary, and in many instances cannot exist without each other. We know Congress is aware of all we have delineated here. We know a majority of congressional delegates have in the past given approval to a new Water Resources Development Act, which now has gone nowhere. The president and the administration are the stumbling blocks. Infrastructure repairs are faltering, and unemployment figures remain higher than the president predicted they would be. A good guess would be that up to 90 percent of all products offered in some major stores are made in foreign lands. Poor government management has caused many of the problems we face today. On March 1 the Government Accountability Office released a report covering only a portion of government activity, and it identified hundreds of billions of dollars in duplication and waste. The findings support the contention that government is too large to be efficient. The GAO reported it had gone over only a portion of government operations and found some $200 billion in waste. In the meantime, while Rome is burning (or we are sleeping) we read that Russia, China, Colombia, Argentina, Brazil and India are subsidizing their marine highways equally instead of favoring gas-guzzling trucks. One reader notes that heavy trucks—not passenger cars—destroy our bridges and highways. “Why build ever more highways and bridges when we don’t use our neglected marine highways?” he asks. “Waterways are the greenest of green transport systems.” In European news, major organizational entities have issued a joint manifesto urging the European Union to “lift all barriers to make full use of its existing asset—the waterway network.” Inlandnavigation.org carries news of dozens of projects focusing on the shifting of cargo to water transport and a wide variety of efforts being undertaken to enhance this goal. We have been reporting these facts for years. Apparently few pay attention. What’s wrong with this picture? What’s wrong is that for a small fraction of the amount of money our government has invested in economic stimulus (much unsuccessfully), our inland waterways system could be entirely rehabilitated and improved, thus protecting the environment, reducing transportation costs and increasing highway safety. Why doesn’t the administration do it?

### Government subsidies to shippers compensates for HMT, Title XI and the Jones act – leads to a competitive marine transport industry

Swigart, et al., 11 [Stan L. Swigart, James R. Amdal, & Tara Tolford, Prepared by: Gulf Coast Research Center for Evacuation and Transportation Resiliency in the Merritt C. Becker Jr. University of New Orleans Transportation Institute, The LSU / UNO University Transportation Center, New Orleans Metropolitan Inland Waterway Container Transport (IWCT) Feasibility Study, September 2011, p. 20-21, http://www.norpc.org/assets/pdf-documents/studies-and-plans/RPC\_COB\_Report-Final\_as\_of\_oct\_10.pdf]

Several of the findings regarding IWCT development, in the US and abroad, are clear and consistent. Supportive government policies must be in place which put marine transport on even footing with trucking and/or rail transport. The vessel fleets must match market needs to achieve efficiency and provide adequate frequency. IWCT services must be reliable and cost competitive (Kruse and Hutson 2010; McCarville 2003; Weigmans 2005; Perakis and Denisis 2008). Kruse and Hutson (2010) define the most important policy concern as the need to modify or compensate for the HMT, Title XI, and the Jones Act, possibly by providing tax credits for marine transport operators, providing direct incentives for shippers (which, they claim, is more effective than incentivizing operators) or allowing the use of Congestion Mitigation Air Quality (CMAQ) funds for marine projects which reduce surface transportation congestion. CMAQ funds have long been used for projects which substitute train travel for truck travel, and studies indicate that the public benefits of truck-barge substitutions are at least as great (McCarville 2003). The ports of Houston and New York have already successfully accessed these funds through SAFETEA for specific projects (McCarville 2003). Kruse and Hutson also stress the need to eliminate current subsidies for the trucking industry and to make marine highway programs more ‘trucker-friendly.’ They go on to suggest the use of the EU’s Marco Polo program as a model for encouraging multimodalism on a national scale. McCarville adds that existing programs which could be beneficial, include MARAD’s Ship Operations Cooperative or Cargo Handling Cooperative Program, if they were better used, and better funded, to serve inland waterway freight development. Such incentives and policy actions, particularly if concentrated on a few key corridors with the greatest industry potential, would help to reduce the ‘chicken-and-egg’ dilemma which has thwarted efforts to implement IWCT to date. These policies, would also help improve the public perception of this transport mode, which has been damaged by public investment in failed operations (Kruse and Hutson 2010; McCarville 2003; Weigmans 2005). Examples of domestic successes do exist. On the Columbia/Snake River waterway, a small but successful modified hub-and-spoke IWCT network is operational. This network was developed to provide container transfers from Asian ocean vessels to barges in Portland, then distributing boxes to various inland ports for export cargoes, primarily agricultural commodities (Kruse and Hutson 2010). The Columbia/Snake River IWCT network handled 50,000 containers in 2000, up from a starting point of 125 containers in 1975 (McCarville 2003). Current volumes are significantly less than the peak in 2000 primarily due to ocean carriers cancelling the Port of Portland as a call on their voyage rotation.

IWCT = Inland water container transport

### Incentives Solve

Kruse and Hutson, 10 [C. James Kruse, TEXAS TRANSPORTATION INSTITUTE, Houston, TX & Nathan Hutson, CENTER FOR TRANSPORTATION RESEARCH, Austin, TX, National Cooperative Freight Research Program, Sponsored by the Research and Innovative Technology Administration and part of the Transportation Research Board of the National Academes, July 2010, http://onlinepubs.trb.org/onlinepubs/ncfrp/ncfrp\_rpt\_005.pdf, p. 8]

The general consensus of the freight community is that without active federal-level involvement, NAMH will likely penetrate only in certain niche markets driven by geography and energy costs. However, for NAMH to truly make an impact in lowering congestion and improving the total energy and environmental performance of the freight sector, a national or North American strategy is clearly needed. In a 2002 report, (3) FHWA made the following observation: Global market logistics rely heavily on the performance of infrastructure owned and operated by the public sector. Understanding the motivation of logistics decisions and their local implications is a critical point of departure for a national or multinational effort on fostering trade. Identifying freight bottlenecks, “solving them,” and establishing market conditions that provide “free access” should be an important focus of regional, state, national, and international planning/policy efforts. . . . Public investment targeted at freight movement should adopt a framework in which the private sector is provided incentives to choose what is best for their business within the context of achieving public goals.

## Solve – SSS General

### Marine transportation saves the world -

Spring, 11 [MS. MARGARET SPRING, Chief of Staff, National Oceanic and Atmospheric Administration 2011 Chair for the CMTS Coordinating Board, “CMTS Coordinating Board Chair’s Point of View,” in The Coast Guard Proceedings of the Marine Safety and Security Council, “The Marine Transportation System,” Summer 2011, www.uscg.mil/proceedings, p. 5]

Marine transportation quite literally drives the U.S. economy, and the way in which maritime commerce develops in the future will have a significant influence on the long- term health of our planet and its people. Well-planned maritime commerce can mini- mize harm to marine wildlife and reduce the nation’s carbon footprint by moving freight with much less energy than other modes. However, without adequate prepara- tion or attention to risk and hazards, marine transportation activities can result in loss of life, ecosystem harm, financial liability, and other costs.

### SSS helps national transportation capacity, increases port productivity, revives US maritime industry and produces corporate responsibility

Perakis and Denisis, ‘8 [ANASTASSIOS N. PERAKIS\* and ATHANASIOS DENISIS, Department of Naval Architecture & Marine Engineering, University of Michigan, A survey of short sea shipping and its prospects in the USA, MARIT. POL. MGMT., DECEMBER 2008, VOL. 35, NO. 6, 591–614]

Additional advantages of SSS In addition to the above environmental and societal benefits, SSS has also the following advantages: 1. Expansion of the transportation network capacity. SSS can add more capacity to the stressed freight transportation network of the US in an efficient way. Given that the sea lanes or ‘marine highways’ are in theory limitless, SSS is by far the easiest to expand transportation system. 2. Port productivity improvement. By swiftly transhipping containers out of a hub-port, using feeder vessels and container barges, SSS can increase the capacity of the port terminals, reduce the ‘dwell time’ for containers in the yard and overall improve the productivity of the port. 3. Revival of the US maritime sector. The introduction of new waterborne transportation will revitalize the maritime sector in the US. There will be new shipbuilding opportunities for new short sea vessels and therefore employment opportunities as well. The new satellite terminals will also create more jobs for the local communities. 4. Corporate social responsibility. The significant environmental and social advantages of SSS over the other transportation modes can lead to different transportation patterns and change the attitudes of the transportation users, i.e. shippers. Under the corporate social responsibility (CSR) concept, businesses make their decisions considering also the interests of other parties, such as the society and the environment, and therefore taking responsibility for the impact of their activities. For example, companies are taking further steps to improve the quality of life for the local communities and the society in general or help the environment. Proponents of CSR argue that corporations gain in the long term in multiple ways by operating with a perspective broader than their own immediate, short-term profits. Several studies have found a positive correlation between social/environ- mental performance and financial performance [45]. In the increasingly conscience-focused marketplaces of the twenty-first century, the demand for more ethical business processes and actions is increasing and additional pressure is applied on almost every industry to improve its business ethics. Often it takes a crisis to precipitate attention to CSR, such as the crisis in the US freight transportation network. It is also suggested that stronger government intervention and regulation, rather than voluntary action, are needed in order to ensure that companies behave in a socially responsible manner. The freight transportation industry is a competitive industry. Cost and time are the two main decision-making criteria for the choice of mode. Transportation companies compete on cost and on the level of service been offered, operating under certain standards and regulations. However, the increased awareness on CSR may force them to move further than their compliance with environmental standards. Shippers will start looking at their environmental impact of their transportation activities and may turn their attention to greener modes. SSS has to promote its image as a sustainable mode of freight transportation and attract environmentally aware shippers. Recent surveys however have showed a lack of awareness about the advantages of SSS among shippers, shipowners, and the public as well [46].

### SSS reduces congestion and improves air quality and port efficiency

Perakis and Denisis, ‘8 [ANASTASSIOS N. PERAKIS\* and ATHANASIOS DENISIS, Department of Naval Architecture & Marine Engineering, University of Michigan, A survey of short sea shipping and its prospects in the USA, MARIT. POL. MGMT., DECEMBER 2008, VOL. 35, NO. 6, 591–614]

SSS offers many public benefits. Removing heavy trucks from the highways reduces congestion on major trade corridors, contributes to the decrease of road accidents on highways and improves the air quality around the metropolitan areas. Additionally, SSS can alleviate the capacity and efficiency problems at US ports, by swiftly dispatching containers to satellite feeder ports. However, there are administrative and operational barriers. Certain measures from the federal government, such as the waiver of the HMT fee, and from other stakeholders in the transportation industry could facilitate the expansion of SSS in the US. The studies conducted in Europe and in the US revealed many common issues and challenges that should be addressed, in order SSS to be a successful alternative mode for freight transportation.

## Solve – Empirics: Europe

### Europe proves solvency

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 9-10]

There is good precedent for effective governmental action to support short sea shipping. The European Union (EU) is faced with many of the same issues as is the United States regarding surface transportation congestion, environmental impacts of transportation systems, and energy conservation. EU leadership has recognized that greater reliance on waterborne transportation is an important means of reaching its goals regarding environmental sustainability and economic competitiveness. It therefore has an active and longstanding policy of promoting short sea shipping and has invested millions of euros to promote greater use of its coastal and inland waterways, including: ␣ funding through the Trans-European Transport Network (TEN-T), the Marco Polo programs (designed to reduce congestion and improve the environmental performance of the intermodal transport system), the European Regional Development Fund, and State funding sources; and ␣ establishment of the Motorways of the Sea program (part of the TEN-T), the Program for the Promotion of Short Sea Shipping, and other and predecessor programs.17 As a result, container barge transportation has seen strong growth, with annual European traffic crossing the one million TEU level by 1991, the two million TEU level by 1996, and the three million TEU level by 2000.18 Estimated barge traffic in 2004 reached four million TEU.19 Short sea shipping (here including bulk materials as well as non-bulk) currently represents 40 percent of intra-EU exchanges in terms of ton-kilometers.20 There are significant differences between freight transportation systems of Europe and the United States. Europe’s rail system is less efficient than the U.S. rail system for moving freight, and Europe’s geography has led to many of its largest industrial centers being in close proximity to water.21 Nonetheless, the strong growth of short sea shipping of containers in Europe highlights both the ability of short sea shipping to compete with land-based transportation modes and the potential benefits of government support to this mode. MARAD is closely monitoring this successful European example.

## Solve – Short Time Frame

### Can solve in a short time

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 969]

The expanded use of our waterways can only incrementally improve each of the challenges identified in this report. Moreover, there are many markets where highway and rail will remain the preferred or only choices. America’s Marine Highway should, however, be viewed as a logical next step as we address our larger surface transportation and funding challenges. In many cases, these benefits can be quickly realized due to pre-existing port and waterway infrastructure and the rapid start-up times of Marine Highway services, particularly when compared to the time required to fund, engineer, construct, and repair much of our land-based transportation infrastructure system.

## Solve – Now Key

### Now key – Panama Canal expanding in 2014

Cullather, 11 [MR. JOHN M. CULLATHER former Staff Director, Coast Guard and Maritime Transportation Subcommittee

“Congressional Support of the Marine Transportation System Helping the MTS expand and adapt to its growing needs.” In The Coast Guard Proceedings of the Marine Safety and Security Council, “The Marine Transportation System,” Summer 2011, www.uscg.mil/proceedings, p. 21-2]

Our marine transportation system must continue to ex- pand and adapt to the growing needs of U.S. manufac- turers, importers, exporters, and other shippers. Some of the challenges on the horizon include a widening of the Panama Canal in 2014, bringing with it the possi- bility that cargoes will flow differently to, from, and around the United States.

Greater amounts of agricultural commodities are trans- ported in containers to keep unique strains of farm pro- duce separated from the general commodity market. Our container market, designed to deliver goods to urban centers, will be challenged to get containers to rural locations at an economical price. Also, as con- tainer ships continue to grow in size, what is the obli- gation of the federal government to provide deeper channels for these ships?

# AT: On-case Arguments

## AT: Hurt Ecosystem

### Strict regulations prevent spills and ensure fast cleanup of environmental problems – no escalation

AWO 6 [American Waterway Operators, The National Trade Association of the Tugboat, Towboat and Barge Industry: Leaders in Safety and Environmental Protection, 2006, www.americanwaterways.com/about\_industry/leaders\_safety.pdf]

All vessels are subject to very strict prohibitions on the discharge of oil and solid waste into the marine environment; AWO members support vigorous enforcement of these laws and penalties for flagrant violators. Tank barge owners must demonstrate evidence of sufficient financial responsibility to pay for damages in the event of an oil or hazardous substance spill and must develop detailed spill response plans. Under the Oil Pollution Act of 1990, all tank barges must be equipped with double hulls by the year 2015; these are currently being phased in, and already 80 percent of tank barges are equipped with double hulls. The Coast Guard may board a barge or towing vessel at any time to verify compliance with these standards.

### No spill over to their species impact

Kimbrell 2 – [Andrew Kimbrell Executive Director of the International Center for Technology Assessment and the Center for Food Safety, The Fatal Harvest Reader: The Tragedy of Industrial Agriculture, p. 83-4]

There is a second practical problem with assigning value to biological diversity. In a chapter called “The Conservation Dileema” in my book The Arrogance of Humanism, I discuss the problem of what I call nonresources. The sad fact that few conservationists care to face is that many species, perhaps most, probably do not have any conventional value at all, even hidden conventional value. True, we cannot be sure which particular species fall into this category, but it is hard to deny that a great many of them do. And unfortunately, the species whose members are the fewest in number, the rarest, the most narrowly distributed – in short, the ones most likely to become extinct – are obviously the ones least likely to be missed by the biosphere. Many of these species were never common or ecologically influential; by no stretch of the imagination can we make them out to be vital cogs in the ecological machine. If the California condor disappears forever from the California hills, it will be a tragedy. But don’t expect the chaparral to die, the redwoods to wither, the San Andreas Fault to open up, or even the California tourist industry to suffer – they won’t. So it is with plants. We do not know how many species are needed to keep the planet green and healthy, but it seems very unlikely to be anywhere near the more than quarter of a million we have now. And if we turn to the invertebrates, the source of nearly all biological diversity, what biologist is willing to find a value – conventional or ecological – for all 600,000-plus species of beetles?

### Even if true we have a comparative advantage over trucking

NG 2009 (The Environmental & Economic Benefits of Short Sea Shipping by ‘Container-On-Barge’ JACOB NG UNDERGRADUATE STUDENT DEPARTMENT OF NAVAL ARCHITECTURE AND MARINE ENGINEERING UNIVERSITY OF MICHIGAN ANN ARBOR, MICHIGAN SUPERVISED BY: PROF. A.N. PERAKIS, Ph.D. SNAME FELLOW MICHIGAN PHOENIX MEMORIAL ENERGY INSTITUE FELLOW DEPARTMENT OF NAVAL ARCHITECTURE AND MARINE ENGINEERING UNIVERSITY OF MICHIGAN ANN ARBOR, MICHIGAN, 2 MAY 2009, <http://towmasters.files.wordpress.com/2011/03/the_environmental__economic_benefits_of_sss_by_cob_2009.pdf>, pg5-7/arouse)

Energy efficiency is important to the consideration of environmental friendliness. Fossil fuels are a non-renewable form of energy and continued use will eventually lead to their depletion. Greater fuel consumption will also increase the amount of air pollution generated. MARAD estimates that for 1 traditional barge tow carrying 456 FEUs utilizing 75 barrels of oil, 228 double-stacked rail cars utilizing 300 barrels of oil and 456 trucks utilizing 645 barrels of oil are respectively needed to transport the equivalent capacity4. In specific terms of fuel efficiency, inland shipping is the most energy efficient form of transport. The Texas Transportation Institute published research on fuel efficiency and reported that inland river towing as an alternative means of transportation is 3.7 times more fuel efficient than trucking and 1.4 times more fuel efficient than rail. With energy prices poised to remain at high levels from burgeoning global demand, SSS can provide a less expensive alternative to providers and users of the service. Table 3: Fuel Efficiency Comparison (Texas Transportation Institute)5 There is increasing global focus on the effects of air pollution. Carbon Dioxide (CO2) and Methane (CH4) are major greenhouse gases that increase temperatures by trapping heat within the Earth‟s atmosphere. This temperature rise causes widespread effects on climate change and ecosystems. Sulfur Dioxide (SO2) is an irritant in its original form. SO2 also combines with moisture in the air to form acidic precipitation that takes the form of acid rain. Acid rain has a devastating effect on fauna as it changes the pH of soil. There has been extensive destruction to the Scandinavian forests due to acid rain. Oxides of Nitrogen (NOX) cause respiratory and eye irritation. NOX also leads to the formation of photochemical smog that is seen in cities like Los Angeles and Beijing. The OECD reports that maritime transport produces less air emissions generally in comparison to transportation by truck/rail. Although shipping produces more SO2 pollution, this is poised to decrease in response to more stringent maritime pollution regulations in the near future. Table 4: Emissions in grams/tonne-km for Surface Transportation Modes (REALISE)6 The effects of road congestion, although hard to quantify, play a significant role in the analysis of the environmental advantage that SSS has over truck/rail. It is estimated that trucks carry 60% of domestic general cargo tonnage and are a major cause of highway congestion7. The Texas Transportation Institute estimates that traffic congestion caused a $78 billion drain on the U.S. economy in 2007 in the form of 4.2 billion hours of lost time and 2.9 billion gallons of wasted fuel8. Congestion results in a need for creation, expansion and maintenance of road infrastructure. This is a drain on the national budget. There are also major congestion issues at U.S. port terminals serving international shipping lines. International ocean carriers unload their cargo at coastal U.S. ports. The cargo is left mainly to be transported by trucking to its final destination. However, the rapid growth in U.S. trade has led to the port terminals struggling to cope with over-utilization of existing facilities. This has fostered intermodal transportation inefficiencies whereby trucks cannot pick up their cargo in time due to port congestion which disrupts the entire supply chain process in logistical planning. This problem is most notably present at the Ports of Long Beach and Los Angeles. Transferring container volume from these congestion zones to the available river and coastal areas is an option for reducing this problem. The adverse effects of congestion are rising due to increasing consumption of goods and resulting trade flows. SSS can take some of the load off congested U.S. highways and major ports to utilize the large cargo carrying capacities of inland waterways. Less road congestion also leads to reduced noise pollution. Noise pollution is an environmental health hazard in the long run. The other benefit that SSS offers is a safer form of transportation as compared to trucking. By reducing road traffic and congestion, there will be better highway safety statistics. As more vessels are added to the inland waterways more accidents will happen but the history is that safety per ton mile on barges is far superior to trucks and trains. Thus, for the transportation of the same amount of product, there will be fewer accidents.

## AT: Species Loss

### Measures to limit ship strikes have proven to be effective

Kaltenstein  ’11 [John Kaltenstein is Clean Vessels Program Manager for Friends of the Earth - U.S. Kaltenstein works predominately on ship air pollution issues. Expanding Short Sea Shipping in California Environmental Impacts and Recommended Best Practices. 2011. Pages 8&9 July 14, 2012]

Deaths of cetaceans caused by ship strikes along the California coast occur relatively frequently. In 2007, four blue whales were struck and killed off the coast of California (NMFS 2009). From July through November 2010, five whales were killed in California waters due to ship strikes (Drake 2010). The actual number of whales killed and severely injured is undoubtedly higher, as the majority of ship strike incidents go undetected or unreported, or necropsies are inconclusive. In addition to endangered blue whales, the National Marine Fisheries Service (NMFS) has identified ship strikes as a threat to humpback, fin, and right whales (Abramson et al. 2009). Nevertheless, measures to limit strikes have been effective, especially on the East Coast of the United States to protect North Atlantic right whales. The United States Coast Guard (USCG) and NMFS have adopted measures there such as seasonal Areas to be Avoided, modified traffic separation schemes, and fixed and dynamic speed limit areas to help conserve North Atlantic right whales (see NMFS 2008b; Coast Guard 2007).

## AT: Invasive Species

### Ballast water regulations are stopping the advance of invasive species

Marine Delivers ’06 [Bi-national industry collaboration, “Ballast Water Intiatives”, references laws made in 2006, <http://www.marinedelivers.com/ballast-water-initiatives>, ao]

The marine industry is committed to reducing, and eventually eliminating, the role it plays in the movement of aquatic nuisance species. Today, the Great Lakes - St. Lawrence Seaway System has the most stringent ballast water management and inspection regulations in the world. Since the latest measures were introduced in 2006, no new aquatic nuisance species have been discovered in the Great Lakes due to shipping. The marine industry is currently awaiting U.S. and Canadian government approval on proposed international regulations requiring installation of ballast water treatment technology aboard all ocean-going vessels.

### Coast Guard creates stricter rules to prevent more invasive species

GCaptain 3/17 [World leader in professional maritime news by maritime professionals, “USCG Unveils Long-Awaited Final Rule for Ballast Water Discharges and Treatment”, 3/17/12, <http://gcaptain.com/uscg-unveils-long-awaited-final/>, ao]

Under the new rule, the Coast Guard established a standard for the allowable concentration of living organisms, i.e. a standard for the acceptable number of living organisms per volume of water, in ballast water discharged from ships in U.S. waters. The Coast Guard is also amending its regulations for engineering equipment by establishing an approval process for ballast water management systems.¶ “These new regulations will aid in controlling the introduction and spread of nonindigenous species from ships’ ballast water,” said Jeffrey Lantz, director of the Coast Guard’s Office of Commercial Regulations and Standards. “This final rule establishes a ballast water discharge standard that is protective of the marine environment and is also consistent with the discharge standard adopted by the International Maritime Organization in 2004.”¶ The Final Rule was reached through the support of findings from reports conducted by the National Academy of Sciences and the EPA Science Advisory Board in 2011, and are the most stringent requirements that vessels can practicably implement and that the Coast Guard can enforce as of now.

## AT: Underwater Noise

### Lowering noise is already underway – and it’s beneficial for companies as well.

Kaltenstein  ’11 [John Kaltenstein is Clean Vessels Program Manager for Friends of the Earth - U.S. Kaltenstein works predominately on ship air pollution issues. Expanding Short Sea Shipping in California Environmental Impacts and Recommended Best Practices. 2011. Pages 8&9 July 14, 2012]

Underwater ship noise is typically an underestimated environmental impact from shipping operations. In the debate over the environmental profile and benefits of short sea shipping, little if any mention is made to underwater noise. This may be due to the fact that shipping is already the largest anthropogenic contributor to ocean noise (see Polefka 2004). Short sea shipping’s contribution to underwater noise could be seen as small by comparison and thus insignificant.15 However, sonic pollution from increased short sea shipping will only exacerbate existing noise-induced problems for marine mammals, such as communications masking, habitat avoidance, and stress (see Clark 2010; Tyack 2009; United States 2008). Fortunately, efforts are underway to reduce underwater noise from shipping. The International Maritime Organization (IMO) is developing voluntary guidelines for ship-quieting technologies as well as possible operational and navigational practices (United States 2010). And classi-fication societies are also engaging on the matter (e.g., DNV’s silent notation). 16 The majority of noise from a ship derives from propeller cavitation, or the rapid creation and bursting of air bubbles due to propeller rotation. The sound produced by cavitation is often in the low-frequency range, which is used extensively by whales and other marine mammals for communication (Hildebrand 2005). Thus, significant attention has been focused on reducing propeller cavitation via design or structural modifications, such as the use of large, slow turning propellers (see Southall 2010). Noise is generated, as well, from non-cavitation sources such as machinery vibrations and hull interaction with water. Options available for reducing noise related to hulls include new hull forms, enhanced underwater appendages (e.g., trailing edge, bow thruster), and dampening coatings (United States 2010). On-board machinery can be quieted through passive and/or dynamic equipment mounts for engines and other systems, equipment isolation procedures, acoustic insulation, damping tiles, and low-noise profile equipment (Id; Southall 2010). Further, operational changes to reduce underwater noise could include speed restrictions, load variations, and maintenance (United States 2010). Reducing underwater noise may also increase efficiency, thereby lowering fuel consumption and limiting harmful air emissions.

### Air bubbles have proved to solve for underwater noise

Reyff ’09 [James Refff: Project Scientist at Illingworth & Rodkin, Inc. TR NEWS 262 MAY–JUNE 2009. Reducing Underwater Sounds with Air Bubble Curtains Page 31. July 15, 2012.]

Air provides an effective barrier to sound propagating through water, because of the difference in density between air and water. Air bubble curtain systems have been used to reduce underwater sound pressures from explosions or from other sources of high-amplitude sounds.

## AT: No Shift

### Plan incentives the shift – usfg action makes the market

TRB ’04 [Transportation Research Board, division of the National Research Council, “The Marine Transportation System and the Federal Role: Measuring Performance, Targeting Innovation”, National Academies Press, February 2004, http://www.nap.edu/openbook.php?record\_id=10890&page=65, pg. 64-65, ao]

The major roles and responsibilities of the federal government related to the nation’s marine transportation system (MTS) are reviewed in this chapter. The federal government’s influence on the MTS is multifaceted and far-reaching. Federal policies and programs concerning international trade, agricultural production, and many other areas affect the demand for and supply of marine transportation services, the structure of the maritime industry, and the efficiency with which it operates. The federal government has a direct role in the provision of much of the infrastructure and support services needed for the MTS to accommodate the nation’s commerce. It also has a lead role in ensuring that the system functions safely, in a manner that minimizes environmental impacts, and in support of the nation’s military and security needs.¶

### Trucking and railways are unsustainable – congestion slowing deliveries, driver shortages

Kennedy, 8 [Sean D. Kennedy, J.D. 2008, Tulane University School of Law, Short Sea Shipping in the United States - The New Marine Highways, 33 Tul. Mar. L. J. 203, Winter, 2008]

Prior to the development of extensive rail and highway transportation networks in the United States, commercial shipping via inland and coastal waterways was the mode of choice among shippers, but has since fallen into desuetude due to its longer transit time compared to land transport alternatives. n8 "American culture is quickly forgetting that the rivers were here long before the roadways." n9 Despite the drop off, shippers of bulk commodities like coal, petroleum, grain, and lumber have continued to utilize water transport, but shippers of time-sensitive goods have relied on faster modes such as trucks and railways. n10 However, increasing freight volumes have stressed the capacity of the U.S. land transportation system, and it is estimated "that growing international trade and domestic production will increase overall freight traffic by 70 percent by 2020." n11 Trucks carry seventy-eight percent of the nation's goods, but roadways have become congested, causing delays in truck traffic. n12 Additionally, driver shortages make it difficult for trucking companies to increase their capacity to meet the growing demand for cargo transportation services. n13 The nation's railways are experiencing similar capacity problems as a result of increasing freight volumes. n14 A 2002 study of rail traffic in five East Coast states noted that there was a lack of capacity on critical rail lines in at least twenty-five different locations. n15 As congestion increases, logistics providers may find it "cheaper and faster to travel partly by sea instead of totally by land and bypass many high density or congested areas." n16 The situation has forced both public-and private-sector officials to reconsider marine transportation as an option for supporting the growing demand on freight transport capacity. n17 These transportation [\*206] officials have looked to existing SSS operations as models for the implementation of an SSS program in the United States, considering both the obstacles that such a development must face and the efficiency benefits that would result from the successful incorporation of SSS into the freight transportation networks in the United States.

### Companies are already interested – Plan makes it cost competitive and increases profit margins

Kennedy, 8 [Sean D. Kennedy, J.D. 2008, Tulane University School of Law, Short Sea Shipping in the United States - The New Marine Highways, 33 Tul. Mar. L. J. 203, Winter, 2008]

Maritime transportation and logistics providers are increasingly vocal proponents of the advantages that under-utilized SSS routes can have regarding increased cargo capacity and trade efficiency. "There is a widespread opinion that Short Sea Shipping markets clearly exist and that these services are very necessary and will expand." n66 In contrast to railways and highways, for SSS "there are no fixed infrastructure costs to develop transportation routes, and ships can carry more cargo per dollar than any other method of transport." n67 The volume of domestic trade alone is expected to increase from a 1998 level of 13.5 billion tons to 22.5 billion tons by 2020; international trade is expected to grow to more than 2 billion tons annually over the next twenty years. n68 Concerned about rising fuel costs, driver shortages, and traffic congestion, n69 transport companies are eager to take advantage of the cost savings of domestic marine routes, where "one barge could take up to 58 trucks off the highway and a 15-barge tow could eliminate the need for 870 trucks." n70 Ideally, SSS could be offered with a higher profit margin than [\*213] land-based transport networks. n71 In turn, a successful SSS network "will alleviate overland congestion, and thus would lower costs (increasing profits) in the competing overland sector." n72

### Incentives overcome concerns of time delays

Canadian Sailings, 9 [Canadian Sailings, SHORT-SEA SHIPPING Opportunities exist but right message needs to be delivered. Highway H2O Conference, January 12, 2009]

From a user's perspective, Ms. Lyden-Kluss said she believes that shippers can - and will - work with longer transit times if they are given incentives. "That is if they are guaranteed delivery time and significant cost benefits," she said. "Shippers are looking for 'green shipping' opportunities due to the increasing pressure to reduce the carbon footprint of their transportation chain. Rail and road systems are less eco-friendly."

\*\*\*Lyden-Kluss is the executive director of the North American Marine Environment Protection Association,

### Companies will be able to move more cargo

Kennedy, 8 [Sean D. Kennedy, J.D. 2008, Tulane University School of Law, Short Sea Shipping in the United States - The New Marine Highways, 33 Tul. Mar. L. J. 203, Winter, 2008]

Another advantage of SSS operations is the ability to absorb significant freight tonnage and allow shippers to take advantage of economies of scale. A regular cargo container can hold approximately twenty-seven tons of cargo, but due to weight limitations on trucks using the highways, shippers can only load containers with twenty tons, or about eighty percent of its maximum capacity. n76 Instead, a shipper can load that same container to full capacity and transport it by an SSS service, thus reducing the need for one extra truck for every four containers shipped by barge. n77 SSS services can complement trucking operations, which are subject to increasing regulations on their long-haul routes. n78 Trucking companies can optimize their drivers' schedules to "fill a single workday with multiple short trips, bringing containers to and from barges, increasing the efficiency of the entire network." n79 Such a schedule would be more attractive to drivers, who currently are in short supply, while also reducing the highway congestion and public safety issues caused by long-haul trucking operations. n80

### Rising fuel costs and congestion help spur transition

Brooks, 8 [MARY R. BROOKS\* and VALERIE TRIFTS Dalhousie University, Canada, “Short sea shipping in North America: understanding the requirements of Atlantic Canadian shippers,” MARIT. POL. MGMT., APRIL 2008 VOL. 35, NO. 2, 145–158]

This paper has presented a better understanding of the factors in a short sea versus truck modal choice. For the most part, the model in figure 1 has been validated; the sole exception is that more work is needed to address the buyer requirement factors. The situational variables may be expanded to explore the subcomponents of delay versus cost (each altering the transit time versus price dynamic relationship), by more closely looking at issues such as border security and border delays, additional regulatory requirements posed on shippers, altered fuel costs and the removal of the Harbor Maintenance Tax, to name but a few. For example, some respondents suggested that the imposition of a government tax proportional with the amount of pollution associated with transport mode (either in the form of a tax on trucking or tax relief for ISSS) would make them consider switching from trucking to ISSS.

We believe that this research has debunked the myth of shipper reluctance to use short sea in this particular geographic market, thereby concluding that as fuel costs grow (either through higher market prices or the imposition of an ‘ecotax’) and as congestion on the corridor grows, this particular market will be one where short sea can become a solid alternative to truck.

### Shippers like RoRo technology – saves them money

Kennedy, 8 [Sean D. Kennedy, J.D. 2008, Tulane University School of Law, Short Sea Shipping in the United States - The New Marine Highways, 33 Tul. Mar. L. J. 203, Winter, 2008]

[\*214] Supporters of SSS are enthusiastic about the increased use of roll-on, roll-off (RoRo) technology in intermodal cargo transportation. n81 Vessels that can be loaded without the use of cargo cranes are particularly well suited for SSS operations, offering the shortest cargo turnaround time at the loading and destination terminals, as well as requiring a minimum investment in port infrastructure. n82 RoRo vessels could even be loaded with tractor-trailers, enabling customers to take advantage of the fuel efficiency of SSS routes while retaining the flexibility and speed advantages of door-to-door truck delivery to which they are accustomed. n83 Shippers using RoRo vessels would not have to pay dockworkers to lift cargo on or off at the loading and discharge ports, avoiding an additional service cost that otherwise makes waterborne transport less cost competitive with other modes. n84 These operating cost and efficiency advantages make SSS operations using RoRo vessels particularly attractive.

## AT: Only Long Distances Work

### Can be cost competitive at all distances

Kruse and Hutson, 10 [C. James Kruse, TEXAS TRANSPORTATION INSTITUTE, Houston, TX & Nathan Hutson, CENTER FOR TRANSPORTATION RESEARCH, Austin, TX, National Cooperative Freight Research Program, Sponsored by the Research and Innovative Technology Administration and part of the Transportation Research Board of the National Academes, July 2010, http://onlinepubs.trb.org/onlinepubs/ncfrp/ncfrp\_rpt\_005.pdf, p. 1-2]

One of the more interesting findings from this research effort is that marine highway ventures of varying distances have the potential for viability. Thus, the conventional wisdom that marine highway operations are viable only at distances equal to, or greater than, those that are viable for intermodal rail is not correct. On the contrary, successful operations have been carried out on routes as short as “across the bay” and as long as more than 1,000 mi. More importantly, the researchers concluded that there is no critical distance for determining whether a particular venture will be successful. The specific geographic features of each service must be considered, including the alternative landside distances and connections.

## AT: Cost Ineffective

### National implementation solves cost concerns – plan leads to economies of scale

Perakis and Denisis, ‘8 [ANASTASSIOS N. PERAKIS\* and ATHANASIOS DENISIS, Department of Naval Architecture & Marine Engineering, University of Michigan, A survey of short sea shipping and its prospects in the USA, MARIT. POL. MGMT., DECEMBER 2008, VOL. 35, NO. 6, 591–614]

The idea of sustainable freight transportation is also gaining ground among its users, i.e. the shippers, the transportation stakeholders and the public. The negative effects of freight transportation can be reduced by exploiting economies of scale and distance of SSS and thus reduce the external costs per tonne-kilometre. Additionally, by introducing more efficient intermodal transportation and imple- menting efficient cargo transfers at port terminals that reduces cargo handling time and costs, we can create modal shifts from road to SSS. Network techniques and consolidation of cargo flows can improve the overall efficiency and reduce the total transportation cost significantly. Innovative bundling, i.e. consolidation, networks have emerged as a way of taking advantage the energy efficiencies of rail and sea transportation for the long-haul part and the flexibility of road transportation for the collection and distribution parts. These intermodal transportation systems are broadly recognized as sustainable and environmentally friendly means of freight transportation [51–53].

### National SSS affordable and leads to economic growth in the shortterm

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 18]

America’s Marine Highway has many thousands of miles of uncongested capacity that can be easily accessed through many existing port facilities. Accordingly, it has the potential to generate new services and economic growth cost-effectively and in a relatively short period of time.

The cost-effectiveness of a specific Marine Highway service will vary according to the characteristics of the corridor it serves. For instance, existing shipping channels along the Atlantic Coast of the United States are already maintained to accommodate international trade and are more than adequate to handle vessels that would transport passengers and freight on America’s Marine Highway. One study found that medium-sized, uncongested ports could be inexpensively modified to handle RoRo ships at an investment cost of $5 million each.44 Moreover, many ports, including smaller ports, are currently capable of handling weekly, twice- weekly, or even daily RoRo vessel services, with ships that hold 100-150 trailers. The study further estimated that an investment of $50 million would be sufficient to prepare Atlantic Coast ports for liner loop service, consisting of vessel calls on ports in regular sequence.45 The study notes that liner loop service would increase daily capacity along the Atlantic coast to a total of 21,000 trailers, consistent with the 10 percent market share projection common to several prior coastal shipping studies. Marine Highway shipping along the U.S. east coast would directly supplement the I-95 corridor. The I-95 Corridor Coalition estimates that by 2040, miles traveled by all vehicles using the corridor will increase by 70 percent.4 Truck volumes could nearly double even though such volumes are probably not physically or environmentally sustainable in many regions along the corridor. Further, ever-increasing congestion at highway and rail bottlenecks along the Atlantic Coast constrains interstate commerce and economic productivity. The Coalition estimates that to respond to this growth, approximately $47 billion per year would need to be invested along the I- 95 corridor on highways, $15 billion to $19 billion per year for transit, $4 billion to $5 billion per year for passenger rail, and $2 billion per year for freight rail. As noted above, the Marine Highway offers a relatively low-cost alternative at a public investment level as low as $50 million. As noted, the cost-effectiveness of the Marine Highway investments will be service-specific and there are many freight corridors where water transportation is not an option due to geographical or other limitations. Nonetheless, where waterways are present, the incremental investment needed to accommodate passengers and freight on America’s Marine Highway can be very cost- competitive with existing land-based modes, even without accounting for the many other benefits provided by Marine Highway services.

## AT: Time Delays

### Transit times irrelevant to most shippers – SSS most cost competitive

Ng and Perakis, ‘9 [Jacob Ng (UNDERGRADUATE STUDENT DEPARTMENT OF NAVAL ARCHITECTURE AND MARINE ENGINEERING UNIVERSITY OF MICHIGAN) and Dr. A. N. Perakis, (Ph.D. SNAME FELLOW MICHIGAN PHOENIX MEMORIAL ENERGY INSTITUE FELLOW DEPARTMENT OF NAVAL ARCHITECTURE AND MARINE ENGINEERING UNIVERSITY OF MICHIGAN), The Environmental & Economic Benefits of Short Sea Shipping by ‘Container-On-Barge’ 2 MAY 2009 p. 8]

Although longer transit times might seem to put SSS at a disadvantage, a report sponsored by the Coalition of Alabama Waterway Association showed that only 15% of shippers deemed transit time to be their highest priority in their choice of transportation. On the other hand, 85% of the survey respondents deemed cost and reliability as their highest priorities. Thus, a longer SSS transit time is not a huge impediment to shippers opting for SSS as their choice of transportation. Even with the greater transit time factored into cost calculations, SSS still provides the most cost competitive transportation option.

### Tech and logistical infrastructure already exist to fix time concerns

Perakis and Denisis, ‘8 [ANASTASSIOS N. PERAKIS\* and ATHANASIOS DENISIS, Department of Naval Architecture & Marine Engineering, University of Michigan, A survey of short sea shipping and its prospects in the USA, MARIT. POL. MGMT., DECEMBER 2008, VOL. 35, NO. 6, 591–614]

The recent developments in supply chain management and the new trends of globalization, decentralized production and outsourcing of logistics to third party providers can benefit SSS even more. Modern logistics has become an essential part of the production process. Supply chain requirements focus not exclusively on speed, but on time reliability, with just-in-time transportation and zero inventory costs. Combined truck and SSS can take advantage of their efficiency, reliability and flexibility. Door-to-door cargo transportation requires the close cooperation of different modes. New technologies, such as cargo tracking, can facilitate that coordination and increase the level of service. The intermodal terminals as cargo transfer points are a crucial part of the intermodal transportation chain. Supply chain management have led to the creation of central trans-shipment facilities or hub terminals [49]. SSS can exploit all these opportuni- ties in logistics and become a modern form of intermodal transportation. Ports should operate as ‘seamless’ logistics nodes that will offer high level of service by facilitating the smooth transfer of cargo and the coordination among the different modes. Better communication and information exchange among the various modes is necessary. Itineraries and timetables among them should be synchronized. Fast and efficient cargo transfer is a key for the success of SSS.

## AT: No Private Interest

### Private sector is already expressing interest in marine highway expansion – they are solving logistical problems on their own

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 9]

The future success of Marine Highway services cannot be tied to any single factor, such as rising fuel prices or landside congestion. Rather, it is contingent on a broad range of qualities, none more important than the ability to serve the needs of shippers for reliable, innovative, and cost- effective transportation. MARAD is confident that the private U.S. maritime sector, with the backing of Federal, State, and local governments, will deliver the required quality and reliability of service needed to attract greater cargo volumes. The private U.S. maritime sector has expressed great interest in the Marine Highway initiative, including by its initiation of new Marine Highway services (discussed later in this document) and by providing extensive information to MARAD about the opportunities and impediments to such services. MARAD notes that innovation by the private U.S. maritime sector has directly or indirectly led to major advancements in international and domestic shipping over the last 70 years, including the revolution in intermodal shipping via containerships, double-stack rail service (in cooperation with the U.S. railroad industry), improved logistics, new and larger ship types, and modern shipbuilding techniques.16

## AT: No Boats

### New boats and boat designs being created now

Barry, 11 [Keith Barry, “Marine Highways To Get Some New Boats,” Wired, Autopia, 12/6/11,

http://www.wired.com/autopia/2011/12/marine-highways-to-get-some-new-boats/ ]

A national marine highway network is one step closer, with eleven new ship designs approved by the Department of Transportation’s Maritime Administration. The standardized vessels can be built efficiently and are ideal for carrying smaller cargo loads. The new designs are part of DOT’s plan to move freight from roadways to waterways. Eighteen underused shipping channels would be designated as “marine highways” and reserved for vessels that transport cargo within North America, taking heavy loads and hazardous materials off crowded highways and putting it on the open waters. The practice is already common in northern Europe, where boats ply the North Sea in a practice they call short-sea shipping. DOT has committed $215 million in funding for marine highways. One has already opened in the northeast, where ships carry cargo between Boston, Portland, ME and Halifax, Nova Scotia. But for the program to be a success, would-be shippers need ships. Currently, the northeastern marine highway runs with a single used German vessel. DOT thinks there should be more ships, and says they should be built in the US. They’ve approved eleven new ship designs: six roll-on, roll-off freighters, three roll-on container ships and two small container ships. A roll-on, roll-off freighter — known as a RoRo — is ideal for a marine highway. The small boats pull directly up to ports and let down ramps for driving freight off, eliminating the need for cranes and other expensive infrastructure. They work best at small ports, where it doesn’t make sense to dredge deep channels or install cranes, which is why the RoRo is already the mainstay of European short-sea shipping service. Ro-Con ships are a hybrid between a RoRo and a traditional container ship. DOT has approved three Ro-Con designs for marine highways, in addition to two traditional container ships. The designs are standardized for a greater economy of scale, so that individual shipbuilders can built the vessels as if they were on assembly lines. In addition to commercial shipping, DOT says there is a national security need for boats that can be easily converted for sealift use by the Department of Defense. Just as the interstate highway system was built to speed commerce and provide for national defense, ships used on marine highways could be repurposed for military use if necessary.

# AT: Off-case Arguments

## AT: T – Increase (Plan trades-off with trucking)

### 1. We meet – Their definition says there must be a net growth of transportation infrastructure investment. We expand the amount of money the USFG is spending the transportation sector. The number of trucks on the road is irrelevant in the context of the resolution.

### 2. Counter- interpretation:

### A. “Increase” means to become larger or greater in quantity

Encarta 6 – Encarta Online Dictionary. 2006. ("Increase" http://encarta.msn.com/encnet/features/dictionary/DictionaryResults.aspx?refid=1861620741)

in·crease [ in krss ]  
transitive and intransitive verb  (*past and past participle* in·creased, *present participle* in·creas·ing, *3rd person present singular* in·creas·es)Definition**:**make or become larger or greater: to become, or make something become, larger in number, quantity, or degree.

### B. “Transportation investment” means addition to existing networks

Berechman 2 (Yossi, Professor of Public Policy – Tel Aviv University, Transport and Economic Development, p. 114)

4.1. Basic definitions

In the present context, "transportation investment" is defined as a capacity improvement or addition to an existing network of roads, rail, waterways, huh terminals, tunnels, bridges, airports and harbors. The concept of "resultant economic growth" is further considered to mean the long-run increase in economic activity in a given geographical area, which can be ascribed to a specific transport investment and which confers welfare improvements to the area's residents. Additionally, as explained later, it is also required that the growth benefits will be in addition to the direct transportation benefits from the investment and not merely their capitalised value. Tin's latter condition is a fundamental one. fully discussed in section 5.2.

### 3. We meet the counter interp – The plan increases subsidies or direct investment in shipping on the Marine Highway system, which is deemed a main portion of US transportation infrastructure.

### 4. Prefer our interpretation –

### A. Grammatically correct within the Context of the resolution – The resolution says that the USFG needs to increase its investment, not increase transportation. Prefer grammatically correct and contextual interpretations. They are the most predictable for research.

### B. Limits – Their interp allows affs to support the development of new types of vehicles or to pay for the building of new buses. Vehicle development would explode the topic, especially since there are limitless vehicle designs for all of the transportation sectors.

### C. Neg Ground – The best neg link arguments are related to spending and its impact on the economy or politics. No DAs link to the actual increases in the amount of existing transportation.

### 5. They lead to effects-T. “Increase” refers to a mandate, not a potential result

HEFC 4 (Higher Education Funding Council, <http://www.publications.parliament.uk/pa/jt200304/jtselect/jtchar/1> 67/167we98.htm# n43)

9.1 The Draft Bill creates an obligation on the principal regulator to do all that it "reasonably can to meet the compliance objective in relation to the charity".[ 45] The Draft Bill defines the compliance objective as "to increase compliance by the charity trustees with their legal obligations in exercising control and management of the administration of the charity".[ 46] 9.2 Although the word "increase" is used in relation to the functions of a number of statutory bodies,[47] such examples demonstrate that "increase" is used in relation to considerations to be taken into account in the exercise of a function, rather than an objective in itself. 9.3 HEFCE is concerned that an obligation on principal regulators to "increase" compliance per se is unworkable, in so far as it does not adequately define the limits or nature of the statutory duty. Indeed, the obligation could be considered to be ever-increasing.

### 6. Prefer reasonability over competing interps – They will continue to move the goal post to create the most limiting interp. This is bad for aff ground, limits creativity and topic innovation, and makes it impossible for the aff to win.

## AT: T – Increase (Cannot Create)

### 1. We meet – We make larger the amount of money the USFG invests in short sea shipping on the marine highways.

### 2. Counter- interp: “Increase” means to become larger or greater in quantity

Encarta 6 – Encarta Online Dictionary. 2006. ("Increase" http://encarta.msn.com/encnet/features/dictionary/DictionaryResults.aspx?refid=1861620741)

in·crease [ in krss ]  
transitive and intransitive verb  (*past and past participle* in·creased, *present participle* in·creas·ing, *3rd person present singular* in·creas·es)Definition**:**make or become larger or greater: to become, or make something become, larger in number, quantity, or degree.

### “Transportation investment” means addition to existing networks

Berechman 2 (Yossi, Professor of Public Policy – Tel Aviv University, Transport and Economic Development, p. 114)

4.1. Basic definitions

In the present context, "transportation investment" is defined as a capacity improvement or addition to an existing network of roads, rail, waterways, huh terminals, tunnels, bridges, airports and harbors. The concept of "resultant economic growth" is further considered to mean the long-run increase in economic activity in a given geographical area, which can be ascribed to a specific transport investment and which confers welfare improvements to the area's residents. Additionally, as explained later, it is also required that the growth benefits will be in addition to the direct transportation benefits from the investment and not merely their capitalised value. Tin's latter condition is a fundamental one. fully discussed in section 5.2.

### 3. We meet: The plan expands subsidies or direct investment in shipping on the Marine Highway system, which is an already existing program established by MARAD.

### 4. “Increase” doesn’t require pre-existence

Reinhardt 5 – U.S. Judge for the UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT (Stephen, JASON RAY REYNOLDS; MATTHEW RAUSCH, Plaintiffs-Appellants, v. HARTFORD FINANCIAL SERVICES GROUP, INC.; HARTFORD FIRE INSURANCE COMPANY, Defendants-Appellees., lexis)

Specifically, we must decide whether charging a higher price for initial insurance than the insured would otherwise have been charged because of information in a consumer credit report constitutes an "increase in any charge" within the meaning of FCRA. First, we examine the definitions of "increase" and "charge." Hartford Fire contends that, limited to their ordinary definitions, these words apply only when a consumer has previously been charged for insurance and that charge has thereafter been increased by the insurer. The phrase, "has previously been charged," as used by Hartford, refers not only to a rate that the consumer has previously paid for insurance but also to a rate that the consumer has previously been quoted, even if that rate was increased [\*\*23] before the consumer made any payment. Reynolds disagrees, asserting that, under [\*1091] the ordinary definition of the term, an increase in a charge also occurs whenever an insurer charges a higher rate than it would otherwise have charged because of any factor--such as adverse credit information, age, or driving record 8 --regardless of whether the customer was previously charged some other rate. According to Reynolds, he was charged an increased rate because of his credit rating when he was compelled to pay a rate higher than the premium rate because he failed to obtain a high insurance score. Thus, he argues, the definitions of "increase" and "charge" encompass the insurance companies' practice. Reynolds is correct. “Increase" means to make something greater. See, e.g., OXFORD ENGLISH DICTIONARY (2d ed. 1989) ("The action, process, or fact of becoming or making greater; augmentation, growth, enlargement, extension."); WEBSTER'S NEW WORLD DICTIONARY OF AMERICAN ENGLISH (3d college ed. 1988) (defining "increase" as "growth, enlargement, etc[.]"). "Charge" means the price demanded for goods or services. See, e.g., OXFORD ENGLISH DICTIONARY (2d ed. 1989) ("The price required or demanded for service rendered, or (less usually) for goods supplied."); WEBSTER'S NEW WORLD DICTIONARY OF AMERICAN ENGLISH (3d college ed. 1988) ("The cost or price of an article, service, etc."). Nothing in the definition of these words implies that the term "increase in any charge for" should be limited to cases in which a company raises the rate that an individual has previously been charged.

### 5. One can increase from zero

WORDS AND PHRASES, 07 (CUMULATIVE SUPPLEMENTARY PAMPHLET, 2007 Vol. 20A, 07, 76.

Increase: Salary change of from zero to $12,000 and $1,200 annually for mayor and councilmen respectively was an “increase” in salary and not merely the fixing of salary. King v. Herron, 243 S.E.2d36, 241 Ga. 5.

### 6. Prefer our interp:

### A. Best for ground. The aff has to invest in existing infrastructure but can choose which funding mechanism to use. The resolution is already bad for the aff because it requires them to increase federal spending, which guarantees link ground and CP competition for the neg. The aff needs the ability to choose the funding mechanism, even if it including a new funding line.

### B. Neg ground – our interp guarantees uniqueness. There is not brightline in their interp to ensure unique DA ground.

### 6. Prefer reasonability over competing interps – They will continue to move the goal post to create the most limiting interp. This is bad for aff ground, limits creativity and topic innovation, and makes it impossible for the aff to win.

## AT: T – Increase (Must create/Make New)

### 1. We meet – the plan is a new mandate to invest in the MARAD’s marine highway program.

### 2. Counter- interp: “Increase” means to become larger or greater in quantity

Encarta 6 – Encarta Online Dictionary. 2006. ("Increase" http://encarta.msn.com/encnet/features/dictionary/DictionaryResults.aspx?refid=1861620741)

in·crease [ in krss ]  
transitive and intransitive verb  (*past and past participle* in·creased, *present participle* in·creas·ing, *3rd person present singular* in·creas·es)Definition**:**make or become larger or greater: to become, or make something become, larger in number, quantity, or degree.

### “Transportation investment” means addition to existing networks

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4.1. Basic definitions

In the present context, "transportation investment" is defined as a capacity improvement or addition to an existing network of roads, rail, waterways, huh terminals, tunnels, bridges, airports and harbors. The concept of "resultant economic growth" is further considered to mean the long-run increase in economic activity in a given geographical area, which can be ascribed to a specific transport investment and which confers welfare improvements to the area's residents. Additionally, as explained later, it is also required that the growth benefits will be in addition to the direct transportation benefits from the investment and not merely their capitalised value. Tin's latter condition is a fundamental one. fully discussed in section 5.2.

### 3. We meet – Plan mandates the expansion of USFG’s investment in transportation infrastructure.

### 4. Reason to prefer

### A. Unpredictable and encourages bad research – they encourage affs to run to the margins and read plans advocated by individual people with no large body of literature. The negs cannot prepare for this.

### B. Context – our interpretation is in the context of transportation and common parlance. Theirs is a contrived understanding.

### 5. Their interp is not exclusive – even if increase can mean to create, no part of their definition requires creation.

### 6. Prefer reasonability over competing interps – They will continue to move the goal post to create the most limiting interp. This is bad for aff ground, limits creativity and topic innovation, and makes it impossible for the aff to win.

## AT: T – Investment

### Subsidies are historically the primary form of federal investment

Semmens, ’94 [John Semmens, Federal Transit Subsidies: How Government Investment Harms the U.S. Economy, The Freeman Online, Feb 1994, http://www.thefreemanonline.org/columns/federal-transit-subsidies-how-government-investment-harms-the-us-economy/]

A traditional first step in analyzing any investment is to examine the historical performance record. Since one of the most frequently mentioned public sector investments is increased public transit subsidies, perhaps it would be worth our while to investigate the historical performance of federal aid for transit. While there is no guarantee that future performance would duplicate past performance, many professional investors regard historical information as indicative of what to expect in the future.

### Core of the topic – subsidies are THE form of fed investment

Transit MN, 12 [Transit for Living Communities Minnesota, Multi‐modal Transportation – “Subsidies” and Return on Investment , 2012, http://www.tlcminnesota.org/pdf/Multi-Modal%20Transportation%20subsidies%20and%20Return%20on%20Investment.pdf]

All transportation modes receive significant public investment (i.e. subsidy) and are not expected to directly or completely “pay for themselves” through user fees. Across the nation and the world, public investment in transportation is justified because of its widely shared pubic benefits, the complexity of collecting some transportation revenues, and the desire to encourage more efficient and less polluting forms of transportation. In thinking about the relative subsidy (public investment) of transit or roads, it is important to understand in more detail the extent of user fees and the return on investment.

### Contextual Evidence: Incentives to shippers is T

Kruse and Hutson, 10 [C. James Kruse, TEXAS TRANSPORTATION INSTITUTE, Houston, TX & Nathan Hutson, CENTER FOR TRANSPORTATION RESEARCH, Austin, TX, National Cooperative Freight Research Program, Sponsored by the Research and Innovative Technology Administration and part of the Transportation Research Board of the National Academes, July 2010, http://onlinepubs.trb.org/onlinepubs/ncfrp/ncfrp\_rpt\_005.pdf, p. 38]

Provide Incentives to Shippers and/or Receivers The federal government could provide some form of stimulus to make it attractive for shippers and/or receivers to explore the use of a new and (at least in terms of perception) more complex transportation option. It is important to keep in mind that the carriers are not the decision makers—the shippers and receivers are. A wide range of incentives is available. Incentives used for industrial development purposes include items such as property tax rebates, income tax credits for qualified investments, financial assistance in developing site infrastructure, and income tax credits based on actual shipping volume. The government of Quebec adopted a program to pay an amount per ton of GHG reduced as a result of a modal shift. Further information on Quebec’s program is found in Appendix F.

# AT: Alt Mechanism CPs

## AT: Repeal HMT

### 1. Perm – Do both

### 2. CP doesn’t solve the aff. –

### A. The CP repeals a barrier, but doesn't provide an incentive to shippers. Shippers require money to shift from truckers, which is key to solving all advantages

### B. Doesn’t spend, so it doesn’t solve the economy. Spending key to solve the economy. Comparative ev proves—

Eggertsson, 10 – Federal Reserve Bank of New York (Gauti B., “What Fiscal Policy is Effective at Zero Interest Rates?” National Bureau of Economic Research, 2011, http://www.newyorkfed.org/research/staff\_reports/sr402.pdf)//HK

The main problem facing the model economy I have studied in this paper is insuﬃcient demand. In this light, the emphasis should be on policies that stimulate spending. Payroll tax cuts may not be the best way to get there. The model shows that they can even be contractionary. What should be done, according to the model? Traditional change in government spending is one approach. Another is a commitment to inﬂate. Ideally, the two should go together. Government spending has the advantage over inﬂation policy in that it has no credibility problems associated with it.

Inﬂation policy, however, has the advantage of not requiring any public spending, which may be at its "ﬁrst best level" in the steady state of the model studied here. Any ﬁddling around with the tax code should take into account that deﬂation might be a problem. In that case, shifting out aggregate supply can make things worse.

It is worth stressing that the way taxes are modeled here, although standard, is special in a number of respects. In particular, tax cuts do not have any "direct" eﬀect on spending. The labor tax cut, for example, has an eﬀect only through the incentive it creates for employment and thus "shifts aggregate supply," lowering real wages and stimulating ﬁrms to hire more workers. One can envision various environments in which tax cuts stimulate spending, such as old-fashioned Keynesian models or models where people have limited access to ﬁnancial markets. In those models, there will be a positive spending eﬀect of tax cuts, even payroll tax cuts like the ones in the standard New Keynesian model.

It is also worth raising another channel through which tax cuts can stimulate the economy. Tax cuts would tend to increase budget deﬁcits and thus increase government debt. That gives the government a higher incentive to inﬂate the economy. As we have just seen in Section 9, higher inﬂation expectations have a strong positive impact on demand at zero interest rates. Eggertsson (2006) models this channel explicitly. In his model, taxes have no eﬀect on labor supply, but 29 instead generate tax collection costs. In that environment, tax cuts are expansionary because they increase debt and, through that, inflation expectations.

What should we take out of all this? There are two general lessons to be drawn from this paper. The first is that insufficient demand is the main problem once the zero bound is binding, and policy should first and foremost focus on ways in which the government can increase spending. Policies that expand supply, such as some (but not all) tax cuts and also a variety of other policies, can have subtle counterproductive effects at zero interest rates by increasing deflationary pressures. This should — and can — be avoided by suitably designed policy.

### C. CP precludes the aff – bankrupting the HMTF ensures ports cannot keep up with Marine highway traffic

AAPA 09 (American Association of Port Authorities, Alliance of the Ports of Canada, the Caribbean, Latin America, and the United States American Association of Authorities, “Questions and Answers About America’s Ports and the Harbor Maintenance Tax”, AAPA, 2009, <http://www.aapa-ports.org/Issues/content.cfm?ItemNumber=1004> CDG)

**Over 90 percent of the nation's top 50 ports in foreign waterborne commerce require regular maintenance dredging. Together these ports move nearly 99 percent of U.S. overseas trade by weight and 61 percent by value**. Many deep draft seaports in the United States are located at the mouths of rivers where upstream runoff collects sediments which are carried down river and deposited on harbor bottoms. **Most ports are not naturally deep harbors; they are man-made through a process of dredging and landfilling**. In parts of New York harbor, for example, the navigation channels are naturally only 18 feet deep, while sections of the Mississippi are only 6 feet deep. **Today's modern ships can require drafts of up to 45 or 50 feet. Sediment also has to be removed to provide turning basins for ships and adequate water depth along waterside facilities. Without routine dredging, areas of navigation channels could change from 40 to 35 feet in one year.** Such a dramatic change **would prohibit many ships from entering the channel or force ships to carry only a fraction of their intended load.** Channels that accumulate sediment become dangerous because they increase the risk of ships running aground. Groundings are expensive not only in cargo and time lost, but groundings may also pollute the environment if ships’ hulls are breached are cargo is spilled.

### 3. CP links to the net benefit [insert explanation]

### 4. HMT Good/Repeal Bad [Insert one from the following blocks]

## AT: Repeal HMT – HMT Good: Economy

### Repeal of HMT collapses competitiveness

Eyerdam 4/20/12(Rick Eyerdam, RAMP Act Remnant to stop the theft of Harbor Maintenance Tax now in conference, April 20, 2012 ,http://seshippingnews.typepad.com/south\_east\_shipping\_news/2012/04/ramp-act-remnant-to-stop-the-theft-of-harbor-maintenance-tax-now-in-conference.html/arouse)

For too long, user fees deposited into the HMTF have not been fully utilized to maintain and support ports and harbors. For example, at the beginning of Fiscal Year 2012, the HMTF had a surplus of approximately $6.2 billion; yet, the funding was not being used to address the backlog of necessary maintenance dredging needed to sustain maritime infrastructure, but instead other federal programs. Similarly, the 2013 budget assumes a level of revenue $1.66 billion into the HMTF while utilizing $839 million, or 51 percent, of the fund’s revenue. At the end of 2013, the budget projects a balance in the fund of about $7 billion. Coast al ports and harbors, including require annual or semi-annual dredging. Delays or decreases in federal funds to maintain these ports and harbors could negatively impact regional and national commerce, reduce economic competitiveness, and increase the risk of vessel groundings, collisions, and pollution incidents. “Going forward, I’ll be working to ensure that the language passed by the House today to protect port and harbor funding is included in the final transportation bill signed by the President,” added Capps.

### Competitiveness is key to support for trade.

Freeman 7 - \* Freeman directs the NBER's Program of Research on Labor Studies and holds the Herbert Ascherman Chair in Economics at Harvard University, Richard, “The Market for Scientists and Engineers”, National Bureau of Economic Research, http://www.nber.org/reporter/2007number3/freeman.html

As other countries become more competitive in knowledge production and in its application to the economy, the United States will lose its comparative advantage in high tech and see the gains from that trade diminish**.** Some fear that this will harm U.S. workers. One of the selling points of NAFTA was the promise that trade meant good jobs for Americans and menial jobs for workers in developing countries. The North-South or product life-cycle models of trade and technology predict such an outcome. These models assume that the United States (other advanced countries) has large supplies of scientists and engineers that give them a monopoly on R and D and new technology. U.S. wages are higher than those of otherwise comparable workers elsewhere because they work with the new technology. The faster the rate of the technological progress relative to the rate of diffusion of technology to developing countries, the higher are wages in the United States.

### Economic decline causes nuclear war

Mead 92 Walter Russell, Senior Fellow in American FoPo @ the Council on Foreign Relations, World Policy Institute, 1992

Hundreds of millions, billions, of people have pinned their hopes on the international market . They and their leaders have embraced market principles and drawn closer to the west because they believe the system can work for them? But what if it can’t? What if the global economy stagnates or even shrinks? In that case, we will face a new period of international conflict: North against South, rich against poor. Russia, China India, these countries with their billions of people and their nuclear weapons will pose a much greater danger to the world than Germany and Japan did in the 30s.

### Repeal crushes the economy

Clarkson 3/9/12(Dredging news Online/Clarkson, US seaports urge action on Harbor Maintenance Fund, News - March 9, 2012, <http://www.sandandgravel.com/news/article.asp?v1=15728/> arouse)

At two separate Congressional hearings held earlier this week the American Association of Port Authorities (AAPA) emphasized the need for federal support for seaport security and maintenance and improvements to federal navigation channels. Port industry leaders illustrated the challenges that underfunding security and dredging pose for national security and US international competitiveness. As the House Appropriations Committee begins work on the Fiscal Year 2013 budget, AAPA executives reminded Congressional leaders of the critical role that ports play for the nation – serving as a front line of defense on international borders and facilitating overseas trade, 99 percent of which moves by water. Captain John Holmes, Deputy Executive Director of Operations at the Port of Los Angeles, testified before the Homeland Security Subcommittee regarding Port Security Grants within the Federal Emergency Management Agency. “The FY 2012 funding level represents a 59 per cent cut from the prior year and 75 per cent less than the authorized level,” Holmes stated. “This will harm our ability to expand protection of our maritime assets, carry out Port-Wide Risk Management Plans and fund federal mandates such as installation of TWIC readers.” AAPA President and CEO Kurt Nagle submitted testimony to the Energy and Water Subcommittee on the budget for the US Army Corps of Engineers’ Civil Works programme. The testimony focused on the need for full use of the Harbor Maintenance Tax annual revenue for maintenance dredging and the need to adequately fund needed channel deepening projects. Mr Nagle wrote: “The federal government has a unique Constitutional responsibility to maintain and improve the infrastructure that enables the flow of commerce, and much of that infrastructure in and around seaports have been neglected for too long, particularly the capacity of the federal channels which affects the ports’ ability to move cargo efficiently into and out of the US. This hurts US business, hurts US workers and hurts our national economy.”

## AT: Repeal HMT – Repeal unpopular/HMT popular

### HMT popular- necessary to maintain waterways

Dredging Today 12 (“Congress Votes to Allocate Harbor Maintenance Trust Fund for Dredging” March 30, 2012, <http://www.dredgingtoday.com/2012/03/30/congressman-votes-to-allocate-harbor-maintenance-trust-fund-for-dredging-usa/>CDG)

Congressman Jeff Landry released the following statement after voting for H.Con.Res. 113 – the Republican Study Committee (RSC) Fiscal Year 2013 Budget (which Congressman Landry cosponsored) – and H.Con.Res. 112 — the Paul Ryan Budget for Fiscal Year 2013: “Today, my colleagues and I did not follow the President’s plan of more spending, more borrowing, and more debt**. We did not follow the Senate’s plan of doing nothing and ignoring our problems**. Rather**, we led and passed a budget**. We voted to curb wasteful spending so we can reduce our nation’s enormous debt – something that exploded when Washington politicians voted to increase our borrowing limit last year. **We voted to allocate the H**arbor **M**aintenance **T**rust Fund **for dredging** – something I got added to the budget. And we voted to defund efforts that force Americans to violate their religious beliefs – something I also got added to the budget. Although I am disappointed Washington politicians did not join me in cosponsoring and voting for the RSC Budget to cut, cap, and balance the government’s budget – I am glad they followed my lead for fiscal sanity, port dredging, and religious freedom.”

### HMT has bipartisan support- supports commercial navigation

Snider and Allen 12 (Adam Snider, transportation reporter for Politico, winner of Beltz award for Editorial excellence; Jonathan Allen, Politico’s senior Washington correspondent, winner of the National Press Foundation’s Everett McKinley Dirksen Award for Distinguished Reporting of Congress, National Press Club’s Sandy Hume Award for Excellence in Political Journalism, Professor of Political Science at Northwestern University, “Lawmakers Brawl Over Bayou District” April 15, 2012, <http://www.politico.com/news/stories/0412/75164.html> CDG)

In late March, Landry sent out a news release claiming credit for the report language, which simply says “**the budget acknowledges the importance of maintaining our ports and waterways to encourage commercial deep-draft navigation and economic competitiveness**” and notes that **the H**arbor **M**aintenance **T**rust Fund **runs a surplus that could be used for dredging**. **Boustany**, now in his fourth term, says the line is “most due to the efforts I’ve made over multiple years” and contends that he has “been talking” about it with House Budget Committee Chairman Paul Ryan (R-Wis.) since before Landry ever showed up in Washington. He is the author of legislation, called the RAMP Act, that would tie Harbor Maintenance Trust Fund spending to annual revenues — a bill he introduced the day Landry was sworn into office. He **wrote a March letter to the Budget Committee, along with** Rep. **Joe Courtney (D-Conn.), in support of dredging.** And when **the budget resolution included the provision**, he also praised the action.

### HMT is bipart- funds port maintenance

ACG 12 (Associated General Contractors of America, “Ensure funds collected by the Harbor Maintenance Trust Fund are fully Utilized” April 9, 2012, <http://www.agc.org/galleries/advy/Infrastructure%20Investment%20-%20Harbor%20Maintenance%20Trust%20Fund%202012.pdf> CDG)

Support H.R. 104, Realize America’s Maritime Promise Act, and S. 412, Harbor Maintenance Act of 2011. H.R. 104 and S. 412 introduced by Charles W. **Boustany (R-La.) and** Senator Carl **Levin (D-Mich.)** respectively, **would fully invest future revenues raised from HMT to fund the operation and maintenance of Federal ports and harbors**, as intended. **Both bills have generated significant bipartisan cosponsorship** in their respective chambers, as **H.R. 104 has 187 cosponsors and S. 412 has 35 cosponsors.** Urge your congressman and senators to support these bills and the future of America’s ports.

## AT: Repeal HMT – HMT Doesn’t deter

### HMT doesn’t deter -- cannot be enforced

Skalberg, 7 [Randall K. Skalberg, Prof in Accounting Dept at U of MN- Duluth, The U.S. Harbor maintenance tax: a bad idea whose time has passed?, Transportation Journal, Summer 2007, http://findarticles.com/p/articles/mi\_hb6647/is\_3\_46/ai\_n29366709/?tag=content;col1]

As Currently Enacted the HMT is Difficult to Properly Enforce The HMT currently applies to imports and to domestic transportation. With respect to imports, it is collected by the U.S. Customs Service when the goods arrive in a U.S. port and clear customs. Payment is voluntary with respect to domestic shipping. Since the Customs Service doesn't monitor domestic shipping there is no clear enforcement tool for domestically shipped items. While potential compliance problems alone are usually not sufficient to militate elimination of a tax system, when the system is as flawed as the current HMT, it may be better to eliminate the tax altogether than to try to create a new and expensive system to ensure taxpayer compliance.

## AT: Repeal HMT – Constitutional

### HMT is Constitutional- Supreme Court ruled taxation of taxation of domestic transportation legal

Skalberg 07 (Randall K. Skallberg, J.D. University of Minnesota, “The U.S. Harbor Maintenance Tax: A Bad Idea Whose Time has Passed?” June 22, 2007, Transportation Journal, Volume 46 Issue 3, <http://www.freepatentsonline.com/article/Transportation-Journal/167507807.html> CDG)

The principal legal challenge to the HMT began with a constitutional challenge based on the export clause of the U.S. Constitution. The U.S. Shoe Corporation brought an action on November 3, 1994 against the U.S. government in the Court of International Trade (CIT). U.S. Shoe sought a refund of the HMT it had paid on exports, arguing that the HMT was an unconstitutional tax as applied to exports (United States v. United States Shoe Corporation). Both the CIT and the Court of Appeals for the Federal Circuit held that the HMT was a tax, not a user fee, and that as a tax, it violated the Export Clause. The U.S. Supreme Court agreed to hear the case after the decision by the Federal Circuit. The first step in the Supreme Court's analysis of the HMT was to determine whether the CIT had proper jurisdiction over the case as filed by U.S. Shoe. The scope of the CIT's jurisdiction is established by 28 U.S.C. [section] 1581. The HMT's own jurisdictional provision states that for jurisdictional purposes, the HMT "shall be treated as if such tax were a customs duty" (United States v. United States Shoe Corporation). The CIT's jurisdictional statute states that the CIT has jurisdiction over any civil action against the U.S. that "... arises out of any law of the United States providing for--(1) revenue from imports or tonnage; (4) administration and enforcement with respect to the matters referred to in paragraphs (1) -(3) of this subsection...." (United States v. United States Shoe Corporation). **The Supreme Court found HMT claims to be within the jurisdiction of the CIT because at that time, the HMT applied to both imports and exports and its specific jurisdictional provision references revenue from imports. Even though the lawsuit involved the HMT's applicability to exports, it was possible for the CIT to rely on jurisdiction created over imports** (United States v. United States Shoe Corporation). The Supreme Court then turned to the issue of whether the HMT was a tax, which would potentially be impermissible under the Export Clause, or whether it qualified as a user fee, which might survive Export Clause scrutiny. The Court found that the HMT is a tax, basing its decision on the Congressional description of the HMT as a "tax on any port use" (United States v. United States Shoe Corporation). The Court went on to analyze the HMT and determined that it is not a user fee. It distinguished prior cases involving user fees such as the civil aircraft registration fee (Evansville Airport v. Delta Airlines) and other valid user charges that involved either the Dormant Commerce Clause or the Takings Clause, finding that the Export Clause contained a "simple direct and unqualified prohibition on any taxes or duties ... on exports" (United States v. United States Shoe Corporation). The Court then analogized the HMT to the excise tax on tobacco that was the subject of the Court' s 1876 decision in Pace v. Burgess. In Pace, the stamps required to sell tobacco in the export market '"bore no proportion whatever to the quantity or value of the package on which [the stamp] was affixed' and the fee was not excessive" (United States v. United States Shoe Corporation). Since the amount of HMT paid by an exporter "does not correlate reliably with the federal harbor services used or useable exporter" (United States v. United States Shoe Corporation) it imposes a tax, not a user fee, and as such was invalid as applied to exports. **The Court invalidated the HMT as it applied to exports, but since the Export Clause does not prohibit taxing imports or domestic transportation, the HMT continues to apply to both imported items and domestic transportation.**

## AT: Repeal Jones Act CP

### 1. Perm – Do Both

### 2. CP doesn’t solve the aff—

### A. Doesn’t incentivize shift - The advantages require incentives be given to shippers to encourage a move from trucking. Newer boats built by countries out of the US doesn’t increase profit for the shippers.

### B. Longtime – Ships contracts are made years in advance and takes years to build. CP doesn’t solve in the shortterm.

### 3. Empirically fails – exemptions to Jones didn’t increase boats

Bluey 10 (Robert B, director at the Center for Media and Public Policy at [The Heritage Foundation](http://www.heritage.org/), “Why Won’t Obama Waive the Jones Act?,” FoxNews.com, 06/21/2010, http://www.foxnews.com/opinion/2010/06/21/robert-bluey-gulf-spill-katrina-jones-act-waive-obama/) SL

Jones Act expert Charlie Papavizas said the 2005 Katrina waiver, which lasted from Sept. 1 to Sept. 19, was used primarily to move cargo between ports, but it didn't result in any new foreign ships in the region. "Twenty days is not enough time to reposition and do anything useful," he said. Mark Ruge, who works with the Maritime Cabotage Task Force, was even blunter: "After the fact, if you look at Katrina and ask, ‘What was the advantage to the United States of America by blanket waiving the Jones Act?’ The answer is nothing came of that -- nothing that couldn't have been accomplished with the usual process. It was just one more thing you could say you did."

### 4. Links to the net benefit – [insert reason]

### 5. Offense [insert one of the following impact turn mods]

## AT: Jones CP- Turn – Military Readiness

### Jones act key to military readiness

Gordon 12 (Meghan, “US barge industry, foreign shippers spar for role in potential SPR sale,” Inside Energy with Federal Lands, 05/21/2012, LexisNexis) SL

The American Maritime Congress springs to the defense of the Jones Act almost every legislative session. Executive Director James Caponiti said his chief reason for defending it is to preserve an active US merchant marine — private ships that the military relies on to transport equipment into war zones. "You don't just prop up a merchant marine when you're getting ready to go to war," Caponiti said. "You leverage the merchant marine that exists. ? The average citizen doesn't have a clue about that: 'Why do I care what ship brought that TV set into my living room?'" Capt. Lee Kincaid, the group's president, compared Jones Act opponents' logic — that cheaper foreign ships should be allowed to carry goods between US ports — to aviation authorities letting a Chinese airline run routine flights between New York and Los Angeles.

### Readiness solves global extinction

Kagan 7 **–** senior associate, Carnegie Endowment for International Peace (Robert, July, End of Dreams, Return of History,

http://www.realclearpolitics.com/articles/2007/07/end\_of\_dreams\_return\_of\_histor.html, AG/JMP)

Were the United States to diminish its influence in the regions where it is currently the strongest power, the other nations would settle disputes as great and lesser powers have done in the past: sometimes through diplomacy and accommodation but often through confrontation and wars of varying scope, intensity, and destructiveness. One novel aspect of such a multipolar world is that most of these powers would possess nuclear weapons. That could make wars between them less likely, or it could simply make them more catastrophic. It is easy but also dangerous to underestimate the role the United States plays in providing a measure of stability in the world even as it also disrupts stability. For instance, the United States is the dominant naval power everywhere, such that other nations cannot compete with it even in their home waters. They either happily or grudgingly allow the United States Navy to be the guarantor of international waterways and trade routes, of international access to markets and raw materials such as oil. Even when the United States engages in a war, it is able to play its role as guardian of the waterways. In a more genuinely multipolar world, however, it would not. Nations would compete for naval dominance at least in their own regions and possibly beyond. Conflict between nations would involve struggles on the oceans as well as on land. Armed embargos, of the kind used in World War i and other major conflicts, would disrupt trade flows in a way that is now impossible. Such order as exists in the world rests not merely on the goodwill of peoples but on a foundation provided by American power. Even the European Union, that great geopolitical miracle, owes its founding to American power, for without it the European nations after World War ii would never have felt secure enough to reintegrate Germany. Most Europeans recoil at the thought, but even today Europe 's stability depends on the guarantee, however distant and one hopes unnecessary, that the United States could step in to check any dangerous development on the continent. In a genuinely multipolar world, that would not be possible without renewing the danger of world war. People who believe greater equality among nations would be preferable to the present American predominance often succumb to a basic logical fallacy. They believe the order the world enjoys today exists independently of American power. They imagine that in a world where American power was diminished, the aspects of international order that they like would remain in place. But that 's not the way it works. International order does not rest on ideas and institutions. It is shaped by configurations of power. The international order we know today reflects the distribution of power in the world since World War ii, and especially since the end of the Cold War. A different configuration of power, a multipolar world in which the poles were Russia, China, the United States, India, and Europe, would produce its own kind of order, with different rules and norms reflecting the interests of the powerful states that would have a hand in shaping it. Would that international order be an improvement? Perhaps for Beijing and Moscow it would. But it is doubtful that it would suit the tastes of enlightenment liberals in the United States and Europe. The current order, of course, is not only far from perfect but also offers no guarantee against major conflict among the world's great powers. Even under the umbrella of unipolarity, regional conflicts involving the large powers may erupt. War could erupt between China and Taiwan and draw in both the United States and Japan. War could erupt between Russia and Georgia, forcing the United States and its European allies to decide whether to intervene or suffer the consequences of a Russian victory. Conflict between India and Pakistan remains possible, as does conflict between Iran and Israel or other Middle Eastern states. These, too, could draw in other great powers, including the United States. Such conflicts may be unavoidable no matter what policies the United States pursues. But they are more likely to erupt if the United States weakens or withdraws from its positions of regional dominance. This is especially true in East Asia, where most nations agree that a reliable American power has a stabilizing and pacific effect on the region. That is certainly the view of most of China 's neighbors. But even China, which seeks gradually to supplant the United States as the dominant power in the region, faces the dilemma that an American withdrawal could unleash an ambitious, independent, nationalist Japan. In Europe, too, the departure of the United States from the scene -- even if it remained the world's most powerful nation -- could be destabilizing. It could tempt Russia to an even more overbearing and potentially forceful approach to unruly nations on its periphery. Although some realist theorists seem to imagine that the disappearance of the Soviet Union put an end to the possibility of confrontation between Russia and the West, and therefore to the need for a permanent American role in Europe, history suggests that conflicts in Europe involving Russia are possible even without Soviet communism. If the United States withdrew from Europe -- if it adopted what some call a strategy of "offshore balancing" -- this could in time increase the likelihood of conflict involving Russiaand its near neighbors, which could in turn draw the United States back in under unfavorable circumstances. It is also optimistic to imagine that a retrenchment of the American position in the Middle East and the assumption of a more passive, "offshore" role would lead to greater stability there. The vital interest the United States has in access to oil and the role it plays in keeping access open to other nations in Europe and Asia make it unlikely that American leaders could or would stand back and hope for the best while the powers in the region battle it out. Nor would a more "even-handed" policy toward Israel, which some see as the magic key to unlocking peace, stability, and comity in the Middle East, obviate the need to come to Israel 's aid if its security became threatened. That commitment, paired with the American commitment to protect strategic oil supplies for most of the world, practically ensures a heavy American military presence in the region, both on the seas and on the ground. The subtraction of American power from any region would not end conflict but would simply change the equation. In the Middle East, competition for influence among powers both inside and outside the region has raged for at least two centuries. The rise of Islamic fundamentalism doesn 't change this. It only adds a new and more threatening dimension to the competition, which neither a sudden end to the conflict between Israel and the Palestinians nor an immediate American withdrawal from Iraq would change. The alternative to American predominance in the region is not balance and peace. It is further competition. The region and the states within it remain relatively weak. A diminution of American influence would not be followed by a diminution of other external influences. One could expect deeper involvement by both China and Russia, if only to secure their interests. 18 And one could also expect the more powerful states of the region, particularly Iran, to expand and fill the vacuum. It is doubtful that any American administration would voluntarily take actions that could shift the balance of power in the Middle East further toward Russia, China, or Iran. The world hasn 't changed that much. An American withdrawal from Iraq will not return things to "normal" or to a new kind of stability in the region. It will produce a new instability, one likely to draw the United States back in again. The alternative to American regional predominance in the Middle East and elsewhere is not a new regional stability. In an era of burgeoning nationalism, the future is likely to be one of intensified competition among nations and nationalist movements

### Jones Act key to military readiness

Luhta 12 (Klaus, graduate of the United States Merchant Marine Academy, Cleveland-Marshall College of Law, U.S. Coast Guard licensed Master, licensed attorney, “Sustaining Jones Act a Necessity [OP/ED],” gCaptain, 04/09/2012, <http://gcaptain.com/sustaining-jones-necessity-oped/>) SL

Known formally as the Merchant Marine Act of 1920, the Jones Act ensures that goods transported between U.S. ports are carried aboard U.S. flag merchant vessels.  The legislation is critical to maintaining the American flag fleet of merchant ships.  This is a good thing from a national security standpoint because it means the U.S. government will have a ready supply of tonnage available for transporting military cargo when the need arises.  Numerous instances have occurred where the U.S. government paid foreign-registered vessels to transport militarily necessary cargo to war theaters and the vessels refused to enter the destination port at the most critical moments, whether out of fear or because of conflicting national interest.  Having that same cargo carried aboard U.S. flag merchant vessels manned by American crews guarantees that such a mission failure will never occur.

## AT: Jones CP- Turn - Navy

### Jones Act key to American navy and national security

Robinson 12 (Matthew, Reuters,“Insight: Obama's oil tanker dilemma: Vex unions to win Pennsylvania?,” 03/12/2012,

<http://www.reuters.com/article/2012/03/12/us-jonesact-waivers-idUSBRE82B10020120312>) SL

"Waiving the Jones Act doesn't make sense due to the impact on jobs," said Dan Duncan, executive secretary treasurer of the A.F.L-C.I.O Maritime Trades Department, which represents 5 million mariners, shipbuilders, longshoreman and suppliers in the United States and Canada. "We need to keep a strong American fleet for national security implications." WE CAN HANDLE IT

### Naval power key to solve great power war

Conway et al 7 [James T., General, U.S. Marine Corps, Gary Roughead, Admiral, U.S. Navy, Thad W. Allen, Admiral, U.S. Coast Guard, “A Cooperative Strategy for 21st Century Seapower,” October, http://www.navy.mil/maritime/MaritimeStrategy.pdf]

Deter major power war**.** No other disruption is as potentially disastrous to global stability as war among major powers. Maintenance and extension of this Nation’s comparative seapower advantage is a key component of **deterring major power war**. While war with another great power strikes many as improbable, the near-certainty of its ruinous effects demands that it be actively deterred using all elements of national power. The expeditionary character of maritime forces—our lethality, global reach, speed, endurance, ability to overcome barriers to access, and operational agility—provide the joint commander with a range of deterrent options. We will pursue an approach to deterrence that includes a credible and scalable ability to retaliate against aggressors conventionally, unconventionally, and with nuclear forces.

**Win our Nation’s wars.** In times of war, our ability to impose local sea control, overcome challenges to access, force entry, and project and sustain power ashore, makes our maritime forces an **indispensable element** of the joint or combined force. This expeditionary advantage must be maintained because it provides joint and combined force commanders with freedom of maneuver. Reinforced by a robust sealift capability that can concentrate and sustain forces, sea control and power projection enable extended campaigns ashore.

## AT: Jones CP- Turn – Economy/Jobs

### Jones Act key to jobs, economic progress and stability

Robinson 12 (Matthew, Reuters,“Insight: Obama's oil tanker dilemma: Vex unions to win Pennsylvania?,” 03/12/2012,

<http://www.reuters.com/article/2012/03/12/us-jonesact-waivers-idUSBRE82B10020120312>) SL

"Waiving the Jones Act doesn't make sense due to the impact on jobs," said Dan Duncan, executive secretary treasurer of the A.F.L-C.I.O Maritime Trades Department, which represents 5 million mariners, shipbuilders, longshoreman and suppliers in the United States and Canada. "We need to keep a strong American fleet for national security implications." WE CAN HANDLE IT The Jones Act was originally conceived as a way to help protect and support domestic shipbuilders, an industry that has since all but vanished. But the Maritime Administration can grant waivers, usually on a case by case basis, "to help ensure continued economic progress and stability." Of the 56 Jones Act tankers with a capacity of more than 10,000 deadweight tons, about 35 are generally engaged in trade in U.S. waters, according to the U.S. Energy Information Administration. Ship owners, wary of the impact of waivers on their business, insist the industry has enough Jones Act-approved tankers to handle a change in trade flows to move product from the giant U.S. Gulf Coast refining hub -- which currently is exporting record volumes of fuel to Latin America -- to the East Coast, which last year imported roughly a fifth of its gasoline from Europe. "It would take some shuffling around but I think there is some tonnage that could meet that demand," said Michael Roberts, senior vice president at Crowley Maritime Corporation. Florida-based Crowley owns 17 U.S.-flagged articulated barges, some of which can carry nearly as much oil as the handymax tankers in the U.S. fleet and can also be used for intercoastal trips. The country's 44 barges are not included in the EIA tanker numbers. "If they waive the Jones Act to move product from the Gulf to the East Coast that would really knock the stuffing out of the confidence to invest in American vessels," said Roberts. The cost of chartering a U.S.-flagged tanker to take a 38,000-tonne cargo of gasoline from Houston to New York Harbor would be roughly $4 per barrel; the theoretical cost of a foreign-flagged tanker to make the same journey would be about $2 per barrel, according to shipbrokers.

### Jones Law boosts industry, economy, and national security

Corgey, 4/17/12 [Dean Corgey, maritime engineer, vice president of the Seafarers International Union’s Gulf Coast Region, vice president of the Texas AFL-CIO; as secretary-treasurer of the West Gulf Ports Council of the AFL-CIO Maritime Trades Department; and on the executive board of the Harris County AFL-CIO. He also served two terms on the Coast Guard’s Towing Safety Advisory Committee. He currently serves as a member of the U.S. Department of Homeland Security's Area Maritime Security Committee, “Jones Act has been good for Texas, America”, <http://www.chron.com/opinion/outlook/article/Jones-Act-has-been-good-for-Texas-America-3489711.php> //VP]

On the national level, the Jones Act fleet consists of 40,000 vessels engaged in domestic waterborne commerce representing an investment of $30 billion. The industry moves a billion tons of cargo and 100 million passengers yearly, generating $100 billion in annual economic output. This has created 500,000 American jobs with a yearly payroll of $29 billion and $11 billion in taxes per annum. The Jones Act fleet provides reliable service to markets such as Alaska, Hawaii and Puerto Rico, which depend on waterborne commerce for their very existence. Our domestic fleet is invaluable to our homeland security and border protection; our companies and crews are regulated by the [U.S. Coast Guard](http://www.chron.com/?controllerName=search&action=search&channel=opinion%2Foutlook&search=1&inlineLink=1&query=%22U.S.+Coast+Guard%22) and by federal law enforcement agencies. Our domestic maritime industry is clearly vital to our national, economic and homeland security.

### The Jones Act protects American jobs

Maritime Trades Department 12 (Constitutionally mandated department of the AFL-CIO, “Mtd official tells reuters, new york times: no jones act waivers,” 03/15/2012, <http://maritimetrades.org/mtd-official-tells-reuters-new-york-times-no-jones-act-waivers/>) SL

“In a time of high unemployment in the United States, ignoring the Jones Act, which has been central to American national security and protects American jobs,  just makes no sense,” said Dan Duncan, secretary-treasurer of the Maritime Trades Department, AFL-CIO, who was quoted in the New York  Times.  He made similar remarks to Reuters. The stories ran shortly after the MTD concluded its winter meetings in Orlando, Florida, where the waivers were a matter of much discussion. Opponents of the Jones Act have been trying to use the latest rise in gasoline prices to erode the integrity of the 1920 law, just as they attempted to use the BP oil spill in the Gulf. And now, just as then, they are disseminating information that, at best, is highly skewered. The MTD and its allies in the labor movement and shipping industry have been working overtime to educate the American public and the new members of Congress about the issues involved.  The important thing to remember is that there are procedures in place to grant waivers if they are needed.  There is, almost everyone in the industry believes, no reason to do so when U.S.-flag vessels are available. As was reported in the Reuters story: “Ship owners, wary of the impact of waivers on their business, insist the industry has enough Jones Act-approved tankers to handle a change in trade flows to move product from the giant U.S. Gulf Coast refining hub — which currently is exporting record volumes of fuel to Latin America — to the East Coast, which last year imported roughly a fifth of its gasoline from Europe. “’It would take some shuffling around but I think there is some tonnage that could meet that demand,’ said Michael Roberts, senior vice president at Crowley Maritime Corporation. “Florida-based Crowley owns 17 U.S.-flagged articulated barges, some of which can carry nearly as much oil as the handymax tankers in the U.S. fleet and can also be used for intercoastal trips. The country’s 44 barges are not included in the EIA tanker numbers. “’If they waive the Jones Act to move product from the Gulf to the East Coast that would really knock the stuffing out of the confidence to invest in American vessels,’ said Roberts.

## AT: Jones CP- Turn – Shipbuilding Industry

### Jones Act key to shipbuilding industry

Luhta 12 (Klaus, graduate of the United States Merchant Marine Academy, Cleveland-Marshall College of Law, U.S. Coast Guard licensed Master, licensed attorney, “Sustaining Jones Act a Necessity [OP/ED],” gCaptain, 04/09/2012, <http://gcaptain.com/sustaining-jones-necessity-oped/>) SL

Why is it important the Jones Act be sustained?  American crews cannot be trained and assembled overnight.  Training, particularly for licensed officers in the U.S., is becoming increasingly onerous.  An officer typically attends a four-year university, earning a Bachelor degree while also satisfying the requirements of the USCG licensing regime.  After graduation the officer must regularly sail aboard vessels to enhance the skills learned in school and advance license grade. And ships cannot be constructed in a day.  Another section of the Jones Act requires that U.S. flag vessels used in U.S. trade be constructed in U.S. shipyards.   Canada has a similar law on the books that is very effective.  While Canadian legislators embrace the law, American Jones Act opponents complain about labor costs related to new ship construction.  Studies do in fact show that ship construction in the U.S. is more expensive than, say, China, where slave labor is employed.  As a nation we ought to relish our commitment to a shipbuilding industry that creates jobs and maintains the skilled workforce necessary to fabricate large vessels.  The Jones Act opponents who say that U.S. flag ships should not be built in America are too quick to sell out American innovation and ingenuity.  It is appalling that any American legislator would support this position. Ship construction is a trade that requires particular knowledge and experience.  So long as ships are being built in U.S. yards, we are assured that the U.S. still maintains the knowledge base to continue this activity.  Stop building ships in the U.S. and in less than ten years all the skilled individuals who know the secrets of ship construction will be gone from the industry.  Retraining this skilled workforce will cost multiples more than any expense associated with sustaining the Jones Act.

### Shipbuilding key to naval power

Alberto, et al., 5 (Lieutenant Colonel Ronald P., U.S. Army, Colonel Michael G. Archuleta, U.S. Air Force, Lieutenant Colonel Steven H. Bills, U.S. Air Force, Commander William A. Bransom, U.S. Navy, Mr. Kenneth Cohen, Department of State, Commander William A. Ebbs, U.S. Navy, George Manjgaladze, Ministry of Defense, Republic of Georgia, Commander Elizabeth B. Myhre, U.S. Navy, Audrea M. Nelson, DA, Robert L. Riddick, Department of Defense, Colonel Christopher M. Ross, U.S. Army, Julia N. Ruhnke, DA, Lieutenant Colonel Gregory M. Ryan, U.S. Marine Corps, Colonel David D. Thompson, U.S. Air Force, Commander Hugh D. Wetherald, U.S. Navy, Dr. Mark Montroll, faculty at the Industrial College of the Armed Forces, Dr. Michael Farbman, USAID, faculty at the Industrial College of the Armed Forces, Captain David B. Hill, U.S. Coast Guard, faculty at the Industrial College of the Armed Forces, “SHIPBUILDING”, The Industrial College of the Armed Forces, National Defense University, 2005, http://www.ndu.edu/icaf/programs/academic/industry/reports/2005/pdf/icaf-is-report-shipbuilding-2005.pdf, Deech)

In conclusion, our study found that the tremendous advantage the US enjoys in naval power directly supports our national security through global power projection and maintaining freedom of the seas. Our ability to build large, highly capable naval ships is a vital part of our naval superiority and is therefore inexorably linked to our national security. **The US must maintain it lead in naval power by protecting its domestic shipbuilding industry**. It is our conclusion that the number one issue facing the American military shipbuilder today is the uncertainty in future orders for ship construction. The year to year fluctuation in the projected naval order book adds uncertainty for the shipbuilder wanting to invest in capital and labor improvement, and adds cost to the vessels actually being delivered. This fluctuation is exacerbated when the US Navy cancels entire ship classes or severely limits procurement of vessels that have been programs of record, programs which the shipbuilders have used to make labor and capital investment decisions. We feel it is imperative for the Navy to identify the force of the future and commit to a stable procurement plan to implement that force. The concept of Seabasing must mature at least to the point where the major yards can invest in the infrastructure necessary to build the force. In this area, we also conclude that the requirement for full funding of naval vessels in the year of authorization hampers the ability of the Navy and the industry to maintain a steady shipbuilding plan. It is apparent to us that the US Navy shipbuilding program is often used as a “bill payer” for other DoD priorities. In addition to the reality that the money is not obligated in the year of funding, the temptation to use the US Navy shipbuilding account to pay current year expenses is greater if significant procurement dollars are available to pay the full cost of individual ships. While we are convinced the nation must maintain sufficient shipbuilding capacity to allow for surge in national emergencies, we feel that the current and projected naval order book does not support the capacity being carried by the six largest shipyards. Restructuring of the industrial base is necessary. This restructuring may entail the politically difficult decision to allow some yards to close, but if the naval order book does not increase and the restructuring does not occur, unit cost will continue to skyrocket out of proportion to the value to the nation of the vessel.

### Naval power key to solve great power war

**Conway et al 7** [James T., General, U.S. Marine Corps, Gary Roughead, Admiral, U.S. Navy, Thad W. Allen, Admiral, U.S. Coast Guard, “A Cooperative Strategy for 21st Century Seapower,” October, http://www.navy.mil/maritime/MaritimeStrategy.pdf]

Deter major power war**.** No other disruption is as potentially disastrous to global stability as war among major powers. Maintenance and extension of this Nation’s comparative seapower advantage is a key component of **deterring major power war**. While war with another great power strikes many as improbable, the near-certainty of its ruinous effects demands that it be actively deterred using all elements of national power. The expeditionary character of maritime forces—our lethality, global reach, speed, endurance, ability to overcome barriers to access, and operational agility—provide the joint commander with a range of deterrent options. We will pursue an approach to deterrence that includes a credible and scalable ability to retaliate against aggressors conventionally, unconventionally, and with nuclear forces.

**Win our Nation’s wars.** In times of war, our ability to impose local sea control, overcome challenges to access, force entry, and project and sustain power ashore, makes our maritime forces an **indispensable element** of the joint or combined force. This expeditionary advantage must be maintained because it provides joint and combined force commanders with freedom of maneuver. Reinforced by a robust sealift capability that can concentrate and sustain forces, sea control and power projection enable extended campaigns ashore.

### Shipbuilding industry is key to the global economy

LECG, 2 [LECG Corporation, global consulting firm, “The Economic Contribution of the U.S. Commercial Shipbuilding Industry”, April 2002, http://www.shipbuilders.org/Portals/Shipbuilders/documents/econcontr\_shipbuilding.pdf, Deech]

U.S. commercial shipbuilders’ activities make a substantial contribution to U.S. economy by increasing U.S. output (GDP), increasing the number of jobs, increasing personal income, and increasing tax revenues. As a result of the commercial shipbuilding activities in 2001: Total U.S. output was increased by $11.0 billion ; 147,230 total jobs in the U.S. economy were created; U.S. personal income was increased by $9.4 billion ; and Federal, state, and local government tax revenues were increased by $3.4 billion These economic contributions are not due just to the U.S. commercial shipbuilders’ activities at their shipyards, but also to the activities in the companies that supply these shipyards. There are active commercial shipyards in at least 29 states, and these shipyards purchase materials, services, and capital equipment that is produced in all 50 states and the District of Columbia. The U.S. commercial shipbuilding industry, which grew at an average annual rate of 6.8% between 1992 and 2001, outperformed the U.S. economy which grew at an average annual rate of 3.4% over the same period. The estimated total value of shipments (gross revenues) of the U.S. commercial shipbuilding industry in 2001 was $3.9 billion , and these shipyards directly employed 31,283 people. Of the $3.9 billion of gross revenues, about 47%, or $1.8 billion, goes to pay companies throughout the U.S. that supply the shipyards. The remaining 53% of the $3.9 billion of gross revenues is disbursed or stays at the shipyard in the form of employee compensation ($1.7 billion), gross profits of the company ($0.3 billion), and indirect business tax payments such as sales/excise taxes and property taxes ($0.02 billion). In turn, the owners and employees pay taxes on the income they receive. The U.S. commercial shipbuilding industry includes facilities which build self-propelled and nonself-propelled ships and barges and clean, repair, and convert ships and barges. Facilities which build Navy combatant ships are not included. Adding these shipyards to the analysis would add significantly to the economic contributions presented above.

### Jones Act Key to and shipbuilding Industry

ASC ‘12 [American Shipping Company, 2012, “US Jones Act”, <http://www.americanshippingco.com/section.cfm?path=326,346>]

The Jones Act industry accounts for: $14.0 Billion in annual economic output and 84,000 jobs in U.S. shipyards, 70,000 jobs working on or with Jones Act vessels. Over 39,000 vessels of all sizes representing an investment of $30 billion The Jones Act is an essential feature of U.S. national security policy as it provides required capacity to support national security needs and avoid complete dependence on ships controlled by foreign nations. Since the U.S. maritime position in international trades has declined significantly in the last three decades, the Jones Act is the primary maritime market for U.S. shipyards and operators, and its maintenance is key to American Shipping Company‘s continued success.

### Jones Act repeal would hurt the shipbuilding industry – empirics prove

Szakonyi, 2010 [Writer and editor at the Journal of Commerce and Jacksonville Business Journal, July 8th 2012, Jacksonville Business Journal, “Jones Act repeal would hurt local shipping firms”, <http://www.bizjournals.com/jacksonville/stories/2010/07/12/story5.html>]

Sen. John McCain’s proposed repeal of an 80-year-old maritime law could, if passed, shake up Jacksonville’s most entrenched trade lane and endanger three hometown shipping companies dependent on it. McCain, R-Ariz., argues that requiring all goods shipped between the nation’s ports to be transported by U.S.-built ships and sailed by American crews is protectionist and raises prices by excluding foreign competition. Supporters of the Jones Act counter that the law preserves security and the domestic maritime industries. The repeal of the law “would be devastating,” said Fred Schloth, [Sea Star Line LLC](http://ad.doubleclick.net/imp;v7;j;257773330;0-0;0;17653162;0/0;48845127/48842170/1;;~aopt=2/1/b4/0;~okv=;at=story;pageid=3620471;pos=wel;dcopt=ist;tile=11;kw=jacksonville;vs=logistics_and_transportation;vs=legal_services;sz=1x1;bsg=1418586;bsg=1429866;bsg=1419306;bsg=1422786;;~cs=u%3fhttp:/s0.2mdn.net/3571821/acerTM_interstitial_v1.htm?t=10&cT=http%3A//ad.doubleclick.net/click%253Bh%253Dv8/3cb0/2/0/%252a/y%253B257773330%253B0-0%253B0%253B17653162%253B255-0/0%253B48845127/48842170/1%253B%253B%257Eaopt%253D2/1/b4/0%253B%257Esscs%253D%253f&l=http%3A//www.bizjournals.com/profiles/company/us/fl/jacksonville/sea_star_line_llc/840261/) ’s assistant vice president of marketing. “When you look at [shipping] rates to Puerto Rico, they’re already competitive and can’t come down more.” The shipping service to the island is the core business of Sea Star and fellow Jacksonville-based company [Trailer Bridge Inc.](http://ad.doubleclick.net/imp;v7;j;257773330;0-0;0;17653162;0/0;48845127/48842170/1;;~aopt=2/1/b4/0;~okv=;at=story;pageid=3620471;pos=wel;dcopt=ist;tile=11;kw=jacksonville;vs=logistics_and_transportation;vs=legal_services;sz=1x1;bsg=1418586;bsg=1429866;bsg=1419306;bsg=1422786;;~cs=u%3fhttp:/s0.2mdn.net/3571821/acerTM_interstitial_v1.htm?t=10&cT=http%3A//ad.doubleclick.net/click%253Bh%253Dv8/3cb0/2/0/%252a/y%253B257773330%253B0-0%253B0%253B17653162%253B255-0/0%253B48845127/48842170/1%253B%253B%257Eaopt%253D2/1/b4/0%253B%257Esscs%253D%253f&l=http%3A//www.bizjournals.com/profiles/company/us/fl/jacksonville/trailer_bridge_inc/841522/) The repeal of the Jones Act could give Crowley Maritime Corp. more competition in Puerto Rico and in its services ranging from towing to oil transport in its North American coasts, Alaskan and Hawaiian markets. Horizon Lines Inc., based in Charlotte, N.C., also provides shipping service from Jacksonville to Puerto Rico, along with Crimson Shipping Co. Inc. and Seaboard Marine Ltd., which operate out of the Port of Fernandina. The amount of trade with Puerto Rico has been declining for years and only recently has shown signs of stabilization and growth. Shipping experts hope that Puerto Rico’s Gov. Luis Forturno will cut down on bureaucracy and revive the island’s ailing manufacturing sector. Even with Puerto Rico’s economic malaise, the amount of cargo handled on the trade lane was about 2.3 million tons, or roughly one-third of all tonnage handled by the Jacksonville Port Authority’s tenants and customers in fiscal 2009, which ends Sept. 30. The figure doesn’t take into account the volumes handled by Crowley.

## AT: Jones CP – Turn – National Security

### Key to national security

American Shipping Company, 12 - American Shipping Company is a U.S. shipping company with focus on building the premier ownership position in the Jones Act market. <http://www.americanshippingco.com/section.cfm?path=326,346>

The U.S. cabotage laws, commonly referred to as the Jones Act, require all commercial vessels transporting merchandise between ports in the United States to be built, owned, operated and manned by U.S. citizens and to be registered under the U.S. flag. The law applies to any vessel operating between two U.S. ports, whether in the continental United States, or non-contiguous states of Hawaii and Alaska, and also Puerto Rico. It functions to as a barrier to entry for low-cost foreign carriers, which are not subject to the same wage, labor and environmental regulations faced by U.S. shipbuilders and operators. The Jones Act industry accounts for: • $14.0 Billion in annual economic output and 84,000 jobs in U.S. shipyards • 70,000 jobs working on or with Jones Act vessels • Over 39,000 vessels of all sizes representing an investment of $30 billion. The Jones Act is an essential feature of U.S. national security policy as it provides required capacity to support national security needs and avoid complete dependence on ships controlled by foreign nations. Since the U.S. maritime position in international trades has declined significantly in the last three decades, the Jones Act is the primary maritime market for U.S. shipyards and operators, and its maintenance is key to American Shipping Company‘s continued success.

## AT: Jones CP- Turn – Hegemony

### Jones Act key to hegemony

Luhta 12 (Klaus, graduate of the United States Merchant Marine Academy, Cleveland-Marshall College of Law, U.S. Coast Guard licensed Master, licensed attorney, “Sustaining Jones Act a Necessity [OP/ED],” gCaptain, 04/09/2012, <http://gcaptain.com/sustaining-jones-necessity-oped/>) SL

Beyond the obvious technical benefits of the Jones Act, there is a more subtle outcome frequently overlooked.  At the International Maritime Organization (IMO) in London, U.K., the United States holds a seat as a member state.  This seat ensures U.S. influence in the development of international policy.  As the U.S. delegation weighs in on maritime matters at IMO today, its opinion holds sway in no small part due to strong U.S. participation in maritime industry in the form of vessel operation and shipbuiliding.  The U.S. has consistently been known to have the best trained mariners in the world.  To eliminate or weaken the Jones Act would mean the supply of qualified American mariners would diminish, thereby diminishing the perception of the U.S. in the maritime realm and, as a result, its influence on global maritime policy.  It would be difficult for the IMO or any of its member states to take the recommendations of the U.S. seriously.  As part of an international body that governs by consensus, it is vital that the U.S. maintain an influential role lest our national interests be circumvented. Jones Act opponents like Senator McCain should give serious thought to the ideas they propose in legislation and media.  The harm inflicted on the U.S. maritime workforce and the U.S. reputation within the global maritime community, were the Jones Act repealed, would be irreparable.

### Heg prevents multiple scenarios for nuclear war

Khalizad 95 Zalmay Khalizad, Analyst at the RAND, Spring 1995, Washington Quarterly

Under the third option, the United States would seek to retain global leadership and to preclude the rise of a global rival or a return to multipolarity for the indefinite future. On balance, this is the best long-term guiding principle and vision. Such a vision is desirable not as an end in itself, but because a world in which the United States exercises leadership would have tremendous advantages. First, the global environment would be more open and more receptive to American values -- democracy, free markets, and the rule of law. Second, such a world would have a better chance of dealing cooperatively with the world's major problems, such as nuclear proliferation, threats of regional hegemony by renegade states, and low-level conflicts. Finally, U.S. leadership would help preclude the rise of another hostile global rival, enabling the United States and the world to avoid another global cold or hot war and all the attendant dangers, including a global nuclear exchange. U.S. leadership would therefore be more conducive to global stability than a bipolar or a multipolar balance of power system.

## AT: Jones CP – Repeal Unpop

### Jones Act key to US shipbuilding industry, national security

ASC 12 (American Shipping Company, U.S. Shipping Company holding the premier ownership position in the market, “U.S. Jones Act” April 24, 2012, <http://www.americanshippingco.com/section.cfm?path=326,346> CDG)

The U.S. cabotage laws, commonly referred to as **the Jones Act**, require all commercial vessels transporting merchandise between ports in the United States to be built, owned, operated and manned by U.S. citizens and to be registered under the U.S. flag. The law applies to any vessel operating between two U.S. ports, whether in the continental United States, or non-contiguous states of Hawaii and Alaska, and also Puerto Rico. It **functions to as a barrier to entry for low-cost foreign carriers, which are not subject to the same wage, labor and environmental regulations faced by U.S. shipbuilders** and operators. **The Jones Act industry accounts for: $14.0 Billion in annual economic output and 84,000 jobs in U.S. shipyards, 70,000 jobs working on or with Jones Act vessels, Over 39,000 vessels of all sizes representing an investment of $30 billion**. **The Jones Act is an essential feature of U.S. national security policy as it provides required capacity to support national security needs and avoid complete dependence on ships controlled by foreign nations.** Since the U.S. maritime position in international trades has declined significantly in the last three decades, the Jones Act is the primary maritime market for U.S. shipyards and operators, and its maintenance is key to American Shipping Company‘s continued success. Implementation of the Jones Act is the responsibility of the United States Coast Guard, which oversees ship construction, repair and rebuilding, as well as reviewing ownership structures to ensure compliance with the Jones Act.

### Jones Act has powerful support in congress- lobbies, national security

ASC 12 (American Shipping Company, U.S. Shipping Company holding the premier ownership position in the market, “U.S. Jones Act” Written October 9, 2008, Article updated April 24, 2012, <http://www.americanshippingco.com/section.cfm?path=326,346> CDG)

**The Jones Act enjoys broad and consistent support in the Congress, primarily due to the combined advocacy efforts of the seagoing trade unions**; shipyards; and vessel owners. **A large lobbying organization, the Maritime Cabotage Task Force** (www.mctf.com) was formed more than 10 years ago and **has grown to represent not only those directly involved in the Jones Act, but many allied parties as well. It maintains an active effort to build support for the Jones Act among U.S. government officials and to discourage any attempts to weaken or modify the law**. In addition, two shipbuilding organizations, **the** Shipbuilders Council of America **(SCA) and the** American Shipbuilding Association **(ASA) maintain active advocacy efforts to build and maintain support for the Jones Act.** Aker Philadelphia Shipyard, Inc. is on the board of the SCA, which is comprised of U.S. commercial shipyards, and participates in its lobbying activities as well as maintaining its own active lobbying presence in Washington. **While the Jones Act has been criticized by economists, some in the shipping community, and other nations seeking to dominate the U.S. domestic maritime markets, no serious effort has been made in the U.S. Congress to amend or weaken the Jones Act**. Since 9/11, the national security aspects of the Jones Act have served to strengthen the support it enjoys in the Congress. **Evidence of the support for the Jones Act can be found in the explicit exemption granted to U.S. cabotage laws under the General Agreement on Tariffs and Trade (GATT) which sought to eliminate all barriers to trade.** All subsequent trade agreements maintain this exclusion, despite continued complaints by other maritime nations.

## AT: Jones CP – Links to Elections

### Repeal unpopular – leads to Obama loss

Sullivan 12 (Colin, E&E reporter, EnergyWire, “OIL AND GAS:

Has the Jones Act put the president in an election-year Catch-22?,” 03/20/2012, <http://eenews.net/public/energywire/2012/03/20/1>) SL

Analysts and insiders are wrestling with the possibility of the White House waiving the Jones Act to accelerate ship flow to the East Coast, in a move that could bring badly needed gasoline to the region before the summer driving season kicks off. The Jones Act, which is technically a section of the Merchant Marine Act of 1920, regulates ship flow between U.S. ports with strict rules designed to ensure U.S.-flagged vessels run by U.S. crews get the work. Some have suggested a waiver of those restrictions to let more foreign-owned tankers into the mix would help a region that may have lost 50 percent of its recent refining capacity by summer ([*EnergyWire*](http://eenews.net/energywire/2012/03/07/archive/1), March 7). The fear is the tight refining market would lead to record gas prices in the Northeast and undermine a fragile economic recovery. Rumors have pointed to President Obama seriously considering the waiver to access more refined fuel from the Gulf of Mexico, though doing so could alienate unions that are key to the Democrat's re-election chances this fall. That puts the president between a rock and a hard place given the ascendance of high energy costs as a prime target in the race for the GOP presidential nomination. Obama waived the act last summer to accelerate crude shipments during the Libyan uprising, but this time around, trade groups appear to be mobilizing against the idea. They say the United States has more than enough options to move refined product, whether by sea or by land. Mark Ruge, counsel to the American Maritime Partnership, bluntly said he sees no reason to waive the act this year because gasoline from cheaper Midwest and Gulf Coast markets -- which process a different type of crude oil than the East -- can be moved through pipelines, through inland waterways and by ocean routes. "The petroleum supply market will quickly adjust to the closure of the refineries," he said. "Additional petroleum products will move from the Gulf to the Northeast by pipeline. Additional petroleum products will be imported from foreign refineries on foreign tank vessels. And additional petroleum products will move from the Gulf to the Northeast on American (i.e., Jones Act) tank vessels."

## AT: Incentives to Operators CP

### Incentives to operators fail

Kruse and Hutson, 10 [C. James Kruse, TEXAS TRANSPORTATION INSTITUTE, Houston, TX & Nathan Hutson, CENTER FOR TRANSPORTATION RESEARCH, Austin, TX, National Cooperative Freight Research Program, Sponsored by the Research and Innovative Technology Administration and part of the Transportation Research Board of the National Academes, July 2010, http://onlinepubs.trb.org/onlinepubs/ncfrp/ncfrp\_rpt\_005.pdf, p. 21]

The policy challenge for government is to bridge the gap between present circumstances and future aspirations. Businesses are not going to sacriﬁce potential proﬁts purely for “greening” their operations. Political entities must ultimately either tax what they wish to discourage or incentivize what they wish to encourage. Legislative activity to date at the federal level can be separated into two main categories: (1) attempts to modify or eliminate HMT, and (2) designation or promotion of routes for the development of marine highways or SSS through infrastructure grants or other mechanisms, along with attempts to actually fund these programs. Efforts to eliminate HMT for domestic shipping have been unsuccessful to date. In the last four congressional sessions, a number of lawmakers have sponsored bills providing HMT relief. Despite bipartisan support for the idea, none of those bills have made it out of committee. Such efforts are still underway. Bills that encourage the development of marine transportation alternatives have met with more success, but there has been little funding attached to them. Appendix E provides a summary of legislative activity directly related to these two categories mentioned. It includes both successful and unsuccessful legislative proposals. The HMT proposals may have been unsuccessful simply because they did not receive priority consideration, but it may also be because of trade-related issues. Congressional sources point out that a taxation scheme that differentiates between international trade and domestic trade throughports could violate existing trade agreements and could result in an unfavorable ruling from the World Trade Organization if challenged. Most interviewees believe that if incentives are deemed to be necessary, the best approach is to incentivize shippers, not operators. In this manner, the decision makers will be directly affected. With increased demand, capacity will follow. If incentives go to operators, there is no guarantee that the shipper will directly benefit and the effect of the incentive will be diminished. Furthermore, some analysts hold the view that for an incentive program to be effective, the recipient needs to have a signiﬁcant ﬁnancial stake (e.g., a one-to-one matching grant); otherwise, there is not a strong incentive to “do things right” from the outset.

# AT: Cheater Cheater Cheater CPs

## AT: NEPA CP

### NEPA has finished its assessment of plan – The public has been included

Federal Register, 12 [Federal Register Volume 77, Number 36 (Thursday, February 23, 2012) http://www.gpo.gov/fdsys/pkg/FR-2012-02-23/html/2012-4158.htm]

SUMMARY: Notice is hereby given that the Maritime Administration (MarAd), of the U.S. Department of Transportation (U.S. DOT), will prepare a Programmatic Environmental Assessment (PEA) in compliance with the National Environmental Policy Act of 1969 that will evaluate potential environmental effects associated with the performance of the America's Marine Highway Program. The PEA will identify and assess potential environmental impacts from the proposed actions and a range of reasonable alternatives so MarAd can determine, what if any, additional analysis may be required including, whether to prepare environmental impact statement(s) (EIS) or issuing finding(s) of no significant impact (FONSI). MarAd is initiating a scoping process to identify community concerns and local issues that will be addressed in the PEA. MarAd plans to hold public scoping meetings regionally to obtain input from the public. The meetings will be conducted using an open house format with informational displays and materials available for public review. There will be no formal presentations. MarAd staff will be present at this open house to answer general questions on the proposed action and the PEA process. If at any point during the preparation of the PEA, MarAd determines that it is necessary to prepare an EIS, this scoping process will serve as the scoping process that would normally follow a Notice of Intent to prepare an EIS. Dates and Locations: The NEPA scoping period ends on April 16, 2012. Comments will only be accepted at the scoping meetings or on regulations.gov under the docket number 2012-0015. Comment forms will be provided at each public scoping meeting. Comments received at the meetings will be scanned and uploaded to the docket.

### CP is normal means – All MARAD policies about the Marine Highway involve NEPA and assessment has already occurred. Plan is the result

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 27]

Accordingly, EPA, USCG, U.S. Army Corps of Engineers, MARAD, and other government agencies should continue to work with the maritime transportation industry to implement responsible regulations and practices to mitigate these potential environmental risks to our water resources. In addition to minimizing the occurrence of harmful events, a robust regulatory framework is appropriate to establish standards for sufficient contingency planning and adequate response resources for when such events do happen. Key issues to address include the potential consequences of the following: ␣ Future increases in water traffic and expanded infrastructure; ␣ Changed nature of vessels and their combined use and interaction on America’s Marine Highway; ␣ Larger cargo capacities; and ␣ Changed and expanded cargoes and products and the nature and effects of accidental releases in multiple, varied aquatic environments (e.g., lakes, rivers, wetlands, estuaries, coastal ocean). The full scope of these efforts is too broad to discuss in this report, and MARAD will conduct the appropriate analysis under the National Environmental Policy Act (NEPA) on both a project and programmatic level. Good environmental practice and sound regulation will be essential to achieving net benefits from greater use of America’s Marine Highway on the nation’s environment and quality of life.

### CP doesn’t solve the econ adv – Marine highways require a continuing commitment for investor stability

LaHood, 11 [Ray LaHood, US Secretary of the Department of Transportation and Chair of the Committee on the Marine Transportation System, The Coast Guard Proceedings of the Marine Safety and Security Council, “The Marine Transportation System,” Summer 2011, www.uscg.mil/proceedings, p. 4]

The U.S. Marine Transportation System (MTS) is critical to the overall health of our nation’s economy, including the creation of jobs throughout the country. It carries 78 percent of our international trade, and is one of the most efficient, effective, safe, and environmentally sound ways to transport people and goods.

America’s “marine highways” have great untapped capacity to relieve congestion and wear-and-tear on our roads while enhancing highway safety, reducing carbon emissions, and increasing international trade. But in order to achieve President Obama’s National Export Initiative goal of doubling our nation’s exports between 2010 and 2015, the MTS will require our continuing commitment to ensure that our waterways and maritime infrastructure can handle the increased traffic.

# AT: Alt Agent CPs

## Fed is Key

### Federal action solves

Oberstar, 10 [Rep. James Oberstar, Chairman, House Committee on Transportation and Infrastructure,

Marine Highways and Short Sea Shipping: The Future is Bright, Sea Technology, January 2010, Vol. 51, Issue 1]

In the days before railroads and highways, the waterways of the United States served as our original interstates and were the primary arteries along which cargo and people moved. Today, America's marine highway consists of more than 25,000 miles of coastal, inland and intracoastal waterways. Although approximately 1.4 billion tons of bulk cargo move up and down the marine highway each year, our commercial waterways are an underutilized asset. The Marine Highway Program has great potential for growth and development because shipping lanes provide an efficient and cost-effective mode of transportation. Every year, our nation's highways become more congested, which increases air pollution, decreases the speed of delivery of goods and reduces the amount of goods that a truck can move annually. Shipping goods by water can address all three of these problems by lowering shipping costs, reducing emissions of pollutants and reducing congestion on our highways. In the coming years, the volume of freight transported in the U.S. is expected to increase significantly, and short sea shipping is an attractive option for meeting that increased demand. The federal government has an important role in promoting the expansion of commercial waterways and making them a more integrated component of the nation's transportation system. Policy initiatives currently being considered by Congress could help address some of the logistical, operational and financial constraints of short sea shipping.

### Fed key – marine highways cross jurisdictional lines and coordination networks already in place

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 8]

The correct valuation of such benefits in planning and investment decisions could justify a much greater role for America’s Marine Highway as part of a balanced national transportation system. USDOT, with its responsibility to develop and implement national freight and passenger transportation strategies and target public resources to satisfy public needs across State and other jurisdictional lines, is best positioned to see that this role is realized. The Federal government is also well-situated to coordinate the development of national standards to ensure the compatibility of infrastructure and equipment throughout the Marine Highway system. MARAD is currently working closely with other USDOT modal administrations and the Office of the Secretary of Transportation to develop national transportation strategies that maximize the positive contributions of Marine Highway services.

## AT: Private Actor CP

### Federal action key – too many obstacles to private action alone –

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 69-70]

Without strong leadership from the Federal government, however, the nation's rivers and coastal waterways will continue to be underutilized for domestic container and trailer freight transportation. It is difficult for private operators to support the scale of investment needed to initiate large scale operations. Private operators are particularly disadvantaged by the fact that many of the important public benefits of water transportation, including congestion reduction, environmental sustainability, and system resiliency, cannot be captured in the form of higher revenues or lower costs to company profits. Government action is required to help overcome these challenges and assist the expansion of Marine Highway services in a significant manner. With the passage of the Energy Act, Congress set the course for greater Federal government involvement in attaining the national benefits of the America’s Marine Highway. The Energy Act established important objectives for MARAD to meet, including the designation of Marine Highway Corridors and Projects, promotion and governmental coordination of development of the Marine Highway, encouragement of the use of America’s Marine Highway solutions in State and local planning, establishment of an America’s Marine Highway Advisory Board, support for research on Marine Highway (in coordination with EPA), and allowing Marine Highway container and RoRo vessels to qualify for CCF benefits. As discussed in this report, the USDOT and MARAD, in cooperation with the EPA and other agencies, has undertaken numerous actions to comply with these requirements of the Energy Act.

### Private action failing now- federal coordination key to realizing the potential of marine highways

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 6-7]

Our nation’s current surface transportation system is largely the result of public and private sector responses to various economic and technological developments over the nation's history. It reflects the influences of changing industry and trade patterns, private and government investments, engineering and materials advances, the advent of new communications and computer technologies, and other developments. Driven largely by market forces, this system has provided the nation and the world with fast, affordable, and efficient transportation that has contributed greatly to the economic prosperity for our country. Even so, our system is not as efficient as it could be. Americans using this system experience widespread traffic congestion, dependence on foreign-produced petroleum, high GHG and other emissions, high fatality and injury rates, and noise. Heavy vehicles operating on highways and bridges generate uncompensated infrastructure maintenance costs that all facility users and/or the public at large must bear. Marine Highway services have the potential to provide cost-effective, environmentally-friendly, safe, and resilient capacity that can mitigate many of these problems, but these services are only lightly utilized for the movement of commercial domestic freight or passengers. Given our nation’s long-term and successful reliance on markets to steer resources to their best uses, the question must be asked as to why market forces have not led to more use of Marine Highway services. Markets are optimal for allocating resources when the costs and benefits of an activity are well understood and factored into an investment or use decision such that the benefits of the activity are greater than its opportunity costs. Factors that affect market-based transportation decisions by private users of the transportation system include shipping costs, reliability and frequency of service, time in transportation, insurance costs, and quality of service. Other costs and benefits of our transportation system, however, are not borne by the private users who cause them. These costs and benefits are “external” to the user and typically will not influence transportation decisions made by the user. Common costs and benefits that are either fully or partially external to a transportation user’s decisions include the effect that the user's decision to transport freight on a highway has on the delay experienced by all other users of that road, or certain effects that the choice of a transportation mode may have on jobs and the broader economy, the environment, public health and safety, and national security.13 Unless such factors are addressed in comprehensive planning, investment, regulation, or market interventions, the full potential benefits of a transportation mode to both private users and the public at large may not be realized.

### Private investment growth slowing now – The INDUSTRY now perceives Fed action key

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 38]

While progress has been made to advance the concept of America’s Marine Highway, much more work remains to achieve the expansion of Marine Highway services in our country. A modest number of Marine Highway services are currently active; MARAD is currently monitoring 32 regularly-scheduled domestic services that move containers and trailers by water (some of these services are to non-contiguous locations in the United States). Many in the industry, however, point out that the concept of revitalizing short sea shipping has existed for well over a decade. In numerous conversations with industry officials, MARAD has observed a widely-held perception that Federal leadership is required to make further significant progress.

### Perm solves – public-private collaboration key

Perakis and Denisis, ‘8 [ANASTASSIOS N. PERAKIS\* and ATHANASIOS DENISIS, Department of Naval Architecture & Marine Engineering, University of Michigan, A survey of short sea shipping and its prospects in the USA, MARIT. POL. MGMT., DECEMBER 2008, VOL. 35, NO. 6, 591–614]

The prospects of SSS in the US are promising. Its many advantages can overcome the barriers hindering its growth. SSS offers many benefits to the transportation industry, the society, the national economy and the environment. A few successful existing operations make a strong case in favour of SSS. Its expansion as an integrated intermodal transportation system should be of national interest. Therefore, public and private organizations should collaborate in achieving this goal. SSS can be an efficient, reliable, and environmentally friendly option for relieving highway congestion and increasing the mobility and the capacity of the US transportation network.

### Private sector lacks sufficient funds for capital infrastructure investment

Oberstar, 10 [Rep. James Oberstar, Chairman, House Committee on Transportation and Infrastructure,

Marine Highways and Short Sea Shipping: The Future is Bright, Sea Technology, January 2010, Vol. 51, Issue 1]

Capital investment in vessels and infrastructure is another hurdle preventing a more robust marine highway system. Building vessels and infrastructure to accommodate short sea shipping requires considerable capital investment. In the current economic environment, it is difficult for shipping startups, as well as established companies, to secure the financing they need to build ships. Many lenders are unwilling to provide capital to develop the infrastructure the system requires, and the market for short sea shipping has not yet developed.

### Federal intervention in the market justified to correct negative externalities – market won’t shift on its own

Kennedy, 8 [Sean D. Kennedy, J.D. 2008, Tulane University School of Law, Short Sea Shipping in the United States - The New Marine Highways, 33 Tul. Mar. L. J. 203, Winter, 2008]

In November 2004, the National Ports and Waterways Institute at the University of New Orleans released a study of the public benefits of [\*211] SSS, analyzing the "negative externalities in different intermodal options." n56 When the public benefits of an SSS system relative to an existing land-based system are not reflected as benefits in the pricing structure of services, there is a need for "public policy intervention either in the form of subsidies or user taxes to accurately reflect social costs of transportation options." n57 A negative externality is any cost associated with the production, marketing, or consumption of a product that is not reflected in the price of the product and not borne by either its producers or consumers. n58 The inability to account for the negative externalities inherent in land-based transportation methods justifies the governmental involvement necessary for market correction. "The social costs of freight transportation are borne by several parties, including the carriers, shippers, government agencies, other common users of the infrastructure facilities, and the public at large." n59 To gauge accurately the advantages of SSS vis-a-vis land transportation, it is necessary to take into account the negative externalities such as congestion, environmental damage, and highway accidents that are not directly reflected in the pricing of land-based transportation services. Although there are many ways to interna-lize the majority of the costs associated with land-based operations, "the two major lines of thinking are either to levy a tax per unit of externality approximate to the social damage or in the case of transportation options with low external costs to provide fiscal incentives such as tax deduction, rebates, and other monetary incentives to promote such options." n60

The EU experience has shown that the external benefits of SSS can be maximized by two principal methods: "First, increasing amounts of highway user charges to reflect external losses and second, directing financial support to water transportation projects." n61 Recent studies conducted by the maritime industry and research institutions in the United States have found that SSS operations should provide a significant impact on the formation of an effective intermodal system ... [that] would relieve congestion and decrease the number of heavy trucks on coastal highways[,] ... [improve] safety, air, noise, and other environmental consequences of land based transportation [\*212] modes, [and create] a modern U.S. fleet reserve and cadres of seafarers for military and other emergencies. n62 Short sea vessels not only emit fewer pollutants per ton/mile than trucks, but "the combustion also occurs further from population centers." n63 "Marine transportation can also be an extremely energy efficient method of transporting large quantities of freight." n64 The United States Merchant Marine Academy has argued that due solely to the "significant environmental benefits" of an SSS program, "some level of tax relief or other government incentive" for it would be justified. n65

## AT: States CP – Perm

### Perm solves best. No solvency without federal action.

Jackson, Jr. 07 (Colonel Donald E., United States Army, Leveraging The Strategic Value Of The U.S. Inland Waterway System, 2007, [www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA469583](http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA469583)) SL

The inland waterway system of the United States stands as a minimally exploited system that, if optimized, could help eliminate the congestion of overland transport, pollution, and provide a low cost alternative to long haul passages. The USDOT should aggressively promote inland waterways as an effective alternative to overland transportation. U.S. Inland Waterway System stakeholders must embrace emerging technologies that more efficiently manage traffic on inland waterways to mitigate lock-imposed delays. An intra-governmental approach to managing national water resources must be better integrated at the local, state, and federal level, eliminating political impediments to system efficiency. Integrated planning to effectively link the national transportation network with state and local intermodal infrastructure must be encouraged and managed strategically. The federal government must lead efforts to develop adequate funding strategies, seeking public-private collaboration, to maintain the investment streams that support new construction, operations, and maintenance of the inland waterway system, making it a reliable and affordable means of transportation in the future. Inland waterway infrastructure must be prioritized and resources focused on the most value- added gateways supporting objectives of the national freight transportation system. Overall the system should be repaired and modernized and, in certain cases, enlarged to meet the industry standard requirement for locks of 1200 feet. The federal government and the USDOT, using an interagency approach, must continue to develop transportation strategies that encourage the balanced growth of each industry sector, leading leads to more effective integration of inland waterway transportation. The USTRANSCOM deployment and distribution model should be commercially replicated at the national level to highlight alternative freight transportation planning opportunities that leverage the capabilities of each transport mode. The USDOT must provide shippers incentives for increased use of inland waterways, expanding container-on- barge opportunities to alleviate congestion and increase capacity of the freight transportation system at the national level.

### Perm solves best

Meyers 12 (Jessica, POLITICO, 05/22/2012, http://www.politico.com/news/stories/0512/76633.html)

“It’s a chicken-and-egg type of thing,” said Sean Connaughton, a former DOT maritime administrator who created the department’s America’s Marine Highway Program. “Shippers won’t commit until there’s reliable service, but you can’t have that until shippers commit.” To do that, the industry needs an almost mythical nexus of federal incentives, public recognition and state support.

## AT: States CP – States Bankrupt

### State budgets have just been slashed-they’ll be under pressure until the economy gets back up

Cooper 11 [James C. Cooper, Senior Editor of the Business Outlook and Masters degree in Economics from North Carolina State University, “The New Fiscal Nightmare”, The Fiscal Times, 5/31/11, <http://www.thefiscaltimes.com/Columns/2011/05/31/The-New-Fiscal-Nightmare-2012-State-Budgets-Cuts.aspx#page1>, ao]

After nearly three years of economic recovery, the [crisis in state and local budgets](http://www.thefiscaltimes.com/Articles/2011/05/27/States-Balance-Budgets-with-Drastic-Service-Cuts.aspx" \t "_self) continues to worsen. Even though state tax revenues are picking up, mandated spending obligations and the loss of federal [stimulus money](http://www.thefiscaltimes.com/Articles/2011/05/30/End-of-Stimulus-Could-Pull-Economy-Down-Further.aspx" \t "_self) still put heavy pressure on state finances. The squeeze on local governments is intensifying, reflecting cutbacks in state aid and the effect of the housing recession on property taxes. All this will exert a downdraft on economic growth and employment in the coming year, and the strains will continue at least until growth in the private-sector economy shifts into a higher gear.¶ Fiscal 2012 will be one of the toughest on record, says the Center on Budget and Policy Priorities (CBPP). That’s because the options for eliminating the gaps between revenues and spending, as required by balanced-budget laws in 49 states except Vermont (which usually balances its budget anyway), are now fewer and more difficult. States already have acted to address gaps totaling $431 billion heading into the fiscal years 2009, 2010, and 2011. The [economy isn’t helping much](http://www.thefiscaltimes.com/Articles/2011/04/28/The-Economy-Lower-Growth-Higher-Unemployment.aspx" \t "_self). Last week the Commerce Dept.’s second estimate of first-quarter GDP left growth unchanged at the originally reported annual rate of 1.8 percent, down from 3.1 percent in the fourth quarter. Economists had expected an upward revision.¶ For fiscal 2012, 44 states and the District of Columbia, project budget shortfalls totaling $112 billion, says the CBPP. These gaps come at a time when rainy-day reserves are essentially depleted and federal assistance under the Recovery Act, which had played a big role in closing earlier shortfalls, is set to drop by more than $50 billion.¶ Economists at UBS estimate that required [budget cuts](http://www.thefiscaltimes.com/Articles/2011/02/28/Youre-Fired-Local-Budget-Wars-Turn-Tough.aspx" \t "_self) for fiscal 2012, which begins on July 1 for 46 states, would be close to $50 billion, about 40 percent greater than in the previous year. That’s enough to cut fiscal-year GDP growth by about one percentage point, they say, about a third more than the loss in fiscal 2011.¶

### The states are facing budget problems, they’re in no condition to subsidize anything

Murray 10 [Sara Murray, Economics Writer for the Wall Street Journal, “States Face Budget Shortfalls of $26.7 Billion”, The Wall Street Journal, 12/8/10, http://online.wsj.com/article/SB1000142405 27487042507 04576005683169980902.html#articleTabs%3Darticle, ao]

Eighteen states said their health-care programs were over budget, partly because a higher level of federal stimulus funding for Medicaid programs was expected. Five states overspent on public safety and prisons, and four states were over budget on social service programs. Many states are bracing for more tight times ahead: 35 states said they expected budget gaps next year, and 24 states predicted shortfalls in fiscal 2013. "At this point, it is difficult to forecast when the vast majority of states will no longer face budget gaps," the report said.¶ While states have been able to rely partly on federal funding from the stimulus program to weather the recession and its aftermath, most of that funding will be exhausted next year, fiscal 2012. States will have $37.9 billion less in federal stimulus funding in fiscal 2012, compared with this year.

### State revenues can’t afford another program

Oliff et al 6/27 [Phil Oliff has a Masters degree in Public Policy from Harvard University’, Chris Mai has a a Master of Public Policy from the University of Virginia, and Vincent Palacios a Masters degree in Public Policy from the University of Maryland, “States Continue to Feel Recession’s Impact”, Center on Budget and Policy Priorities, 6/27/12, http://www.cbpp.org/cms/index.cfm?fa=view&id=711, ao]

States’ fiscal conditions are improving along with the broader economy. But states are coming out of a very deep hole. Figure 3 illustrates the magnitude of the problem. State revenues have begun to rebound. State tax intake grew 8.3 percent in the 12-month period ending in June 2011 — the 2011 fiscal year for most states. This encouraging growth offers a glimmer of hope that states are beginning to climb out of the fiscal hole caused by the recession. Unfortunately, that hole was so deep that even if revenues continue to grow at last year’s rate — which is highly unlikely, as explained below — it would take seven years to get them back on a normal track. ¶ In other words, revenues probably won’t come close to what states need to restore the programs that they cut during the recession unless states raise taxes, at least temporarily, or receive additional federal aid while the economy slowly recovers. As noted below, additional federal aid is unlikely.

# AT: DISADVANTAGES

## AT: Federalism - Uniqueness

### MARAD is the legitimate authority of marine transportation and actively involved now

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 71]

In closing, MARAD will use its current authorities, as delegated by the Secretary, and any new authorities granted by Congress in future legislation, to incorporate America’s Marine Highway more completely into the national transportation system as a significant provider of efficient and environmentally sound services. In this role, MARAD will fund research and study the commercial market for Marine Highway services, as well as evaluate the outcomes of Marine Highway projects already underway, to verify the value of future Federal investments in this system. Finally, MARAD will work closely with its sister operating administrations at USDOT, other U.S. government agencies including EPA, State and local governments, planning organizations, Marine Highway service operators and other private industry representatives, and the public to insure the success of this important initiative.

### The Federal government is doing actions like the plan now

LaHood, 11 [Ray LaHood, US Secretary of the Department of Transportation and Chair of the Committee on the Marine Transportation System, The Coast Guard Proceedings of the Marine Safety and Security Council, “The Marine Transportation System,” Summer 2011, www.uscg.mil/proceedings, p. 4]

The U.S. Department of Transportation actively supports the MTS in many ways through the efforts of the Maritime Administration and the Saint Lawrence Seaway Development Corporation. Over the last two years, the department has provided over $215 million in port and marine highway investments through the TIGER (Transportation Investment Generating Economic Recovery) grants program, the most significant federal investment in port infrastructure in recent years. We also provided almost $7 million in grants for projects under the Maritime Administra- tion’s new Marine Highway Grant program. Through efforts like these, the depart- ment is investing in our ports and waterways, facilitating trade, and educating the next generation of merchant mariners at the U.S. Merchant Marine Academy, which plays a critical role in training officers who operate our merchant ships safely and efficiently.

### Congress has set the stage for further federal involvement now

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 70]

With the passage of the Energy Act, Congress set the course for greater Federal government involvement in attaining the national benefits of the America’s Marine Highway. The Energy Act established important objectives for MARAD to meet, including the designation of Marine Highway Corridors and Projects, promotion and governmental coordination of development of the Marine Highway, encouragement of the use of America’s Marine Highway solutions in State and local planning, establishment of an America’s Marine Highway Advisory Board, support for research on Marine Highway (in coordination with EPA), and allowing Marine Highway container and RoRo vessels to qualify for CCF benefits. As discussed in this report, the USDOT and MARAD, in cooperation with the EPA and other agencies, has undertaken numerous actions to comply with these requirements of the Energy Act.

## AT: Federalism – No Link

### Federal agencies have marine jurisdiction now

Khandpur, 11 [MR. RAJIV KHANDPUR, Chief, U.S. Coast Guard Office of Marine Transportation Systems, “The U.S. Marine Transportation System Federal responsibilities, funding, and coordination,” In The Coast Guard Proceedings of the Marine Safety and Security Council, “The Marine Transportation System,” Summer 2011, www.uscg.mil/proceedings, p. 6]

Even more than the other parts of the nation’s trans- portation system, marine transportation is a joint private and public sector enterprise. The private sector owns and operates the vessels and most of the terminals and is responsible for the commerce that flows through the system. The public sector provides much of the infra- structure to keep the system functioning in a safe, secure, and environmentally sound manner. While the respon- sibility of building, maintaining, and monitoring the interstate highway system rests mainly with federal and state departments of transportation, the responsi- bility for the MTS is carried out by many federal agen- cies. For example, the National Oceanic and Atmospheric Ad- ministration surveys navigable waterways and issues charts depicting waterway depth as well as obstructions. The aforementioned locks and dams are mostly built and maintained by the U.S. Army Corps of Engineers, though the St. Lawrence Seaway Development Corpo- ration has that responsibility on the St. Lawrence Seaway. Finally, though there are some private “ice- breakers,” most of these services are provided by the U.S. and Canadian Coast Guards. Other agencies such as the Federal Maritime Commis- sion, the National Transportation Safety Board, and the Departments of Commerce and Justice also play a big part in the nation’s marine transportation system, as dis- cussed in later articles in this edition. Some of the other agencies that play a big role in the MTS include: · the Maritime Administration promotes and facili- tates MTS use; · the U.S. Department of Agriculture works to link U.S. agriculture to the world and so depends heav- ily on navigable waters to facilitate the movement of grain and other commodities; · the Department of Interior (Bureau of Ocean Energy Management and Regulation Enforcement), which regulates offshore oil platform safety; · the Military Sealift Command and U.S. Transporta- tion Command deliver supplies, people, and equip- ment to support the U.S. Navy and the Department of Defense; of Defense; · U.S. Custom and Border Protection secures our homeland by preventing the illegal entry of people and goods while facilitating legitimate travel and trade; · the Environmental Protection Agency regulates environmental standards.

### Congressional committees also have official jurisdiction

Khandpur, 11 [MR. RAJIV KHANDPUR, Chief, U.S. Coast Guard Office of Marine Transportation Systems, “The U.S. Marine Transportation System Federal responsibilities, funding, and coordination,” In The Coast Guard Proceedings of the Marine Safety and Security Council, “The Marine Transportation System,” Summer 2011, www.uscg.mil/proceedings, p. 6]

Just as many federal agencies “own” parts of the nation’s marine transportation system, many congressional com- mittees and subcommittees also have jurisdiction. The House Transportation and Infrastructure Commit- tee. As the name suggests, this committee has jurisdic- tion over all modes of transportation, including aviation, maritime and waterborne transportation, roads, bridges, mass transit, and railroads. Its purview also includes other aspects of national infra- structure, such as clean water and waste management, the transport of resources by pipeline, flood damage re- duction, the economic development of depressed rural and urban areas, disaster preparedness and response, ac- tivities of the U.S. Army Corps of Engineers, and vari- ous missions of the Coast Guard. These areas of jurisdiction provide a comprehensive view of how communities across the United States are connected to one another, how infrastructure affects the growth and flow of commerce at home and abroad, and how an effective government can improve the lives of its citizens. Currently the largest committee in the House of Repre- sentatives, its six subcommittees are: Aviation Coast Guard and Maritime Transportation Economic Development, Public Buildings, and Emergency Management Highways and Transit Railroads, Pipelines, and Hazardous Materials Water Resources and Environment The Senate Committee on Commerce, Science, and Trans- portation. This committee’s oversight is also very wide- ranging. In addition to the air, surface, and water transportation modes, it also exercises jurisdiction over competitiveness, exports, and consumer protection. It is composed of seven subcommittees, as follows: · Aviation Operations, Safety, and Security · Communications, Technology, and the Internet · Competitiveness, Innovation, and Export Promotion · Consumer Protection, Product Safety, and Insurance · Oceans, Atmosphere, Fisheries, and Coast Guard · Science and Space · Surface Transportation and Merchant Marine Infra- structure, Safety, and Security.

## AT: Politics – Popular: Bipart

### Short sea shipping has support of both democrats and republicans

Lehman ’11[Ryan Lehman: Deputy Political Director, M.E.B.A. Washington Update. <http://www.mebaunion.org/MarineOfficer/eMagazienWinter-spring-2012/files/assets/seo/page7.html>. July 13, 2012.]

While you may now be saying to yourself, “What a depressing list of failures,” the truth of the matter is that even in such a gridlocked and dysfunctional environment as Washington last year, the M.E.B.A. has been able to continue to advance the issues important to the U.S. merchant marine. In an important step for the maritime industry, Chairman Mica’s initial outline of the surface transportation bill has, for the first time, included a maritime title. It’s also important to note that the Restore America’s Maritime Promise (RAMP) Act also continues to advance through both the House and the Senate and now has over 175 cosponsors on the House bill. The RAMP Act will ensure money collected by the Harbor Maintenance Trust Fund is used for dredging and port maintenance projects. The Short Sea Shipping Act has also been making significant progress in the House. This bill will help encourage the use of short sea shipping in the U.S. by ending double taxation of domestic waterborne cargo. The Short Sea Shipping Act has continued to add new cosponsors throughout the year and enjoys the support of both Democrats and Republicans, an uncommon occurrence in 2011. In fact, both the Short Sea Shipping Act and the RAMP Act were the topic of a recent Ways and Means Committee hearing on maritime tax issues which attracted a lot of attention from both the news media and members of Congress. These kinds of hearings are a crucial step in advancing any legislation through Congress.

### Bipartisan committee encourages short sea shipping

LOBIONDO ‘ DNC[Frank A. LoBiondo is the U.S. Representative for New Jersey's 2nd congressional district. SUBCOMMITTEE ON COAST GUARD & MARITIME TRANSPORTATION. <http://transportation.house.gov/subcommittees/coastguard.aspx>. July 13, 2012.]

The Committee supports the development of a national strategic transportation plan that includes a strong maritime transportation component and greater use of coastwise trade. Marine highways represent a cost effective but underutilized mode of transportation, and the Committee will examine ways to encourage the use of short-sea shipping, or shipping between domestic ports in the United States. This concept has the potential to create new maritime industry jobs for Americans.

### Problems from trucking have lead to bipartisan support of Short Sea Shipping

Farrell ’07[David J. Farrell, Jr. is part of the maritime law association if the unites states. 2007. America's Marine Highway Short Sea Shipping: A Win-Win Proposition. JULY 13, 2012]

Aging, clogged, and overtaxed highways and bridges combined with global warming, rising fuel prices, noxious truck emissions, and urban chokepoints spurred bi-partisan Congressional support for SSS corridors to supplement existing rail and truck routes. As recently noted by Rep. Elijah Cummings (D. Md.), Chair of the House Sub-Committee on Coast Guard and Maritime Transportation: We urgently need to support the growth of short sea shipping so that cargo can be economically moved between domestic ports and so that we can help get trucks off of ouincreasingly congested highways. Rep. Stephen C. LaTourette (R. Oh.) echoed marine highway benefits: Short sea shipping could potentially transfer thousands of cargo containers off of our interstates and onto U.S.-flag vessels. An increase in the amount of freight traffic that is moved by coastwise trade would benefit the U.S. fleet, our merchant mariners, our ports and our Nation's shipbuilders

### SSS has bipartisan support

BDP1 Consulting 7( staffed by a group of people with years of operating and management backgrounds in the transportation business and finance businesses with specialty in financial writing, sprinkled with a heavy dose of shipping, energy and commodity market and transaction analysis, “US Ship Finance- Title XI, CCF- Short Sea” , July 10 2007, <http://www.conconnect.com/Workingpapers/janeswashington.pdf>)

Short Sea may be the way forward. In June 2007, the U.S. Congress must have been listening to Clay Cook’s testimony. Indeed, H.R. 2701, a new Transportation Bill (in its early stages of the legislative process) introduced three months after the March hearings, carves out up to USD 2 billion for potential government guarantees on suitable container or Roro “Short Sea” projects and requests a 2008 annual allocation of USD 25 million. The Blank Rome team, though cognizant of Marad’s foresight in the 1970’s and 1990’s, was cautious about coastal and intra-Lake container shipping. Ellis said: “Short sea shipping has been part of the DOT’s vision since the year 2000 and before, but there’s never been any funding requested by the Administration or appropriated by Congress. Many things need to fall into place for it to work. How long has it taken in Europe? One of the biggest issues is port infrastructure. Another is whether those who control the cargo will commit it in advance to a short sea project. The government needs to take a major role in trying to facilitate it- you’ve got a whole supply chain issue here.” Ways & Means subcommittees examine Harbor Maintenance Tax, deferral rules for foreign shipping income The House Ways and Means subcommittees on Oversight and Select Revenue Measures held a joint hearing February 1 to explore the Harbor Maintenance Tax and the adequacy of spending out of the associated Harbor Maintenance Trust Fund, as well as special deferral rules applicable to certain foreign income of U.S. multinational shipping companies. In a rare display of bipartisan agreement, Democrats and Republicans agreed with the witnesses both on the inadequacy of harbor maintenance spending.

### Bipart key to Obama’s agenda

Galston 10. (William, Senior Fellow, Governance Studies, Brookings, “President Barack Obama’s First Two Years: Policy Accomplishments, Political Difficulties” Brookings Institute (Proquest) November 4, 2010)

The outcome of the November 2010 election has fundamentally changed the political dynamic for at least the next two years. It will no longer be possible for President Obama to advance his agenda with support from only his own party. Instead, he will be forced either to negotiate with an emboldened Republican House majority or endure two years of confrontation and gridlock. (As Newt Gingrich discovered in 1995, the same logic applies in reverse: it is no easier to run divided government from Capitol Hill than from 1600 Pennsylvania Avenue.) Choosing the path of negotiation over confrontation would require a change of substance as well as tone. The president would have to give the federal budget deficit and national debt a far more central place in his policy agenda. Here the obstacles to agreement across party lines are formidable, although the findings of his bipartisan fiscal commission, due out in December, may assist him in making a shift to a more fiscally conservative position. It helps that the co-chairs of the commission, Democrat Erskine Bowles and Republican Alan Simpson, are determined to break the current gridlock, in which conservatives refuse to consider raising taxes while those on the left stoutly resist cuts in social programs.

## AT: Politics – Popular: Congress

### Congress Supports SSS- empirically proven

USDTMA 11 (United States Department of Transportation Maritime Administration “America’s Marine Highway Report to Congress” April 2011 http://www.marad.dot.gov/documents/MARAD\_AMH\_Report\_to\_Congress.pdf)

Congress has understood the need to promote the expansion of the Marine Highway. In recent years, its most significant action in supporting America’s Marine Highway was to enact the Energy Act. Among the many provisions of the Energy Act is Subtitle C of Title XI, titled “Marine Transportation,” which requires the Secretary to “establish a short sea transportation program and designate short sea transportation projects to be conducted under the program to mitigate surface congestion.” 15 The Energy Act recognizes environmental and transportation benefits of such services and calls for research in these areas. This would generate public benefits that include less delay and more reliable transportation as well as improved air quality, highway safety, and national security. Congress recently passed additional legislation that will foster growth of Marine Highway services. This legislation includes the National Defense Authorization Act for Fiscal Year 2010 and the Consolidated Appropriations Act of 2010. The former act authorizes the newly established Marine Highway Grants program; the latter act appropriates up to $7 million in funds for the new grants program in Fiscal Year (FY) 2010. Additionally, the American Recovery and Reinvestment Act of 2009 created a discretionary surface transportation grants program in which Marine Highway port projects have competed successfully for grant awards along with highway, transit, and rail projects. The Consolidated Appropriations Act of 2010 created a successor to this discretionary surface transportation grants program for FY 2010. The America’s Marine Highway Program envisioned by USDOT will comply fully with Congress’s legislative requirements for short sea shipping by working to bring about a more diverse, energy-efficient, and climate-friendly transportation system through the creation and expansion of domestic water transportation services. The goal of the Program is to develop and expand these services in a self-sustaining, commercially-viable manner that also recognizes the public benefits these services create in the form of reduced surface congestion, fewer GHG emissions resulting from a more sustainable transportation system, improved safety, and additional sealift resources for national defense. The future success of Marine Highway services cannot be tied to any single factor, such as rising fuel prices or landside congestion. Rather, it is contingent on a broad range of qualities, none more important than the ability to serve the needs of shippers for reliable, innovative, and costeffective transportation. MARAD is confident that the private U.S. maritime sector, with the backing of Federal, State, and local governments, will deliver the required quality and reliability of service needed to attract greater cargo volumes. The private U.S. maritime sector has expressed great interest in the Marine Highway initiative, including by its initiation of new Marine Highway services (discussed later in this document) and by providing extensive information to MARAD about the opportunities and impediments to such services. MARAD notes that innovation by the private U.S. maritime sector has directly or indirectly led to major advancements in international and domestic shipping over the last 70 years, including the revolution in intermodal shipping via containerships, double-stack rail service (in cooperation with the U.S. railroad industry), improved logistics, new and larger ship types, and modern shipbuilding techniques. 16 A full exposition of the Energy Act and other legislative requirements for the America’s Marine Highway Program, along with USDOT’s efforts through MARAD to implement them, is provided in detail in the latter half of this report. Information is also provided on MARAD’s broader efforts to promote America’s Marine Highway through support to local government planners and private sector water transportation services, as well as MARAD’s efforts to identify impediments and solutions to impediments that will enable future growth of this national asset.

### SSS Popular- job creation and environmental support

Barry 10(Keith Barry, Wired Environmental Specialist, freelance environmental policy expert with 20 years experience, “DOT to Turn Underused Waterways Into Marine Highways”, July 23, 2010, http://www.wired.com/autopia/2010/07/dot-turns-underused-waterways-into-marine-highways/)

Matsuda says a political climate that’s focused on creating jobs and helping the environment also will support the cause.“Where there are corridors, the federal government will help focus attention and investments to get those services up and running,” he said. “This is something that we think is going to go a long way.”

## AT: Politics – Popular: Obama

### Obama Administration committed to SSS

Meyers 12 (Jessica Meyers, Transportation Reporter for Politico, Also Covers Transportation and Infrastructure Issues in Dallas, Texas, June 22, 2012, “Federal Marine Highways Project Launch” <http://www.politico.com/news/stories/0512/76633.html>)

Transportation Secretary Ray LaHood has designated 18 marine highway corridors in recent years and directed more than $110 million toward marine highway projects. The agency backs the Marine Highways Cooperative, a public-private partnership dedicated to developing the country’s 25,000 miles of water routes.

“The Obama administration is committed to investing in innovative marine transportation services along America’s coast and waterways, in order to relieve congestion on our roadways, make our transportation system greener and develop the vast unused capacity on our waterways,” said DOT spokesman Justin Nisly.

\*\*See Bipart Key to Obama’s Agenda\*\*

## AT: Politics – Popular: Military

### Short Sea Shipping appeals to military needs

HILBURN 10 [MATT HILBURN, Associate Editor of navy league of the United States. Resurgence. <http://www.navyleague.org/sea_power/may06-10.php>. July 13, 2012]

A robust short-sea shipping industry also could provide the military with greater flexibility for the movement of materiel. U.S. Transportation Command (USTRANSCOM), the arm of the military responsible for moving military equipment and personnel around the globe, is keeping an eye on the commercial viability of this emerging industry.“As the concept of operations develops and matures in industry, USTRANSCOM will remain interested in its potential impact to support [Department of Defense] movement requirements,” and command spokesman said.

## AT: Politics – Popular: Lobbies

### Union lobbies support the plan

MTD, 11(Metal Trades Department, industry group focused on shipbuilding and metals production, “The Way Forward--US Commercial Ship Building: A Strategic National Asset”, 6/20/2011, <http://www.metaltrades.org/?zone=/unionactive/view_article.cfm&HomeID=209195&page=Shipbuilding>)

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.

### Shipbuilding industry lobby supports plan

Tedesco et. Al 08 (Dr. Matthew P. Tedesco, John Malone, NSRP Panel, Ph. D. in Engineering Management from MIT, Ship design, engineering, and shipping expert, “Shipbuilding opportunities in Short Sea Shipping” June 4, 2008, <http://www.nsrp.org/6-Presentations/SDMT/060408_Shipbuilding_Opportunities_in_Short_Sea_Shipping_Malone&Tedesco.pdf>)

Goal: To accelerate the shipbuilding opportunities accelerate the shipbuilding opportunities associated with potential U.S.-based Short Sea Shipping (S3) operations Objectives: To continue the NSRP engagement with S3 and serve as a bridge to a broader effort that that may be undertaken as an NSRP RA project in the U.S. with concentration on RoRo vessels of varying size and configuration. To facilitate forming consortia (Owners, operators, US shipyards, partnered foreign shipyards, suppliers and Technical support companies).

## AT: Politics – Popular: Truckers

### Popular - Truckers and port handlers

Perakis and Denisis, ‘8 [ANASTASSIOS N. PERAKIS\* and ATHANASIOS DENISIS, Department of Naval Architecture & Marine Engineering, University of Michigan, A survey of short sea shipping and its prospects in the USA, MARIT. POL. MGMT., DECEMBER 2008, VOL. 35, NO. 6, 591–614]

The numerous SSS conferences and the various surveys in the US and in Europe have revealed that the integration of SSS into the intermodal transportation and logistics chains is imperative for its success. An empirical research study was conducted in 2002 among short sea shipowners in the UK using the Delphi approach, i.e. a systematic collection of informed independent judgements from a panel of experts [48]. They agreed that SSS should be integrated into the intermodal transportation. Similar questionnaires among shippers in the US showed that on-time reliability and door-to-door capability are the leading factors in their choice of transportation mode. SSS should be an integral component of a multi-modal transportation network that will provide on-time reliable service and will meet modern door-to-door and just-in-time requirements. While short sea vessels will take over the long-haul leg of the freight transportation chain, trucks will pick up and deliver the cargo to the final destinations, i.e. drayage. The trucking industry can be an ally and a complementary mode for SSS. Trucking companies can become partners instead of competitors for the long-haul freight transportation and can further assist the growth of SSS. Facing a shortage of drivers, trucking companies have already expressed their interest in co-operating with shipowners. Successful operations, such as Osprey Lines in the US and Samskip in Europe have showed that working with truckers and becoming intermodal providers were key elements of their success. The business strategies of ocean and rail companies, such as APL and CSX, which became total intermodal logistics providers, should be examined. Furthermore, port authorities are increasingly interested in ‘feedering’ their international containers to smaller satellite ports, using SSS, as a way to increase their yard capacity and improve their terminal efficiency.

### Truck drivers do not view SSS as competition

HILBURN 10 [MATT HILBURN, Associate Editor of navy league of the United States. Resurgence. <http://www.navyleague.org/sea_power/may06-10.php>. July 13, 2012]

Citing a driver shortage, increased congestion on the highways and rising fuel costs, Armstrong said the trucking industry, rather than viewing short-sea shipping as a competitor, is now seeing it as a bridge to making more trips on a regional and local basis [150-mile radius from a port], which would allow drivers to come home at night.

## AT: Politics – Unpopular

### Subsidies unpopular – unions

ILWU, 10 [(Intl Longshore and Warehouse Union), Coast Longshore Division Newsletter, Winter 2010, Republished in Longshore and Shipping News, http://www.longshoreshippingnews.com/2011/02/the-case-against-short-sea-shipping/]

Subsidy and promotion of SSS by the governments of the United States, Canada and Mexico, is an effort, one of several fronts, to deregulate maritime transportation and drive organized labor consequentially from the Industry. SSS is not a panacea for additional union jobs. It is just the opposite. Scarce government tax dollars should be used for land-based infrastructure designed to efficiently move containers to and from established ports. We need dedicated freight corridors, bridges, rail enhancements and dredging that bring stability to the industry — not the funding, promotion, and blind acceptance of a concept that even with subsidy will fail, and drag organized labor down with it.

### Republican are against subsidies for greener projects

Jarrett ’12[Jan Jarett has had a 25-year career in environmental advocacy, most recently as head of PennFuture. May 25, 2012. Republican double-speak on energy subsidies. July 14, 2012. ]

Mitt Romney apparently shares the Republican resentment of subsidies for renewable energy and the wholehearted love of subsidies for fossil fuels. If elected president, Romney would seek to [end subsidies for wind and solar power](http://www.rechargenews.com/business_area/politics/article277785.ece). Solar and wind he says, “make little sense for the consuming public but great sense only for the companies reaping profits from taxpayer subsidies.”

### Republicans support subsidies-as long as they don’t support greener alternatives

Caperton 3/30 [Richard W. Caperton is the Director of Clean Energy Investment …the American Energy Initiative. [47 Senators Side With Big Oil And Vote To Kill 37,000 American Wind Jobs](http://thinkprogress.org/climate/2012/03/30/455722/47-senators-side-with-big-oil-and-vote-to-kill-37000-american-wind-jobs/). March 30th, 2012. <http://thinkprogress.org/climate/2012/03/30/455722/47-senators-side-with-big-oil-and-vote-to-kill-37000-american-wind-jobs/>. July 14, 2012.]

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Yesterday, 47 United States Senators voted to kill 37,000 American jobs, while giving [$24 billion](http://thinkprogress.org/green/2012/03/29/454635/lautenberg-kick-big-oil-off-the-welfare-rolls/) in tax breaks to big oil companies. It’s clear where these Senators’ loyalties lie: They would rather give handouts to the dirty energy of the past rather than invest in the clean energy of the future. In a largely party-line [51-47](http://thinkprogress.org/green/2012/03/29/454789/senate-republicans-protect-big-oil-subsidies-as-their-gasoline-profits-soar/) vote (four Democrats side with Big Oil, and two Republicans side with clean energy), the Senate failed to reach the 60 votes necessary to move forward on the [Repeal Big Oil Tax Subsidies Act](http://www.gpo.gov/fdsys/pkg/BILLS-112s2204pcs/pdf/BILLS-112s2204pcs.pdf), sponsored by Senator Robert Menendez (D-NJ). This bill would do two things: End several egregious subsidies to big oil companies, while extending industry-supporting incentives for clean energy. Among those incentives is the critical [Production Tax Credit](http://www.americanprogress.org/issues/2012/01/renewable_energy_investment.html), which encourages investment in wind energy. As we’ve reported before, raising taxes on the emerging wind power industry by failing to extend this credit will kill 37,000 jobs. Indeed, we’ve [already seen layoffs](http://thinkprogress.org/romm/2012/01/13/403707/wind-jobs-at-vestas/) as manufacturing companies prepare for the worst.

## AT: Elections – Popular: Public

### The Public supports infrastructure investment

Madland and Bunker 12 (David, Nick, Director of the American Worker Project and Research Assistant with the Economic Policy team at American Progress “Ties that Bind: How a Strong Middle Class Supports Strong Public Infrastructure”, Center for American Progress Action Fund, March 22, 2012, <http://www.americanprogressaction.org/issues/2012/03/middle_class_infrastructure.html>)

And make no mistake, the broader American public supports increased investments in infrastructure. [Ninety-three percent](http://www.rockefellerfoundation.org/uploads/files/8095e806-a876-41a6-9f35-7485287cf0d2.pdf) feel making improvements to infrastructure is important; [72 percent](http://i2.cdn.turner.com/cnn/2011/images/10/17/oct17.poll.economy.pdf) support “increasing federal spending to build and repair roads, bridges, and schools”; and [81 percent](http://www.bafuture.org/news/press-release/poll-majority-americans-ready-pay-better-infrastructure-demand-accountability) are prepared to pay more in taxes to do so.

## Solvency Ideas – Various Incentives

### Customs Processing

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 64]

Customs Processing of Inbound Containers on Great Lakes

The geographical boundaries of America’s Marine Highway, as defined in the Energy Act, includes the shipment of containers and trailers loaded at a port in the United States and unloaded either at another port in the United States or at a port in Canada located in the Great Lakes Saint Lawrence Seaway System; or loaded at a port in Canada located in the Great Lakes Saint Lawrence Seaway System and unloaded at a port in the United States.” There is a significant barrier, however, to the ability of Marine Highway services to carry containerized cargo from Canada to the United States. By regulation, manifests of containerized cargo inbound from Canadian and other foreign ports must be sent electronically to U.S. Customs and Border Protection (CBP) 24 hours before loading of the cargo onto the vessel.157 Foreign air, rail, and truck manifests, on the other hand, need be sent to CBP only 4 hours, 2 hours, and 1 hour, respectively, before arrival in the United States.158 This different notification requirement can cause delays of many hours for container shipments from Canada on the Marine Highway that other transportation modes do not experience. Treating waterborne container shipments from Canada in a manner comparable to land-based shipments of the same containers for purposes of application of this rule would remove a major obstacle to increasing Marine Highway services on the Great Lakes.

### Shipper tax credits

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 64]

Shipper Tax Credits

Companies in the business of shipping freight, including brokers, freight forwarders, rail carriers, trucking companies, and third-party logistics providers, may be reluctant to re-direct their routing to a new service even if they stand to gain potential benefits or cost savings as it introduces new delivery risks with which they are less familiar. A shipper often operates under negotiated contracts with trucking and railroad companies for many years and may not be willing to jeopardize effective working relationships to move to a new Marine Highway service, particularly if the service provider does not have an established performance record.159 Some have suggested the creation of Federal incentives to shippers to consider and use water transportation through mileage-based rebates or corporate tax credits for each container or trailer that moves by water. The rebates could be linked to the value of public benefits associated with the decision to select water transportation. Such a program could be applied nationally, subject to a letter of eligibility from MARAD, or could be made specific to designated Marine Highway Corridors or Projects that alleviate severe highway congestion. Focusing eligibility on specific corridors or projects could help to ensure that such credits would provide the greatest public benefit. It also offers a controlled environment and limited scope to evaluate the true costs and benefits of the incentive along with any intended and unintended implications that may emerge. The primary beneficiaries of a rebate program would be cargo owners and surface transportation service providers, but the resulting increase in usage of water transportation would also benefit vessel and shoreside infrastructure owners and operators.

### Investment Tax Credits

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 65]

Investment Tax Credits

Investment tax credits are reductions in the tax that companies pay on their profits if they invest in certain types of equipment or infrastructure. Private companies could receive a tax credit for qualified capital investments to start or expand a designated Marine Highway Project. Qualified expenditures could include design, construction, or modification of vessels, development or improvement of shoreside infrastructure, procurement of cargo handling equipment, intermodal connector development, or any investment that reduces fuel consumption or emissions for qualified expenditures.160 Direct beneficiaries of investment tax credits would be vessel owners and operators and shoreside infrastructure owners.

### Accelerated Depreciation

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 65]

Accelerated Depreciation

Some stakeholders have suggested that making investments in Marine Highway projects eligible for accelerated depreciation under Federal tax law would be a significant incentive to help expand America’s Marine Highway. Accelerated depreciation allows a more rapid expensing of asset costs for tax purposes than is generally permitted. It offers the advantage of deferring the payment of taxes which both reduces their present value to the investor and helps to maximize net income in the years immediately following asset purchases. The depreciation benefit is offset later in the form of reduced deductions, but when the operator is usually in a stronger position to accommodate the taxes. Such accelerated depreciation would have a maximum benefit in the first three years of operation, when a Marine Highway service is most likely to need cash flow in order to mature.

### Matching Capital Grants

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 65-7]

Matching Capital Grants

Stakeholders recommended the establishment of an America’s Marine Highway matching capital grants program to fund projects that improve the efficiency and productivity of water transportation of passengers and freight (containers and trailers). Since MARAD initially queried stakeholders, several significant legislative actions have created a basis for such grants. These are as follows: ␣ Congress has specifically authorized “America’s Short Sea Transportation Grants for the Development of Marine Highways” (implemented by MARAD in August 2010 as the Marine Highway Grants program).161 Congress has appropriated up to $7 million in funding for the Marine Highway Grants program for FY 2010.162 ␣ Congress authorized MARAD to establish a new Port Infrastructure Development Program.163 The new program provides a framework for MARAD to receive and manage port improvement funds, coordinate with other Federal, State, and local agencies to expedite the environmental review processes for port projects, and provide technical assistance to port authorities or commissions.164 To augment the ability of MARAD to work directly with ports, the program is established with a Port Infrastructure Development Fund to receive transfers of Federal, non-Federal, and private funds from entities that have specific agreements or contracts with MARAD. Grants of capital funds made by other USDOT agencies to eligible port projects under title 23 or chapter 53 of title 49 of the United States Code may now be transferred to this fund, subject to the written agreement of these agencies and the terms and eligibilities originally approved by those agencies. ␣ Congress provided up to $1.5 billion in the American Recovery and Reinvestment Act of 2009 (Recovery Act) to be used by USDOT to make discretionary grants for surface transportation investments (referred to as TIGER Discretionary Grants). Seven port- related projects benefiting Marine Highway services were among the 51 successful applicants for these grants in 2009-2010.165 A similar discretionary grants program (referred to as TIGER II) was funded at $600 million in the Consolidated Appropriations Act of 2010.166 Seven port-related projects were among the 42 successful applicants for TIGER II capital construction grant funds.

MARAD has gained valuable experience in administering grant programs. The agency provided extensive assistance to the Secretary in the recent evaluations of the TIGER Discretionary Grants and manages the 14 capital grants awarded to ports under the TIGER and TIGER II programs. MARAD also continues to administer the award of numerous matching capital grants to small shipyards under its Small Shipyard Assistance Grant Program. As such, it is well-prepared to administer matching capital grants under the above authorities or any similar future programs (such as a multimodal infrastructure bank), including for projects to improve the physical infrastructure of ports, terminals, and intermodal connectors. Matching capital grants under the new Marine Highway Grants initiative could extend to the purchase or lease of terminal equipment and construction or modification of vessels to increase energy efficiency and meet high environmental standards. Direct beneficiaries of matching capital grants would be vessel owners and operators and shoreside infrastructure owners.

MARAD’s administration of existing grant programs also provides it with clear insight into the outcomes of the grant-funded projects. MARAD will monitor project outcomes to see if the projects accomplish their objectives of promoting use of Marine Highway services. Information of this type is vital to understanding the potential for success of larger future Federal investments in America’s Marine Highway, including potential investments in new vessel designs or improved port facilities.

### Title XI Loan Guarantees

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 67]

Marine Highway Title XI Loan Guarantees

The Title XI Federal Ship Financing Program, administered by MARAD, enables owners of eligible vessels and shipyards to obtain long-term capital financing with attractive terms by providing a full faith and credit guarantee of eligible debt obligations. When credit markets are constrained, this program has been particularly helpful to obtain long-term financing for vessels. Stakeholders have suggested modifications to the Title XI program to help introduce more environmentally sustainable vessels into the U.S. fleet and stimulate growth in U.S. shipyard jobs. Potential changes to the program could prioritize Marine Highway vessels, allow Title XI to be used for directly-related shoreside facility improvements, revise debt/equity and working capital requirements (responding to the needs of startup operators), and include a mandate to conform to high environmental standards. Any such changes, however, would need to be made in a manner that would not jeopardize the financial integrity of the Title IX program. Direct beneficiaries of Title XI loan guarantees would be vessel owners and operators and, potentially, shoreside infrastructure owners.

### TIFIA

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 67]

Marine Transportation Infrastructure Finance and Innovation Act

The Transportation Infrastructure Finance and Innovation Act (TIFIA) is a Federal program that provides credit assistance for significant land transportation projects. Projects located within the boundary of a port terminal are eligible to receive TIFIA assistance provided that the project is limited to surface transportation infrastructure modifications that are necessary to facilitate direct intermodal interchange, transfer, and access into and out of the port. Additionally, projects must have eligible costs reasonably anticipated to total at least $50 million to be considered for TIFIA credit instruments, or alternatively, eligible project costs must equal 33␣ percent or more of the State's Federal-aid highway apportionments for the most recently completed fiscal year, whichever is less. Other TIFIA eligibility thresholds apply, some of which would be difficult for many port projects to meet.167 Some stakeholders have suggested that the creation of a smaller- scale maritime infrastructure-oriented program similar to TIFIA could help to fund port and terminal intermodal infrastructure, especially in small and medium-sized ports. These ports usually do not have projects which meet the minimum TIFIA eligibility requirements, such as projects of at least $50 million in scope. In addition, extending eligibility to cargo-handling equipment and other investments would be needed to accommodate Marine Highway projects.

### Capital grants –

Marston, ’12 [Craig Marston is Managing Director at CEM Marine, a firm providing consulting services in the maritime and shipping industry. The Problem with Short Sea Shipping, 2012, https://www.hightable.com/maritime-and-shipping/insight/the-problem-with-short-sea-shipping-2032]

In addition to capital costs, the US crewing requirement entails two to three times the daily operating cost of an international crew of mariners.

The high capital investment and high operating costs make short sea shipping a questionable economic model under the current market conditions. However, escalating costs and increasing delays in the surface transportation system would seem to indicate that it is a matter of time before this becomes a reality.

### Vessel Standardization—

Vessel standardization key to solvency – only the fed can accomplish this

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 54-5]

Current vessels serving the U.S. domestic trades reflect a variety of types, ages, configurations, speeds, and cargo handling capabilities. Some older vessels have less efficient engines, burn bunker fuel that is less clean than diesel fuels, and generally are more expensive to operate. The variability of ship characteristics within the U.S. fleet also creates inefficiency when transporting and transferring cargoes within an intermodal system. Standardization of vessel designs or design requirements would facilitate the ability of service providers, ports, and shippers to plan, implement, or utilize America’s Marine Highway on a national scale. Standardization of vessel designs or design requirements would also facilitate series construction of vessels, which would lower vessel construction costs. Ideally, standardized vessels intended to transport containers and trailers as an alternative to land-based carriers should be designed to minimize vessel operating costs and maximize the speed and efficiency of cargo loading, storage, and unloading operations. They must also be designed and operated in a manner that supports Federal, State, and local environmental objectives.

Standardization of Marine Highway vessel and equipment design is especially important because it would allow ports to build and modify facilities to efficiently meet the specific needs of the vessels. In fact, so important is the relationship between vessel and port terminal design that MARAD has proposed research projects to develop standardized designs for Marine Highway vessels and terminal facilities that would be conducted in coordination with each other (see section above on Marine Highway Research). Only through coordinated, standardized design guidelines for vessels and port terminal facilities can the full cost-effectiveness of the Marine Highway system be realized. For instance, the development of a standardized RoRo vessel design would be coordinated with a standardized port terminal design that would enable the ramp(s) of the vessel to be deployed efficiently while in port. MARAD anticipates that its participation in promoting standardization will yield significant transportation, safety, and environmental benefits to the public at modest overall cost to the government. As noted earlier, new vessel demand supported through design standardization would also provide the shipbuilding community with the opportunity to construct more vessels, helping to sustain the nation' shipbuilding industrial base (see earlier section on Maintaining National Shipbuilding Capabilities).

### Vessel Standardization solves

MARAD ‘11 [U.S. Department of Transportation Maritime Administration], America’s Marine Highway Report to Congress, Prepared in Consultation with the Environmental Protection Agency, April 2011, p. 55]

Finally, the development of standardized vessel and terminal designs or design requirements would explore the incorporation of National Defense Features, particularly for RoRo-type vessels and the port facilities that serve them. The inclusion of such features (e.g., reinforced decks, cranes, and ramps) could justify sharing of some costs by the Federal government, such as through the National Defense Sealift Fund for vessels.132 More broadly, some continuing level of government intervention may be needed to design new vessels and terminal infrastructure that are also suitable for national defense purposes, as well as to initiate and sustain orders for the same.

### Federal use

Mulligan and Lombardo, 4 [Robert F. Mulligan, Ph.D., Western Carolina University and Gary A. Lombardo, Ph.D., United States Merchant Marine Academy, Short Sea Shipping: Alleviating the Environmental Impact of Economic Growth, http://paws.wcu.edu/mulligan/www/SSSenviron.htm]

There remain other spheres where the government can play a financial role. The government can utilize SSS as a customer, taking advantage of cost savings and lowered environmental impact. The government can utilize SSS to move the mail, defense equipment, and military units, bypassing potential bottlenecks in overland transportation networks. The government can create a tax environment favorable to SSS operators and their customers, including but not limited to, permitting accelerated depreciation, tax rebates, and tax cuts. An effort should be made to implement favorable tax treatment for freight service consumers in terms of granting tax rebates to users of SSS.

### Repeal of Jones Act solves

Kennedy, 8 [Sean D. Kennedy, J.D. 2008, Tulane University School of Law, Short Sea Shipping in the United States - The New Marine Highways, 33 Tul. Mar. L. J. 203, Winter, 2008]

The cabotage provisions in the Jones Act require that any vessel operating in the coastwise trade between two U.S. ports be U.S.-built, n101 owned by a documentation citizen, n102 and operated by a crew of U.S. citizens. n103 For purposes of owning a U.S.-flag vessel, an SSS company must be organized in such a way that it qualifies as a documentation citizen. n104 If it is organized as a U.S. corporation, an SSS company must be at least seventy-five percent owned by U.S. citizens, n105 its chief [\*217] executive officer and chairman of the board of directors must be U.S. citizens, and no more of its directors than a minority of the number necessary to constitute a quorum may be noncitizens. n106 The corporate citizenship requirements apply to all levels of a company's organization, so the seventy-five percent ownership requirement applies to a parent corporation that has a subsidiary company operating an SSS service. n107 An SSS operator that meets these citizenship requirements may own qualified U.S.-flag vessels that were built in a U.S. shipyard n108 and apply for a coastwise endorsement to be issued to the vessel by the United States Coast Guard (Coast Guard). n109 Any vessel engaged in transporta-tion, including towage operations, n110 of passengers or merchandise between U.S. ports must be issued a coastwise endorsement. n111 Thus, SSS operators that wish to expand their fleet in order to accommodate increased demand for domestic marine transportation will be restricted to purchasing vessels constructed in U.S. shipyards.

In order to support an extensive national SSS network, there must be "a tremendous fleet build-up and the shipyard costs of construction will be a competitive issue." n112 The Coast Guard considers a vessel to be U.S.-built if all major components of her hull and superstructure are fabricated in the United States, and the vessel is assembled entirely in the United States. n113 Nonetheless, "the Coast Guard has consistently held that items not integral to the hull or superstructure, such as propulsion machinery, consoles, wiring harness and other outfitting have no bearing on a U.S. build determination and may, therefore, be foreign built without compromising the coastwise eligibility of a vessel." n114 Proponents of SSS have urged MARAD to ease build requirements in the U.S. with respect to SSS vessels in order for operators to overcome the substantial capital [\*218] costs inherent in buying U.S. vessels at above-market rates. n115 They argue that the U.S.-build requirements deter investment in SSS operations due to inflated start-up costs of purchasing vessels built in U.S. shipyards that are costlier than vessels that can be acquired from the global market. n116 U.S. shipyards charge anywhere from three to four times the price of a comparable ship built in Europe or Asia, while failing to offer the technology that would make an SSS operation more efficient. n117 These higher costs for vessels in the coastwise trade make it difficult for operators to create SSS services or sustain profitability. n118 The United States International Trade Commission conducted a study in 1999 to determine what effect removing the U.S.-build requirement, while maintaining all other cabotage laws, would have on U.S. economic welfare. n119 Taking into consideration the resulting adverse effect on U.S. shipyards, the study estimated that the removal of the U.S.-build requirement would result in an increase in the volume and demand for cabotage services due to the lower price and would ultimately benefit domestic consumers with "a welfare increase ranging from $ 138 million to $ 380 million." n120 A relaxation of the U.S.-build requirement for coastwise vessels would spur private investment in SSS vessels, further the DOT's goal of enhancing freight mobility, and generate public benefits for domestic consumers.

The justification for the protectionism of the U.S.-build requirement is grounded in national security concerns - to assure a reliable domestic shipping network and the existence of a maritime capability that is completely subject to federal control in times of war or national emergency. n121 However, noneconomic objectives like national security and defense are achieved most efficiently by using targeted, direct government interventions in the form of subsidies, rather than through indirect interventions like the Jones Act import restraints. n122 The [\*219] unintended consequence of this protection for domestic shipyards is the disincentive to private investment in efficient and profitable alternative modes of domestic freight transport due to the prohibitive cost of acquiring suitable vessels.