### Explanation of this affirmative

We have tried to improve on the initial file that was presented in the starter packet. Thought this explanation might be helpful. Here’s what the research seems to indicate:

High Speed Rail has been talked about for close to 30 years. President Obama and Transportation Secretary LaHood have made a big part of their agenda since 2010. Significant funds have given seed money to several local projects, some of which have been very successful. Plans call for the development of up to 9 different corridors across the country. The cost would be significant (close to $200 billion) and would take several years. Republicans in the House in particular aren’t keen on funding nationwide projects. That’s why the affirmative can take a number of different directions, and there are three suggested plan texts. They aren’t perfect, but we can work on them if you wish.

First, we kept the original plan text from the starter packet. It’s adequate for what you might want to do.

Second, the text would mandate the implementation of the Magnetic Levitation technology. This tech requires no wheels on the tracks, which means the upkeep would be much less. The downside would be that none of these tracks currently exist. However, the technology is being used elsewhere and seems to be very successful. Use of this technology would answer some of the solvency claims about access and not being able to deal with different types of terrain

Third, the text mandates focusing only on the Northeast Corridor. The evidence is pretty good about how this would be the best place to start. Republicans also seem to like this approach. The USFG, because of Amtrak, already owns rights of way, land, etc. so the cost would be much less. Don’t have any spillover to other area ev, but could be found if necessary.

Another plan text (one that we didn’t put in, but if you are thinking about running this later this year, one to consider) would be to change the requirements for RRIF loans. There is one piece of evidence in the 1AC solvency about that. There seems to be some feeling in the industry that this is a major barrier to getting more loans for HSR through. Gets one into some pretty technical economic explanations (the current situation would be analogous to taking out a second mortgage on a house), but might be a small aff for people to claim. Also, that might be good counterplan ground, or something.

The evidence might be here, but we didn’t put any counterplan texts in the negative files. There are problems with some of the current projects, including California’s, that would be great PIC ground. Just suggestions. We also found some pretty good links to both sides of the politics debate. That should go well with the elections and politics files we are doing for the negative side of things.

# \*\*\*HSR AFFIRMATIVE (CNDI)

### 1AC: Inherency: Current track conditions stymie HSR development

#### Current infrastructure inadequate for HSR development; must address those issues to guarantee success

Lane 2012(Bradley W. MPA Program, The University of Texas at El Paso, “On the utility and challenges of high-speed rail in the United States” Journal of Transport Geography 22 (2012) 282–284 www.elsevier.com/locate/jtrangeo)

Despite the potential utility of a series of interconnected high- speed regional rail networks, there are several major issues with it that have thus far received relatively little public attention but need to be addressed before committing the massive resources necessary for such a project. Three of these are discussed in the rest of this viewpoint: the engineering/right-of-way requirements, the question of who is going to provide the service, and high-speed- rail’s own last-mile problem. 3. Engineering and right-of-way challenges Many people assume high-speed rail can run on existing track with only some minor improvements necessary. This is simply not the case. The US has approximately the same amount of rail track miles that it did in the early 1800s, and less than half of what it did at its peak near the turn of the 20th century (see Black, 2003). Much of the rail infrastructure the US once had has been aban- doned and the right of way either sold to other interests or con- verted to other uses (such as urban rails-to-trails initiatives). The inter-city rail infrastructure remaining is also largely owned and exclusively used by freight railroad companies. Incorporating inter-city passenger rail into these tracks would require additional track sharing to what freight companies already do to Amtrak, and they are generally not interested in adding users, decreasing the functional capacity, and increasing maintenance requirements of existing track. The inter-city rail infrastructure that remains has also been sub- ject to what can be described as ‘‘deferred maintenance,’’ which essentially means all non-critical maintenance issues are ignored. In many places, trains currently running must slow to a near-crawl because the track has deteriorated near to the point of no longer being usable. However, it is not enough to simply improve the existing track by bringing it up to proper maintenance levels. Doing so only allows trains to run up to speeds in the low 100s of mph in places. Though faster than legal auto travel, this is not true high-speed rail seen in Europe or East Asia, which requires a base speed between 124 mph on upgraded track in the European Union to 217 mph on new track in China (UIC, 2010). Such speeds are necessary to offset the additional cost of train travel relative to automobile travel, as well as provide a convenience level that can compete with short-haul airline travel. Engineering new track to handle these speeds will require new right of way. This requires employment of eminent domain, which has significant monetary costs as well as the almost certainty of strong local (and possibly national) political opposition.

### 1AC: Inherency: Now is critical time for HSR adoption

#### Political process is now at critical juncture; this is optimum time to convince policymakers of need and feasibility of HSR

Chen 2011 (Zhenhua, PhD student at the George Mason University, School of Public Policy, and is currently working as a graduate research assistant under the supervision of Prof. Jonathan Gifford in the area of transportation policy. Mr. Chen was awarded the Graduate Student Best Paper Award of the 51st Transportation Research Forum, “Is the Policy Window Open for High-Speed Rail in the United States: A Perspective from the Multiple Streams Model of Policymaking,” Transportation Law Journal Vol. 38:115)

B. POLICY STREAM In Kingdon's theory, the policy stream represents a short list of pro- posals.56 This short list does not gain consensus from the policy commu- nity because one proposal does not meet their criteria to solve a problem; rather, the availability of multiple potential solutions drives policymak- ers.57 When considering a policy stream or a short list of proposals, concrete ideas are favored by governmental policymakers because of their technical feasibility and capacity for actual implementation.58 A detailed development plan and a clear project purpose can be very helpful for policymakers to make decisions. In order to gain legislative supports, HSR proposals were submitted with a variety of contents and focuses (See Table 1). Among these focuses, the most dominant issues are legislative sup- port and allocated financing. Legislative support is important because it demonstrates authorization for HSR development, while financing allows HSR projects to begin. These two elements are key to HSR development in the United States.60 Furthermore, post 9/11 efforts to improve safety and security on rail travel have also driven public sector stakeholders to improve cooperation in the development and oversight of domestic rail travel.61 Considered in conjunction with statistical indicators, emphasizing that rail rider-ship increases when gasoline prices rise and that rail travel can maintain rider-ship after gasoline prices level off, a healthy environment for developing HSR exists.62 A confluence of circumstance and opportunity lead to the proposed Program for Real Energy Security Act, sponsored by Representative Steny H. Hoyer's in 2007.63 The bill proposed a series of solutions to promote energy independence by several means, including supporting passenger rail travel.6 The bill sought to improve passenger vehicle fuel technology and efficiency and provided the financial means to bolster the American rail infrastructure. 65 In par- ticular, the bill added specific sections that created high-speed rail infra- structure bonds and provided tax incentives to bond holders to stimulate high speed rail development.66 One common objective for these HSR policy proposals is to build an efficient HSR system in the United States. However, neither lawmakers nor the President have personal experience with HSR.67 Therefore, when the idea of HSR is addressed, reactions from both Congress and the White House are very cautious. 6 8 Under such a scenario, for HSR to be accepted, policymakers must be persuaded that HSR can benefit the na- tion. It seems that the long-term benefits, such as congestion alleviation and energy consumption reduction, are too far off in the future to see any practical immediate effects.69 Consequently, those tangible advantages that can be seen in a short term are preferred by policy communities in order to prove its feasibility. One of the major tangible advantages of developing HSR in the United States that has been advocated is job creation and economic growth.70 Figure 1 shows the relationship between number of proposed HSR bills introduced in Congress and economic conditions. According to Table 1, from 1991 to 2008, there were a total of three periods when HSR bills were prevalent. Interestingly, Table 1 also indicates that the years with the most HSR proposals submitted were primarily during economic recessions. The first year was in 1991 when the economic recession caused high unemployment, massive governmental deficits and slow GDP growth.71 In 1991 alone, eleven HSR related bills were submitted, among which seven were Magnetic Levitation development bills.72 A second re- cession occurred in the early 2000s, particularly from 2001 to 2003. Again, 2003 is another year that has more HSR bills proposed in Con- gress. Most of the bills directly addressed economic stimulation and job creation with a strategy of increasing transportation infrastructure investment.7 3 The Rail Infrastructure Development and Expansion Act for the 21st Century, proposed by Representative Don Young, former chairman of the House Committee on Transportation and Infrastructure, on June 24, 2003 required the establishment of an authority for States or Interstate Compacts to issue $12 billion in federally tax-exempt bonds and $12 bil- lion in federal tax-credit bonds for infrastructure improvements in high- speed passenger railroad infrastructure. 74 Although the bill failed to be enacted by Congress, it did reveal that HSR promotion was receiving congressional attention as one method to combat the economic downturn. The third wave of HSR proposals associated with economic recession concerns began in 2008. Compared with prior recessionary years, the number of HSR bills proposed was not as significant; yet, these bills did show more realistic development plans that also increased their likeli- hood of passage through Congress. For example, the Passenger Rail In- vestment and Improvement Act of 2008, H.R. 6003 concretely articulated federal appropriations of funds for a HSR corridor development plan.76 It also provided measures to promote private sector development of the Northeast Corridor and other potential high-speed rail.77 On October 16, 2008 a related bill, the Railroad Safety Enhancement Act of 2008, H.R.2095, was signed into law. The act expressed a clear statement of the federal government's role in the development of the national HSR.78 With a detailed HSR legislative guideline, the passage of the ARRA on February 17, 2009 was connected with the PRIIA, and it linked the HSR to the purposes of economy stimulation and job creation.79 From the multiple HSR policy proposals during 1991 and 2008, it demonstrates that in the United States the idea of building HSR system becomes more likely to meet the short-term objective of stimulating the economy and creating jobs rather than long-term objectives. Because the long-term benefits of HSR, such as alleviation of congestion in other modes, reducing energy consumption, and boosting regional develop- ment, not only depend on the system itself, but also on other external variables such as traffic deviation from other modes, source of electricity generation, and the density of urban areas crossed, the actual effect of outcomes becomes hard to predict.80 Comparatively, the HSR short- term benefits are much more solid for policy communities to focus on. Therefore, in the policy stream, many proposals tend to link HSR with short-term tangible objectives so that it can become more likely to rise to the top of the governmental agenda.

### 1AC Plan

**Text 1: The United States federal government should substantially increase its investment in high-speed rail development in the United States.**

Text 2: **The United States federal government should substantially increase its investment in high-speed rail development in the United States by mandating the use of Magnetic Levitation technology in all HSR projects.**

Text 3: **The United States federal government should substantially increase its investment in high-speed rail development in the United States by focusing on the development of the Northeast Corridor.**

## \*\*Economy/Competitiveness ADV

### 1AC: Plan boosts competitiveness

#### Rail is facing collapse—but the plan boosts competitiveness and creates growth—dedicated funding sources are key

**Galati, CGW, 10**—certified grant writer for TRC Solutions Inc, extensively experienced in writing technical documents to government, local, industrial, environmental, transportation, process, security, and infrastructure clients (Stephan, December 2010 (last cited date), “Changing the Dynamics of the Rail Industry: Transformation through Federal Rail Grant Funding”, TRC Solutions White Paper, <http://www.trcsolutions.com/Documents/White%20Papers/TRC_Stephan_Galati_Whitepaper_Grant_Writing.pdf>, AL)

The rail systems in America offer traveler passage between our nation’s most populated metropolitan centers and to those areas far less travelled. Although the nation’s rail network promotes energy efficiency and offers various transportation choices, the **existing systems are facing critical issues**. America’s rail infrastructure is aged making many transit systems vulnerable to **new threats** and **unnatural acts of destruction**, while the passenger rail network is **fractured** often leaving passengers with unlinked modes of transportation and inefficient rail corridors. The nation’s network has also steadily fallen behind the worldwide rail leaders who offer such transportation choices as high-speed rail, which links passengers with their country’s transit and commuter rail networks. Taking notice of America’s **loss of economic competitiveness** and rail systems beleaguered with security and safety concerns, the Federal government began offering grant funding for the rehabilitation and development of transit systems nationwide. As a result of this robust funding stream, America’s rail industry and nationwide network is now being transformed to serve America’s future rail needs and enrich our nation’s passenger rail options. Two of the more dynamic rail project funding programs espoused by the federal government are the Federal Rail Administration’s (FRA) High-Speed Intercity Passenger Rail (HSIPR) Program and the Department of Homeland Security’s (DHS) Transit Security Grant Program (TSGP). While both programs are changing our nation’s network of railroads, they are individually in a state of transition as well. The younger of the funding programs, the HSIPR program, is in full-gear shift from recent project funding awards to project starts and implementations. Alternatively, the more senior program, the TSGP, is in transition from its current funding structure to one better fitted for the next years’ project needs. The following synopses characterize each program and the different ways each is transforming the rail industry. The High-Speed Intercity Passenger Rail (HSIPR) Program The High-Speed Intercity Passenger Rail Program was inaugurated in June 2009 after President Obama’s historic declaration promoting high-speed passenger rail in America. Under the American Recovery and Reinvestment Act (ARRA), eight billion dollars was allocated to launch a national high-speed rail program designed to modernize the national transportation network, promote energy efficiency, **invigorate domestic economic development** through ‘Buy American’ requirements, and build America’s competitiveness with other leading nations. Grants under this program are designated only for high-speed rail projects and not for any other transportation modes. This **dedicated funding source** has laid a potent foundation for a **vibrant high-speed rail** program in America that provides commutable links between America’s major population centers. The HSIPR program is a **ray of hope** for the rail industry. As already implied, America has fallen behind competitively with other countries regarding high-speed rail. As perspective, Japan’s first high-speed “bullet” train, the shinkansen, was introduced four decades ago for the Tokyo Olympics in 1964, and Europe’s first high-speed rail, the Train à Grande Vitesse (TGV), was introduced in France in 1981 (Miller, 2010). Both countries’ high-speed rail networks have grown since their inaugural trains and now have mature high-speed rail systems that employ the newest technologies. In fact, Japan’s latest high-speed rail trains, called the E5 series, will be put into service in 2011 and will move passengers at nearly 200 miles per hour (McCurry, 2009). China has used new technology to build the leading high-speed rail network that is not only three times the size of Japan’s network, but also is the longest in the world (Yingying, 2010). The United States, through the HSIPR Program, will commence with the development of a **robust national network** of high-speed rail travel that will hopefully compete with or even rival our formidable and well-vested competitors. Since the HSIPR program was initiated, $2.5 billion in grants have been awarded to approximately 54 organizations in numerous areas, including California’s corridors, the Detroit-Chicago corridor, the Charlotte-Richmond-Washington, DC corridor, and the Northeast Region. The chart below highlights the already announced awards for HSIPR funding by state and reflects the changes from FRA’s redistribution of Wisconsin and Ohio’s $1.195 billion funding, which was handed back to DHS by the states in December 2010. Now that the government has awarded project funding and the pathway toward a national high-speed rail system has been cemented, the HSIPR program is transitioning from a grant awarding phase to a project implementation phase. This shift is **vital for revitalizing economic development** in America. The investments made today in the rail road industry will **swell the economic returns dynamically** as our national rail network is augmented for future travelers. With this grant funding stream being implemented throughout the country, our nation’s intercity passenger rail infrastructure, equipment, and intermodal connections are being modernized so that the United States- like China, Japan, and Europe- can quickly move people from one major hub to another. Additionally, the influx of **federal money** into local economies will have **dramatic influences** in key areas of the country and ultimately offer Americans transportation choices through a reinvigorated and improved rail industry.

### 1AC: HSR critical to economic success

#### And it’s critical to long-term economic success

**Archdeacon, VEIL officer, 11**—officer for project development at the Victorian Eco-Innovation Lab, MPhil in urban agriculture at U Melbourne (Kate, 2/2/2011, “High-Speed Rail: A Catalyst for Sustainable City Development”, VEIL at U Melbourne, <http://www.sustainablecitiesnet.com/research/high-speed-rail-a-catalyst-for-sustainable-city-development/>, AL)

High-speed rail can **create jobs** and **boost local economies**. A U.S. high-speed rail system could help **position the nation for economic success** in the 21st century while creating short-term jobs in construction and long-term jobs in ongoing maintenance and operation. Construction of high-speed rail lines creates thousands of temporary jobs. For example, about 8,000 people were involved in construction of the highspeed rail link between London and the Channel Tunnel. Well-designed high-speed rail stations located in city centers **spark economic development** and encourage revitalization of urban areas: A study of the Frankfurt-Cologne high-speed rail line in Germany estimated that areas surrounding two towns with new high-speed rail stations experienced a **2.7 percent increase** in overall economic activity compared with the rest of the region. Office space in the vicinity of highspeed rail stations in France and northern Europe generally fetches higher rents than in other parts of the same cities. The city of Lyon experienced a 43 percent increase in the amount of office space near its high-speed rail station following the completion of a high-speed rail link to Paris. Property values near stations on Japan’s Shinkansen network have been estimated to be **67 percent higher** than property values further away. Several cities have used high-speed rail as the catalyst for ambitious urban redevelopment efforts. The city of Lille, France, used its rail station as the core of a multi-use development that now accommodates 6,000 jobs. The new international high-speed rail terminal at London’s St. Pancras station is the centerpiece of a major redevelopment project that will add 1,800 residential units, as well as hotels, offices and cultural venues in the heart of London. High-speed rail has increased overall travel in corridors in Spain and France and the number of one-day business trips in South Korea. Increases in overall travel indicate that high-speed rail is having an impact on **broader economic decisions** and improve the chances that high-speed rail lines can recoup their overall costs. High-speed rail can **expand labor markets** and increase the potential for face-to-face interactions that create value in the growing “**knowledge economy**.” A British study projects that the construction of the nation’s first high-speed rail line will lead to **more than $26 billion** in net economic benefits over the next 60 years.

###  1AC: Competitiveness—Plan Key

#### Rail is collapsing now and key to competitiveness—new investment is key

**Dovell, CFR researcher, 3/7**—researcher for the Council on Foreign Relations, Executive Board Member and Program Writer at Dialogue Beyond Borders, BA in international relations from SUNY-New Paltz (Elizabeth, 3/7/2012, “U.S. Rail Infrastructure”, Council on Foreign Relations: Renewing America, <http://www.cfr.org/united-states/us-rail-infrastructure/p27585>, AL)

Rail is an **essential component** of a balanced national transportation (PDF) system and a globally competitive economy. The American Society of Civil Engineers, which graded U.S. rail infrastructure with a **C-**, notes that the rail industry requires $200 billion in investment by 2035 to meet projected future demand. In the United States, modern freight and passenger rail systems share the same corridors and infrastructure. But while privately owned U.S. freight has succeeded in remaining competitive with other transportation modes, federally run passenger rail has **struggled**. Experts say the continued success of freight rail will require **billions in new funding** to avoid congestion, particularly if plans for expanding passenger rail proceed.

### 1AC: Competitiveness: HSR key

#### HSR key to global competitiveness

Kunz, 2011 (Andy, president and CEO of the U.S. High Speed Rail Association, U.S. High-Speed Rail: Time to Hop Aboard or Be Left Behind, March 10, 2011, <http://e360.yale.edu/feature/us_high-speed_rail_time_to_hop_aboard_or_be_left_behind/2378>)

The average American produces three times the amount of CO2 emissions as a person in France. A U.S. journalist now living in Europe explains how she learned to love her clothesline and sweating in summer. The U.S. must build a national high-speed rail network if it hopes to maintain its competitiveness in the world economy. China and Europe are now moving ahead with their high-speed rail networks at breakneck speed, which means that in a decade or two they will have significantly reduced their dependence on imported oil, created tens of millions of new jobs, and saved their countries trillions of dollars by vastly improving the productivity of their economies thanks to a low-carbon transportation sector that moves people and goods at speeds that could one day hit 300 miles per hour, or more. The U.S. can be part of that future. But if more states follow the example of Florida, Wisconsin, and Ohio, the country will remain shackled by 19th- and 20th-century forms of transportation in a 21st-century world. Contemplate this image: China, Europe, Russia, South America, and other parts of the globe are streaking by at 250 miles per hour while the likes of Governor Scott are stuck in a traffic jam on an interstate, watching the trains whiz past.

### 1AC: Loss of competitiveness decreases hegemony

#### **Loss of economic competitiveness=Loss of Heg, empirics prove**

Wallerstein, 2003 (Immanuel, sociologist, historical social scientist, and world-systems analyst, U.S. Weakness and the Struggle for Hegemony, 5/30/03, <http://www.iwallerstein.com/wp-content/uploads/docs/MR3.PDF>)

We have to start in 1945 when the U.S. became hegemonic, really hegemonic. What does hegemony in this context mean? It means that the U.S. nation-state was so much the strongest, it had an economic capability so far ahead of anybody else in the world as of 1945, that it could undersell anyone in their own home markets. The United States had a military strength that was unparalleled. As a consequence, it had an ability to create formidable alliances, NATO, the U.S.–Japan Defense Pact, and so on. At the same time the United States, as the hegemonic power, became culturally the center of the world. New York became the center of high culture and American popular culture went on its march throughout the world.

The first time I was in the Soviet Union, in the Brezhnev era, my host took me to a night club in Leningrad. The one thing that startled me in the Soviet Union, the whole time I was there, was that in this nightclub ￼￼￼￼￼￼￼￼￼￼￼￼￼￼￼￼￼￼one heard American popular music sung in English. And, of course, ideo- logically, I think we underestimate the degree to which the theme of the “free world” has had legitimacy among wide segments of the world pop- ulation.

So the U.S. was really on top of the world for about twenty-five years, and it got its way in whatever it wanted to do.

It is true that there was the Soviet Union, which posed a military dif- ficulty for the United States. Nonetheless, the United States handled that very simply by an agreement. It is called Yalta, which encompasses more than just what happened at Yalta itself. I think the left has underestimat- ed historically the reality and the importance of the Yalta arrangements that made the Cold War a choreographed arrangement in which nothing ever really happened for forty years. That was the important thing about the Cold War. It divided up the world into a Soviet zone that was about a third of the world, and the U.S. zone that was two-thirds. It kept the zones economically separate and allowed them to shout at each other loudly in order to keep their own side in order, but never to make any truly substantial changes in the arrangement. The United States was therefore sitting on top of the world.

This lasted only about twenty-five years. The United States ran into difficulty somewhere between 1967 and 1973 because of three things. One, it lost its economic edge. Western Europe and Japan become sufficiently strong to defend their own markets. They even began to invade U.S. mar- kets. They were then about as strong and as competitive as the United States economically and that, of course, had political implications. Secondly, there was the world revolution of 1968 that many MR read- ers were involved in, in one way or another. Think of what happened in 1968. In 1968, there were two themes that were repeated everywhere throughout the world in one version or another. One, we don’t like the U.S. hegemony and dominance of the world, and we don’t like Soviet col- lusion with it. That was a theme everywhere. That was not only the Chinese stance on the two superpowers but that of most of the rest of the world as well. The second thing that 1968 made clear was that the Old Left, which had come to power everywhere—Communist parties, social-democratic parties, national liberation movements—had not changed the world and something had to be done about it. We were not sure we trusted them anymore. That undermined the ideological basis of the Yalta agreement, and that was very important. The third thing that happened is that there were people who didn’t ￼￼￼￼￼￼￼￼￼￼￼￼￼￼￼￼￼￼￼￼￼agree with Yalta. They were located in the third world and there were at least four significant defeats of imperialism that occurred in the third world. The first was China, where the Communist Party defied Stalin and marched on Kuomintang-controlled Shanghai in 1948, thus getting China out from under U.S. influence on the mainland. That was a central defeat in the U.S. attempt to control the periphery. Secondly, there was Algeria and all its implications as a role model for other colonial territories. There was Cuba, in the backyard of the United States. And finally there was Vietnam, which both France and then the United States were incapable of defeating. It was a military defeat for the United States that has structured world geopolitics ever since. The threefold fact of the rise of economic rivals, the world revolution of 1968 and its impact on mentalities across the world, and Vietnam’s defeat of the United States, all taken together, mark the beginning of the decline of the United States.

### 1AC: Heg solves war

#### Must maintain US hegemony to guarantee peaceful transition to a multipolar world

**Kagan 2/11**—Senior Fellow in Foreign Policy at the Brookings Institution (Robert, member of the Foreign Policy Advisory Board of Secretary of State Hillary Clinton, the Foreign Policy Advisory Board of Secretary of State Hillary Clinton, 2/11/12, “Why the World Needs America,” Wall Street Journal, http://online.wsj.com/article/SB10001424052970203646004577213262856669448.html, MV)

History shows that world orders, including our own, are transient. They rise and fall, and the institutions they erect, the beliefs and "norms" that guide them, the economic systems they support—they rise and fall, too. The downfall of the Roman Empire brought an end not just to Roman rule but to Roman government and law and to an entire economic system stretching from Northern Europe to North Africa. Culture, the arts, even progress in science and technology, were set back for centuries. Modern history has followed a similar pattern. After the Napoleonic Wars of the early 19th century, British control of the seas and the balance of great powers on the European continent provided relative security and stability. Prosperity grew, personal freedoms expanded, and the world was knit more closely together by revolutions in commerce and communication. With the outbreak of World War I, the age of settled peace and advancing liberalism—of European civilization approaching its pinnacle—collapsed into an age of hyper-nationalism, despotism and economic calamity. The once-promising spread of democracy and liberalism halted and then reversed course, leaving a handful of outnumbered and besieged democracies living nervously in the shadow of fascist and totalitarian neighbors. The collapse of the British and European orders in the 20th century did not produce a new dark age—though if Nazi Germany and imperial Japan had prevailed, it might have—but the horrific conflict that it produced was, in its own way, just as devastating. Would the end of the present American-dominated order have less dire consequences? A surprising number of American intellectuals, politicians and policy makers greet the prospect with equanimity. There is a general sense that the end of the era of American pre-eminence, if and when it comes, need not mean the end of the present international order, with its widespread freedom, unprecedented global prosperity (even amid the current economic crisis) and absence of war among the great powers. American power may diminish, the political scientist G. John Ikenberry argues, but "the underlying foundations of the liberal international order will survive and thrive." The commentator Fareed Zakaria believes that even as the balance shifts against the U.S., rising powers like China "will continue to live within the framework of the current international system." And there are elements across the political spectrum—Republicans who call for retrenchment, Democrats who put their faith in international law and institutions—who don't imagine that a "post-American world" would look very different from the American world. If all of this sounds too good to be true, it is. The present world order was largely shaped by American power and reflects American interests and preferences. If the balance of power shifts in the direction of other nations, the world order will change to suit their interests and preferences. Nor can we assume that all the great powers in a post-American world would agree on the benefits of preserving the present order, or have the capacity to preserve it, even if they wanted to. Take the issue of democracy. For several decades, the balance of power in the world has favored democratic governments. In a genuinely post-American world, the balance would shift toward the great-power autocracies. Both Beijing and Moscow already protect dictators like Syria's Bashar al-Assad. If they gain greater relative influence in the future, we will see fewer democratic transitions and more autocrats hanging on to power. The balance in a new, multipolar world might be more favorable to democracy if some of the rising democracies—Brazil, India, Turkey, South Africa—picked up the slack from a declining U.S. Yet not all of them have the desire or the capacity to do it. What about the economic order of free markets and free trade? People assume that China and other rising powers that have benefited so much from the present system would have a stake in preserving it. They wouldn't kill the goose that lays the golden eggs. Unfortunately, they might not be able to help themselves. The creation and survival of a liberal economic order has depended, historically, on great powers that are both willing and able to support open trade and free markets, often with naval power. If a declining America is unable to maintain its long-standing hegemony on the high seas, would other nations take on the burdens and the expense of sustaining navies to fill in the gaps? Even if they did, would this produce an open global commons—or rising tension? China and India are building bigger navies, but the result so far has been greater competition, not greater security. As Mohan Malik has noted in this newspaper, their "maritime rivalry could spill into the open in a decade or two," when India deploys an aircraft carrier in the Pacific Ocean and China deploys one in the Indian Ocean. The move from American-dominated oceans to collective policing by several great powers could be a recipe for competition and conflict rather than for a liberal economic order. And do the Chinese really value an open economic system? The Chinese economy soon may become the largest in the world, but it will be far from the richest. Its size is a product of the country's enormous population, but in per capita terms, China remains relatively poor. The U.S., Germany and Japan have a per capita GDP of over $40,000. China's is a little over $4,000, putting it at the same level as Angola, Algeria and Belize. Even if optimistic forecasts are correct, China's per capita GDP by 2030 would still only be half that of the U.S., putting it roughly where Slovenia and Greece are today. As Arvind Subramanian and other economists have pointed out, this will make for a historically unique situation. In the past, the largest and most dominant economies in the world have also been the richest. Nations whose peoples are such obvious winners in a relatively unfettered economic system have less temptation to pursue protectionist measures and have more of an incentive to keep the system open. China's leaders, presiding over a poorer and still developing country, may prove less willing to open their economy. They have already begun closing some sectors to foreign competition and are likely to close others in the future. Even optimists like Mr. Subramanian believe that the liberal economic order will require "some insurance" against a scenario in which "China exercises its dominance by either reversing its previous policies or failing to open areas of the economy that are now highly protected." American economic dominance has been welcomed by much of the world because, like the mobster Hyman Roth in "The Godfather," the U.S. has always made money for its partners. Chinese economic dominance may get a different reception. Another problem is that China's form of capitalism is heavily dominated by the state, with the ultimate goal of preserving the rule of the Communist Party. Unlike the eras of British and American pre-eminence, when the leading economic powers were dominated largely by private individuals or companies, China's system is more like the mercantilist arrangements of previous centuries. The government amasses wealth in order to secure its continued rule and to pay for armies and navies to compete with other great powers. Although the Chinese have been beneficiaries of an open international economic order, they could end up undermining it simply because, as an autocratic society, their priority is to preserve the state's control of wealth and the power that it brings. They might kill the goose that lays the golden eggs because they can't figure out how to keep both it and themselves alive. Finally, what about the long peace that has held among the great powers for the better part of six decades? Would it survive in a post-American world? Most commentators who welcome this scenario imagine that American predominance would be replaced by some kind of multipolar harmony. But multipolar systems have historically been neither particularly stable nor particularly peaceful. Rough parity among powerful nations is a source of uncertainty that leads to miscalculation. Conflicts erupt as a result of fluctuations in the delicate power equation. War among the great powers was a common, if not constant, occurrence in the long periods of multipolarity from the 16th to the 18th centuries, culminating in the series of enormously destructive Europe-wide wars that followed the French Revolution and ended with Napoleon's defeat in 1815. The 19th century was notable for two stretches of great-power peace of roughly four decades each, punctuated by major conflicts. The Crimean War (1853-1856) was a mini-world war involving well over a million Russian, French, British and Turkish troops, as well as forces from nine other nations; it produced almost a half-million dead combatants and many more wounded. In the Franco-Prussian War (1870-1871), the two nations together fielded close to two million troops, of whom nearly a half-million were killed or wounded. The peace that followed these conflicts was characterized by increasing tension and competition, numerous war scares and massive increases in armaments on both land and sea. Its climax was World War I, the most destructive and deadly conflict that mankind had known up to that point. As the political scientist Robert W. Tucker has observed, "Such stability and moderation as the balance brought rested ultimately on the threat or use of force. War remained the essential means for maintaining the balance of power." There is little reason to believe that a return to multipolarity in the 21st century would bring greater peace and stability than it has in the past. The era of American predominance has shown that there is no better recipe for great-power peace than certainty about who holds the upper hand. President Bill Clinton left office believing that the key task for America was to "create the world we would like to live in when we are no longer the world's only superpower," to prepare for "a time when we would have to share the stage." It is an eminently sensible-sounding proposal. But can it be done? For particularly in matters of security, the rules and institutions of international order rarely survive the decline of the nations that erected them. They are like scaffolding around a building: They don't hold the building up; the building holds them up. Many foreign-policy experts see the present international order as the inevitable result of human progress, a combination of advancing science and technology, an increasingly global economy, strengthening international institutions, evolving "norms" of international behavior and the gradual but inevitable triumph of liberal democracy over other forms of government—forces of change that transcend the actions of men and nations. Americans certainly like to believe that our preferred order survives because it is right and just—not only for us but for everyone. We assume that the triumph of democracy is the triumph of a better idea, and the victory of market capitalism is the victory of a better system, and that both are irreversible. That is why Francis Fukuyama's thesis about "the end of history" was so attractive at the end of the Cold War and retains its appeal even now, after it has been discredited by events. The idea of inevitable evolution means that there is no requirement to impose a decent order. It will merely happen. But international order is not an evolution; it is an imposition. It is the domination of one vision over others—in America's case, the domination of free-market and democratic principles, together with an international system that supports them. The present order will last only as long as those who favor it and benefit from it retain the will and capacity to defend it. There was nothing inevitable about the world that was created after World War II. No divine providence or unfolding Hegelian dialectic required the triumph of democracy and capitalism, and there is no guarantee that their success will outlast the powerful nations that have fought for them. Democratic progress and liberal economics have been and can be reversed and undone. The ancient democracies of Greece and the republics of Rome and Venice all fell to more powerful forces or through their own failings. The evolving liberal economic order of Europe collapsed in the 1920s and 1930s. The better idea doesn't have to win just because it is a better idea. It requires great powers to champion it. If and when American power declines, the institutions and norms that American power has supported will decline, too. Or more likely, if history is a guide, they may collapse altogether as we make a transition to another kind of world order, or to disorder. We may discover then that the U.S. was essential to keeping the present world order together and that the alternative to American power was not peace and harmony but chaos and catastrophe—which is what the world looked like right before the American order came into being.

### 1AC: Plan boosts economy and growth

#### Second is stimulus—the plan immediately boosts the economy and cements the next wave of growth—empirics prove and dissenters use myopic models

**MPI, economic think tank, 10**—Martin Prosperity Institute at the U of Toronto’s Rotman School of Management (date last cited, “High Speeds, High Costs, Hidden Benefits: A Broader Perspective on High-Speed Rail”, Martin Prosperity Insights, <http://martinprosperity.org/images/stories/jmc/cache/mpi-high-speeds-high-costs-hidden-benefits-a-broader-perspective-on-high-speed-rail.pdf>, AL)

Thus the benefits of high-speed rail are usually conceived as lowering costs and reducing problems (gridlock, pollution, travel time) rather than expanding growth. The Martin Prosperity Institute’s latest white paper, Making High-Speed Rail Work for Ottawa, argues that a better approach to assessing transportation investments ought to consider the **economy-expanding effects** of high-speed rail. Economic history is replete with evidence of forward-thinking infrastructure investments that could not be justified by the evaluation tools of their time but **ultimately proved transformative** to the economic system. The Trans-Canada railway, the **U.S.** Interstate **Highway System**, and **ARPANET** (precursor to the Internet) all fall into this category. The new paper argues that high-speed rail infrastructure has the potential to have the same sort of transformative effect. First, it **expands the labour pool** available to employers, bringing talented workers from nearby centres within commuting distance and thus expanding the **quantity and quality of available employees**. So, for example, high-speed rail would enable a company in Toronto looking for a mobile user-interface designer to draw on talent living in Kitchener-Waterloo, London, and Kingston. In economic terms, an effective transportation system improves productivity because it helps allocate labour inputs more effectively. Second, high-speed rail **expands the size of the job market** available to **workers**. Because it increases the distance that commuters can travel for work, it allows them to seek employment across what were once multiple, separate labour markets. This is particularly important in an era when self-employment, contract-oriented work, and part-time work are all rising, meaning that workers are searching for jobs more frequently than ever. Eliminating the need to move to a new home to follow economic opportunity saves **significant financial** and social **costs**. Third, faster connections **extend the benefits of other** expensive, productivity-enhancing **infrastructure** across the entire mega-region. International airports, major research universities and reference libraries are all more **financially viable** and **internationally competitive** when they serve a larger population. High-speed rail allows them to build the scale they need to achieve world-class **excellence** and also spreads their high costs across a wider population. Perhaps the best paradigm for illustrating the potential effects of high-speed rail is the development of the US Interstate Highway System. In a report looking back at the history of the system since construction began in 1956, the Transportation Research Board describes the difficulty of capturing the full economic impact of such a massive transportation advance using conventional models. Introduction of the high-speed highway system “fundamentally altered relationships between time, cost, and space in a manner which allowed new economic opportunities to emerge that would never have emerged under previous technologies”ii (p. 44). In the knowledge economy era, high-speed rail may have the right characteristics to help facilitate **another wave of productivity-driven economic growth**.

### 1AC: HSR primes the economy

#### And the plan is key—other stimuli fail

**Tierney, prof geography, 12**—professor of geography at U of North Texas, PhD in geography from U of Denver, MA in geography from Arizona State University (Sean, 2/28/2012, “High-speed rail, the knowledge economy and the next growth wave”, Journal of Transport Geography 22, p. 285-287, p. science direct, AL)

For all the controversy surrounding the 2009 stimulus bill, one of its **noteworthy flaws** was its focus on ‘shovel ready’ projects. Shovel ready projects are relics of the 20th century economy designed to prop up or expand the existing built environment. Acknowledging that crisis management is **inherently reactionary**, the stimulus failed to anticipate the next economic landscape. **What we need now**, what HSR offers, is infrastructure that **primes the knowledge economy**, designed to enhance idea-exchange in the face of rising populations and global competition. Globalization is already reshuffling our national urban hierarchy. Some cities and regions are grappling with **decaying industries**, plummeting tax receipts and laborers with inadequate skills. Meanwhile, other places with deep and diversified economic roots are repositioning themselves for the next round of consolidation and growth. For better or worse, **ideas have replaced tangible goods** as our primary export and there is a growing divide between those places with long traditions of economic adaptation and those with mono-industry concentrations and declining productivity. HSR is not appropriate for regions in decline, places like the industrial mid-west or the sand-states (Florida, Arizona, and Nevada), but HSR is well suited to **strengthen the competitive advantages** of those places that are winning.

### 1AC: Stimulus stops depression

#### Only massive stimulus now can stave off a second depression

**Watson, citing Roubini, PhD in int’l economics, 11**—news writer and MA in IR from U Nottingham (Steve, 9/12/2011, “Renowned Economist Warns Of Severe Depression Without “Massive New Stimulus, Could hit as early as next year”, InfoWars, <http://www.infowars.com/renowned-economist-warns-of-severe-depression-without-massive-new-stimulus/>, AL)

Renowned Economist Nouriel Roubini, says that unless world governments release **massive new fiscal stimulus**, there will be **another Great Depression**, possibly **within one year**. Roubini, who predicted the 2008 crash and has been predicting a double dip recession for some time, has even revised his previous “perfect storm” prediction for 2013 and now suggests that a **grave economic downturn** is even closer. “I thought a few months ago that the perfect storm would be 2013, but now, the economic weakness in the U.S., eurozone and U.K. is front-loaded.” Roubini told Bloomberg News. “So we’re going to double-dip earlier. The climax of it could be 2013 or it could be already earlier.” Roubini added. Earlier this month, the economist, often dubbed Dr Doom owing to his stark and bearish financial predictions, stated that he feels there is a 60 percent probability of recession in early 2012. “There’ll be more monetary easing and quantitative easing done by the Fed and other central banks, but the credit channel is broken.” Roubini told Bloomberg. Roubini has warned that the world’s developed economies are trapped in a more dangerous place than in 2008, owing to the “stall speed” of low growth and a dearth of potential political solutions. “Things are getting worse, and the big difference between now and a few years ago is that this time around, we’re **running out of policy bullets**.” Roubini said. In a piece in the Financial Times last month, the economist noted that the recent media driven impression of a short term “recovery” was a “**delusion that has been dashed**.” “America’s recent data have been lousy: there has been little job creation, weak growth and flat consumption and manufacturing production. Housing remains depressed. Consumer, business and investor confidence has been falling, and **will now fall further**.” “Until last year policymakers could always produce a new rabbit from their hat to trigger asset reflation and economic recovery.” Roubini writes. “Zero policy rates, QE1, QE2, credit easing, fiscal stimulus, ring-fencing, liquidity provision to the tune of trillions of dollars and bailing out banks and financial institutions – all have been tried. But now we have run out of rabbits to reveal.” he added. The New York University professor,stated that he believes avoiding another severe recession is tantamount to “mission impossible”. “In the short term, we **need to do massive stimulus**; otherwise, there’s going to be another Great Depression…” “You need to restore economic growth, not five years from now. You need to restore it today.” the economist added.

### 1AC: Avoids nuclear war

#### The impact is nuclear war

Harris and Burrows 9 (Mathew, PhD European History at Cambridge, counselor in the National Intelligence Council (NIC) and Jennifer, member of the NIC’s Long Range Analysis Unit “Revisiting the Future: Geopolitical Effects of the Financial Crisis” <http://www.ciaonet.org/journals/twq/v32i2/f_0016178_13952.pdf>, AM)

Increased Potential for Global Conflict Of course, the report encompasses more than economics and indeed believes the future is likely to be the result of a number of intersecting and interlocking forces. With so many possible permutations of outcomes, each with ample Revisiting the Future opportunity for unintended consequences, there is a growing sense of insecurity. Even so, history may be more instructive than ever. While we continue to believe that the Great Depression is not likely to be repeated, the lessons to be drawn from that period include the harmful effects on fledgling democracies and multiethnic societies (think Central Europe in 1920s and 1930s) and on the sustainability of multilateral institutions (think League of Nations in the same period). There is no reason to think that this would not be true in the twenty-first as much as in the twentieth century. For that reason, the ways in which the potential for greater conflict could grow would seem to be even more apt in a constantly volatile economic environment as they would be if change would be steadier. In surveying those risks, the report stressed the likelihood that terrorism and nonproliferation will remain priorities even as resource issues move up on the international agenda. Terrorism’s appeal will decline if economic growth continues in the Middle East and youth unemployment is reduced. For those terrorist groups that remain active in 2025, however, the diffusion of technologies and scientific knowledge will place some of the world’s most dangerous capabilities within their reach. Terrorist groups in 2025 will likely be a combination of descendants of long established groups\_inheriting organizational structures, command and control processes, and training procedures necessary to conduct sophisticated attacks\_and newly emergent collections of the angry and disenfranchised that become self-radicalized, particularly in the absence of economic outlets that would become narrower in an economic downturn. The most dangerous casualty of any economically-induced drawdown of U.S. military presence would almost certainly be the Middle East. Although Iran’s acquisition of nuclear weapons is not inevitable, worries about a nuclear-armed Iran could lead states in the region to develop new security arrangements with external powers, acquire additional weapons, and consider pursuing their own nuclear ambitions. It is not clear that the type of stable deterrent relationship that existed between the great powers for most of the Cold War would emerge naturally in the Middle East with a nuclear Iran. Episodes of low intensity conflict and terrorism taking place under a nuclear umbrella could lead to an **unintended escalation** and broader conflict if clear red lines between those states involved are not well established. The close proximity of potential nuclear rivals combined with underdeveloped surveillance capabilities and mobile dual-capable Iranian missile systems also will produce inherent difficulties in achieving reliable indications and warning of an impending nuclear attack. The lack of strategic depth in neighboring states like Israel, short warning and missile flight times, and uncertainty of Iranian intentions may place more focus on preemption rather than defense, potentially leading to **escalating** **crises**. 36 Types of conflict that the world continues to experience, such as over resources, could reemerge, particularly if protectionism grows and there is a resort to neo-mercantilist practices. Perceptions of renewed energy scarcity will drive countries to take actions to assure their future access to energy supplies. In the worst case, this could result in interstate conflicts if government leaders deem assured access to energy resources, for example, to be essential for maintaining domestic stability and the survival of their regime. Even actions short of war, however, will have important geopolitical implications. Maritime security concerns are providing a rationale for naval buildups and modernization efforts, such as China’s and India’s development of blue water naval capabilities. If the fiscal stimulus focus for these countries indeed turns inward, one of the most obvious funding targets may be military. Buildup of regional naval capabilities could lead to increased tensions, rivalries, and counterbalancing moves, but it also will create opportunities for multinational cooperation in protecting critical sea lanes. With water also becoming scarcer in Asia and the Middle East, cooperation to manage changing water resources is likely to be increasingly difficult both within and between states in a more dog-eat-dog world.

### 1AC: Plan creates jobs

#### The plan creates over 1.6 million jobs—creates long-term economic stability and resilience

**Rogers, JD, 11**—JD from U of Illinois College of Law, BA in Economics from U of Utah (Joshua, Spring 2011, “THE GREAT TRAIN ROBBERY: HOW STATUTORY CONSTRUCTION MAY HAVE DERAILED AN AMERICAN HIGH SPEED RAIL SYSTEM”, U. Ill. J.L. Tech. & Pol'y 215, p. lexis, AL)

High speed rail will also **boost the economy immediately** and help **stabilize the economy** in the future. The construction of high speed rail is estimated to create **1.6 million U.S. jobs**. n68 Still, that number could **grow significantly** if, as has been proposed by some, the U.S. contracts with American companies to build the high speed rail trainsets. n69 Beyond the immediate creation of jobs, passenger rail is predicted to reduce America's dependence on foreign oil imports. n70 That reduction could also be augmented if the high speed rail system employs electric propulsion in lieu of the traditional diesel propulsion of passenger rail. n71 Thus, the U.S. would benefit from a viable high speed rail system through increased efficiency, reduced environmental impact, and economic growth and stabilization.

### 1AC: Limiting unemployment lifts the poor

#### Limiting unemployment creates a social infrastructure that is key to lifting the poorest of the poor

AFL-CIO, labor advocacy group, 1—“An American Economy That Works for All Working Families,” <http://www.aflcio.org/aboutus/thisistheaflcio/convention/2001/resolutions/upload/res6.pdf>

Low unemployment rates also yield tremendous social benefits by providing a rung on the ladder of economic opportunity to those previously excluded from the labor force. Without the opportunity to earn a living and acquire job skills, it is impossible to participate in the American dream. Falling unemployment throughout the second half of the 1990s provided this opportunity to our most economically disadvantaged citizens, and the benefits were enormous for all of us. People everywhere worked when given the chance, welfare roles shrank and economically disadvantaged inner-city areas began to revive. Finally, low unemployment also produces major fiscal benefits. High levels of employment and rising wages increase tax revenues and reduce demand for social services. They also generate higher profits and stock market gains, which add to public revenues through corporate and capital gains taxes. As a result, the nation’s finances are improved, positioning us to invest in education, public infrastructure, health care and retirement security. In short, low unemployment is the foundation of rising living standards, greater productivity, enhanced opportunities for the most disadvantaged and sound public finances.

### 1AC: Limitations solves economic nationalism and protectionism

#### This solves economic nationalism and protectionism

El-Erian, CEO at Pimco, 9—Mohamed, chief executive and co-chief investment officer of Pimco, American jobs data are worse than we think, <http://www.ft.com/cms/s/0/1e06911c-6719-11de-925f-00144feabdc0.html#axzz1RAPfeGsO>

This conventional wisdom is valid most, but not all of the time. There are rare occasions, such as today, when we should think of the unemployment rate as much more than a lagging indicator; it has the potential to influence future economic behaviours and outlooks. Today’s broader interpretation is warranted by two factors: the speed and extent of the recent rise in the unemployment rate; and, the likelihood that it will persist at high levels for a prolonged period of time. As a result, the unemployment rate will increasingly disrupt an economy that, hitherto, has been influenced mainly by large-scale dislocations in the financial system. In just 16 months, the US unemployment rate has doubled from 4.8 per cent to 9.5 per cent, a remarkable surge by virtually any modern-day metric. It is also likely that the 9.5 per cent rate understates the extent to which labour market conditions are deteriorating. Just witness the increasing number of companies asking employees to take unpaid leave. Meanwhile, after several years of decline, the labour participation rate has started to edge higher as people postpone their retirements and as challenging family finances force second earners to enter the job market. Notwithstanding its recent surge, the unemployment rate is likely to rise even further, reaching 10 per cent by the end of this year and potentially going beyond that. Indeed, the rate may not peak until 2010, in the 10.5-11 per cent range; and it will likely stay there for a while given the lacklustre shift from inventory rebuilding to consumption, investment and exports. Beyond the public sector hiring spree fuelled by the fiscal stimulus package, the post-bubble US economy faces considerable headwinds to sustainable job creation. It takes time to restructure an economy that became over-dependent on finance and leverage. Meanwhile, companies will use this period to shed less productive workers. This will disrupt consumption already reeling from a large negative wealth shock due to the precipitous decline in house prices. Consumption will be further undermined by uncertainties about wages. This possibility of a very high and persistent unemployment rate is not, as yet, part of the mainstream deliberations. Instead, the persistent domination of a “mean reversion” mindset leads to excessive optimism regarding how quickly the rate will max out, and how fast it converges back to the 5 per cent level for the Nairu (non-accelerating inflation rate of unemployment). The US faces a material probability of both a higher Nairu (in the 7 per cent range) and, relative to recent history, a much slower convergence of the actual unemployment rate to this new level. This paradigm shift will complicate an already complex challenge facing policymakers. They will have to recalibrate fiscal and monetary stimulus to recognise the fact that “temporary and targeted” stimulus will be less potent than anticipated. But the inclination to increase the dose of stimulus will be tempered by the fact that, as the fiscal picture deteriorates rapidly, the economy is less able to rely on future growth to counter the risk of a debt trap. Politics will add to the policy complications. The combination of stubbornly high unemployment and growing government debt will not play well. The rest of the world should also worry. Persistently high unemployment fuels protectionist tendencies. Think of this as yet another illustration of the fact that the US economy is on a bumpy journey to a new normal. The longer this reality is denied, the greater will be the cost to society of restoring economic stability.

### 1AC: Impact is nuclear terrorism

#### The impact is great power conflict and nuclear terrorism

Panzner, investment banker, 8 **-**faculty at the New York Institute of Finance, 25-year veteran of the global stock, bond, and currency markets who has worked in New York and London for HSBC, Soros Funds, ABN Amro, Dresdner Bank, and JPMorgan Chase Michael, Financial Armageddon: Protect Your Future from Economic Collapse, Revised and Updated Edition, p. 136-138

Continuing calls for curbs on the flow of finance and trade will inspire the United States and other nations to spew forth protectionist legislation like the notorious Smoot-Hawley bill. Introduced at the start of the Great Depression, it triggered a series of tit-for-tat economic responses, which many commentators believe helped turn a serious economic downturn into a prolonged and devastating global disaster, But if history is any guide, those lessons will have been long forgotten during the next collapse. Eventually, fed by a mood of desperation and growing public anger, restrictions on trade, finance, investment, and immigration will almost certainly intensify.   Authorities and ordinary citizens will likely scrutinize the cross-border movement of Americans and outsiders alike, and lawmakers may even call for a general crackdown on nonessential travel. Meanwhile, many nations will make transporting or sending funds to other countries exceedingly difficult. As desperate officials try to limit the fallout from decades of ill-conceived, corrupt, and reckless policies, they will introduce controls on foreign exchange, foreign individuals and companies seeking to acquire certain American infrastructure assets, or trying to buy property and other assets on the (heap thanks to a rapidly depreciating dollar, will be stymied by limits on investment by noncitizens. Those efforts will cause spasms to ripple across economies and markets, disrupting global payment, settlement, and clearing mechanisms. All of this will, of course, continue to undermine business confidence and consumer spending.  In a world of lockouts and lockdowns, any link that transmits systemic financial pressures across markets through arbitrage or portfolio-based risk management, or that allows diseases to be easily spread from one country to the next by tourists and wildlife, or that otherwise facilitates unwelcome exchanges of any kind will be viewed with suspicion and dealt with accordingly.  The rise in isolationism and protectionism will bring about ever more heated arguments and dangerous confrontations over shared sources of oil, gas, and other key commodities as well as factors of production that must, out of necessity, be acquired from less-than-friendly nations. Whether involving raw materials used in strategic industries or basic necessities such as food, water, and energy, efforts to secure adequate supplies will take increasing precedence in a world where demand seems constantly out of kilter with supply. Disputes over the misuse, overuse, and pollution of the environment and natural resources will become more commonplace. Around the world, such tensions will give rise to full-scale military encounters, often with minimal provocation.  In some instances, economic conditions will serve as a convenient pretext for conflicts that stem from cultural and religious differences. Alternatively, nations may look to divert attention away from domestic problems by channeling frustration and populist sentiment toward other countries and cultures. Enabled by cheap technology and the waning threat of American retribution, terrorist groups will likely boost the frequency and scale of their horrifying attacks, bringing the threat of random violence to a whole new level.  Turbulent conditions will encourage aggressive saber rattling and interdictions by rogue nations running amok. Age-old clashes will also take on a new, more healed sense of urgency. China will likely assume an increasingly belligerent posture toward Taiwan, while Iran may embark on overt colonization of its neighbors in the Mideast. Israel, for its part, may look to draw a dwindling list of allies from around the world into a growing number of conflicts. Some observers, like John Mearsheimer, a political scientist at the University of Chicago, have even speculated that an "intense confrontation" between the United States and China is "inevitable" at some point.  More than a few disputes will turn out to be almost wholly ideological. Growing cultural and religious differences will be transformed from wars of words to battles soaked in blood. Long-simmering resentments could also degenerate quickly, spurring the basest of human instincts and triggering genocidal acts. Terrorists employing biological or nuclear weapons will vie with conventional forces using jets, cruise missiles, and bunker-busting bombs to cause widespread destruction. Many will interpret stepped-up conflicts between Muslims and Western societies as the beginnings of a new world war.

## \*\*Env/Emissions ADV\*\*

### **1AC: HSR reduces emissions**

#### **HSR reduces emissions, creates jobs, and lowers dependence on oil**

Center for American Progress 2010 (March 23, 2010, “It's Easy Being Green: Rail Transport Picks Up Speed”, http://www.americanprogress.org/issues/2010/03/ebg\_032310.html)

The United States uses 25 percent of the entire world’s oil supply despite having only 5 percent of the world’s population, and sprawling communities force people to drive even short distances. We need alternate modes of transportation to kick this oil dependence, and one alternative is high-speed rail, which offers tantalizing environmental and economic benefits. President Barack Obama, Vice President Joseph Biden, and Transportation Secretary Ray LaHood announced a strategic plan for high-speed rail last year that includes $8 billion in the American Recovery and Reinvestment Act and $1 billion a year for five years in the federal budget. Their goal is to jumpstart a potential world-class rail system in the United States. These economic incentives for a mass U.S. network of high-speed rail trains, or HSR, along existing transportation corridors could create much-needed jobs, decrease our dependence on foreign oil and fossil fuels, and significantly reduce greenhouse gas emissions. The national implementation of HSR would create jobs in the planning, design, and construction of track and station infrastructure as well as the management, design, and manufacturing of high-speed trains. A study by the California High-Speed Rail Authority found that building their proposed HSR system—which would run from Los Angeles to San Francisco and voters OK’d in 2008—will create 150,000 construction jobs and 450,000 permanent jobs. Critics worry that HSR will encourage sprawl and have a significant impact on parks and wildlife refuges. Yet there have been no links established between existing HSR stations in France and Spain, for example, and an epidemic of suburban growth. In fact, sprawl could be a thing of the past if we take preventative measures to encourage urban density, enact antisprawl regulations, and make it convenient to travel to outlying HSR stations with plenty of garage parking. HSR systems would take advantage of existing transportation corridors to minimize intrusion onto protected nature reserves, decrease air pollution generated by internal combustion engines in cars, and reduce greenhouse gas emissions. The California HSR, for example, will remove 12 billion pounds of carbon dioxide per year by 2030 because it uses electricity generated from wind, solar, and other renewable resources. In addition, California’s HSR will save 12.7 million barrels of oil by 2030. Further, the Center for Clean Air Policy and the Center for Neighborhood Technology concluded in 2006 that a national HSR system could reduce the number of annual car trips by 29 million and annual plane flights by 500,000, saving 6 billion pounds of carbon dioxide emissions equal to removing 1 million cars from the road each year. If the United States is going to have a world-class rail system, however, it needs to focus on the “speed” part of HSR. President Obama said on January 27, 2010, “there’s no reason why Europe or China should have the fastest trains.” Yet plans for a network in the United States indicate that U.S. HSR trains will be slower than their European or Asian counterparts. European HSR trains operate in excess of speeds of 180 mph, but the U.S. HSR train speeds vary from express routes that serve major population centers traveling at least at 150 mph to regional routes at 110-150 mph to developing corridors topping out at 90-110 mph on tracks shared with regular rails. In October 2009, Amtrak laid out a $10 billion plan that only reduces the 457-mile travel time between Washington and Boston from six and a half hours to five and a half hours, while China’s 601 mile line between Wuhan and Guangzhou takes only three hours. Central Japan Railway, France’s SNCF, and China South Locomotive & Rolling Stock are all competing for President Obama’s $8 billion grant for HSR corridors across the United States. The potential of foreign development forced Amtrak to internally reorganize and make HSR development and implementation their top priority. The publicly owned company announced that it will perform feasibility studies about boosting the Northeast Corridor service to 220 mph. Though Amtrak is notorious for slow trains and hemorrhaging money, grant funding—rather than bonds—for future HSR lines will not require the company to cover backpayment on construction loans, paving the way for profit. Some may lament that HSR lines in the United States are a waste of tax dollars during an economic crisis. But a combination of reduced carbon emissions, congestion, and traffic-related deaths will provide an extra $21.63 million worth of benefits a year from HSR as well as the necessary commuting infrastructure for all Americans to lead sustainable lives.

### 1AC: HSR Solvency: Congestion

#### As population grows in large cities, the demand for fast and efficient travel increases, HSR solves with multiple advantages over aviation

Ivan 11 (Donald, 4/9/11, Team Leader, Rail & ITS, Automotive and Transportation, “High Speed Rail - Urbanization triggering demand for mass transit”, http://www.frost.com/sublib/display-market-insight.do?ctxixpLink=FcmCtx3&searchQuery=United+States+high+speed+rail&csqnc=1340157255518&bdata=aHR0cHM6Ly93d3cuZnJvc3QuY29tL3NyY2gvY2F0YWxvZy1zZWFyY2guZG8%2FeD0wJnk9MCZxdWVyeVRleHQ9VW5pdGVkK1N0YXRlcytoaWdoK3NwZWVkK3JhaWwmcGFnZVNpemU9MTJAfkBTZWFyY2ggUmVzdWx0c0B%2BQDEzNDAxNTcyMjAxODE%3D&id=227550507&ctxixpLabel=FcmCtx4)

In line with global urbanisation trends, it is estimated that 4.5 billion people globally will be living in cities by 2020, representing 60% of the World's population. This will continue to exacerbate demand for urban transportation in these areas, which will be dependent on smart mobility networks to facilitate travel and the movement of goods and services in tomorrow's smart cities. These cities, termed as megacities, will have a minimum population level of 10 million and will form as a result of the core city centres engulfing with the surrounding suburbs to form one big city. This trend will create a compelling need for the increased mobility solutions. People today are travelling much more than they used to in the last 10 years. Passengers want to reach their destination comfortably, taking the minimum journey time possible. Conventional air travel addresses the need of quick mobility in terms of the actual journey time. However, in today's urban environment, reaching the Airports that are located outside the city has become particularly time consuming and unpredictable in terms of journey time for airport users. As such, there is a growing potential for a true high speed mobility solution that can connect two or more city centres in the quickest time possible. This is where High Speed Rail (HSR) pitches in as a faster, greener and more convenient mode of transport for inter-city travellers of the current generation. The convenience factor is potentially the key advantage of HSR versus aviation, as HSR can connect major cities directly, making use of mainline rail stations, traditionally located in city centres. However, HSR also allows for the creation of new towns within the existing / expanding network (becoming future centres for industry, business and residence). Whilst the actual in vehicle journey time will be similar or marginally longer when using HSR, the fact that the number of interchanges required to reach one's destination reduces improves passenger convenience. In addition, the improved provision of power, internet connectivity, and infotainment on HSR allows passengers to undertake work, gaming, and various entertainment forms more easily, placing this mode of transportation in an advantageous position over aviation, and particularly attractive to business customers.

### 1AC: Internal Link to Warming

#### That’s the controlling internal link to warming

EDF, environmental think tank, 6—Environmental Defense Fund, a think tank dedicated to sustainability and fixing global warming (1/26/2006, “Cars Built by Each of the Big Three Emit More Greenhouse Gas Than America”, Environmental Defense Fund, <http://www.edf.org/news/cars-built-each-big-three-emit-more-greenhouse-gas-america>, AL)

“Fixing the global warming problem without making cars more efficient is like **trying to fix a leaky roof without a hammer**,” said Environmental Defense President Fred Krupp. “The leading automakers must accept responsibility for becoming part of the solution.” “Cutting greenhouse gas emissions from U.S. automobiles will be **critical to any strategy for slowing global warming**,” said John DeCicco, author of the report and senior fellow at Environmental Defense. “To address global warming, we’ll need a clear picture of what sources are contributing to the problem. This report details, by automaker and vehicle type, the greenhouse gas contributions from America's auto sector, for the first time.” Surprisingly, given the popularity of SUVs, small cars (compacts and subcompacts) still accounted for the greatest portion of carbon emitted as of 2004 – a testament to how long today’s vehicles remain on the road. SUVs will soon be the main source of CO2 emissions from U.S. autos, having overtaken small cars in market share in 2002. U.S. cars and light trucks are responsible for 45 percent of the CO2 emitted by automobiles around the world, even though America’s vehicles represent just 30 percent of the nearly 700 million cars in use worldwide. The American share of CO2 emissions is disproportionately higher because American vehicles are driven more each year and on average burn more fuel than cars in other countries. The report examines the three factors behind greenhouse gas emissions from automobiles: amount of driving, fuel economy, and the carbon content of motor fuel. U.S. cars and light trucks were driven a staggering **2.6 trillion miles** in 2004, equal to driving back and forth to Pluto more than 470 times. U.S. autos also had an average fuel economy of 19.6 miles per gallon; gasoline contains 5.3 pounds of carbon, nearly all of which ends up in the atmosphere when burned. “Reducing global warming on the road is a **shared responsibility**,” said DeCicco. “By underscoring the magnitude of emissions from America's automobiles, this report shows that all actors – automakers, fuel providers, consumers, and various levels of government – can help solve the problem by addressing those aspects of CO2 emissions they can control.”

### 1AC: Warming is anthropogenic

#### Warming is real and anthropogenic—models and scientific consensus are on our side

**Rahmstorf 8** (Richard. Professor of Physics of the Oceans at Potsdam University. Global Warming: Looking Beyond Kyoto. Edited by Ernesto Zedillo. “Anthropogenic Climate Change?” Page 42-49)

It is time to turn to statement B: human activities are altering the climate. This can be broken into two parts. The first is as follows: global climate is warming. This is by now a **generally undisputed** point (except by novelist Michael Crichton), so we deal with it only briefly. The two leading compilations of data measured with thermometers are shown in figure 3-3, that of the National Aeronautics and Space Administration (NASA) and that of the British Hadley Centre for Climate Change. Although they differ in the details, due to the inclusion of different data sets and use of different spatial averaging and quality control procedures, they both show a consistent picture, with a global mean warming of 0.8°C since the late nineteenth century. Temperatures over the past ten years clearly were the warmest since measured records have been available. The year 1998 sticks out well above the longterm trend due to the occurrence of a major El Nino event that year (the last El Nino so far and one of the strongest on record). These events are examples of the **largest natural climate variations** on multiyear time scales and, by releasing heat from the ocean, generally cause **positive** anomalies in global mean temperature. It is remarkable that the year 2005 rivaled the heat of 1998 even though no El Nino event occurred that year. (A bizarre curiosity, perhaps worth mentioning, is that several prominent "climate skeptics" recently used the extreme year 1998 to claim in the media that global warming had ended. In Lindzen's words, "Indeed, the absence of any record breakers during the past seven years is statistical evidence that temperatures are not increasing.")33 In addition to the surface measurements, the more recent portion of the global warming trend (since 1979) is also documented by satellite data. It is not straightforward to derive a reliable surface temperature trend from satellites, as they measure radiation coming from throughout the atmosphere (not just near the surface), including the stratosphere, which has strongly cooled, and the records are not homogeneous' due to the short life span of individual satellites, the problem of orbital decay, observations at different times of day, and drifts in instrument calibration.' **Current** analyses of these satellite data show trends that are fully consistent with surface measurements and model simulations." If no reliable temperature measurements existed, could we be sure that the climate is warming? The "canaries in the coal mine" of climate change (as glaciologist Lonnie Thompson puts it) ~are mountain glaciers. We know, both from old photographs and from the position of the terminal moraines heaped up by the flowing ice, that mountain glaciers have been in retreat all over the world during the past century. There are precious few exceptions, and they are associated with a strong increase in precipitation or local cooling.36 I have inspected examples of shrinking glaciers myself in field trips to Switzerland, Norway, and New Zealand. As glaciers respond sensitively to temperature changes, data on the extent of glaciers have been used to reconstruct a history of Northern Hemisphere temperature over the past four centuries (see figure 3-4). Cores drilled in tropical glaciers show signs of recent melting that is unprecedented at least throughout the Holocene-the past 10,000 years. Another powerful sign of warming, visible clearly from satellites, is the shrinking Arctic sea ice cover (figure 3-5), which has declined 20 percent since satellite observations began in 1979. While climate clearly became warmer in the twentieth century, much discussion particularly in the popular media has focused on the question of how "unusual" this warming is in a longer-term context. While this is an interesting question, it has often been mixed incorrectly with the question of causation. Scientifically, how unusual recent warming is-say, compared to the past millennium-in itself contains little information about its cause. Even a highly unusual warming could have a natural cause (for example, an exceptional increase in solar activity). And even a warming within the bounds of past natural variations could have a predominantly anthropogenic cause. I come to the question of causation shortly, after briefly visiting the evidence for past natural climate variations. Records from the time before systematic temperature measurements were collected are based on "proxy data," coming from tree rings, ice cores, corals, and other sources. These proxy data are generally linked to local temperatures in some way, but they may be influenced by other parameters as well (for example, precipitation), they may have a seasonal bias (for example, the growth season for tree rings), and high-quality long records are difficult to obtain and therefore few in number and geographic coverage. Therefore, there is still substantial uncertainty in the evolution of past global or hemispheric temperatures. (Comparing only local or regional temperature; as in Europe, is of limited value for our purposes,' as regional variations can be much larger than global ones and can have many regional causes, unrelated to global-scale forcing and climate change.) The first quantitative reconstruction for the Northern Hemisphere temperature of the past millennium, including an error estimation, was presented by Mann, Bradley, and Hughes and rightly highlighted in the 2001 IPCC report as one of the major new findings since its 1995 report; it is shown in figure 3\_6.39 The analysis suggests that, despite the large error bars, twentieth-century warming is indeed highly unusual and probably was unprecedented during the past millennium. This result, presumably because of its symbolic power, has attracted much criticism, to some extent in scientific journals, but even more so in the popular media. The hockey stick-shaped curve became a symbol for the IPCC, .and criticizing this particular data analysis became an avenue for some to question the credibility of the IPCC. Three important things have been overlooked in much of the media coverage. First, even if the scientific critics had been right, this would not have called into question the very cautious conclusion drawn by the IPCC from the reconstruction by Mann, Bradley, and Hughes: "New analyses of proxy data for the Northern Hemisphere indicate that the increase in temperature in the twentieth century is likely to have been the largest of any century during the past 1,000 years." This conclusion has since been supported further by every single one of close to a dozen new reconstructions (two of which are shown in figure 3-6). Second, by far the most serious scientific criticism raised against Mann, Hughes, and Bradley was simply based on a mistake. 40 The prominent paper of von Storch and others, which claimed (based on a model test) that the method of Mann, Bradley, and Hughes systematically underestimated variability, "was [itself] based on incorrect implementation of the reconstruction procedure."41 With correct implementation, climate field reconstruction procedures such as the one used by Mann, Bradley, and Hughes have been shown to perform well in similar model tests. Third, whether their reconstruction is accurate or not has no bearing on policy. If their analysis underestimated past natural climate variability, this would certainly not argue for a smaller climate sensitivity and thus a lesser concern about the consequences of our emissions. Some have argued that, in contrast, it would point to a larger climate sensitivity. While this is a valid point in principle, it does not apply in practice to the climate sensitivity estimates discussed herein or to the range given by IPCC, since these did not use the reconstruction of Mann, Hughes, and Bradley or any other proxy records of the past millennium. Media claims that "a pillar of the Kyoto Protocol" had been called into question were therefore misinformed. As an aside, the protocol was agreed in 1997, before the reconstruction in question even existed. The overheated public debate on this topic has, at least, helped to attract more researchers and funding to this area of paleoclimatology; its methodology has advanced significantly, and a number of new reconstructions have been presented in recent years. While the science has moved forward, the first seminal reconstruction by Mann, Hughes, and Bradley has held up remarkably well, with its main features reproduced by morerecent work. Further progress probably will require substantial amounts of new proxy data, rather than further refinement of the statistical techniques pioneered by Mann, Hughes, and Bradley. Developing these data sets will require time and substantial effort. It is time to address the final statement: most of the observed warming over the past fifty years is anthropogenic. A large number of studies exist that have taken different approaches to analyze this issue, which is generally called the "attribution problem." I do not discuss the exact share of the anthropogenic contribution (although this is an interesting question). By "most" I imply mean "more than 50 percent.” The first and crucial piece of evidence is, of course, that the magnitude of the warming is what is expected from the anthropogenic perturbation of the radiation balance, so anthropogenic forcing is able to explain all of the temperature rise. As discussed here, the rise in greenhouse gases alone corresponds to 2.6 W/tn2 of forcing. This by itself, after subtraction of the observed 0'.6 W/m2 of ocean heat uptake, would Cause 1.6°C of warming since preindustrial times for medium climate sensitivity (3"C). With a current "best guess'; aerosol forcing of 1 W/m2, the expected warming is O.8°c. The point here is not that it is possible to obtain the 'exact observed number-this is fortuitous because the amount of aerosol' forcing is still very' uncertain-but that the expected magnitude is roughly right. There can be little doubt that the anthropogenic forcing is large enough to explain most of the warming. Depending on aerosol forcing and climate sensitivity, it could explain a large fraction of the warming, or all of it, or even more warming than has been observed (leaving room for natural processes to counteract some of the warming). The second important piece of evidence is clear: there is **no viable** alternative explanation. In the scientific literature, no serious alternative hypothesis has been proposed to explain the observed global warming. Other possible causes, such as solar activity, volcanic activity, cosmic rays, or orbital cycles, are well observed, but they do not show trends capable of explaining the observed warming. Since 1978, solar irradiance has been measured directly from satellites and shows the well-known eleven-year solar cycle, but no trend. There are various estimates of solar variability before this time, based on sunspot numbers, solar cycle length, the geomagnetic AA index, neutron monitor data, and, carbon-14 data. These indicate that solar activity probably increased somewhat up to 1940. While there is disagreement about the variation in previous centuries, different authors agree that solar activity did not significantly increase during the last sixty-five years. Therefore, this cannot explain the warming, and neither can any of the other factors mentioned. Models driven by natural factors only, leaving the anthropogenic forcing aside, show a cooling in the second half of the twentieth century (for an example, See figure 2-2, panel a, in chapter 2 of this volume). The trend in the sum of natural forcings is downward. The only way out would be either some as yet undiscovered unknown forcing or a warming trend that arises by chance from an unforced internal variability in the climate system. The latter cannot be completely ruled out, but has to be considered highly unlikely. **No evidence** in the observed record, proxy data, or current models suggest that such internal variability could cause a sustained trend of global warming of the observed magnitude. As discussed, twentieth century warming is unprecedented over the past 1,000 years (or even 2,000 years, as the few longer reconstructions available now suggest), which does not 'support the idea of large internal fluctuations. Also, those past variations correlate well with past forcing (solar variability, volcanic activity) and thus appear to be largely forced rather than due to unforced internal variability." And indeed, it would be difficult for a large and sustained unforced variability to satisfy the fundamental physical law of energy conservation. Natural internal variability generally shifts heat around different parts of the climate system-for example, the large El Nino event of 1998, which warmed, the atmosphere by releasing heat stored in the ocean. This mechanism implies that the ocean heat content drops as the atmosphere warms. For past decades, as discussed, we observed the atmosphere warming and the ocean heat content increasing, which rules out heat release from the ocean as a cause of surface warming. The heat content of the whole climate system is increasing, and there is no plausible source of this heat other than the heat trapped by greenhouse gases. ' A completely different approach to attribution is to analyze the spatial patterns of climate change. This is done in so-called fingerprint studies, which associate particular patterns or "fingerprints" with different forcings. It is plausible that the pattern of a solar-forced climate change differs from the pattern of a change caused by greenhouse gases. For example, a characteristic of greenhouse gases is that heat is trapped closer to the Earth's surface and that, unlike solar variability, greenhouse gases tend to warm more in winter, and at night. Such studies have used different data sets and have been performed by different groups of researchers with different statistical methods. They consistently conclude that the observed spatial pattern of warming can only be explained by greenhouse gases.49 Overall, it has to be considered, highly likely' that the observed warming is indeed predominantly due to the human-caused increase in greenhouse gases. ' This paper discussed the evidence for the anthropogenic increase in atmospheric CO2 concentration and the effect of CO2 on climate, finding that this anthropogenic increase is proven beyond reasonable doubt and that a mass of evidence points to a CO2 effect on climate of 3C ± 1.59C global-warming for a doubling of concentration. (This is, the classic IPCC range; my personal assessment is that, in-the light of new studies since the IPCC Third Assessment Report, the uncertainty range can now be narrowed somewhat to 3°C ± 1.0C) This is based on consistent results from theory, models, and data analysis, and, even in the absence-of any computer models, the same result would still hold based on physics and on data from climate history alone. Considering the plethora of consistent evidence, the chance that these conclusions are wrong has to be considered minute. If the preceding is accepted, then it follows logically and incontrovertibly that a further increase in CO2 concentration will lead to further warming. The magnitude of our emissions depends on human behavior, but the climatic response to various emissions scenarios can be computed from the information presented here. The result is the famous range of future global temperature scenarios shown in figure 3\_6.50 Two additional steps are involved in these computations: the consideration of anthropogenic forcings other than CO2 (for example, other greenhouse gases and aerosols) and the computation of concentrations from the emissions. Other gases are not discussed here, although they are important to get quantitatively accurate results. **CO2 is the largest and most important forcing**. Concerning concentrations, the scenarios shown basically assume that ocean and biosphere take up a similar share of our emitted CO2 as in the past. This could turn out to be **an optimistic assumption**; some models indicate the possibility of a positive feedback, with the biosphere turning into a carbon source rather than a sink under growing climatic stress. It is clear that even in the **more optimistic** of the shown (non-mitigation) scenarios, global temperature would rise by 2-3°C above its preindustrial level by the end of this century. Even for a paleoclimatologist like myself, this is an extraordinarily high temperature, which is very likely unprecedented in at least the past 100,000 years. As far as the data show, we would have to go back about 3 million years, to the Pliocene, for comparable temperatures. The rate of this warming (which is important for the ability of ecosystems to cope) is also highly unusual and unprecedented probably for an even longer time. The last major global warming trend occurred when the last great Ice Age ended between 15,000 and 10,000 years ago: this was a warming of about 5°C over 5,000 years, that is, a rate of only 0.1 °C per century. 52 The expected magnitude and rate of planetary warming is highly likely to come with major risk and impacts in terms of sea level rise (Pliocene sea level was 25-35 meters higher than now due to smaller Greenland and Antarctic ice sheets), extreme events (for example, hurricane activity is expected to increase in a warmer climate), and ecosystem loss. The second part of this paper examined the evidence for the current warming of the planet and discussed what is known about its causes. This part showed that global warming is already a measured and-well-established fact, not a theory. Many different lines of evidence consistently show that most of the observed warming of the past fifty years was caused by human activity. Above all, this warming is exactly what would be expected given the anthropogenic rise in greenhouse gases, and no viable alternative explanation for this warming has been proposed in the scientific literature. Taken together., the very strong evidence accumulated from **thousands** of independent studies, has over the past decades convinced **virtually every** climatologist around the world (many of whom were initially quite skeptical, including myself) that anthropogenic global warming is a reality with which we need to deal.

### 1AC: Warming magnifies impacts

#### Warming magnifies every impact and causes extinction

**Burke 8** (Sharon, sr fellow and dir of the energy security project at the Center for a New American Security, Chapter 6 of Climatic Cataclysm: The Foreign Policy and National Security Implications of Climate Change, edited by Kurt Campbell, p 157-165)

At the same time, however, the implications of both trends for human society and survival raise the stakes; it is crucial to try to understand what the future might look like in one hundred years in order to act accordingly today. This scenario, therefore, builds a picture of the plausible effects of catastrophic climate change, and the implications for national security, on the basis of what we know about the past and the present. The purpose is not to "one up" the previous scenarios in awfulness, but rather to attempt to imagine the unimaginable future that is, after all, entirely plausible. Assumed Climate Effects of the Catastrophic Scenario. In the catastrophic scenario, the year 2040 marks an important tipping point. Large-scale, singular events of abrupt climate change will start occurring, greatly exacerbated by the collapse of the Atlantic meridional overturning circulation (MOC), which is believed to play and important role in regulating global climate, particularly in Europe.8 There will be a rapid loss of polar ice, a sudden rise in sea levels, totaling 2 meters (6.6 feet), and a temperature increase of almost 5.6°C (10.1°F) by 2095. Developing countries, particularly those at low latitudes and those reliant on subsistence, rain-fed farming, will be hardest and earliest hit. All nations, however, will find it difficult to deal with the unpredictable, abrupt, and severe nature of climate change after 2040. These changes will be difficult to anticipate, and equally difficult to mitigate or recover from, particularly as they will recur, possibly on a frequent basis. First, the rise in temperatures alone will present a fundamental challenge for human health. Indeed, even now, about 250 people die of heatstroke every year in the United States. In a prolonged heat wave in 1980, more than 10,000 people died of heat-related illnesses, and between 5,000 and 10,00 in 1988.9 In 2003, record heat waves in Europe, with temperatures in Paris hitting 40.4°C (104.7°F) and 47.3°C (116.3°F) in parts of Portugal, are estimated to have cost more than 37,000 lives; in the same summer there were at least 2,000 heat-related deaths in India. Average temperatures will increase in most regions, and the western United States, southern Europe, and southern Australia will be particularly vulnerable to prolonged heat spells. The rise in temperatures will complicated daily life around the world. In Washington, D.C., the average summer temperature is in the low 30s C (high 80s F), getting as high as 40°C (104°F). With a 5.6°C (10.1°F) increase, that could mean temperatures as high as 45.6°C (114.5°F). In New Delhi, summer temperatures can reach 45°C (113°F) already, opening the possibility of new highs approaching sO.sOC (123°F). In general, the level of safe exposure is considered to be about 38°C (lOO°F); at hotter temperatures, activity has to be limited and the very old and the very young are especially vulnerable to heat-related ill­ness and mortality. Sudden shifts in temperature, which are expected in this scenario, are particularly lethal. As a result of higher temperatures and lower, unpredictable precipitation, severe and persistent wildfires will become more common, freshwater will be more scarce, and agricultural productivity will fall, particularly in Southern Europe and the Mediterranean, and the western United States. The World Health Organization estimates that water scarcity already affects two- fifths of the world population-s-some 2.6 billion people. In this scenario, half the world population will experience persistent water scarcity. Regions that depend on annual snowfall and glaciers for water lose their supply; hardest hit will be Central Asia, the Andes, Europe, and western North America. Some regions may become uninhabitable due to lack of water: the Mediter­ranean, much of Central Asia, northern Mexico, and South America. The southwestern United States will lose its current sources of fresh water, but that may be mitigated by an increase in precipitation due to the MOC col­lapse, though precipitation patterns may be irregular. Regional water scarcity will also be mitigated by increases in precipitation in East Africa and East and Southeast Asia, though the risk of floods will increase. The lack of rainfall will also threaten tropical forests and their dependent species with extinction. Declining agricultural productivity will be an acute challenge. The heat, together with shifting and unpredictable precipitation patterns and melting glaciers, will dry out many areas, including today's grain-exporting regions. The largest decreases in precipitation will be in North Africa, the Middle East, Cen tral America, the Caribbean, and northeastern South America, including Amazonia. The World Food Program estimates that nearly 1 billion people suffer from chronic hunger today, almost 15 million of them refugees from conflict and natural disasters. According to the World Food Program, "More than nine out of ten of those who die I of chronic hunger] are simply trapped by poverty in remote rural areas or urban slums. They do not make the news. They just die." Mortality rates from hunger and lack of water will skyrocket over the next century, and given all that wiII be happening, that will probably not make the news, either--people will just die. Over the next one hundred years, the "breadbasket" regions of the world will shift northward. Consequently, formerly subarctic regions will be able to support farming, but these regions' traditionally small human populations and lack of infrastructure, including roads and utilities, will make the dra­matic expansion of agriculture a challenge. Moreover, extreme year-to-year climate variability may make sustainable agriculture unlikely, at least on the scale needed. Northwestern Europe, too, will see shorter growing seasons and declining crop yields because it will actually experience colder winters, due to the collapse of the MOC. At the same time that the resource base to support humanity is shrinking, there will be less inhabitable land. Ten percent of the world population now lives in low-elevation coastal zones (all land contiguous with the coast that is 10 meters or less in elevation) that will experience sea level rises of 6.6 feet (2 meters) in this scenario and 9.8 feet (3 meters) in the North Atlantic, given the loss of the MOC. Most major cities at or near sea level have some kind of flood protection, so high tides alone will not lead to the inundation of these cities. Consider, however, that the combined effects of more frequent and severe weather events and higher sea levels could well lead to increased flood­ing from coastal storms and coastal erosion. In any case, there will be saltwa­ter intrusion into coastal water supplies, rising water tables, and the loss of coastal and upstream wetlands, with impacts on fisheries. The rise could well occur in several quick pulses, with relatively stable peri­ods in between, which will complicate planning and adaptation and make any kind of orderly or managed evacuation unlikely. Inundation plus the combined effects of higher sea levels and more frequent tropical storms may leave many large coastal cities uninhabitable, including the largest American cities, New York City and Los Angeles, focal points for the national economy with a combined total of almost 33 million people in their metropolitan areas today. Resettling coastal populations will be a crippling challenge, even for the United States. Sea level rises also will affect food security. Significant fertile deltas will become largely uncultivable because of inundation and more frequent and higher storm surges that reach farther inland. Fisheries and marine eco­systems, particularly in the North Atlantic, will collapse. Locally devastating weather events will be the new norm for coastal and mid-latitude locations-wind and flood damage will be much more intense. There will be frequent losses of life, property, and infrastructure-and this will happen *every year.* Although water scarcity and food security will dis­proportionately affect poor countries-they already do-extreme weather events will be more or less evenly distributed around the world. Regions affected by tropical storms, including typhoons and hurricanes, will include all three coasts of the United States; all of Mexico and Central America; the Caribbean islands; East, Southeast and South Asia; and many South Pacific and Indian Ocean islands. Recent isolated events when coastal storms made landfall in the South Atlantic, Europe, and the Arabian Sea in the last few years suggest that these regions will also experience a rise in the incidence of extreme storms. In these circumstances, there will be an across-the-board decline in human development indicators. Life spans will shorten, incomes will drop, health will deteriorate-including as a result of proliferating diseases-infant mortality will rise, and there will be a decline in personal freedoms as states fall to anocracy (a situation where central authority in a state is weak or non­existent and power has devolved to more regional or local actors, such as tribes) and autocracy. **The Age of Survival: Imagining the Unimaginable Future** If New Orleans is one harbinger of the future, Somalia is another. With a weak and barely functional central government that does not enjoy the trust and confidence of the public, the nation has descended into clan warfare. Mortality rates for combatants and noncombatants are high. Neighboring Ethiopia has intervened, with troops on the ground in Mogadishu and else­where, a small African Union peacekeeping force is present in the country, and the United States has conducted military missions in Somalia within the last year, including air strikes aimed at terrorist groups that the United States government has said are finding safe haven in the chaos." In a July 2007 report, the UN Monitoring Group on Somalia reported that the nation is "lit­erally awash in arms" and factional groups are targeting not only all combat­ants in the country but also noncombatants, including aid groups. Drought is a regular feature of life in Somalia that even in the best of times has been difficult to deal with. These are bad times, indeed, for Somalia, and the mutually reinforcing cycle of drought, famine, and conflict has left some 750,000 Somalis internally displaced and about 1.5 million people-17 per­cent of the population-in dire need of humanitarian relief. The relief is dif­ficult to provide, however, given the lawlessness and violence consuming the country. For example, nearly all food assistance to Somalia is shipped by sea, but with the rise of piracy, the number of vessels willing to carry food to the country fell by 50 percent in 2007.u Life expectancy is forty-eight years, infant mortality has skyrocketed, and annual per capita GDP is estimated to be about six hundred dollars. The conflict has also had a negative effect on the stability of surrounding nations. In the catastrophic climate change scenario, situations like that in Soma­lia will be commonplace: there will be a sharp rise in failing and failed states and therefore in intrastate war. According to International Alert, there are forty-six countries, home to 2,7 billion people, at a high risk of violent con­flict as a result of climate change. The group lists an additional fifty-six nations, accounting for another 1.2 billion people, that will have difficulty dealing with climate change, given other challenges. 12 Over the next hundred years, in a catastrophic future, that means there are likely to be at least 102 failing and failed states, consumed by internal conflict, spewing desperate refugees, and harboring and spawning violent extremist movements. More­over, nations all over the world will be destabilized as a result, either by the crisis on their borders or the significant numbers of refugees and in some cases armed or extremist groups migrating into their territories. Over the course of the century, this will mean a collapse of globalization and transnational institutions and an increase in all types of conflict-most dramatically, intrastate and asymmetric. The global nature of the conflicts and the abruptness of the climate effects will challenge the ability of govern­ments all over the world to respond to the disasters, mitigate the effects, or to contain the violence along their borders. There will be civil unrest in every nation as a result of popular anger toward governments, scapegoating of migrant and minority populations, and a rise in charismatic end-of-days cults, which will deepen a sense of hopelessness as these cults tend to see no end to misery other than extinction followed by divine salvation. Given that the failing nations account for half of the global population, this will also be a cataclysmic humanitarian disaster, with hundreds of mil­lions of people dying from climate effects and conflict, totally overwhelming the ability of international institutions and donor nations to respond. This failure of the international relief system will be total after 2040 as donor nations are forced to turn their resources inward. There will be a worldwide economic depression and a reverse in the gains in standards of living made in the twentieth and early twenty-first centuries. At the same time, the probability of conflict between nations will rise. Although global interstate resource wars are generally unlikely;" simmering conflicts between nations, such as that between India and Pakistan, are likely to boil over, particularly if both nations are failing. Both India and Pakistan, of course, have nuclear weapons, and a nuclear exchange is possible, perhaps likely, either by failing central governments or by extremist and ethnic groups that seize control of nuclear weapons. There will also be competition for the Arctic region, where natural resources, including oil and arable land, will be increasingly accessible and borders are ill defined. It is possible that agreements over Arctic territories will be worked out among Russia, Canada, Norway, the United States, Iceland, and Denmark in the next two decades, before the truly catastrophic climate effects manifest themselves in those nations. If not, there is a strong probability of conflict over the Arctic, pos­sibly even armed conflict. In general, though, nations will be preoccupied with maintaining internal stability and will have difficulty mustering the resources for war. Indeed, the greater danger is that states will fail to muster the resources for interstate cooperation. Finally, all nations are likely to experience violent conflict as a result of migration patterns. There will be increasingly few arable parts of the world, and few nations able to respond to climate change effects, and hundreds of millions of desperate people looking for a safe haven-a volatile mix. This will cause considerable unrest in the United States, Canada, Europe, and Russia, and will likely involve inhumane border control practices. Imagining what this will actually mean at a national level is disheartening. For the United States, coastal cities in hurricane alley along the Gulf Coast will have to be abandoned, possibly as soon as the first half of the century, certainly by the end of the century. New Orleans will obviously be first, but Pascagoula and Bay St. Louis, Mississippi, and Houston and Beaumont, Texas, and other cities will be close behind. After the first couple of episodes of flooding and destructive winds, starting with Hurricanes Katrina and Rita in 2005, the cities will be partially rebuilt; the third major incident will make it clear that the risk of renewed destruction is too high to justify the cost of reconstruction. The abandonment of oil and natural gas production facilities in the Gulf region will push the United States into a severe recession or even depression, probably before the abrupt climate effects take hold in 2040. Mex­ico's economy will be devastated, which will increase illegal immigration into the United States. Other major U.S. cities are likely to become uninhabitable after 2040, including New York City and Los Angeles, with a combined metropolitan population of nearly 33 million people. Resettling these populations will be a massive challenge that will preoccupy the United States, cause tremen­dous popular strife, and absorb all monies, including private donations, which would have previously gone to foreign aid. The United States, Canada, China, Europe, and Japan will have little choice but to become aggressively isolationist, with militarized borders. Given how dependent all these nations are on global trade, this will provoke a deep, persistent eco­nomic crisis. Standards of living across the United States will fall dramatically, which will provoke civil unrest across the country. The imposition of martial law is a possibility. Though the poor and middle class will be hit the hardest, no one will be immune. The fact that wealthier Americans will be able to manage the effects better, however, will certainly provoke resent­ment and probably violence and higher crime rates. Gated communities are likely to be commonplace. Finally, the level of popular anger toward the United States, as the leading historical contributor to climate change, will be astronomical. There will be an increase in asymmetric attacks on the American homeland. India will cease to function as a nation, but before this occurs, Pakistan and Bangladesh will implode and help spur India's demise. This implosion will start with prolonged regional heat waves, which will quietly kill hundreds of thousands of people. It will not immediately be apparent that these are cli­mate change casualties. Massive agricultural losses late in the first half of the century, along with the collapse of fisheries as a result of sea level rise, rising oceanic temperatures, and hypoxic conditions, will put the entire region into a food emergency. At first, the United States, Australia, China, New Zealand, and the Nordic nations will be able to coordinate emergency food aid and work with Indian scientists to introduce drought- and saltwater-resistant plant species. Millions of lives will be saved, and India will be stabilized for a time. But a succession of crippling droughts and heat waves in all of the donor nations and the inundation of several populous coastal cities will force these nations to concentrate on helping their own populations. The World Food Program and other international aid agencies will first have trouble operating in increasingly violent areas, and then, as donations dry up, will cease operations. Existing internal tensions in India will explode in the latter half of the century, as hundreds of millions of starving people begin to move, trying to find a way to survive. As noted above, a nuclear exchange between either the national governments or subnational groups in the region is possi­ble and perhaps even likely. By mid-century, communal genocide will rage unchecked in several African states, most notably Sudan and Senegal, where agriculture will com­pletely collapse and the populations will depend on food imports. Both nations will be covered with ghost towns, where entire populations have either perished or fled; this will increasingly be true across Africa, South Asia, Central Asia, Central America, the Caribbean, South America, and Southeast Asia. Europe will have the oddity of having to deal with far colder winters, given the collapse of the MOC, which will compromise agricultural productivity.

### 1AC: Warming causes extinction

#### Warming leads to extinction, empirically proven

Dyer, 2012 (Gwynne, London-based independent journalist, Tick, tock to mass extinction date, June 19, 2012)

There have been five mass extinctions in the past 500 million years, when 50 per cent or more of the species then existing on the Earth vanished, but until recently the only people taking any interest in this were paleontologists, not climate scientists. They did wonder what had caused the extinctions, but the best answer they could come up was "climate change". It wasn't a very good answer. Why would a warmer or colder planet kill off all those species? The warming was caused by massive volcanic eruptions dumping huge quantities of carbon dioxide in the atmosphere for tens of thousands of years. But it was very gradual and the animals and plants had plenty of time to migrate to climatic zones that still suited them. (That's exactly what happened more recently in the Ice Age, as the glaciers repeatedly covered whole continents and then retreated again.) There had to be a more convincing kill mechanism than that. The paleontologists found one when they discovered that a giant asteroid struck the planet 65 million years ago, just at the time when the dinosaurs died out in the most recent of the great extinctions. So they went looking for evidence of huge asteroid strikes at the time of the other extinction events. They found none. What they discovered was that there was indeed major warming at the time of all the other extinctions - and that the warming had radically changed the oceans. The currents that carry oxygen- rich cold water down to the depths shifted so that they were bringing down oxygen- poor warm water instead, and gradually the depths of the oceans became anoxic: the deep waters no longer had any oxygen. When that happens, the sulfur bacteria that normally live in the silt (because oxygen is poison to them) come out of hiding and begin to multiply. Eventually they rise all the way to the surface over the whole ocean, killing all the oxygen-breathing life. The ocean also starts emitting enormous amounts of lethal hydrogen sulfide gas that destroy the ozone layer and directly poison land- dwelling species. This has happened many times in the Earth's history.

### \*\*\*Solvency\*\*\*

### 1AC: HSR best hedge against fossil fuels

#### Other countries demonstrate empiric prove of HSR efficacy; best hedge against dwindling oil supplies

CABLE 2011 (JOSH, Senior Editor, MIXED SIGNALS, WWW.INDUSTRYWEEK.COM JUNE 2011)

The Case for High-Speed Rail Thirty other countries can't be wrong...can they? High-speed rail is nothing new to America. "People have been squabbling over high-speed trains in the U.S. since Lyndon John- son introduced the High- Speed Ground Trans- portation Act," asserts Anthony Perl, author of "Transport Revolutions: Moving People and Freight Without Oil. ' Congress passed that legislation in 1965, and we've been debating the merits of high-speed rail ever since. Meanwhile, Eu- rope and Asia have been building electric-train sys- tems that whisk passengers from city to city at more than 200 miles per hour. But the fact that high- speed trains have been zipping along in 30 other countries isn't necessarily a selling point for Americans. "It isn't something that's close to home, so it seems very foreign for Ameri- cans," Perl says. "Probably like some people in devel- oping countries thought for a long time that the U.S. missions to the moon were fabricated—-that they'd been staged o r faked in some maybe- cause they just couldn't get their minds around it —I think many Americans just think o f high-speed trains in the same sort of fantasy category, up there with unicorns, Sasquatch and whatever else." But, Perl argues, high- speed rail is real, and "30, 40 years of experience show that it works." "It's not a fantasy project," Perl says. High-speed rail has yet to materialize in the United States. With the government at risk of defaulting on its debt, high-speed rail's opponents say it's a luxury that we can't afford. "The federal govern- ment is facing a record deficit that must be tamed," says James Moore, a professor of public pol- icy and management at the University o f South- ern California. "Initiating a U.S. high-speed-rail pro- gram now is not merely a poor choice. It would be genuinely irresponsible. It would constitute deliber- ately poor management of scarce resources. It would benefit few and further burden many.**"** With the clock ticking on the world's supply of oil**,** Perl and other supporters counter that the United States can't afford not t o invest in high-speed rail. "I would say that this high-speed rail initiative is America's best insurance policy t o allow f o r a smooth post-carbon o r post-oil transition going forward," Perl asserts. High-speed-rail advo- cates tout other potential benefits, such as the cre- ation of U.S. jobs to build the system. Rick Harnish, executive director of the Midwest High Speed Rail Association, sees high- speed rail as a means to boost U.S. innovation by making it easier to have face-to-face interaction. "There's no question it's a competitiveness is- sue," Harnish says.

### 1AC: HSR implementation garners several advantages

#### Development of corridors create defacto national rail system; these corridors comparatively gain economic and environmental advantages

Lane 2012(Bradley W. MPA Program, The University of Texas at El Paso, “On the utility and challenges of high-speed rail in the United States” Journal of Transport Geography 22 (2012) 282–284 www.elsevier.com/locate/jtrangeo)

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Considerable attention has been given to high-speed rail in the US with the Obama administration’s ini- tiatives to invest in its development. This viewpoint discusses the utility of high-speed rail, as well as some major challenges facing its application to the transport geography of the US. High-speed rail has the potential to alleviate automobile and short-haul air traffic congestion in several regional corridors throughout the US, which would have significant economic, environmental, and quality-of-life benefits. Though a national network may not be feasible, a series of interconnected regional corridors would make a de facto national high-speed network that would represent a significant improvement over existing national rail operations, which outside of the Northeast and Pacific Coast are virtually non-existent. How- ever, before this can be achieved major issues of engineering and track right of way, service provision, and stop access require resolution. ￼￼￼￼1. Contemporary high-speed rail in the US Since taking office in January 2009, the Obama administration is responsible for several notable changes to transportation policy. Air travel has seen the introduction of controversial security mea- sures as well as passenger rights legislation. The American Recov- ery and Reinvestment Act (ARRA) of 2009 (generally known as the ‘‘Stimulus Package’’) is responsible for funding numerous transpor- tation infrastructure and maintenance projects nationwide. An additional major shift away from previous administrations is support for intercity passenger rail in the US. The High-Speed Inter- city Passenger Rail Program (HSIPR) from the US Federal Railroad Administration (FRA) gives transportation goals tying together eco- nomic competitiveness, environmental improvement, community development, and increasing consumer choices (FRA, 2009a). The program balances short-term motivations to use high-speed rail construction to help stimulate economic development and long- term plans to develop a national rail network by connecting major population centers 100–600 miles apart (FRA, 2009a). This has re- sulted in the recent funding of several major corridors for research and development of high-speed passenger rail transportation (FRA, 2009b). Definition of the appropriate rail corridors varies, and the High-Speed Intercity Rail Program has thus far awarded funding less to regions and more toward connecting pairs of cities. A general outline of regions with the potential to support rail service follows: 􏰀 Pacific Northwest (Vancouver, Seattle, Portland). 􏰀 California/West Coast (San Francisco–Oakland, Sacramento, Los Angeles, San Diego–Tijuana). ￼ 􏰀 Southwest (Las Vegas, Phoenix, Salt Lake City, Denver, Tucson, Albuquerque–Santa Fe, El Paso–Ciudad Juarez). 􏰀 Texas Triangle (Dallas, Austin, San Antonio, Houston, Rio Grande Valley). 􏰀 Southeast (New Orleans–Gulf Coast, Little Rock, Memphis, Birmingham, Atlanta). 􏰀 Florida (Jacksonville, Orlando, Tampa, Miami–Fort Lauderdale). 􏰀 Mid-Atlantic (Charlotte, Raleigh–Durham, Norfolk, Washing- ton DC). 􏰀 Northeast (Baltimore, Philadelphia, Pittsburgh, CO-RI, New York, Boston, upper NY state, New England). 􏰀 Midwest and Great Plains (Cleveland, Columbus, Cincinnati, Detroit, Indianapolis, Louisville, Nashville, St. Louis, Chicago, Milwaukee, Minneapolis, Kansas City). Investment in high-speed rail in the US is not without contro- versy. Criticism comes largely in the form of the potential cost of the system, and of the question of the ability of high-speed trains to compete with intercity air and automobile travel. The idea of designating significant federal funds at a time of long-term finan- cial strife and with the federal deficit growing by a trillion dollars a year has been lambasted by lawmakers at various levels of gov- ernment. Would people even be willing to sacrifice their beloved cars and the rapid speed of air travel to use a mode that many view as a relic of the past? 2. Utility of high-speed rail A true national high-speed rail network is not particularly fea- sible in the United States. Long-haul air travel is too established and convenient, and the population geography of the central US does not lend itself to intra-continental rail trips. However, the cor- ridors defined earlier indicate several regions with extensive inter- action among groups of cities. These corridors also feature significant numbers of short-haul flights within them as well as highway congestion. These regions are also connected to their neighboring regions, and as such create a de facto (if not optimal) national high-speed rail network. Such a network based on regio- nal hubs would improve intra-regional mobilities, increase na- tional rail accessibility over existing Amtrak operations, and result in a system that at the very least would, to paraphrase James Howard Kunstler, no longer embarrass the Bulgarians. A series of regional high-speed rail regions has significant po- tential to alleviate some serious transportation and environmental issues. Inefficiencies in fuel usage for short-haul air travel, pollu- tion from takeoffs and landings, and a growing lack of comfort and perception of poor customer service constitute major issues with air travel. High-speed rail would likely run from either over- head electricity or diesel power, both of which provide significant emission benefits relative to airplanes (Black (2010) includes an excellent discussion of the environmental issues related to trans- port modes). It has the potential for decreased waiting times and a streamlined boarding security process, and rising costs of air tra- vel from increasing fuel prices and decreasing competition indicate the intercity regional travel market may be open to a worthwhile alternative. Many major hub airports feature airplane congestion beyond their effective operating capacity which leads to delays affecting the entire air travel network. Replacing short-haul flights with train travel could alleviate airport congestion and improve the air travel system functionality. The alleviation of considerable intercity automotive congestion is also possible with development of a high-speed rail network. The popularity of air travel indicates a willingness to pay a premium for decreased travel times for intercity travel, while the train offers additional advantages of improvements in comfort and utility while traveling. Planes have become smaller and space more cramped as airlines try to maximize load factors, and while wire- less internet is available on some carriers, mobile phone usage is currently prohibited. Meanwhile, in addition to its decreased speed, the automobile is limiting to drivers in what they can do while also navigating the car. Trains have the potential to offer more personal space and increased seating options than airline tra- vel, and more flexibility for time usage than automobile travel. This includes operating trains with separate quiet cars as well as pro- viding workstations and dining services, as is currently done on Amtrak operations.

### 1AC: Magnetic Levitation overcomes barriers

#### Maglev technology could make transcontinental rail possible

Brown, 2010 ( Stuart F. Contributing editor, Revolutionary RAIL Scientific American, May, Vol. 302 Issue 5, p54-59, 6p, )

More significant for the prospects of maglev technology in the U.S., maglev propulsion allows trains to climb much steeper gradients than standard high-speed rail lines can. It is the only way fast trains could pass through much of the western U.S.'s jagged terrain. The problem for classic technology is traction. Locomotives' steel wheels can maintain only so much adhesion to steel rails before they start to slip, and the train stalls. Common and unpredictable conditions such as rain, snow, ice and even wet leaves place a limit on the steepness of the grade a train can climb or safely descend. Because of this limitation, grades on railways in the U.S. are generally kept below 3 percent, and grade maximums of 2 percent or less are most common. Maglev lines, in contrast, have no steel-on-steel contact, so traction does not pose the challenge it does on a wheels-on-rails line. Maglev lines can climb a 10 percent grade, which permits planners to select more expeditious routes when laying out new rights-of-way through hilly terrain. The technology also allows for high-speed transport in areas that would otherwise remain impassable. The Rocky Mountain Rail Authority recently completed an 18-month study of building two intersecting high-speed train lines running along about 400 miles of Colorado's north-south and east-west interstate highways. It concluded that the trains need to be maglev, because some of the grades along the highways reach 7 percent. "You're going through the Rocky Mountains," says Harry Dale, the rail authority's chair. He also notes that because magnetic forces, not physical adhesion, propel and slow the train, Colorado's "snow and ice problem goes away." ￼Dale believes that the maglev trains built by Transrapid International, a joint venture of the German firms Siemens and ThyssenKrupp, could do the job. Transrapid is the manufacturer of the Shanghai airport system, which has whisked more than 17 million passengers from Shanghai to its airport at peak speeds of 267 mph. Transrapid's maglev trains use conventional electromagnets; the Japanese, on the other hand, have been researching technology that employs superconducting electromagnets not unlike those found inside the Large Hadron Collider. While the superconducting approach provides greater clearance between train and guideway as a precaution against earthquakes, the magnets must be cooled with liquid helium, an expensive and unwieldy proposition.

### 1AC: Streamlining RRIF process would result in more loans

#### Current regulations frustrate loan applicants; making the process easier would result in more loan applications and approvals

Sussman 2011 (Michael, Owner, Strategic Rail Finance, SITTING ON OUR ASSETS: REHABILITATING AND IMPROVING OUR NATION’S RAIL INFRASTRUCTURE (112–7) HEARING BEFORE THE SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS OF THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION FEBRUARY 17, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation)

The RRIF program is a USDOT loan and loan guarantee program with three main attractions for the borrowers. One is the repayment term, which can be as long as 35 years. Second is its relatively low interest rate, based on treasury securities of a similar term. Most importantly, it recognizes the collateral value of track, right-of-ways, and transportation facilities, assets for which it is challenging to secure long-term financing in the private sector. The country can enjoy a substantial return from improving the RRIF program. In spite of America’s love-hate relationship with railroads, rail transportation provides many public benefits. Each train load of freight, if moved on our highways, requires a convoy of trucks 27 miles long. Since those trucks burn two to four times the amount of diesel fuel, the consequent increase in air pollution is significant. We need trucks as part of a complete transportation system, but we need increased rail transportation more than ever. RRIF fulfills a role that is missing in the private sector. Since Federal de-regulation of railroads in 1980, the number of short line and regional railroads has increased from 190 to 575. At the same time, banks have merged and consolidated, leaving behind the close connection between local banks and local railroads. In spite of the long-term financial stability of rail projects, they are more challenging to finance than riskier commercial develop- ments such as office buildings and movie theaters. So, why does this $35 billion loan program still have $34.6 billion available? And what can be done to increase the loan activity? I will suggest four no-cost remedies, and several process improve- ments. Firstly, I recommend enforcing the previously-mandated 90- day timeline for the FRA to make loan decisions. Secondly, I would like to see the OMB reverse the practice of cut- ting the collateral values by 20 percent when accompanied by pro- fessional appraisals. Hardly warranted when the primary assets presented in rail projects—i.e., steel, land, and rolling stock—are among the most stable collateral items we see, often appreciating in value over time. Thirdly, it is vitally important to revisit the FRA’s deprioritization of refinancing made public last September. There should be no reluctance to approve RRIF loans for refinancing, as long as it supports a comprehensive capitalization strategy for suc- cessful long-term stewardship of rail facilities. Fourth, borrowers should be given the option of a higher interest rate in exchange for a lower credit risk premium. There are other ways to improve the RRIF program, such as in- stituting a clear pathway for the program’s loan guarantee func- tion, and coordinating with state departments of transportation and local banks. I would be gratified to share these ideas with the Committee at a later date. For now, just a brief mention of process improvements. Seeing a RRIF loan application through to completion is like raising a child. No one really talks about how damn hard it is. And, even if they do, it is harder than anyone has the capacity to imagine until they have one of their own. What I would like to see is a less expensive, less strenuous appli- cation process for smaller RRIF loans, in support of one of its stat- ed purposes, ‘‘preserve or enhance rail or intermodal service to small communities or rural areas.’’ As an addendum to my remarks, I have provided data on the outstanding repayment history of state revolving loan funds that rely on much less application information, and a relatively rapid approval process. The RRIF process needs to be more predictable and more interactive. Applicants need more coaching and support at every stage, and the application itself needs to be rewritten by writers, not financial analysts or engineers. Many of the application questions do not clarify the level of data and detail required, and the FRA is often muted in its response to inadequate applications. This communication gap adds weeks and months to the process, often ending in frustration and withdrawn applications. Relating to a much simpler state loan application, Kathleen Gro- ver, former administrator of Michigan’s rail loan program, said that 50 percent of the applicants in her state did not respond to re- quests for additional information. Railroaders are some of the hardest working people in industry. A successful RRIF campaign re- quires more determination and communication than most rail oper- ators can muster. If we apply our limited public resources intelligently, we can seed private sector investment to accomplish goals that neither sector can achieve on their own. The resulting innovation can provide the capital environment for railroads to substantially increase their contribution to America’s economic vitality.

### 1AC: HSR designed to solve problems

#### HSR uniquely addresses transportation issues, gaining advantages of economic development and addressing environmental issues

Chen 2011 (Zhenhua, PhD student at the George Mason University, School of Public Policy, and is currently working as a graduate research assistant under the supervision of Prof. Jonathan Gifford in the area of transportation policy. Mr. Chen was awarded the Graduate Student Best Paper Award of the 51st Transportation Research Forum, “Is the Policy Window Open for High-Speed Rail in the United States: A Perspective from the Multiple Streams Model of Policymaking,” Transportation Law Journal Vol. 38:115)

A. PROBLEMS STREAM What does the problems stream consist of in the HSR policymaking process? Why is HSR raised? How do problems attain the attention of policymakers? According to Kingdon's model, various mechanisms-indicators, focusing events, and feedback--bring problems to governmental officials' attention.25 In the actual HSR policy-making process, all these mechanisms have played roles in pushing HSR forward. Generally, HSR is addressed to solve contemporary transportation issues. As a new transportation mode, HSR is different from conventional passenger rail because of higher speed, better amenities, and higher reliability for on-time performance. 26 Also, in terms of energy efficiency and social and economic impacts, HSR has a unique advantage over other transportation modes in medium-distance travel.27 From 1990-2009, seventy-three bills have been proposed in the House or Senate related to HSR, and only eight of the HSR related bills have been passed.28 The problems addressed by theses bills vary in terms of the different time period of passage. Generally, three major problems that HSR aims to correct are: (1) improving the national intermodal transportation network, (2) providing transportation alternatives for energy savings and environmental concerns, and (3) creating jobs and stimulating economy prosperity.29 The first problem that HSR aims to correct is to improve the national intermodal transportation network.30 As a new dimension of transportation infrastructure created to meet passenger transportation demand, HSR has been addressed as a way to enhance the national transportation system. Many indicators were used to reveal this problem. In 1965, in his remarks signing the High-Speed Ground Transportation Act, President Lyndon B. Johnson quoted socioeconomic statistics to point out the need for HSR development:In the past 15 years, travel between our cities has more than doubled. By 1985-only 20 years away-we will have 75 million more Americans in this country. And those 75 million will be doing a great deal more traveling ... we must find ways to move more people, to move these people faster, and to move them with greater comfort and with more safety. Later in the 1990s, highway and airport congestion became a more apparent issue for policymakers to tackle.32 A study was conducted to assess the feasibility of implementing a HSR system as an alternative mode of transportation in the United States. 33 At the request of the US- DOT, the National Research Council, operating through the Transportation Research Board, assembled a committee to assess the applicability of HSR technologies to meet the demand for passenger transportation service in high-density travel markets and corridors. 34 The study results showed that HSR could be an effective alternative to auto and air travel in corridors where travel demands are increasing, but where increasing the capacity of highways and airports is difficult.3 5 Studies have also shown that building a HSR system can help improve the national intermodal network, and thus, strengthen national competitiveness through alleviating congestion and fostering economic development. 36 For many years, this was the issue that HSR bills addressed. The second problem that HSR development addressed was accounting for environmental concerns by providing an energy efficient alternative form of transportation. 37 This is especially true when the economy is under certain energy and environmental pressures. During 2007 and 2008, high gasoline prices demonstrated a weakness in the current American intermodal transportation system and illustrated how PRIIA developed HSR could provide a feasible alternative. 38 The main objective of PRIIA focused on increasing support for intercity passenger rail travel, including Amtrak's long-distance passenger line along the Northeast Corridor ("NEC"), an HSR corridor.3 9 .Before PRIIA was submitted to Congress, two notable studies had been conducted to examine HSR's impact on energy and on the environment. The first study named "High Speed Rail and Greenhouse Gas Emissions in the U.S." concluded that the implementation of proposed federally designated HSR corridors could result in an annual reduction of 6 billion pounds of carbon dioxide emissions.40 The second study con- ducted by the congressionally created National Surface Transportation Policy and Revenue Study Commission, indicated that intercity passenger rail consumes seventeen percent less energy per passenger mile than air travel and twenty one percent less energy per passenger mile than passen- ger automobile travel.41 These statistical indicators underscored a need for sustainable, clean, and efficient transportation alternatives. The Obama Administration capitalized on this in need promoting HSR. 4 2 These statistical indicators, combined with high profile, presidential sup- port have helped a greater number of policymakers to become aware of the problem and have stimulated them to take the issue seriously.43 The third problem addressed by HSR is high unemployment resulting from the economic recession of 2008 and 2009. Creating jobs and stimulating the economy demonstrates important objectives and benefits of the HSR.44 Creating jobs through HSR projects has been previously addressed, but the impact of the economic recession of 2008 and 2009 increased focus on the job creation potential of HSR. On April 28, 1993 Secretary of Transportation, Federico Pefila introduced the Clinton Ad-ministration's proposal for a major new initiative to advance high-speed ground transportation. This proposal reflected a new dimension of HSR development, the use of HSR projects to spur economic develop- ment and create jobs.46 Despite this new approach, progress on this proposal was impeded by a powerful opponent, transportation unions motivated by the perception that HSR projects would result in lay offs and wage cuts for existing transportation workers . Compared to the recession damaged economy of 2009, the American economy in 1993 was healthy. A healthy economy and job security can explain why earlier HSR proposals failed to gain traction. Simply put, when jobs are threatened any measure securing or creating jobs is considered. For this reason, during the 2009 recession the HSR plan proposed by President Obama aimed at creating jobs and sought to capitalize on unemployment concerns to gain national support.48 Refraining HSR as a job creation mechanism helped support the HSR initiative by creating a distinct, employment-oriented argument in favor of HSR.49 The eco- nomic recession, and resulting passage of the ARRA of 2009, facilitated support for HSR by dedicating an eight billion dollar investment to create jobs in HSR. Kingdon's theory posits that problems are not often self-evident from certain indicators.51 "Problems need a little push to get the attention of people in and around government." 52 This "push" can be pro- vided by a focusing event, like a crisis or disaster that calls attention to the problem; in turn the personal experience and perception of policy- makers is changed. Broad-based, systemic indicators of the problem's ex- istence often generate policymaker awareness.53 A triggering event serves to accelerate and exacerbate the effects of the problem, speeding and intensifying policymaker awareness and response. 54 As a result, gov- ernment and has found HSR as an attractive solution to the current problems faced by the nation.55

### 1AC: HSR Feasible: France proves

#### High Speed Rail system is feasible and profitable- success in France proves

Oberstar, 1/22 (James L., Potomac, 1/22/2012, served in the U.S. House of Representatives from 1975 to 2011. He chaired the House Committee on Transportation and Infrastructure from 2007 to 2011, “Why we need high-speed rail”, http://www.lexisnexis.com/hottopics/lnacademic/?)

The financial uncertainties facing California's high-speed rail project should not be read as an indictment of such rail development in America [front page, Jan. 16]. High-speed, inter-city passenger rail can be successful, even profitable - as proven in France. SNCF, the French national passenger rail system, wrote a check for 230 million euros ($299 million) to the national government just before Christmas and has returned 600 million euros ($780 million) to the government over the past five years. Congestion is choking our metropolitan areas, costing Americans $110 billion a year in lost productivity and wasted fuel. We must invest in a passenger rail alternative. The longer we wait, the less livable our cities will become and the more expensive the alternatives will be. The French have proven that the concept can succeed. We should follow their lead and not give up on inter-city passenger rail.

## \*\* Off Case Extensions/Responses\*\*

### \*\*CP Responses\*\*

### AT CP Generic—Fed Key

#### Consistent, dedicated federal funding streams are key

**Galbraith, MA in economics, 10**—MA in economics from the London School of Economics, Nieman fellow in journalism at Harvard, fmr writer for The Economist, clean energy reporter for the New York Times (Kate, 9/5/2010, “U.S. Plays Catch-Up on High-Speed Rail”, New York Times, <http://www.nytimes.com/2010/09/06/business/energy-environment/06green.html?_r=1>, AL)

But the biggest question mark hovering over the future of high-speed rail in the United States is **funding**. The $8 billion allocated in the stimulus package is not nearly enough, particularly because it is spread across a range of projects around the country. California’s new system alone could cost $40 billion. State governments will shoulder a substantial share of the costs, and they are **grappling with budget deficits**. Mr. Gertler of HNTB said that one key will be **consistent spending from the federal government**. He envisioned a **dedicated stream** of funding, like the gasoline tax, which pays for highway maintenance. “The biggest obstacle is a permanent, sustainable and secure source of funding into the future,” he said.

###  AT States—Perm

#### Federal down payment gets states on board—California proves

**Kehs 10**—public relations officer for high-speed rail advocacy group Hill & Knowlton, General Manager of the Washington DC Office of Hill & Knowlton (Michael, October 2010, “High-Speed Rail can Keep the Economy on Track”, US High Speed Rail Association, <http://www.ushsr.com/images/High_Speed_Rail_can_Keep_the_Economy_on_Track_1_.pdf>, AL)

The benefits of a HSR system nationally, once established, will comprise the greatest change to the way Americans travel since the establishment of the interstate highway system. And as I said in June at the US HSR conference in Los Angeles, there’s no better place to start than right here in California. Our largest and most productive state in the union, California represents an opportunity to set a constructive pattern and model for the nation. As Californians and others are so fond of saying “as California goes, so goes the nation.” But we are not without our challenges. Like so many states, California finds itself in **fiscal peril** with many competing priorities vying for attention in Sacramento. But HSR presents a light at the end of the tunnel. With a $2.25B **down-payment from the federal government** – to include the recent $194M federal grant from the Federal Rail Administration that will help pay for preliminary engineering and environmental analyses of segments connecting San Francisco to Anaheim – **we have the momentum behind us** to make our case.

###  AT States—Solvency

#### States mismanage funds and overspend

**Julian, Stanford researcher, 10**—fellow at the Hoover Institute, a Stanford University think tank (Liam, 3/24/2010, “The Trouble with High-Speed Rail”, The Hoover Institution at Stanford University, <http://www.hoover.org/publications/policy-review/article/5296>, AL)

Nonetheless, the Obama administration pushes onward, encouraging **states** such as Florida and California to concoct **bogus high-speed rail plans** and then dispersing billions of dollars to them. All the while, **nobody has an accurate idea** of what these scattered high-speed systems will actually cost the country, all total, in the end. History shows that official construction estimates are **usually lowballed big-time**. A 1990 evaluation by the U.S. Department of Transportation of 10 major American rail transit projects found that their average cost overrun was about 50 percent; the real costs of seven of the ten projects were between 30 and 100 percent higher than their original estimates. A 2003 study carried out at Aalborg University in Denmark evaluated 258 transport infrastructure projects completed in 20 nations on five continents between 1927 and 1998. It found that the **costs of nine out of ten projects were underestimated**, and that for rail, actual expenses were some **45 percent higher than predicted**. Ridership projections are typically way overshot, too, though not as whoppingly so as in Florida and California.

###  AT CP Private—Perm/Solvency

#### Public-private partnerships solve best—governmental leadership is key

**Downey, director at WMATA, 11**—Member of the Board of Directors at Washington Metropolitan Area Transit Authority, Senior Advisor at Parsons Brinckerhoff, fmr deputy secretary at the US Department of Transportation, AMP from Harvard, MPA in public administration from New York University, BA in political science from Yale, magna cum laude (Mortimer, September 2011, “An Introduction to High Speed Rail - A Multidisciplinary Challenge”, Velocity Network Issue No. 73, <http://www.pbworld.com/pdfs/publications/pb_network/pbnetwork73.pdf>, AL)

Leadership, both governmental and corporate, will be critical in establishing the foothold for these investments to reach their maximum potential. US national and regional policy makers need to understand their options and make the choices that make for optimum investments with limited resources. If we can invest in HSR to move people within a mega-region like the Northeast Corridor or California, shouldn’t we reconfigure those region’s air services to serve different needs for international and intercontinental travel, rather than competing with the improved rail service? On the highway side, there’s talk of a new generation of Interstate Highways, closing gaps and making connections that aren’t there now even as we rebuild our fifty year old roadways and bridges. Wouldn’t it make sense to do that planning in a way that takes rail opportunities into account? **That’s a role for government**— federal, state and local—and as we look more and **more to public-private partnerships** to finance key assets, the private sector has an interest as well. Considering the mega-regional opportunities, we may have to **create new instruments of government** to develop systems that transcend state and local boundaries but are smaller in scope than the nation as a whole. Cooperative efforts have taken us part of the way, but investments that serve broad regional needs and intersect with local services and facilities have to be approached with the perspective of the broad region.

### \*\*General Case Extensions/Responses\*\*

### AT DA Elections

#### Bipartisan public support for new transportation funding

**Branham, CSG editor, 12**—managing editor for The Council of State Governments, a think tank dealing with energy and infrastructural issues (Mary, March/April 2012, “The Road to Recovery Begins with Transportation”, The Council of State Governments, <http://www.csg.org/pubs/capitolideas/Mar_Apr_2012/10questions.aspx>, AL)

Do you think the public has an adequate understanding about the nation’s infrastructure needs, the political and fiscal challenges policymakers face in addressing those needs and the importance of improving our infrastructure to our economy? “I’ve travelled to **200 cities** in **48 states** during the last three years. Everywhere I go, people come up to me and say the same thing: ‘Put my neighbors to back to work rebuilding our country.’ I’ve met with construction workers building St. Paul’s new light rail line, Charlotte’s new streetcar system and Oakland’s new air traffic control tower. I’ve visited with leaders of America’s labor movement at the Laborers’ International Convention in Las Vegas, with business people in Kansas City and with economic development officials in Anchorage. “And this is **no partisan sentiment**. In one poll conducted earlier this year, **two of three voters**—and 59 percent of Tea Party supporters—said making improvements in transportation is **extremely important**.”

###  AT Competitiveness—Collapse Inev

#### Not inevitable—but we’re facing serious challenges

**Porter and Rivkin, Harvard profs, 12**—\*Bishop William Lawrence University Professor at Harvard Business School, \*\*Bruce V. Rauner Professor of Business Administration at Harvard Business School (\*Michael E. Porter, \*\*Jan W. Rivkin, March, “The Looming Challenge to U.S. Competitiveness”, Harvard Business Review, <http://hbr.org/2012/03/the-looming-challenge-to-us-competitiveness/ar/1>, AL)During the past year, we have examined U.S. competitiveness with the help of a **diverse group of scholars**, business **leaders from around the world**, and the first-ever comprehensive survey of Harvard Business School alumni. Our research suggests that the U.S. faces serious challenges. Too often, America’s leaders, in government and business, have acted in ways that neutralize the country’s many strengths. However, the decline of U.S. competitiveness is **far from inevitable**. The United States remains the world’s most productive large economy and its largest market for sophisticated goods and services, which stimulates innovation and acts as a magnet for investment.

###  AT Stimulus—Doesn’t Work

#### Keynesian models are correct—stimulus saves the economy

Stiglitz, prof econ, 12—University Professor at Columbia University, and a Nobel laureate in Economics [Joseph E. Stiglitz, Stimulating the Economy in an Era of Debt and Deficit, The Economists’ Voice http://www.degruyter.com/view/j/ev March, 2012]

Any diagnosis of the current economic situation should focus on the fact that the shortfall between actual and potential unemployment is huge and that monetary policy has proven ineffective, at least in restoring the economy to anything near full employment. Under these circumstances, the traditional economists’ solution has been to advocate the use of fiscal policy—tax cuts and/or spending increases. There is an especially compelling case for increasing public investments because they would increase GDP and employment today as well as increase output in the future. Given low interest rates, the enhanced growth in GDP would more than offset the increased cost of government spending, reducing national debt in the medium term. Moreover, the ratio of debt to GDP would decrease and the ability of the U.S. economy to sustain debt (debt sustainability) would improve. This happy state of affairs is especially likely given the ample supply of high-return investment opportunities in infrastructure, technology, and education resulting from underinvestment in these areas over the past quarter century. Moreover, well-designed public investments would raise the return on private investments, “crowding in” this additional source of spending. Together, increased public and private investment would raise output and employment in the short run, and increase growth and debt sustainability in the medium and long run. Such spending would reduce (not increase) the ratio of debt to GDP. Thus, the objection that the U.S. should not engage in such fiscal policies because of the high ratio of debt to GDP is simply wrong; even those who suffer from deficit fetishism should support such measures. Critics of this standard Keynesian prescription raise two objections: (a) government is not likely to spend the money on high return investments, so that the promised gains will prove elusive and (b) the fiscal multipliers are small (perhaps negative), suggesting that the shortrun gains from fiscal policy are minimal at best. Both of these objections are easily dismissed in the current economic environment. First, the assertion that government is incapable of making high return investments is just wrong. Studies of the average returns on government spending on investments in technology show extraordinarily high returns, with returns on investments in infrastructure and education returns well above the cost of borrowing. Thus, from a national point of view, investments in these areas make sense, even if the government fails to make the investments with the absolute highest returns. Second, the many variants of the argument that the fiscal multiplier is small typically rest on the assumption that as government spending increases, some category of private expenditure will decline to offset this increase. 1 Certainly, when the economy is at full employment and capital is being fully utilized, GDP cannot increase. Hence, under the circumstances, the multiplier must be zero. But today’s economic conditions of significant and persistent resource underutilization have not been experienced since the Great Depression. As a result, it is simply meaningless to rely on empirical estimates of multipliers based on post-World War II data. Contractionary monetary policy is another reason why multipliers may be markedly larger now than they were in some earlier situations of excess capacity. In these cases, monetary authorities, excessively fearful of inflation, responded to deficit spending by raising interest rates and constraining credit availability, thus dampening private spending. But such an outcome is not inevitable; it is a result of policies, often guided by mistaken economic theories. In any case, such an outcome is irrelevant today. This is because the Federal Reserve is committed to an unprecedented policy of maintaining near-zero interest rates through at least the end of 2014, while at the same time encouraging government spending. With interest rates at record lows and the Federal Reserve committed to keeping them there, crowding out of private investment simply will not occur. On the contrary, as I have noted, public investment— for instance, in better infrastructure—is more likely to increase the returns to private investment. Such public spending crowds in private investment, increasing the multiplier. Sometimes economists claim that consumers, worried about future tax liabilities in the wake of government spending, would contract their spending. However, the applicability of this notion (referred to as Ricardian equivalence) is contradicted by the fact that when George W. Bush lowered taxes and massively increased the deficit, savings plummeted to zero. But even if one believed in the applicability of Ricardian equivalence in today’s economy, government spending on investments that increase future growth and improve the debt-toGDP ratio would induce rational to spend more today. Consumption would also be crowded in by such government expenditures, not crowded out. Indeed, if consumers had rational expectations, the multiplier would increase even more in a long-lived downturn like the current one. The reason is that some of the money that is saved this year will be spent next year, or the year after, or the year after that—periods in which the economy is still well-below capacity. This increased spending will lead to higher employment and incomes in these later years. But if individuals are rational, the realization that their future incomes will be higher will lead them to spend more today. Deficit spending today crowds in not just investment, but also consumption. Thus, a careful look at the current situation suggests that the impact of well-designed government programs will be to stimulate the economy more than is assumed to be the case in standard Keynesian models (which typically assume a short-lived downturn and yield a shor run fiscal multiplier of around 1.5). Even in the current period, fiscal policy results in greater output increases because investment and consumption is crowded in, because: (a) the Federal Reserve is unlikely either to increase interest rates or reduce credit availability; (b) public investments are likely to increase the returns to private investments; and (c) rational consumers/ taxpayers may recognize that future tax liabilities will decline and that future incomes will rise as a result of these measures.

### Hegemony: Must stop isolationism (Khalizad)

#### That’s key to stave off isolationism and maintain hegemony

**Khalilzad, fellow at RAND, 95**—fellow at the RAND corporation, fmr US ambassador to the United Nations(Zalmay, “Losing the moment? The United States and the World after the Cold War?” Washington Quarterly Vol 18 no 2 Spring)

The United States is unlikely to preserve its military and technological dominance if the U.S. economy declines seriously. In such an environment, the domestic economic and political **base for global leadership would diminish** and the United States would probably **incrementally withdraw from the world**, become inward-looking, and abandon more and more of its external interests. As the United States weakened, others would try to fill the Vacuum. To sustain and improve its economic strength, the United States must **maintain its technological lead** in the economic realm. Its success will depend on the choices it makes. In the past, developments such as the agricultural and industrial revolutions produced fundamental changes positively affecting the relative position of those who were able to take advantage of them and negatively affecting those who did not. Some argue that the world may be at the beginning of another such transformation, which will shift the sources of wealth and the relative position of classes and nations. If the United States fails to recognize the change and **adapt its institutions**, its relative position will **necessarily worsen**.

### Stimulus—Global Growth

#### HSR is critical to supply the expanding economic geography—drives global economic growth

**Tierney, prof geography, 12**—professor of geography at U of North Texas, PhD in geography from U of Denver, MA in geography from Arizona State University (Sean, 2/28/2012, “High-speed rail, the knowledge economy and the next growth wave”, Journal of Transport Geography 22, p. 285-287, p. science direct, AL)

More than simply links and nodes, transportation is **deeply embedded** in the texture of the American experience, and HSR is the **next logical iteration** in the nexus between infrastructure and an expanding economic geography. History has shown that new transportation technologies improve exchange while accommodating growing urban populations. Street and trolley cars enabled the first bedroom communities along rail lines after which the early automobile expanded the perimeter a bit further. The Eisenhower highway system created the suburbs, while beltways brought us edge cities and exurbs. Urban boundaries have now pushed out so far that they often **overlap with neighboring cities**. People living in the boomburb of Castle Rock, CO are within an hour of both Denver and Colorado Springs, while Princeton, NJ splits the difference between New York and Philadelphia. It is **axiomatic** that **agglomerations spur innovation and growth** (Audretsch, 1998), but creativity has been pushing outward for decades as evidenced by Redmond, WA (Microsoft), Stamford, CT (UBS Bank) or Round Rock, TX (Dell). The landscape is extending yet again and where we used to associate economic vibrancy with cities, and then metropolitan areas, we now think of **mega-regions**. Charlotte is not part of the research triangle (Raleigh, Durham, and Chapel Hill) but is home to the country’s largest bank (Bank of America) and is only 250 miles from Atlanta. Los Angeles and San Diego are part of a web extending across southern California. Southwest Airlines got its start serving traveler demand in the triangle between Dallas, Houston and San Antonio; with triple digit oil prices, rail could serve these three fast-growing cities (a triangle that also contains Austin and Ft. Worth), none of which are more than 275 miles apart. Florida (2009) identifies **40 global mega-regions**, of which nine are located in the US (seven are purely US and two included parts of Canada). These places are not just **driving global economic growth**, they are doing it with a fraction of the people; home to less than 20% of the world’s population, these mega-regions produce 2/3 of the economic output. It is naïve to believe the populations of these regions will remain static, which is why it would be **irresponsible** not to start constructing HSR. Intelligent transportation systems or alternate fuel vehicles may obviate an oil crisis, but we would still have a highway and **congestion crisis**. There is a reason that highway construction has its own ‘black hole theory’ (Plane, 1995). And it is not just congestion that is costing us money, but also l**ost economic output**. By equipping trains with Wi-Fi, as competitor countries have already done, HSR enhances productivity.

### Demand for rail services exists; doesn’t have to be HSR

#### Other countries and areas of US prove success of rail system; HSR would be unnecessary

Longman Jul/Aug2011 (Phillip, Senior fellow at the Washington Monthly and the New America Foundation, The Case for Not-Quite-So-High-Speed Rail.,

Washington Monthly; Vol. 43 Issue 7/8, p13- 16, 4p)

So how about we all calm down, chuck the theology, and look practically at what should be the future of passenger trains in the U.S.? To do that, we need to start by defining what we mean by high-speed rail. An extreme example is the French National Railways' train a grande vitesse ("high-speed train"), or TGV, which in 2007 set a world record of 357.2 mph. In regular service, its average start-to-stop speed is typically a bit north of 170 mph, with top speeds of around 200 mph. I once had the opportunity to ride in the cab of a TGV between Paris and Lille, and even to hold the throttle. It was an unexpectedly harrowing experience, as the windshield repeatedly filled with the remains of unfortunate birds who failed to get out of the way in time. But back in the revenue seats, the experience is sublime. Even as the French countryside shoots by in a blur, you won't see so much as a ripple in your wine glass, and even the coach seats are bigger than what you would find in first class on an airplane. The service has proven to be a great commercial success. As with other high-speed rail lines in Europe, it generates an operating profit. The capital cost of constructing the first TGV line between Paris and Lyon was recovered within twelve years, and newer lines are well on their way to paying for themselves as well. The social returns, in the form of reduced airport and road congestion, pollution, and energy use, have also been high, as have been the returns in the form of economic development. Lille was once one of the most economically depressed cities in France. Now served by high-speed trains that put Paris and Brussels just an hour away and London an hour and a half, as well as by other high-speed lines providing easy connectivity to other major Continental cities, Lille is no longer a dying "flyover city" but a quickly expanding commercial hub. But as great as it would be to have passenger service as fast and elegant as the TGV in the United States, there are many reasons not to put our first dollars into such an ambitious project. First off, building a truly high-speed rail system in today's America would be so expensive, disruptive, contentious, and politically risky that it just might not be possible. It would require, for example, securing brand-new rights-of-way, because trains traveling at more than around 125 mph can't share tracks with slower freight or passenger trains. This in turn would require using eminent domain to secure millions of acres of real estate, and these days, in the U.S., that would ￼involve endless litigation, environmental review, and the innumerable other processes that always stand to derail any large-scale infrastructure project. Plans to build a high-speed rail in California between San Diego and the Bay Area are now foundering for precisely this reason. Big showcase high-speed projects in Texas and Florida flopped in the 1990s for the same reason, plus another: the shifting currents of polarized American politics. Under the governorship of the late Democratic Governor Lawton Chiles, Florida committed to building a true high-speed line connecting Tampa, Orlando, and Miami. Both the government and private companies s pent millions to conduct feasibility and environmental studies, survey the route, secure financing, and develop elaborate project management and business plans. But then, just as the project became "shovel ready," Florida elected Republican Jeb Bush governor, and he promptly pulled the plug despite widespread public support for the project. Last February the same thing happened again, when newly elected Florida Republican Governor Rick Scott decided to reject $2 billion in federal funds that the Obama administration wanted to use to revive the project that Chiles had set in motion more than seventeen years ago. Quite apart from these bureaucratic and political barriers to an American TGV, there's also an economic question that needs to be asked for any given rail corridor: just how fast does high- speed rail need to go in order to gain a meaningful market share? The typical answer is "fast enough to beat air and auto travel times," but achieving that optimum speed is rarely just a matter of buying suped-up trains. Often boosting top speeds up to 180 mph or more, while requiring enormous increases in capital spending and geometric increases in energy use, does little to increase average speed, which is what really counts. Total trip times, especially on runs of less than 200 hundred miles or so, are typically far more affected by a train's slowest moments than its fastest. On Amtrak's forty-mile run between Washington, D.C., and Baltimore, for example, trains run as fast as 125 mph on some segments. But because all trains on the line must spend a long time creeping through the yard at Washington's Union Station and through antiquated tunnels under Baltimore Harbor, the average speed of even the fastest scheduled train, the vaunted Acela, is only 83.4 mph. Increasing speeds on the slowest segments of the line would do as much or more to shorten travel times as making the fastest speeds faster, and wouldn't require an expensive new right-of-way or new equipment. As it is, Amtrak's service between Washington and Boston is already highly successful, even if it does not qualify as high-speed rail by world standards. The top speed obtained by any train is 150 mph, and that happens only in a brief segment of Rhode Island. The average speed is much lower, even to the point that the schedule today between New York and Boston is only nineteen minutes faster than that achieved by the New Haven Railroad's "Merchants Limited" in 1954. But today's service is fast enough for Amtrak to dominate the travel market among the intermediate points along the corridor. Tellingly, almost no one rides all the way from Boston to Washington, which takes seven hours on the Acela and costs more than flying. But the trains are nonetheless full despite steep fares, and ridership continues to mount. ￼That's because most passengers are traveling between intermediate points where existing train service is more than competitive with alternative modes, such as battling the traffic on I-95 or catching a flight. Compared to airlines, for example, Amtrak has virtually a 100 percent market share of passenger trips between Philadelphia and New York, a 60 percent share between Washington and New York, and a 50 percent share between New York and Boston. On each trip between Washington and Boston, more than half the passengers will get off at either Philadelphia or New York and are replaced by other passengers. From the travelers' point of view, it doesn't matter much whether the train goes 150 mph or even 300 mph, since they will only be on it for a short time anyway. What matters to them far more is that the trains are frequent, pleasant, reasonably priced, and reliable. Recently, after Florida rejected federal money for its high-speed project, U.S. Transportation Secretary Ray LaHood redirected $795 million to upgrade some of the most heavily used sections of the Northeast Corridor. This money will increase speeds from 135 to 160 miles per hour on critical segments, but much more importantly it will improve on-time performance and add more seats to accommodate the continuing surge in ridership. This principle is also illustrated by Amtrak's highly successful "Cascades" service on the 187- mile line between Portland and Seattle. The Spanish-designed Talgo "tilt" train sets look futuristic, and with their on-board bistros and comfy chairs they are a joy to ride. But because they run on conventional track through mountainous country shared by freight trains, their current top speed is only 79 mph, and their average speed is just 53. Still, that's enough to make taking the train faster than driving, and ridership has swelled to more than 700,000 passengers a year. Using federal stimulus dollars plus state spending, work is currently under way to boost top train speeds to 110-125 mph, simply by adding better signaling and more sidings to let freight trains get out of the way. This incremental investment will also boost reliability and allow for increased frequency, which will further bump up ridership. But numerous studies show there is no point in making trains go faster than 125 mph on a segment this short because of the great cost involved and the limited gains to total trip times. Moreover, if a new bullet train line were built between Portland and Seattle, the tremendous cost of its construction would require fares too high for all but well-heeled business travelers to afford. The same considerations apply even on much longer segments. In many instances conventional train service is, or could be, competitive with flying or driving, if only it were more frequent and reliable. For example, when I need to travel from my home in Washington, D.C., to Chicago, I am always tempted to take a sleeper car on Amtrak's "Capitol Limited," and frequently do. Though it never goes faster than 79 mph, the train is scheduled to leave Washington at 4:00 p.m. and to arrive in Chicago at 8:45 a.m. To make a morning meeting in Chicago by plane, I would either have to fly out the night before and rent a hotel room, or get up at some ungodly hour on the same day and arrive frazzled. Either way, taking the plane requires schlepping my way to and from airports on both ends, while also enduring the hassle and uncertain duration of airport security. In the wintertime, I'm also far more likely to be stranded by snowstorms if I take the plane, and, of course, dinner in the diner sure beats airplane food. ￼But while the Capitol Limited is fast enough to be more convenient than flying when it's on time, it frequently runs hours late, even in fair weather, due to competition with freight trains. So I can't count on it for business travel to Chicago unless my meeting is in the afternoon. Even with that poor track record, sleeper cars on the Capitol Limited are often sold out weeks in advance, such is the surging popularity of this way of travel among professionals who have had it with air travel. All Amtrak needs to build a much larger market share would be better on-time performance, and this, in turn, would require only incremental investment in new sidings and track capacity to make sure freight trains don't get in the way. Frequency of service is also often more important than top speed. Only two passenger trains serve Cleveland, for example, and both come through, in both directions, between 12:59 and 5:35 a.m. It's surprising how many people use these trains nonetheless. Recently, after business in Cleveland that kept me there late, I decided to take a sleeper car home rather than spending an extra night in a hotel room and flying out in the morning. I counted some seventy-five people in the waiting room even at two a.m. Many more would be taking the train in and out of Cleveland if only there were reliable daytime service to nearby points such as Pittsburgh, Toledo, South Bend, Akron, Indianapolis, or Chicago, all of which could be reached by conventional trains in far less time, and at far less cost, than flying. (Sadly, Ohio Republican Governor John Kasich has rejected $400 million in federal stimulus funds that would have had such service up and running in short order. Republican Governor Scott Walker has waved away more than $800 million in federal money that would have brought similarly practical and thrifty passenger rail service to the Chicago, Milwaukee, Madison, and St. Paul corridor.) Providing connectivity to small towns and midsize cities that currently lack affordable air service, or any air service at all, is one of the most important potential benefits of passenger rail, and you don't need 300-mph bullet trains to pull it off. Conventional trains running between Washington and such nearby cities to the south as Richmond, Charlottesville, Durham, and Charlotte already attract a growing ridership, and would attract a larger one if they were more frequent and reliable, as well as better integrated with trains running north of D.C. along the Northeast Corridor. The minimal investment needed in new track capacity would also improve freight service, thereby getting more trucks off the road and improving the driving experience for those who don't want to take the train. It also would likely spur a good amount of economic development. Midsize cities such as Lynchburg or Petersburg, Virginia, which once thrived because of their strategic position on the nation's rail map, might experience a real estate boom if it were possible to live there and still have easy access to the business opportunities and cultural amenities of Washington, Philadelphia, or New York. Projects currently under way will do the same for cities like Kalamazoo, Michigan, and Springfield, Illinois, by providing improved connections with Chicago. Making such incremental improvements might not stir the hearts of Americans the way eclipsing the French or the Chinese in high-speed rail might, but it's still a sensible course that will gradually start rebuilding a rail culture in the U.S. As more and more Americans outside the Northeast Corridor experience practical, reliable, conventional train service that beats flying or driving, the constituency for super-expensive, super-fast trains will build as it has abroad. Until then "fast enough" high-speed rail is good

### Rail infrastructure improvements must be planned

#### Current planning and restrictions impede rail development; must overcome those to build an effective system

Brown, 2010 ( Stuart F. Contributing editor, Revolutionary RAIL Scientific American, May, Vol. 302 Issue 5, p54-59, 6p, )

Exclusive Access ￼Regardless of whether maglev or conventional rail-on-wheels technology is used, an inviolable requirement for safe fast-train operation is having special tracks dedicated to the high-speed trains, no exceptions permitted. That is where Amtrak's pokey Acela line, which shares its route with freight and slower passenger trains, was born to fail. Another necessity is laying out the track so that there are no grade-level crossings, which is where most crashes happen involving trains and road-going vehicles. Time and time again, people try to drive around a closed crossing gate to beat the train, or pedestrians who are unaware that oncoming locomotives project very little sound in front of them notice a train when it is too late to escape. Depending on a route's terrain, lots of overpasses, underpasses and tunnels may be needed to keep the rest of the world out of the exclusive path of the fast trains. Why has it taken so long for the U.S. to get onboard with technologies that are already ripe? The short answer: passenger trains have not been a federal priority for quite some time. The nation spent decades building interstate highways and airports; investment in tracks suitable for fast trains dwindled to almost nothing. American railroads became almost exclusively low-speed haulers of heavy freight. But the recent push for green transportation, along with the realization that the nation's highways and airports are already operating past capacity, could bring fast trains into vogue--at least in a few key regions of the country. The Benefits of Rail HEAD-TO-HEAD The rail line that stretches the 320 miles between Tokyo and Osaka in Japan demonstrates a few of the benefits of high-speed trains. The figures below all refer to a one-way trip between the central business districts of each city. Cost of journey Total time Carbon dioxide emitted $200 6 hours 45 minutes 209 pounds $225 $130 4:15 2:25 178 50 SOURCES: U.S. Government Accountability Office, Reuters, Bureau of Transportation Statistics, Japan Central Railway. THE FEDERAL EXPRESS FUNDING In January the government announced the recipients of $8 billion in stimulus funds for high-speed rail. The biggest individual slices went to true high-speed projects in California and Florida; the rest of the money will be used to incrementally improve passenger service on lines shared with freight trains. The colored lines below mark all projects awarded more than $25 million; the boxes highlight the five biggest winners. CAR PLANE TRAIN LOS ANGELES-SAN FRANCISCO $2.34 billion The infusion adds to a $9-billion bond approved by voters in 2008. CHICAGO-ST. LOUIS $1.10 billion Track signal upgrades will increase top speeds from 79 to 110 mph. MADISON-MILWAUKEE $810 million Most of the funds will go toward building new and refurbished stations. RALEIGH-CHARLOTTE $520 million Nearly 30 piecemeal projects will bump passenger service up to 90 mph. TAMPA-ORLANDO $1.25 billion The 84-mile project requires new track that is physically separated from roads and freight traffic. SOURCE: U.S. Department of Transportation

### US is behind other countries in HSR development

#### Technology exists for high speed rail; US lacking infrastructure to effectively implement HSR

Brown, 2010 ( Stuart F. Contributing editor, Revolutionary RAIL Scientific American, May, Vol. 302 Issue 5, p54-59, 6p, )

High-speed trains are coming to the U.S. America is an absurdly backward country when it comes to passenger trains. As anyone who has visited Europe, Japan or Shanghai knows, trains that travel at nearly 200 miles per hour have ￼become integral to the economies of many countries. With its celebrated Tokaido Shinkansen bullet trains, Central Japan Railway has for the past five decades carried billions of passengers between Tokyo and Osaka in half the time it would take to fly [see box on next page]. A new Madrid-to-Barcelona express train runs at an average speed of 150 miles per hour; since its inception two years ago, airline traffic between the two cities has dropped by 40 percent. In contrast, Amtrak's showcase Acela train connecting Boston to Washington, D.C., averages just 70 mph. That figure is so low because many sections of the Acela's tracks cannot safely support high speeds, even though the train itself is capable of sprints above 150 mph. Think of it as a Ferrari sputtering down a rutted country lane. There has been a recent push to change all this. Earlier this year the Department of Transportation announced the recipients of $8 billion in stimulus funding designed to spread high- speed rail across the U.S. The 2010 federal budget requests an additional $1 billion in rail construction funds in each of the next five years. And in 2008 California voters approved a $9- billion bond measure to initiate an ambitious high-speed rail network that would connect Los Angeles to San Francisco and, eventually, Sacramento and San Diego. Questions remain, however, about exactly what kind of passenger system will be built. In the decades since the federal government last pursued rail as a viable way to transport passengers-- not just freight--train technology has advanced significantly, with advanced high-speed lines spreading through Europe and, more recently, across mainland China. And what exactly qualifies as "high speed" by the guidelines of the stimulus funding is open to interpretation.

### \*\*Advantage Extensions/Responses\*\*

### HSR Good for the Environment: Local efforts

#### HSR is a good long-term investment with many benefits

Center for American Progress 2008 (July 24, 2008, “Idea of the Day: Invest in Low-Carbon Transportation Infrastructure”, http://www.americanprogress.org/issues/ideas/2008/07/072408.html)

Less fuel-intensive transportation options means less greenhouse gases. To boost greater use of alternative low-carbon transportation we propose new investment in more diverse and intermodal transportation networks such as local mass-transit networks, regional and interstate long-distance high-speed rail systems, and green city programs to encourage the redevelopment of urban areas and reduce long commutes and suburban sprawl. Investing in new infrastructure for smart growth and transportation alternatives has many spin-off benefits, increasing property values (especially near transit networks), creating high skill construction jobs, providing real transportation choices for commuters, investing in more livable communities, and increasing job access for low-income workers. Investing in a more diverse and intermodal transportation network is a long-term strategy for meeting climate challenges and a critical part of an integrated approach to reducing our nation’s carbon footprint. Currently, demand for federal funds to initiate mass transit construction projects far outstrips federal budget allocations. We can increase incentives for communities to build better and more effective transit systems by increasing the percentage of the federal match for new mass transit rail networks and high speed bus systems, and by strengthening federal programs that promote mass transit ridership through workplace and other incentives. At the state and regional level, we can also have great impact on reducing long-distance automobile travel by promoting the construction of new high-speed rail corridors in the Midwest, South, and West Coast, and by upgrading the already successful rail projects in the Northeast. In our cities, too, we can promote denser, more desirable, and pedestrian-friendly neighborhoods by funding programs that redevelop abandoned and polluted urban lands close to transit networks—specifically by funding the expansion of the highly successful Brownfields program, which has brought much blighted urban land into vibrant and productive use. Rebuilding our metropolitan regions to promote new modes of transportation that in turn promote shorter commutes is ultimately a critical step toward creating a low-carbon economy.

### Solvency-Plan reduces automobile emissions

#### The plan halves automobile emissions

**CCAP, environmental research group, 6**—environmental think tank, in collaboration with the Center for Neighborhood Technology, a think tank dedicated to local sustainability (January, “High Speed Rail and Greenhouse Gas Emissions in the U.S.”, The Center for Clean Air Policy, <http://www.cnt.org/repository/HighSpeedRailEmissions.pdf>, AL)

Results

We calculated a total emissions savings of **6 billion pounds of CO2 per year** (2.7 MMTCO2)23 if all proposed high speed rail systems studied for this project are built (Table 2). Overall, high speed rail is estimated to generate approximately **half of the gross emissions it saves** by enabling passengers to switch from other modes. Savings from cancelled automobile and airplane trips are the primary sources of the emissions savings; together these two modes make up 80 percent of the estimated emissions savings from all modes. The total emissions savings vary greatly by corridor, however, as do the source of those savings, as shown in Figures 3 and 4. Figure 4 looks at the emissions for every corridor except California, because its large potential savings overshadows the other corridors studied when the corridors are considered together.

### Competitiveness: HSR part of green effort

#### **HSR key to competitiveness**

Furnas 2009 (,Ben, April 24, 2009,“Idea of the Day: Seize the Energy Opportunity or Slip Further Behind”,http://www.americanprogress.org/issues/ideas/2009/04/042409.html, Center for American Progress)

China’s leaders are investing $12.6 million every hour to green their economy. Other countries are equally energetic in their embrace of alternative energy technologies; they are setting targets and investing billions of dollars to spur the development of entirely new markets in wind, solar, geothermal, biofuels, energy efficiency, high-speed rail, and other clean and innovative solutions to global warming. The United States, too, is poised to transform its economy to create millions of new jobs and help create a cleaner, safer planet by investing in a green, renewable-energy based economy. The Obama administration wants to unleash the ingenuity of our private sector to rein in pollution and put millions of Americans back to work. Yet China is spending twice as much as the American Recovery and Reinvestment Act spends to lay the foundations for a green energy economy, despite the U.S. economy being 1.5 times as large as China’s. And across Europe and Asia, other governments have diversified their energy portfolios and encouraged entrepreneurs to start and expand clean and renewable energy companies. There is no reason why the United States shouldn’t lead the world in renewable energy. Start-up companies across our country should be developing the solar panels of the future for deployment in the Southwest and on rooftops with good exposure to the sun nationwide. Wind turbines should be sprouting across our Great Plains and our coastlines. Thermal energy captured beneath our mountains and beneath our homes should be part of our alternative energy mix. And as a nation we should be developing and deploying the battery technologies needed to power the hybrid cars built in auto factories in the Midwest and elsewhere—alongside a smart electric grid capable of helping all Americans save on energy costs and combat global warming. The rest of the world is seizing this opportunity. If we seize it with them, then together we can save the planet and develop China, the European Union, and the rest of the world as our customers.

### Competitiveness: HSR key

#### HSR key to economic growth and competitiveness

The Washington Post 2011 (Ashley Halsey, February 9, 2011 Wednesday, “More funds planned for trains”, SECTION: A-SECTION; Pg. A03, http://www.lexisnexis.com/hottopics/lnacademic/?)

PHILADELPHIA - The Obama administration wants to invest $53 billion in high-speed and intercity rail service in the next six years, expanding a signature transportation initiative it already has targeted with $10.5 billion. The plan to spend billions more on a vast high-speed-rail network was cast by the administration as vital to keeping the United States competitive with world markets that already use the technology. "Public infrastructure investment raises private-sector productivity," Vice President Biden said Tuesday, continuing a theme struck by the president in his State of the Union speech last month. "They literally are the veins and arteries of commerce." Biden and Transportation Secretary Ray LaHood announced the plan Tuesday in Philadelphia's majestic 30th Street Station. Obama's budget for fiscal 2012, which will be sent to Congress next week, includes $8 billion for the plan. There is bipartisan support for construction of high-speed rail but sharp disagreement on whether it should be funded with tax dollars or through private investment. The proposal drew immediate criticism from House Transportation Committee Chairman John L. Mica (R-Fla.), who favors construction of high-speed rail largely with private funds. "This is like giving Bernie Madoff another chance at handling your investment portfolio," Mica said in a statement. "With the first $10.5 billion in administration rail grants, we found that . . . what the administration touted as high-speed rail ended up as embarrassing snail-speed trains to nowhere." Although Biden spoke in more modest terms, high-speed advocates envision a network of 17,000 miles of rail capable of handling trains traveling at 220 mph. The U.S. High Speed Rail Association has estimated the price tag at $600 billion over the next 20 years, a cost that critics say the nation cannot afford. The White House push for high-speed rail construction was launched with $8 billion in stimulus act funding. Later LaHood added $2.5 billion to boost the effort in 23 states. California has received the bulk of the awards - about $3 billion total. Virginia received $45.4 million in the last round of funding to help pay for studies and preliminary engineering to improve service between Richmond and Washington. But more than half that money went for trains that travel much slower than the 150 to 220 mph common in Europe and Japan. The proposal to allocate $8 billion in the next fiscal year spreads the money across three types of train travel: construction of high-speed corridors, creation of regional systems for trains capable of speeds from 90 to 125 mph and provisions for slower feeder lines into the high-speed network. Critics have argued that a car-loving nation will not be won over to train travel in sufficient numbers to justify the federal investment. Two recently elected GOP governors, Scott Walker of Wisconsin and John Kasich of Ohio, plan to forgo $1.3 billion in federal high-speed-rail funding and focus instead on highway improvement. According to the Associated Press, Rep. Eric Cantor (Va.), the second-ranking House Republican, urged the administration to involve the business community in its high-speed-rail plans. "I'm not in favor of additional monies that we don't have to be spent on those projects and would certainly look for ways to leverage the private sector to get it involved," Cantor said. In announcing the plan Tuesday, Biden twice mentioned that he took more than 7,900 round trips on Amtrak trains between Washington and his home in Delaware during his years in the Senate. He said transforming rail service to match the high-speed lines proliferating in China and Europe is essential to continued prosperity. He said the United States "taught the world" about transportation in the 19th and 20th centuries. "If we don't get a grip, folks, they're going to be teaching us," he said. "They're going to own our kids." Biden said building rail lines would relieve highway congestion on the East and West coasts, where most Americans live, and put people back to work. "Right now, nobody makes these [trains] in America,”he said. "Our long-term commitment is going to give birth to a new industry." The American Public Transportation Association endorsed the administration's plan to invest more in high-speed rail. "Investing in our country's transportation infrastructure is vital for economic growth, competitiveness and quality of life," said William Millar, president of the public transportation association. "In addition, the formation of a high-speed-rail network that connects to public transportation will relieve both highway and aviation congestion." Mica urged the administration Tuesday to focus its spending on the crowded Northeast rail corridor and not to "squander limited taxpayer dollars on marginal projects." Last fall Amtrak announced a 30-year plan to invest $117 billion in developing high-speed rail in the Northeast corridor. Amtrak President Joseph Boardman has said the system would reduce the travel time between Washington and New York City from 162 minutes to 96 minutes and the New York-Boston time from 215 minutes to 84. However, Mica's disdain for Amtrak is as well established as Biden's love for it. "Amtrak's Soviet-style train system is not the way to provide modern and efficient passenger rail service," Mica said.

### Uniqueness: Competitveness: US declining

#### US competitiveness declining

Moon, 2004 (Bruce, E., Professor at Lehigh University, The United States and Globalization: Struggles with Hegemony, July 23, 2004)

Since the 1970s, when the United States began to experience a changing pattern of comparative advantage, the uniqueness of the American experience with globalization has eroded. In 1970, trade was a smaller share of GDP in the U.S. than in any other developed country. Indeed, by one measure it was barely half that in the second most insulated nation, Japan. Since then, trade has grown rapidly in the U.S., though the U.S. economy remains very much less exposed to foreign trade than most, with an export share about a third of the average European level. ￼ The expansion in trade volume has been dramatic, but it is its unbalanced character that has most changed the political dynamic of policy discussions. Greater opportunities in the export realm certainly have benefitted high technology goods and financial service sectors, among others. However, the U.S. has lost competitiveness in basic manufacturing, especially in industries whose well-paying blue-collar jobs have provided much of the vaunted social mobility that remains central to America’s self-image, such as autos and steel. Moreover, with the widely publicized outsourcing of white collar jobs, the impact of declining competitiveness is no longer restricted to odd corners of the economy or to the margins of the political system. A $500 billion annual trade deficit in recent years is testimony to how wide-spread is the vulnerability of American firms and American workers to the foreign competition unleashed by globalization

### Competitiveness: Infrastructure Key

#### **Infrastructure key to global competitiveness**

Puentes, 2011 (Robert, Senior Fellow, Brookings Institution, Infrastructure Investment and U.S. Competitiveness, April 5, 2011, <http://www.cfr.org/united-states/infrastructure-investment-us-competitiveness/p24585>)

Infrastructure is central to U.S. prosperity and global competitiveness. It matters because state-of-the-art transportation, telecommunications, and energy networks--the connective tissue of the nation--are critical to moving goods, ideas, and workers quickly and efficiently and providing a safe, secure, and competitive climate for business operations. But for too long, the nation's infrastructure policies have been kept separate and apart from the larger conversation about the U.S. economy. The benefits of infrastructure are frequently framed around short-term goals about job creation. While the focus on employment growth is certainly understandable, it is not the best way to target and deploy infrastructure dollars. And it means so-called "shovel ready projects" are all we can do while long-term investments in the smart grid, high-speed rail, and modern ports are stuck at the starting gate. We often fail to make infrastructure investments in an economy-enhancing way. This is why the proposal for a national infrastructure bank is so important. So in addition to the focus on job growth in the short term, we need to rebalance the American economy for the long term on several key elements: higher exports, to take advantage of rising global demand; low-carbon technology, to lead the clean-energy revolution; innovation, to spur growth through ideas and their deployment; and greater opportunity, to reverse the troubling, decades-long rise in inequality. Infrastructure is fundamental to each of those elements.

### HSR improves global trade

#### **Investment in US rail network, including crossing international borders, improves US ability to maintain global trade and improving competitiveness; federal involvement is key**

Ziolkowski 2012 (Michael F. , State University of New York, College at Brockport, The ties that bind: freight and passenger high-speed rail are interdependent

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The United States rail network is part of the global supply chain No conversation about rail in the United States should exclude the nature of traffic that is carried today and predicted in the future. This paper argues that passenger and freight rail invest- ments are symbiotic. Supply chains transcend national boundaries so the United States rail network is but a part of the larger supply networks (Cowen 2010). Some planning of HSR suggests links to Canadian cities such as Vancouver, Toronto, and Montreal may help to make HSR in the northwest and northeast USA viable.2 Yet, many transportation planning studies of American railroads have not followed the supply chain over international borders, where many shipments originate and are destined, in their infra- structure planning (NYSDOT, 2009; Cambridge Systematics, 2007; Wilbur Smith Associates, 2010). These plans are largely bounded by their authors’ reality and sphere of influence not by the paths, nodes, and borders of the global supply chain. The problem is illustrated by Figs. 1 and 2. Fig. 1shows a typical map from a rail plan focused on the perspective of the political jurisdiction of the transport planners and not on the reality of cross-border supply chains. Fig. 2 is a somewhat better reflection of the United States’ rail transportation network as nested in the global supply chain.3 Containers from Asia, for example, are inducted into the rail network on the west coast of North America and flow east. Increases in containerization volume have put great pressure on inland ports and have created bottlenecks, which impede com- merce (Rodrigue, 2008). The widening of the Panama Canal is pre- dicted to shift the induction of containers destined for the eastern seaboard of North America from west coast ports to east coast ports (Severson, 2010). It is anticipated that this will shift signifi- cant container traffic along new supply chains, and will open 2 For example, Vermont Agency of Transportation’s Boston – Montreal HSR Planning and Feasibility Study: www.aot.state.vt.us/Planning/BostonRail.htm. Although more could be done to show the intermodal nature of global supply chains in this figure it illustrates the point. potential new routes into the interior of North America, causing more constraints for both freight and passenger operators. ‘‘Thru- ports,’’ or inland intermodal facilities, may further develop (Rodri- gue, 2008). New Jersey could receive containers destined for Canada increasing the pressure on the existing rail infrastructure and key bottlenecks. For example, the International Bridge at the Niagara River (Fig. 3) built in 1873 carries more than ten percent of Canada’s trade and this route overlaps proposed HSR projects. Based upon secret United States State Department documents that were disclosed in the past year by Wikileaks (National Post, 2010), many rail links between Canada and the United States are considered critical to the minimal functioning of the US economy. Investments in rail infrastructure should focus on upgrading the weakest links in the system. Fig. 4 represents the precarious nature of the nation’s infrastructure. Much of the national railroad infrastructure was built in the first half of the last century and is maintained, but under- engineered, for modern standards and projected uses. As private property, it is lightly regulated, if at all; there is little that the gov- ernment can do to force regular maintenance or replacement of the railroad infrastructure. Presumably, corporations have factored the risk of failure into their operating plans. Upgrades in passenger rail transportation, however, are important for our economic future and national security. A greater and present risk to the economy is the deteriorated and outdated freight rail infrastructure linking glo- bal supply chains. A sound multimodal transportation framework is a necessary component—and prerequisite—for both strong national security and competitiveness. The government can help create a more level playing field with highway, water, and air transportation through the continued investment in our rail infrastructure. The current stimulus package is an excellent start, but it is a one-shot investment, albeit one designed to actually invest in tangible projects with multiplier effects, rather than to simply hand money to investment banks. Longer term, however, what is needed are dedicated and perma- nent streams of state and federal funding and an overhaul of rail regulations to ensure the upkeep of our infrastructure.

### Adv Impact: US Hegemony good

#### **US hegemony key to stability and globalization**

Moon, 2004 (Bruce, E., Professor at Lehigh University, The United States and Globalization: Struggles with Hegemony, July 23, 2004)

Most nations can only react to globalization, but the United States, as the system’s dominant economic and political actor, is also able to affect the speed and character of the globalization process itself. By promoting the institutions that integrated national economies after World War II, it appears that the U.S. acted as predicted by hegemonic stability theory (HST).1 As American economic dominance later faded, the global system drifted away from the coherence of its original Bretton Woods design. The result is a chaotic patchwork of inadequate governance at the system level, while the management of trade relations has fallen increasingly to the regional level. Both patterns lend credence to HST explanations centered on the relative decline of the hegemonic power, but they tell only part of the story. America’s distinctive foreign policy tradition and peculiar political, economic, and social structure offer a further explanation for the character of the globalization that has emerged. The idiosyncratic vision and reluctant hegemony of the United States also explains why globalization’s core institutions lie in crisis while the negotiations to rescue them stagger on the verge of collapse. At the end of World War II, the United States exhibited the two most important characteristics required of a candidate to champion global liberalism.2 First, it possessed the dominance that affords a hegemon both the greatest incentive and the greatest capacity to advance globalization. As the most productive economy, it was the most likely to benefit from open goods markets. As the largest source of both supply and demand for capital it was also the most likely to exploit open capital markets. Its power could be used to persuade or coopt a majority of nations, compel most of the remainder, and isolate the few dissenters. Second, the liberalism of the American domestic economy demonstrated that “its social purpose and domestic distribution of power was favorably disposed toward a liberal international order”.3 However, America’s dominance is accompanied by a profound isolationism that induces episodic and inconsistent unilateralist impulses. Furthermore, American liberalism is colored by unique circumstances that make the U.S. commitment to it only skin-deep. The effects of these eccentricities were discernible in the Bretton Woods design but eventually became dominant in both American policy and the global regime it sponsored. Today they threaten the continued viability of the international architecture that has governed the process of globalization for more than half a century.

### **Adv Impact: US Hegemony key to world peace**

#### **US hegemony key to maintaining world peace, empirics prove**

Odom, 2007 (William, Lieutenant General (Retired), United States Army Adjunct Professor of Political Science, Yale University, American Hegemony: How to Use It, How to Lose It, <http://www.middlebury.edu/media/view/214721/original/OdomPaper.pdf>

For most of the Cold War, American leaders used our hegemony with remarkable effectiveness. The Marshall Plan is merely one of many examples. Stabilizing Northeast Asia during and after the Korean War is another. Less well remembered is bringing West Germany into NATO against strong French resistance. Once the Soviet Union made unambiguous its intent not to support restoration of a united Germany, the United States began pushing for the reconstruction of Germany and a Western security system. France, having engaged Britain in the Dunkirk Treaty (a bilateral hedge against Germany), resisted multilateral arrangements. British initiatives, however, eventually helped Washington to create the North Atlantic Treaty Organization against French preferences for a network of bilateral treaties. By letting these initiatives come from European states themselves, Washington positioned itself to guide the process benignly toward a large multilateral solution. By contrast, had the United States taken the initiative unilaterally, its efforts would have left Washington at odds with most Western European states and probably killed any serious chance of forming NATO before the Korean War. Only when the Korean War broke out did the United States take the near-term Soviet military threat seriously and begin to advance the idea of German rearmament. When France used the concept of the European Defense Community (EDC) to block German rearmament, Washington sought to use the EDC to justify German sovereignty. For two years, Washington danced around French blocking tactics, and while Paris refused to dissolve its own army into the European Defense Community, by 1955 it finally accepted Germany’s sovereignty and its membership in NATO. Had the United States insisted on that outcome in 1952 or 1953, it might well have destroyed the Atlantic alliance. This pattern of letting our allies take the initiative, nudging, encouraging, not demanding, often adjusting to European concerns, and getting help from some countries in convincing those that resist, produced constructive outcomes. For example, the doctrine of “forward defense” for NATO in 1967–68, the third attempt at an agreed overall NATO defense plan (MC 14/3), was achieved in precisely this way, with a European-led study (the Harmel Report) advancing a compromise. We saw this pattern again, both in the decision to deploy intermediate-range nuclear forces in Europe during the Carter administration, and in successfully deploying them against much Soviet- backed and inspired European public opposition during the Reagan administration. Yet, none of these examples can rival what American leaders accomplished through the reunification of Germany in 1990. This was the largest strategic realignment without a major war in the history of modern Europe—a feat so spectacular that it is unlikely to be rivaled any time soon in the history of diplomacy. Although today we tend to take Germany’s successful reunification as foreordained, it was not. Had the Europeans had their way in a straight up or down vote, only two countries, the United States and West Germany, would have voted for it. In that event, Germany would have reunited anyway, but outside of NATO, while a rump Warsaw Pact would have survived. Europe then would have been without the European Union, and the continent would have experienced profound political and military turmoil. Yet, through skillful diplomacy backed by overwhelming U.S. military and economic power, President George H. W. Bush backed German Chancellor Helmut Kohl in cutting a deal with Moscow. Bush then split Prime Minister Margaret Thatcher—the most adamant opponent of German unification—from a far less adamant opponent, President Francois Mitterand, to push through NATO approval. While Bush cornered Thatcher, Kohl appeased Mitterand by promising to push through the Maasstricht Treaty. Thus Germany was reunified within NATO, the European Union was soon born from the Maasstricht Treaty, and both the Warsaw Pact and the Soviet Union collapsed. Not even the hardest of American hardliners against Soviet power would have believed that this outcome was possible. Make no mistake: future historians will judge this achievement as among the greatest diplomatic feats ever accomplished. It certainly took skill, but what truly made it possible was the intelligent exercise of hegemonic American power via U.S. military guarantees and international institutions like NATO.

### Emissions—National

#### Substantial benefits across the US

**CCAP, environmental research group, 6**—environmental think tank, in collaboration with the Center for Neighborhood Technology, a think tank dedicated to local sustainability (January, “High Speed Rail and Greenhouse Gas Emissions in the U.S.”, The Center for Clean Air Policy, <http://www.cnt.org/repository/HighSpeedRailEmissions.pdf>, AL)

Our modeling shows that high speed rail, if built as planned, will generate **substantial GHG savings** in all regions. The total emissions savings vary greatly by corridor, however, as do the source of those savings. In some regions, such as the Midwest, the impact on air travel is likely to be modest; our analysis shows just a 7 percent decrease in flights from today’s levels. In California, on the other hand, **19 million passengers are projected to switch from air**—a volume that would result in 114 percent of today’s 192 million annual direct flights in the corridor being cancelled. Such ridership levels may be an overestimate, or may be possible if projected growth in air travel and indirect flights, including those from outside the corridor are included. To draw so many air passengers to rail will certainly require that high speed rail ticket prices be competitive with air and that service be as convenient and time-efficient. It is worth further study to see if such high levels of mode shifting are likely. In some respects, the California system, as it is currently planned, represents what will be the second generation of high speed rail in many of the other corridors. While areas like the Pacific Northwest may increase ridership sooner with an incremental approach to high speed rail that uses existing rail routes, the success of a new high speed rail system like California’s could **prove the value of faster trains** with higher upfront capital costs.

### Emissions—HSR Solves

#### HSR massively decreases emissions

**Rogers, JD, 11**—JD from U of Illinois College of Law, BA in Economics from U of Utah (Joshua, Spring 2011, “THE GREAT TRAIN ROBBERY: HOW STATUTORY CONSTRUCTION MAY HAVE DERAILED AN AMERICAN HIGH SPEED RAIL SYSTEM”, U. Ill. J.L. Tech. & Pol'y 215, p. lexis)

American transportation will become more efficient, if high speed rail is [\*222] used. Of the three major forms of land transportation (automobile, airplane, and passenger rail), traditional passenger rail already expends the least amount of energy per passenger mile n54 and, despite moving two to three times faster, high speed rail is actually more energy efficient than traditional passenger rail. n55 Also, with every passenger mile serviced by high speed rail, the other forms of transportation service less passenger miles. n56 It is estimated that a high speed rail network would annually reduce automobile travel by 29 million trips and reduce air travel by approximately 500,000 flights. n57 For automobile travel, less cars on the road, means less wasted energy spent in traffic and for air travel, this means less wasted energy through delays. In other words, less transportation congestion and, thus, increased efficiency across all modes of intercity passenger travel. A high speed rail network would reduce the U.S.'s negative impact on the environment. As recently as 2006, the U.S. emitted 5,902.75 million metric tons of carbon dioxide (CO2) annually, n58 placing the U.S. second, behind China, among the world's countries in total annual CO2 emissions. n59 Moreover, the U.S. placed second, behind Australia, in per capita CO2 emissions among countries with a population of more than 10 million. n60 As the largest CO2 emitter among end-use sectors, n61 transportation constitutes approximately one-third of all CO2 emissions in the U.S. n62 High speed rail employs "green" technologies that consume one-third less energy per passenger mile than automobile travel. n63 Also, high speed rail would transport passengers closer to their city center destinations, thereby, reducing unneeded energy consumption by additional travel to and from airports. n64 It is estimated that a high speed rail network would result in an annual reduction of 6 billion pounds of CO2 emissions for the U.S. n65 These statistics have led several [\*223] environmental groups, such as the Center for Clean Air Policy n66 and the Sierra Club n67 to endorse a U.S. high speed rail system.

### AT Warming—Methane/Livestock

#### Cows have a minimal impact

Wheat, 8 – Ph.D. Biology and Consultant (Dr. David, personal blog, <http://sxxz.blogspot.com/2008/01/do-cow-farts-cause-global-warming.html>)

Cows can digest things we can't, especially including the cellulose in grass and grain. They do this by maintaining cultures of microorganisms in their complicated series of "stomachs" that can break down cellulose. The cows then digest the microbes and the sugars and fatty acids they produce. (Brief overview of ruminant digestion here. If you are interested in delving into the digestive physiology of ruminants in more detail, start here.) Some of these microbes produce methane (CH4). Some of the other microbes can use that methane as food, but a certain amount of it escapes as belches or farts (mostly belches). (Some people have microbes in their guts which produce methane, and thus their farts also contain methane--but nothing compared to the amount cows produce.) The publication Emissions of Greenhouse Gases in the United States 2006 (pdf) summarizes the total greenhouse gas output of the US: Of the 605 million metric tonnes CO2 equivalent of methane shown in the graph, about 115 million tonnes CO2e is from "livestock enteric fermentation"--mostly cow burps and farts. That is less than 20% of the methane load, and less than 2% of the 7 billion tonne CO2 total. Of course raising cattle causes other greenhouse gas emissions. \* There are about 56 million tonnes CO2e of methane and 55 million tonnes CO2e of nitrogen oxides released from cattle wastes as they decompose. (Some of that methane can be captured and used to generate electricity or heat, while releasing carbon dioxide, a much less potent greenhouse gas.) \* About 227 million tonnes CO2e of nitrous oxide is released from nitrogen fertilization of soils (30% of it from nitrogen fixed by the crops themselves, not from industrially produced fertilizers). \* Most of the nitrogen fertilizer used on crops (89%) is used on corn (maize). About half of the corn produced in the US is fed to livestock, a large fraction to cattle, especially dairy cows. So about 50 million tonnes CO2e emissions associated with fertilizer use should be indirectly blamed on cows. \* (Another large fraction of corn is used to make ethanol as a motor fuel, indirectly causing the release of significant amounts of greenhouse gases in the corn production. But that's another story.) So cattle are responsible for about 3.5% of US greenhouse gas emissions, on a CO2 equivalent basis. To keep this in perspective: \* 2% of greenhouse gas production is in the form of methane from garbage decomposing in landfills. \* Roughly 2% is chlorofluorocarbons (CFCs) from air conditioners, refrigerators and industrial processes. \* Other industrial processes (especially cement manufacture) produce about 2%. \* Burning jet fuel accounts for more than 3%. \* 12% of greenhouse gas emissions are CO2 emitted generating electricity which is used in residential applications like lighting, TVs, computers, and refrigerators. \* 17% came from burning gasoline in cars and trucks. **So cow farts and burps do contribute some to greenhouse gases, and thus to global climate change. But they are not a major cause**. Nonetheless, improvements in fertilizer use and waste management in agriculture could reduce the cow-related burden on our atmosphere.

### Warming: Must Accept Consensus of Scientists

####  EXT: Warming—Consensus

**Prefer scientific consensus – it’s the only way to prevent the politicization of scientific studies and create international awareness.**

**GSA, The Geological Society of America, 4** [GSA, August 2004, GSA Today, “Panel Seeks Help”, <http://www.gsajournals.org/perlserv/?request=get-document&doi=10.1130%2F1052-

5173(2004)014%3C0028%3ASOTEOS%3E2.0.CO%3B2&ct=1>]

In response to growing concern about how scientific information is being used in policy-making, GSA's Council has appointed a panel to prepare a statement to present an earth science perspective on the evaluation of scientific information. The panel seeks your help in crafting the statement. Sound policy decisions require the best available scientific information. Population growth, increasing per-capita consumption driven by globalization, and the need to preserve essential resources for future generations have sharply reduced the margin for error, and increased the need for policymakers to understand the implications of science and how the quality of scientific information can be assessed. Many nonscientists think of science primarily in terms of laboratory experiments intended to discover laws that are precise and easily quantified. Untangling complex processes like climate change, ecosystem response, beach migration, or earthquake dynamics is much more complex. It requires collaboration among a team of scientists with complementary expertise, and it requires that the team systematically integrate results from different disciplines and gradually **work toward consensus**. Each step requires careful review by peer scientists in an atmosphere that encourages objective exchange, free of political pressures. Policymakers, the media, and the general public need to understand **the importance of consensus,** objective exchange, and freedom from political pressure. There are signs that the process of integrating science and public policy is **becoming increasingly politicized**. For example: The Union of Concerned Scientists (UCS) published a report in February 2004 detailing incidents in which the administration was allegedly mishandling, suppressing, and distorting the scientific findings of federal agencies. Note, the administration responded to the UCS report, and the UCS has since prepared a rebuttal. In September 2003, the Office of Management and Budget (OMB) proposed procedures for selecting scientists for peer review of regulatory information that attempts to limit the involvement of scientists who have received grants from the federal agency involved; that seems to equate having “advocated a position” on the matter with having a bias; and, when bias so defined exists on a panel, requires that “another reviewer with contrary bias” be appointed for the sake of balance. Note, the OMB is reevaluating these proposed procedures based on extensive comments from the scientific community and other affected parties. Scientists are already reluctant to communicate their scientific conclusions to policymakers or to the public. Redefining conclusions as bias may further inhibit scientists from participating in policy-making for fear of being perceived as “advocates.”

### EXT: Consensus of scientists agree on anthropogenic climate change

#### Recent studies indicate the overwhelming consensus of credible climate experts agree that anthropogenic causes affect climate change

Anderegga et al 2010 (William R. L.,1 aDepartment of Biology, Stanford University, Stanford, CA, James W. Prallb, Electrical and Computer Engineering, University of Toronto, Toronto, ON, Canada; Jacob Harold, William and Flora Hewlett Foundation, Palo Alto, CA ; and Stephen H. Schneider Woods Institute for the Environment, Stanford University, Stanford, CA Expert credibility in climate change April 9, 2010 www.pnas.org/cgi/doi/10.1073/pnas.1003187107

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Although preliminary estimates from published literature and expert surveys suggest striking agreement among climate scientists on the tenets of anthropogenic climate change (ACC), the American public expresses substantial doubt about both the anthropogenic cause and the level of scientific agreement underpinning ACC. A broad analysis of the climate scientist community itself, the distribution of credibility of dissenting researchers relative to agreeing researchers, and the level of agreement among top climate experts has not been conducted and would inform future ACC discussions. Here, we use an extensive dataset of 1,372 climate researchers and their publication and citation data to show that (i) 97–98% of the climate researchers most actively publishing in the field surveyed here sup- port the tenets of ACC outlined by the Intergovernmental Panel on Climate Change, and (ii) the relative climate expertise and scientific prominence of the researchers unconvinced of ACC are substantially below that of the convinced researchers. Preliminary reviews of scientific literature and surveys of cli- mate scientists indicate striking agreement with the primary conclusions of the Intergovernmental Panel on Climate Change (IPCC): anthropogenic greenhouse gases have been responsible for “most” of the “unequivocal” warming of the Earth’s average global temperature over the second half of the 20th century (1–3). Nonetheless, substantial and growing public doubt remains about the anthropogenic cause and scientific agreement about the role of anthropogenic greenhouse gases in climate change (4, 5). A vocal minority of researchers and other critics contest the conclusions of the mainstream scientific assessment, frequently citing large numbers of scientists whom they believe support their claims (6–8). This group, often termed climate change skeptics, contrarians, or deniers, has received large amounts of media attention and wields significant influence in the societal debate about climate change impacts and policy (7, 9–14). An extensive literature examines what constitutes expertise or credibility in technical and policy-relevant scientific research (15). Though our aim is not to expand upon that literature here, we wish to draw upon several important observations from this literature in examining expert credibility in climate change. First, though the degree of contextual, political, epistemological, and cultural in- fluences in determining who counts as an expert and who is credible remains debated, many scholars acknowledge the need to identify credible experts and account for expert opinion in tech- nical (e.g., science-based) decision-making (15–19). Furthermore, delineating expertise and the relative credibility of claims is criti- cal, especially in areas where it may be difficult for the majority of decision-makers and the lay public to evaluate the full complexities of a technical issue (12, 15). Ultimately, however, societal decisions regarding response to ACC must necessarily include input from many diverse and nonexpert stakeholders. Because the timeline of decision-making is often more rapid than scientific consensus, examining the landscape of expert opinion can greatly inform such decision-making (15, 19). Here, we examine a metric of climate-specific expertise and a metric of overall sci- entific prominence as two dimensions of expert credibility in two groups of researchers. We provide a broad assessment of the rel- ative credibility of researchers convinced by the evidence (CE) of ACC and those unconvinced by the evidence (UE) of ACC. Our consideration of UE researchers differs from previous work on climate change skeptics and contrarians in that we primarily focus on researchers that have published extensively in the climate field, although we consider all skeptics/contrarians that have signed pro- minent statements concerning ACC (6–8). Such expert analysis can illuminate public and policy discussions about ACC and the extent of consensus in the expert scientific community. We compiled a database of 1,372 climate researchers based on authorship of scientific assessment reports and membership on multisignatory statements about ACC (SI Materials and Methods). We tallied the number of climate-relevant publications authored or coauthored by each researcher (defined here as expertise) and counted the number of citations for each of the researcher’s four highest-cited papers (defined here as prominence) using Google Scholar. We then imposed an a priori criterion that a researcher must have authored a minimum of 20 climate publications to be considered a climate researcher, thus reducing the database to 908 researchers. Varying this minimum publication cutoff did not ma- terially alter results (Materials and Methods). We ranked researchers based on the total number of climate publications authored. Though our compiled researcher list is not comprehensive nor designed to be representative of the entire cli- mate science community, we have drawn researchers from the most high-profile reports and public statements about ACC. Therefore, we have likely compiled the strongest and most credentialed re- searchers in CE and UE groups. Citation and publication analyses must be treated with caution in inferring scientific credibility, but we suggest that our methods and our expertise and prominence criteria provide conservative, robust, and relevant indicators of relative credibility of CE and UE groups of climate researchers (Materials and Methods). Results and Discussion The UE group comprises only 2% of the top 50 climate researchers as ranked by expertise (number of climate publications), 3% of researchers of the top 100, and 2.5% of the top 200, excluding researchers present in both groups (Materials and Methods). This result closely agrees with expert surveys, indicating that !97% of self-identified actively publishing climate scientists agree with the tenets of ACC (2). Furthermore, this finding complements direct polling of the climate researcher community, which yields quali- tative and self-reported researcher expertise (2). Our findings capture the added dimension of the distribution of researcher expertise, quantify agreement among the highest expertise climate researchers, and provide an independent assessment of level of scientific consensus concerning ACC. In addition to the striking difference in number of expert researchers between CE and UE groups, the distribution of expertise of the UE group is far below that of the CE group (Fig. 1). Mean expertise of the UE group was around half (60 publications) that of the CE group (119 pub- lications; Mann–Whitney U test: W = 57,020; P < 10"14), as was median expertise (UE = 34 publications; CE = 84 publications). Author contributions: W.R.L.A. and J.H designed research; W.R.L.A. and J.W.P. performed research; W.R.L.A. analyzed data; and W.R.L.A., J.W.P., J.H., and S.H.S. wrote the paper. ￼Furthermore, researchers with fewer than 20 climate publications comprise !80% the UE group, as opposed to less than 10% of the CE group. This indicates that the bulk of UE researchers on the most prominent multisignatory statements about climate change have not published extensively in the peer-reviewed climate literature. We examined a subsample of the 50 most-published (highest- expertise) researchers from each group. Such subsampling facili- tates comparison of relative expertise between groups (normalizing differences between absolute numbers). This method reveals large differences in relative expertise between CE and UE groups (Fig. 2). Though the top-published researchers in the CE group have an average of 408 climate publications (median = 344), the top UE re- searchers average only 89 publications (median = 68; Mann– Whitney U test: W = 2,455; P < 10"15). Thus, this suggests that not all experts are equal, and top CE researchers have much stronger expertise in climate science than those in the top UE group. Finally, our prominence criterion provides an independent and approximate estimate of the relative scientific significance of CE and UE publications. Citation analysis complements publication analysis because it can, in general terms, capture the quality and impact of a researcher’s contribution—a critical component to overall scientific credibility—as opposed to measuring a research- er’s involvement in a field, or expertise (Materials and Methods). The citation analysis conducted here further complements the publication analysis because it does not examine solely climate- relevant publications and thus captures highly prominent re- searchers who may not be directly involved with the climate field. We examined the top four most-cited papers for each CE and UE researcher with 20 or more climate publications and found immense disparity in scientific prominence between CE and UE communities (Mann–Whitney U test: W = 50,710; P < 10"6; Fig. 3). CE researchers’ top papers were cited an average of 172 times, compared with 105 times for UE researchers. Because a single, highly cited paper does not establish a highly credible reputation but might instead reflect the controversial nature of that paper (often called the single-paper effect), we also considered the av- erage the citation count of the second through fourth most-highly cited papers of each researcher. Results were robust when only these papers were considered (CE mean: 133; UE mean: 84; Mann–Whitney U test: W = 50,492; P < 10"6). Results were ro- bust when all 1,372 researchers, including those with fewer than 20 climate publications, were considered (CE mean: 126; UE mean: 59; Mann–Whitney U test: W = 3.5 × 105; P < 10"15). Number of citations is an imperfect but useful benchmark for a group’s scientific prominence (Materials and Methods), and we show here that even considering all (e.g., climate and nonclimate) Fig. 1. Distribution of the number of researchers (n = 908) in convinced by the evidence (CE) of anthropogenic climate change and unconvinced by the evidence (UE) categories with a given number of total climate publications. Tick marks indicate the center of right-inclusive categories (e.g., 20–50, 51– 100, 101–150, etc.). Fig. 2. publications, the UE researcher group has substantially lower prominence than the CE group. We provide a large-scale quantitative assessment of the relative level of agreement, expertise, and prominence in the climate re- searcher community. We show that the expertise and prominence, two integral components of overall expert credibility, of climate researchers convinced by the evidence of ACC vastly overshadows that of the climate change skeptics and contrarians. This divide is even starker when considering the top researchers in each group. Despite media tendencies to present both sides in ACC debates (9), which can contribute to continued public misunderstanding re- garding ACC (7, 11, 12, 14), not all climate researchers are equal in scientific credibility and expertise in the climate system. This extensive analysis of the mainstream versus skeptical/contrarian researchers suggests a strong role for considering expert credibi- lity in the relative weight of and attention to these groups of re- searchers in future discussions in media, policy, and public forums regarding anthropogenic climate change. Materials and Methods We compiled a database of 1,372 climate researchers and classified each researcher into two categories: convinced by the evidence (CE) for anthro- pogenic climate change (ACC) or unconvinced by the evidence (UE) for ACC. We defined CE researchers as those who signed statements broadly agreeing with or directly endorsing the primary tenets of the IPCC Fourth Assessment Fig. 3. Distribution of the number of researchers (n = 908) in CE and UE categories with a given number times cited for each researcher’s average of the first through fourth most-cited papers. Tick marks indicate the center of right-inclusive categories (e.g., 0–50, 51–100, 101–150, etc.), stepped by increments of 50 until 1,000 citations, and 500 thereafter. ￼Distribution of the number of the top 50 most-published researchers from CE and UE categories with a given number of total climate pub- lications. Tick marks indicate the center of right-inclusive categories (e.g., 20–50, 51–100, 101–150, etc.). ￼￼12108 | www.pnas.org/cgi/doi/10.1073/pnas.1003187107 Anderegg et al. Report that it is “very likely” that anthropogenic greenhouse gases have been responsible for “most” of the “unequivocal” warming of the Earth’s average global temperature in the second half of the 20th century (3). We compiled these CE researchers comprehensively from the lists of IPCC AR4 Working Group I Contributors and four prominent scientific statements endorsing the IPCC (n = 903; SI Materials and Methods). We defined UE researchers as those who have signed statements strongly dissenting from the views of the IPCC. We compiled UE names comprehensively from 12 of the most prominent statements criticizing the IPCC conclusions (n = 472; SI Materials and Methods). Only three researchers were members of both the CE and UE groups (due to their presence on both CE and UE lists) and remained in the dataset, except in calculations of the top 50, 100, and 200 researchers’ group membership. Between December 2008 and July 2009, we collected the number of climate-relevant publications for all 1,372 researchers from Google Scholar (search terms: “author:fi-lastname climate”), as well as the number of times cited for each researcher’s four top-cited articles in any field (search term “climate” removed). Overall number of publications was not used because it was not possible to provide accurate publication counts in all cases because of similarly named researchers. We verified, however, author identity for the four top-cited papers by each author. To examine only researchers with demonstrated climate expertise, we imposed a 20 climate-publications minimum to be considered a climate re- searcher, bringing the list to 908 researchers (NCE = 817; NUE = 93). Our dataset is not comprehensive of the climate community and therefore does not infer absolute numbers or proportions of all CE versus all UE researchers. We ac- knowledge that there are other possible and valid approaches to quantifying the level of agreement and relative credibility in the climate science com- munity, including alternate climate researcher cutoffs, publication databases, and search terms to determine climate-relevant publications. However, we provide a useful, conservative, and reasonable approach whose qualitative results are not likely to be affected by the above assumptions. We conducted the above analyses with a climate researcher cutoff of a minimum of 10 and 40 publications, which yielded very little change in the qualitative or strong statistically significant differences between CE and UE groups. Researcher publication and citation counts in Earth Sciences have been found to be largely similar between Google Scholar and other peer-review-only citation indices such as ISI Web of Science (20). Indeed, using Google Scholar provides a more conservative estimate of expertise (e.g., higher levels of publications and more experts considered) because it archives a greater breadth of sources than other citation indices. Our climate-relevant search term does not, un- derstandably, capture all relevant publications and exclude all nonrelevant publications in the detection and attribution of ACC, but we suggest that its generality provides a conservative estimate of expertise (i.e., higher numbers of experts) that should not differentially favor either group. 1. Oreskes N (2004) Beyond the ivory tower. The scientific consensus on climate change. Science 306:1686. 2. Doran PT, Zimmerman MK (2009) Examining the scientific consensus on climate change. Eos Trans AGU 90:22–23. 3. IPCC (2007) Summary for policymakers. Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the In- tergovernmental Panel on Climate Change (IPCC), eds Solomon S, et al. (Cambridge Univ Press, Cambridge, UK). 4. Pew Research Center for People and the Press (2009) Public Praises Science; Scientists Fault Public, Media. Pew Research Center. Available at http://people-press.org/report/528/. Accessed December 1, 2009. 5. DunlapRE,McCrightAM(2008)Awideninggap:RepublicanandDemocraticviewson climate change. Environment 50:26–35. 6. McCright AM, Dunlap RE (2000) Challenging global warming as a social problem: An analysis of the conservative movement’s counter-claims. Soc Probl 47:499–522. 7. McCright AM, Dunlap RE (2003) Defeating Kyoto: The conservative movement’s impact on US climate change policy. Soc Probl 50:348–373. 8. Lahsen M (2008) Experiences of modernity in the greenhouse: A cultural analysis of a physicist ’’trio’’ supporting the backlash against global warming. Glob Environ Change 18:204–219. 9. Boykoff MT, Boykoff JM (2004) Balance as bias: Global warming and the US prestige press. Glob Environ Change 14:125–136. 10. Jacques P, Dunlap R, Freeman M (2008) The organisation of denial: Conservative think tanks and environmental scepticism. Env Polit 17:349–385. 11. Antilla L (2005) Climate of scepticism: US newspaper coverage of the science of climate change. Glob Environ Change 15:338–352. 12. Schneider SH (2009) Science as a Contact Sport (National Geographic Society, Washington, DC). 13. Boykoff MT (2009) ‘We Speak for the Trees’: Media reporting on the environment. Annu Rev Environ Resour 34:431–458. 14. Malka A, Krosnick JA, Debell M, Pasek J, Schneider D (2009) Featuring skeptics in news media stories about global warming reduces public beliefs in the seriousness of global Publication and citation analyses are not perfect indicators of researcher credibility, but they have been widely used in the natural sciences for comparing research productivity, quality, and prominence (21–24). Furthermore, these methods tend to correlate highly with other estimates of research quality, ex- pertise, and prominence (21–26). These standard publication and citation metrics are often used in many academic fields to inform decisions regarding hiring and tenure. Though these methods explicitly estimate credibility to other academics, which might not directly translate to credibility in broader discourse, polls suggest that about 70% of the American public generally trust scientists’ opinions on the environment, making this assessment broadly relevant (27). Criticisms of the two methods center around issues of self-citation, additionality of multiple authors, clique citation, and age demographic (e.g., age distribution where older researchers can accrue more publications and citations) differences between groups (21–26, 28, 29). All of these criticisms are expected to have the least influence at high levels of aggregation (e.g., an entire field) and high levels of citations, both of which are analyzed here (21–23, 25, 28, 29). Regarding the influence of citation patterns, we acknowledge that it is difficult to quantify potential biases of self-citation or clique citation in the analysis presented here. However, citation analysis research suggests that the potential of these patterns to influence results is likely to decline as sample size of researchers, possible cliques, and papers analyzed for citations considered increases (22, 25–28). By selecting an expansive sample of 1,372 researchers and focusing our analysis only on the researchers’ four most-cited papers, we have designed our study to minimize the potential influence of these pat- terns. Furthermore, we have no a priori basis for assuming any citation (e.g., self-citation rates) or demographic differences (e.g., age effect on pub- lications or citations) between CE and UE groups. Preliminary evidence sug- gests these differences would likely favor the UE group. From the #60% of researchers where year of PhD was available, mean year of receiving a PhD for UE researchers was 1977, versus 1987 for CE researchers, implying that UE researchers should have on average more publications due to an age effect alone. Therefore, these methods are likely to provide a reasonable estimate of the preeminent researchers in each group and are useful in comparing the relative expertise and prominence between CE and UE groups. Ultimately, of course, scientific confidence is earned by the winnowing process of peer review and replication of studies over time. In the meanwhile, given the immediacy attendant to the state of debate over perception of climate science, we must seek estimates while confidence builds. Based on the arguments presented here, we believe our findings capture the differential climate science credentials of the two groups.

### \*\*Inherency Extensions\*\*

### AT ARRA Solves

#### Not enough funding

**Rogers, JD, 11**—JD from U of Illinois College of Law, BA in Economics from U of Utah (Joshua, Spring 2011, “THE GREAT TRAIN ROBBERY: HOW STATUTORY CONSTRUCTION MAY HAVE DERAILED AN AMERICAN HIGH SPEED RAIL SYSTEM”, U. Ill. J.L. Tech. & Pol'y 215, p. lexis, AL)

President Obama has noted that the $ 8 billion ARRA grant is intended as a down payment on high speed rail. n100 This initial investment is to be followed [\*227] by $ 1 billion annually to continue funding of planning and projects. n101 Standing alone, these figures are vast; however, when compared with the $ 1.8 trillion the federal government has spent on air and highway travel since 1960, the **figures are minimal**. n102 In fact, when projected over an equal period of time, they are nearly identical to the 3% of federal funding for intercity passenger travel that passenger rail has traditionally received. n103 This minimal funding demonstrates a traditional dilemma faced by passenger rail: it **does not receive the funding required to make it successful**. If a high speed rail system is meant to compete with air and automobile travel, it will cost **significantly more** than the amounts allocated by ARRA and the President's proposed continued investment. Not surprisingly, estimates of the cost of high speed rail infrastructure construction vary widely. n104

### Standards stifle effectiveness

#### Standards prevent rail effectiveness

**Rogers, JD, 11**—JD from U of Illinois College of Law, BA in Economics from U of Utah (Joshua, Spring 2011, “THE GREAT TRAIN ROBBERY: HOW STATUTORY CONSTRUCTION MAY HAVE DERAILED AN AMERICAN HIGH SPEED RAIL SYSTEM”, U. Ill. J.L. Tech. & Pol'y 215, p. lexis, AL)

With this new code section, the law creates a section specific definition of high speed rail as "intercity passenger rail service that is reasonably expected to reach speeds of at least 110 miles per hour." n124 Thus, ARRA, by committing its high speed rail funding to P.L. 110-432, adopts the 110 mph attainment (but not average) standard, which is woefully short of the needed 150 mph average standard. ARRA does at least succeed, regarding the geographic requirements, because § 502 of PRIIA modifies § 501 to the extent that for an application to be approved it must fall within one of the designated high speed corridors. n125 Therefore, by establishing the system requirements at 110 mph, ARRA fails to capture the purpose and vision of U.S. high speed rail.

### Republicans not willing to fund HSR

#### Recent Congressional action indicate that Republicans not willing to fund HSR projects

Hurst 2011(Nathan, CQ Staff. "Obama Initiatives on Infrastructure, High­Speed Rail Are Zeroed Out." CQ Weekly (November 21, 2011): 2448. [http://library.cqpress.com/cqweekly/weeklyreport112­000003986513](http://library.cqpress.com/cqweekly/weeklyreport112%C2%AD000003986513).)

House and Senate conferees provided no funding for two of President Obama’s signature initiatives: high­speed rail and a national infrastructure bank. Obama has requested $53 billion over six years for high­speed rail. The Senate Appropriations Committee agreed to set aside $100 million in fiscal 2012. Overall, the three­bill minibus (HR 2112) that the Senate cleared Nov. 17 would provide $109.4 billion for the departments of Transportation and Housing and Urban Development (HUD). Just $55.6 billion of that is discretionary appropriations; most of the funding in the bill comes from obligations for the Highway Trust Fund. (Minibus, p. 2445) The discretionary funding is virtually the same as in fiscal 2011, but it is $19.4 billion less than Obama sought. Senate Majority Whip Richard J. Durbin, D­Ill., said he was “disappointed that the final bill did not include funding specifically for high­speed rail,” but he expressed optimism that projects such as the one in his state aiming to provide faster rail links between Chicago and St. Louis would continue under a different grant program. With the Republican House targeting the president’s high­speed rail initiative, the executive branch is independently doing what it can to bolster projects already in place. Meanwhile, House Transportation and Infrastructure Chairman John L. Mica, R­Fla., has signaled his intent to redirect unspent high­speed rail funds to Amtrak’s heavily traveled Northeast Corridor. House and Senate aides said the conference committee’s actions are not expected to affect projects with phases already under way, such as the St. Louis­Chicago project. While its Phase I — upgrading track to facilitate speeds of up to 110 miles per hour — is already paid for, funding for later phases is not determined. The measure also does not fund a $5 billion administration request for a National Infrastructure Bank. Senate Democrats were able to retain $500 million for national infrastructure investments commonly referred to as the TIGER program. Durbin praised the retention of the program as a way to save high­speed rail projects, but Transportation Secretary Ray LaHood said the program is already grossly oversubscribed. House Republicans offered nothing for the TIGER program in their proposal approved by the Transportation­HUD Subcommittee in September. The National Passenger Railroad Corp., known as Amtrak, would get $1.4 billion of the $1.6 billion total slated to be spent on rail in fiscal 2012 under the deal. Along with Amtrak’s funding are some policy riders aimed at streamlining the railroad’s cost structure, including overtime caps for employees and a ban on federal subsidies for routes on which Amtrak offers passengers discounts of at least half off the regular fares. Federal highway projects for the year would be funded at the $39.1 billion authorized in the latest surface transportation extension (PL 112­30), about $2 billion less than in fiscal 2011. That spending is exclusive of another $1.6 billion slated for emergency road repairs, targeted to areas affected by Hurricane Irene and flooding on the Missouri River. A waiver of a $100 million per­state cap for a single event was part of the final agreement. The Federal Aviation Administration would get $15.9 billion, a slight million bump. That includes $878 million targeted toward the nationwide NextGen upgrade of air traffic control systems, which included some compromises on funding for research and development related to the multi­year projects. Senate Democrats largely won out on one of the most contentious FAA­run funding mechanisms: the Essential Air Service program that subsidizes service to otherwise unprofitable rural airports. The program would be funded at the $143 million level that Democrats preferred. House Republicans wanted to trim the program to $100 million with a slew of cutbacks. ￼Instead, the program would bar new airports, allowing participation only by facilities already served under the program or that had qualified for support as of Oct. 1. HUD took a hit in the conference, ending up with $37.4 billion, $4.6 billion less than the White House requested and a $3.7 billion decline from current spending. The legislation would fund Section 8 low­income­tenant housing vouchers at $17.2 billion, which the conference committee called sufficient to provide “funding to renew every individual and family that received assistance last year.” The bill also would provide $3.3 billion for the popular Community Development block grant program, $193 million less than in fiscal 2011 and $473 million less than the White House requested.

###  “Buy America” clause hurts HSR

####  “Buy America” clause and lack of Congressional commitment barriers to business commitment to HSR; businesses are ready to build

 CABLE 2011 (JOSH, Senior Editor, MIXED SIGNALS, WWW.INDUSTRYWEEK.COM JUNE 2011)

In February 2010, Siemens announced that it bought 20 acres of land in Sacramento, Calif., to meet future demand for high-speed trains in the United States. The land, which sits adjacent to the company's 34-acre light-rail manufacturing site in Sacramento, has yet to be developed. But if Congress ever reaches consensus in support of high-speed rail, the company says it will build a factory on the new site, producing Siemens' 220-mile-per-hour Velaro trains. Either rail manufacturers would love to know. "We're ready to bring high-speed rail to the United States," declares Oliver Hauck, president. Mobility Division, Siemens Industry Inc. It's not just the trains that Siemens want to bring here. It's the electrification, safety and communication systems. It's the rail automation, the signaling and the interlocking. It's the technology. "What would happen is we would transfer all the knowl- edge in a first set of trains, where we would literally exchange teams of people between our core factory in Krefeld [Germany] and here in Sacramento," Hauck explains. Siemens isn't sure how many people a new U.S. factory would employ, but Hauck notes that the company once estimated that the plant would require approximately 1,000 people to meet the needs of California's proposed high-speed-rail system alone, based on original plans that called for 100 train sets. However, before the plant's first beam goes up, Siemens needs to see evidence that the United States is committed to high-speed rail. Ideally, Hauck says, that would take the form of a federal trans- portation bill that includes "clearly defined" funding for the next six years to support construction of a high-speed rail system. "If a system like this gets kicked off and [receives] a continuous funding stream," says Hauck, "then we—and I think many the supply side—would he willing, ready and commit to put those jobs in this country." CAL TRAIN WRECK It's unlikely that federal and state lawmakers will send the kind of signal that Siemens is looking for anytime soon. In February, the Obama administration called on Gongress to back a six-year, $53 billion investment in high-speed in- tercity rail, as part of Obama's plan to give 80% of Americans access to high-speed rail within 25 years. Soon after, the federal budget crisis dealt a major blow to Obama's plan. In April, under the specter of a possible government shutdown, Obama and Republicans in Congress agreed to a six-month continuing resolution that rescinded $400 million in high-speed-rail funding from the fiscal year 2010 budget and eliminated all federal high-speed-rail funding for fiscal year 2011. Meanwhile, newly elected Republican governors in Ohio, Florida and Wisconsin wasted little time in rejecting federal funds allocated for high-speed-rail projects in their respective states, expressing concern that the projects would leave their tax- payers on the hook for cost overruns and continuing subsidies. Ohio Gov. John Kasich was so dead-set against a proposed passenger-rail corridor between Cleveland and Cincinnati that just one day after winning the election this past November, Kasich declared, "That train is dead." Florida Gov. Rick Scott's rejection of $2.4 hillion in federal high-speed-rail funds was a particularly painful blow to the high-speed-rail movement. The Tampa-to-Orlando line was eyed as the first high-speed-rail system in the United States, and the Obama administration had hoped it would sell the rest of the nation on the concept. As did Andy Kunz, president and GEO of the U.S. High Speed Rail Association. "[Scott] was the only one in the entire state who didn't see the need to build that," asserts Kunz. " ... That would've been our showcase system, and I think that's why he killed it." Kunz, though, rejects the notion that Obama's high-speed-rail plan is caught in the crossfire of partisan politics. Scott's predecessor. Republican-turned-independent Charlie Grist, had embraced high-speed rail and had sought the federal high-speed-rail funds that Scott rebuffed. And Kunz notes that John Mica, a Florida Republican who chairs the House Transportation and Infrastructure Committee, is a "huge supporter of high-speed rail." "It's not partisan, because there are a lot of Republicans who support this, and there are some Democrats who are against it," Kunz says. "If you really dig deep and you look at who the most outspoken people against high-speed rail are, look at where they get their campaign contributions. They're the ones who get the biggest contributions from the oil industry." Kunz argues that the No. 1 benefit of building a network of high-speed electric trains in the United States is that it will help reduce the nation's dependence on foreign oil. His theory on the oil industry's lobbying influence aside, Kunz isn't optimistic about high-speed rail getting funded in the next federal budget. "You have a lot of freshmen members of Congress in there trying to flex their muscles and act like tough guys, [saying] 'We're not spending anything on this, that and the other,'" he says. "I think it's going to he a bit of time before we get past high-speed rail being funded with stimulus money, and a couple bucks here and there, to the point where it is permanently funded." WILL 'BUY AMERICA' DERAIL THE PLAN? As the political and public debate over high-speed rail rages on, author and professor Anthony Perl believes the push for "Buy America" provisions in high-speed-rail procurement is only muddling the process. "To me that is the biggest self-inflicted wound that the United States is struggling with," says Perl, who is director of the Urban Studies Program at Simon Fraser University in Vancouver. "It's like stepping on the brake and putting on the gas at the same time. " Americans, understandably, want to see their tax dollars directed toward American manufacturers for public projects such as high-speed rail. But there are no U.S.-based manufacturers of high-speed trains. And therein lies the conundrum. "I'm American. I grew up here. I care about my country. And I don't want to see all of our jobs exported all over the world," Kunz says. "But if we want true high-speed rail, we're going to have to buy the trains from the people who are making them, because we don't make them." Perl is convinced that the lack of domestic manufacturing ca- pacity is the biggest obstacle to high-speed rail gaining traction in the United States. Without the technological knowhow and institutional knowledge, it's difficult "to move [high-speed rail] forward in a way that inspires confidence across political lines,"he says. "When President Kennedy stood up and said we're going to send a man to the moon, NASA existed, and there were scientists and engineers and all these people [to support the effort]," Perl says. "It was a big leap for them to take, but there was a diving board to leap from. We don't have a diving board." Consequently, insisting on a strict "Buy America" approach to U.S. bigh-speed rail "is the equiva- lent of Bangladesh saying we're go- ing to develop a space program with entirely indigenous experience and technology," Perl says. Kunz notes that most of the major players in high-speed rail—includ- ing Munich-based Siemens, Paris- based Alstom and Montreal-based Bombardier—already have light- rail manufacturing facilities in the United States. Siemens' Hauck estimates that his company has 1,200 employees sup- porting rail manufacturing in the United States. Siemens plans to hire an additional 250 people at its U.S. rail facilities over the next year or so, to build 70 electric locomotives for Amtrak as part of a $466 million light- rail contract awarded in October. The Amtrak contract includes a "Buy America" clause mandating 50% U.S. content, "but that content is mea- sured all the way down to the subcomponent level," Hauck points out, "so two levels down the bill of materials." "If you take the current "Buy America" requirement that is being talked about in Congress for [high- speed rail] projects because they have stimulus money or federal money in them, that would be 100% Buy America, but only to the first level of the bill of materials. So that means some subcomponents could then be imported." Regardless of whether a high-speed-rail plan requires 50% U.S. content or 100% U.S. content, Siemens is "rather confident that we would be able to fulfill either requirement," Hauck adds. Until a majority of U.S. lawmakers hop on board the high- speed-rail movement, though, it's a moot point, "All of these companies have said they will scale up and start producing [high-speed trains] here in America once they see a bunch of orders," Kunz says. "But they're not going to spend millions of dollars opening a factory for two train sets or four train sets and then the orders stop. Until this thing becomes a permanent, consistent program with money every year, none of these companies are going to invest a dime here”

### Past regulations empirically prevent HSR

#### Lack of planning and outdated regulations have doomed previous proposals; must have good planning and policy exploration to be able to solve

Perl 2012 (Anthony, Political Science Department & Urban Studies Program, Simon Fraser University, Vancouver, BC, Canada Assessing the recent reformulation of United States passenger rail policy Journal of Transport Geography 22 (2012) 271–281 www.elsevier.com/locate/jtrangeo)

4. The legacy of stagnation: challenges in improving the Northeast Corridor A revealing perspective on the limitations arising from the atro- phy of high-speed passenger train design and construction capac- ity in the years following Amtrak’s creation is offered by the Acela project. Between 1996 and 2003, the federal government A. Perl / Journal of Transport Geography 22 (2012) 271–281 275 276 A. Perl / Journal of Transport Geography 22 (2012) 271–281 invested $3.2 billion in a second, and much more ambitious, at- tempt to realize Senator Pell’s vision of a bullet train serving the Northeast (United States General Accounting Office, 2004). By elec- trifying the tracks between Boston and New Haven and ordering 20 new electric trainsets adapted from the TGV’s design, the launch of true high-speed train service between the nation’s capital, New York City, and southern New England appeared to be imminent. Acela was initially billed as America’s long awaited analog of the Tokaido Shinkansen and the Paris–Lyon TGV, namely a breakthrough project that would open the door wide to high-speed rail in the United States. But that was not how the project turned out. The Acela trains turned out to be the heaviest high-speed trains ever built, to comply with Federal Railroad Administration safety regulations requiring its rolling stock to withstand 800,000 lb of collision force. This standard was based upon the anticipated impact of a head-on crash with a freight train, and was derived from a regulation that had been introduced by the US Postal Service for crash survivability of Railway Post Office cars that were put in service in the 1940s (Tyrell, 2002, p. 126). Since neither the Canadian builder nor the French designer of the Acela trains was a domestic manufacturer, their input to the development of ‘‘new’’ safety regulations was minimal. Development and testing were rushed to meet an ambitious production schedule, leaving little opportunity to identify design flaws that have since plagued Acela’s operations and stymied its performance as a true high-speed train. When Acela trains were pulled out of service for defective brakes and cracked suspension beams after less than 2years of operation, the Government Accountability Office (GAO) was called upon to assess the project’s implementation. Their findings underscored that know-how for adapting global high-speed rail experience to the Northeast Corri- dor was significantly lacking. The GAO report concluded: (1) Amtrak’s management of this project was not comprehensive but was focused on the short term; (2) project management focused on separate components of the project, such as electrifi- cation and acquisition of the high-speed trains, and not the pro- ject as a whole; and (3) did not sufficiently address major infrastructure improvements needed to attain project trip-time goals. We also found that Amtrak lacked a comprehensive finan- cial plan for the project and that Amtrak did not fully integrate stakeholder interests (commuter rail authorities and state gov- ernments), even though work that involved stakeholders was critical to achieving project goals. The overall results of this poor management was that many critical elements of the project were not completed, project costs and schedules increased consider- ably, and the project goal (3-hour trip time from Boston to New York City) was not attained. (United States Government Account- ability Office, 2005, p. 13) To sum up, Amtrak can be seen to have filled the policy vacuum that existed at its inception in 1971 with a robust set of administra- tive and political fortifications designed to protect it from fiscal as- saults. While this configuration of policy instruments has worked to preserve a national network of conventional passenger trains, the capacity to develop and deploy a new passenger train technology that existed in the late 1960s has withered away. Opening a policy window to pursue fundamental redevelopment of the passenger train would have to contend with this diminished capacity.

### Inconsistent support from past and present administrations

#### HSR has checkered past; gaining support now, but future is uncertain

Chen 2011 (Zhenhua, PhD student at the George Mason University, School of Public Policy, and is currently working as a graduate research assistant under the supervision of Prof. Jonathan Gifford in the area of transportation policy. Mr. Chen was awarded the Graduate Student Best Paper Award of the 51st Transportation Research Forum, “Is the Policy Window Open for High-Speed Rail in the United States: A Perspective from the Multiple Streams Model of Policymaking,” Transportation Law Journal Vol. 38:115)

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High-Speed Rail ("HSR"), also known as an intercity passenger transport, can run at top speeds of at least 150 mph. Traditionally, rail- dominated countries such as Japan, Germany, and France use HSR to connect metropolitan areas and have achieved impressive social and economic successes due to their use of HSR. Countries such as Spain, Korea, and China have introduced HSR into their transportation systems and are also beginning to see the results of HSR after years of projects. As a result of the Intermodal Surface Transportation Equity Act ("IS- TEA") of 1991, America has initiated the creation of a concrete HSR plan. The High-Speed Rail Development Act ("HSRDA") of 1994 took further clear steps to bring HSR to the United States. However, during previous administrations HSR had "faded" out of the governmental agenda. In recent years, under the backdrop of soaring gasoline prices and increasing concerns about environmental protection, it has become clear that HSR is an ideal alternative for future transportation. HSR has gained new attention in the United States. Furthermore, because of the 2008 economic recession, job creation is the first priority of the Obama Administration. The Obama Administration has given HSR a new task-creating jobs. In February 2009, just a few days after his inauguration, the American Recovery and Reinvestment Act ("ARRA") was passed, which apportioned eight billion dollars designated for a national high-speed rail investment. In April 2009, the United State Department of Transportation (USDOT) announced the national strategic high-speed rail plan, Version for High Speed Rail in America, which includes eleven high-speed corridors designed to accommodate maximum speeds of over 120 mph. On January 28, 2010, President Obama unveiled the High- Speed Intercity Passenger Rail Program, which included several initial selected projects that would be awarded federal funds. These changes in policy and funding show that unlike other countries, the idea of HSR in the United States has been on and off public and presidential agendas because of different economic situations and political tides. Now supported by an innovative and ambitious president, the "faded" HSR seems on the verge of a comeback and ready to get on the right track. Yet, the answers to several fundamental questions are still unclear. Why is President Obama now pushing HSR instead of other alternative modes? What are the situational differences between the related HSR Acts that have passed during Obama's administration and that in Clinton's and George W. Bush's administrations? What role does HSR play in the United States, and what can be done to implement these long-term infrastructure projects efficiently and effectively?

### Amtrack disastrous for passenger rail service

#### Uncertainty, political agendas, and lack of direction doomed Amtrack from beginning; such examples have stifled other passenger train development

Perl 2012 (Anthony, Political Science Department & Urban Studies Program, Simon Fraser University, Vancouver, BC, Canada Assessing the recent reformulation of United States passenger rail policy Journal of Transport Geography 22 (2012) 271–281 www.elsevier.com/locate/jtrangeo)

3. A lengthy sidetrack: how the rail industry’s restructuring routed rail passenger policy into a protracted stalemate 3.1. An industry in crisis Over the course of the four decades between 1971 and 2009, the United States passenger rail subsystem has changed less than it did during the policy experiments and demonstration projects under- taken during the 4 years between 1965 and 1969. The reason for the sudden burst of innovation followed by a prolonged period of stagnation was the creation of a quasi-public enterprise, Amtrak. Amtrak both reflected and suffered from a quick policy fix for a transport problem that could not wait any longer for government’s attention. In a clear example of the garbage can model’s arbitrary fusion of a policy problem and a solution that were more suited for one another by virtue of temporal proximity than substantive compatibility, Amtrak’s quick creation to relieve railroads of their uneconomic passenger train burden was to have unintended, but enduring, political consequences that constrained passenger rail innovation. The partnership that had enabled the Metroliner’s commercial success was derailed by an industrial crisis that vaulted the rail- road industry’s survival well ahead of passenger train development among government’s policy priorities. After the Penn Central Transportation Company’s bankruptcy in 1970, which represented the largest corporate failure in American history at that time, gov- ernment was compelled to act. Keeping freight trains operational in the Northeast and Midwest was essential to core economic activities such as automobile manufacturing and electric power generation. Resolving the freight railroad crisis required govern- ment to grapple with a series of policy problems that had been ne- glected precisely because of their acute political challenges. The passenger train problem became a sideshow in this larger policy making struggle. The policy that ensued was driven by a political calculus of blame avoidance (Weaver, 1986), because the adjustment costs of restructuring bankrupt railroads would be immediate and pain- ful to concentrated groups (e.g., railroad workers, communities that lost rail access) while the benefits were widespread (e.g., reduction in future subsidies) and would not be seen for a decade. The approach taken to reverse railroads’ competitive decline took a different approach from the administrative capacity building put forward by High Speed Ground Transportation Act of 1965. Instead of partnering with private enterprise, government entered the rail- road business directly and decisively. Government’s industrial interventions between 1971 and the 1980s and their salutary effect on US freight railroading are de- tailed by Saunders (2003). Breaking with several established para- digms, the federal government embraced economic deregulation of the rail industry, it invested heavily in public enterprise, it facili- tated abandoning uneconomic rail infrastructure, and it embraced measures to downsize the railroad workforce. In 1976, the Consol- idated Railroad Corporation (Conrail) took ownership of the bank- rupt Penn Central along with the wreckage of six smaller insolvent Northeast and Midwest railroads. The resulting public enterprise put the US government directly in the business of running a major freight railroad that served large parts of the Northeast and Midwest. 3.2. Government initiative in freight rail restructuring This new line of business consumed billions in government sub- sidies for operations and renewal of physical plant. Severance pay- ments were made to redundant workers, and funds were given to short line freight carriers and to state and local governments that assumed responsibility for commuter train operations. While pub- lic ownership of bankrupt freight railroads and operating subsidies were introduced as stopgap measures, the enduring policy legacy of this period was created by Public Law 96-448, better known as the Staggers Rail Act of 1980. The Staggers Act introduced a major retrenchment of government’s administrative capacity – through deregulating railroad rates and services that had become ossified under America’s oldest regulatory bureaucracy, the Inter- state Commerce Commission. The administrative talents applied to freight railroad regenera- tion grew considerably once previous policy constraints had been removed. Keeler (1983,p. 99) characterized the Staggers Act as ‘‘. . . the most dramatic change in federal policy towards the rail- roads since the Interstate Commerce Act of 1887 – in some ways an even more dramatic change than that law, because while the 1887 act codified principles already existing in common law. . . the Staggers Act completely reversed earlier policies. Assessing the effect of this new policy, Winston and colleagues (1990, p. 65) concluded that the deregulatory regime ‘‘. . . forced the rail and motor carrier industries to become more innovative and effi- cient’’ yielding an annual rail industry profit increase of $2.8 billion in 1988 dollars. And Wilson (1997) estimates that productivity in the US freight rail sector grew by 40% during the 1980s, compared to arrangements under the pre-existing regulatory regime. Government’s combined intervention of massive public invest- ment in freight rail restructuring and sweeping deregulation of freight rates and services enabled the economic wreckage of bank- rupt Northeast and Midwest railroads to be resurrected. By 1983, Conrail began to turn a profit. And in 1999, after years of consistent profitability, Conrail was split up and sold to two private rail cor- porations, CSX and the Norfolk Southern. During a span of less than a quarter century, a major component of the US freight rail net- work had been nationalized, overhauled both organizationally and technically, and then profitably conveyed back into the private sector. 3.3. Creating public enterprise to fix the railroad industry’s passenger train deficit During this same time period, America’s intercity passenger trains also became wards of the state, but their guardianship has extended through more than 40 years of publicly subsidized oper- ation. In examining the policy change that ushered America’s pas- senger trains into many decades of uneconomic public enterprise, political expediency can be seen to have bought a quick fix at the expense of creating capacity for the kind of transformation that drove Conrail’s turnaround, as well as the reinvention of passenger trains in Asia and Europe (Dunn and Perl, 1994). Amtrak was created by the Rail Passenger Service Act of 1970. It came into existence 5 years ahead of Conrail, yet never achieved the economic renaissance accomplished by its freight counterpart in government’s rail portfolio. Instead, this quasi-public enterprise has struggled to preserve America’s passenger trains in much the same economic position as they existed at its inception. Before the Northeast railroad bankruptcies, there had been growing de- bate, but little action, on the policy problem posed by uneconomic passenger trains. Sabatier and Jenkins-Smith’s (1993) concept of an Advocacy Coalition Framework (ACF) helps to clarify how political conflict prevented Amtrak from gaining a mandate for policy inno- vation, with policy deliberations instead degenerating into a per- petual skirmish over the corporation’s legitimacy. In the ACF, core beliefs unite political factions that struggle to advance or undermine policy options depending on how these re- late to their beliefs. In passenger train policy, the ACF perspective reveals a policy subsystem divided between supporters of govern- ment intervention and skeptics of public initiative in rail transpor- tation. These core beliefs oriented rail passenger supporters and skeptics to draw opposite conclusions about this mode’s problems, and thus endorse incompatible policy options to address the future. Passenger rail supporters such as Senator Pell, rail labor unions, local governments that valued train access, and others saw nothing inherently incurable in the passenger train’s economic decline. A combination of new technology and better organization, embodied by the bullet trains of Japan and validated as being transferable to the US by the Metroliner project, could put passenger trains back on track. Conversely, passenger train skeptics, which included fis- cal conservatives, advocates of aviation and the automotive–indus- trial complex, and many freight railroad industry leaders, saw passenger trains suffering from the terminal stage of technological obsolescence. American economic and spatial development was seen to require the higher speeds of aircraft over bullet trains, and the flexibility that only automobiles could offer in accessing sprawling suburban development. As predicted by the ACF, supporters and skeptics could never agree about how to address the mounting passenger train deficits incurred by America’s railroads. When bankruptcy of the Northeast carriers provided an exogenous shock that was sufficient to precip- itate federal intervention, the only thing that all sides could agree upon was the urgency of relieving freight railroads from the crip- pling passenger rail burden. But unlike the specter of freight rail cessation undermining heavily reliant sectors of the US economy (e.g., auto manufacturing, chemical production, and electricity gen- eration) there was no perceived corresponding misfortune that an end to intercity (as opposed to commuter) passenger trains would visit on the American economy. As a result, there was no political exigency that could reshape the balance of power in policy deliberations and thus enable either the supporters or the skeptics to introduce their preferred beliefs as the guiding principles to shape Amtrak’s enabling legislation. Instead, Amtrak’s legislative mandate was constructed on an un- founded assumption – that a new partnership between govern- ment and the railroad industry could quickly undo the passenger train’s economic decline and yield a self-sustaining operation. The Rail Passenger Service Act of 1970 offered all private rail- roads the option of immediate exit from the passenger operations that they had unsuccessfully sought to abandon through regula- tory proceedings before the Interstate Commerce Commission. In return for literally buying into a new mixed enterprise, private rail- roads would be rid of further liability for passenger operating def- icits. Once freight railroad partners made their initial investment in Amtrak, based on a percentage of their passenger train losses in 1969, the federal government kicked in a $40 million grant to cover start-up costs and provided a $100 million loan guarantee to take care of contingencies. This capitalization was supposed to sustain Amtrak through its rapid reinvention of the passenger train business, which would yield profits to repay both the railroads and the govern- ment for their initial investment. The fatal flaw that rendered Amtrak’s founding strategy no better than a ponzi scheme was that the corporation was given no clear mandate about whether it was supposed to grow or shrink the passenger train business to attain profitability. Amtrak then received inconsistent guid- ance from government when attempting to pursue either strategy. America’s private railroads quickly concluded that they could make more money from carrying freight than what they would re- ceive from any successful partnership with Amtrak. To many skep- tics, Amtrak’s greatest value would be generated by its capability to successfully manage the blame for euthanizing uneconomic pas- senger trains. Abandoning routes, closing stations, and laying off redundant workers had proven difficult enough policy outputs for private industry to pursue through regulatory proceedings be- fore the Interstate Commerce Commission. Such downsizing threa- tened to become virtually impossible if Congress was to play a growing role in the subsystem. Creating Amtrak as a ‘‘for profit’’ corporation at arm’s length from government offered at least the potential for political insulation that could facilitate ‘‘rational’’ decisions. Despite the obvious ambiguity in Amtrak’s legislative formula- tion, neither supporters nor skeptics were motivated to press for clarity. If a rail passenger renaissance would require ongoing sub- sidies and a much more active role for government, as supporters expected, then downplaying government’s future involvement ap- peared strategic. Skeptics also found it prudent to remain circum- spect regarding their intended meaning of Amtrak’s ‘‘for profit’’ status and how this would orient the corporation’s business model toward an orderly winding down of this transport mode. Weaver (1985, p. 87) captured the resulting ambiguity that accompanied Amtrak’s creation when he noted that ‘‘Innovation in policy instruments served as a substitute for innovation in policy’’ at the corporation’s founding. But once Amtrak began operating, the policy instruments that had been deployed by the federal govern- ment to initiate passenger rail restructuring required making choices that quickly became politicized. Whatever decisions that Amtrak made, from the routes and frequencies it operated, to the fares it charged, to the level of on-board services, supporters and skeptics could be counted upon to lobby Congress for their preferred approach. Amtrak has subsequently developed into one of the world’s most politicized railroad organizations. The US Congress has regu- larly intervened to dictate how routes and services should be man- aged (Wilner, 1994). In this Congressional micromanagement, both supporters and skeptics proved capable of blocking the opposing coalition’s preferred fiscal instrument setting (e.g., either abolish- ing, or vastly expanding, federal subsidies). But neither side could deny their opponents an influence over the policy instruments that kept Amtrak operating in a precarious limbo between preservation of the status quo, and insolvency and shut-down. In the ensuing impasse, neither the rail passenger renaissance that supporters aspired to, nor the winding down of most passen- ger train operations favoured by skeptics, came to pass. Instead, prolonged trench warfare in Congress over Amtrak’s budget dis- placed deliberation over broader policy options that might have moved America’s passenger railroading beyond its state of limbo (Perl and Dunn, 1997). These perennial struggles to abandon or preserve parts of the Amtrak system crowded out most opportuni- ties to consider more fundamental changes to rail passenger policy, such as investing in purpose built high-speed rail infrastructure. Since the 1980s, freight carriers have been the locus of innova- tion in America’s railroad industry (Martin, 1992; Loving, 2006). From enhancing productivity to lowering fuel consumption and emissions, US freight railroads have demonstrated impressive re- sults. This successful trajectory was reminiscent of the claims that supporters had made about what Amtrak’s new approach to run- ning passenger trains could produce but did not. Another casualty of the rail passenger policy stalemate has been the American industry that used to produce passenger train tech- nology. Of the three industrial partners in the Metroliner project, two have gone out of business (the Budd Company and Westing- house) and one (General Electric) has not produced another high- speed electric passenger train since 1969. Instead, the relatively small amount of new passenger train equipment that has been operated by Amtrak has been designed and manufactured by Cana- dian and European manufacturers and assembled from kits sent to US locations that were established to satisfy ‘‘Buy America’’ requirements in federal funding.

### Policy Making Characteristics have stalled HSR

#### Policy decisions impacted by multiple factors including public pressure and Congressional characteristics have kept HSR from being considered seriously

Chen 2011 (Zhenhua, PhD student at the George Mason University, School of Public Policy, and is currently working as a graduate research assistant under the supervision of Prof. Jonathan Gifford in the area of transportation policy. Mr. Chen was awarded the Graduate Student Best Paper Award of the 51st Transportation Research Forum, “Is the Policy Window Open for High-Speed Rail in the United States: A Perspective from the Multiple Streams Model of Policymaking,” Transportation Law Journal Vol. 38:115)

To answer these questions it is necessary to understand the internal mechanism of agenda-setting in the policy making process by following paths of public policy theory and then find a rational explanation for the policy outcomes. Many public policy theories have addressed the policy making process in different approaches, including: the Pluralism Theory, Public Choice Theory, Critical Theory and Rationalism Theory." Another classic theory, also known as the Multiple Streams (MS) model, developed by John Kingdon in his book Agenda, Alternatives and Public Policies,has been widely used for a variety of policy analyses.12 Kingdon posits three relatively independent, but intermittently "coupled" streams that constitute the policy process: "political," "problem," and "policy."' The "political" stream is constituted by political developments as conventionally understood as: public moods, pressure group campaigns, election results, partisan or ideological distribution in Congress, and changes of administration. The "problem" stream is composed of external events that impress themselves on the decision-makers' attention, whether through mechanisms of indicators, focusing events, or feedback. The policy stream is constituted by the accumulation of competing proposals put forth by various "policy communities." This stream comes to compose a "policy primeval soup," in which politicians and their advisors cast about for responses to events thrown up by the other two streams.' 7 The soup is stirred by "policy entrepreneurs" who are continually looking for connections between politics and policy making.18 They are persistent and are constantly looking for a "policy window" to take action.'9 This paper concentrates on the MS model to analyze how these different streams interact with each other in the HSR policy-making pro- cess. The reason for adopting the MS model instead of other theories is because the MS model provides a better framework to investigate how policy outcome is shaped by different political factors. Additionally, a case study of the Florida HSR is introduced specifically to explain how coupled activities of policy entrepreneurs influence the policy outcome when the policy window opens. II. MULTIPLE STREAM MODEL Policy making is a complicated process because many actors are involved, and their propositions and influences can have impacts on the policy making process.20 The involvement of many actors inexorably makes the policy outcome difficult to predict.21 Through a drastic over-simplification, public policy-making can be considered to be a set of processes including: (1) the setting of the agenda, (2) the specification of alternatives from which a choice is made, (3) an authoritative choice among those specified alternatives, and (4) the implementation of the decision.22 For the past forty-four years, the concept of HSR has been addressed and discussed among policymakers only at the agenda-setting and alternative stages, and the concept has never reached the authoritative or implementation stages.23 However, this situation has changed since Barack Obama became the President of United States. Through two acts, the Passenger Rail Investment and Improvement Act of 2008 ("PRIIA") and ARRA, HSR has been pushed onto the national agenda and has be-gun to enter the authoritative and implementation stages. 2 4 There must be a powerful strength behind this change for success. In order to under-stand the inherent driving force for this change, we will follow John Kingdon's MS model to explore different streams behind HSR policy.

### \*\*Inherency/Solvency: Railroad Rehabilation and Improvement Fund (RRIF)

### RRIF program requirements prevent approval for applications

#### Local rail programs could solve; Southern California proves; RRIF credit requirements prevent effective solvency

Fenton 2011 (John, CEO, Southern California Regional Railroad Authority (Metrolink), SITTING ON OUR ASSETS: REHABILITATING AND IMPROVING OUR NATION’S RAIL INFRASTRUCTURE (112–7) HEARING BEFORE THE SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS OF THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION FEBRUARY 17, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation)

RRIF PROGRAM EXPERIENCE Through a partnership with the federal government and leveraged funding through RRIF, Metrolink can elevate our standing as a leading solutions provider for Southern California. As an example, Metrolink recently looked into the possibility of applying for a $300 million RRIF loan to purchase Tier 4 (advanced technology) or “green” locomotives. Metrolink’s current locomotive fleet is one of the highest polluting in the nation, averaging less than Tier 1. Today, however, we can do much better. Metrolink is now evaluating options for new advanced technology locomotives, which would ensure the most efficient and environmentally friendly passenger rail service in the state. The environmental benefits of advanced technology locomotives would be significant. We expect an 86 percent reduction (11,000 tons) of Nitrous Oxide (NOx) and a 95 percent reduction in Particulate Matter (PM) emissions annually. Locomotive manufacturers have indicated that the new technology could reduce fuel usage by up to 10 percent over our present equipment. In addition, if Metrolink would qualify to acquire these new locomotives under RRIF, it would protect our passengers’ pocketbooks from rising gas prices. Investment in new locomotives would allow us to increase horsepower per unit over 50 percent from 3000HP to approximately 4700 HP. Therefore, more efficient and cleaner locomotives will allow us to increase capacity (add more rail cars to the trains) and move more people. Advanced technology locomotives would reduce PM equivalent to the removal of 137,000 automobiles, and the reduction in NOx emissions would equate to the removal of 175,400 automobiles annually. After careful investigation, Metrolink has found that we are ineligible to participate in the existing RRIF program. Some reasons might be unique to Metrolink and passenger railroads, but other major reasons involve larger issues in the RRIF program, which are shared by other rail industry witnesses today. Prior to joining Metrolink, I served as President of one of the country's larger short line holding companies. We applied for two RRIF loans and in both cases the process took over a year and a half. In the case of the second loan the delay was so long that the rehabilitation needs changed and we had to rewrite the application to accommodate the facts on the ground. It is very difficult to run a business, be it private or public, with these kinds of delay. From my perspective and experience in both the private and public sectors, I would like to discuss the most significant barriers with the RRIF program. I will also provide some recommendations to address some of the challenges that I believe undermine the potential of the RRIF program. RRIF PROGRAM RECOMMENDATIONS 􏰀 Coordination with FTA Programs For state and local public passenger authorities like Metrolink, most of our hard assets were acquired with assistance of FTA capital funds, or state or local capital funds. Property acquired with assistance of FTA funds has a condition giving FTA rights to the property if the property is no longer used for public transportation purposes. Often state transportation capital funds have similar requirements. For RRIF loans, the FRA requires a first lien on hard assets. The challenge arises when SCRRA cannot use an asset as collateral because the FTA has prior rights. The collateral requirement prevents state and local rail authorities like Metrolink from utilizing the RRIF loan program. The RRIF program is one example that highlights the disconnect between federal agencies. In practice, these barriers undermine the success of the RRIF program. Metrolink wishes to work with the committee to further address these issues. Greater flexibility by FRA in considering collateral and repayment conditions, especially for state and local government rail authorities, would make a significant difference. 􏰀

### RRIF program must have more flexible financing issues

#### Current guidelines make loan program cumbersome; removing restrictions would invite greater private investment; less dependent on federal financing

Fenton 2011 (John, CEO, Southern California Regional Railroad Authority (Metrolink), SITTING ON OUR ASSETS: REHABILITATING AND IMPROVING OUR NATION’S RAIL INFRASTRUCTURE (112–7) HEARING BEFORE THE SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS OF THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION FEBRUARY 17, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation)

Credit Risk Premiums Another significant challenge with the RRIF program results from the requirement for credit risk premiums. Unlike the Transportation Innovative Financing & Improvement, or “TIFIA” loan program, the RRIF program does not provide any subsidy to cover the risk of default. Currently, the cost of the default risk is borne by the applicant through the payment of what is called the “Credit Risk Premium.” The amount of the premium is calculated as a percentage of the amount of the loan and is based on the risk of non-payment of the particular loan. In addition, each applicant must pay an investigation fee calculated to cover the cost to the FRA of evaluating the loan application. This fee must be paid whether or not the loan is ultimately approved. These extra costs can make the loan cost-prohibitive for government entities with limited resources. The credit risk premium is a unique feature of the RRIF statute. Providing funds for RRIF loan credit risk premiums, similar to TIFIA loans, would be helpful and certainly make the program more financially practical. 􏰀 Loan Term Flexibility The topic of RRIF loan terms flexibility is well-addressed by my colleague on the panel, Mr. Loftus for the American High Speed Rail Alliance, who is also addressing issues from a perspective of public passenger rail. We support and endorse Mr. Loftus’ comments and recommendations for the RRIF program on loan flexibility. 􏰀 Innovative Financing Finally, I also support efforts that create opportunities for private investment. The federal government is facing unprecedented budget constraints. The traditional model for federal funding and grants is incapable of meeting the nation’s deteriorating transportation infrastructure needs. ￼The RRIF program is a great opportunity to leverage private investment. We would like to work with the Subcommittee to identify incentives that will encourage greater private investment. CONCLUSION In closing, I would like to emphasize that Metrolink is more than passenger trains moving people from place to place. We are the solution for some of the major issues facing Southern California by reducing gridlock, safeguarding our environment and providing economic investment, jobs and growth. We provide a better quality of life. Equally as important, Metrolink has an opportunity to set an example for commuter rail throughout America. I want to thank you for the opportunity to appear before you today, and I am happy to answer any questions you might have.

### Current regulations prevent short line rail use of RRIF

#### 2010 guidelines stifle loan applications and railroad development; must allow all rail development to assist with HSR development

Timmons 2011 (Rich, President, American Short Line and Regional Railroad Association, SITTING ON OUR ASSETS: REHABILITATING AND IMPROVING OUR NATION’S RAIL INFRASTRUCTURE (112–7) HEARING BEFORE THE SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS OF THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION FEBRUARY 17, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation)

The short line railroad industry has been the primary user of the RRIF program: 25 of the 28 RRIF loans approved to date are short line railroads. The average short line loan is $27.8 million. And to- gether they borrowed a total of $695.5 million over the last 10 years. These loans have helped short lines maximize capital invest- ment through direct rehabilitation. And, in some cases, through re- financing existing debt, so as to increase cash available for addi- tional rehabilitation. We are particularly proud to point out that since the program’s inception in 1998, not a single short line railroad has defaulted on its loan. Only one railroad has ever missed a quarterly principal and interest payment, and that was due to serious railroad water- sheds caused by the 2007 floods in Iowa. That delinquency, of course, has been rectified since. I would like to emphasize three important points about the cur- rent RRIF program, and comment briefly on the recent RRIF guid- ance issued by the Obama administration. First, RRIF leverages substantial private investment in short line infrastructure. These are not grants, but loans that must be paid back in full by the railroad. They’re relatively low interest rate, and the 35-year amortization period are terms short lines can- not secure in the private market and it allows short lines to under- take projects that could not have been done, or that would have been stretched out over many years. Second, because these are loans that must be repaid, and are se- cured by an ironclad first lien on the railroad’s hard assets, RRIF loans are not being used to fund frivolous or cost-ineffective projects. Third, most short lines do not have the in-house manpower to undertake rehabilitation projects, must hire contractors and addi- tional laborers to do the work. The FRA estimates that 50 percent of every rehab dollar goes to labor. In addition, 100 percent of the ties, and the overwhelming majority of the materials used in track rehabilitation are U.S. manufactured. RRIF is currently authorized at $35 billion, and is yet to reach a billion in outstanding loans over the past 10 years. This is due, in part, to the slow start-up of the program, and to the lengthy delays in the approval process. Over the years, I believe the FRA has worked diligently to accelerate the process, particularly that part of the process they control. Indeed, as I have previously acknowledged before this committee, I believe that part of the blame for this slow start may lay with the application submitted by my own short line railroads. I applaud the FRA staff for their patience and willingness to correct our shortcomings, especially in those early years. Nonetheless, I believe the FRA is understaffed to manage the RRIF program. But it also is no secret that, since the beginning, FRA has had to deal with substantial institutional opposition to the program within other Federal agencies, and that opposition has been largely responsible for the severe under-utilization of this program. I am fearful that the pattern may be repeated. On September 29, 2010, the administration issued a Federal Reg- ister notice concerning its priorities in granting RRIF loans. We be- lieve the new guidelines will make it very difficult for small, pri- vate railroads to qualify for loans. And it eliminates categories of loans that are clearly eligible, under the statute. I have attached to my testimony a copy of a letter that I sent to the USDOT detailing our difficulties with this notice. Our pri- mary objections are as follows. The guidance creates loan criteria that are not part of the under- lying statute. The guidance claims the need to ration loans, so as not to be disruptive to the railroad economy. The railroad industry invests over $10 billion a year in capital projects. If the FRA were to double that number of loans over night, the combined total would represent just 14 percent of the industry’s annual expendi- tures. The guidance discriminates against refinancing as an eligible purpose, except for public agencies. This directly contradicts the statute, which makes no differentiation among eligible categories. Short lines borrowed heavily from banks to purchase and rehabili- tation lines that were going to be abandoned by the Class I rail- roads. Refinancing this short term high interest rate of debt is very important to a short line’s cash flow, and allows it to preserve cash that is much needed for rehabilitation. The guidance establishes priority categories of politically correct RRIF projects which have nothing to do with the economic world in which short line railroads operate. The categories include en- hancing commuter and inner city rail, transportation, noise reduc- tion, reduction of waterway pollution, development of inter-con- nected livable communities, and reduction of highway traffic. These have nothing to do with the short line railroads. The guidance creates a new requirement of public benefit, defin- ing public benefit as the difference between the benefit that would be achieved by using RRIF, as opposed to using conventional fi- nancing. In the real world, the difference is that short line rail- roads cannot get these kind of loans from conventional financing. That was the reason the program was created in the first place, the reason why $7 billion was set aside to begin with, which is one-fifth of the revolving authorization. That amount of money is reserved solely for projects primarily benefitting freight railroads, other than the Class I carriers. Mr. Chairman and committee, I appreciate the opportunity to ap- pear before you today, and will be glad to address any questions that you may have at the appropriate time. Thank you very much.

### Need to expand the Railroad Rehabilitation and Improvement Program (RRIF)

#### RRIF currently exists and could easily be expanded; best way to fund HSR programs

Shuster 2011 (Hon. Bill, Rep from Pennsylvania, SITTING ON OUR ASSETS: REHABILITATING AND IMPROVING OUR NATION’S RAIL INFRASTRUCTURE (112–7) HEARING BEFORE THE SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS OF THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION FEBRUARY 17, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation)

The hearing today, though, is dealing with the RRIF program, the Railroad Rehabilitation and Improvement Program, known as the RRIF program, which was originally created in 1998 as a dedi- cated source of loan funding for railroads’ infrastructure needs. It was limited to $3.5 billion in total outstanding loans. At that point the Congress recognized the need for strong freight railroad im- provement program, and increased that amount to $35 billion. We also strengthened the RRIF program in the Passenger Rail Investment and Improvement Act of 2008, by increasing the repay- ment period from 25 years to 35 years. It’s also important to note that in the history of the program, we have not had a single default of any of the RRIF loans, and I think there has been one payment that was delayed, and that was be- cause of a flood or some natural disaster occurred. Despite the efforts of the committee, the RRIF program is in serious need of improvement. Chairman Mica has indicated he is inter- ested in pursuing improvement to a number of rail issues, and a rail title to the transportation and reauthorization bill, and ad- dressing the issues in the RRIF program are a top priority. Let me point out these loans cost the U.S. Government nothing. Loan applicants pay credit risk premiums, and full collateralize the loans. The cost of the RRIF program to the taxpayer, again, is zero. However, only $400 million is currently out in loans, utilizing just a little more than 1 percent of the program’s capacity. And we must improve access to this program. In 2010, the Department of Transportation approved only 2 loans in 2009—2 loans. And in 2008, only 1 loan. Despite require for Department of Transpor- tation to consider and approve a loan application in 90 days, the average loan processing time for the FRA is 13.5 months. That needs to be improved. Additionally, the FRA released guidance for the RRIF loan pro- gram last September that could further hinder the program. Chair- man Mica and I have expressed our concerns to this new guidance last October. I look forward to exploring the concerns of the programs with our panelists today. At a time when our Nation is doing all that it can to spur economic activity, the RRIF program stands out as a poten- tial model for how government can encourage economic growth. Be- cause RRIF is an innovative loan program, not a grant program where the government merely hands out cash, the private sector has the incentive to invest money in projects that will pay a finan- cial dividend down the road. At today’s hearing I am interested in exploring ideas for improv- ing this important program. Specifically, I am interested in ways we can reform the program to leverage Federal funding with pri- vate sector resources. I am also interested in ways that we might be able to apply the RRIF program to improve the eligibility for high-speed rail projects. To quote Chairman Mica, ‘‘We must stop sitting on our assets.’’ I look forward to working with the chairman and the members of the subcommittee to improve and better utilize the RRIF pro- gram, and look forward to the testimony of today’s witnesses. And I should have started out by saying I apologize for us being late, but a pesky little thing about votes we had to take, so—and I don’t think—we’re going to be good for votes for a couple of hours, so we should be able to move through that. I have a—I ask unanimous consent to insert in the record a statement by Representative Petri.

### Changes in RRIF needed

#### Current practices block use of RRIF; simple changes would make program more usable

Brown 2011 (Hon. Corrine, Rep from Florida, SITTING ON OUR ASSETS: REHABILITATING AND IMPROVING OUR NATION’S RAIL INFRASTRUCTURE (112–7) HEARING BEFORE THE SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS OF THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION FEBRUARY 17, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation)

The Department of Transportation estimates that freight rail transportation demand will increase 88 percent by 2035. Recent studies show that the investment of $148 billion for rail infrastruc- ture expansion over the next 28 years is required to meet the DOT projected demands. Without this investment, 30 percent of rail miles in primary corridors will be operating above capacity by 2035, causing severe congestion that would affect every region of the country, and potentially shifting freight to an already heavy congestion highway system. For passenger rail, a working group for the national surface transportation policy and review study commission reported that the total capital cost estimate of establishing a national inter-city passenger rail network between now and 2050 is about $357 bil- lion, or $8.1 billion annually. However, the ability of railroad shippers and states to meet the rail infrastructure investment needs is becoming increasingly dif- ficult in the current economic climate. And it nearly is impossible for anyone to get a traditional bank loan today. Congress made a big mistake when we bailed out the banks but did not stipulate that they had to lend it out. Now, instead of lending money, banks are calling in notes. The RRIF program can help railroads, ship- pers, and states meet their rail infrastructure investment needs. But I don’t think we are taking full advantage of the program. I meet with the railroads and others all the time, and they tell me time and time again how difficult it is, the application process, to navigate, how time consuming it is, how expensive. And, in the end, many of them tell me it’s just not worth it. Well, we are work- ing to do better, and we are doing better, and I am looking forward to hearing how much better we are doing. The Draft Surface Transportation Authorization Act of 2009 makes significant changes in the RRIF program, which I proposed. The bill authorized the Secretary to reduce the interest to be paid on direct loans provided to railroad, states, and local government, and eligibility for the sole purpose of installing Positive Train Con- trol system, allowing applicants to use private insurance, in lieu of the credit risk premium, and allow applicants to pay the credit pre- mium over the life of the loan. The draft bill also authorizes appropriations to assist the Sec- retary in reducing the interest rate for loans using—for installing PTC (Positive Train Control). I look forward to hearing from the witnesses on these proposals and other suggestions for improving the RRIF loan program. Thank you very much. And I turn it back over to the chairman.

### RRIF could be specifically used for passenger HSR

#### Empirically, HSR passenger rail projects are eligible for RRIF funding

Porcari 2011 (John, Dep. Secretary, US Dept. of Transportation, SITTING ON OUR ASSETS: REHABILITATING AND IMPROVING OUR NATION’S RAIL INFRASTRUCTURE (112–7) HEARING BEFORE THE SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS OF THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION FEBRUARY 17, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation)

Mr. SHUSTER. Well, thank you. And one other question. And, you know, I discussed this the other day when we met, and you said in your testimony that the RRIF program can be used for pas- senger rail. So high-speed rail, if that were something that we were to move forward, is that—the potential is there for the northeast corridor to loan money for those—to that type of project? Mr. PORCARI. Yes. The RRIF program can clearly be used for passenger rail. It can also be used, by the way, for Positive Train Control. It’s not an application yet, but there is a very large project, DesertXpress, which will go from east of Los Angeles to Las Vegas, that we’re in discussions with right now. The credit council has looked at that and had some questions that the DesertXpress private operator is answering now. They’re not yet eligible, because they need to complete their NEPA process and get Surface Transportation Board approval. Once they do that, if that goes forward, that alone would be in the $4 billion, $5 bil- lion, or $6 billion range.

### Loan requirements for the RRIF program need change

#### Revising loan requirements like those of other agencies would make RRIF loans more attractive; would guarantee the success of HSR proposals

Loftus 2011 (Tom, President, American High Speed Rail Alliance, SITTING ON OUR ASSETS: REHABILITATING AND IMPROVING OUR NATION’S RAIL INFRASTRUCTURE (112–7) HEARING BEFORE THE SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS OF THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION FEBRUARY 17, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation)

My pur- pose today is to propose a number of changes to the RRIF program that the American High Speed Rail Alliance believes would allow the program to better support the development of high speed rail, and help leverage the private financing that is badly needed to make high speed rail a reality in this country. Building world class high speed rail will require a significant commitment of resources. The $8 billion provided in the 2009 stim- ulus package, and even the $53 billion that the President has pro- posed, are not sufficient to complete the job. These funds are going to have to be matched by local support and private investment. Let me briefly describe three changes that would provide an in- centive for private investment. The first proposal is to provide RRIF with a TIFIA-like Federal subsidy that allows the Secretary of Transportation to modify loan terms by deferring payments or subsidizing the interest rate. Deferring payment would allow high speed rail applicants to meet the construction and ramp up time tables of high speed rail projects, which typically run anywhere from 5 to 8 years to 10 years. Under TIFIA, repayment can be deferred up to five years after completion of the project. The cost of this deferral is paid by annual appropriations, initially set at approximately $122 million, and supplemented in 2010 to cover additional loan activity. We propose also that the RRIF subsidy can be used to lower the interest rate when the Secretary determines that that would make the difference in the viability of a project. RRIF and TIFIA interest rates are set based on comparable U.S. treasuries. Today, the rate on a 35-year loan is approximately 4.7 percent. We estimate that, at today’s interest rate, a $1.1 billion subsidy would support a 10-year deferral of payments, or a 3 per- cent interest rate on a 35-year loan of $5 billion. Put another way, one Federal dollar would leverage five dollars in loans to private entities that must be repaid. We fully understand the need to reduce Federal spending, and we know that $1.1 billion is not pocket change. However, if the Federal Government is committed to investing in high-speed rail, would we not be better off taking a portion of the proposed $53 bil- lion and leveraging it at 5 to 1? Given today’s financial reality, this might be the only way to find the funds necessary to build high speed rail in the U.S. Collateral is also an obstacle to the high speed rail industry. RRIF requires a first lien on hard assets equal to at least 100 per- cent of the value of the project. High speed rail projects will not be able to meet this requirement. We propose that FRA accept the estimated value of a future stream of taxes or fees pledged to repay the loan as collateral. In the case of a default, the government is guaranteed this stream of income to repay the loan, so it’s just as protected as it would be if there were hard assets to sell to recover the loan. Finally, we propose that development phase activities be eligible for RRIF funding. High speed rail projects, as you know, require substantial development phase activities, including planning, feasi- bility analysis, and environmental review. Under the current RRIF statute, it is unclear whether these are eligible costs. Uncertain outcomes can make this first phase of the projects the hardest to fund. Knowing that a RRIF loan could reach back and pay for these costs would make it more feasible for private or local government to initially fund these costs. High speed rail holds great promise for the American people, and high speed rail advocates are rightly passionate in promoting its substantial advantages. Congestion relief, energy conservation, cleaner air, inter-connected communities are all potential benefits. Build-out will create many thousands of jobs in providing rolling stock, signaling systems, and maintaining the infrastructure will renew critical domestic manufacturing and supply industries that we have sadly ceded to foreign countries. We need to move forward—to move forward, we need to think about alternative ways to fund high speed rail projects. These pro- posals are not the total answer, but they are realistic and a cost- effective way to begin. Thank you for your time, and I am available to answer any ques- tions you might have.

### Current RRIF regulations flexible enough to provide financing

#### The Obama administration is committed to HSR; RRIF will play a significant role in that development

Porcari 2011 (John, Dep. Secretary, US Dept. of Transportation, SITTING ON OUR ASSETS: REHABILITATING AND IMPROVING OUR NATION’S RAIL INFRASTRUCTURE (112–7) HEARING BEFORE THE SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS OF THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION FEBRUARY 17, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation)

RRIF has helped expand the nation’s transportation infrastructure and freight capacity, preserve small town and rural connections to the nation’s rail system, and improve freight and rail mobility. For example, the Iowa Northern Railroad was formed in 1984 to preserve freight service to the small towns and the largely agricultural area between Cedar Rapids and Manley, Iowa. Iowa Northern provides essential transportation services to ethanol producers near Fairbanks, IA and Shell Rock, IA. FRA provided a $25 million loan to Iowa Northern to purchase track and right-of-way, rehabilitate track and construct office and maintenance facilities. However, in June 2008, Iowa Northern was severely damaged during a flood. The Department approved the railroad’s request to defer loan repayments, an approach that not all lenders would take, and then rolled the deferred payments into the amount owed. Today Iowa Northern consists of over 160 miles of track with 100 employees and is current on all payments. Iowa Northern is also a RRIF success story. RRIF is also offering opportunities for meeting our urban mobility needs. The Denver Regional Transportation District (RTD) approached the Department about developing a major intermodal transportation hub at the historic Denver Union Station. After a series of discussions, the Department concluded that RTD’s needs could be met with a combination of a RRIF loan and financing from the Transportation Infrastructure Finance and Innovation Act of 2008 (TIFIA). The RRIF staff led the Departmental review of the project and developed an approach to provide $300 million in financing for the project including $155 million from RRIF. Today, construction is underway and people are at work developing a facility that will become a focal point for transit oriented development in Denver. As you can see from these examples, RRIF offers a great deal of flexibility in meeting our rail and rail-related intermodal investment needs. That is why this Administration believes that RRIF will play a significant role in the future. The Notice Since the inception of the program, the Secretary of Transportation has had broad discretion in implementing RRIF. Until our notice was published last September, there had never been a clear expression by the Department as to how the Secretary would exercise that discretion. That lack of guidance has been a justifiable concern for those who may benefit from the program, in particular the small railroads which are the reason that the program exists in the first place. In issuing the Notice, the Department for the first time provided the basis for how we would manage the program and apply standards that applicants are required to address. In providing this transparency, our goal was to make it easier and less costly for interested parties to determine whether RRIF was a good fit for their financing plans, and to lay out what they could expect from the RRIF review process. Unfortunately, what we believed was an effort to improve the implementation of RRIF has been seen by some as an effort to continue the policy of the past Administration to eliminate or significantly constrict the availability of credit through this program. Let me say unequivocally, this is not our intent. Thus, I would like to touch upon a few misunderstandings about the Notice. 􏰀 RRIF Financing Connection to Public Benefits The use of the fiscal resources of the U.S. Government, including the use of the Federal Government’s credit, needs to be linked to a public benefit. This was recognized in the statute that created the current RRIF program which included eight priorities for RRIF financial assistance. (45 U.S.C. 822(c)). The Notice provided more information and examples of how applicants could address the long-existing statutory priorities and help better articulate how implementation of RRIF aligns with national transportation goals. Among the types of investment we specifically identified as generating public benefits were “address[ing] specific chronic safety concerns”, “sustained improvement in the class of track”, and “enhancements of signal and train control systems”. In the latter type of investment we were expressing our view that RRIF could be of assistance in the extension of positive train control to our Nation’s rail system. The Department believes that the important transportation services provided by our Class III and Class II railroads in preserving and encouraging the use of efficient rail freight services and preserving access by small towns and rural areas to the national rail system align closely with the Department’s strategic goals and the public benefits that can be realized through the RRIF program. As we say in the Notice: “The RRIF Program was originally established as a means to provide access to capital for critical infrastructure improvements by the Class III and Class II railroads. Although the RRIF program has changed since its creation, FRA views the original purpose as one of the highest priorities for use of RRIF financial assistance. (Fed. Reg./Vol. 75, No 188/Wednesday, September 29, 20190, pg 60168, emphasis added.)

### Current guidelines safeguard rail investment

#### Regulations prevent abuse of the system; safeguards will guarantee effective use of RRIF funds

Porcari 2011 (John, Dep. Secretary, US Dept. of Transportation, SITTING ON OUR ASSETS: REHABILITATING AND IMPROVING OUR NATION’S RAIL INFRASTRUCTURE (112–7) HEARING BEFORE THE SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS OF THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION FEBRUARY 17, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation)

 􏰀 Refinancing of Debt Incurred for Eligible Purposes The Notice recognizes that under appropriate circumstances refinancing debt can yield benefits to the public. Among these types of refinancing are those that are used to free up cash flow to undertake additional capital improvements that preserve or improve the rail service or free up cash flow to ensure continued operation of the rail service. Included within this is using the beneficial financing terms offered by RRIF to facilitate compliance by railroads with so-called “unfunded mandates” that might result from statutory or regulatory requirements. There are, however, certain types of refinancing of existing debt that provide limited or no public benefit and are not efficient uses of Federal assistance. These include using RRIF as part of a funding scheme that would permit entities such as hedge funds to acquire railroads through a highly leveraged purchase, strip the railroad of valuable assets such as title to the railroad’s right-of-way, and leave the remaining shell of a railroad shackled with the acquisition debt. Our refinancing bottom line is that we are in favor of refinancing that yields benefits to the public commensurate with the level of financial assistance provided, and most efficiently meets policy goals. We are not interested in the use of refinancing if the purpose of Federal financial assistance is solely to enrich corporations or individuals with little or no benefit to this Nation’s transportation system. 􏰀 The Number or Size of RRIF Loans The Notice states that the Department will periodically review the volume of RRIF- funded transactions to ensure that the level of RRIF activity continues to have an impact on rail investment. It is not our goal to “ration” RRIF assistance and set limits on either the size of loans or the amount of activity in any one year, but rather to make sure that Federal assistance is targeted efficiently and effectively, without providing unnecessary subsidies or displacing private credit markets. In the current economy as we continue our progress out of the greatest recession of our lifetimes, the Department wants to stimulate job-making positive economic activity such as investment in rail infrastructure and equipment. We see no benefit in restricting the volume of such investments. Indeed, expanded competition for labor and materials will have precisely the simulative effect that this economy needs. However, we are confident that the lingering effects of the recession will soon recede. In that future state, the Department wishes to assure that our actions do not contribute to levels of inflation that could have the effect of curtailing investment in transportation infrastructure and the jobs that comes with that investment. The Credit Council The Credit Council, as restructured by Secretary LaHood, ensures that the application of credit policy among the Department’s different credit programs is consistent. Through the Credit Council review, the individual modal administrations and the Secretary’s office that are evaluating applications for financial assistance benefit from the diverse expertise of the leadership of the Department and its modal administrations. In the RRIF program context, the Credit Council first reviews with FRA information gathered through preapplication discussions prior to retaining the independent financial advisor (IFA). The purpose of this is to identify any issues that the Credit Council believes need to be addressed in the review of an application so that such issues are included within the scope of the IFA’s work. Prior to this requirement there have been circumstances where FRA’s analysis had not included issues of interest to the Council which in turn required more analysis and delay in acting on the proposed application. Throughout the review of an application, the FRA RRIF program regularly briefs the Credit Council working group, which is comprised of the career staff credit program managers from the Office of the Secretary and the modal administrations. This acts as a peer review of the analysis being undertaken by FRA. Finally, when the analysis is complete, it is presented to the Credit Council for review and comment. The results of this review are provided as advice to the FRA Administrator, who has been delegated by the Secretary with responsibility for implementing the RRIF program. We have established regular schedules for Credit Council meetings and processes for preparing and submitting materials for the Credit Council review. With this predictability built into FRA’s application review process, the Council’s considerations helps improve timely decision making on completed applications for RRIF financial assistance. The Use of Credit Based Financing As RRIF has proven, Federal credit assistance can be an important tool to help address the Nation’s infrastructure investment needs. Credit can leverage available Federal financial resources to meet important and essential investment needs. President Obama’s budget for Fiscal Year 2012 requests $5 billion for the National Infrastructure Bank. The National Infrastructure Bank will invest in high-value projects of regional or national significance, and marks an important departure from the Federal Government’s traditional way of spending on infrastructure through mode-specific grants. The National Infrastructure Bank would have flexibility to choose projects with demonstrable merit from around the country and provide a variety of financial products – grants, loans, or a combination – to best fit a project’s needs. The National Infrastructure Bank would allow the Department to further encourage collaboration among, and co- investment by, non-Federal stakeholders, including States, municipalities, and private partners. Also, the National Infrastructure Bank may be able to provide deeper, and targeted subsidies for eligible projects where warranted based on the potential public and economic benefits of a project.

### RRIF key to continued rail investment and development

#### RRIF has demonstrated success; it will continue to adapt and provide funds for needed infrastructure needs

Porcari 2011 (John, Dep. Secretary, US Dept. of Transportation, SITTING ON OUR ASSETS: REHABILITATING AND IMPROVING OUR NATION’S RAIL INFRASTRUCTURE (112–7) HEARING BEFORE THE SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS OF THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION FEBRUARY 17, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation)

Next Steps for RRIF The RRIF program has a strong record of success. Despite the recession every recipient of RRIF financial assistance is presently current with their payments. In addition, we have had no defaults that have required the Federal Government to assume responsibility for the loans made under this program. RRIF offers an opportunity to facilitate investment in rail capital needs that will yield public benefits at little or no cost to the Federal Government. Since we issued the notice, we have seen interest from a wide range of eligible applicants for a wide range of projects both large and small. Many proposals, such as the Denver Union Station project that was funded through a combination of RRIF and TIFIA financing, are unusually complex and are without precedent. This reflects both a maturing program and the growing need for transportation capital investment. We will continue our outreach and educational efforts to the RRIF stakeholder community. We will redouble our efforts to assist rail industry organizations in helping their members identify how best to work within the program requirements, particularly those members that may not be accustomed to the requirements of public sector programs. Conclusion In conclusion, credit-based financial assistance programs such as RRIF will play a role of growing importance as we address this Nation’s transportation investment needs. I would be happy to address any questions that the Subcommittee might have.

### \*\*Magnetic Levitation Technology\*\*

### Maglev technology removes barriers to connect major cities

#### Las Vegas to Los Angeles corridor proves need for maglev technology; best to connect and travel between cities of that size and distance

Brown, 2010 ( Stuart F. Contributing editor, Revolutionary RAIL Scientific American, May, Vol. 302 Issue 5, p54-59, 6p, )

The Fast Route Competing proposals for a passenger train line connecting Las Vegas to southern California further demonstrate just how important maglev technology can be. Urban planners have dreamed of linking Las Vegas to Los Angeles with fast trains for decades. "This is an ideal corridor for high- speed trains because you are connecting one of the biggest entertainment districts in America with southern California, one of the largest population centers," says engineer Thomas Bordeaux, senior transportation manager at Parsons Transportation, an engineering firm in Las Vegas. The cities are 270 miles apart--right in the sweet spot between 100 and 500 miles where train travel is more convenient than either driving or flying. And the land between those two cities is little more than sand and scrub, a blank canvas on which to paint the tracks. Unfortunately, the Los Angeles basin is flanked to the east by the San Bernardino and San Jacinto mountain ranges. Any high-speed line penetrating these natural obstacles would have to scale grades of up to 7 percent, which is only feasible using maglev technology. The California- Nevada Super Speed Train project aims to do just that, connecting Las Vegas with Anaheim, a large city just south of Los Angeles. The alternative to maglev technology is to avoid the L.A. basin area altogether. The DesertXpress, as the project is called, would build a traditional high-speed rail line that links Las Vegas to Victorville, a high desert outpost more than an hour and a half from downtown Los Angeles (this assumes no traffic, which is an anomaly in L. A.). While it would not require advanced technology, it also would not take passengers anywhere they would want to go. The DesertXpress will also fail to connect to the planned California high-speed rail system that will link Los Angeles to San Francisco. The California project was one of the two big winners in this year's stimulus fund giveaway, along with an 84-mile route connecting Tampa and Orlando in Florida. When the stimulus money is combined with the $9 billion secured in the 2008 voter referendum, the California project will have in hand more than a quarter of its $40-billion projected total cost. Construction is likely to begin as early as 2011.

### Magnetic Levitation (MagLev) Technologies Best

#### Changes now focus on wheels on surface solutions; magnetic levitation technologies would be better focus

Brown, 2010 ( Stuart F. Contributing editor, Revolutionary RAIL Scientific American, May, Vol. 302 Issue 5, p54-59, 6p, )

Federal authorities, eager to spread the wealth to as many congressional districts as possible, are financing a bevy of incremental improvements to existing lines. In many cases, these projects will only marginally increase passenger rail speeds. On the other end of the technological spectrum, some efforts aim to bypass wheels-on-rail systems by using magnetic levitation, or maglev technology, in which passenger cars float above a concrete guideway. Momentum for the technology comes in a number of forms. Although maglev trains have been in development for decades, the first (and, thus far, only) commercial system entered service in 2004. For mountainous regions of the U.S., the technology represents the only viable solution to the problem of steep gradients that would otherwise cripple standard rail lines. And perhaps most important, the technology has received a stunning vote of confidence from the world's foremost experts in building and operating commercial high-speed passenger rail lines. The Maglev Option The Central Japan Railway (CJR) has by far the world's largest body of experience in operating high-speed trains, having run the sleek wheels-on-rail Shinkansen bullet trains connecting the population centers of Tokyo, Nagoya and Osaka since 1964. Yet the realities of running the bullet system are now spurring CJR's interest in maglev. Every night a marching army of 3,000 railway ￼workers descends on a 12-mile section of Shinkansen track, scrutinizing the rights-of-way, replacing worn components and assuring precision alignment of the rails. The following night they labor on the next 12-mile section of track. The work never ends. The company must invest all this costly effort because even small imperfections in the tracks can trigger serious vibrations in the speeding trains. These vibrations, in turn, increase wear and tear on the infrastructure. The deterioration of rails, train wheels and the overhead catenary wires supplying electricity to locomotives increases exponentially with the train's running speed. Truly high-speed rail turns out to be murder on the hardware. If the nighttime maintenance work on the Shinkansen line takes longer than expected, its 309-train daily schedule is thrown into chaos. Hoping to avoid such difficulties, the company plans to construct a high-speed maglev line called the Tokaido Shinkansen Bypass, which it aims to complete by 2025. Although this would not be the world's first commercial maglev line--a 19-mile shot connecting Shanghai's airport with its financial center opened in 2004--at 180 miles, it will be by far the most ambitious. Yoshiyuki Kasai, CJR's chair, told a gathering of transportation officials in Washington, D.C., last June that maglev would be less expensive than traditional high-speed rail in the long run because of less costly upkeep demands over the life cycle of the system. CJR also says maglev promises to reduce trip times because the trains accelerate and slow down much more rapidly than wheel-on-rail trains can.

### Technological developments improve HSR possibilities

#### Magnetic levitation best means to develop HSR

Lane 2012(Bradley W. MPA Program, The University of Texas at El Paso, “On the utility and challenges of high-speed rail in the United States” Journal of Transport Geography 22 (2012) 282–284 www.elsevier.com/locate/jtrangeo)

Technological developments have the potential to lessen the impact of this in some places. Mag-lev is a form of train technology similar to a monorail, only the car and the track are held ‘‘together’’ by opposing magnets. The magnetic force eliminates friction, which makes the elevated system very quiet, safe, and requires less energy to propel the train (see Lee et al., 2006). Mag-lev systems have been proposed in many places, but due to cost and technolog- ical questions its application is thus far limited to one high-speed line connecting central Shanghai to its airport (a distance of 19 miles covered in less than 8 min). Regardless, one can imagine an elevated application in the US, where a train zooms over a Wis- consin dairy farm between Minneapolis and Chicago while cattle graze oblivious to its presence. Arrangements could be made where farms and ranches leased vertical space over their land to al- low for an elevated line to pass through with minimal impact on crops or livestock, as well as provide the landowner supplemental income.

### FYI: Explanation of MagLev technology

#### Explanation of the Maglev technology

Brown, 2010 ( Stuart F. Contributing editor, Revolutionary RAIL Scientific American, May, Vol. 302 Issue 5, p54-59, 6p, )

THE PULL OF MAGLEV HOW IT WORKS The Central Japan Railway has announced that it will build a 200-mile-long line that will use magnetic levitation--or maglev--technology. Maglev systems employ magnetic fields to lift and propel trains above concrete guideways. Because it eliminates the friction between steel wheels and rails, the approach not only raises speeds, it significantly reduces wear on the system, leading to lower maintenance costs. Planners in Colorado, Nevada and California hope to bring similar systems to the U.S. LEVITATION: In a maglev system, arms on each side of the train reach around and below an ￼elevated concrete guideway. Electromagnets on the underside of the guideway attract support magnets installed in the train's arms. Sophisticated control systems balance the weight of the train against the magnets' pull, keeping the train a constant distance from the track. In addition, guidance magnets on each side ensure that the train stays centered. PROPULSION: Old-fashioned trains have locomotives. In a maglev, the guideway does most of the work. Inside the guideway an alternating current creates a moving magnetic field that pulls the support magnets on the train's arms. By varying the frequency of the alternating current, the train can accelerate or decelerate as needed. The current goes through only the section of guideway that has the train directly above it. A fraction of a second later, the alternating current in the guideway switches the polarity of the magnetic field. Magnets that pulled now push; magnets that pushed now pull. In this way, the train moves forward. Maglev vs. Traditional High-Speed Rail COST COMPARISON The existing and planned high-speed train projects listed below demonstrate that the cost of a project depends greatly on individual circumstances. The most important factors include the terrain the line must pass through (mountainous areas are more costly), how densely populated the area is, the cost of labor, and the technology being used. Line Yatsushiro to Kagoshima Estimated construction cost per mile (millions) $82 Status Completed 2004 Technology Length (miles) Barcelona $39 Completed Wheelsonrail 79 Wheels on rail 468 Wheels on rail 520 to Madrid Los Angeles $63 to San Francisco Las Vegas $22 to 2008 Proposed Proposed Wheels on rail 183 ucelinks.cdlib.org:8888/sfx\_local?genre=article&issn=00368733&title=Scientific+American&volume=30... 7/9 6/19/12 UC‐eLinks ‐ Revolutionary RAIL. ￼Victorville Las Vegas $48 to Anaheim Baltimore $132 to Washington, D.C. KEY CONCEPTS Proposed Proposed Maglev 269 Maglev 40 • Unlike Japan, France and other countries, the U.S. has no true high-speed train lines. • A recent influx of federal money is spurring hope that long-planned projects could finally be built. • Such projects include both steel-wheels -on-rails and magnetic levitation technology. --The Editors

### \*\*General Solvency Extensions/Responses\*\*

### Must effectively communicate HSR goals for policy to work

#### The relationship between proposal and implementation is complicated; must be done correctly for policies to be effective

Perl 2012 (Anthony, Political Science Department & Urban Studies Program, Simon Fraser University, Vancouver, BC, Canada Assessing the recent reformulation of United States passenger rail policy Journal of Transport Geography 22 (2012) 271–281 www.elsevier.com/locate/jtrangeo)

￼This article reviews the prospects for major change in United States transportation policy based on initial experience with the Obama administration’s launch of a high-speed intercity passenger train program. Public policy theory suggests that such paradigmatic change requires a mix of both powering through new goals and puzzling over how to attain them. Pursuit of the Obama administration’s high-speed rail policy agenda to date suggests that when the power to initiate policy goals is much greater than the capacity to achieve them, then political conflict over implementation will become a constraint on policy paradigm shift. ￼￼￼￼1. Introduction: What happens when radical change is proposed for a stagnant transportation mode? What can we learn from the change that occurs when a political leader suddenly rewrites the policy agenda for a part of the transportation system that has been politically deadlocked and mired in stagnation for decades? This article will examine a radical revision of the policy agenda that has provoked efforts to develop a new organizational and technological paradigm for passenger railroad operations in the United States. Should a successful implementation of high-speed passenger trains occur during the coming decades, then opportunities for assessing the economic, energy and environmental impacts will be ripe for investigation. But at the outset of this potential transformation, the most fruitful insights into America’s high-speed rail development efforts are likely to arise from examining the political dynamics that sought to upend institutional arrangements that had effectively isolated the rail mode from national transportation planning and finance efforts during much of the 20th century. Understanding both these politics and their administrative implications can shed light on both the immediate consequences of, and subsequent prospects for, this significant shift in American transportation policy. Two years into the implementation of high-speed passenger rail in the United States, the limited correlation between policy objectives, bureaucratic aptitude, and fiscal capacity has become an obvious constraint on program development. Such a gap between the political power to rewrite a policy agenda and the administrative ingenuity to deliver novel policy outcomes is entirely predictable based on policy-making theory. Hugh Heclo was among the first scholars to identify an underlying political friction between authority and knowledge that can become relevant when governments initiate policy. He wrote that: Governments not only ‘power’ (or whatever the verb form of that approach might be); they also puzzle. Policymaking is a form of collective puzzlement on society’s behalf. (Heclo, 1974, p. 305) In creating this enduring metaphor about the interplay between knowledge and power in public problem-solving efforts, Heclo of- fered a key insight for understanding how a sudden shift in policy calls for two, not inherently compatible, dimensions of know-how. First, politicians must successfully change the agenda of issues that are considered legitimate subjects of policy-making. And second, but no less important, civil servants must identify tools and master techniques that can deliver new policy outputs to address the issue. The more power that is leveraged to reshape the policy agen- da, the greater that the demand for figuring out ways of achieving the newly desired outcomes will be. Efforts to identify and apply policy instruments for implementing a new transportation agenda will thus be shaped by the fit between the authoritative and analytical dimensions of collective puzzling. Examining the efforts to articulate powering and puzzling can be less revealing during periods when a policy subsystem is stable and change is either incremental or absent. But when a policy agenda changes suddenly, the connection between deciding what to do and knowing how to do it becomes an important influence on the resulting policy outcomes. This article will demonstrate that the redesign of US passenger railroading has initially linked an authoritative revision of the policy agenda to a relatively limited capacity for adopting the instruments and crafting the governance configurations that would facilitate implementation of these new goals. To date, this variance between political ingenuity at reshaping the agenda and administrative inadequacy in delivering policy outputs has intensified the conflict over policy implementation. The prospects for paradigmatic change in 21st century US trans- portation policy will thus be shown to depend upon combining the political authority to create policy goals with the ￼ administrative capacity to deliver results that can legitimate the new objective.

### US trains empirically plausible

#### When planned correctly, HSR will work in US; Metroliner from the ‘60’s proves; other economic issues undermined the project

Perl 2012 (Anthony, Political Science Department & Urban Studies Program, Simon Fraser University, Vancouver, BC, Canada Assessing the recent reformulation of United States passenger rail policy Journal of Transport Geography 22 (2012) 271–281 www.elsevier.com/locate/jtrangeo)

By considering America’s passenger rail policy development over an extended time frame, beginning with a response to Japan’s launch of the world’s first ‘‘bullet train’’ in 1964, the gap between authority and capacity that has recently stirred political conflict will become more apparent. Section 2 will illuminate a relevant legacy for United States rail passenger redevelopment through examining government’s initial attempt to modernize the technol- ogy supporting passenger train services. The High Speed Ground Transportation Act of 1965 marked a milestone in seeking an alternative to the decline and marginalization of US passenger trains as a transportation mode. This Act and its implementation reveal how a workable symbiosis of political power and administrative knowledge was configured to facilitate innovation and thus preempt much of the political conflict that has accompanied more recent efforts at passenger rail redevelopment. It also reveals the limits of an incremental approach to change that relied on a demonstration project delivered by private sector partners that were threatened by industrial decline. Section 3 considers the legacy of rail passenger policy changes that grew out of an industrial crisis in the US rail sector. Policy goals and instruments were abruptly reshaped through a ‘‘garbage can’’ model of policy making, which Cohen, March and Olsen, (1972) conceptualized to depict decisions taken during conditions of ‘‘organized anarchy’’. One result was the contested divorce of passenger and freight rail management and finance that restructured American railroad operations into a configuration that was quite different from that found in Asia or Europe. Intercity passenger train operation, and its substantial operating deficit, was taken over by Amtrak, a quasi-public passenger train operator which was hurriedly created to relieve failing private carriers of this major cost burden. Supporters saw Amtrak as the start of a major public redevelop-ment that would modernize America’s passenger trains along the lines that were emerging in Asia and Europe, while skeptics saw the new organization as an entity whose mission should be to wind down an obsolete technology with hopeless economic prospects. But once the rail sector’s industrial crisis abated, neither support- ers nor skeptics could wield sufficient authority within the subsys- tem to advance their competing policy prescriptions. Section 4 covers the latest reformulation of US passenger train policy, initiated by a agenda change introduced at the apex of the executive branch in early 2009. Shortly after his inauguration, President Obama succeeded in adding high-speed passenger trains to a fiscal stimulus program that was crafted in response to the glo- bal financial crisis. The American Recovery and Reinvestment Act of 2009 included $8 billion for high-speed rail investment, but left the definition of high-speed passenger train service and the mechanisms of how to achieve such operations unspecified. The resulting policy implementation produced retroactive develop- ment of a vision for high-speed rail in the United States and created administrative procedures to allocate federal funds. Section 5 will consider the governance implications of this initial divergence be- tween political authority and administrative capability and will close by anticipating what kind of policy learning would be needed to overcome the initial challenges of implementing high-speed passenger trains in America. 2. America’s first round of reinventing passenger train policy: the 1965 High Speed Ground Transportation Act and the ‘‘Metroliner’’ project To better understand the political dynamics behind today’s struggle over a new passenger train policy, it is helpful to consider what transpired during an earlier episode of policy innovation. Like the American Recovery and Reinvestment Act of 2009, the High Speed Ground Transportation Act of 1965 established a significant departure from the existing goals and means of US railroad policy. But while its vision of change was equally ambitious, the 1965 Act engaged subsystem actors in quite a different way than what has transpired since 2009. In both 1965 and 2009, the initiative for policy change was opened by a recently elected federal official who took on the role of political champion. While a growing number of subsystem ac- tors would subsequently be drawn into puzzling over how to achieve new goals, it is important to recognize that departing from established policy norms was initiated from outside the railroad industry. It is also relevant to note that neither of the public offi- cials who introduced a new vision for passenger trains onto the policy agenda was a transportation expert. Perhaps because of their distance from the details of railroad management, they embraced a strategy in which renewing passen- ger trains was neither an end in itself nor solely a means to address transportation needs. Instead, reviving passenger trains was iden- tified as a means to advancing broader economic and social oppor- tunities whose benefits would extend far beyond the transport subsystem. In the early 1960s, the train’s potential contribution to American economic development was seen much more vividly from outside the industry than by rail executives who were strug- gling to cope with competition from other modes. In the 1960s, a first term Senator from Rhode Island turned out to be one of the few Americans in public office who could see be- yond the passenger train’s decline and imagine how a renewed railroad could boost the productivity and augment the social cap- ital of communities along America’s northeast seaboard. Senator Claiborne Pell, who went on to create highly regarded policy inno- vations including the ‘‘Basic Educational Opportunity Grants’’ for postsecondary students that bear his name, the National Endow- ment for the Arts, and the National Endowment for the Humani- ties, took an early interest in economic development opportunities for the US Northeast. Notoriously frugal, Senator Pell had spent much time riding the slow and unreliable trains that connected Providence, Rhode Is- land, with Washington, DC. But beyond recognizing the incipient decline of this mobility mode, as railroads cut back in response to a shrinking passenger demand, Senator Pell also noted a new kind of social interaction that was developing along the trains’ route. Rather than living and working in a single community, Pell observed a growing number of people who travelled between com- munities throughout the northeastern states as if they were differ- ent neighborhoods of a single city. Based on this experience, Senator Pell became an early adherent of what would today be called a ‘‘cluster’’ approach to fostering regional economic develop- ment (Porter, 1998). In his book Megalopolis Unbound, Senator Pell articulated a bold vision for advancing opportunities in America’s Northeast mega- region. That vision highlighted modern passenger trains as en- abling regional productivity and creative interaction. Trains that replicated the success of Japan’s Shinkansen could simultaneously improve mobility while lowering its cost to both the individual and to society. Pell’s analysis identified a complex policy problem which modern passenger trains offered the key to solving. He wrote that: We are developing in America a new kind of urban society of vast proportions – a society unique in its sheer size and scope and concentration of energies and activities. . .. [This] ‘new order’ calls for a new dimension in public outlook and public- policy planning: if we do not match the scale of Megalopolis with our solutions of Megapolitan problems, we may find ourselves unable to carry forward into the new order some of the basic values of our civilization. Particularly this is true of all facets of the problem of mobility. (Pell, 1966, p. 34–35) The railroad infrastructure between Boston, New York, and Washington could not adequately support development of the meg- alopolis because of what Pell termed ‘‘technological retardation’’, a phrase meant to suggest that ‘‘. . . railroads are not obsolete but have simply lagged behind other modes of transportation and failed to ex- ploit their natural technological advantages.’’ (Pell, 1966, p. 142) The 1965 High Speed Ground Transportation Act sought to redi- rect the railroad policy agenda, which had become increasingly fo- cused on downsizing the role of passenger trains as they lost market share to autos and airlines. One of the rail industry’s many concerns was that federal and state governments had been pouring money into new airport and highway infrastructure, and thus sub- sidizing their competition. The 1965 Act would authorize the first federal spending on intercity passenger train infrastructure, through demonstration projects that could show whether new technology could offset the losses to aviation and automotive com- petition. Since the federal government had not engaged in railroad development directly, a new agency would be needed to plan and oversee these demonstration projects in partnership with rail industry partners. The Office of High-Speed Ground Transportation (OHSGT) was established with a budget of $90 million, equivalent to $622 mil- lion in 2010 dollars.1 Its mandate was to plan and facilitate high- speed train projects that would demonstrate the added value of modern passenger trains, both to railroad companies that were struggling with economic losses from uncompetitive services and to the ‘‘external’’ beneficiaries of improved passenger services – communities and businesses that would gain from enhanced mobil- ity. By 1967, the OHSGT had been incorporated into the subse- quently created US Department of Transportation and was in the midst of some ambitious partnerships for passenger train renewal. The most ambitious element of OHSGT’s policy implementation efforts was its partnership with the Pennsylvania Railroad (PRR) to launch an electric train capable of 160 mile per hour speeds. The PRR’s role in such an ambitious project was apt, since it already carried more passengers than any other American railroad and was the principal carrier between New York City and Washington, DC. Just 225 miles apart, these two cities were ideally placed for testing the contribution of rail to building a thriving Northeast megalopolis. In return for $11 million in federal funds, the PRR contributed $44.5 million to design and build the ‘‘Metroliner,’’ which was in- tended to cruise at 120 miles per hour, making the trip between midtown Manhattan and Capitol Hill in less than three hours. Three established railroad manufacturers teamed up in a success- ful bid for the PRR’s $21 million Metroliner rolling stock contract. The Budd Company would build the car bodies while General Elec- tric and Westinghouse would manufacture the electric motors, brakes, and communications technology that went into them. The remainder of the funding would go into track maintenance to enable the Metroliner to attain its design speed. In addition to contributing more than three dollars of private investment for each dollar of government support, the rail industry partners brought considerable experience and technical know-how to policy implementation. While not at the leading edge of global high-speed rail innovation, which was being pursued by Japanese, French and German industrial engineers, the PRR, Budd Company, GE, and Westinghouse were North American repositories of exper- tise in passenger trains. Their know-how yielded results, which were delivered much more rapidly than the high-speed train initia- tives in Japan and Europe, even if the outcomes fell short of inter- national experience. While the Metroliner did achieve a speed of 164 miles per hour in a single test run, and operated between New York and Washington, DC at speeds up to 110 miles per hour for many years, this train established only one speed record that endures to date, and reveals the key to US rail policy development before Amtrak. Unlike Japan’s Shinkansen or the French TGV, the Metroliner could not sustain the high-speeds that it was designed for because it made use of existing tracks that were shared with freight trains, conventional intercity passenger trains, as well as frequently stopping commuter trains. By avoiding the need for new tracks, which the Japanese, French and Germans had to build before launching their high-speed passen- ger trains, America’s Metroliner demonstration sprinted off the drawing boards in under 4 years, going from partnership launch in 1965 to entering revenue service in 1969. Not building new tracks saved much time and money, and the rapid deployment of North America’s closest analog to a bullet train gave both the demonstration project and the passenger train modernization program essential credibility within the railroad industry, and even beyond it. PRR’s Metroliner also passed a key market test. The Metroliner was able to generate greater revenue than its operating expenses from the day it entered service. The Metroliner project revealed a promising capability for realizing the policy vision presented in the High Speed Ground Trans- portation Act of 1965. Through partnering with the railroad industry, government had successfully stimulated a highly visible, and commercially successful, deployment of modern passenger train technology. Faster trains quickly proved themselves capable of reconnecting New York and Washington in ways that were both profitable for the operator and preferable for travelers who weighed the options of driving and flying. In this first wave of rail passenger redevelopment policy, the tension between Senator Pell’s ingenuity to power a new goal onto the policy agenda and the administrative capability to puzzle through the means of achieving it had been solved by a two stage capacity building effort. First, a new federal agency was created to manage the government’s support for this initiative. And second, a partnership with a private railroad company and private manufac- turers of railroad equipment was created to apply technical and operational expertise to the policy goal of deploying high-speed passenger trains. Had private railroads been capable of building upon this policy capacity for advancing passenger rail redevelopment, continued reinvention of passenger trains could possibly have achieved the policy goal of making them the leading mode of intercity travel connecting the Northeast mega-region. And like the public author- ities that were first created in the Northeast to deliver highway, port, and airport infrastructure, this administrative innovation could have spread across the United States. But more powerful eco- nomic forces undermined this possibility by driving these railroads into bankruptcy and triggering an industrial crisis that preempted the policy agenda. In the subsequent response, another combina- tion of policy instruments was activated that created political and economic effects that undermined the partnership responsible for Metroliner’s implementation.

### Must have partnerships with many entities to be successful

#### More experience is necessary to implement the plan; must understand the role of all potential actors, including state and private entities

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Indeed, America’s freight railroads were the only mode of transportation to weather the Great Recession of 2008 without posting huge losses. While the auto manufacturers were certainly in no position to resist govern- ment’s policy priorities, due to their economic infirmities, the rail- roads were not similarly vulnerable. And outside the Boston – New York – Washington Northeast Corridor, virtually all passenger train redevelopment projects would require partnering with private railroads for track access or sharing a right-of-way. The administration’s Vision document had recognized the need to work with private railroads in advancing a new passenger rail agenda, but left the difficult negotiations needed to forge such agreements to state governments, where proposals for these stim- ulus funds would originate, and rail improvement projects would be managed. Such an intergovernmental division of labor, with the US Department of Transportation left to organize and manage funding programs while state and local transportation agencies implemented projects, had become established practice in high- way, aviation, and mass transit policy subsystems. In principle, try- ing to align passenger train redevelopment with the standard operating procedures that had worked in other transport modes made sense, but only if one overlooked the fact that railroads owned their own infrastructure while roads, transit, and aviation infrastructure were in the public domain. In practice, states are the owners of their highway transporta- tion infrastructure, with all the responsibilities and engagement that such ownership entails. But they are only tenants, or sub-ten- ants, on the rail infrastructure used by most intercity passenger trains. States that have sought to deliver passenger train operations within their borders were obliged to rent the infrastructure from freight railroads and lease the equipment from Amtrak. And while development of such passenger rail operations has been pursued by over a dozen states including California, New York, Michigan, and Illinois, renting freight railroad capacity through Amtrak did not foster the technical know-how for advancing passenger train technology in the way that owning highways built foundational knowledge about roads and motor vehicles into state transporta- tion bureaucracies. Engaging freight railroads in ambitious passenger train improvement programs, after those companies had developed a successful business model that ignored moving people, presented enormous challenges. Delegating the initiative on high-speed rail to states left this critical task in the hands of subsystem partici- pants with little capability to address it effectively. The Vision doc- ument had recognized such a deficit in America’s experience with modern passenger train operating techniques and technology (Fed- eral Railroad Administration, 2009, p. 7) but overlooked its policy implications. The Department of Transportation did not recognize that the limited knowledge of passenger train operations was dis- tributed quite unevenly across organizations within the US rail sec- tor. The DOT then missed considering how such an uneven distribution of know-how could affect policy implementation. America’s largest repository of passenger train expertise is found within Amtrak. While Amtrak has faced considerable chal- lenges in advancing higher speed passenger train operations along the Boston-to-Washington Northeast corridor, it is the only Amer- ican organization with direct experience in operating trains at over 100 miles per hour. Perhaps because Amtrak’s mission had become so closely associated with preserving conventional passenger trains, and perhaps because the policy stalemate over closing it down versus keeping the status quo has remained in place for dec- ades, the Obama administration did not assign Amtrak a leadership role in rail passenger renewal. Evidence for such an association be- tween Amtrak and policy stagnation can be found in the way the Vision document depicted Amtrak’s roots: ‘‘In 1970, Congress cre- ated the National Railroad Passenger Corporation (Amtrak) to pre- serve remaining passenger service over a national system of routes.’’ (Federal Railroad Administration, 2009, p. 5) Following Amtrak, the Federal Railroad Administration repre- sented America’s second biggest source of passenger train develop- ment know-how. In a 2010 report on high-speed rail prospects, the United States Government Accountability Office (2010, p. 26) iden- tified that before ARRA’s passage, there were 23 staff positions within the Federal Railroad Administration with responsibilities for intercity passenger rail. Subsequently FRA received authorization to add another 20 positions in this area. And after the FRA, America’s six major freight railroads each had a small staff with responsibilities for managing their passenger train contracts with Amtrak, and in some cases other operators of commuter train service. Compared to these resources, state governments possessed the most limited rail passenger knowledge, by a wide margin. Before ARRA, most state governments would not even have considered themselves participants in rail policy. State departments of trans- portation saw their core mission as building and maintaining roads, with some secondary responsibilities in public transit, ports, and aviation. Only a handful of state transportation departments had permanent staff working on intercity rail passenger planning or program delivery. When the GAO queried FRA officials about state capacity in rail passenger policy, the response revealed some awareness of the constraint: ‘‘While [FRA officials] found that some states are more advanced in their planning for passenger rail pro- jects than others, some have no state resources dedicated to rail and many do not have a state rail plan to guide their efforts.’’ (Uni- ted States Government Accountability Office, 2010, p. 27) Assigning a leading implementation role to organizations possessing the most limited capacity within the rail sector could have been expected to produce some challenge to meeting the President’s new policy goals. In addition to failing to consider potential effects of their pro- posed linkage between implementation responsibility and policy capacity, the Obama administration passed up the opportunity to directly foster capacity development in its agenda for renewing passenger trains. The $8 billion in high-speed rail funding lacked any provision for human resource development. Given that rail funding had been included in a stimulus package intended to re- duce American unemployment, delivering educational opportuni- ties in passenger rail planning, manufacturing, management, and project development was a particularly significant omission. $100 billion in educational spending had been included in the ARRA leg- islation, and all of it was focused on sectors of the economy where America’s level of know-how was far greater than that in passenger rail. Compounding the capacity constraint on implementation, the ARRA imposed ‘‘Buy America’’ restrictions on procuring goods and services that would be funded through the stimulus. The over- all logic was to concentrate the economic benefits on the American economy, but the result in this particular subsystem was to ex- clude or sharply limit foreign passenger train operators, planners, and technology producers from contributing their know-how to policy implementation. Taken together, these capacity constraints yielded a context that was hardly conducive to advancing a bold new policy agenda.

### Time is critical; must make commitment now

#### Current actions are only a start; HSR is only possible if commitment is made

Chen 2011 (Zhenhua, PhD student at the George Mason University, School of Public Policy, and is currently working as a graduate research assistant under the supervision of Prof. Jonathan Gifford in the area of transportation policy. Mr. Chen was awarded the Graduate Student Best Paper Award of the 51st Transportation Research Forum, “Is the Policy Window Open for High-Speed Rail in the United States: A Perspective from the Multiple Streams Model of Policymaking,” Transportation Law Journal Vol. 38:115)

IV. CONCLUSION In this study, we followed John Kingdon's Multiple Stream Mode to record the different political factors that affect the HSR's agenda setting into three streams-problem, policy and politics. The findings show that in the United States, HSR is primarily addressed as an alternative to provide sustainable medium distance travel service over a long-term. While in the short-term, HSR goals are creating jobs and stimulating the econ- omy. The idea of HSR hasn't just emerged in recent years. On the con- trary, it has been promoted by rail stakeholders, as well as Democratic lawmakers for almost a half century. Many kinds of planning, prelimi- nary studies and policy proposals have been prepared, waiting for a win- dow to open. However, the recent economic recession as well as the transition of the federal government administration finally opened the window for HSR. The short-term objective of the current national HSR promotion is political more than any other reason. Under such scenario, those states with substantial political advantages, such as Florida and Cal- ifornia, have naturally waited in the front of the line to gain federal sup- port. Moreover, as the catalysts in the process of policymaking, policy entrepreneurs' coupling activities have further advocated connecting their prepared proposals to politics and problem streams, which finally helped achieve their political outcome. The initial award of $1.25 billion of federal funding for Florida's HSR corridor project has proven that their success is largely attributed to the contributions of HSR policy entrepreneurs. To conclude, the promotion of HSR in the United States is more a product of the American political game than the demand of transporta- tion mode. Whether current HSR policy will truly make President Obama's national HSR strategy plan become reality is still hard to pre- dict because the current open window for HSR may close soon. The cur- rent proposals for HSR from the legislative perspective are more likely to be seen as solutions for job creation and as ways to stimulate the econ- omy. However, this perspective may be risky if only the short-term ob- jective is addressed. USDOT reports that the whole national HSR system would cost no less than $500 billion. Compared to this figure, the current thirteen billion dollars (eight billion dollars plus the pledged future five billion dollars) HSR fund is only a seed. The goal of creating jobs may be achieved through the ARRA in the short term, but whether the long term objective of building a cost effective HSR system can be achieved is still unknown. However, one thing that is obvious: if a truly efficient and reliable national HSR system is desired in the United States, more consideration should be put on the long-term objectives instead of the short-term. The implementation of an efficient national HSR system should not solely depend on political and problem windows. It must also be technically and economically feasible. This means the current focus of HSR development should be on fundamental research instead of any hasty on-site construction. This research should include: project funding, corridor route planning and design, rider-ship forecasts, cost-benefit esti- mations, operation and management design, and national HSR publicity campaigns. Only by eliminating irrational political reactions to HSR will America get on the right track for future mobility, both stimulating the economy and achieving a new era of sustainable transportation.

### **States will accept investment needed to make HSR competitive**

#### Current infrastructure is insufficient; states will accept investment to make them economically competitive

Ziolkowski 2012 (Michael F. , State University of New York, College at Brockport, The ties that bind: freight and passenger high-speed rail are interdependent

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Introduction President Barack Obama signed the American Recovery and Reinvestment Act (ARRA) into law in 2009, injecting $8 billion in investments for ‘‘high-speed rail (HSR)’’ into the United States economy. The ARRA’s stated goal is to create a new passenger rail infrastructure utilizing state of the art fast-train technology with the potential of relieving the congested air and road networks. This will lubricate the circulation of people and goods in the economy and make the country more productive (Lakshmanan, 2011). The ARRA has become a political football for some and remains an opportunity for others. Per-pound rail transportation is both a cost effective and a green alternative to truck and air transportation, but as the implementation of ARRA progresses it has become clear that the original goals must be amended as the operating environment dictates. This commentary supports utilizing HSR investments for a spec- trum of rail projects, ranging from truly high-speed passenger rail on par with the fastest trains in the world, to the upgrading of the United States’ supporting, but out-dated, rail infrastructure. 2. HSR needs a strong freight rail network In the United States, passenger trains tend to run on the tracks of commercial freight railroads. To invest in HSR in the United States, proponents need to work with the railroads. Passengers and freight trains may mostly run on private property, on the same right-of-way, and even on the same tracks, yet remain critical pieces of the economic base of the country and serve as a public benefit. Once highly regulated, the railroads were allowed to ratio- nalize their operations and stopped offering passenger service. Amtrak was created in 1970 to ensure that intercity passenger trains remained in the United States after the collapse of the pri- vate sector market. Significant investment is needed in the standard rail infrastructure, which, in some parts of the country, has far exceeded its engineered lifespan (Cambridge Systematics, 2007). The industry suffered from overcapacity in the second half of the 20th century and went through a half century of consolidation. As a result, parts of the rail infrastructure have been neglected for decades. For example, freight trains are much longer now than when the infra- structure was developed. Consequently, freight trains often do not fit on sidings which forces passenger trains to wait on them while freight trains pass. Much of the redundancy in the national rail sys- tem is gone because of the consolidation and abandonment of rail right-of-way. In the northeast, some parts of the system are so heavily utilized that the right-of-way cannot be taken out of ser- vice for more than a few hours overnight. This makes replacement of infrastructure such as 100 year old bridges impossible. The rail transport industry has crawled back to profitability despite the cost of fuel and a bias in governmental policy for the past half century, which has focused on highway, water, and air transport investments. Even while significant investment is needed in the freight rail- roads, HSR is aimed at serving passengers. For passengers to take trains more frequently, they will have to have high-speed and reli- able service that links them to the places from which they originate and are destined in the fewer than 500 mile range (Congressional Research Service, 2009). High-speed passenger rail service must be at a scale that supports these investments. This appears to be the case for the Los Angeles to San Francisco corridor, where the gravitational attractiveness between the two cities should gen- erate enough traffic and are of the optimal distances to support HSR. Other viable corridors are possible, but some governors are refusing to take the money. These governors believe that the HSR investments will need to be ultimately developed and managed by the states so they are refusing to take operational and fiscal responsibility because they fear that HSR will not be profitable. Other states are seeing this as an opportunity to fix what is merely the tip of the iceberg in terms of the investment needed to restore their state’s rail infrastructure. They see HSR as a way to keep their communities linked to the global economy.

### Metrolink empirically proves HSR works

#### Southern California railroads work now; would be cheaper alternative to additional highways; they are poised to alleviate environmental concerns

￼￼￼￼￼￼ Fenton 2011 (John, CEO, Southern California Regional Railroad Authority (Metrolink), SITTING ON OUR ASSETS: REHABILITATING AND IMPROVING OUR NATION’S RAIL INFRASTRUCTURE (112–7) HEARING BEFORE THE SUBCOMMITTEE ON RAILROADS, PIPELINES, AND HAZARDOUS MATERIALS OF THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION FEBRUARY 17, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation)

Metrolink is a Southern California commuter rail provider that operates on a 512-mile system and serves five counties, including Los Angeles, Orange, Riverside, San Bernardino and Ventura. In addition to operating 144 daily trains with nearly one million passenger trips each month, Metrolink provides dispatching services to two freight companies (Burlington Northern Santa Fe and the Union Pacific Railroad) and three passenger rail services (Amtrak, Coaster, Metrolink) over one of the most complex multi-modal rail systems in the United States. This includes select freight traffic coming out of the ports of Long Beach and Los Angeles, two of the busiest ports in the nation. Since my joining Metrolink in April 2010, the organization has focused on driving excellence in safety, customer service, operational efficiency, transparency and fiscal responsibility. We are on a course to reduce our operating costs and become more self- sufficient. We have made substantial improvements, including enhancing the safety culture by bringing into the process our key stakeholders such as rail labor, elected officials, federal and state regulators and our contractor co-workers. This year we launched our new state-of-the-art, collision absorption-equipped passenger rail cars, the safest in the nation. We have improved our equipment utilization and instituted a fuel conservation program that will reduce emissions and fuel usage this year by more than 800,000 gallons, saving taxpayers millions of dollars. Metrolink has also made great progress with our accelerated strategy to have Positive Train Control (PTC) operational in advance of the 2015 federal deadline. Innovative safety enhancements and environmental improvements require investment. Keeping our equipment and infrastructure in a state of good repair requires resources. There has been much discussion about the “promise” of high-speed rail. But Southern California is facing many complex problems that require more than a glimpse into the future; these problems need answers today. More than 60 percent of Californians reside in Southern California, with close to 20 million people living in the Los Angeles basin alone. We have more than 15 million cars on our gridlocked freeways, and it is estimated that vehicle miles will more than double from the current 22 million miles to 48 million over the next decade. Building one mile of freeway costs approximately $80 million to $100 million, whereas building one mile of rail costs approximately $5 million. We must continually look for innovative ways to safely operate the railroad, improve the customer experience and seek the financing to build a system that meets the demands of our changing population. As a low-cost provider, we believe Metrolink is the solution. Metrolink is about a better quality of life, today. Yet, as an untapped resource, Metrolink is not reaching its potential to help safeguard our environment, reduce gridlock on our freeways and become a catalyst for job growth and economic investment.

### Need to commit to HSR now

#### HSR key to competitiveness; current projects will address competition and congestion

Lahood 2011 (Hon. Ray, Secretary of Transportation, US Dept. of Transporation, THE FEDERAL RAILROAD ADMINISTRATION’S HIGH-SPEED AND INTERCITY PASSENGER RAIL PROGRAM: MISTAKES AND LESSONS LEARNED (112–65) HEARING BEFORE THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION DECEMBER 6, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation

And in the long term, high-speed rail will bolster America’s economic competitiveness. You know we are being out-competed right now, today, all over the world, but in particular in Asia, on countries that are building roads, building airports, building bridges, and building high-speed rail. We used to be the leader. If we don’t catch up here pretty quick, we are going to be in second place. We know our Nation will be home to 100 million additional peo- ple by the year 2050. That is the equivalent of another California, Texas, New York, and Florida, combined. Our highways and air- ports simply can’t handle the growth. We need to do something, or we will be crushed under the weight of our own expansion. So, how are we bringing President Obama’s vision to life? What is the plan? Well, we have designated an integrated network with trains moving at different high-end speeds, based on the needs of the market, just like in rail systems overseas. Not all the trains overseas go the same speed. Where it makes sense, we are building state-of-the-art high-speed lines on a par with anything in Europe or Asia. Feeding into this true high-speed core will be regional service. We know that everybody is not going to drive a car to a train sta- tion. There will be regional service. There already is, faster than most trains we have today. Finally, we are building out our energy corridors. This is hap- pening already. These are local lines along which entrepreneurs are opening shops. These rail lines will become economic corridors for jobs, just like the interstate highway was. This integrated ap- proach is exactly what rail operators have done in countries around the globe. Some trains are fast, other trains are faster. So, how far have we come during these last 3 years? We have put American workers on rail job sites in 32 States and the District of Columbia. Projects in Illinois, Maine, Minnesota, North Carolina, Oregon, Vermont are coming in ahead of schedule and under budg- et. The same time, we are supporting jobs at manufacturing plants in industrial States like Indiana, and at suppliers in States like Ar- izona and Arkansas. And everything from tracks to ties to train sets to construction material for new stations is being built by American workers, American workers building America’s infra- structure. From here, the future is bright. During the next 6 months, more than $1.1 billion of new job-creating construction projects will com- mence. We have invested in increasing the Acela speed from 130 miles per hour to 186 miles per hour. We have invested in bringing 110-mile-per-hour service to the Midwest. We will soon break ground on a new line between Portland and Seattle. We continue planning for a southwest network from—that connects Dallas to Houston and Oklahoma City. And we are committed to helping the people of California achieve their vision for high-speed rail. This is not Ray LaHood’s vision; this is California’s vision. This is the people’s vision, people that have worked on high-speed rail in California for 15 years. It is not a cheap project, but it is an essential one. Its costs are in line with those of similar projects that have been successful around the world.

### **Must concentrate on the whole network to be successful**

#### Must have Federal involvement; Current efforts need to be expanded

Capon 2011 (Ross, , president and CEO of the National Association of Railroad Passengers THE FEDERAL RAILROAD ADMINISTRATION’S HIGH-SPEED AND INTERCITY PASSENGER RAIL PROGRAM: MISTAKES AND LESSONS LEARNED (112–65) HEARING BEFORE THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION DECEMBER 6, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation

Perhaps the most singular ‘‘lesson learned’’ is that it takes a Fed- eral partner to advance passenger train improvements. In our view, it was essential that a substantial part of the funds in this pro- gram go to upgrading conventional services. In spite of pleas from the States for over 15 years, Federal funds generally have not been available to support State investments in conventional intercity passenger trains. One exception, a happy exception, is the Key- stone Corridor, where Amtrak was able to match, dollar for dollar, I believe, Pennsylvania’s investment. And that became a success story. But back in 2002, AASHTO put out a fairly thick book, their first report on intercity passenger rail transportation, that documented the many conventional corridors around the country that were cry- ing out for investments. President Obama, when he launched this program, made it clear that part of the funds would go to upgrad- ing conventional service. The administration also, of course, made an effort, in Florida, California, and more recently the Northeast Corridor, to do ‘‘true’’ high-speed rail. But back to conventional rail. The need for conventional rail as an important part of the transportation network is illustrated both here and abroad. There is a table on page 2 of my statement that shows that in France, where they have a well-developed TGV high- speed rail system, the non-TGV share of intercity rail is 70 percent. That reflects the fact that it is the network that counts, and high- speed rail works, as I think the chairman has pointed out, where there is a network not just of commuter trains, but also of con- necting intercity trains. In this country, California’s three conventional corridors, the ones that exist today, account for 18 percent of all Amtrak pas- sengers. The Downeaster, I think, deserves particular mention— this is the train between Boston and Portland. Before this train started running, so many people said it would be a flop. It was too slow. It wouldn’t go to Boston’s South Station, it wouldn’t go be- yond Portland. It makes too many stops. And today, it is considered very successful. In fact, I have heard that a major reason that— the second major reason that Massachusetts students go to Univer- sity of New Hampshire is because of the accessibility that the Dur- ham station on the Downeaster line provides to the university. The conventional rail projects also improve the freight network because the added track capacity that results from these projects is available 24/7, whereas the passenger trains are not using those tracks 24/7. The elimination—the trends in the aviation industry underline the growing need for passenger trains. And just on November 29th it was reported that as Southwest Airlines gets out of the Pitts- burgh-Philadelphia market, the nonrefundable round trip fair for US Airways apparently is going to jump from $118 to $698. I have heard people talk in Ohio about how they really wish there was a train to take from Columbus to Cleveland, especially when they are trying to drive on a nasty day. Nearly 90 percent of the portfolio, as the Secretary’s written statement points out, is invested in five key corridors. So I don’t see this as revenue sharing. I see this as being concentrated, for the most part, on conventional lines that desperately need and have been waiting for improvements. A lot of this investment is just beginning to take place. And the silver lining, as I point out in my written statement, is that at a time when a lot of cries are heard for more stimulus, the rail program is just starting to gen- erate valuable jobs in a much bigger way. In fact, North Carolina DOT has a chart that shows that 2013, 2014 is going to be when employment for its rail projects peaks. The GAO report said that the administration ‘‘established a fair and objective approach for distributing these funds and substan- tially followed recommended [grantmaking] practices used through- out the Government,’’ and that ‘‘an application’s technical review score was largely the basis for the selection deliberations.’’ So we think that the administration did, on balance, a good job. The fundamental problem that we have, as you have pointed out, is the shortage of money. But that is just as much a problem with the Northeast Corridor. If 100 percent of the money had gone into the Northeast Corridor, people would still be looking at the price tag on getting the job done, and they would see a gap between needs and available funds perhaps even bigger than the gap that has already been observed with regard to California. But we commend the committee for holding this hearing and for its tremendous interest in intercity passenger rail, and we look for- ward to working with you as the program goes forward.

### California plan proves adaptation can save billions

#### Existing rails can be repurposed for HSR, cutting cost by billions

Bloomekatz 6/3 (Ari Los Angeles Times 2012 “L.A. leaders back revised strategy on bullet train; The new plan cuts $30 billion off the cost by using existing track in some areas.“)

 Several Los Angeles leaders backed a revised business plan released Monday by the agency overseeing California's ambitious high-speed rail effort, saying it lowers costs and speeds construction while bringing jobs and world-class transit to the region. By embracing a "blended" approach, the plan shaves $30 billion off the cost by using some tracks that now carry regional passenger lines rather than building new ones exclusively for the bullet train. "High-speed rail is the natural extension of the transportation network we are building in Southern California," said L.A. Mayor Antonio Villaraigosa. "When it comes to transportation infrastructure, connectivity is key." If the plan is approved, construction would begin this year on a 300-mile stretch of electrified rail connecting Merced in the Central Valley to the San Fernando Valley within 10 years. An earlier draft included only a 130-mile portion of that. Eventually, the line would extend from Southern California, through several cities in the Central Valley, to the Bay Area. Even with the $30-billion reduction, the projected $68.4-billion effort is $25 billion more than the original price tag. Officials with the California High-Speed Rail Authority said Monday that construction of the entire 520-mile system would be completed in 2028. It would open to the public in 2029. Supporters of the revised plan included Gary Toebben, president of the Los Angeles Area Chamber of Commerce, and union groups that have long backed building a high-speed rail system because of the jobs it would provide. "This plan will propel the high-speed rail project forward while going back to basics -- let's put people to work to build much-needed transportation networks, and let's do it fast," said Robbie Hunter of the Los Angeles/Orange Counties Building & Construction Trades Council. Other related measures the authority is proposing call for about $2 billion to upgrade existing rail lines into Los Angeles and the Bay Area. But some critics say the proposed system is not the one voters were promised when they approved $9 billion to get the project started four years ago. "This looks nothing like what the people of California were promised in 2008, when the rail authority claimed that tickets would cost $50, Sacramento and San Diego would be included and the private sector would fund much of the project," said state Sen. Doug LaMalfa (R-Richvale). "This is one bait-and-switch that cash-strapped Californians simply can't afford," he said. One of the project's initial proponents took issue with plans to share tracks with commuter trains. "I call it the great train robbery," said Quentin Kopp, a former state senator and rail authority board member. "Because they plan, if they can get away with it, to take money out of high-speed rail and bestow it on to commuter rail systems." "This isn't high-speed rail," Kopp said. "High-speed rail runs on dedicated tracks."

### **Must increase private investment in Northeast Corridor**

#### Private investment could help front the cost of Northeast Corridor expansion; would serve as a model for other parts of the country

Geddes 2011 (Richard, adjunct scholar at the American Enterprise Institute, THE FEDERAL RAILROAD ADMINISTRATION’S HIGH-SPEED AND INTERCITY PASSENGER RAIL PROGRAM: MISTAKES AND LESSONS LEARNED (112–65) HEARING BEFORE THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION DECEMBER 6, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation

In my view, the second concern was a failure to create the insti- tutional structures necessary, and to focus on those structures to attract private investment to high-speed rail, and instead relying almost exclusively on taxpayer funding. There are many advan- tages of including private participants, which I outline in my writ- ten testimony. Private investment, I believe, can play a major role in improving passenger rail on the Nation’s entire network. But I believe it is important to separate the Northeast Corridor finan- cially from the rest of the system, because that corridor is most likely to be able to operate without subsidies, without operating subsidies, and because the rest of the system operates mainly on freight train tracks, unlike the Northeast Corridor. On the Northeast Corridor I believe a public-private partnership should be structured so that firms wishing to operate passenger rail service would bid against one another on the basis of the size of an upfront concession payment for the right to operate. That up-front payment could then be used to help fund necessary improve- ments to the infrastructure on the corridor. This approach is also fair, since future riders would effectively be paying for the physical infrastructure improvements that they would be using. Private investment in passenger rail infrastructure can also be used on other parts of the network. But the nature of the bidding must change. That is why I believe it is important to do the Northeast Corridor separately. I am happy to explain that later. Future efforts to improve high-speed passenger rail in the United States should focus on attracting private investment and on first renovating existing routes, where I believe the social returns to the next dollar of investment are the highest, rather than on con- structing a—or trying to construct a number of new lines. Those re- turns are likely to be highest for renovations and improvements on the Northeast Corridor. To mitigate taxpayer costs, improve performance, and enhance innovation, the private sector should be engaged as a full partner through public-private partnerships, and I believe that is possible. Thank you once again, and I look forward to answering your questions.

### HSR meet population demands

#### US population growing, alternatives to HSR too costly

Lahood, 2011 (Roy, Department of Transportation writerHigh Speed Rail: creating jobs, spurring growth, providing needed capacity, November 16, 2011, <http://fastlane.dot.gov/2011/11/high-speed-rail-improving-the-present-preparing-for-the-future.html>)

Over the next 40 years, America will be home to 100 million more people, largely concentrated in regions that make up only 25% of the land mass in the United States where congestion is already costing families and businesses nearly $130 billion each year. This growth will burden our already stressed roadways and airports well beyond their capacities. The cost of those bottlenecks in freight delays, loss of competitiveness, and forfeited productivity will be enormous and will ultimately cost our country jobs. Without an alternative way of getting people where they're going, our economy will be choked by congestion. High speed rail is that alternative. It's clear that moving an American high-speed rail network forward will require conversations with those who are not passenger rail's strongest advocates. So I was happy to speak about high-speed rail on Monday at the annual William O. Lipinski Symposium on Transportation at Northwestern University. In many regions of the country, space is simply not available to expand highways or runways. In other areas, the costs to expand are outrageous. For comparably lower costs, connecting high-speed rail to other modes in these congested regions can add desperately needed capacity, improve the performance of all modes, and provide a boost to the entire American economy. Let me be clear: there is no amount of money that could build enough capacity on our highways and at our airports to keep up with our expected population growth in coming decades. High-speed rail can help alleviate congestion both in the air and on our roads--opening more gates to the international flights the America needs to stay competitive and providing more room on our highways to get goods to market. It can do so while relieving Americans from pain at the pump and emitting less carbon in our air. And, despite critics' objections, we can actually build rail cheaper than we can add the necessary highway or airport capacity. Recently in Chicago, construction started on the Englewood flyover, a rail bridge that will, when completed, speed trains through what has been one of the nation's worst rail bottlenecks. This project is creating jobs right now improving freight and passenger rail service. Upgrades like this will continue to add jobs and improve existing rail service as they pave the way for high speed rail. And we're not just talking about adding jobs; we're talking about revitalizing the American rail manufacturing industry. We have 30 rail companies that have pledged to hire Americans and expand their US operations if awarded contracts to work on high speed rail. Some companies, like Progress Rail in Indiana, have already expanded their US manufacturing facilities. President Obama understands that we can’t shortchange future generations of Americans by failing to lay the foundation for growth today. President Obama understands we need to get busy building the capacity our transportation network needs for the next 100 million people. High-speed rail will play a large role in providing that capacity.

### Northeast Corridor critical to HSR development

#### Densest area of the country is the Northeast; that area would significantly benefit from a HSR system

McDonald 2011 (Hon. Joan, chairperson of the Northeast Corridor Infra- structure and Operations Advisory Commission, THE FEDERAL RAILROAD ADMINISTRATION’S HIGH-SPEED AND INTERCITY PASSENGER RAIL PROGRAM: MISTAKES AND LESSONS LEARNED (112–65) HEARING BEFORE THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION DECEMBER 6, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation

We all agree the Northeast Corridor and its connecting feed- er services are critical transportation assets, and are closely tied to the economic future of the entire northeast region. As has been mentioned earlier today, the Northeast is the dens- est region in the Nation. It is home to 4 of the 10 largest metropoli- tan areas, generating 20 percent of the U.S. GDP. However, this density creates significant transportation challenges for the region. Some 260 million commuter and intercity riders, and an esti- mated 30 million ton-miles of freight are moved over the corridor each year by more than 2,200 daily trains. The service we have today is not enough to meet the future needs of our region and our Nation. The corridor is congested in many locations, and demand for rail service is growing. For much of its history, the Northeast Corridor has suffered from underinvestment. We now face a considerable backlog in state-of- good-repair needs that require billions of dollars of investments. Amtrak’s Northeast Corridor master plan estimated that $52 bil- lion is needed over the next 20 years, just to maintain reliable service for all users of the corridor. Addressing capacity needs beyond 2030 will add substantially to that total. While our corridor’s needs are significant, there is not a clear consensus long-term vision for the future of the corridor. The charge of the commission, as we see it, is to bring together di- verse interests, develop a unified, long-term vision for the corridor, and establish that consensus on a plan to secure the public and pri- vate investments needed to implement the vision. By coming to- gether to coordinate these activities, the States, Amtrak, and the Federal Government can achieve a level of success that far exceeds the potential reach of any individual entity. Critical to the process is the passenger rail corridor investment plan being led by the FRA in cooperation with the commission, the Northeast States, and Amtrak. The Northeast is a compelling mar- ket for high-speed rail service, and compares favorably to other na- tions that have successful implemented high-speed rail. The ques- tion we need to answer is: What is the right path forward? And how do we fund it? The commission’s approach is cooperative, fact-based, and non- ideological. We will look to do what is best for the long-term eco- nomic growth of the northeast region. We will seek opportunities to partner with the private sector, while ensuring that the public interest is protected. The Northeast Corridor benefitted from the $1.3 billion in capital funds appropriated to Amtrak in the economic recovery act, and re- ceived another billion dollars in high-speed rail program grants. And I must add that during that process each State endorsed the other States’ proposals for consideration to U.S. DOT. These projects are creating jobs and helping to improve rail service. In my home State of New York, under the leadership of Governor Cuomo, we are advancing a number of important projects on the Northeast Corridor mainline, and our empire corridor, an important feeder. One of my short-term goals, as chair of the commis- sion, is to facilitate close cooperation between FRA, the States, and Amtrak, to ensure that all of these projects move forward as quick- ly as possible. Despite the importance of the funding we have received so far, much more is needed. The commission is working to identify pri- ority projects that need to move forward as soon as possible. On behalf of my fellow commissioners, we appreciate this com- mittee’s strong support for the Northeast Corridor, and look for- ward to working with you. A strong Federal partnership is critical to our success. Thank you, and thank you for the opportunity to testify today.

### HSR solves: Must focus locations & private partnerships

#### Current programs expensive; must foster private partnerships

USA TODAY 2011 (March 31, 2011 Thursday, “In dense corridors, high-speed rail warrants a green light”)

Travelers in China, Japan, France and several other countries can hop onto sleek bullet trains and race between cities at 150 to 220 miles per hour, zipping past clogged highways and bypassing airport hassles. Picture that here. New York City to Washington, D.C., for example, now takes almost three hours, even on Amtrak's Acela. Imagine cutting that trip to, say, 90 minutes or less. Sweet. Don't make any reservations yet, though. In the USA, long-promised high-speed rail projects have never left the station. Lately, President Obama and Transportation Secretary Ray LaHood have been touting the economic benefits of a network of bullet train routes all around the country. But their campaign has slowed to a crawl, hobbled by budget worries, rejected by cost-conscious governors in Florida and Ohio, and mocked by critics who call "ObamaRail" nothing more than a bullet train to bankruptcy**.** The experience of other countries, and a hard look at what might happen here, suggests the truth is somewhere between the extremes in the simplistic "good/bad" debate about high-speed rail. Bullet trains are expensive to build and far from cheap to run. They won't work everywhere. The sweet spot is somewhere between about 100 and 400 miles. Any less, and driving becomes more convenient. Too much more, and it makes increasing sense to fly. Another must is a densely populated area with a lot of potential riders, such as the Boston-New York-Washington corridor, or California between Los Angeles and San Diego. In places like these, highways and airports are already saturated at peak travel times. With the U.S. population expected to grow by more than 100 million by 2050, mostly along the coasts, adding another way for people to get around seems like smart long-term planning. Experience abroad shows that many high-speed rail lines need big, ongoing government subsidies, but a few become popular enough to pay their own way. The two most successful high-speed rail routes in the world -- Tokyo-Osaka in Japan and Paris-Lyon in France -- both make money. (The reason Amtrak loses so much is that politicians insist that it keep serving highly subsidized, sparsely traveled routes.) Could high-speed rail succeed here, where private automobiles are common, gas is cheaper than abroad and the highway system is so well developed? Maybe very selectively. The Obama administration's plan to spend more than $60 billion on trains around the country seems excessive in a era of massive deficits. But targeting the places where high-speed rail has the best chance of attracting riders could work. The way to limit risk to taxpayers would be to build public-private partnerships in which the government would pay for the tracks, and private companies would buy and run the trains. History shows that infrastructure projects such as highways, bridges and airports almost always make long-run sense, even if that's not always clear when they're built. For two decades after it was opened in 1962, for example, Dulles airport outside Washington, D.C., was so under-utilized that private pilots in small planes could practice there. Now the region has grown up around it, and the jetport is an indispensible hub. In an age when much government spending is automatically suspect, it's easy to lose sight of the fact that some spending really is a wise investment. High-speed rail is a calculated risk best attempted in the limited number of places where it has a prospect of supporting itself.

# \*\*\*NEGATIVE

### \*\*Answers to Advantages\*\*

### AT Economy Adv

**SQ travel methods are cheaper and solve better**

**Sanandaji, PhD in public policy, 11**—PhD in public policy from U Chicago, MA in economics from U Chicago, post-doc student at U Chicago, Research Fellow at the Institute of Industrial Economics (Tino, 2/8/2011, “America wrong continent for High-Speed Trains”, Super-Economy (blog), <http://super-economy.blogspot.com/2011/02/america-wrong-continent-for-high-speed.html>, AL)

High-Speed trains are not only **expensive**, they are slow when compared to air-travel. Take one of the least crazy high-speed train projects, connecting Los Angeles and San Francisco. The White House estimates are that this trip will take 2 hours 40 minutes. The same trip by commercial flight takes 1 hours 20 minutes. Even if you add an extra one hour for security check, the trip is faster by air (you also have to drive to the airport, but the same is true for trains).

After the **first terrori st attack against high-speed trains**, the security advantage would diminish. If we really wanted to and had an extra $53 billion over, we could invest in flying faster, in making the security process more effective, or (most sensibly) improving the high-way system.

Another fact Liberals ignore is that air-travel is cheaper in the U.S, costing about **half** per mile of what it does in Europe (perhaps due to economies of scale and higher competitiveness).

###  AT Competitiveness IL

**Their competitiveness arguments are wrong—HSR isn’t necessary**

**Sanandaji, PhD in public policy, 11**—PhD in public policy from U Chicago, MA in economics from U Chicago, post-doc student at U Chicago, Research Fellow at the Institute of Industrial Economics (Tino, 2/8/2011, “America wrong continent for High-Speed Trains”, Super-Economy (blog), <http://super-economy.blogspot.com/2011/02/america-wrong-continent-for-high-speed.html>, AL)

The New York Times headlines this "U.S. Plays Catch-Up on High-Speed Rail", admiring High-Speed trains in China and Europe. Basically, the American Left argues that since Western Europe and China have high-speed rail, and since they believe that Western Europe and China have better economic policy than the United States, we should emulate them and build fast trains.

I often argue that European style policies **will not work in America** because of demographics and cultural differences. I can understand that not all readers are convinced that Americans are that different from Europeans. However, I hope every reader accepts that **the U.S is geographically different from Europe and Asia**.

High-Speed train countries Spain and France have 3 times higher population density than America. China has 4 times higher, Germany 7 times higher, Japan 10 times higher, South Korea 15 times higher and Taiwan 20 times higher population density than the U.S. Germany is more densely populated than New York state, and China more densely populated than California.

Countries that like America have a lot land compared to people, such as Canada, Scandinavia, Russia and Australia have not made any large scale investments in high-speed trains.

Let me illustrate this graphically. I take the total high-speed miles from The International Union of Railways, and plot the density of the high-speed-rail network with population density.

The United States **is not an outlier** as the White-House suggests, the U.S is exactly where our population density would predict. Only after President Obama's plan will the U.S become a outlier, a country with more High-Speed Train that population density would predict (the figure after Obama's plan is my estimate based on White House material).

**Competitiveness theory is false**

**Krugman 94** (Paul, “Competitiveness: A Dangerous Obsession,” April 1994, Paul Krugman joined The New York Times in 1999 as a columnist on the Op-Ed Page and continues as professor of Economics and International Affairs at Princeton University. At MIT he became the Ford International Professor of Economics. Mr. Krugman is the author or editor of 20 books and more than 200 papers in professional journals and edited volumes. His professional reputation rests largely on work in international trade and finance; he is one of the founders of the "new trade theory," a major rethinking of the theory of international trade. In recognition of that work, in 1991 the American Economic Association awarded him its John Bates Clark medal)

By contrast, even the largest corporation sells hardly any of its output to its own workers; the "exports" of General Motors -- its sales to people who do not work there -- are virtually all of its sales, which are more than 2.5 times the corporation's value-added. Moreover, countries do not compete with each other the way corporations do. Coke and Pepsi are almost purely rivals: only a negligible fraction of Coca-Cola's sales go to Pepsi workers, only a negligible fraction of the goods Coca-Cola workers buy are Pepsi products. So if Pepsi is successful, it tends to be at Coke's expense. But the major industrial countries, while they sell products that compete with each other, are also each other's main export markets and each other's main suppliers of useful imports. If the European economy does well, it need not be at U.S. expense; indeed, if anything a successful European economy is likely to help the U.S. economy by providing it with larger markets and selling it goods of superior quality at lower prices. International trade, then, is not a zero-sum game. When productivity rises in Japan, the main result is a rise in Japanese real wages; American or European wages are in principle at least as likely to rise as to fall, and in practice seem to be virtually unaffected. It would be possible to belabor the point, but the moral is clear: while competitive problems could arise in principle, as a practical, empirical matter the major nations of the world are not to any significant degree in economic competition with each other. Of course, there is always a rivalry for status and power -- countries that grow faster will see their political rank rise. So it is always interesting to compare countries. But asserting that Japanese growth diminishes U.S. status is very different from saying that it reduces the U.S. standard of living -- and it is the latter that the rhetoric of competitiveness asserts. One can, of course, take the position that words mean what we want them to mean, that all are free, if they wish, to use the term "competitiveness" as a poetic way of saying productivity, without actually implying that international competition has anything to do with it. But few writers on competitiveness would accept this view. They believe that the facts tell a very different story, that we live, as Lester Thurow put it in his best-selling book, Head to Head, in a world of "win-lose" competition between the leading economies. How is this belief possible?

**Heg doesn’t solve war—expanding the power gap causes global backlash that makes effective leadership impossible**

Maher 11—Ph.D. in Political Science from Brown University (Richard, Winter, “The Paradox of American Unipolarity: Why the United States May Be Better Off in a Post-Unipolar World,” Orbis, Vol. 55, No. 1, p. 53-68)

Since the disintegration of the Soviet Union and the end of the Cold War, world politics has been unipolar, defined by American preponderance in each of the core components of state power—military, economic, and technological. **Such an imbalanced distribution of power in favor of a single country is unprecedented in the modern state system. This material advantage does not automatically translate into America’s preferred political and diplomatic outcomes, however.** Other states, if now only at the margins, are **challenging U.S. power and authority**. Additionally, on a range of issues, **the United States is finding it increasingly difficult to realize its goals and ambitions**. The even bigger challenge for policymakers in Washington is how to respond to signs that America’s unquestioned preeminence in international politics is waning. This decline in the United States’ relative position is in part a consequence of the burdens and susceptibilities produced by unipolarity. Contrary to the conventional wisdom, **the U.S. position both internationally and domestically may actually** be strengthened **once this period of unipolarity has passed**. On pure material terms, the gap between the United States and the rest of the world is indeed vast. The U.S. economy, with a GDP of over $14 trillion, is nearly three times the size of China’s, now the world’s second-largest national economy. The United States today accounts for approximately **25 percent of global economic output**, a figure that has held relatively stable despite steadily increasing economic growth in China, India, Brazil, and other countries. Among the group of six or seven great powers, this figure approaches 50 percent. When one takes discretionary spending into account, the United States today spends more on its military than the rest of the world combined. This imbalance is even further magnified by the fact that five of the next seven biggest spenders are close U.S. allies. China, the country often seen as America’s next great geopolitical rival, has a defense budget that is one-seventh of what the United States spends on its military. There is also a vast gap in terms of the reach and sophistication of advanced weapons systems. By some measures, the United States spends more on research and development for its military than the rest of the world combined. What is remarkable is that the United States can do all of this without completely breaking the bank. The United States today devotes approximately 4 percent of GDP to defense. As a percentage of GDP, the United States today spends far less on its military than it did during the Cold War, when defense spending hovered around 10 percent of gross economic output. As one would expect**, the United States today enjoys unquestioned preeminence in the military realm**. No other state comes close to having the capability to project military power like the United States.1 And yet, **despite this material preeminence, the United States sees its** political and strategic influence diminishing **around the world.** It is involved in two costly and destructive wars, in Iraq and Afghanistan, where **success has been elusive** and the end remains out of sight. China has adopted a new assertiveness recently, on everything from U.S. arms sales to Taiwan, currency convertibility, and America’s growing debt (which China largely finances). Pakistan, one of America’s closest strategic allies, is facing the threat of social and political collapse. Russia is using its vast energy resources to **reassert its dominance** in what it views as its historical sphere of influence. Negotiations with North Korea and Iran have gone **nowhere** in dismantling their nuclear programs. Brazil’s growing economic and political influence offer another option for partnership and investment for countries in the Western Hemisphere. And relations with Japan, following the election that brought the opposition Democratic Party into power, are at their frostiest in decades. To many observers, it seems that America’s vast power is not translating into America’s preferred outcomes. **As the United States has come to learn, raw power does not automatically translate into the realization of one’s preferences, nor is it necessarily easy to maintain one’s predominant position in world politics**. There are **many costs** that come with predominance – material, political, and reputational. **Vast imbalances of power create** apprehension and anxiety **in others, in one’s friends just as much as in one’s rivals**. In this view, it is not necessarily American predominance that produces unease but rather American predominance. **Predominance also makes one a** tempting target**, and a** scapegoat **for other countries’ own problems and unrealized ambitions**. Many a Third World autocrat has blamed his country’s economic and social woes on an ostensible U.S. conspiracy to keep the country fractured, underdeveloped, and subservient to America’s own interests. **Predominant power likewise breeds** envy, resentment, and alienation**.** How is it possible for one country to be so rich and powerful when so many others are weak, divided, and poor? **Legitimacy—the perception that one’s role and purpose is acceptable and one’s power is used justly—is** indispensable for maintaining power **and influence in world politics**. As we witness the emergence (or re-emergence) of great powers in other parts of the world, we realize that **American** predominance cannot last forever. It is inevitable that the distribution of power and influence will become more balanced in the future, and that the United States will necessarily see its relative power decline. While the United States naturally should avoid hastening the end of this current period of American predominance, it should not look upon the next period of global politics and international history with dread or foreboding. **It certainly** should not seek to maintain its predominance at any cost, devoting unlimited ambition, resources, and prestige to the cause. In fact, contrary to what many have argued about the importance of maintaining its predominance, **America’s position in the world—both at home and internationally—could very well be** strengthened **once its era of preeminence is over**. It is, therefore, necessary for the United States to start thinking about how best to position itself in the ‘‘post-unipolar’’ world.

###  AT Stimulus IL

**Economic crisis doesn’t cause war—prefer statistical studies over abstract IR theories**

**Miller, PhD in economics, 2k**—PhD in economics from McGill U, MSc in economics from the London School of Economics, fmr adjunct professor at U of Ottawa, fmr executive director of the World Bank in Washington D.C. (Morris, August 2000, “Poverty as a Cause of Wars?”, University of Ottawa Center on Governance, <http://www.management.uottawa.ca/miller/poverty.htm>, AL)

It seems reasonable to believe that a powerful "shock" factor might act as a catalyst for a violent reaction on the part of the people or on the part of the political leadership. The leadership, finding that this sudden adverse economic and social impact destabilizing, would possibly be tempted to seek a diversion by finding or, if need be, fabricating an enemy and setting in train the process leading to war. There would **not appear to be any merit in this hypothesis** according to a study undertaken by Minxin Pei and Ariel Adesnik of the Carnegie Endowment for International Peace. After studying **93 episodes** of economic crisis in 22 countries in Latin America and Asia in the years since World War II they concluded that

Much of the conventional wisdom about the political impact of economic crises may be **wrong** …..The severity of economic crisis - as measured in terms of inflation and negative growth – bore **no relationship** to the collapse of regimes….(or, in democratic states, rarely) to an outbreak of violence…In the cases of dictatorships and semi-democracies, the ruling elites responded to crises by **increasing repression** (thereby using one form of violence to abort another.)

**Government stimulus must be financed—this prevents it from growing the economy**

**Foster 10** (JD, PhD in economics from Georgetown and the Norman B. Ture Senior Fellow in the Economics of Fiscal Policy at The Heritage Foundation, “Obama Jobs Deficit Further Evidence of Failure,” October 8, 2010, PM)

The centerpiece of Obama’s short-term stimulus program was the $862 billion in poorly targeted tax cuts and ineffectual spending increases he signed into law in February 2009, which has since been supplemented by a number of smaller budget-busting “jobs” bills, including the most recent, a $26 billion state aid package. Obama had one big shot at really helping the economy and he took it, holding nothing back. As short-term economic stimulus, it was doomed from the outset because it was based on the erroneous assumption that deficit spending can increase total demand in a slack economy. The theory underlying Obama’s stimulus was that the economy was weak because total demand was too low. The suggested solution is then to increase demand by increasing government spending, exploding the deficit in the process. This theory of demand manipulation through deficit spending ignores the simplest of realities: Government spending must be financed. So to finance deficit spending, government must borrow from private markets, thereby reducing private demand by the same amount as deficit spending increases public demand. In effect, the theory says that if I take a dollar from my right pocket and put it in my left, then I’m a dollar richer. No wonder it always fails.

**Deficit reduction is the only way to avoid a double-dip**

**Business Insider 11** (Mamta Badkar, “Moody's Mark Zandi Explains Why He Sees A 40% Chance Of A Recession,” October 11, 2011, PM)

The U.S. economy is growing at a pace that leaves it vulnerable to a recession, according to Moody's analytics chief economist Mark Zandi. He believes there continues to be a 40% probability of a recession in next six months to a year. In his latest report, U.S. Macro Outlook: Barely Staying Afloat, Zandi points out three distinct threats to the U.S. economy: The European debt crisis - Already in a mild recession, austerity is crushing growth, exports are weakening, and European banks are taking too long to mark down the value of their sovereign debt holdings. The EFSF needs to be ratified soon and must be expanded, because delays will only create more turmoil in the banking system and financial markets. The U.S. foreclosure crisis - A further decline in home prices could threaten the U.S. recovery. "Key to the near-term price trend is the share of home sales that involve foreclosures, short sales, and other distressed properties. We expect a settlement before the end of 2011, meaning the foreclosure process will gear up this winter. ...Moreover, with falling house prices pushing more homeowners under water (more than 14 million homeowners owe more than their homes' market values), there is a risk this will ignite a self-reinforcing negative cycle of even more defaults, distress sales and price declines." The rift between the Obama administration and Congress If Congress and Obama continue to butt heads over fiscal policy and do nothing, it could shave 1.7 percentage points from real GDP growth in 2012. It is critical that policymakers agree to extend and increase the payroll tax holiday for workers through 2012 because this would reduce the fiscal drag to a manageable 1 percentage point. Zandi says only good policy making can save the economy from another recession. More than anything the government needs to arrive at some consensus on cutting its long-term deficit if it wants to shore up investor confidence and bring forth an economic recovery.

### AT Env/Emissions Adv

**There’s no environmental benefit—empirics prove**

**O’Toole, CATO senior fellow, 10**—Senior Fellow working on urban growth, public land, and transportation issues at the CATO Institute, distinguished author on urban land use and transportation (Randal, June 2010, “High-Speed Rail”, The CATO Institute, <http://www.downsizinggovernment.org/transportation/high-speed-rail>, AL)

2. Environmental Benefits. The environmental benefits of high-speed rail would be **negligible at best**. President Obama's moderate-speed trains are expected to be powered by diesel locomotives, which burn petroleum and emit pollutants and greenhouse gases. Even electrically powered, true high-speed rail is **unlikely to be clean**. California rated its proposal as environmentally sound only by projecting **impossibly high ridership numbers** and unrealistically assuming that future automobiles and airplanes would be no more energy-efficient than they are today.

In 2005, Florida's High-Speed Rail Authority proposed a 125-mph rail line between Tampa and Orlando. The environmental impact statement for the proposal estimated that the trains would produce **more nitrogen oxide pollution and volatile** organic **compounds than would be saved** by the automobiles taken off the road.35 It also calculated that operating and maintaining the gas-turbine locomotives would consume **3.5 to 6.0 times as much energy as would be saved** by the cars replaced.36 The statement concluded that "the environmentally preferred alternative is the No Build Alternative" because it "would result in less direct and indirect impact to the environment."37

**Current efficiency standards are sufficient**

**O’Toole, CATO senior fellow, 10**—Senior Fellow working on urban growth, public land, and transportation issues at the CATO Institute, distinguished author on urban land use and transportation (Randal, June 2010, “High-Speed Rail”, The CATO Institute, <http://www.downsizinggovernment.org/transportation/high-speed-rail>, AL)

3. Automobile and Airplane Assumptions. In considering the costs and benefits of high-speed rail, fast trains should be compared not to today's cars and planes, but to **tomorrow's more efficient cars and planes**. If automakers are able to meet the administration's latest fuel-economy targets, and consumers continue to replace the nation's auto fleet at the usual rate, cars and light trucks on the road in 2020 will be almost 25 percent more energy efficient than they are today, on average, and by 2030 they will be **38 percent more fuel-efficient**.

Meanwhile, the energy efficiency of air travel has increased an average 2 percent per year since 1980.39 Boeing promises that its 787 plane will be 20 percent more fuel efficient than comparable planes today.40 Jet engine makers have set a goal of **doubling fuel efficiency by 2020**.41

The California high-speed rail authority claims that high-speed trains will produce large energy savings.42 Yet the authority's own environmental impact statement (EIS) reveals that the benefits will be **negligible**. The EIS projects that the energy savings from operating high-speed rail will repay the energy cost of construction in just five years.43 But the EIS assumes that the energy efficiency of autos and planes won't improve.44 But if, over the lifetime of a high-speed rail project, autos and planes become 30 percent more fuel efficient, then the energy payback period for high-speed rail rises to **30 years**. Since rail lines require expensive (and energy-intensive) reconstruction about every 30 years, high-speed rail is **not likely to save energy at all**.

**Increases overall CO2 output—your studies are biased and wrong**

**O’Toole, CATO senior fellow, 9**—Senior Fellow working on urban growth, public land, and transportation issues at the CATO Institute, distinguished author on urban land use and transportation (Randal, 9/9/2009, “High-Speed Rail Is Not “Interstate 2.0””, CATO Institute Briefing Papers, No. 113, <http://www.cato.org/pubs/bp/bp113.pdf>, AL)

These are examples of what Danish planning professor Bent Flyvbjerg calls “**optimism bias**.”52 Such bias, says Flyvbjerg, explains why large public works projects almost inevitably **cost more** and **produce smaller benefits** than originally promised. In addition, nearly 1 billion pounds of the projected annual reduction of CO2 were from the Boston-to-Washington Corridor, which is not part of the FRA plan.53 That means the plan itself is projected to save only 2.3 million metric tons per year.

Substituting more realistic assumptions greatly changes the results. In the 19 years between 1975 and 1994, automobile fuel economies increased by 33 percent and commercial airline economies increased by 44 percent. 54 If they achieve similar efficiencies in the 19 years between 2006 and 2025, and if the average auto carries 2.4 people in intercity travel and the average high-speed train fills only 51 percent of its seats, then rather than save 2.3 million metric tons of CO2 per year, highspeed trains would instead **add 220,000 metric tons of CO2** to the atmosphere each year. Moreover, not building high-speed rail would **save huge amounts of energy** and **millions of tons of CO2** that would otherwise be used and released during construction.

**No consensus for warming—their authors are less-qualified doomsayers who have a financial incentive to cherrypick studies and have inaccurate instruments**

**Horn, meteorologist, 11**—degree in meteorology with honors from Lyndon State College, regular speaker at the annual International Climate Change Conference, fmr meteorologist for the Weather Services Corporation (11/30, Art, “The Confused Climate Change Consensus”, Energy Tribune, <http://www.energytribune.com/articles.cfm/9264/The-Confused-Climate-Change-Consensus>, AL)

It would appear that the much claimed consensus among leading climate scientists is not in such general agreement these days. If there really is such a consensus, then the opinions from leading climate scientists should be reasonably consistent among them. What I am seeing instead is an increasing divergence among the man made climate doom community. Let’s set one thing straight from the get go. The data from all of the sources of earth’s measured average global temperature clearly show that **there has been a pause in global temperature increase since 1998. People who claim otherwise simply don’t look at the data** or believe someone who wrote a story that said warming is accelerating and it’s really, really bad. Don’t trust me on this, look for yourself. There are those who see the pause and as a reaction to it, have now begun to focus on “extreme weather events” to keep the public engaged and convinced that civilization is gagging Mother Earth with its carbon dioxide pollution. Since the temperature is no longer increasing **some other scare tactic needs to be employed to keep the research funding from drying up**. In a time of economic turmoil research funding is threatened. For instance at Penn State University funds allocated for research for 2010/11 were $805,000,000, more than half of that lofty sum, $470,000,000 was Federal grants and contracts. An undetermined amount of that money goes to climate research at Penn State. If the lack of warming for over a decade begins to influence how congress doles out money for global warming research, large cuts in grants and contracts could result. Claims of increases in “extreme weather” due to global warming could be the prod that keeps the government funding spigot open. The problem with trying to compare weather events today to the past is that observational networks have improved dramatically in the years after World War Two. Weather events in the past were vastly underreported due to a lack of reporting stations and primitive communications technologies. In its 2007 report the United Nations Intergovernmental Panel on Climate Change (IPCC) said "At continental, regional, and ocean basin scales, numerous long-term changes in climate have been observed. These include changes in Arctic temperatures and ice, widespread changes in precipitation amounts, ocean salinity, wind patterns and aspects of extreme weather including droughts, heavy precipitation, heat waves and the intensity of tropical cyclones." What the report does not say is that multi-decadal ocean temperature oscillations lasting 60 years or more reveal climate fluctuates on time scales that overwhelm our relatively short period of reliable observations. What the report also does not say is that changes in Arctic temperature and ice, widespread changes in precipitation amounts, ocean salinity, wind patterns and aspects of extreme weather including droughts, heavy precipitation, heat waves and the intensity of tropical cyclones are **just as likely to be from natural variability as any man made global warming**. The attempt to attribute changes in weather over decadal time scales to man made global warming is extremely limited by our short period of reliable weather records and a fundamental lack of understanding what causes climate to change in the first place.

**Clouds make feedback loops turn net negative—halts warming**

**Watts 11**—American meteorologist (AMS seal holder, retired), editor of the blog, Watts Up With That? (WUWT), owner of the weather graphics company ItWorks, and founder of the SurfaceStations.org project that documents the siting of weather stations across the United States (Anthony, 9/20, “New peer reviewed paper: clouds have large negative cooling effect on Earth’s radiation budget”, Watts Up With That Blog, <http://wattsupwiththat.com/2011/09/20/new-peer-reviewed-paper-clouds-have-large-negative-feedback-cooling-effect-on-earths-radiation-budget/>, AL)

Oh dear, now we have three peer reviewed papers (Lindzen and Choi, Spencer and Braswell, and now Richard P. Allan) based on observations that show a **net negative feedback for clouds**, and a strong one at that. What will Trenberth and Dessler do next? Maybe the editor of Meteorological Applications can be persuaded to commit professional suicide and resign? The key paragraph from the new paper: …the cloud radiative cooling effect through reflection of short wave radiation is found to dominate over the long wave heating effect, resulting in a net cooling of the climate system of −21 Wm−2. After all the wailing and gnashing of teeth over the Spencer and Braswell paper in Remote Sensing, and the stunt pulled by its former editor who resigned saying the peer review process failed, another paper was published last week in the journal Meteorological Applications that agrees well with Spencer and Braswell. This new paper by Richard P. Allan of the University of Reading discovers via a combination of satellite observations and models that **the cooling effect of clouds far outweighs the long-wave or “greenhouse” warming effect**. While Dessler and Trenberth (among others) claim clouds have an overall positive feedback warming effect upon climate due to the long-wave back-radiation, this new paper shows that clouds have a large net cooling effect by blocking incoming solar radiation and increasing radiative cooling outside the tropics. This is key, because since clouds offer a negative feedback as shown by this paper and Spencer and Braswell plus Lindzen and Choi, it **throws a huge monkey wrench in climate model machinery that predict catastrophic levels of positive feedback** enhanced global warming due to increased CO2.

**Livestock emissions are more than 51% of total GHG emissions**

**Goodland and Anhang 9**—\*retired as lead environmental adviser at theWorld Bank Group after serving there for 23 years. In 2008 he was awarded the first Coolidge Memorial Medal by the IUCN for outstanding contributions to environmental conservation, \*\*research officer and environmental specialist at theWorld Bank Group’s International Finance Corporation, which provides private-sector financing and advice in developing countries (\*Robert, \*\*Jeff, November/December, “Livestock and Climate Change: What if the key actors in climate change are…cows, pigs, and chickens”, WorldWatch, <http://www.worldwatch.org/files/pdf/Livestock%20and%20Climate%20Change.pdf>, AL)

Livestock are already well-known to contribute to GHG emissions. Livestock’s Long Shadow, the widely-cited 2006 report by the United Nations Food and Agriculture Organization (FAO), estimates that 7,516 million metric tons per year of CO2 equivalents (CO2e), or 18 percent of annual worldwide GHG emissions, are attributable to cattle, buffalo, sheep, goats, camels, horses, pigs, and poultry. That amount would easily qualify livestock for a hard look indeed in the search for ways to address climate change. But our analysis shows that livestock and their byproducts actually account for at least 32,564million tons of CO2e per year, or **51 percent of annual worldwide GHG emissions**. This is a strong claim that requires strong evidence, so we will thoroughly review the direct and indirect sources of GHG emissions from livestock. Some of these are obvious but underestimated, some are simply overlooked, and some are emissions sources that are already counted but have been assigned to the wrong sectors. Data on livestock vary from place to place and are affected by unavoidable imprecision; where it was impossible to avoid imprecision in estimating any sum of GHGs, we strove to minimize the sum so our overall estimate could be understood as conservative.

### \*\*Politics DA Links\*\*

### Obama Good—Links

**Even if the GOP likes the idea of rail they’ll backlash to federal spending on it**

**Weigel 11**—political reporter for Slate Magazine (David, 3/8/2011, “Off the Rails: Why do conservatives hate trains so much?”, Slate Magazine, <http://www.slate.com/articles/news_and_politics/politics/2011/03/off_the_rails.html>, AL)

Libertarians, of course, have **no problem with trains** (see, e.g., Atlas Shrugged). They do have a problem with **federal spending on transportation**, as do many Republicans. Atlas Shrugged was published in 1957; Amtrak took over the rails in 1971. Since then, conservatives will sing the praises of private rail projects but **criticize federally funded projects** that don't meet the ideal. Rep. John Mica, R-Fla., for example, pushed a high-speed rail initiative through Congress in 2008. By 2010, he was denouncing "the **Soviet-style Amtrak operation**" that had "trumped true high-speed service" in Florida. In 2011, as the chairman of the House Transportation Committee, he is interested in saving the Orlando-Tampa project by building 21 miles between the airport and Disney World. This is about 21 miles farther than local Republicans want to go.

### Current political climate not conducive to HSR implementation

#### Obama, despite setbacks, is not backing off the HSR agenda

Perl 2012 (Anthony, Political Science Department & Urban Studies Program, Simon Fraser University, Vancouver, BC, Canada Assessing the recent reformulation of United States passenger rail policy Journal of Transport Geography 22 (2012) 271–281 www.elsevier.com/locate/jtrangeo)

5.3. Contested implementation and goal displacement Although implementation of the Obama administration’s pas- senger train policy has been under way for just over 2 years at the time of this writing, there is sufficient evidence to conclude that both politicization and goal displacement have been the initial results. Goal displacement can be seen in the degree to which states and freight railroads have gravitated toward the low end of high-speed rail objectives in their projects. And intensification of political conflict is evident in the respective actions of President Obama and Republican governors in Wisconsin, Ohio, and Florida who were elected in 2010 and quickly canceled their states’ partic- ipation in already funded projects. First, we will examine the evi- dence for goal displacement in the grant-making process. The first federal high-speed grant awards were announced in January of 2010. Two hundred and fifty nine applications had been received from 37 states and the District of Columbia, with the funds requested totalling nearly $57 billion (American Association of State Highway and Transportation Officials, 2010). The ARRA’s approach to accepting grant applications from state departments of transportation practically guaranteed that need would trump experience in the criteria used to evaluate proposals. Few states had experience with passenger trains, and because of such limita- tions, many states could make the claim that they needed a chance to start climbing the learning curve of passenger rail development. And the place where climbing inevitably began was at the bottom of the curve, with projects that took small steps toward improving, or introducing, relatively slow trains. This large number of modest proposals created considerable impetus to spread the $8 billion in stimulus funds far and wide. A total of 62 projects in 29 states and the District of Columbia were funded in amounts that ranged from $3.1 billion to $727,400 (American Association of State Highway and Transporta- tion Officials, 2010; Federal Railroad Administration, 2011). More than half of the available funds, $4.5 billion, were spread thinly among 21 states that had proposed incremental upgrades to exist- ing Amtrak operations or would launch trains that operated at speeds on the low end of the Vision document’s categorization and subsequent administrative guidelines that built upon it. This is not surprising, given that Amtrak had the greatest level of imple- mentation capacity and that the freight railroads had adopted a po- sition that mixing freight and passenger operations on the same tracks could be done only at speeds below 90 miles per hour (Ham- berger, 2009). This dispersion of funds into incremental upgrades left the President’s high-speed rail policy open to the same criti- cism that Amtrak had attracted over past decades – that govern- ment was wasting public money to preserve an obsolete and uneconomic transport option. Robert Samuelson, a pundit who has delivered longstanding criticism of Amtrak in the media, declared that ‘‘The Obama admin- istration’s enthusiasm for high-speed rail is a dispiriting example of government’s inability to learn from past mistakes.’’ (Samuelson, 2009, p. A15) After emphasizing differences between the interna- tional experiences in rail passenger reinvention and the US ap- proach, he concluded the worst failing of this new policy agenda was its intellectual dishonesty, because US high-speed rail represented: Amtrak writ large: the triumph of fantasy over fact. The same false arguments used to justify Amtrak (less congestion, pollu- tion, etc.) are recycled. Evidence and experience count for little. Obama and Biden pander to popular prejudices instead of rec- ognizing past failure. Boondoggles become respectable. (Sam- uelson, 2009) Relying upon the limited base of domestic experience and capacity in passenger rail, most states saw no alternative to pursuing incremental upgrades that would yield little difference from the train services that Amtrak had been operating since its inception. Only two projects that were funded by ARRA grants proposed results that would qualify as high-speed according to the interna- tional standard of operating trains at or above 150 miles per hour. California’s Bay Area-to-Los Angeles bullet train received the single largest grant of $2.235 billion. These funds would supplement $9.95 billion in bond funds that had been approved by voters in a 2008 referendum. Another high-speed project in Florida, running from the Orlando International Airport to Tampa, received the sec- ond largest grant of $1.25 billion. Both of these projects would be stand-alone systems that would involve little input from Amtrak or freight railroads, and consequently were subject to considerable uncertainty. The potential costs and future revenues of pursuing a 90 mile per hour train improvement could be forecast by extrapolating from actual data on Amtrak’s experience. These same key parame- ters of a 150 mile per hour train project could be forecast only through making very approximate estimates from foreign experi- ence. And since the role of foreign suppliers in these projects would be limited as a result of ‘‘Buy America’’ provisions, the plausibility of such estimates was open to further question. And it was not long before such questioning magnified political differences over policy. Pro-market think-tanks such as the Reason Foundation, Heri- tage Foundation and Cato Institute had each previously declared Amtrak to be a policy failure, and were equally skeptical regarding the estimates that high-speed rail would do better. The Reason Foundation published influential critiques of the high-speed rail proposals that received ARRA funding. In California, a due diligence report alleged that forecasts for ridership and revenue had been in- flated and that construction cost estimates had been underesti- mated (Cox and Vranich, 2008). Since there was no actual experience to draw upon, these skeptical assessments adopted the most conservative projections of low revenue and high costs. In Florida, the Reason Foundation concluded that high-speed rail threatened the state’s budget with both cost overruns and ongoing operating losses (Cox, 2011). Such skepticism was espe- cially potent at a time when serious concerns were being raised about the rapid deterioration in America’s public finances. Writing in Foreign Affairs, Altman and Haas (2010, p. 25) warned that ‘‘. . . federal debt could equal total GDP as soon as 2015. . .. [and] If US leaders do not act to curb this debt addiction, then the global cap- ital markets will do so for them. . ..’’ This combination of uncertain estimates about high-speed rail costs and benefits coupled with imminent fears about America’s debt burden in a volatile world economy quickly turned fiscal conservatives into program opponents. Calls to end the President’s initiative thus found a receptive audience among three incoming Republican governors of states that had been awarded billions in federal rail grants. In Ohio, Governor-elect John Kasich wasted little time in putting the brake on high-speed train development. Eight days after his election, Governor-elect Kasich wrote to Governor Ted Strickland, whom he had defeated, serving notice that he would cancel the high-speed passenger train program and urging an immediate end to any spending on this initiative. He also wrote to President Obama seeking to transfer Ohio’s $400 million passenger rail grant to either highway or freight train infrastructure projects (Niquette, 2010). When neither Strickland nor Obama obliged the incoming Governor, he terminated Ohio’s passenger train project soon after inauguration. Governor-elect Scott Walker was more successful in getting Wisconsin to stop work on its $810 million passenger train development grant within 2 days of his election (Associated Press, 2010). In Florida, one of the two truly high-speed initiatives, the stakes and the conflict over rejecting Washington’s support were even more intense. Incoming governor Rick Scott based his opposition on the Reason Foundation’s negative evaluation, additional criti- cism supplied by the Heritage Foundation and a verbal briefing from the Florida Department of Transportation, according to a spokesperson (Zink, 2011). News coverage also revealed that Rea- son Foundation co-founder Robert Poole had served on Scott’s eco- nomic development transition team (Zink, 2011). Despite attempts made by state legislators and municipal government officials to re- verse the decision, as well as a legal challenge which went all the way to the Florida Supreme Court, Florida’s project was aban- doned. Tampa’s Mayor Pam Iorio lamented the signal that such a decision sent out: ...the message being sent to eight world-wide business con- sortiums across the globe and the United States is don’t bother ...As a mayor who cares about economic development and the encouragement of investment by the private sector, I can not understand or justify this stance. (Leary et al., 2011) Faced with these reversals at the hands of political opponents in key states, President Obama responded by raising both the stakes and the visibility of his commitment. The Department of Transpor- tation reallocated the returned high-speed rail funds to other states that had committed to other projects. And in the 2011 State of the Union Address, the President called for a national high-speed network that was even more ambitious than previous commitments: Within 25 years, our goal is to give 80 percent of Americans access to high-speed rail. This could allow you to go places in half the time it takes to travel by car. For some trips, it will be faster than flying – without the pat-down. As we speak, routes in California and the Midwest are already underway. (Obama, 2011) Although the details of such a plan still remain to be worked out, it was apparent that the President of the United States showed no inclination to back off his agenda for railroad redevelopment that embraced high-speed services, even in the face of setbacks due to the politicization of policy implementation in a time of mounting public debt.

### Plan not popular with Republicans

#### Obama administration wants high speed rail; Republicans oppose

Wolfe 2011 (,Kathryn A. "Ambitious Rail Plans Stun Lawmakers." CQ Weekly , February 21, 2011: 400. http://library.cqpress.com/cqweekly/weeklyreport112­000003817897.)

On the day President Obama released his fiscal 2012 budget, Transportation Secretary Ray LaHood pointed reporters to an aerial photo of Hoover Dam, its concrete mass shining bone white behind an impressive span of highway. “The people that came before us had some big dreams” for infrastructure, LaHood said. And, he added, Obama does, too. Just before LaHood spoke, the president had unveiled details of his budget for the Transportation Department, which called for an eye­popping $53 billion investment in building high­speed rail corridors around the country over the next six years. Left unanswered was how to pay for it all. The budget announcement was itself a follow­up to Obama’s State of the Union address, in which he called for a nationwide network of high­speed rail corridors to be developed within 25 years. LaHood refers to the rail initiative — which received seed money through the 2009 economic stimulus law — as his agency’s “signature program.” When he speaks about it, he sometimes conjures images of historically important public works projects, including Hoover Dam, the Interstate Highway System and the transcontinental railroad. Just as those huge projects transformed the country in ways that are still felt today, LaHood and the administration view their rail proposal as having the potential to reshape America’s transportation options, create employment opportunities, reduce congestion and revitalize manufacturing. “Like our parents and grandparents, we, too, must exercise the foresight and courage to invest in the most important infrastructure projects of our time,” LaHood wrote in a December op­ed column. “If we work together, a national high­speed­ rail network can and will be our generation’s legacy.” Obama’s high­speed rail dreams are certainly ambitious, but can they be achieved? So far the administration hasn’t offered any specific proposals to pay for all this rail spending. When asked whether the administration has any plans for solving the yawning financing gap, LaHood replied that he looks forward to working that out with Congress. Of course, so far Congress hasn’t had many new ideas about how to raise revenue for the country’s current infrastructure needs — much less an additional $53 billion for high­speed rail. The proposal to bring 80 percent of Americans ready access to fast trains within a quarter century is part of the president’s six­year, $556 billion surface transportation proposal. Overall, the White House is proposing an ambitious agenda to fix roads and bridges, modernize aviation, and expand broadband access. Surface transportation programs have been authorized through a series of short­term extensions since the last highway law expired in September 2009. The biggest obstacle to enacting a new multi­year authorization has been how to pay for it. The Highway Trust Fund is financed with taxes on motor fuels and truck and tire sales. But the 18.4 cents­per­gallon gasoline tax hasn’t been increased since 1993, and highway spending has outpaced revenue. Congress kept the fund solvent in recent years only through transfers from general tax revenue. With no appetite in Congress or by the administration for raising the gasoline tax, it is unclear how a new highway bill will be financed. Billions of dollars in new spending on high­speed rail makes a bill an even tougher sell. Even before the administration unveiled its newest plans for rail, congressional Republicans were criticizing the $10.5 billion already doled out, mostly through the stimulus law. In fact, high­speed rail was near the top of the hit list for Republican budget­cutters. And it’s not just congressional Republicans who take a dim view of the initiative. A handful of Republican governors have actually rejected billions of dollars in federal high­speed rail money, saying the lines will end up being too costly for the state to maintain. Florida’s new governor, Rick Scott, was the latest to say no thanks to $2.4 billion, just days after the White House unveiled its spending blueprint. The administration promptly said it would allocate the money elsewhere. “There’s been a lot of bipartisan support for the need to create the kind of modern infrastructure in this country that will enable us to compete,” said White House press secretary Jay Carney. “High­speed rail is very much a part of that. And we will make sure that that money is used elsewhere to advance the infrastructure and innovation agenda that is essential for economic growth.” That’s a message welcomed by a new crop of “green” transportation advocates. John Robert Smith, president of Reconnecting America, which promotes transit­oriented development, said a national high­speed rail system “is not only an opportunity to redefine how we travel and how our regional economies grow” but also the type of “innovation and progress that can secure a better future for our grandchildren.” More road builders and other more traditional transportation stakeholders are wary about the administration’s proposal to rejigger the Transportation Department’s budget to ensure that high­speed rail has a dedicated funding stream into the future. To ensure that high­speed rail isn’t subject to the whims of appropriators, the budget proposes merging rail programs with the Highway Trust Fund, which funds most highway and transit spending, into a new account to be called the Transportation Trust Fund. Traditional transportation groups worry that already inadequate gasoline tax receipts deposited into the Highway Trust Fund won’t remain dedicated to highway and transit spending, even though the president’s budget says the money will be protected. “It is hard to take this proposal seriously when the administration has yet to identify how it will pay for the other programs it wants to add to the trust fund,” said Stephen E. Sandherr, chief executive of the Associated General Contractors of America, in a statement. James M. Inhofe of Oklahoma, ranking Republican on the Senate Environment and Public Works Committee, which will draft portions of the next surface transportation bill, said he won’t support such a big change to the trust fund structure for just that reason. “Well you know what that means,” Inhofe said. “We used to have surpluses. Remember that? Then all these hitchhikers came along — bike trails and rail — instead of just maintaining and building highways, bridges and construction.”

### Obama key to HSR adoption

#### Obama entered office with a HSR agenda; the President has been key proponent for its’ implementation

5. Reinventing the passenger train as an instrument of economic recovery: the radical reshaping of a policy agenda 5.1. New leaders and new goals After decades during which passenger train policy was pursued mainly through budget battles in the halls of Congress, the sudden shift to thinking about grand plans for a national network of high- speed trains caught most in the rail industry off guard. Strange as it must have seemed to policy veterans who were inured to negotiat- ing compromises on Amtrak’s annual subsidy where differences were in the millions of dollars, and debating the merits of train operations that rarely reached 80 miles per hour, such a radical shift in thinking is what models of policy change would predict when a new political leader uses an electoral mandate to establish different goals. Building upon Heclo’s distinction between how the interaction between powering and puzzling can influence policy change, Peter Hall has suggested that where in government these efforts are pur- sued will also make a significant impact in the scope and direction of policy change. In Hall’s (1993) analysis of the United Kingdom’s shift from Keynesianism to monetarism, the incremental policy adjustments to Keynesianism that arose from the social learning effort among economic policy specialists looked quite different from the wholesale replacement of policy goals that occurred fol- lowing a new government with a leader determined to reshape Great Britain’s policy agenda. Margaret Thatcher’s election as Prime Minister brought new economic ideas into power at the heart of government. As Prime Minister, Thatcher could steer the civil service toward new priorities in macroeconomic manage- ment. She set that course firmly toward implementing a monetar- ist paradigm, and held it there long enough to institutionalize monetarism as the orthodoxy among Britain’s economic experts. An analogous agenda change took place in the US railroad policy subsystem following the election of President Obama, but with some important differences that can account for the subsequent political conflict over implementation. Like Margaret Thatcher, Barack Obama was elected to lead a country that had suffered a debilitating economic reversal of fortune. The ‘‘Great Recession’’ of 2008 and accompanying global financial crisis were anomalous policy outcomes of the highest magnitude. The collapse of the real estate and financial markets not only delegitimated governments around the world, but also eroded credibility of the established monetarist economic paradigm. Even before President Obama was inaugurated, hundreds of billions of dollars had been used to prop up America’s major financial institutions, which were effec- tively insolvent (Goldman, 2011). The transport sector was deeply affected by this crisis. Two of America’s ‘‘big three’’ auto makers were facing bankruptcy, and had to be rescued with a $97.4 billion bailout from Washington (Hyde, 2009). These systemic financial failures opened the door to a round of Keynesian macroeconomic intervention that had not been at- tempted for decades. The American Recovery and Reinvestment Act of 2009 (ARRA) was signed into law exactly 4 weeks after Pres- ident Obama’s inauguration. It authorized a $787 billion fiscal stimulus that was intended to reach the American population di- rectly, rather than filling the coffers of banks, investment firms, and big corporations that had been heavily supported by the out- going Bush administration and Congress. While the magnitude of this paradigm shift was certainly more modest than the United Kingdom’s monetarist regime under Thatcher, there is no question that the Obama administration’s stimulus program represented a break with established economic thinking. 5.2. High-speed rail joins the economic recovery agenda Implanted within this departure from existing economic ortho- doxy, there was also a significant change in transportation policy. It was only after the ARRA had been passed by Congress that a com- mitment for spending $8 billion on high-speed train projects be- came apparent. The closed door negotiations between the White House and Congressional leadership that produced ARRA have not yet been exposed in the detail needed to support a definitive explanation of how a high-speed passenger train development pro- gram made its way into a Keynesian stimulus package. But there is strong circumstantial evidence to suggest that the initiative came from the Executive branch, and was driven by the President’s lead- ership. Four pieces of supporting evidence merit consideration. First, there is no record of any Congressman or Senator identify- ing high-speed trains as a priority for the federal stimulus package during debates on the ARRA. Second, when Barack Obama ran for President, he clearly identified a need for high-speed passenger trains to be added to the transportation policy agenda. Speaking at a Miami campaign event in June 2008, Obama stated ‘‘We’ll also invest in our ports, roads and high-speed rails – because I don’t want to see the fastest train in the world built halfway around the world in Shanghai, I want to see it built right here in the United States of America.’’ (McSherry, 2008) Third, the President’s chief negotiator on the stimulus package, White House Chief of Staff Rahm Emmanuel, made it clear that the depths of the economic crisis would enable the Administration to pursue change in long neglected policy subsystems. At a confer- ence of American CEOs organized by The Wall Street Journal, shortly after the November 2008 election, Emmanuel explained how the Administration viewed the economic crisis as an important opportunity: You never want a serious crisis to go to waste. Things that we had postponed for too long, that were long-term, are now immediate and must be dealt with. This crisis provides the opportunity for us to do things that you could not do before. (Seib, 2008, p. A2) Fourth, when Obama’s Secretary of Transportation Ray LaHood was interviewed by Roll Call about the transportation spending that had gone into the stimulus package, he offered secondhand testi- mony regarding the President’s role. Roll Call editor Morton Kond- racke asked LaHood, ‘‘The $8 billion that’s in there for high-speed rail – how much of that is [Senate Majority Leader] Harry Reid’s [D-Nev] Maglev going from Las Vegas to Disneyland?’’ LaHood responded: This is money that was put in by the president. His Chief of Staff, Rahm Emmanuel, did the negotiations on this bill. This is money that was put in by the president because he wants to make high-speed rail his transportation legacy....This is one of the highest transportation priorities for President Obama. (Roll Call, 2009) Taken together, this evidence strongly supports the view that America’s new agenda for rail renewal was initiated by an incom- ing President who made use of a major economic crisis to change transportation policy priorities. Reinventing the passenger train appeared to be high among those priorities. Although some conjecture is required to infer the President’s role in launching a new rail passenger policy agenda, that leader- ship became crystal clear following ARRA’s passage. On April 15, 2009, the US Department of Transportation released a policy doc- ument entitled Vision for High-Speed Rail in America setting forth the goals and priorities which were meant to guide the implemen- tation of new passenger train policy. The document explicitly introduced modern passenger trains as a new goal for America’s transportation policy, stating: High-speed intercity passenger rail can play a critical role in certain travel markets, but the United States has historically failed to invest in this mode. The President proposes a long- term strategy intended to build an efficient, high-speed passen- ger rail network of 100- to 600-mile intercity corridors, as one element of a modernized transportation system. (Federal Rail- road Administration, 2009, p. 2) While articulating such a policy goal was unprecedented in any government document on American transportation, the presenta- tion of this vision was even more exceptional. The Vision for High Speed Rail was unveiled at the Old Executive Office Building, with the President, the Vice-President and the Secretary of Transporta- tion each speaking to the importance of passenger rail reinvention. To hear them tell it, high-speed trains offered a key to unlocking America’s economic recovery. US Presidents have said little about passenger trains during the postwar decades, and in the few instances when a President of- fered any comment, it was not positive. President Reagan dispar- aged Amtrak in his 1985 State of the Union Address and urged Congress to end ‘‘. . . this huge Federal subsidy.’’ (Reagan, 1985) When President Obama articulated his views about passenger trains on April 16, 2009, there was little doubt about his desire to set a new course in transportation policy. He stated: What we need. . . is a smart transportation system equal to the needs of the twenty-first century. A system that reduces travel times and increases mobility. A system that reduces congestion and boosts productivity. A system that reduces destructive emissions and creates jobs. (Congressional Digest, 2011, p. 104) He then linked these goals to renewing passenger trains, a course of action which had never been embraced by an American President before. He asked his audience to contemplate a travel experience that was the antithesis of the typical air journey in 2009: Imagine boarding a train in the center of a city. No racing to an airport and across a terminal, no delays, no sitting on the tar- mac, no lost luggage, no taking off your shoes. Imagine whisking through towns at speeds over 100 miles an hour, walking only a few steps to public transportation, and ending up just blocks from your destination. Imagine what a great project that would be to rebuild America. (Congressional Digest, 2011) The President explicitly addressed concerns that his vision was realistic for America: Now, all of you know [high-speed rail] is not some fanciful, pie- in-the-sky vision of the future. It is now. It is happening right now. It’s been happening for decades. The problem is it’s been happening elsewhere, not here. . .. There’s no reason why the future of travel should lie some- where else beyond our borders. Building a new system of high-speed rail in America will be faster, cheaper, and easier than building more freeways or adding to an already overbur- dened aviation system—and everybody stands to benefit. (Con- gressional Digest, 2011) And with those words, redirection of the US transportation policy agenda was launched. But unlike the paradigmatic shift from Keynesianism to monetarism that occurred during the 1980s, the railroad subsystem differed from the macroeconomic subsystem in at least two ways that introduced significant constraints in advancing this new agenda. First, the anomalous events that had, arguably, created a strong mandate that President Obama seized to begin changing policies had occurred outside the rail subsystem.

### HSR is politically divisive issue

#### Progressives and conservatives can’t agree on the purpose of HSR

Longman Jul/Aug2011 (Phillip, Senior fellow at the Washington Monthly and the New America Foundation, The Case for Not-Quite-So-High-Speed Rail.,

Washington Monthly; Vol. 43 Issue 7/8, p13- 16, 4p)

[b]ullet trains speeding at 180 mph or more from major city to major city are great for business execs in a hurry and on an expense account. But the more conventional, cheaper, "fast enough" high-speed rail lines like the West Rhine line are the real backbone of the German passenger rail system and that of most other industrialized nations. And it is from these examples that America has the most to learn, especially since it now looks as if the U.S. isn't going to build any real high-speed rail lines, except possibly in California, anytime soon. In an ironic twist, between the mounting concern over the state and federal deficits and growing Republican and NIMBY opposition to highspeed rail, the Obama administration is being forced to settle for incremental projects that will only bring passenger rail service up to the kind of standards found on the West Rhine line. And that's a good thing, provided Republicans don't succeed in killing passenger trains in the United States altogether, as they are increasingly wont to try. The debate over high-speed rail in the United States has become akin to that over organic food. Most people can't define exactly what it is, but they tend to have strong, almost theological opinions about whether it's morally good, elitist, impractical, and/or politically correct. Progressives are likely to tell you that high-speed rail is necessary to reduce global warming, prepare for "peak oil," and overcome "auto dependency." The Obama administration plays to this by proudly proclaiming that it has set in motion projects that will bring high-speed rail to 80 percent of the U.S. population within twenty-five years. Meanwhile, especially since the elections of 2010, conservatives have been rallying their troops in full-throated opposition to any and all government spending to improve passenger rail service, often portraying it as another step on the road to serfdom. Though many Republicans, such as Kay Bailey Hutchinson of Texas, have strongly supported Amtrak over the years (especially for service in their own backyards), we now see a new breed of Republican governors in Florida, Ohio, and Wisconsin all making a big show of waving away billions in federal stimulus dollar for rail improvements in their states.

### HSR Popular: GOP

#### HSR receives support from GOP

Cooper, 2012 (Michael, New York Times, For High-Speed Rail, Support in the Past From G.O.P. Presidential Hopefuls, January 3, 2012, <http://www.nytimes.com/2012/01/03/us/politics/for-high-speed-rail-support-in-the-past-from-gop-presidential-hopefuls.html?_r=1>)

President Obama's program to bring bullet trains to the United States has been left on life support by the strident opposition of Republicans in Congress and in statehouses around the nation. But the idea may carry more favor with some of the Republican candidates vying to unseat Mr. Obama, who have a history of supporting high-speed rail. Newt Gingrich, a former speaker of the House, has written books and given speeches about the importance of high-speed rail in the United States, and he supported a study for a high-speed line from Atlanta to Chattanooga, Tenn., sought by local boosters when he was in Congress. Gov. Rick Perry of Texas saw a role for high-speed rail in his failed $175 billion transportation plan to build what would have been called the Trans-Texas Corridor. Even Representative Ron Paul of Texas, a small-government libertarian, signed a letter that several members of Texas' Congressional delegation sent to federal officials in 2009 urging them to give the state money for rail studies to help it build ''a truly ambitious and world-class high-speed rail network.'' But Mr. Gingrich may be the most outspoken Republican presidential candidate when it comes to his support of high-speed rail. He has spoken and written admiringly of China and France, and how far ahead of the United States they were when it comes to high-speed rail. He has opined that high-speed train lines would make sense in Florida and California -- places the Obama administration sought to build them -- and in the Northeast, among other places. And he has spoken of a role for government to help build a national rail network. ''If you want to be the most competitive country in the world in 2040 or 2050, you have to think large,'' Mr. Gingrich said in 2009 at a videotaped forum sponsored by the National Governors Association and Building America's Future, an infrastructure advocacy group. Mr. Gingrich's large thought was for America to build high-speed magnetic levitation trains, as China has. ''Let's go ahead and be really bold, and go head to head with the Chinese in developing and implementing maglev trains that move at 280, 300, 320 miles an hour,'' Mr. Gingrich said in his speech, which Streetsblog.org, a transportation Web site, wrote about recently. ''And you suddenly change all sorts of equations about how this country operates.'' Before the politics of rail was scrambled in recent years, Republican support for high-speed rail was not unusual. As recently as 2004, the Republican Party platform stated that ''Republicans support, where economically viable, the development of a high-speed passenger railroad system as an instrument of economic development and enhanced mobility.''

### Democrats more likely to support HSR

#### Obama critical to HSR passage; Democrats more likely to support

Chen 2011 (Zhenhua, PhD student at the George Mason University, School of Public Policy, and is currently working as a graduate research assistant under the supervision of Prof. Jonathan Gifford in the area of transportation policy. Mr. Chen was awarded the Graduate Student Best Paper Award of the 51st Transportation Research Forum, “Is the Policy Window Open for High-Speed Rail in the United States: A Perspective from the Multiple Streams Model of Policymaking,” Transportation Law Journal Vol. 38:115)

C. POLITICAL STREAM In the MS model, flowing independently alongside the problem and policy streams, the political stream is composed of such things as national mood, pressure group campaigns, election results, partisan or ideological alignments in Congress, and changes of administration.8 1 The emergence of a HSR is mostly pushed by two major components of political stream: ideological alignments in Congress and changes of administration. In the United States, the idea of HSR stands for a new dimensional perspective that aims at solving contemporary transportation problems, such as re- lieving congestion and greenhouse gas reduction.82 However, because of the unpredictable social and economic outcomes and tremendous capital cost, Republicans and Democrats have formed different standpoints re- garding government's role in HSR spending. Republicans generally re- present a conservative ideology on government spending. They believe government spending on HSR is too risky to be affordable.83 Democrats, generally represent a liberal ideology, prefer increasing government spending on HSR to spur development and achieve better connection among city centers.84 These ideological discrepancies can be tracked by the recent usage debate of HSR stimulus money in Madison, Wisconsin. American political history has two periods when HSR became part of the governmental agenda. The first period started with the passage of ISTEA in 1991 and ended with the passage of Swift Rail Development Act in 1994. The second period started in late 2007 with the passage of the Railroad Safety Enhancement Act of 2008 and is still ongoing today. In the first period, Democrats controlled both Houses.88 From 1989 to 1996, eight HSR proposals and six Maglev proposals were submitted to Congress.89 More interestingly, all the proposals were submitted by Democrats.90 In the second period, the nation was in a recession. Due to more uniform ideological distributions in the House and Senate, a variety of HSR policy proposals were submitted and awaiting a policy window opening. Another important political stream component appeared and helped facilitate the passage of HSR bills, the change of administrations. Now HSR is back on the governmental agenda and is basically attributable to the new unified rail leadership.91 President Obama, as one of the most active HSR advocates in this country, collaborated with a longtime rail user, Vice President Joseph Biden, and a new Secretary of Transporta- tion, Ray LaHood, to speed up the national HSR development process to an unprecedented stage. 92 Started in 2008, America suffered a severe economic recession, which at one point caused the unemployment rate to reach 10.2%, and tens of thousands of businesses to shut down.93 In order to get the econ- omy to recover as soon as possible, the ARRA was passed on February 17, just one month after President Obama's inauguration. 94 In this Act, an eight billion dollar transportation infrastructure investment was dedi- cated to HSR, something that had never been done before.95 As the first African-American President, Barack Obama was thought to be a revolu- tionary in American politics. 9 6 Moreover, he seems to have greater inter- est in innovation and more courage to take on challenges than his predecessors. 7 Because of this, he seeks new alternatives to solve old problems. On the unveiling event of the national HSR plan on April 16, 2009, President Obama said, "[w]hat we need, then, is a smart transporta- tion system equal to the needs of the 21st century. A system that reduces travel times and increases mobility. A system that reduces congestion and boosts productivity. A system that reduces destructive emissions and creates jobs."98 Meanwhile, Vice President Joseph Biden and Secretary of Transpor- tation Ray LaHood have helped President Obama push HSR as well as implement the HSR.99 In fact, as a long time train user, Biden was in charge of the infrastructure expenditure from the Obama stimulus pack- age whose purpose was to counteract the ongoing recession.100 Also, it shows that HSR is Secretary LaHood's top priority as Transportation Secretary. After the announcement of the national HSR plan in April 2009, he has been actively involved in allocating HSR money. 0 1 Not only did he visit Spain to gain knowledge for HSR development in the United States, but he also had discussions with HSR grant applicant states to allocate the money to the most practical routes.102 In short, the change of administration was a key component in the HSR political stream. According to the MS model, "the agenda is affected more by the problems and political streams, and the alternatives are affected more by the policy stream." 03 A "policy window" indicates an opportunity for policy entrepreneurs who are "advocates of proposals to push their pet solutions." 0 4 When policy windows open, policy entrepreneurs act to couple the three streams. 05 In Florida, a policy window has opened. A case study of the Florida HSR explores how policy entrepreneurs couple the three streams because Florida's Tampa-Orlando HSR plan was awarded $1.25 billion in federal HSR grants and is likely to be the first real HSR system completed.106 Although studies have shown that the most recommended places to have HSR are city pairs in the Northeast Corridor,10 7 Florida's success in winning the initial HSR as the single de- veloping HSR in the United States is no surprise. 08 Florida's HSR is not merely a solution to the transportation issue; more importantly, it is the outcome of political gaming among different stakeholders. Through this case analysis, we can understand how the United State's policy entrepre- neurs are achieving the HSR policy goals through the coupling of activities.

### **Turn: Current Republican actions kill HSR**

#### Republicans killing HSR projects hurt job creation and competitiveness; must invest to create jobs and meet competition goals

Brown 2011 (Hon. Corrine, Representative from Florida, THE FEDERAL RAILROAD ADMINISTRATION’S HIGH-SPEED AND INTERCITY PASSENGER RAIL PROGRAM: MISTAKES AND LESSONS LEARNED (112–65) HEARING BEFORE THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION DECEMBER 6, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation

Ms. BROWN. Thank you, Mr. Chairman. And I am glad we are holding this hearing today to focus on progress and pitfalls of implementing high-speed and intercity passenger rail in the United States. All of our international competitors are beating us to the punch. They have invested billions of dollars in passenger rail systems that have significantly reduced highway and aviation congestion. While here, in the United States, we fail to provide adequate fund- ing for passenger rail, and waste $115 billion a year in fuel and lost time sitting in traffic. Let’s step back and look at this committee progress, or lack thereof. Over the past year we have no surface transportation bill, no FAA bill, no water resource bill. And to top it off, we are here today arguing about a High-Speed and Intercity Passenger Rail Program that has already been defunded by the Republicans. Our country is building huge infrastructure projects in Iraq, giving tax credits to the company, taking jobs overseas, and building massive bridges in the United States with Chinese steel. Yet, the committee leadership here today is trashing a program that would improve passenger rail throughout the country and put thousands of people to work. Since today’s hearing is titled, ‘‘Mistakes in FRA High-Speed and Intercity Passenger Rail Program,’’ I thought I would make a list of a few mistakes that I have seen since enacting the Passenger Rail Investment and Improvement Act of 2008 and Recovery. First of all, we fail to dedicate any significant funds for passenger rail. Our main competitor, the Chinese, have invested $350 billion in rail. Let me say that again: $350 billion. They see the im- portance of moving people, goods, and services. Then we invite private companies that I have had several meet- ings with over the world, including some of the biggest rail opera- tors and manufacturing business today to invest time and re- sources into vying for parts of the U.S. high-speed rail market, only to slam the doors in their face by canceling projects and cutting Federal funds. Look at Wisconsin. Just yesterday, Talgo announced it is going to shut down its Milwaukee train manufacturing operations in 2012, killing over 4,700 jobs because Wisconsin Governor Scott Walker rejected Federal funds for the high-speed line between Mil- waukee and Madison when he took office. It is worth noting that— talking about mistakes—that the government later reapplied for a portion of the funds he rejected. That is absurd. And let me talk about the poster child of mistakes, my home State of Florida. The mistakes started when Governor Jeb Bush shut down the high-speed rail authority in Florida before they were able to study the most desirable Orlando to Miami route. Our current Governor, Rick Scott, was able to come up with one of the big- gest acts of stupidity—returning $2.4 billion in awarded funds. A ridership study which was paid for by taxpayers’ dollars indicates that it would have made money. The study estimates that the ridership, at more than 3 million the first operating year, would increase to 4.7 million in the 10th year. Revenues were estimated at $4.2 million in the first operating year, rising to $38 million in the 10th year. And with respect to jobs, something we have all been talking about and are supposed to be focusing on, 30,000 jobs. You know, well, what kind of jobs are we talking about? We are talking about engineering firms, steel, cement factories, and construction jobs. Those are real jobs. What a loss. What a loss. I want to welcome Secretary Ray LaHood, and thank him for his efforts in working out the agreement that averted a possible rail strike during the holiday season. I really think you are one of the bright spots in transportation. And I welcome you here today. And I want to thank you for your leadership.

### HSR projects are popular

#### Obama administration committed to HSR; past bipartisan support has pushed HSR; will boost competitiveness in several ways

Lahood 2011 (Hon. Ray, Secretary of Transportation, US Dept. of Transporation, THE FEDERAL RAILROAD ADMINISTRATION’S HIGH-SPEED AND INTERCITY PASSENGER RAIL PROGRAM: MISTAKES AND LESSONS LEARNED (112–65) HEARING BEFORE THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION DECEMBER 6, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation

High-speed rail is a signature initiative for President Obama and this administration. But most of all, it is an important initiative to the American people, whose representatives have submitted more than 500 applications requesting $75 billion to build high-speed rail projects. And all that since 2009. In fact, when Florida’s Governor decided to send back his State’s $2 billion of high-speed rail money, 24 States and the District of Columbia and Amtrak submitted requests for $10 billion. Another powerful testament to America’s enthusiasm for high-speed rail. So, I am looking forward to our conversation about President Obama’s vision, President Obama’s plan, and 3 years of successes achieved and progress to build on. The fact is, high-speed rail has been a priority for decades at the local, State, and Federal levels. And among members of both parties. Let me read you something that I just came across. And I quote: ‘‘It is the policy of the United States to promote the con- struction and commercialization of a high-speed rail transportation system.’’ That is a quote from the 1991 transportation bill signed into law by President Herbert Walker Bush. Just 1 year later, one of my outstanding predecessors, a Repub- lican, former Transportation Secretary Andy Card, designated the first five high-speed rail corridors during a recession. And if you think this was an historic anomaly, I remind you that the Repub- lican House and Republican Senate passed another transportation bill reiterating America’s commitment to high-speed rail in 1998. I remember, because I was one of 337 Members of this body who voted for it. So, what has changed today is that we have a President and a Vice President who are putting their money where their mouth is. We are not just asking—we are not just writing reports and filing them away. We are hiring workers, laying track, and building sta- tions. High-speed rail is coming to America. It is here. Three years ago, President Obama started with a vision. He envisioned an American in which 80 percent of the people can have access to high-speed rail. And we know that as this system emerges, jobs, economic de- velopment, and economic competitiveness will follow. In the short term, we are creating manufacturing construction jobs. These are American jobs building the next generation of America’s infrastructure. Once track is laid and stations are built, we are spurring economic development, quality jobs, and American- owned small businesses all along the United States rail corridors. What is more, our investment in train tracks, in train sets, don’t just give travelers more option, they improve existing rail lines for freight cars. We have invested in the last 3 years a half-a-billion dollars in our Class I freight rail system in America. Now we have done that selfishly, because that helps us get into high-speed rail. But that is the first time that anybody can remember that kind of invest- ment was ever made in what is the best rail—freight rail—system in the world: ours. A half-a-billion dollars. President Obama’s administration is working every day to elimi- nate bottlenecks and choke points in America’s freight rail. I have been to tower 55 in Texas. I have been to the CREATE program in Chicago. All over America we are making investments in freight rail. One-third of our competitive TIGER grants went to projects that speed delivery of products from factories, farms, and busi- nesses to customers across the United States and around the world.

### HSR should be bipartisan

#### Obama administration committed to HSR; current budgets have included funding; bipartisan support is best to support the program

Lahood 2011 (Hon. Ray, Secretary of Transportation, US Dept. of Transporation, THE FEDERAL RAILROAD ADMINISTRATION’S HIGH-SPEED AND INTERCITY PASSENGER RAIL PROGRAM: MISTAKES AND LESSONS LEARNED (112–65) HEARING BEFORE THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION DECEMBER 6, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation

And we are in it for the long haul. We will not be dissuaded by the naysayers, by the crit- ics, some of whom you are going to hear from later on today. We are not. High-speed rail is in America, coming to America, and expanding in America. There is no going back. The dollars to support all of this were included and paid for in every budget that President Obama has submitted to Congress. All of this was included in the President’s outline for a long-term transportation bill which charted a course in proposed funding for the next 6 years. All of this was included in our push for high-speed rail projects as a part of the American Jobs Act. And all of this is anchored in our shared history. We have always met tough challenges by doing big things. We have always done big things. And transportation has always been bipartisan, always. When I was here, sitting where you are sitting, I was voting for two trans- portation bills. Both of those bills passed with over 400 votes in the House. There are no Republican or Democratic bridges. There are no Republican or Democratic railroads. We have had a rich history in this country of bipartisanship when it comes to transportation, because transportation puts people to work. It puts friends and neighbors to work. That is why it has been bipartisan. Our blueprint for building high-speed rail is the same as Amer- ica’s blue print for building the interstate system. We are right at the point where America was at when we started the interstate system. We didn’t know where all the lines were at. Do you think they knew where all the lines were at when President Eisenhower signed the interstate bill? Of course not. Do you think they knew where all the money was coming from? Of course not. Fifty years later, we have the best interstate system in the world because peo- ple had a vision. When the United States first started going from planning to pav- ing, we didn’t know where all the routes were going to be. We didn’t know where every penny was coming from. But President Ei- senhower set a goal. He had a vision. Through 10 administrations and 28 sessions of Congress—that is when I say, ‘‘High-speed rail is coming to America,’’ because through 10 administrations, 10 Presidents, and 28 sessions of Congress, we got it done. That is what America has always been about. We didn’t invest when times were good. We have a proud history investing when times were tough, because transportation puts peo- ple to work. Through boom years and bust years, through eight re- cessions, we built the best roadway system in the world. And we should do no less for high-speed rail. Members of this committee, our parents and grandparents dreamed big, planned big, built big so we might have the chance to lead. What the previous generation did for us is left us an inter- state system. State of the art. We should do no less for the next generation. I am not going to benefit from high-speed rail, but I have four grown children and nine grandchildren. They will. We should do what generations did for us. Think big, build big, and leave the next generation of transportation high-speed rail. I am happy to answer your questions, Mr. Chairman.

### \*\*Solvency Arguments\*\*

### No solvency: Obama must adapt to policymaking framework to successfully implement HSR

#### Past actions have been unsuccessful; successful implementation will rely on multiple factors

Perl 2012 (Anthony, Political Science Department & Urban Studies Program, Simon Fraser University, Vancouver, BC, Canada Assessing the recent reformulation of United States passenger rail policy Journal of Transport Geography 22 (2012) 271–281 www.elsevier.com/locate/jtrangeo)

5.4. Conclusion: agendas, capacity and the politics of major policy change While the substantive results of the Obama administration’s redirection of the US transportation policy will not be known for years to come, this bold attempt to shift priorities offers an oppor- tunity for more immediate insights into the politics of major trans- port policy change. What the launch of an American high-speed train development program following 40 years of policy stalemate reveals is the essential role of administrative and technical capac- ity in enabling a policy paradigm shift to be implemented quickly, when the political leadership that introduced it maintains its greatest reserve of political capital. Momentum in implementation was the key to transforming the UK’s macroeconomic management during the Thatcher government’s tenure as depicted in Peter Hall’s model of policy paradigm shift. Margaret Thatcher and her colleagues in government succeeded in transforming Great Britain’s economic paradigm during the 1980s through the policy equivalent of a blitzkrieg. They swept into power, captured the key positions in government (e.g., Whitehall) where policy goals were pursued, and left the subsequent disarma- ment of resisters to ‘‘mopping up’’ operations across the civil ser- vice. In this case, policy and politics aligned so that those in control of the ‘‘powering’’ efforts in British economic policy could empower qualified experts to puzzle through implementation of the monetarist paradigm. But circumstances are not always as clear cut as the policy context that Mrs. Thatcher took charge of in 1979. In part by institutional design (i.e., federalism and the sep- aration of powers) and in part by the specific nature of anomalies that open a window that could legitimate radical change, the Uni- ted States proved a much more challenging context in which to reinvent transportation policy. The institutional design of US government is intended to restrict the exercise of government’s authority in pursuing any kind of ma- jor change. And while the Great Recession of 2008 did open a win- dow for some changes in economic goals and instrumentation, the Obama administration misread, or misunderstood, the context in which their preferred policy changes would have to unfold. Although the financial sector and the automotive industry had been brought to the brink of collapse, and were thus powerless to resist new policies, the railroad sector was in a different position. US railroads were among the strongest corporate components of the nation’s transport sector, if not the economy as a whole. They did not need, or receive, a bailout, and the freight railroads also owned the infrastructure that would be critical for imple- menting many ‘‘bullet train’’ projects. Not only were there credible organizations within the railroad subsystem that could resist the new passenger train policy goals, but there was also a dearth of experience in government about how to effectively implement these goals. And after 40 years of policy stalemate over what Amtrak’s mis- sion and mandate was supposed to be, the capacity to plan and execute passenger train reinvention, as opposed to preservation, was in very short supply across the United States. The ability to tap into global expertise was constrained by the ‘‘Buy America’’ provisions of the ARRA, which had become the legislative vehicle for policy change. Capacity was further constrained by designating state departments of transportation as the high speed train project proponents. While this division of federal and state government la- bor had worked in implementing road, transit, and aviation pro- jects, the states were among the least experienced policy actors to be called upon for implementation leadership. Their reliance on Amtrak and freight railroads to actually deliver policy outputs created considerable momentum for displacement of goals, from high-speed trains toward services that looked indistinguishable from services Amtrak currently provides. This lack of capacity fur- ther politicized the implementation process. The more that pursuit of a new high-speed train agenda ap- peared aimed at creating additional Amtrak services, the more that well known and high profile skeptics of Amtrak succeeded in crit- icising the President’s policy as offering nothing more than ‘‘old wine in new bottles.’’ Such critiques proved persuasive in three states where mid-term elections had brought Republican gover- nors into office who were not disposed to advance the President’s agenda in any case. The relationship between the ambition for pol- icy change and the capacity to advance it is thus revealed to be a critical factor in influencing both the administration and the poli- tics of paradigm shifts. At a tactical level, this episode of rewriting the policy agenda re- veals the importance of identifying policy actors who are either vulnerable or already disposed to adopting new goals and then for- mulating a policy that will bring them together in the service of those goals. Those new to power need to target policy opponents who lack the authority to resist change. In this case, the automo- tive sector would have made an ideal candidate to be assigned the goal of designing and building high speed trains in return for the billions of dollars of federal grants that were being used to bail them out. The fact that General Motors had once had an active rail design practice, and had even built a ‘‘Train of Tomorrow’’ in 1947 to show the potential of modernizing passenger trains would have made a good point of departure. Next, while Amtrak’s expertise in passenger rail reinvention might appear limited in global perspective, especially following the shortcomings of the Acela project, it offered the most experi- ence that the United States had available. Rather than leaving it to state governments to negotiate with Amtrak and freight rail- roads on an ad hoc basis, with the typical displacement toward ‘‘business as usual’’ goals, the nation’s passenger railroad could have been assigned a greater role in directing and planning high- speed train development, with clear direction to meet the Vision document’s more ambitious goals. And at the strategic level, a fo- cus on developing the human resources to carry forward a serious reinvention of the passenger train could have met short term stim- ulus goals of getting Americans into education and training for jobs with a future, while laying the groundwork for the much higher capacity that would be needed to meet the new policy goals in future. From a theoretical perspective, this episode of a transport revo- lution in the making raises the question of whether there is a min- imum ratio between capacity in powering and capability in puzzling that is necessary to advance policy change. If the ratio is more balanced, and if both power and capacity are relatively high, then the path to paradigmatic change opens up. But if the power to adjust policy goals is much greater than the capacity to implement them, then political conflict appears to escalate, leading to bitter fights over financing and launching new projects. Assessing how much capacity can be created to puzzle through such a radical change in America’s transportation options will require more evi- dence to see where the Obama vision for high-speed rail takes gov- ernment, industry, and American society.

### No solvency: Jurisdictional issues could affect management of HSR

#### Successful implementation will be dependent on resolving means and methods of administration and operation

Lane 2012(Bradley W. MPA Program, The University of Texas at El Paso, “On the utility and challenges of high-speed rail in the United States” Journal of Transport Geography 22 (2012) 282–284 www.elsevier.com/locate/jtrangeo)

But another issue is urban areas, where rights-of-way and land-usage represent a complicated potential political minefield for any mode of high-speed rail. 4. Service provision challenges There is another major issue with regards to who is going to provide the rail service. Will high-speed-rail be operated by pub- licly subsidized public transit agencies, in a similar manner to ur- ban mass transportation? Will it be an extension of Amtrak, or some other kind of national rail agency? Will it be operated by pri- vate entities competing in the marketplace? The US has learned many important lessons when it comes to regulation and deregulation in transportation markets from its experiences in the trucking and airline industry. As part of roll- backs against governmental influence in the market in the 1970s and 1980s, both industries experienced significant deregulation designed to open up markets and lead to reduced costs for con- sumers (see Black, 2003). In general, the entry costs for airlines were underestimated, while the entry barriers for trucking were overestimated. As a result, the airline industry has seen a decline in fare charges, but also contraction in the number of carriers providing service and the number of places receiving service. The commercial trucking experience has been a proliferation of low-cost providers accessible to a wide range of areas and prod- ucts, which has also contributed to subsequent effects on the nat- ure of inventory storage and on roadway congestion. The startup costs for high-speed rail service are going to be very high. Beyond addressing the issues of track and right away previ- ous discussed, it also requires new car procurement and skilled la- bor for operation and maintenance of the rolling stock, which limits the number of potential suitors for providing the service. Some commuter rail services are operated by metropolitan, regio- nal, or state agencies that have experience crossing jurisdictional boundaries, but currently do not provide high-speed rail or manage a large intercity network. Amtrak is currently the only national intercity rail provider, but it likewise lacks the rolling stock needed for high-speed rail and will need dramatic enhancement to operate the service. This is more likely with the backing of federal re- sources, but such public financial support would only add fuel to an already contentious political issue at a time when many law- makers are calling for government contraction. The only compa- nies that have experience operating interstate high-speed rail are foreign agencies; while they might have an interest in expanding their markets, as entities subsidized and run by foreign govern- ments their entry into the US is quite difficult to imagine. An addi- tional option is existing airline operators, who could be encouraged through incentives to convert some of their short-haul service to train operations and are ideally positioned to coordinate train and airline service where transfers between the two modes would be required, such as at airports. But most airlines also currently lack the capital and the interest to operate rail systems. It would require substantial investment in a new, foreign, and uncertain business, and it is difficult to imagine air travel people getting into the train business.

### No solvency: Must involve state and locals in deciding where the trains are going

#### Must determine the best stopping points for trains; must account for the urban population of riders

Lane 2012(Bradley W. MPA Program, The University of Texas at El Paso, “On the utility and challenges of high-speed rail in the United States” Journal of Transport Geography 22 (2012) 282–284 www.elsevier.com/locate/jtrangeo)

5. Challenges of the last mile Another potential stumbling block is transportation’s version of the ‘‘last-mile’’ problem. High-speed rail may have excellent utility potential for providing regional inter-city transport, but major questions exist around the transportation that must occur once people get off that train in the city. A centralized, dense, and highly-accessible location to place a stop for the high-speed train will be necessary so that it can then connect riders of the train to the rest of the city’s transport network. Many metropolitan areas are lacking in the accessibility provided by non-automotive modes, especially outside of downtown areas near existing transit stops or stations. Likewise, the low-density, automobile-oriented develop- ment that has overwhelmingly dominated US cities in the inter- state highway era is ill-suited for the type of access provided by high speed rail. Public transit has struggled in these areas for the same reasons. Train stations themselves may be difficult to build and locate in dense, well-developed downtown areas due to the same right-of-way issues as inter-city track acquisition. Other op- tions include access to rental cars at train stations, but adding vehicular traffic is undesirable. Taxi services may be the first and fastest to benefit from high-speed rail entering urban areas, and the number of service providers may expand. If public transit is to tie into high-speed rail, there will have to be investment and support to coordinate local agency operations with regional or na- tional high-speed rail entities. If high-speed rail is going to compete with or replace short-haul airline flights, it would be much more convenient if it also stopped at airports in major cities. Connections between high-speed rail and long-haul flights would have to be coordinated in a similar manner to the existing hub and spoke airline system. Stopping at airports in addition to central cities may also significantly improve intra-city accessibility from the high-speed rail network. Most air- ports feature access to rental cars and taxis, as well as increasing amounts of connectivity to urban mass transit. A final pair of access questions remains: where and how fre- quently will high-speed trains stop in between major metropolitan areas? Airline deregulation robbed many small and mid-sized cit- ies in the US of air travel access. The arrival of high-speed rail that provides direct connections to airports could improve access to air travel to many of these places. However, the train cannot stop too frequently or it loses its speed benefits. Similar to the original rail- road boom of the 19th century, there will be winners and losers among small and mid-sized American cities with respect to getting access to high-speed rail.

### No solvency: HSR must be faster than other modes of transportation to be successful

#### HSR will only work if it can replace auto and air travel in “short haul” situations

Lane 2012(Bradley W. MPA Program, The University of Texas at El Paso, “On the utility and challenges of high-speed rail in the United States” Journal of Transport Geography 22 (2012) 282–284 [www.elsevier.com/locate/jtrangeo](http://www.elsevier.com/locate/jtrangeo))

6. Concluding thoughts Despite the public criticisms and potentially large cost of developing high-speed rail in the US, there are undoubtedly benefits of such an investment. These are related to congestion relief, environ- mental impact mitigation, increasing competition in the intercity travel market, and better utilizing the time of intercity travelers. These benefits are so significant that most other developed coun- tries in the world as well as burgeoning China have and continue to invest in high-speed rail development. However, more than just initial criticisms of financial viability, there are additional questions that suggest our national debate on high-speed rail has not completely thought the matter through. Major long-term issues with respect to right-of-way acquisition, service provision, and stop access will need to be addressed. Ulti- mately the key to attracting consumers of short-haul air and inter- city car travel is the speed of travel. The train must be faster than the automobile and fast enough to compete with air travel; too slow, and the cost premium for train travel becomes one that con- sumers will not pay.

### No Solvency: HSR Empirically Fails: China proves

#### HSR fails, multiple cases confirm it’s a wasteful investment

The Washington Post 2011 (February 17, 2011 Thursday “A Railroad to Ruin”, SECTION: EDITORIAL COPY; Pg. A16

<http://www.lexisnexis.com/hottopics/lnacademic/>?)

PRESIDENT OBAMA'S fiscal 2012 budget includes $8 billion for high-speed rail next year and $53 billion over six years. In the president's view, the United States needs to spend big on high-speed rail so that we can catch up with Europe, Japan - and you-know-who. "China is building faster trains and newer airports," the president warned in his State of the Union address. But of all the reasons to build high-speed rail in the United States, keeping up with the international Joneses may be one of the worst. In fact, experience abroad has repeatedly raised questions about the cost-effectiveness of high-speed rail. China would seem to be an especially dubious role model, given the problems its high-speed rail system has been going through of late. Beijing just fired its railway minister amid corruption allegations; this is the sort of thing that can happen when a government suddenly starts throwing $100 billion at a gargantuan public works project, as China did with rail in 2008. Sleek as they may be, China's new fast trains are too expensive for ordinary workers to ride, so they are not achieving their ostensible goal of moving passengers from the roads to the rails. Last year, the Chinese Academy of Sciences asked the government to reconsider its high-speed rail plans because of the system's huge debts. Of course, if the Chinese do finish their system, it is likely to require operating subsidies for many years - possibly forever. A recent World Bank report on high-speed rail systems around the world noted that ridership forecasts rarely materialize and warned that "governments contemplating the benefits of a new high-speed railway, whether procured by public or private or combined public-private project structures, should also contemplate the near-certainty of copious and continuing budget support for the debt." That's certainly what happened in Japan, where only a single bullet-train line, between Japan and Osaka, breaks even; it's what happened in France, where only the Paris-Lyon line is in the black. Taiwan tried a privately financed system, but it ended up losing so much money that the government had to bail it out in 2009. When it comes to high-speed rail, Europe, Japan and Taiwan have two natural advantages over every region of the United States, with the possible exception of the Northeast Corridor - high gas taxes and high population density. If high-speed rail turned into a money pit under relatively favorable circumstances, imagine the subsidies it would require here. Every dollar spent to subsidize high-speed rail is a dollar that cannot be spent modernizing highways, expanding the freight rail system or creating private-sector jobs. The Obama administration insists we dare not lag the rest of the world in high-speed rail. Actually, this is a race everyone loses.

### No Solvency-Problems exist with HSR

#### Current plans are flawed; only the California train would be high speed; must have the cooperation of local and state agencies to be successful

Johnson 2012(Brian Edward Auburn University at Montgomery, Department of Sociology, American intercity passenger rail must be truly high-speed and transit-oriented Journal of Transport Geography 22 (2012) 295–296 www.elsevier.com/locate/jtrangeo)

The High-Speed Intercity Passenger Rail (HSIPR) Program succeeds in proposing a truly high-speed rail route in California that will offer travelers significantly faster trips than driving on a route that is too short to conveniently fly instead. Unfortunately, the proposed routes in the Northeast, Midwest, and Northwest will continue to chug along at medium-speeds and attract few new riders from among those who currently travel those areas via highway or air. The plan does indeed succeed in calling for TOD around high-speed rail stations. The HSIPR Program must, however, encourage local planning jurisdictions to broadly liberalize land use controls to allow for compact development rather than writing new zoning codes to require the intensive land uses developers desire anyway. Trains must truly be fast, with stations surrounded by dense development, for America’s high-speed rail plan to realize its full potential. ￼￼￼￼The High-Speed Intercity Passenger Rail (HSIPR) Program (Fed- eral Railroad Administration, 2011b) has brought the poor state of America’s passenger train service into the political and public consciousness, and for that the plan should be commended. Unfortunately, the plan suffers from a lack of ambition in proposing a barely-upgraded system that in many places will continue to feature sluggish trains unable to match the speed and/or convenience of travel by air or highway. ‘‘High-speed rail,’’ according to the US Congress, ‘‘means inter- city passenger rail service that is reasonably expected to reach speeds of at least 110 miles per hour’’ (110th Congress, 2008). This definition focuses on largely irrelevant top speeds, not on average speeds and subsequent total trip times. The HSIPR Program similarly touts improvements in increased top speeds (Federal Railroad Administration, 2011c, 2011d, 2011e), but says little about increasing average speeds. For example, in the Northeast, the HSIPR Pro- gram proposes to upgrade the Acela Express, currently America’s fastest train, to allow ‘‘for segments capable of 160 mph service’’ (Federal Railroad Administration, 2011e). The Acela Express cur- rently reaches a top speed of 150 mph (Federal Railroad Adminis- tration, 2009), but has an average speed of merely 70mph (Amtrak, 2011c, 2011d). Even if the HSIPR Program reported the proposed increase in this train’s average speed, which it does not, increasing the top speed by 10 mph does not seem to be a substan- tial improvement. In the Midwest, the route from Chicago to Detroit is slated to be upgraded (Federal Railroad Administration, 2011d) to raise that train’s average speed from approximately 61mph (Amtrak, 2011e) to a still-sluggish 68 mph (Federal Railroad Administration, 2011d). In the Northwest, the HSIPR Program vaguely proposes ‘‘reduced travel times’’ (Federal Railroad Administration, 2011c), but gives no specifics on how much the 50 mph average speed will be increased on trains traveling between Seattle and Portland (Amtrak, 2011a). In the Northeast, Midwest, and Northwest, improved ‘‘high- speed’’ rail trips will, at best, approximately replicate the speeds at which interstate highway drivers already travel. These trains must be made significantly faster than interstate highway speeds to per- suade more drivers to endure the inconveniences of planning jour- neys around train schedules, organizing travel between starting points and stations, paying for tickets and station parking, slowing down and stopping at intervening stations, dealing with other pas- sengers, and journeying between end stations and actual final destinations. The only route in the HSIPR Program that can be realistically termed ‘‘high-speed’’ rail is the California portion. The proposal calls for a San Francisco to Los Angeles train to feature an average of 140 mph (Federal Railroad Administration, 2011c), a momentous improvement on the current 33 mph average between Oakland and Los Angeles (Amtrak, 2011b). The vital point is that this train will travel at average speeds markedly faster than interstate highway driving. This train will conveniently serve trips too long to drive, but too short to fly. California’s high-speed rail will uniquely com- pliment the existing highway and airport systems, rather than com- pete with them. Truly excellent high-speed rail routes need both California’s planned fast trains and the pedestrian approachability of nearly every existing Acela Express station in the Northeast. Thankfully, the HSIPR Program does call for transit-oriented development (TOD) around stations (Office of Railroad Policy and Development, 2011) by stating that ‘‘through compact development and en- hanced transit, walkways and bikeways, TOD can increase access, or the ease of connection between places at the scale of the station area’’ (Office of Railroad Policy and Development, 2011). The convenience of rail is due, in part, to its compact nature and the pedestrian approachability of train stations (Federal Railroad Administration, 2011a). Through efforts to ‘‘establish, reroute, and add public transit lines directly to the high-speed and intercity passenger rail stations,’’ these stations can be accessible to non- drivers, which ‘‘maximizes the convenience of train travel’’ (Office of Railroad Policy and Development, 2011). In order to encourage pedestrian access to high-speed rail stations, the HSIPR Program rightly advocates eliminating required parking minimums from lo- cal land use controls and removing subsidies for curb and off-street parking (Office of Railroad Policy and Development, 2011). The HSIPR Program needs to go further and call for liberalization of lo- cal land use controls, rather than bloating the zoning codebook with new TOD rules. In doing so, the program will encourage com- pact, pedestrian and train station-oriented development by simply allowing developers to build tall, build mixed use, and build with- out setback minima and footprint maxima (Levine and Inam, 2004; Levine, 2005; Johnson, 2011). Developers merely need freedom to build TOD through liberalization of local land use controls, not planning mandates to do so (Levine, 2005; Johnson, 2011). In sum, the HSIPR Program succeeds in proposing a truly high- speed rail route in California that will offer travelers significantly faster trips than driving on a route that is too short to conveniently fly instead. Unfortunately, the proposed routes in the Northeast, Midwest, and Northwest will continue to chug along at medium- speeds and attract few new riders from among those who currently travel those areas via highway or air. The plan does indeed succeed in calling for TOD around high-speed rail stations. The HSIPR Pro- gram must, however, encourage local planning jurisdictions to broadly liberalize land use controls to allow for compact develop- ment rather than writing new zoning codes to require the intensive land uses developers desire anyway. Trains must truly be fast, with stations surrounded by compact development, for America’s high- speed rail plan to realize its full potential.

### **No Solvency: Must upgrade freight rails as well**

#### Overall rail infrastructure must improve; federal government subsidies are necessary

Ziolkowski 2012 (Michael F. , State University of New York, College at Brockport, The ties that bind: freight and passenger high-speed rail are interdependent

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Passenger trains largely run over freight rail rights-of-way, and, so, investment in the current freight railroads is logical. The railroads have other ideas: Chief Executive Officer Michael Ward of CSX Corp. (CSX) said, ‘‘CSX can’t be part of President Barack Obama’s rail vision because passenger trains don’t make money, and high-speed trains don’t be- long on freight tracks’’ (Caruso, 2011). A parallel passenger infra- structure needs to be developed, often in the same right-of-way. It is essential, however, that freight tracks be upgraded and updated, both to improve freight rail and to expand HSR. If any investments in rail infrastructure are to take place they need to focus on improving the existing right-of-way of freight railroads so that if a viable passenger market develops the infrastructure will be there to host it. The acquisition of right-of- way designated for passenger service may be required as mixing passenger and freight trains may not be feasible or safe. After the infrastructure is built the trains will need to be operated profitably. At a minimum the fixed investments will need to be heavily subsidized.

### No solvency: HSR maintenance costs high

#### HSR needs Billions of taxpayer dollars to maintain

Vartabedian, 2012 (Ralph, CALIFORNIA;Experts target bullet train; Taxpayers will have to provide billions of dollars annually once the system is running, group's report says., April 24, 2012, )

The state rail authority has grossly underestimated future operating costs of California's proposed bullet train, meaning taxpayers potentially will have to provide billions of dollars annually once the system is running, according to an analysis released Monday by a group of outside financial experts. The California High Speed Rail Authority's claim that its future system would generate hundreds of millions of dollars in surpluses is based on unrealistic assumptions about what it will cost to operate the network, according to the study group, which included former World Bank official William Grindley and Stanford University management professor Alain C. Enthoven. The rail authority claims it can operate the 510-mile system at a cost of about 10 cents per passenger mile, less than one-fourth of the 40 cents to 50 cents it costs high speed rail operators in other countries, the analysis found. If California's bullet train operating costs rise to the international average, losses will range from $2 billion to $9 billion annually, according to the report.

### No Solvency: Northeast Corridor should be HSR focus

#### All funding for HSR should be focused on Northeast Corridor

Washington Post, 2010 (Washington Post Article, All aboard high-speed politics; Funding for fast trains should be focused in the Northeast Corridor, not sprinkled across the country, January 31, 2010)

FRESH OFF HIS State of the Union address, President Obama flew to Tampa to announce $1.25 billion in economic recovery funds to go toward a high-speed rail corridor between that city and Orlando. It's part of an $8 billion investment from the economic recovery package announced in April. We're in favor of these kinds of projects. They would get people out of their cars and thus reduce our dependence on fossil fuels. But a better investment would have been to use all of that money to make the Northeast Corridor -- the nation's most traveled rail line -- a model for high-speed rail. Thirty high-speed rail projects received stimulus funding, spanning 31 states in every region of the country. Many of them have been on state transportation drawing boards for years. They include high-speed rail between San Diego, Los Angeles and San Francisco ($2.34 billion), Chicago, St. Louis and Kansas City ($1.13 billion) and Minneapolis, Milwaukee and Chicago ($823 million). Meanwhile, the Northeast Corridor, from Boston to Washington, D.C., will be targeted for $112 million in recovery money to help fund improvements along the route.These federal dollars are meant to be seed money to spur local and private investment. They also have the benefit of putting people to work. But these projects are massive, take years to build and cost tens of billions of dollars. That's why sprinkling limited funds across the country strikes us as an inefficient exercise, one that is ripe for pork-barrel politics.Take, for instance, the pet project of Senate Majority Leader Harry M. Reid (D-Nev.), a rail connection between Las Vegas and Los Angeles. While it did not get any recovery funds, we won't be surprised if it snags some of the additional $5 billion over the next five years that Mr. Obama announced last year to help jump-start high-speed rail plans.Amtrak's Acela, which runs between Boston, New York and Washington, is the only high-speed train in the United States. While it can reach a top speed of 135 mph on the Washington-to-New York run, the average speed on that route is 83 mph -- not nearly fast enough.A serious plan to get high-speed rail service up and running would have used the Acela as a test case by making improvements to the existing infrastructure. Japan, France and Italy all boast trains that can reach speeds of more than 200 mph. The United States won't be joining the club anytime soon.

### \*\*Case Arguments\*\*

### Negative Case: Current high speed rail projects not working well

#### Lack of planning and transparency has doomed current HSR projects

MICA 2011 (Hon. John L., Representative from Florida, THE FEDERAL RAILROAD ADMINISTRATION’S HIGH-SPEED AND INTERCITY PASSENGER RAIL PROGRAM: MISTAKES AND LESSONS LEARNED (112–65) HEARING BEFORE THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION DECEMBER 6, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation

As some of you may know, I have been a long, strong, committed advocate to high-speed passenger rail service in the United States. I was delighted to work in the past to put provisions in PRIIA, which was signed into law by President Bush. That was the first rail operations and Amtrak reauthorization in, I believe, 11 years. And I took great pride in working on trying to set up a blueprint and some guidelines for beginning the process of instituting high- speed rail in the United States. I was also pleased when President Obama made high-speed rail one of his top priorities. And, in fact, I think it was his commit- ment and direction in which we had some $8 billion firmly an- chored to high-speed rail. All that being said, I am here today—and actually tried to give some of these projects as much time and leeway as possible to move forward and see what develops—but I am here today in this hearing to say that I am very disappointed in some of the things that have happened. I have to give some credit where credit is due, but as far as high-speed rail we have hit an impasse. I am very concerned about the progress of actually achieving a successful high-speed rail program. And the failure to date, particularly on high-speed rail, actually sets us, I think, further behind. There are many critics to various forms of public transportation. And unfortunately, it gives them more ammunition to undermine what should be positive alternative means of transportation, which is efficient, which helps with our energy problems, which has a whole host of benefits. Unfortunately, some of the high-speed rail funds—and we have not only the $8 billion that was in the Recovery Act and committed some 21⁄2, almost 3 years ago now in January, we had $2.5 billion in regular appropriations, bringing the total for high-speed rail in the country and improvements to $10.5 billion. Of that, some $400 million has been rescinded and gone back to deficit reduction. Unfortunately, three States have returned money for projects that did not get off the ground, or fell off the track, so to speak: Ohio, Wisconsin, and my State of Florida. Actually, it is quite startling that more than a third of the funds have been returned, which is another setback for the program. More recently, our one hope of actually achieving high-speed rail—and I have given that project as much leeway as I possibly can in trying to see what would develop—but again, the one poten- tial where we had to achieve high-speed rail on an average of at least 110 miles per hour—that is not reaching 110 miles an hour, that is not reaching 150 miles an hour at some point in the jour- ney. I am talking about the average speed, which is the measure by which, internationally, high-speed rail is evaluated. But our one hope, California, appears to be in disarray. In fact, we are devoting an entire hearing to that next week, to see where that one project is going. We have problems with, first of all, the route that was chosen. I went out with Mr. Denham and actually looked at some of it—Fresno to Bakersfield, mostly populated by agricultural community and interests. We will hear from those folks next week. But again, the site that was abandoned, southern California or the Bay Area, where you have significant populations to be served and at the present time have incredible congestion, both of those corridors—again, it is an initial operating segment that was cho- sen. The more disturbing news is within the last month now the pro- jections on the cost may double the original $40-some billion and reach over $90 billion. Furthermore, it appears that there will be a 13-year delay. We are now looking at, what, 2033, which would mean either subsidization of a ‘‘dog operation’’ and give us more heartburn, as far as anyone ever seeing a viable high-speed rail op- eration in the United States. And finally, I was informed last week that even if they built this segment—again, trains to—at the short operating segment, not serve any fixed large population—that the equipment that would be available at that point would only be contemporary slow train vehicles, which could not achieve high speed. So, I am very concerned about the progress of California. We will hear more about that next week. So we have $3.8 billion, the big- gest amount going of the $8 billion and a total of $10 billion, going to California. There is $10.1 billion, as I said, left over after the return of $400 million. Then the next issue that I have with the whole process of select- ing these corridors is—well, of course it is not something I raised, but also GAO in March 2010 said that the process that FRA had followed in selecting these lacked transparency and some of the manner in which these were chosen did not really make a whole lot of sense. We have three what I call pseudo-high-speed rail projects, and maybe you will hear of those touted as a success, most of them cen- tered in Chicago, two of the three, Chicago to St. Louis. That is going to run an average of 71 miles an hour. Now that is not incre- mental high speed, that is not high speed. And it doesn’t hold much hope for the future. Chicago to Detroit, that route goes at 64 miles an hour on average, a snail-speed train followed by a Portland to Vancouver so-called and named high-speed rail project, which is 65 miles an hour. These are, again, a bait and switch for high-speed rail, and will continue to give high-speed rail a bad name in the United States because they will not operate at high speeds, and act as merely a mirage of high-speed rail. Finally, Amtrak and some of the projects—and they are—hosted by them, spread around the country—will get another $3.6 billion. Of that there is $900 million that was redirected to the Northeast Corridor. But if you take that $3.6 billion and amortize it over 3 years, you have a current subsidy of $49 a passenger on Amtrak, and you attribute the cost of that $3.6 billion and amortize it over 3 years, you are looking at a subsidization during these 3 years of $99, just a $1 under $100 per ticket for every Amtrak passenger, based on 30 million, which is their current ridership. So that is dis- turbing. So, I have to say, sort of in conclusion, we need a success. I be- lieve that the most logical place to put high-speed rail—have said it before, I am from Florida—is in the Northeast Corridor. You are from—members of the panel—are from around the country. But we can all benefit by a success of high-speed rail in the Northeast Cor- ridor. Unfortunately, there too we have seen delays. It has taken now 3 years to finally issue an RFP to do an environmental study. That environmental study RFP went out in August. To date—and this is December—there is no award for doing the environmental study in the Northeast Corridor. So we still lag behind in moving forward with that project in the Northeast Corridor. We will all benefit by the Northeast Corridor, one, because it is the most densely populated area—20 percent of the U.S. population resides in that corridor. We own the corridor. It is the only corridor that we own. Between the Federal Government and the States, they own almost the entire distance between Washington, DC, and Boston. We, of course, operate Amtrak’s other service over freight rails, 22,000 miles of them. We also will benefit as a Nation, because 70 percent of our chronically delayed flights are in this area, whether it is summer or winter causing the meltdown of air transportation. And most of it will emanate from the northeast region, so we can all benefit by, again, having one success in our most densely popu- lated area on a corridor that we already own. Half of Amtrak’s pas- sengers of the 30 million are in that corridor. So, again, it just makes sense. Finally, let me say I had offered an alternative and suggested separating out the Northeast Corridor into a separate entity. I did meet a slight bit of resistance on that. And I announced recently that I was willing to look at having Amtrak and—if there wasn’t an Amtrak, we would have an Amtrak; I have supported a nation- wide service system. But I am willing to work with Secretary LaHood, Mr. Boardman and others to come up with a plan. And we don’t have to create a separate entity and transfer the assets out. But what we do need is to attract private sector capital and move this project, which Amtrak now has projected would take 30 years, and would cost $117 billion. Now, Congress cut off funds to high-speed rail in the coming fis- cal year. And Congress certainly is not going to give Amtrak $117 billion, based on its current record, lack of plan or progress in the Northeast Corridor. So we have got to work together and we have got to find a solution to have a success and put high-speed rail and transportation projects where they make sense, and move forward on these important projects. So, I’m willing to work with the administration, with other Mem- bers of Congress, and in an effort to, again, end the failure that we have seen, and hopefully have a pattern for success for high-speed rail in the future. So, that is my opening, rather lengthy comment. I will defer to Mr. Sires.

### Neg Case: HSR expensive: California proves

#### Cost estimates for alternatives are exaggerated; ridership estimates are inflated

Vartabedian & Weikel 2012 (Ralph & Dan New doubts about bullet train;

Experts say promoters inflated estimates of the cost of providing alternatives if the rail system isn't built. Los Angeles Times, January 17, 2012 lexis)

As the price tag for California's bullet train has soared to nearly $100 billion, a central argument for forging ahead with the controversial project is an even loftier figure: the $171 billion that promoters recently estimated will be needed for new roads and airports if no high-speed rail is built. Without a fast-rail network, they warn, the state would have to add 2,300 miles of highway and roughly the equivalent of another Los Angeles International Airport to handle a projected surge in future travel. Now, that alternative is coming under attack by a state-appointed panel of experts, who will soon release an assessment of the rail project's business plan and cast doubt on the accuracy and validity of the $171-billion figure, The Times has learned. Already, transportation researchers, government officials and watchdog groups are saying the $171-billion claim is based on such exaggerated estimates, misleading statements and erroneous assumptions that it is "divorced from any reality." "There is some dishonesty in the methodology," said Samer Madanat, director of UC Berkeley's Institute of Transportation Studies, the top research center of its type in the nation. "I don't trust an estimate like this." Until November, California High-Speed Rail Authority officials were asserting that the alternative cost of highway and airport construction would be $100 billion. Earlier predictions were billions lower. When the estimate for the bullet train project recently hit $98.5 billion, the authority ratcheted the highway and airport cost up to $171 billion. The price of alternatives is a central part of the authority's rationale for building the high-speed rail network, along with jobs and possible environmental benefits. The bullet train is aimed at meeting future transportation needs of the state, which cannot be economically met with highways and airports, the authority says. "If anything, we underestimated the costs of alternatives to high-speed rail," said Dan Richard, an authority board member who is in line to become the group's chairman. "Expanding freeways and then maintaining them is not a free alternative." Outside transportation experts say, however, that rail consultant Parsons Brinkerhoff's methodology is so flawed the entire claim should be disregarded. "The rail authority's analysis does not account for the roadway and airport work investment that will be required both with and without high speed rail," the Orange County Transportation Authority told the rail agency in a letter late last year. In November, the nonpartisan Legislative Analyst's Office questioned the study as well, saying the $171-billion estimate is not what the state would otherwise spend to address intercity transportation demand. The city of Burlingame, which is near San Francisco International Airport, weighed in too. "The astounding figure is completely divorced from any reality over the next 50 years," city officials wrote urging the authority to stop using the number. Madanat said the rail authority has rebuffed offers to have UC Berkeley, UC Irvine and UC Davis, which have among the top five university transportation departments in the nation, help analyze the bullet-train system. Instead, the rail authority has relied heavily on New York-based Parsons Brinkerhoff, a contractor that helped fund the political campaign for the $9.9-billion bond measure passed by voters in 2008. Although the rail authority has more than two dozen employees, Parsons controls 108 people working on the project. "You have a tremendous conflict of interest," said Elizabeth Goldstein Alexis, co-founder of the watchdog group Californians Advocating Responsible Rail Design. "You can't see where the authority ends and the private consultants begin because they are so intertwined. It is extraordinary the institutional conflicts of interest that exist all over this project." But Richard defended Parsons' role, saying, "They performed the analysis, which was an honest and realistic estimate of the project's costs -- not a policy justification of the project." He added that the alternative analysis represents a standard way that transportation projects are evaluated. Nonetheless, Parsons does not answer the question of how much high-speed rail would reduce future investments in roads, public transit and airports, which other experts say is a more relevant guide to its value. Caltrans predicts that traffic on Interstate 5 and California 99 in the Central Valley will double over the next 25 years. But agency officials say they have not scaled back plans to make highway improvements in the state's agricultural heartland because of the high-speed rail project. Not until the rail system is built and actually reduces traffic on both roads would Caltrans adjust its investment strategy, officials said. In October, Parsons submitted the analysis that came up with the $171 billion, a number that initially appeared in the authority's draft business plan released Nov. 1. In the study, Parsons first estimated how much passenger capacity the system would have at completion in 2033 and then calculated the cost for providing the same airport and highway capacity. Parsons said the high-speed rail system could carry 116 million passengers a year, based on running trains with 1,000 seats both north and south every five minutes, 19 hours a day and 365 days a year. The study assumes the trains would be 70% full on average. But nobody, including the rail authority, expects the bullet train would actually carry that many people in the foreseeable future. It estimates the system will actually carry between 30 million and 44 million passengers per year by 2040. If those ridership numbers were used to calculate alternative highway and airport requirements, as suggested by Madanat and others, it could actually be cheaper than the bullet train. Parsons Brinkerhoff defended the use of capacity rather than projected ridership, saying that high-speed rail systems are investments with a 50- to 100-year life and therefore they have useful lives that go well beyond any ridership forecast. The ridership assumption is just one example of the controversy with the estimate. The analysis disregards current unused capacity and scheduled investments that will absorb some future growth. Airports, such as Ontario, LAX, Sacramento, San Francisco and San Jose, have room for tens of millions of new passengers, and three former Air Force bases in the L.A. area could become prime candidates for future commercial airline operations. Much of the state's rural interstate system is not congested either. "All you get are selling points from the authority," said Burlingame Mayor Jerry Deal, who supports the idea of high-speed rail but questions the current project. "I want information that is as close to reality as possible, but we don't seem to get that." –

### Neg case: Northeast Corridor best place for HSR

#### HSR not working in some areas; best area to test would be in the Northeast

Shuster 2011 (Hon. Bill., Representative from Pennsylvania, THE FEDERAL RAILROAD ADMINISTRATION’S HIGH-SPEED AND INTERCITY PASSENGER RAIL PROGRAM: MISTAKES AND LESSONS LEARNED (112–65) HEARING BEFORE THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION DECEMBER 6, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation

. With respect to the President’s vision of high-speed rail in this country, I just don’t believe it is going to happen because we don’t have the money. Number two, I don’t really think we have the need to have 80 percent of the American population have access to high- speed rail. I do believe there are corridors in this country that need high-speed rail; we should be focused on them. We should be abso- lutely focused. And we are not, in this present form that we are taking. We are spreading money all over the country. It is no surprise that Ohio and Wisconsin have turned down these large sums of money, because they realize they are going to be strapped with operating costs that are going to drive them further into debt. I really believe if we focus on the one true high-speed rail cor- ridor that we have today that desperately needs it, it is the North- east Corridor. We own the tracks, so we don’t have to go round and round with our friends in the freight rails on it. We own the tracks, we can do separations where we need it. And as my friend from New Jersey mentioned, there is a bridge up there, and it is a huge bottleneck. We should focus the money there. Regarding the tunnel in Baltimore, I know some of the money is coming back to make those improvements. But if we are really serious about getting high-speed rail, we need to find one place to do it in the country to do it right, spend the money to do it right, learn from it, and then take it to these other corridors that will emerge in the future. The California corridor, the money being spent there, the more I see of it—and you see the numbers; they have gone from $40 bil- lion to $100 billion to maybe 20 years to who knows—and, Mr. Sec- retary, you have been in Congress, you have been in Government long enough to know that if they are saying $100 billion or $90 bil- lion, you know it is going to be more than that. And I have been to southern California. And they are telling me that between $1 billion and $1.5 billion you could truly have significant impact on intercity rail transportation between San Diego and Los Angeles. That is where we ought to start in California. The northern city of San Francisco and that corridor and the southern California. So, again, I urge you to go back and sit down with the President and Mr. Szabo and really reevaluate what we are doing here, be- cause I just don’t believe that we are going to be able to have high- speed rail across this country because we can’t afford it and be- cause the American people really aren’t clamoring for that. They are clamoring, though, to have better intercity rail at higher speeds. The Keystone Corridor is a great example. It is not high speed, but the ridership has gone up 40 percent over the last 4 or 5 years, and it continues to grow, Harrisburg to Philadelphia. And that is not high-speed rail, but it is higher speed, more frequency. Those are the things that I think will benefit the traveling public and America, if we focus on those areas. So, again, appreciate you being here today, look forward to your testimony, and I yield back.

### **Neg case: Current efforts at HSR unsuccessful**

#### Adminstration efforts lack transparency and focus; must focus on one corridor, such as the Northeast to be successful

Orski 2011 (Ken, Editor & Publisher, Innovation NewsBriefs, THE FEDERAL RAILROAD ADMINISTRATION’S HIGH-SPEED AND INTERCITY PASSENGER RAIL PROGRAM: MISTAKES AND LESSONS LEARNED (112–65) HEARING BEFORE THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION DECEMBER 6, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation

Mr. ORSKI. Thank you, Mr. Chairman, for the opportunity to testify before you. As requested, I shall only briefly summarize the key points of my testimony. The committee, I believe, has my full statement. Mr. Chairman, let me state at the outset that I do not question the merits of or the need for the intercity passenger rail service, nor do I question the desirability of high-speed rail, a technology that I believe we should pursue in this country. What I do question is the manner in which the administration has gone about imple- menting its $10 billion initiative. The administration’s first misstep, in my judgment, has been to misleadingly represent its program as ‘‘high-speed rail,’’ thus con- juring up an image of bullet trains cruising at 200 miles per hour, just as they do in western Europe and the Far East. In reality, the administration’s rail program will do no such thing. A close exam- ination of the grant announcements shows that, with one excep- tion, the program consists of a collection of planning, engineering, and construction grants that seek incremental improvements in ex- isting facilities of Class I freight railroads in selected corridors used by Amtrak trains. Now, those improvements may result in some cases in top speeds of 110 miles per hour. But the average speeds will increase only modestly. Average speed is a more accurate measure of perform- ance and service quality than top speed, for it determines trip du- ration, which is, after all, what really counts, from a traveler’s per- spective. Had the administration candidly represent the HSR program for what it is—and that is an effort to introduce useful but modest en-hancements in existing intercity Amtrak services—it would have earned some plaudits for its good intentions to improve train travel. But by pretending to have launched a ‘‘high-speed renaissance,’’ when all evidence points to only small incremental improvements in speed and trip duration, the administration, I believe, has suf- fered a serious loss of credibility. Its pledge to bring high-speed rail to 80 percent of Americans is not taken seriously any more. The administration’s second mistake, in my opinion, has been to fail to pursue its objective in a focused manner. Instead of identi- fying a corridor that would offer the best chance of successfully de- ploying the technology of high-speed rail, and concentrating re- sources on that project, the administration has scattered $9 billion on 145 projects in 32 States. Indeed, the program bears more re- semblance to an attempt at revenue sharing than to a focused ef- fort to pioneer a new transportation technology. Ironically, the Northeast Corridor has received scant attention. And yet, as other witnesses and members of the committee have pointed out on repeated occasions, this is where high-speed rail has the best chance of succeeding. It is probably the only rail corridor in the Nation that has all the attributes necessary for viable high- speed rail service, and it is also the only corridor where passenger trains do not have to share track, and thus are not slowed by freight traffic. Now, to its credit, the administration belatedly recognized the potential of the Northeast Corridor, and made some useful grants. Now, these grants are a small beginning in what will hopefully be- come a restructured high-speed rail program refocused on the northeast program—corridor. Finally, a comment about the role of the private sector. As Chair- man Mica and you, Mr. Chairman, have observed more than once, there is a clear need for substantial financial participation by the private sector, in view of the constraints of the Federal and State budgets. The density of travel in the Northeast Corridor and its continued growth should, in principle, generate sufficient stream of revenue to attract private capital. However, this is still an untested hypothesis. We simply do not have enough experience with public-private partnerships in the passenger rail sector to confidently predict the response of the pri- vate investment community, its assessment of the risk, rewards, and expected rate of return on investment in such an enterprise. Thus, I believe that an early step, Mr. Chairman, in the process should focus on thoroughly exploring the potential of private fi- nancing and ascertaining the private investors’ interest in this ven- ture, both domestically and internationally. And this, I might add, should include an examination of the lessons learned from the Channel Tunnel project, the largest rail infrastructure project to- tally financed by the private sector. Thank you, Mr. Chairman.

### **Neg case/Solvency: Must focus on the Northeast Corridor**

#### Remedy for mistakes made would be to focus on Northeast Corridor; best place and market for HSR expansion

Geddes 2011 (Richard, adjunct scholar at the American Enterprise Institute, THE FEDERAL RAILROAD ADMINISTRATION’S HIGH-SPEED AND INTERCITY PASSENGER RAIL PROGRAM: MISTAKES AND LESSONS LEARNED (112–65) HEARING BEFORE THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES ONE HUNDRED TWELFTH CONGRESS FIRST SESSION DECEMBER 6, 2011 http://www.gpo.gov/fdsys/browse/ committee.action?chamber=house&committee=transportation

Let me state from the outset that I am a firm supporter of high- speed passenger rail in the United States, and those corridors and on those routes where it makes economic sense. Such corridors are likely to have the population densities, the proven ridership or the indications thereof, and the public transportation options at sta- tions necessary to yield positive social benefits to additional invest- ment. The hearing today focuses on concerns about recent attempts to expand high-speed rail through the High-Speed and Intercity Pas- senger Rail Program. I believe that two errors were made. The first, which has been highlighted, is the issue of trying to spread taxpayer funds out over too many projects across the country, rather than focusing resources on improving existing corridors with demonstrated demand. The second was in not creating the institu-tional structure and public policies necessary to attract and retain private investment. I wish to discuss each of these in turn. The social returns on investing in high-speed rail are likely to vary widely across different possible routes. In particular, the mar- ket population must be sufficiently dense to support high-speed rail. And for several reasons, the Northeast Corridor is likely to yield the highest social returns to additional investment. First, population densities in areas served by the Northeast Cor- ridor are very high, with over 50 million people living in the cor- ridor, even though it represents only 2 percent of the Nation’s landmass. Second, one of the main concerns in constructing any new high- speed rail line is forecasting ridership. This issue has not been dis- cussed today, and I think it is critical. How is ridership going to be forecast? The record of ridership forecasting for new passenger rail lines around the world is very poor. The estimates typically are overestimated, while the costs of construction are typically under- estimated. This has been documented in detail by a professor at Oxford University, Bent Flyvbjerg. Ridership in the Northeast Cor- ridor is known. So only changes in ridership induced by new invest- ment need to be estimated. A major hurdle is thus already over- come. Third, much of the necessary right of way is already in hand. Al- though additional right of way may be needed to accommodate im- proved high-speed rail service, this greatly reduces uncertainty re- garding the cost of installation. Uncertainty surrounding both the costs and the benefits of additional investment in the Northeast Corridor are low, relative to new lines. Fourth, cities along the Northeast Corridor, such as Washington, New York, and Boston, feature well-developed local transit systems that facilitate passengers’ use of intercity passenger rail systems. These considerations all suggest that scarce public dollars should be directed first to making much-needed improvements to high- speed passenger rail in that corridor. That is likely to—where the marginal returns are the highest.

### **Neg case: California project underestimate costs**

#### Running costs are underestimated

Vartabedian, 4/26 (Ralph LATimes, “CALIFORNIA; Experts target bullet train; Taxpayers will have to provide billions of dollars annually once the system is running, group's report says”. 2012 LEXIS NEXUS)

The state rail authority has grossly underestimated future operating costs of California's proposed bullet train, meaning taxpayers potentially will have to provide billions of dollars annually once the system is running, according to an analysis released Monday by a group of outside financial experts. The California High Speed Rail Authority's claim that its future system would generate hundreds of millions of dollars in surpluses is based on unrealistic assumptions about what it will cost to operate the network, according to the study group, which included former World Bank official William Grindley and Stanford University management professor Alain C. Enthoven. The rail authority claims it can operate the 510-mile system at a cost of about 10 cents per passenger mile, less than one-fourth of the 40 cents to 50 cents it costs high speed rail operators in other countries, the analysis found. If California's bullet train operating costs rise to the international average, losses will range from $2 billion to $9 billion annually, according to the report. "We are confounded by where the authority is getting its operating costs," Grindley said. The group, which also includes Silicon Valley executives William Warren and Alan Bushell, has written a series of financial assessments of the bullet train plan that sharply question its economics. The four experts are affiliated with the Community Coalition on High Speed Rail, located in the Bay Area. The rail authority disagreed with the findings in a statement. "We have met with the authors of the report in an attempt to correct their flawed assumptions and conclusions," said rail board member Mike Rossi. The rail authority's plan uses conservative assumptions that demonstrates the system can produce an operating profit, which would revert back to the state or pay for additional rail investments, Rossi said. "Most if not all of the foreign high-speed train operators are currently operating without subsidies and some have even repaid portions of their original capital investments," he added. The authors of the study studied both European and Asian high-speed systems. They found that costs range from a low of 34 cents per passenger mile in Italy to 50 cents in Germany and Japan, based on public reports published by those operating systems. Grindley said it appears the rail authority's consultant, Parsons Brinckerhoff, estimated the cost of operating the California system by assembling as many as 300 different cost inputs, though the rail authority has declined to identify all of those inputs. In most cases, California's costs would be even higher than those in Europe, including for labor and electricity, Grindley said. Under a bond measure approved by voters in 2008, the California system is supposed to operate without a subsidy. The authority has repeatedly assured state lawmakers and the public that the system will operate at a profit from the day it begins partial operations. The $68-billion tab for building the system is not included in the operating costs.

### **Neg Case: HSR fails: China empirically proves**

#### China rails going into debt

Moore 2/21 (Malcolm, telegraph.co.uk. “China's high-speed rail project runs out of steam;

China's high-speed rail project, the jewel of the country's transport policy and one of the most impressive feats of engineering in the world, has run out of money and will be scaled back dramatically this year.”)

Out of 23 current railway projects, some 70 per cent have been suspended, partly suspended, or delayed, according to the Chinese state media. Meanwhile, an unnamed source told Dow Jones, the news agency, that only nine new railways would be commissioned this year, compared to 70 last year. Having run up enormous debts, the Chinese Railways ministry is struggling to persuade banks to continue to finance its ambitions. Ticket sales, meanwhile, have been slow on some lines as travellers baulk at the price. "The ministry cannot bear so much debt. It has already taken 240 billion yuan (e24 billion) $30.2 billion of loans and if it takes much more how can it pay the interest?" said Wang Mengshu, a member of the Chinese Academy of Engineering and senior consultant on the high-speed rail project. "It can make profits of about 70 billion yuan on freight, but it is making no money on passenger travel. The government should cancel some of the debt, or invest some money itself rather than asking the banks to finance it," he added. "A lot of projects are half-finished and while nine new lines have been approved this year, no one has started building them." By the end of this year, China's high-speed network is likely to stretch to over 6,000 miles, transporting hundreds of millions of passengers in spacious long-nosed bullet trains. The 819-mile journey from Beijing to Shanghai, more than twice the distance from London to Edinburgh, now takes under five hours. At the height of the high-speed boom, trains were being fitted with toilets that cost 1.2 million yuan (£120,000) a piece, and taps imported from Japan that cost 7,000 yuan, according to an investigation by Century Weekly magazine. However, China's high-speed rail ambitions, which include tendering for the London to Birmingham high-speed link, took a blow last July when two trains collided, killing 40 and injuring almost 200 . A few months before the crash, China's Railway minister, Liu Zhijun was removed from his post and now faces corruption charges. Zhang Shuguang, the deputy chief engineer, who is also under investigation, reportedly paid £540,000 for a house in Los Angeles while on a monthly salary of a few hundred pounds. Questions were raised about how much of the £190 billion high-speed rail budget had been siphoned off, and whether it would have an impact on the safety of the network. In the wake of the crash, the Ministry found it increasingly expensive to borrow money, and no longer had access to the huge stimulus loans that were handed out in the wake of the financial crisis to keep the Chinese economy going. "The Ministry's debts are now worth 60 per cent of its assets, and some analysts think they may rise to 70 per cent this year," reported the China Business Times.

### Neg case: HSR flawed: Countries with HSR geographically different

#### Countries with HSR geographically different than the US

Puentes, 2010 (Robert, Senior Fellow, Metropolitan Policy Program, Obama Moves High-Speed Rail Forward, January 28, 2010, <http://www.brookings.edu/up-front/posts/2010/01/28-halls-sotu>)

But constructing high-speed rail corridors is not a simple proposition when considering a country as exceptionally expansive as the United States, especially in a severely constrained fiscal environment. Contrary to many European countries with less land area and a dominant metropolitan capital, the United States has multiple metropolitan centers throughout the country, and many are well over 500 miles from one another. This creates tensions when selecting corridors and developing criteria to prioritize investments.

### Neg. Case: Alternatives to HSR more Expensive

#### Costs of alternatives to HSR are exaggerated

Vartabedian, Weikel, 2012 (Ralph, Dan, Writers for the Los Angeles Times, New doubts about bullet train; Experts say promoters inflated estimates of the cost of providing alternatives if the rail system isn't built.,January 17, 2012)

Without a fast-rail network, they warn, the state would have to add 2,300 miles of highway and roughly the equivalent of another Los Angeles International Airport to handle a projected surge in future travel. Now, that alternative is coming under attack by a state-appointed panel of experts, who will soon release an assessment of the rail project's business plan and cast doubt on the accuracy and validity of the $171-billion figure, The Times has learned. Already, transportation researchers, government officials and watchdog groups are saying the $171-billion claim is based on such exaggerated estimates, misleading statements and erroneous assumptions that it is "divorced from any reality.""There is some dishonesty in the methodology," said Samer Madanat, director of UC Berkeley's Institute of Transportation Studies, the top research center of its type in the nation. "I don't trust an estimate like this." Until November, California High-Speed Rail Authority officials were asserting that the alternative cost of highway and airport construction would be $100 billion. Earlier predictions were billions lower. When the estimate for the bullet train project recently hit $98.5 billion, the authority ratcheted the highway and airport cost up to $171 billion. The price of alternatives is a central part of the authority's rationale for building the high-speed rail network, along with jobs and possible environmental benefits. The bullet train is aimed at meeting future transportation needs of the state, which cannot be economically met with highways and airports, the authority says."If anything, we underestimated the costs of alternatives to high-speed rail," said Dan Richard, an authority board member who is in line to become the group's chairman. "Expanding freeways and then maintaining them is not a free alternative." Outside transportation experts say, however, that rail consultant Parsons Brinkerhoff's methodology is so flawed the entire claim should be disregarded.