# High Speed Rail – Affirmative Starter Pack – Hoya-Spartan 2012

## \*\*\* 1AC

### 1AC—The Great Reset Contention

#### Contention One is the Great Reset:

#### First, growth has grinded to a halt—America is shifting to a post-industrial knowledge economy but the government has been slow to adapt.

Florida 10 — Richard Florida, Senior Editor at *The Atlantic*, Director of the Martin Prosperity Institute and Professor of Business and Creativity at the Rotman School of Management at the University of Toronto, previously held professorships at George Mason University and Carnegie Mellon University and taught as a visiting professor at Harvard and MIT, holds a Ph.D. from Columbia University, 2010 (“The Roadmap to a High-Speed Recovery,” *The New Republic*, August 12th, Available Online at http://www.tnr.com/print/article/economy/76961/richard-florida-reset-recovery-economy-future, Accessed 06-10-2012)

But now we find ourselves having the wrong debate—about whether a stimulus is needed or not—and we need to shift it. The fiscal and monetary fixes that have helped mature industrial economies like the United States get back on their feet since the Great Depression are not going to make the difference this time. Mortgage interest tax credits and massive highway investments are artifacts of our outmoded industrial age; in fact, our whole housing-auto complex is superannuated. As University of Chicago economist Raghuram Rajan wrote recently in the Financial Times: “The bottom line in the current jobless recovery suggests the US has to take deep structural reforms to improve its supply side. The quality of its financial sector, its physical infrastructure, as well as its human capital, all need serious economic and politically difficult upgrades.” Now we’re getting to the nub of the matter.

Why? Because this is no bump in the business cycle that we are going through; it is an epochal event, comparable in magnitude and scope to the Great Depression of the 1930s, and even more so, as historian Scott Reynolds Nelson has observed, to the decades-long crisis that began in 1873. Back then our economy was undergoing a fundamental shift from agriculture to industry. We are in the midst of an equally tectonic transition today, as our industrial economy gives way to a post-industrial knowledge economy—but by focusing all our attention of whether we need a bigger stimulus or a smaller deficit, we’re flying blind.

These kind of epochal changes, which I have called “great resets,” are long, generational processes. They are driven by improvements in efficiency and productivity, and by the waves of innovation that Joseph Schumpeter called “creative destruction.” When economies slow down, inefficient companies go by the boards. Seeking better returns on investment, businesses redirect capital towards innovation. When the economist Alfred Kleinknecht diagrammed U.S. patents along a timeline extending through the nineteenth century, he found a huge spike in the 1870s, 1880s, and 1890s, a period of depression that also saw the invention of electric power, modern telephony, and street and cable car systems. The economic historian Alexander Field observed a similar clustering and unleashing of innovation in the 1930s, which he dubbed the most “technologically progressive decade” of the twentieth century. More R&D labs opened in the first four years of the Great Depression than in the entire preceding decade, 73 compared to 66. By 1940, the number of people employed in R&D had quadrupled, increasing from fewer than 7,000 in 1929 to nearly 28,000 by 1940, according to the detailed historical research of David Mowery and Nathan Rosenberg.

Our transition from a Fordist mass production economy, based on the assembly line, to a knowledge economy, in which the driving force is creativity and technological innovation, has been under way for some time; the evidence can be seen in the physical decline of the old manufacturing cities and the boom in high-tech centers like Silicon Valley, government boomtowns like Washington DC, and college towns from Boulder to Ann Arbor. Between 1980 and 2006, the U.S. economy added some 20 million new jobs in its creative, professional, and knowledge sectors. Even today, unemployment in this sector of the economy has remained relatively low, and according to Bureau of Labor Statistics projections, is likely to add another seven million jobs in the next decade. By contrast, the manufacturing sector added only one million jobs from 1980 to 2006, and, according to the BLS, will lose 1.2 million by 2020.

This is the future towards which our post-industrial economy is already trending—and government should be proposing policies that will help to create a new geography and a new way of life to sustain and support it. But that doesn’t mean we need a centralized public bureaucracy to speed the process of change. As it happens, innovation occurs not only within big companies, major laboratories, and research universities, but also on the margins of business and academia. John Seely Brown, the former director of Xerox’s storied Palo Alto Research Center (PARC), has observed that many, if not most, of today’s high-tech innovations are products of the open-ended, collaborative explorations of hackers. Steve Jobs didn’t invent the PC; he saw its components at work at PARC, realized their potential, and put the pieces together.

#### Second, this poses the greatest threat to U.S. competitiveness—failure to jumpstart America’s knowledge economy ensures permanent decline.

Florida 5 — Richard Florida, Senior Editor at *The Atlantic*, Director of the Martin Prosperity Institute and Professor of Business and Creativity at the Rotman School of Management at the University of Toronto, previously held professorships at George Mason University and Carnegie Mellon University and taught as a visiting professor at Harvard and MIT, holds a Ph.D. from Columbia University, 2005 (“The Greatest Competitive Threat of Our Time,” *The Globalist*, September 8th, Available Online at http://www.theglobalist.com/printStoryId.aspx?StoryId=4719, Accessed 06-10-2012)

The current competitive threat is similar to the world-shattering economic battle between the United States, the United Kingdom and Germany set in motion by the Industrial Revolution — out of which the United States eventually emerged as the world's economic superpower.

But this one is different — very different. And that’s what makes it so perplexing and hard to grapple with. Competition today is not limited to one, two or even several great powers.

Rather, it comes from many places simultaneously, and is harder to hone in on precisely because it is so diffuse.

The most likely scenario is not that one nation will overtake the United States as the dominant power on the global stage, but that the world stage will see the rise of many more significant players.

Who’s next?

In fact, no single country in the world is ready to emerge as the singular great power — not China, India, Japan, Germany, Canada, Australia or any of the Scandinavian nations.

While each of these has certain strengths and advantages, all suffer from weaknesses as well.

Scouting the candidates

Canada and Australia are relatively open societies but lack the strong technology base and market size to dominate the global arena.

The Scandinavian nations are centers of tolerance and self-expression and have solid technology infrastructures, but are simply too small to become true world powers.

India and China have the market size and potential technology and human capital base, but are far from having the kind of openness and tolerance required to attract talent on the world stage.

Listen to logic

Thinking only in terms of the rise and fall of great powers, though, blinds us to a more likely scenario. We shouldn’t assume an impending shift in power from the United States to a single emerging great power. The logic of globalization goes against this.

Corporations are now free to locate where they want, and more importantly, people can move freely to places that offer opportunity, freedom and the ability to build the lives they choose.

The global mosaic

The mobility of people is perhaps the most significant facet of the modem global economy — more important than the rise of new technology or the mobility of capital.

In such an environment, it is much more likely that many places will gain particular advantages and that the shape of the global economy will grow more complicated and multi-polar.

It will likely be a mosaic of competitors, each with unique abilities to attract and mobilize talent.

The key for the United States, then, is to design a strategy that enables it to prosper in this emerging multi-polar world.

Remaining competitive

To do so, it must bolster its great universities and science and technology assets, cultivate new creative industry sectors, prepare its people for the future and, most of all, remain an open society.

But much of what the United States is now doing only serves to undercut its position. For decades, the United States succeeded at attracting and growing talented people because of its creative ecosystem — a densely interwoven fabric of institutions, individuals and economic and social rights.

Branching out

Attracting people does not just happen — it depends on the care and feeding of the organizations and people that make up this ecosystem. Perturb it or damage it in small ways and, like any ecosystem, it can die.

The problem is that we don’t yet fully understand how this ecosystem works. We don’t know which fauna feed off which flora, and what kinds of balances are in place.

The ecosystem was easy enough to understand when we assumed it was premised on the one simple credo — economic self-interest.

Now, though, the increased mobility of talent has shattered our conceptions of national and even personal boundaries.

Face the facts

How to adapt to the realities of this shifting ecosystem? America must start by confronting the hard fact that it is no longer as unilaterally dominant as it once was.

Peter Drucker argues that U.S. leadership in both political parties, on the left as well as the right, must get beyond the myth of the United States as an unassailable superpower.

A crowded playing field

There are many more players occupying many more niches and competing vigorously on the world stage.

When asked if the United States would lose its economic dominance at any point in the foreseeable future, Drucker replied: “The dominance of the United States is already over. What is emerging is a world economy of blocs represented by NAFTA, the EU, ASEAN. There’s no one center in this world economy.”

Rather than a single deathblow, the United States is much more likely to see its dominance eroded by the sting of those thousand cuts.

Global brain drain

The United States will continue to be squeezed between the global talent magnets of Canada, Australia and the Scandinavian countries, which are developing their technological capabilities, becoming even more open and tolerant and competing effectively for creative people.

Also, the large emerging economies of India and China, who rake in a greater share of low-cost production, are now competing more successfully for their own talent.

Bouncing back

Whether the United States suffers a long, slow decline, or rebounds to skillfully navigate this new playing field depends entirely on how willing it is to restore its creativity and openness to full capacity.

Perhaps the most troubling thing is that no one seems aware of the problem and ready and able to carry the ball. The United States today lacks the kind of collective effort that pulled it together during previous times of economic change and transformation.

Business and government working together got our economy back on track during the New Deal period, the incredible World War II mobilization and the effort to set up a vibrant framework for the postwar economy.

Business responded vigorously to the competitive threat posed a few short decades ago by Asian and European manufacturers, forming organizations like the Council of Competitiveness.

Meanwhile, the federal government undertook efforts to support greater research and innovation. Where will that thrust come from today?

Friends and foes

Unfortunately, in recent years the powerful political forces at either end of the spectrum have tended to widen a right-left chasm that grows less and less navigable and a dichotomy between materialistic and moralistic values that grows more and more false.

At the same time that truly important issues don’t even get mentioned in the public sphere, the extremes have actually become the status quo.

Creative diaspora

The end result is that people grow disillusioned with the political process and choose not to participate. The leading force for political change — the creative class — has for all intents and purposes opted out of the political process.

Instead, its members vote with their feet, looking for the city, region or country that offers the most opportunity and best reflects their values.

Here we confront a deep and insidious tension of the creative age. Unlike previous dominant classes, such as the working class, members of the creative class have little direct incentive to become involved in conventional politics.

When they get involved in broader social issues, they are likely to do it in on a local scale or through some alternative way of their own choosing rather than through either of the major political parties.

Face the music

The whole basis of the creative ethos is individual creative pursuit and the shunning of traditional forms. The paradox is that this ethos is not necessarily conducive to the highly political effort needed to bring our new age to the fore.

The end result is a gaping vacuum, and nothing to fill it. We are faced with the biggest competitiveness crisis in 30 or 40 years — and no leading-edge group to take it on.

Thus the central dilemma of our time: Even though the creative economy generates vast innovative, wealth-creating and productive promise, left to its own devices it will neither realize that promise nor solve the myriad social problems confronting us today.

#### Third, this results in great power conflict—economic growth is vital to prevent the collapse of U.S. hegemony.

Khalilzad 11 — Zalmay Khalilzad, Counselor at the Center for Strategic and International Studies, served as the United States ambassador to Afghanistan, Iraq, and the United Nations during the presidency of George W. Bush, served as the director of policy planning at the Defense Department during the Presidency of George H.W. Bush, holds a Ph.D. from the University of Chicago, 2011 (“The Economy and National Security,” *National Review*, February 8th, Available Online at http://www.nationalreview.com/articles/print/259024, Accessed 02-08-2011)

Today, economic and fiscal trends pose the most severe long-term threat to the United States’ position as global leader. While the United States suffers from fiscal imbalances and low economic growth, the economies of rival powers are developing rapidly. The continuation of these two trends could lead to a shift from American primacy toward a multi-polar global system, leading in turn to increased geopolitical rivalry and even war among the great powers.

The current recession is the result of a deep financial crisis, not a mere fluctuation in the business cycle. Recovery is likely to be protracted. The crisis was preceded by the buildup over two decades of enormous amounts of debt throughout the U.S. economy — ultimately totaling almost 350 percent of GDP — and the development of credit-fueled asset bubbles, particularly in the housing sector. When the bubbles burst, huge amounts of wealth were destroyed, and unemployment rose to over 10 percent. The decline of tax revenues and massive countercyclical spending put the U.S. government on an unsustainable fiscal path. Publicly held national debt rose from 38 to over 60 percent of GDP in three years.

Without faster economic growth and actions to reduce deficits, publicly held national debt is projected to reach dangerous proportions. If interest rates were to rise significantly, annual interest payments — which already are larger than the defense budget — would crowd out other spending or require substantial tax increases that would undercut economic growth. Even worse, if unanticipated events trigger what economists call a “sudden stop” in credit markets for U.S. debt, the United States would be unable to roll over its outstanding obligations, precipitating a sovereign-debt crisis that would almost certainly compel a radical retrenchment of the United States internationally.

Such scenarios would reshape the international order. It was the economic devastation of Britain and France during World War II, as well as the rise of other powers, that led both countries to relinquish their empires. In the late 1960s, British leaders concluded that they lacked the economic capacity to maintain a presence “east of Suez.” Soviet economic weakness, which crystallized under Gorbachev, contributed to their decisions to withdraw from Afghanistan, abandon Communist regimes in Eastern Europe, and allow the Soviet Union to fragment. If the U.S. debt problem goes critical, the United States would be compelled to retrench, reducing its military spending and shedding international commitments.

We face this domestic challenge while other major powers are experiencing rapid economic growth. Even though countries such as China, India, and Brazil have profound political, social, demographic, and economic problems, their economies are growing faster than ours, and this could alter the global distribution of power. These trends could in the long term produce a multi-polar world. If U.S. policymakers fail to act and other powers continue to grow, it is not a question of whether but when a new international order will emerge. The closing of the gap between the United States and its rivals could intensify geopolitical competition among major powers, increase incentives for local powers to play major powers against one another, and undercut our will to preclude or respond to international crises because of the higher risk of escalation.

The stakes are high. In modern history, the longest period of peace among the great powers has been the era of U.S. leadership. By contrast, multi-polar systems have been unstable, with their competitive dynamics resulting in frequent crises and major wars among the great powers. Failures of multi-polar international systems produced both world wars.

American retrenchment could have devastating consequences. Without an American security blanket, regional powers could rearm in an attempt to balance against emerging threats. Under this scenario, there would be a heightened possibility of arms races, miscalculation, or other crises spiraling into all-out conflict. Alternatively, in seeking to accommodate the stronger powers, weaker powers may shift their geopolitical posture away from the United States. Either way, hostile states would be emboldened to make aggressive moves in their regions.

As rival powers rise, Asia in particular is likely to emerge as a zone of great-power competition. Beijing’s economic rise has enabled a dramatic military buildup focused on acquisitions of naval, cruise, and ballistic missiles, long-range stealth aircraft, and anti-satellite capabilities. China’s strategic modernization is aimed, ultimately, at denying the United States access to the seas around China. Even as cooperative economic ties in the region have grown, China’s expansive territorial claims — and provocative statements and actions following crises in Korea and incidents at sea — have roiled its relations with South Korea, Japan, India, and Southeast Asian states. Still, the United States is the most significant barrier facing Chinese hegemony and aggression.

Given the risks, the United States must focus on restoring its economic and fiscal condition while checking and managing the rise of potential adversarial regional powers such as China. While we face significant challenges, the U.S. economy still accounts for over 20 percent of the world’s GDP. American institutions — particularly those providing enforceable rule of law — set it apart from all the rising powers. Social cohesion underwrites political stability. U.S. demographic trends are healthier than those of any other developed country. A culture of innovation, excellent institutions of higher education, and a vital sector of small and medium-sized enterprises propel the U.S. economy in ways difficult to quantify. Historically, Americans have responded pragmatically, and sometimes through trial and error, to work our way through the kind of crisis that we face today.

The policy question is how to enhance economic growth and employment while cutting discretionary spending in the near term and curbing the growth of entitlement spending in the out years. Republican members of Congress have outlined a plan. Several think tanks and commissions, including President Obama’s debt commission, have done so as well. Some consensus exists on measures to pare back the recent increases in domestic spending, restrain future growth in defense spending, and reform the tax code (by reducing tax expenditures while lowering individual and corporate rates). These are promising options.

The key remaining question is whether the president and leaders of both parties on Capitol Hill have the will to act and the skill to fashion bipartisan solutions. Whether we take the needed actions is a choice, however difficult it might be. It is clearly within our capacity to put our economy on a better trajectory. In garnering political support for cutbacks, the president and members of Congress should point not only to the domestic consequences of inaction — but also to the geopolitical implications.

As the United States gets its economic and fiscal house in order, it should take steps to prevent a flare-up in Asia. The United States can do so by signaling that its domestic challenges will not impede its intentions to check Chinese expansionism. This can be done in cost-efficient ways.

While China’s economic rise enables its military modernization and international assertiveness, it also frightens rival powers. The Obama administration has wisely moved to strengthen relations with allies and potential partners in the region but more can be done.

Some Chinese policies encourage other parties to join with the United States, and the U.S. should not let these opportunities pass. China’s military assertiveness should enable security cooperation with countries on China’s periphery — particularly Japan, India, and Vietnam — in ways that complicate Beijing’s strategic calculus. China’s mercantilist policies and currency manipulation — which harm developing states both in East Asia and elsewhere — should be used to fashion a coalition in favor of a more balanced trade system. Since Beijing’s over-the-top reaction to the awarding of the Nobel Peace Prize to a Chinese democracy activist alienated European leaders, highlighting human-rights questions would not only draw supporters from nearby countries but also embolden reformers within China.

Since the end of the Cold War, a stable economic and financial condition at home has enabled America to have an expansive role in the world. Today we can no longer take this for granted. Unless we get our economic house in order, there is a risk that domestic stagnation in combination with the rise of rival powers will undermine our ability to deal with growing international problems. Regional hegemons in Asia could seize the moment, leading the world toward a new, dangerous era of multi-polarity.

#### And, maintaining a large power differential is key—innovation is the lynchpin of hegemony.

Tellis 9 — Ashley J. Tellis, Senior Associate at the Carnegie Endowment for International Peace specializing in international security, defense and Asian strategic issues, Research Director of the Strategic Asia program at NBR—the National Bureau of Asian Research, holds a Ph.D. from the University of Chicago, 2009 (“Preserving Hegemony: The Strategic Tasks Facing the United States,” *Global Asia*, Volume 4, Number 1, Available Online at http://globalasia.org/pdf/issue9/Ashley\_J.\_Tellis.pdf, Accessed 09-13-2011, p. 55-56)

Second, and equally importantly, who wins in the ensuing struggle — whether that struggle is short or long, peaceful or violent — is as important as by how much. This is particularly relevant because the past record unerringly confirms that the strongest surviving state in the winning coalition usually turns out to be the new primate after the conclusion of every systemic struggle. Both Great Britain and the United States secured their respective ascendancies in this way. Great Britain rose through the wreckage of the wars with Louis XIV and with Napoleon. The United States did so through the carnage of the hot wars with Hitler and Hirohito, finally achieving true hegemony through the detritus of the Cold War with Stalin and his successors. If the United States is to sustain this hard-earned hegemony over the long term, while countering as necessary a future Chinese challenge should it emerge, Washington will need to amass the largest differential in power relative not only to its rivals but also to its friends and allies. Particularly in [end page 55] an era of globalization, this objective cannot be achieved without a conscious determination to follow sensible policies that sustain economic growth, minimize unproductive expenditures, strengthen the national innovation system, maintain military capabilities second to none and enjoin political behaviors that evoke the approbation of allies and neutral states alike.

The successful pursuit of such policies will enable the United States to cope more effectively with near-term challenges as well, including the war on terrorism and managing threatening regional powers, and will ineluctably require — to return full circle — engaging the central tasks identified earlier as facing the new US administration. These tasks involve the need to satisfactorily define the character of desirable US hegemony, the need for sound policies that will renew the foundations of US strength, and the need to recover the legitimacy of US purposes and actions. What is clearly implied is that the principal burdens facing the next US president transcend Asia writ large. The success of these pursuits, however, will inevitably impact Asia in desirable ways, even as the resolution of several specifically Asian problems would invariably contribute to the conclusive attainment of these larger encompassing goals.

#### Independently, this threatens to make *every global problem* worse—economic growth is vital to generate the resources needed to meet emerging challenges.

Silk 93 — Leonard Silk, Distinguished Professor of Economics at Pace University, Senior Research Fellow at the Ralph Bunche Institute on the United Nations at the Graduate Center of the City University of New York, and former Economics Columnist with the *New York Times*, 1993 (“Dangers of Slow Growth,” *Foreign Affairs*, Available Online to Subscribing Institutions via Lexis-Nexis)

Like the Great Depression, the current economic slump has fanned the firs of nationalist, ethnic and religious hatred around the world. Economic hardship is not the only cause of these social and political pathologies, but it aggravates all of them, and in turn they feed back on economic development. They also undermine efforts to deal with such global problems as environmental pollution, the production and trafficking of drugs, crime, sickness, famine, AIDS and other plagues.

Growth will not solve all those problems by itself. But economic growth – and growth alone – creates the additional resources that make it possible to achieve such fundamental goals as higher living standards, national and collective security, a healthier environment, and more liberal and open economies and societies.

#### And, economic decline increases the risk of war—*strong statistical support*.

Royal 10 — Jedidiah Royal, Director of Cooperative Threat Reduction at the U.S. Department of Defense, M.Phil. Candidate at the University of New South Wales, 2010 (“Economic Integration, Economic Signalling and the Problem of Economic Crises,” *Economics of War and Peace: Economic, Legal and Political Perspectives*, Edited by Ben Goldsmith and Jurgen Brauer, Published by Emerald Group Publishing, ISBN 0857240048, p. 213-215)

Less intuitive is how periods of economic decline may increase the likelihood of external conflict. Political science literature has contributed a moderate degree of attention to the impact of economic decline and the security and defence behaviour of interdependent states. Research in this vein has been considered at systemic, dyadic and national levels. Several notable contributions follow.

First, on the systemic level, Pollins (2008) advances Modelski and Thompson's (1996) work on leadership cycle theory, finding that rhythms in the global economy are associated with the rise and fall of a pre-eminent power and the often bloody transition from one pre-eminent leader to the next. As such, exogenous shocks such as economic crises could usher in a redistribution of relative power (see also Gilpin. 1981) that leads to uncertainty about power balances, increasing the risk of miscalculation (Feaver, 1995). Alternatively, even a relatively certain redistribution of power could lead to a permissive environment for conflict as a rising power may seek to challenge a declining power (Werner. 1999). Separately, Pollins (1996) also shows that global economic cycles combined with parallel leadership cycles impact the likelihood of conflict among major, medium and small powers, although he suggests that the causes and connections between global economic conditions and security conditions remain unknown.

Second, on a dyadic level, Copeland's (1996, 2000) theory of trade expectations suggests that 'future expectation of trade' is a significant variable in understanding economic conditions and security behaviour of states. He argues that interdependent states are likely to gain pacific benefits from trade so long as they have an optimistic view of future trade relations. However, if the expectations of future trade decline, particularly for difficult [end page 213] to replace items such as energy resources, the likelihood for conflict increases, as states will be inclined to use force to gain access to those resources. Crises could potentially be the trigger for decreased trade expectations either on its own or because it triggers protectionist moves by interdependent states.4

Third, others have considered the link between economic decline and external armed conflict at a national level. Blomberg and Hess (2002) find a strong correlation between internal conflict and external conflict, particularly during periods of economic downturn. They write,

The linkages between internal and external conflict and prosperity are strong and mutually reinforcing. Economic conflict tends to spawn internal conflict, which in turn returns the favour. Moreover, the presence of a recession tends to amplify the extent to which international and external conflicts self-reinforce each other. (Blomberg & Hess, 2002. p. 89)

Economic decline has also been linked with an increase in the likelihood of terrorism (Blomberg, Hess, & Weerapana, 2004), which has the capacity to spill across borders and lead to external tensions.

Furthermore, crises generally reduce the popularity of a sitting government. “Diversionary theory" suggests that, when facing unpopularity arising from economic decline, sitting governments have increased incentives to fabricate external military conflicts to create a 'rally around the flag' effect. Wang (1996), DeRouen (1995). and Blomberg, Hess, and Thacker (2006) find supporting evidence showing that economic decline and use of force are at least indirectly correlated. Gelpi (1997), Miller (1999), and Kisangani and Pickering (2009) suggest that the tendency towards diversionary tactics are greater for democratic states than autocratic states, due to the fact that democratic leaders are generally more susceptible to being removed from office due to lack of domestic support. DeRouen (2000) has provided evidence showing that periods of weak economic performance in the United States, and thus weak Presidential popularity, are statistically linked to an increase in the use of force.

In summary, recent economic scholarship positively correlates economic integration with an increase in the frequency of economic crises, whereas political science scholarship links economic decline with external conflict at systemic, dyadic and national levels.5 This implied connection between integration, crises and armed conflict has not featured prominently in the economic-security debate and deserves more attention.

This observation is not contradictory to other perspectives that link economic interdependence with a decrease in the likelihood of external conflict, such as those mentioned in the first paragraph of this chapter. [end page 214] Those studies tend to focus on dyadic interdependence instead of global interdependence and do not specifically consider the occurrence of and conditions created by economic crises. As such, the view presented here should be considered ancillary to those views.

#### And, alternatives to growth kill hundreds of millions and cause global conflict—we can’t “*turn off*” the economy.

Barnhizer 6 — David R. Barnhizer, Emeritus Professor at Cleveland State University’s Cleveland-Marshall College of Law, 2006 (“Waking from Sustainability's "Impossible Dream": The Decisionmaking Realities of Business and Government,” *Georgetown International Environmental Law Review* (18 Geo. Int'l Envtl. L. Rev. 595), Available Online to Subscribing Institutions via Lexis-Nexis)

The scale of social needs, including the need for expanded productive activity, has grown so large that it cannot be shut off at all, and certainly not abruptly. It cannot even be ratcheted down in any significant fashion without producing serious harms to human societies and hundreds of millions of people. Even if it were possible to shift back to systems of local self-sufficiency, the consequences of the transition process would be catastrophic for many people and even deadly to the point of continual conflict, resource wars, increased poverty, and strife. What are needed are concrete, workable, and pragmatic strategies that produce effective and intelligently designed economic activity in specific contexts and, while seeking efficiency and conservation, place economic and social justice high on a list of priorities. n60

The imperative of economic growth applies not only to the needs and expectations of people in economically developed societies but also to people living in nations that are currently economically underdeveloped. Opportunities must be created, jobs must be generated in huge numbers, and economic resources expanded to address the tragedies of poverty and inequality. Unfortunately, natural systems must be exploited to achieve this; we cannot return to Eden. The question is not how to achieve a static state but how to achieve what is needed to advance social justice while avoiding and mitigating the most destructive consequences of our behavior.

#### Fortunately, high-speed rail will generate long-term growth—six internal links are supported by strong empirical evidence.

Todorovich et al. 11 — Petra Todorovich, Director of America 2050—a national urban planning initiative to develop an infrastructure and growth strategy for the United States, Assistant Visiting Professor at the Pratt Institute Graduate Center for Planning and the Environment, Member of the Board of Advisors of the Eno Transportation Foundation, holds an M.A. in City and Regional Planning from the Bloustein School of Planning and Public Policy at Rutgers University, et al., with Daniel Schned, Associate Planner for America 2050, Lecturer at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, holds an M.A. in City and Regional Planning and a Certificate in Geographic Information Systems from Rutgers University, and Robert Lane, Senior Fellow for Urban Design at Regional Plan Association, Founding Principal of Plan & Process LLP, former Loeb Fellow at the Harvard Graduate School of Design, holds an M.A. in Architecture from Columbia University, 2011 (“Chapter 2: Potential Benefits of High-Speed Rail,” *High-Speed Rail: International Lessons for U.S. Policy Makers*, Policy Focus Report of the Lincoln Institute of Land Policy, ISBN 9781558442221, Available Online at https://www.lincolninst.edu/pubs/dl/1948\_1268\_High-Speed%20Rail%20PFR\_Webster.pdf, Accessed 06-08-2012, p. 16-18)

High-speed rail’s ability to promote economic growth is grounded in its capacity to increase access to markets and exert positive effects on the spatial distribution of economic activity (Redding and Sturm 2008). Transportation networks increase market access, and economic development is more likely to occur in places with more and better transportation infrastructure. In theory, by improving access to urban markets, high-speed rail increases employment, wages, and productivity; encourages agglomeration; and boosts regional and local economies. Empirical evidence of high-speed rail’s impact around the world tends to support the following theoretical arguments for high-speed rail’s economic benefits.

Higher wages and productivity: The time savings and increased mobility offered by high-speed rail enables workers in the service sector and in information-exchange industries to move about the megaregion more freely and reduces the costs of face-to-face communication. This enhanced connectivity boosts worker productivity and business competitiveness, [end page 16] leading to higher wages (Greengauge 21 2010).

Deeper labor and employment markets: By connecting more communities to other population and job centers, high-speed rail expands the overall commuter shed of the megaregion. The deepened labor markets give employers access to larger pools of skilled workers, employees access to more employment options, and workers access to more and cheaper housing options outside of expensive city centers (Stolarick, Swain, and Adleraim 2010).

Expanded tourism and visitor spending: Just as airports bring visitors and their spending power into the local economy, high-speed rail stations attract new tourists and business travelers who might not have made the trip otherwise. A study by the U.S. Conference of Mayors (2010) concluded that building high-speed rail would increase visitor spending annually by roughly $225 million in the Orlando region, $360 million in metropolitan Los Angeles, $50 million in the Chicago area, and $100 million in Greater Albany, New York.

Direct job creation: High-speed rail creates thousands of construction-related jobs in design, engineering, planning, and construction, as well as jobs in ongoing maintenance and operations. In Spain, the expansion of the high-speed AVE system from Malaga to Seville is predicted to create 30,000 construction jobs (Euro Weekly 2010). In China, over 100,000 construction workers were involved in building the high-speed rail line that connects Beijing and Shanghai (Bradsher 2010). Sustained investment could foster the development of new manufacturing industries for rail cars and other equipment, and generate large amounts of related employment.

Urban regeneration and station area development: High-speed rail can generate growth in real estate markets and anchor investment in commercial and residential developments around train stations, especially when they are built in coordination with a broader set of public interventions and urban design strategies (see chapter 3). These interventions ensure that high-speed rail is integrated into the urban and regional fabric, which in turn ensures the highest level of ridership and economic activity. For example, the city of Lille, France, experienced greater than average growth and substantial office and hotel development after its high-speed rail station was built at the crossroads of lines linking London, Paris, and Brussels (Nuworsoo and Deakin 2009).

Spatial agglomeration: High-speed rail enhances agglomeration economies by creating greater proximity between business locations through shrinking time distances, especially when the locations are within the rail-friendly 100 to 600 mile range. Agglomeration economies occur when firms benefit from locating close to other complementary firms and make use of the accessibility to varied activities and pools of skilled labor. [end page 17] High-speed rail has also been described as altering the economic geography of megaregions. By effectively bringing economic agents closer together, high-speed rail can create new linkages among firms, suppliers, employees, and consumers that, over time, foster spatial concentration within regions (Ahlfeldt and Feddersen 2010). This interactive process creates net economic gains in addition to the other economic benefits described here.

#### Specifically, HSR is vital to the continued vitality of America’s mega-regions—they’re the backbone of economic growth.

Tierney 12 — Sean Tierney, Assistant Professor of Geography at the University of North Texas, holds a Ph.D. in Geography from the University of Denver, 2012 (“High-speed rail, the knowledge economy and the next growth wave,” *Journal of Transport Geography*, Volume 22, May, Available Online to Subscribing Institutions via ScienceDirect, p. 284-285)

On April 14, 2011, Cambridge, MA based Zipcar, soared on its first day as a publically traded company. Zipcar owns a fleet of cars in nearly 100 cities and charges a monthly fee to its members who reserve and use it only when needed. A critical underlying aspect of Zipcar’s vision is reliant on population density, as people must walk to and from cars that are strategically parked around town. What does Zipcar have to do with high-speed rail? High-speed rail (HSR) will form the corridors of housing, employment and recreation that will transform our regional geographies; a landscape where suburbs and detached single family housing are still the norm, but people and businesses are more densely aligned around stations making car-ownership less necessary.

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 lost economic output. By equipping trains with Wi-Fi, as competitor countries have already done, HSR enhances productivity.

In addition to being congested, cities like Boston, Seattle and Chicago are also expensive. HSR enables these cities to extend the benefits of urbanization economies, by making them available further into the hinterland where housing and commercial space is more affordable. Regional agglomeration benefits will be necessary as rising rents and labor costs choke off access, collaboration and opportunities for would-be entrepreneurs.

#### And, high-speed rail is uniquely key to the growth of mega-regions—shortcomings in status quo transportation infrastructure stunt development.

Dutzik et al. 10 — Tony Dutzik, Senior Policy Analyst with Frontier Group specializing in energy, transportation, and climate policy, holds an M.A. in print journalism from Boston University and a B.S. in public service from Penn State University, et al., with Siena Kaplan, Analyst with Frontier Group, and Phineas Baxandall, Federal Tax and Budget Policy Analyst with U.S. PIRG, holds a Ph.D. in Political Science from the Massachusetts Institute of Technology and a B.A. in Economics from the College of Social Studies at Wesleyan University, 2010 (“Why Intercity Passenger Rail?,” *The Right Track: Building a 21st Century High-Speed Rail System for America*, Published by the U.S. PIRG Education Fund, Available Online at http://americanhsra.org/whitepapers/uspirg.pdf, Accessed 06-10-2012, p. 11-13)

Building a modern passenger rail network will be a boost to America’s economy. Besides the jobs created in upgrading our railways, making connections between our cities quicker and more convenient will better equip the country for the 21st century economy.

The 19th century was characterized by the phenomenal growth of America’s cities. Chicago, a town of less than a thousand people in the 1830s, grew to be the fifth-largest city in the world by 1900.16 Other cities, from New York to St. Louis, experienced similar meteoric rises. The 20th century, on the other hand, was characterized by the growth of suburbia and the development of metropolitan areas, which were knitted together by mass transit and, later, by highways. Today, many American metropolitan areas have far more people living in their suburbs than in the central city.

Some analysts see the 21st century as the era of the “megaregion”—areas of the country in which formerly distinct metropolitan areas are now merging into contiguous zones of integrated economic activity. The Boston-New York-Philadelphia-Baltimore-Washington, D.C.-Richmond corridor along the East Coast is the most well-known of these regions, but experts have identified roughly 10 others (see Figure 2, next page).17 These 11 regions include more than 70 percent of the nation’s population and the vast bulk of its economic activity.18

The development of economically successful regions depends upon the ability to [end page 11] share information and insights quickly and conveniently. The growth of the Internet and other forms of telecommunication has not replaced the vital role of face-to-face interactions in generating new ideas and increasing economic productivity. In-person business and technology meetings are considered essential for building relationships and trust. Consider the benefits gained by students in Cleveland who come to hear a lecture from a university professor in Chicago, or of employees from throughout the Southeast called in for a one-day sales training in Atlanta.

Our current transportation system, unfortunately, does a poor job of connecting residents and workers in the nation’s megaregions. The main highways linking cities within megaregions tend to be congested—think of Interstate 95 in the Northeast or Interstate 5 in the Pacific Northwest or Southern California. Air travel for short trips within a megaregion can be challenging as well. For many short flights, the amount of time that it takes to travel to the airport and go through security can be greater than the amount of time actually spent in flight.

Passenger rail—particularly high-speed rail—has the potential to link cities within megaregions together in a faster and more efficient way. Easier travel within megaregions means that businesses and organizations will effectively be closer together, making it easier to travel between branches, meet with potential employees and clients, and make the other connections that strengthen an economy. It will also make the United States a more attractive location internationally, attracting potential economic boosts such as tourism and international meetings.

Downtown train stations in a high-speed rail network would also help to revitalize downtown areas, including those in declining smaller cities, by bringing [end page 12] thousands of passengers straight to town and city centers, reducing the pressure for new sprawling development in regions where land is often scarce. Similar opportunities for in-fill development exist around airports served by direct high-speed rail links.

Between this economic benefit, and the work required to build and operate the trains, an American high-speed rail system could create millions of jobs. According to an analysis by the Midwest High Speed Rail Association (MHSRA), building the national system will create up to 1.6 million construction jobs. The economic boost from the system could translate into up to 4.5 million additional permanent jobs. Manufacturing the trains will require additional workers—the MHSRA estimates up to 100,000 new jobs.20

Creating this network will require a large investment. But solving our infrastructure problems will be expensive regardless of what types of travel are prioritized. Expanding highways can range from under $10 million to over $70 million per mile of additional lanes, and often is only a temporary fix for congestion.21 Moreover, in some of the most densely developed regions, expanding highways is even more expensive, or virtually impossible. The reconstruction and reconfiguration of the deteriorating elevated highway through downtown Boston—known as the Big Dig—cost nearly $2 billion per mile.22 Expanding airports is also very expensive—a program to reconfigure runways and add one terminal at Chicago’s O’Hare Airport, for example, will cost $6.6 billion.23

There is growing agreement that America must make large investments in its transportation infrastructure if it is to grow and thrive in the 21st century. Unlike the infrastructure development strategies of the last half-century, passenger rail needs to be a central focus of this new wave of investment.

#### And, thriving mega-regions facilitate concentration and clustering—this “*spatial fix*” is crucial to sustainable economic recovery.

Florida 10 — Richard Florida, Senior Editor at *The Atlantic*, Director of the Martin Prosperity Institute and Professor of Business and Creativity at the Rotman School of Management at the University of Toronto, previously held professorships at George Mason University and Carnegie Mellon University and taught as a visiting professor at Harvard and MIT, holds a Ph.D. from Columbia University, 2010 (“The Roadmap to a High-Speed Recovery,” *The New Republic*, August 12th, Available Online at http://www.tnr.com/print/article/economy/76961/richard-florida-reset-recovery-economy-future, Accessed 06-10-2012)

Instead of further encouraging the growth of an auto-housing-suburban complex, the government should promote those forces that are subtly causing the shift away from it. Chief among these are the creation of inter-connected mega-regions, like the Boston-Washington corridor and the Char-lanta region (Atlanta, Charlotte, and Raleigh Durham) and ten or so more across the United States. Concentration and clustering are the underlying motor forces of real economic development. As Jane Jacobs identified and the Nobel Prize-winning economist Robert Lucas later formalized, clustering speeds the transmission of new ideas, increases the underlying productivity of people and firms, and generates the diversity required for new ideas to fertilize and turn into new innovations and new industries.

In fact, the key to understanding America’s historic ability to respond to great economic crises lies in what economic geographers call the “spatial fix”—the creation of new development patterns, new ways of living and working, and new economic landscapes that simultaneously expand space and intensify our use of it. Our rebound after the panic of 1873 and long downturn was forged by the transition from an agricultural nation to an urban-industrial one organized around great cities. Our recovery from the Great Depression saw the rise of massive metropolitan complexes of cities and suburbs, which again intensified and expanded our use of space. Renewed prosperity hinges on the rise of yet another even more massive and more intensive geographic pattern—the mega-region. These new geographic entities are larger than the sum of their parts; they not only produce but consume, spurring further demand.

#### Fortunately, HSR powers this *spatial fix*—it’s the essential infrastructure.

Florida 10 — Richard Florida, Senior Editor at *The Atlantic*, Director of the Martin Prosperity Institute and Professor of Business and Creativity at the Rotman School of Management at the University of Toronto, previously held professorships at George Mason University and Carnegie Mellon University and taught as a visiting professor at Harvard and MIT, holds a Ph.D. from Columbia University, 2010 (“The Roadmap to a High-Speed Recovery,” *The New Republic*, August 12th, Available Online at http://www.tnr.com/print/article/economy/76961/richard-florida-reset-recovery-economy-future, Accessed 06-10-2012)

Infrastructure is key to powering spatial fixes. The railroads and streetcar, cable car, and subway systems speeded the movement of people, goods, and ideas in the late 19th century; the development of a massive auto-dependent highway system powered growth after the Great Depression and World War II. It’s now time to invest in infrastructure that can undergird another round of growth and development. Part of that is surely a better and faster information highway. But the real fix must extend beyond the cyber-economy to our physical development patterns—the landscape of the real economy.

That means high-speed rail, which is the only infrastructure fix that promises to speed the velocity of moving people, goods, and ideas while also expanding and intensifying our development patterns. If the government is truly looking for a shovel-ready infrastructure project to invest in that will create short-term jobs across the country while laying a foundation for lasting prosperity, high-speed rail works perfectly. It is central to the redevelopment of cities and the growth of mega-regions and will do more than anything to wean us from our dependency on cars. High-speed rail may be our best hope for revitalizing the once-great industrial cities of the Great Lakes. By connecting declining places to thriving ones—Milwaukee and Detroit to Chicago, Buffalo to Toronto—it will greatly expand the economic options and opportunities available to their residents. And by providing the connective fibers within and between America’s emerging mega-regions, it will allow them to function as truly integrated economic units.

#### Finally, HSR is key to long-term, productivity-driven growth—the Interstate Highway System proves that investments in transportation infrastructure are vital.

Martin Prosperity Institute 10 — Martin Prosperity Institute—think tank affiliated with the Rotman School of Management at the University of Toronto, 2010 (“High speed, high costs, hidden benefits: a broader perspective on high-speed rail,” February 23rd, Available Online at http://martinprosperity.org/2010/02/23/907/, Accessed 06-10-2012)

Opponents of high-speed rail have a common thread in their reasoning. Trains are fast and enjoyable to ride, they say, but when scrutinized with rigorous cost-benefit analysis their high cost simply cannot be justified. This type of analysis typically considers benefits like reduced travel times, reduced congestion for those who drive and fly, and reduced pollution emissions, weighing them against the considerable construction and operating costs of high-speed systems.

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 (p.22), 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” (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—Air Pollution Contention

#### Contention Two is Air Pollution:

#### First, HSR dramatically cuts emissions that cause air pollution.

Dutzik et al. 10 — Tony Dutzik, Senior Policy Analyst with Frontier Group specializing in energy, transportation, and climate policy, holds an M.A. in print journalism from Boston University and a B.S. in public service from Penn State University, et al., with Siena Kaplan, Analyst with Frontier Group, and Phineas Baxandall, Federal Tax and Budget Policy Analyst with U.S. PIRG, holds a Ph.D. in Political Science from the Massachusetts Institute of Technology and a B.A. in Economics from the College of Social Studies at Wesleyan University, 2010 (“Why Intercity Passenger Rail?,” *The Right Track: Building a 21st Century High-Speed Rail System for America*, Published by the U.S. PIRG Education Fund, Available Online at http://americanhsra.org/whitepapers/uspirg.pdf, Accessed 06-10-2012, p. 15-16)

Passenger rail is a cleaner form of transportation than car or air travel, emitting less global warming pollution and less health-threatening air pollution. Building a high-speed rail network in the United States would attract passengers who otherwise would have taken cars or planes, reducing the country’s global warming emissions and cleaning up our air. Modernizing our tracks would also benefit freight trains, taking large trucks off of highways and adding to the environmental and health benefits of investment in rail.

Passenger rail already emits less global warming pollution than cars or planes, and these savings will increase as the United States develops a high-speed rail network. The Center for Clean Air Policy (CCAP)/ Center for Neighborhood Technology (CNT) study showed that today, passenger rail travel emits 60 percent less carbon dioxide per passenger mile then cars and 66 percent less than planes. The faster diesel trains that would likely be used to upgrade current service would emit slightly more emissions, but would still emit much less than cars and planes and would draw more passengers than current passenger rail.30 (See Figure 3, next page.)

Electric trains show the most potential for global warming emission reductions, even using today’s carbon-intensive electricity grid. The CCAP/CNT study surveyed the technology used on three different popular electric train lines, in France, Germany and Japan, and found that all would produce lower carbon dioxide emissions per passenger mile than a fast diesel train when powered by the U.S. electric grid. One train, used on the German ICE line, would produce about half the emissions of America’s current passenger rail system.31 Electric trains are not only more energy efficient, but they are faster, and could eventually be powered at least partially with emission-free renewable energy.

By attracting travelers who otherwise would have taken cars or planes, building a high-speed rail network would be much more effective at reducing global warming emissions than our current passenger rail system. The CCAP/CNT study estimated that building the high-speed rail corridors [end page 15] planned by the federal government using fast diesel trains, with top speeds of 99 mph, would attract enough passengers to reduce U.S. global warming emissions by 6.1 billion pounds, the equivalent of taking almost 500,000 cars off the road.33

Passenger rail reduces harmful air pollution as well, especially when it is powered by electricity. For example, a passenger on an electric train in Germany produces about 93 percent less air pollution than someone traveling by car, and 91 percent less than someone making the same trip by plane.34 Although the electricity produced in the United States would create more emissions, electric trains would still be much cleaner than diesel trains, cars or planes.

When tracks are upgraded for better passenger rail service, freight traffic needs are considered as well, allowing more freight trains to travel faster and with fewer delays and adding to the environmental benefits. Rail transport is much more fuel efficient than truck transport for freight—various studies estimate that train transport is three to nine times as efficient as truck transport for the same amount of freight.35 The resulting fuel savings add to the emissions reductions from improving passenger rail.

#### Second, air pollution kills 70,000 people in the U.S. every year—the impact is linear.

Roberts 2 — Bernie Fischlowitz-Roberts, Analyst at the Earth Policy Institute, 2002 (“Air Pollution Fatalities Now Exceed Traffic Fatalities by 3 to 1,” Earth Policy Institute, September 17th, Available Online at http://www.earth-policy.org/plan\_b\_updates/2002/update17, Accessed 06-10-2012)

The World Health Organization reports that 3 million people now die each year from the effects of air pollution. This is three times the 1 million who die each year in automobile accidents. A study published in The Lancet in 2000 concluded that air pollution in France, Austria, and Switzerland is responsible for more than 40,000 deaths annually in those three countries. About half of these deaths can be traced to air pollution from vehicle emissions.

In the United States, traffic fatalities total just over 40,000 per year, while air pollution claims 70,000 lives annually. U.S. air pollution deaths are equal to deaths from breast cancer and prostate cancer combined. This scourge of cities in industrial and developing countries alike threatens the health of billions of people.

Governments go to great lengths to reduce traffic accidents by fining those who drive at dangerous speeds, arresting those who drive under the influence of alcohol, and even sometimes revoking drivers' licenses. But they pay much less attention to the deaths people cause by simply driving the cars. While deaths from heart disease and respiratory illness from breathing polluted air may lack the drama of deaths from an automobile crash, with flashing lights and sirens, they are no less real.

Air pollutants include carbon monoxide, ozone, sulfur dioxide, nitrogen oxides, and particulates. These pollutants come primarily from the combustion of fossil fuels, principally coal-fired power plants and gasoline-powered automobiles. Nitrogen oxides can lead to the formation of ground-level ozone. Particulates are emitted from a variety of sources, primarily diesel engines. "Smog"-a hybrid word used to describe the mixture of smoke and fog that blankets some cities-is primarily composed of ozone and particulates.

#### Third, this impact will only get worse—every reduction in air pollution saves thousands of lives.

Plumer 12 — Brad Plumer, Reporter focusing on energy and environmental issues for the *Washington Post*, previously served as Associate Editor at *The New Republic*, 2012 (“What’s going to kill us in 2050? Air pollution — and lots of it,” *WONKblog*—a *Washington Post* blog, March 15th, Available Online at http://www.washingtonpost.com/blogs/ezra-klein/post/whats-going-to-kill-us-in-2050-air-pollution--and-lots-of-it/2012/03/15/gIQAgiDgES\_blog.html, Accessed 06-10-2012)

Air pollution tends to get wildly underrated as a public health concern. Everyone knows malaria is deadly. Or that access to clean water is a problem. And yet, in the next few decades, air pollution will kill far more people than both of those things combined, according to a new report.

On Wednesday, the OECD released its “Environmental Outlook to 2050,” which contained a few spots of cheery news. Humanity is making steady progress against malaria. Worldwide, the number of deaths from the disease are expected to fall by half by 2050. And fewer people will die from unsafe drinking water and poor sanitation in the future. But the number of deaths caused by air pollution — which includes ground-level ozone, particulate matter, and “indoor pollution” — are expected to skyrocket, killing more than 6 million people per year by mid-century. Here’s the chart: [graphic chart omitted] (OECD Environmental Outlook 2050)

The situation is particularly acute in India. In 2010, about 90 people out of every million died prematurely from ground-level ozone, which is formed when emissions from power plants, vehicles and factories react with sunlight. The resulting pollution can “trigger a variety of health problems including chest pain, coughing, throat irritation, and congestion. It can worsen bronchitis, emphysema, and asthma.” And by 2050, according to the OECD, about 130 Indians out of every million are likely to die prematurely from exposure.

Wealthy countries aren’t immune, either, especially as places like the United States and Europe age, given that the elderly are especially sensitive to ozone pollution. While it’s technically feasible to reduce ground-level ozone, these control measures tend to be pricey and controversial — the Obama White House nixed stricter ozone standards last September for this very reason.

Other pollutants, however, could prove much easier to tackle. Take particulate pollution, which the OECD expects will kill 3.6 million people per year by 2050. A lot of lung-damaging particulate matter comes from the burning of fossil fuels. And actions to curb them can prove quite cost-effective. The EPA’s new regulations on mercury, for instance, will reduce U.S. particulate pollution, as coal plants install new scrubbers. That, the agency estimates, will save an estimated 11,000 lives per year by 2016 and deliver between $36 billion to $89 billion per year in health benefits. And all for a cost of $9.6 billion per year.

### 1AC—Plan

#### The plan:

#### The United States federal government should substantially increase its investment in a national network of inter-city high-speed passenger rail including a dedicated allocation of funds and a commitment to match state investments at an 80:20 ratio.

### 1AC—Solvency Contention

#### Contention Three is Solvency:

#### First, the plan ensures effective deployment of HSR—stable, continuous federal funding is vital.

Dutzik et al. 10 — Tony Dutzik, Senior Policy Analyst with Frontier Group specializing in energy, transportation, and climate policy, holds an M.A. in print journalism from Boston University and a B.S. in public service from Penn State University, et al., with Siena Kaplan, Analyst with Frontier Group, and Phineas Baxandall, Federal Tax and Budget Policy Analyst with U.S. PIRG, holds a Ph.D. in Political Science from the Massachusetts Institute of Technology and a B.A. in Economics from the College of Social Studies at Wesleyan University, 2010 (“High-Speed Passenger Rail: Going From Vision to Reality,” *The Right Track: Building a 21st Century High-Speed Rail System for America*, Published by the U.S. PIRG Education Fund, Available Online at http://americanhsra.org/whitepapers/uspirg.pdf, Accessed 06-10-2012, p. 53-55)

Building a passenger rail network worthy of the 21st century will not be easy, quick or cheap. But there are many reasons—from congestion on highways and airports to the need to wean America off of oil and curb global warming pollution—why bold investment is vital.

At a time of economic challenges and budget shortfalls at all levels of government, it is critical not only that America spend what is necessary on high-speed rail, but that it also gets the greatest possible value for the investment. The following principles should guide America’s investment in passenger rail to ensure that the nation gets the rail system we deserve at a price we can afford.

1. Invest Adequate Resources

America’s passenger rail system is in its current sorry shape largely because of the failure to adequately invest in maintaining and upgrading the system over the last half century. During a postwar period in which America built tens of thousands of miles of gleaming new expressways and hundreds of airports, our rail system was allowed to deteriorate such that today, at the beginning of the 21st century, we still rely, in some places, on infrastructure dating from before the Civil War. In some cases, it takes far longer to complete a rail journey today than it did in the 1920s.225

The worst, most costly mistake America [end page 53] can make going into the 21st century is to not invest adequate resources in upgrading and expanding our passenger rail network. Failing to invest will necessitate even greater spending on highways and airports, deepen our costly dependence on foreign oil, and forestall the economic growth that can result from improved connections among people, businesses and institutions.

The first step in determining an adequate level of investment is to recognize that America is digging out of a very deep hole when it comes to our nation’s rail infrastructure. If the federal government had invested the same amount of money over the last half-century in rail as it had in aviation, roughly $400 billion worth of upgrades would have been possible. That amount of money would have been more than enough to build a high-speed rail network worthy of the world’s most economically advanced nation.

To begin to dig out of that hole, the federal government should invest steadily increasing levels of funding in passenger rail. We probably cannot hope to match the $300 billion China will be investing in its high-speed rail system between now and 2020, but we should endeavor to match the level of investment provided by other industrialized nations, as a share of GDP, in their rail networks.

Currently, America’s public investment in inter-city rail is far lower than that of other industrialized countries. Even with the unprecedented investments in passenger rail included in the American Recovery and Reinvestment Act, the U.S. government investment in the national rail system is far below that of many European countries per capita and as a share of GDP. (See Figure 7.) These figures do not include investments made by private U.S. freight railroads, but in any case, to create a truly world-class passenger rail system, [end page 54] the United States will need to invest far more than it has historically.

As important as the lack of funding has been the instability of funding for passenger rail in the United States, which has made it difficult to undertake long-term capital planning and to build the investor confidence necessary to establish vibrant domestic industries to supply rail equipment.

To ensure stable, continuing funding for high-speed rail, the next federal transportation bill should include a dedicated allocation of funds for passenger rail and the federal government should match state investments in rail at no less than the same 80:20 ratio it does for highways. By financing transportation projects equitably, states will be able to make rational transportation decisions based on the needs of their residents, rather than on the chances of securing a lucrative federal match.

#### Second, status quo investment is insufficient—strong federal support is needed.

Todorovich et al. 11 — Petra Todorovich, Director of America 2050—a national urban planning initiative to develop an infrastructure and growth strategy for the United States, Assistant Visiting Professor at the Pratt Institute Graduate Center for Planning and the Environment, Member of the Board of Advisors of the Eno Transportation Foundation, holds an M.A. in City and Regional Planning from the Bloustein School of Planning and Public Policy at Rutgers University, et al., with Daniel Schned, Associate Planner for America 2050, Lecturer at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, holds an M.A. in City and Regional Planning and a Certificate in Geographic Information Systems from Rutgers University, and Robert Lane, Senior Fellow for Urban Design at Regional Plan Association, Founding Principal of Plan & Process LLP, former Loeb Fellow at the Harvard Graduate School of Design, holds an M.A. in Architecture from Columbia University, 2011 (“Chapter 3: U.S. Policy and Programs for High-Speed Rail Investment,” *High-Speed Rail: International Lessons for U.S. Policy Makers*, Policy Focus Report of the Lincoln Institute of Land Policy, ISBN 9781558442221, Available Online at https://www.lincolninst.edu/pubs/dl/1948\_1268\_High-Speed%20Rail%20PFR\_Webster.pdf, Accessed 06-08-2012, p. 22-23)

Each country that has developed high-speed rail has done so with strong national government leadership. Prior to President Barack Obama’s recent embrace of high-speed rail, federal government support had been a missing ingredient in U.S. passenger rail development. However, significant federal investments in high-speed rail in 2009–2010 put the federal High-Speed Intercity Passenger Rail (HSIPR) Program on a solid initial footing. Whether that commitment can be sustained in a difficult fiscal environment will determine whether high-speed rail in the United States can become a reality.

The federal commitment to high-speed rail began in 2008, when Congress passed the Passenger Rail Investment Improvement Act (PRIIA), which authorized funding for Amtrak and state-led efforts to develop high-speed rail corridors between 2009 and 2013. In February 2009, just months after PRIIA was signed into law at the end of 2008, the act became the vehicle for appropriating $8 billion for high-speed rail under the American Recovery and Reinvestment Act (ARRA). An additional $2.5 billion for high-speed rail was appropriated by Congress in the Fiscal Year (FY) 2010 budget (figure 8).

These appropriations, totaling $10.5 billion for high-speed and passenger rail, transformed the preservation-focused program established by PRIIA into a highly visible high-speed rail initiative that later became the centerpiece of the Obama administration’s infrastructure agenda. [end page 22] However, this sudden infusion of funding also revealed PRIIA’s limitations and the challenges of creating an ambitious high-speed and intercity passenger rail program virtually overnight.

The subsequent Congressional appropriation for FY 2011 stripped the program of any funding in 2011 and rescinded $400 million from the FY 2010 budget. This abrupt reversal underscores the program’s vulnerability to shifting political winds as long as it has to rely on annual Congressional appropriations for its funding.

#### Specifically, stable federal funding is key to state and investor confidence.

Todorovich et al. 11 — Petra Todorovich, Director of America 2050—a national urban planning initiative to develop an infrastructure and growth strategy for the United States, Assistant Visiting Professor at the Pratt Institute Graduate Center for Planning and the Environment, Member of the Board of Advisors of the Eno Transportation Foundation, holds an M.A. in City and Regional Planning from the Bloustein School of Planning and Public Policy at Rutgers University, et al., with Daniel Schned, Associate Planner for America 2050, Lecturer at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, holds an M.A. in City and Regional Planning and a Certificate in Geographic Information Systems from Rutgers University, and Robert Lane, Senior Fellow for Urban Design at Regional Plan Association, Founding Principal of Plan & Process LLP, former Loeb Fellow at the Harvard Graduate School of Design, holds an M.A. in Architecture from Columbia University, 2011 (“Chapter 6: Funding and Financing Options for High-Speed Rail,” *High-Speed Rail: International Lessons for U.S. Policy Makers*, Policy Focus Report of the Lincoln Institute of Land Policy, ISBN 9781558442221, Available Online at https://www.lincolninst.edu/pubs/dl/1948\_1268\_High-Speed%20Rail%20PFR\_Webster.pdf, Accessed 06-08-2012, p. 46)

Like other modes of transportation and public goods, high-speed rail generally does not pay for itself through ticket fares and other operating revenues. Reliable federal funding is needed for some portion of the upfront capital costs of constructing rail infrastructure, but operating revenues frequently cover operating and maintenance costs.

Two well-known examples of highly successful high-speed rail lines—the Tokyo–Osaka Shinkansen and Paris–Lyon TGV—generate an operating profit (JR Central 2010; Gow 2008). German high-speed trains also have been profitable on an operating basis, with revenues covering 100 percent of maintenance costs and 30 percent of new track construction (University of Pennsylvania 2011).

Moreover, as long as the HSIPR Program combines funding for both high-speed and conventional rail, federal grants, not loans, will be required to support its initiatives. Since conventional rail services are likely to need continued operating subsidies, it is even more important to secure a federal funding source for capital infrastructure costs. A small but reliable transportation tax for high-speed and conventional passenger rail would demonstrate the federal government’s commitment to a comprehensive rail program, giving states the assurance they need to plan high-speed rail projects and equipment manufacturers the confidence they require to invest in the industry.

## \*\*\* 2AC—The Great Reset

### Economic Decline Bad

#### Economic decline causes war—empirically proven.

Mead 9 — Walter Russell Mead, Senior Fellow for U.S. Foreign Policy at the Council on Foreign Relations, 2009 (“Only Makes You Stronger,” *The New Republic*, February 4th, Available Online at http://www.tnr.com/story\_print.html?id=571cbbb9-2887-4d81-8542-92e83915f5f8, Accessed 01-25-2009)

None of which means that we can just sit back and enjoy the recession. History may suggest that financial crises actually help capitalist great powers maintain their leads—but it has other, less reassuring messages as well. If financial crises have been a normal part of life during the 300-year rise of the liberal capitalist system under the Anglophone powers, so has war. The wars of the League of Augsburg and the Spanish Succession; the Seven Years War; the American Revolution; the Napoleonic Wars; the two World Wars; the cold war: The list of wars is almost as long as the list of financial crises.

Bad economic times can breed wars. Europe was a pretty peaceful place in 1928, but the Depression poisoned German public opinion and helped bring Adolf Hitler to power. If the current crisis turns into a depression, what rough beasts might start slouching toward Moscow, Karachi, Beijing, or New Delhi to be born?

The United States may not, yet, decline, but, if we can't get the world economy back on track, we may still have to fight.

#### Economic decline collapses democracy and causes war—empirically proven.

Tilford 8 — Earl Tilford, military historian and fellow for the Middle East and terrorism with The Center for Vision & Values at Grove City College, served as a military officer and analyst for the Air Force and Army for thirty-two years, served as Director of Research at the U.S. Army’s Strategic Studies Institute, former Professor of History at Grove City College, holds a Ph.D. in History from George Washington University, 2008 (“Critical Mass: Economic Leadership or Dictatorship,” Published by The Center for Vision & Values, October 6th, Available Online at http://www.visionandvalues.org/2008/10/critical-mass-economic-leadership-or-dictatorship/, Accessed 08-23-2011)

Nevertheless, al-Qaeda failed to seriously destabilize the American economic and political systems. The current economic crisis, however, could foster critical mass not only in the American and world economies but also put the world democracies in jeopardy.

Some experts maintain that a U.S. government economic relief package might lead to socialism. I am not an economist, so I will let that issue sit. However, as a historian I know what happened when the European and American economies collapsed in the late 1920s and early 1930s. The role of government expanded exponentially in Europe and the United States. The Soviet system, already well entrenched in socialist totalitarianism, saw Stalin tighten his grip with the doctrine of "socialism in one country," which allowed him to dispense with political opposition real and imagined. German economic collapse contributed to the Nazi rise to power in 1933. The alternatives in the Spanish civil war were between a fascist dictatorship and a communist dictatorship. Dictatorships also proliferated across Eastern Europe.

In the United States, the Franklin Roosevelt administration vastly expanded the role and power of government. In Asia, Japanese militarists gained control of the political process and then fed Japan's burgeoning industrial age economy with imperialist lunges into China and Korea; the first steps toward the greatest conflagration in the history of mankind ... so far ... World War II ultimately resulted. That's what happened the last time the world came to a situation resembling critical mass. Scores upon scores of millions of people died.

Could it happen again? Bourgeois democracy requires a vibrant capitalist system. Without it, the role of the individual shrinks as government expands. At the very least, the dimensions of the U.S. government economic intervention will foster a growth in bureaucracy to administer the multi-faceted programs necessary for implementation. Bureaucracies, once established, inevitably become self-serving and self-perpetuating. Will this lead to "socialism" as some conservative economic prognosticators suggest? Perhaps. But so is the possibility of dictatorship. If the American economy collapses, especially in wartime, there remains that possibility. And if that happens the American democratic era may be over. If the world economies collapse, totalitarianism will almost certainly return to Russia, which already is well along that path in any event. Fragile democracies in South America and Eastern Europe could crumble.

A global economic collapse will also increase the chance of global conflict. As economic systems shut down, so will the distribution systems for resources like petroleum and food. It is certainly within the realm of possibility that nations perceiving themselves in peril will, if they have the military capability, use force, just as Japan and Nazi Germany did in the mid-to-late 1930s. Every nation in the world needs access to food and water. Industrial nations -- the world powers of North America, Europe, and Asia -- need access to energy. When the world economy runs smoothly, reciprocal trade meets these needs. If the world economy collapses, the use of military force becomes a more likely alternative. And given the increasingly rapid rate at which world affairs move; the world could devolve to that point very quickly.

#### Economic decline heightens the risk of global conflict—*multiple scenarios*.

Burrows and Harris 9 —Mathew J. Burrows, counselor in the National Intelligence Council, principal drafter of *Global Trends 2025: A Transformed World*—an unclassified report by the NIC published every four years that projects trends over a 15-year period, has served in the Central Intelligence Agency since 1986, holds a Ph.D. in European History from Cambridge University, and Jennifer Harris, Member of the Long Range Analysis Unit at the National Intelligence Council, holds an M.Phil. in International Relations from Oxford University and a J.D. from Yale University, 2009 (“Revisiting the Future: Geopolitical Effects of the Financial Crisis,” *The Washington Quarterly*, Volume 32, Issue 2, April, Available Online at http://www.twq.com/09april/docs/09apr\_Burrows.pdf, Accessed 08-22-2011, p. 35-37)

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 [end page 35] 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. [end page 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.

### Hegemonic Decline Bad

#### A narrowing power differential increases the risk of global conflict—*structurally incentivizes war*.

Goldstein 7 — Avery Goldstein, David M. Knott Professor of Global Politics and International Relations at the University of Pennsylvania, Associate Director of the Christopher H. Browne Center for International Politics, Senior Fellow at the Foreign Policy Research Institute, holds a Ph.D. from the University of California-Berkeley, 2007 (“Power transitions, institutions, and China's rise in East Asia: Theoretical expectations and evidence,” *Journal of Strategic Studies*, Volume 30, Number 4-5, August-October, Available Online to Subscribing Institutions via Taylor & Francis Online, p. 647-648)

Two closely related, though distinct, theoretical arguments focus explicitly on the consequences for international politics of a shift in power between a dominant state and a rising power. In War and Change in World Politics, Robert Gilpin suggested that peace prevails when a dominant state’s capabilities enable it to ‘govern’ an international order that it has shaped. Over time, however, as economic and technological diffusion proceeds during eras of peace and development, other states are empowered. Moreover, the burdens of international governance drain and distract the reigning hegemon, and challengers eventually emerge who seek to rewrite the rules of governance. As the power advantage of the erstwhile hegemon ebbs, it may become desperate enough to resort to the ultima ratio of international politics, force, to forestall the increasingly urgent demands of a rising challenger. Or as the power of the challenger rises, it may be tempted to press its case with threats to use force. It is the rise and fall of the great powers that creates the circumstances under which major wars, what Gilpin labels ‘hegemonic wars’, break out.13

Gilpin’s argument logically encourages pessimism about the implications of a rising China. It leads to the expectation that international trade, investment, and technology transfer will result in a steady diffusion of American economic power, benefiting the rapidly developing states of the world, including China. As the US simultaneously scurries to put out the many brushfires that threaten its far-flung global interests (i.e., the classic problem of overextension), it will be unable to devote sufficient resources to maintain or restore its former advantage over emerging competitors like China. While the erosion of the once clear American advantage plays itself out, the US will find it ever more difficult to preserve the order in Asia that it created during its era of preponderance. The expectation is an increase in the likelihood for the use of force – either by a Chinese challenger able to field a stronger military in support of its demands for greater influence over international arrangements in Asia, or by a besieged American hegemon desperate to head off further decline. Among the trends that alarm [end page 647] those who would look at Asia through the lens of Gilpin’s theory are China’s expanding share of world trade and wealth (much of it resulting from the gains made possible by the international economic order a dominant US established); its acquisition of technology in key sectors that have both civilian and military applications (e.g., information, communications, and electronics linked with the ‘revolution in military affairs’); and an expanding military burden for the US (as it copes with the challenges of its global war on terrorism and especially its struggle in Iraq) that limits the resources it can devote to preserving its interests in East Asia.14

Although similar to Gilpin’s work insofar as it emphasizes the importance of shifts in the capabilities of a dominant state and a rising challenger, the power-transition theory A. F. K. Organski and Jacek Kugler present in The War Ledger focuses more closely on the allegedly dangerous phenomenon of ‘crossover’– the point at which a dissatisfied challenger is about to overtake the established leading state.15 In such cases, when the power gap narrows, the dominant state becomes increasingly desperate to forestall, and the challenger becomes increasingly determined to realize the transition to a new international order whose contours it will define.

#### Unipolarity creates structural disincentives for war—*theoretical* and *empirical* evidence.

Wohlforth 9 — William C. Wohlforth, Daniel Webster Professor of Government at Dartmouth College, holds an M.Phil. and Ph.D. in Political Science from Yale University, 2009 (“Unipolarity, Status Competition, and Great Power War,” *World Politics*, Volume 61, Number 1, January, Available Online to Subscribing Institutions via Project MUSE, p. 29-31)

The upshot is a near scholarly consensus that unpolarity’s consequences for great power conflict are indeterminate and that a power shift resulting in a return to bipolarity or multipolarity will not raise the specter of great power war. This article questions the consensus on two counts. First, I show that it depends crucially on a dubious assumption about human motivation. Prominent theories of war are based on the assumption that people are mainly motivated by the instrumental pursuit of tangible ends such as physical security and material prosperity. This is why such theories seem irrelevant to interactions among great powers in an international environment that diminishes the utility of war for the pursuit of such ends. Yet we know that people are motivated by a great many noninstrumental motives, not least by concerns regarding their social status. 3 As John Harsanyi noted, “Apart from economic payoffs, social status (social rank) seems to be the most important incentive and motivating force of social behavior.”4 This proposition rests on much firmer scientific ground now than when Harsanyi expressed it a generation ago, as cumulating research shows that humans appear to be hardwired for sensitivity to status and that relative standing is a powerful and independent motivator of behavior.5 [end page 29]

Second, I question the dominant view that status quo evaluations are relatively independent of the distribution of capabilities. If the status of states depends in some measure on their relative capabilities, and if states derive utility from status, then different distributions of capabilities may affect levels of satisfaction, just as different income distributions may affect levels of status competition in domestic settings. 6 Building on research in psychology and sociology, I argue that even capabilities distributions among major powers foster ambiguous status hierarchies, which generate more dissatisfaction and clashes over the status quo. And the more stratified the distribution of capabilities, the less likely such status competition is.

Unipolarity thus generates far fewer incentives than either bipolarity or multipolarity for direct great power positional competition over status. Elites in the other major powers continue to prefer higher status, but in a unipolar system they face comparatively weak incentives to translate that preference into costly action. And the absence of such incentives matters because social status is a positional good—something whose value depends on how much one has in relation to others.7 “If everyone has high status,” Randall Schweller notes, “no one does.”8 While one actor might increase its status, all cannot simultaneously do so. High status is thus inherently scarce, and competitions for status tend to be zero sum.9

I begin by describing the puzzles facing predominant theories that status competition might solve. Building on recent research on social identity and status seeking, I then show that under certain conditions the ways decision makers identify with the states they represent may prompt them to frame issues as positional disputes over status in a social hierarchy. I develop hypotheses that tailor this scholarship to the domain of great power politics, showing how the probability of status competition is likely to be linked to polarity. The rest of the article investigates whether there is sufficient evidence for these hypotheses to warrant further refinement and testing. I pursue this in three ways: by showing that the theory advanced here is consistent with what we know about large-scale patterns of great power conflict through history; by [end page 30] demonstrating that the causal mechanisms it identifies did drive relatively secure major powers to military conflict in the past (and therefore that they might do so again if the world were bipolar or multipolar); and by showing that observable evidence concerning the major powers’ identity politics and grand strategies under unipolarity are consistent with the theory’s expectations.

#### Hegemonic decline causes conflict—history proves.

Friedberg 11 — Aaron L. Friedberg, Professor of Politics and International Affairs at Princeton University, holds a Ph.D. from Harvard University, 2011 (“Hegemony with Chinese Characteristics,” *The National Interest*, June 21st, Available Online at http://nationalinterest.org/print/article/hegemony-chinese-characteristics-5439, Accessed 09-15-2011)

Throughout history, relations between dominant and rising states have been uneasy—and often violent. Established powers tend to regard themselves as the defenders of an international order that they helped to create and from which they continue to benefit; rising powers feel constrained, even cheated, by the status quo and struggle against it to take what they think is rightfully theirs. Indeed, this story line, with its Shakespearean overtones of youth and age, vigor and decline, is among the oldest in recorded history. As far back as the fifth century BC the great Greek historian Thucydides began his study of the Peloponnesian War with the deceptively simple observation that the war’s deepest, truest cause was “the growth of Athenian power and the fear which this caused in Sparta.”

The fact that the U.S.-China relationship is competitive, then, is simply no surprise. But these countries are not just any two great powers: Since the end of the Cold War the United States has been the richest and most powerful nation in the world; China is, by contrast, the state whose capabilities have been growing most rapidly. America is still “number one,” but China is fast gaining ground. The stakes are about as high as they can get, and the potential for conflict particularly fraught.

At least insofar as the dominant powers are concerned, rising states tend to be troublemakers. As a nation’s capabilities grow, its leaders generally define their interests more expansively and seek a greater degree of influence over what is going on around them. This means that those in ascendance typically attempt not only to secure their borders but also to reach out beyond them, taking steps to ensure access to markets, materials and transportation routes; to protect their citizens far from home; to defend their foreign friends and allies; to promulgate their religious or ideological beliefs; and, in general, to have what they consider to be their rightful say in the affairs of their region and of the wider world.

As they begin to assert themselves, ascendant states typically feel impelled to challenge territorial boundaries, international institutions and hierarchies of prestige that were put in place when they were still relatively weak. Like Japan in the late nineteenth century, or Germany at the turn of the twentieth, rising powers want their place in the sun. This, of course, is what brings them into conflict with the established great powers—the so-called status quo states—who are the architects, principal beneficiaries and main defenders of any existing international system.

The resulting clash of interests between the two sides has seldom been resolved peacefully. Recognizing the growing threat to their position, dominant powers (or a coalition of status quo states) have occasionally tried to attack and destroy a competitor before it can grow strong enough to become a threat. Others—hoping to avoid war—have taken the opposite approach: attempting to appease potential challengers, they look for ways to satisfy their demands and ambitions and seek to incorporate them peacefully into the existing international order.

But however sincere, these efforts have almost always ended in failure. Sometimes the reason clearly lies in the demands of the rising state. As was true of Adolf Hitler’s Germany, an aggressor may have ambitions that are so extensive as to be impossible for the status quo powers to satisfy without effectively consigning themselves to servitude or committing national suicide. Even when the demands being made of them are less onerous, the dominant states are often either reluctant to make concessions, thereby fueling the frustrations and resentments of the rising power, or too eager to do so, feeding its ambitions and triggering a spiral of escalating demands. Successful policies of appeasement are conceivable in theory but in practice have proven devilishly difficult to implement. This is why periods of transition, when a new, ascending power begins to overtake the previously dominant state, have so often been marked by war.

#### The pursuit of hegemony is inevitable—the only question is effectiveness.

Tellis 9 — Ashley J. Tellis, Senior Associate at the Carnegie Endowment for International Peace specializing in international security, defense and Asian strategic issues, Research Director of the Strategic Asia program at NBR—the National Bureau of Asian Research, holds a Ph.D. from the University of Chicago, 2009 (“Preserving Hegemony: The Strategic Tasks Facing the United States,” *Global Asia*, Volume 4, Number 1, Available Online at http://globalasia.org/pdf/issue9/Ashley\_J.\_Tellis.pdf, Accessed 09-13-2011, p. 54-55)

This hegemony is by no means fated to end any time soon, however, given that the United States remains predominant by most conventional indicators of national power. The character of the United States’ hegemonic behavior in the future will thus remain an issue of concern both within the domestic polity and internationally. Yet the juvenescence of the United State’s “unipolar moment,” combined with the disorientation produced by the September 11 attacks, ought to restrain any premature generalization that the imperial activism begun by the Clinton administration, and which the Bush administration took to its most spirited apotheosis, would in some way come to define the permanent norm of US behavior in the global system. In all probability, it is much more likely that the limitations on US [end page 54] power witnessed in Afghanistan and Iraq will produce a more phlegmatic and accommodating United States over the longer term, despite the fact that the traditional US pursuit of dominance — understood as the quest to maintain a preponderance of power, neutralize threatening challengers, and protect freedom of action, goals that go back to the foundations of the republic — is unlikely to be extinguished any time soon.

Precisely because the desire for dominance is likely to remain a permanent feature of US geopolitical ambitions — even though how it is exercised will certainly change in comparison to the Bush years — the central task facing the next administration will still pertain fundamentally to the issue of US power. This concern manifests itself through the triune challenges of: redefining the United States’ role in the world, renewing the foundations of US strength, and recovering the legitimacy of US actions. In other words, the next administration faces the central task of clarifying the character of US hegemony, reinvigorating the material foundations of its power, and securing international support for its policies.

### HSR Key To Economic Growth

#### HSR is key to mega-regions—it’s the key investment.

Florida 9 — Richard Florida, Senior Editor at *The Atlantic*, Director of the Martin Prosperity Institute and Professor of Business and Creativity at the Rotman School of Management at the University of Toronto, previously held professorships at George Mason University and Carnegie Mellon University and taught as a visiting professor at Harvard and MIT, holds a Ph.D. from Columbia University, 2009 (“More Megas and High-Speed Rail,” *The Atlantic*, May 6th, Available Online at http://www.theatlantic.com/national/archive/2009/05/more-megas-and-high-speed-rail/17123/, Accessed 06-10-2012)

So, transportation infrastructure plays a big role in economic development by opening up new spaces and by allowing for the redevelopment of old spaces in more intensive ways. There's not many transport technologies that promise to do that today for mega-regions straddling major cities except high-speed rail. High-speed rail is a technology that "fits" the geographic scale of mega-regions and can help spur more intensive development of them.

#### History supports our internal link—HSR is key to geographic expansion.

Florida 9 — Richard Florida, Senior Editor at *The Atlantic*, Director of the Martin Prosperity Institute and Professor of Business and Creativity at the Rotman School of Management at the University of Toronto, previously held professorships at George Mason University and Carnegie Mellon University and taught as a visiting professor at Harvard and MIT, holds a Ph.D. from Columbia University, 2009 (“Mega-Regions and High-Speed Rail,” *The Atlantic*, May 4th, Available Online at http://www.theatlantic.com/national/archive/2009/05/mega-regions-and-high-speed-rail/17006/, Accessed 06-10-2012)

Better high-speed rail connections promise considerable economic efficiency gains. And they also promise to relieve the psychological burdens of commuting by car. Research by behavioral economists like Nobel prize-winner Daniel Kahneman finds that long car commutes are among the things that most adversely affect our happiness.

But there is an even bigger and more fundamental reason to connect our mega-regions through high-speed rail. As I recently argued in The Atlantic, our current economic crisis promises to powerfully reshape America's geography. There will be winners and losers, and a new economic geography will emerge in time.

Geographic expansion, as I noted there, is a fundamental axis of economic recovery and development. Recovery after the Long Depression of the 1870s was in part powered by the rise of the large-scale industrial city that grew up around raw materials, ports, and railroads, expanding outward along its early street-car lines. While many see the rise of Keynesian spending (particularly World War II spending) as key to U.S. recovery from the Great Depression of the 1930s, post-war recovery was propelled by the rise of another era of geographic expansion - the rise of the Sunbelt and the massive growth of auto-oriented suburbia. Demand for cars surged to move workers between home and work. And suburban houses all had to be filled with the refrigerators, washing machines, dryers, television sets, and consumer appliances rolling off America's assembly lines. This post-war auto-oriented "fordist" development model worked to ensure that mass production and mass consumption could grow together fueling the expansion of America's great golden era.

But fordism has come smack up against its limits. It's cheaper to produce many industrial goods off-shore, and the geography of post-war suburbia has been stretched to its breaking point. It may well be impossible for sustained recovery to come from breathing life back into the banks, auto companies, and suburban-oriented development model. A new period of geographic expansion - or what geographers term a "new spatial fix" - will eventually be needed to spur a renewed era of economic growth and development.

The history of capitalist development is the history of the more expansive and intensive use of space. Post-war suburbs, the rise of larger metropolitan areas, the development of multi-nodal regions with edge cities as well as downtown cores are part and parcel of this process of geographic development. It's a mistake to consider suburban sprawl a backward step (as some do), and to see only more compact urban style back-to-the-city development as a path to the future. The rise of the mega-region is the cornerstone of a new, more intensive and also more expansive use of space.

New periods of geographic expansion require new systems of infrastructure. Ever since the days of the canals, the early railroad, and streetcar suburbs, we've seen how infrastructure and transportation systems work to spur new patterns economic and regional development. The streetcar expanded the boundaries of the late 19th and early 20th century city, while the railroad moved goods and people between them. The automobile enabled workers to move to the suburbs and undertake far greater commutes, expanding the geographic landscape still further.

Mega-regions, if they are to function as integrated economic units, require better, more effective, and faster ways move goods, people, and ideas. High-speed rail accomplishes that, and it also provides a framework for future in-fill development along its corridors. Just as development filled-in along the early street-car lines and the post-war highways, high-speed rail will encourage denser, more compact, and concentrated development with growth filling in along its routes over time. Spain's new high-speed rail link between Barcelona and Madrid not only massively reduced commuting times between these two great Spanish cities, according to a recent New York Times report, it has also helped revitalize several declining locations along the line.

It's time to start thinking of our transit and infrastructure projects less in political terms and more as a set of strategic investments that are fundamental to the speed and scope of our economic recovery and to the new, more expansive economic geography required for long-run growth and prosperity.

### Mega-Regions Key To Economic Growth

#### Strong metropolitan economies are the lynchpin of the U.S. economy—this is the most important internal link to a sustainable recovery.

Katz et al. 9 — Bruce Katz, Vice President and Director of the Metropolitan Policy Program at the Brookings Institution, et al., with Mark Muro, Fellow and Policy Director of the Metropolitan Policy Program at the Brookings Institution, and Jennifer Bradley, Senior Research Associate at the Metropolitan Policy Program at the Brookings Institution, 2009 (“Miracle Mets: How U.S. Metros Propel America's Economy and Might Drive Its Recovery,” *Democracy: A Journal of Ideas*, Spring, Available Online at http://www.brookings.edu/articles/2009/0311\_metro\_katz.aspx, Accessed 09-07-2009)

Though our economic development policies don’t reflect it, America doesn’t really possess a national economy, or even a collection of 50 state economies. Instead, America’s long-term prosperity stands or falls on the more local prosperity of its 363 distinct, varied, clustered, and interlinked metropolitan economies, dominated by the 100 largest metros—many of which cross county and state jurisdictions and incorporate multiple city centers, suburbs, exurbs, and downtowns in a way that the old hub-and-spoke model of urban geography never did. In that sense, America is quite literally a “MetroNation,” utterly dependent on the success of its metropolitan hubs.

From the hundreds of square miles that constitute contemporary London to the sprawling Brazilian city-states of Sao Paulo and Rio, metros are the new norm in global economic development, shaped by twenty-first-century forces of globalization, innovation, and cultural diversity. These forces assign enormous value to a relatively small number of factors—infrastructure networks, industrial innovation, human capital, the quality of place—and then reward those nations and places that are best able to marshal and align those assets. And those places are, increasingly, metros—pulsating zones of urban, suburban, and exurban synergies and exchange that revolve around cities. Metros—and not only their constituent individual cities, suburbs, or isolated municipalities—are therefore one of the most critical places where federal policymakers should focus their attention and resources as they seek to restore prosperity to our nation.

Yet here is the problem: While America is more metropolitan than ever, the nation’s policies and structures rarely match economic reality. As a nation, we remain fixed in old arrangements, established decades ago and kept in place by bureaucratic inertia and entrenched political interests. Such a misunderstanding of contemporary urban structures inevitably leads to bad public policy decisions. Take as an example the nation’s crumbling infrastructure, now finally in the public eye. We should be spending money on metropolitan infrastructure, such as new transit lines or the maintenance and upgrade of existing roads and bridges, because it gives the best return on investment, the most bang for the buck. And yet the federal government sends the overwhelming bulk of national infrastructure funds to states, not metros. Given the vagaries of state politics, state departments of transportation in turn tend to scant metro investments in favor of building brand-new roads in far-flung places. Money that could be fueling the metro economic engine ends up widening a rural highway.

We can no longer afford this mismatch. As the nation gathers its energies to emerge from the current rattling recession, President Barack Obama and Congress need to re-imagine the relationships between the federal government, states, and localities to more fully realize the potential of metropolitan America. Washington must lead in areas that transcend the reach of local action and require national vision, direction, and purpose—areas such as the provision of worldclass interstate road and rail links, investments in science and basic research, immigration reform, and the creation of a framework for controlling greenhouse gas emissions. At the same time, Washington needs to get past its focus on states and empower metro areas—often made up of dozens of independent governments— to work closer together and begin asserting themselves as coherent, if widespread, entities. And finally, Washington and all levels of government need to maximize their performance by deploying information, standards-setting, and data to improve decision-making and problem-solving.

America can no longer pretend that it is a single economy, nor can it imagine that it is a nation of independent, small towns, punctuated by large but isolated urban centers. It must embrace its metropolitan future—and all the wrenching change that entails.

#### Metropolitan economies are key to the U.S. economy.

Bradley and Katz 8 — Jennifer Bradley, Senior Research Associate at the Metropolitan Policy Program at the Brookings Institution, and Bruce Katz, Vice President and Director of the Metropolitan Policy Program at the Brookings Institution, 2008 (“A Small-town or Metro Nation?,” *The New Republic*, October 8th, Available Online at http://www.brookings.edu/articles/2008/ 1008\_smalltowns\_katz.aspx, Accessed 09-07-2009)

Thinking of the United States as a nation of small towns fundamentally misunderstands our economy, which is disproportionately driven by metros. Harvard Business School professor Michael Porter, one of the world's foremost gurus on economic competitiveness, has suggested that there is no such thing as the U.S. economy, but rather a network of interlinked metropolitan economies. The top 100 metropolitan areas are home to 68 percent of America's jobs and are the origin of 75 percent of the nation's gross domestic product.

Metros are economic powerhouses precisely because of the way they differ from the idealized small town. Adam Smith noted in The Wealth of Nations that "the division of labor is limited by the extent of the market" and that larger markets (like those currently found in metros) enable workers to specialize and work more efficiently. The easy flow of ideas that drives economic growth also tends to happen in metros. The largest metropolitan areas house 76 percent of "knowledge economy" jobs (such as software developers), 81 percent of R&D employment, and 67 percent of major U.S. research universities. Just six metros accounted for 64 percent of the nation's venture capital funding. It turns out that the genuine interaction of people in the same physical space is not replaceable by the Internet, telecommuting, or video conferencing.

A politician who ignores this economic and demographic reality risks making serious policy mistakes, such as misdirecting the public investments that we need to survive in an era of intense global competition. For example, self-sufficient small towns don't need mass transit and high-speed rail networks, but interconnected metros do. Germany and France have already constructed fast rail connections between their major metropolitan areas, radically altering the movement of people and the facilitation of business. China is building the most sophisticated network of ports and freight hubs in the world. A nation of small towns doesn't recognize the need for these kinds of investments.

People's longing for small towns is an understandable fantasy. Small towns seem like slower, saner havens in an overly connected, frenetic world, places where a blackberry is an ingredient in jam. But metros, not small towns, are where our economy is, where our population is, and where our country's future is.

### Competitiveness Key To Hegemony

#### Technological leadership is the vital internal link to hegemony—*theoretical models* and *500 years of history*.

Drezner 1 — Daniel Drezner, Assistant Professor of Political Science at the University of Chicago, International Economist in the Office of International Banking and Securities at the Department of the Treasury, International Affairs Fellow at the Council on Foreign Relations, holds a Ph.D. in Political Science from Stanford University, 2001 (“State Structure, Technological Leadership and The Maintenance Of Hegemony,” *Review of International Studies*, Volume 27, Issue 1, Available Online to Subscribing Institutions via Cambridge Journals Online, p. 3-5)

The importance of economic growth to state power is undisputed by international relations scholars.1 The importance of technological innovation to economic growth is similarly undisputed by economists.2 Logically, technological leadership is a linchpin of great-power status in the world, a fact recognized by long-cycle theorists.3 However, despite the obvious importance of innovation to power, and despite a large literature on how the state should be organized to maximize the extraction of societal resources, there has been very little written in international political economy on the state’s role in fostering technological leadership. [end page 3]

The relationship between innovation and the nation-state has been discussed in international relations, but the debates that touch on the subject mention it only in passing. In the late seventies, there was a great deal of discussion about state ‘strength’ vis-à-vis society as a way of determining foreign economic policies, including industrial policies.4 One of the implicit arguments in this literature was that strong states would pursue more enlightened economic policies. However, the strong state/weak state typology has been criticized as vague, and this literature has moved away from the study of economic issues, focusing more on security policies.5

In this decade, proponents of globalization argue that because information and capital are mobile, the location of innovation has been rendered unimportant.6 While this notion has some popular appeal, the globalization thesis lacks theoretical or empirical support. Theoretically, even in a world of perfect information and perfect capital mobility, economists have shown that the location of technological innovation matters.7 Empirically, the claims of globalization proponents have been far-fetched. Capital is not perfectly mobile, and increased economic exchange does not lead to a seamless transfer of technology from one country to another.8 The location of innovation still matters.

Long-cycle theorists have paid the most attention to the link between technological innovation, economic growth, and the rise and fall of hegemons.9 They argue that the past five hundred years of the global political economy can be explained by the waxing and waning of hegemonic powers. Countries acquire hegemonic status because they are the first to develop a cluster of technologies in leading sectors. These innovations generate spillover effects to the rest of the lead economy, and then to the global economy. Over time, these ‘technological hegemons’ fail to maintain the rate of innovations, leading to a period of strife until a new hegemon is found. While this literature has done an excellent job at describing the link between [end page 4] innovation, economic growth, and global stability, it cannot explain why technological hegemons lose their lead over time.

#### Competitiveness is key to hegemony—science and technology innovation is vital to sustain leadership.

Segal 4 — Adam Segal, Maurice R. Greenberg Senior Fellow in China Studies at the Council on Foreign Relations, 2004 (“Is America Losing Its Edge?; Innovation in a Globalized World,” *Foreign Affairs*, January-February, Available Online to Subscribing Institutions via Lexis-Nexis)

The United States' global primacy depends in large part on its ability to develop new technologies and industries faster than anyone else. For the last five decades, U.S. scientific innovation and technological entrepreneurship have ensured the country's economic prosperity and military power. It was Americans who invented and commercialized the semiconductor, the personal computer, and the Internet; other countries merely followed the U.S. lead.

Today, however, this technological edge—so long taken for granted—may be slipping, and the most serious challenge is coming from Asia. Through competitive tax policies, increased investment in research and development(R&D), and preferential policies for science and technology (S&T) personnel, Asian governments are improving the quality of their science and ensuring the exploitation of future innovations. The percentage of patents issued to and science journal articles published by scientists in China, Singapore, South Korea, and Taiwan is rising. Indian companies are quickly becoming the second-largest producers of application services in the world, developing, supplying, and managing database and other types of software for clients around the world. South Korea has rapidly eaten away at the U.S. advantage in the manufacture of computer chips and telecommunications software. And even China has made impressive gains in advanced technologies such as lasers, biotechnology, and advanced materials used in semiconductors, aerospace, and many other types of manufacturing.

Although the United States' technical dominance remains solid, the globalization of research and development is exerting considerable pressures on the American system. Indeed, as the United States is learning, globalization cuts both ways: it is both a potent catalyst of U.S. technological innovation and a significant threat to it. The United States will never be able to prevent rivals from developing new technologies; it can remain dominant only by continuing to innovate faster than everyone else. But this won't be easy; to keep its privileged position in the world, the United States must get better at fostering technological entrepreneurship at home.

### A2: Competitiveness Alternate Causalities

#### Infrastructure investment is key to competitiveness.

McAvey 11 — Maureen McAvey, Executive Vice President of the Urban Land Institute, 2011 (“Crumbling infrastructure ranks U.S. behind Barbados,” Quoted in *Scripps Howard News Service*, September 23rd, Available Online at http://www.independentmail.com/news/2011/sep/23/crumbling-infrastructure-ranks-us-behind-barbados/?print=1, Accessed 06-10-2012)

"America's unwillingness to confront its infrastructure challenges is undermining the ability of our urban areas to compete globally," said Maureen McAvey, executive vice president of the Urban Land Institute, a nonprofit organization that focuses on land use.

"If we persist with shortsighted decisions, we will lose talented workers and companies to nations and cities overseas that are committed to infrastructure as a vital component of livability and economic viability," McAvey said. "Infrastructure as a national priority is not political rhetoric. It's a must to keep America's standing as a global leader in innovation."

### A2: No Public Support For Spatial Fix

#### Momentum is strong in the status quo.

Tierney 12 — Sean Tierney, Assistant Professor of Geography at the University of North Texas, holds a Ph.D. in Geography from the University of Denver, 2012 (“High-speed rail, the knowledge economy and the next growth wave,” *Journal of Transport Geography*, Volume 22, May, Available Online to Subscribing Institutions via ScienceDirect, p. 286)

HSR does more than tighten connections between regional cities and insulate us from higher oil prices. A flourishing knowledge economy hinges on more intense social interactions, which means a more intelligent allocation of resources across the landscape. Part of the solution means shifting away from our chaotic urban form, but it does not mean renters and apartment living for a majority. It cannot. With the exception of Detroit, forced urban contraction would be socially unpopular and politically untenable. But Zipcar’s popularity reveals that we may be turning an important cultural corner – willing to forgo some of the long embraced amenities associated with home ownership, like a garage, a yard or vaulted ceilings that devour scarce heating/ cooling resources. In 2009, for the first time in 30years, the average-sized home shrank (Brown, 2010). The development of ‘pocket neighborhoods’ (El Nassar, 2011) or the diffusion of LEED (Cidell, 2009) demonstrate how compact land-use is viable, as people embrace downsized homes, shared open spaces and sustainable transportation options.

### A2: HSR Not “Shovel-Ready”

#### “Shovel-ready” is not important—the plan is key to a thriving knowledge economy.

Tierney 12 — Sean Tierney, Assistant Professor of Geography at the University of North Texas, holds a Ph.D. in Geography from the University of Denver, 2012 (“High-speed rail, the knowledge economy and the next growth wave,” *Journal of Transport Geography*, Volume 22, May, Available Online to Subscribing Institutions via ScienceDirect, p. 286)

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.

## \*\*\* 2AC—Air Pollution Contention

### HSR Decreases Emissions

#### HSR is key to the environment — reduces pollution.

Zaidi 7 — Kamaal R. Zaidi, holds a J.D. from the University of Tulsa and a B.S. from the University of Calgary, 2007 ("High Speed Rail Transit: Developing the Case for Alternative Transportation Schemes in the Context of Innovative and Sustainable Global Transportation Law and Policy," *Temple Journal of Science, Technology & Environmental Law* (26 Temp. J. Sci. Tech. & Envtl. L. 301), Fall, Available Online to Subscribing Institutions via Lexis-Nexis)

In the transportation sector, with every new technology comes the question of how that technology will impact the environment. Given that conventional modes of transportation, which use fossil-fuels, contribute to rising levels of air, noise, and land pollution, alternative forms of energy such as wind energy and solar energy are gaining popularity. This rising popularity of "greener" technologies such as high-speed rail transit includes some form of environmental impact assessment to determine whether or not such technology is applicable. Currently, there are several environmental impacts by railway transport, including air pollution (e.g. idling of stationary vehicles during traffic), noise pollution, and water pollution. n49 Modern efforts to combat noise pollution have focused on noise abatement.

High-speed rail transit has the distinct advantage of being more environmentally friendly in terms of requiring less fuel than conventional forms of travel like air or road travel. n50 For example, while idling cars contribute to higher levels of air pollution during traffic congestion, high-speed rail transit operate mainly on electrification and signaling systems that produce very little emissions. Moreover, traveling vehicles produce excessive noise for surrounding communities, while high-speed trains run on tracks specially manufactured for noise abatement. For these reasons, several nations are actively promoting high-speed transit to protect the environment, including wildlife and rural communities.

Perhaps the most significant environmental benefits associated with high- [\*311] speed rail transit can be summarized as follows:

- Decreased energy consumption;

- Reduced air pollution;

- Using less land to expand highways and airports; and

- Fewer impacts on sensitive habits and water resources such as floodplains, streams, and wetlands n51

#### HSR dramatically reduces greenhouse gas emissions.

Todorovich et al. 11 — Petra Todorovich, Director of America 2050—a national urban planning initiative to develop an infrastructure and growth strategy for the United States, Assistant Visiting Professor at the Pratt Institute Graduate Center for Planning and the Environment, Member of the Board of Advisors of the Eno Transportation Foundation, holds an M.A. in City and Regional Planning from the Bloustein School of Planning and Public Policy at Rutgers University, et al., with Daniel Schned, Associate Planner for America 2050, Lecturer at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, holds an M.A. in City and Regional Planning and a Certificate in Geographic Information Systems from Rutgers University, and Robert Lane, Senior Fellow for Urban Design at Regional Plan Association, Founding Principal of Plan & Process LLP, former Loeb Fellow at the Harvard Graduate School of Design, holds an M.A. in Architecture from Columbia University, 2011 (“Chapter 2: Potential Benefits of High-Speed Rail,” *High-Speed Rail: International Lessons for U.S. Policy Makers*, Policy Focus Report of the Lincoln Institute of Land Policy, ISBN 9781558442221, Available Online at https://www.lincolninst.edu/pubs/dl/1948\_1268\_High-Speed%20Rail%20PFR\_Webster.pdf, Accessed 06-08-2012, p. 19-20)

Energy mix: High-speed rail is the only available mode of long-distance travel that currently is not dependent on motor fuels. High-speed rail is powered by electricity, which is not without environmental problems depending on its source (see table 2). If it is powered by electricity generated from fossil fuels, such as coal or natural gas that discharge harmful greenhouse gas emissions, then its environmental benefits are limited. However, electricity is generally considered an improvement over petroleum- [end page 19] generated power and provides a crucial advantage as the United States aims to reduce its dependence on foreign oil. Amtrak’s Northeast Corridor and parts of the Keystone Corridor (connecting Harrisburg, Pennsylvania to Philadelphia) are electrified. Most other conventional passenger trains in America operate on freight rail lines and are powered by diesel fuel.

Energy planning needs to be a part of the planning for high-speed rail to ensure the reduction of greenhouse gases and other harmful pollutants. Even with the current energy mix that includes fossil fuel sources, however, high-speed rail can yield significant environmental benefits. A recent study by the University of Pennsylvania (2011) found that a new high-speed line in the Northeast Corridor, powered by electricity from the current energy mix, would divert nearly 30 million riders from cars and planes, attract 6 million new riders, and still reduce car emissions of carbon monoxide by more than 3 million tons annually. The system would also result in a reduction of carbon dioxide emissions if the energy mix were shifted to low carbon emitting sources.

### HSR Increases Energy Efficiency

#### HSR massively increases energy efficiency.

Todorovich et al. 11 — Petra Todorovich, Director of America 2050—a national urban planning initiative to develop an infrastructure and growth strategy for the United States, Assistant Visiting Professor at the Pratt Institute Graduate Center for Planning and the Environment, Member of the Board of Advisors of the Eno Transportation Foundation, holds an M.A. in City and Regional Planning from the Bloustein School of Planning and Public Policy at Rutgers University, et al., with Daniel Schned, Associate Planner for America 2050, Lecturer at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, holds an M.A. in City and Regional Planning and a Certificate in Geographic Information Systems from Rutgers University, and Robert Lane, Senior Fellow for Urban Design at Regional Plan Association, Founding Principal of Plan & Process LLP, former Loeb Fellow at the Harvard Graduate School of Design, holds an M.A. in Architecture from Columbia University, 2011 (“Chapter 2: Potential Benefits of High-Speed Rail,” *High-Speed Rail: International Lessons for U.S. Policy Makers*, Policy Focus Report of the Lincoln Institute of Land Policy, ISBN 9781558442221, Available Online at https://www.lincolninst.edu/pubs/dl/1948\_1268\_High-Speed%20Rail%20PFR\_Webster.pdf, Accessed 06-08-2012, p. 19)

High-speed rail has the potential to provide greater environmental benefits and energy efficiencies than other modes of long distance travel. However, several conditions must be met to obtain these benefits.

Energy efficiency and ridership: High-speed rail offers greater operating efficiency on a per passenger mile basis than competing modes, such as single-occupancy automobiles or airplanes that require significant amounts of fuel to get off the ground. For example, Shinkansen trains are estimated to use one-quarter the energy of airplanes and one-sixth that of private automobiles per passenger mile (JR Central 2011a).

To achieve environmental benefits, high-speed trains must maximize load factors to realize the greatest efficiencies. As high-speed rail ridership increases, so does its relative energy efficiency, whereas a high-speed train carrying no passengers ceases to be efficient in any sense.

In regions where the number of total trips is not growing, high-speed rail can bring about a net reduction of energy use through mode shift by capturing passengers from automobile or airplane trips. In regions like California where population and trips are projected to keep growing, high-speed rail can help reduce the energy and climate impacts on a per passenger basis through a combination of mode shift and attracting new passengers to high-speed rail.

### HSR Reduces Traffic/Air Congestion

#### HSR dramatically decreases traffic and air congestion.

Dutzik et al. 10 — Tony Dutzik, Senior Policy Analyst with Frontier Group specializing in energy, transportation, and climate policy, holds an M.A. in print journalism from Boston University and a B.S. in public service from Penn State University, et al., with Siena Kaplan, Analyst with Frontier Group, and Phineas Baxandall, Federal Tax and Budget Policy Analyst with U.S. PIRG, holds a Ph.D. in Political Science from the Massachusetts Institute of Technology and a B.A. in Economics from the College of Social Studies at Wesleyan University, 2010 (“Why Intercity Passenger Rail?,” *The Right Track: Building a 21st Century High-Speed Rail System for America*, Published by the U.S. PIRG Education Fund, Available Online at http://americanhsra.org/whitepapers/uspirg.pdf, Accessed 06-10-2012, p. 9-10)

An effective intercity transportation system carries business travelers, tourists, and others reliably and efficiently from one city to another. America relies almost entirely on airplanes and roads for intercity transportation, including trips that could be better served by rail. The lack of effective passenger rail service in much of the country adds to congestion on our roads and in our airports—leading to frustration, delay and large losses to the economy.

Over the past three decades, the number of miles driven on U.S. roads has almost doubled.6 Over the same period, traffic congestion has skyrocketed. In 2007, congestion cost the country 4.16 billion hours of lost time. Long-distance trips add to this congestion: the U.S. Department of Transportation estimates that Americans take more than 2 billion trips by car of 50 miles or more annually.7

Similarly, the number of miles Americans travel by plane has more than tripled in the past three decades.8 The resulting crowding of airports and airspace has led to more delays and increasingly frustrated passengers. Air travelers wasted more than 2 million hours in airline delays in 2007, with the problem significantly worse at some of the nation’s most frequently used airports.9

Passenger rail can alleviate congestion on highways and in airports—making all aspects of the transportation system more efficient. The Center for Clean Air [end page 9] Policy and the Center for Neighborhood Technology estimate that building out a national high-speed rail network would reduce car travel by 29 million trips and air travel by nearly 500,000 flights—more flights than currently depart each year from Atlanta’s Hartsfield-Jackson Airport, the nation’s busiest.10 The availability of additional options for intercity travel will become even more important in the years ahead as congestion on roadways and in airports increases.

In certain areas of the United States, passenger rail service already plays an important role in easing congestion. When the near-high-speed Acela service was introduced in 2000, passenger rail’s share of the travel between Boston, New York and Washington, D.C., rose dramatically while airlines’ portion fell. In 1999, 18 percent of travelers in the air/rail market between Boston and New York took the train; by 2008, this had risen to 47 percent, with only 53 percent flying.11

### HSR Decreases Oil Dependence

#### HSR decreases oil dependence.

Dutzik et al. 10 — Tony Dutzik, Senior Policy Analyst with Frontier Group specializing in energy, transportation, and climate policy, holds an M.A. in print journalism from Boston University and a B.S. in public service from Penn State University, et al., with Siena Kaplan, Analyst with Frontier Group, and Phineas Baxandall, Federal Tax and Budget Policy Analyst with U.S. PIRG, holds a Ph.D. in Political Science from the Massachusetts Institute of Technology and a B.A. in Economics from the College of Social Studies at Wesleyan University, 2010 (“Why Intercity Passenger Rail?,” *The Right Track: Building a 21st Century High-Speed Rail System for America*, Published by the U.S. PIRG Education Fund, Available Online at http://americanhsra.org/whitepapers/uspirg.pdf, Accessed 06-10-2012, p. 10-11)

Cars and airplanes are almost exclusively powered by oil—increasing America’s dependence on a limited supply of fossil fuel largely controlled by other nations. Spikes in oil prices in recent years have had dramatic effects on Americans’ willingness to drive or fly to their destinations. Expanding and improving passenger rail service can reduce the nation’s dependence on oil and insulate travelers from the impact of fuel price spikes.

America’s existing intercity passenger rail network already contributes to reducing America’s oil dependence, removing an estimated 8 million cars from the road and eliminating the need for 50,000 passenger airplane trips each year.12

Intercity passenger rail—even when powered by diesel fuel—is more fuel-efficient than car or air travel, particularly for trips in the 100 to 500-mile range. On average, an Amtrak passenger uses 23 percent [end page 10] less energy per mile than an airplane passenger, 40 percent less than a car passenger, and 57 percent less than a passenger in an SUV or pickup truck.13

These numbers underestimate rail’s oil savings compared with airplanes. In terms of travel time, rail is most competitive against oil-intensive short airplane flights with trip distances of 500 miles or less—a traveler is much more likely to choose rail over air travel from Chicago to Minneapolis than from Chicago to Miami. Short flights use more fuel per mile than longer flights, since a plane uses much of its fuel in takeoff.

A modernized passenger rail network in the future will also likely use less oil than American passenger rail service does today. As a high-speed rail network is developed in the United States, it will rely more on electricity and less on diesel fuel. Currently, about 40 percent of American intercity passenger rail is powered by electricity, while 80 percent of European rail service is electric.14

As train service becomes faster, more reliable and more frequent it will also likely draw more passengers, further lowering per-passenger fuel usage. The more seats on a train that are filled, the less fuel that is used per passenger. Amtrak trains are typically about 50 percent full, compared with 70 percent for European high-speed trains.15 As rail travel in America improves and draws more passengers, it is likely that trains will be carrying larger loads of travelers, raising the fuel efficiency of a trip on a train.

Finally, the location of passenger rail hubs in downtown areas can encourage and support land-use patterns that reduce the need to drive, further curbing oil use. Placing a passenger rail station in a downtown area provides an inducement for businesses to locate nearby—just as airports spur development of office parks for businesses seeking close proximity to transportation and the construction of hotels and other traveler services. Unlike airports, however, passenger rail hubs would likely be located in existing downtown areas, where workers would be more likely to get to work via transit or other transportation alternatives.

#### That’s crucial to economic growth and competitiveness.

Lefton and Weiss 10 — Rebecca Lefton, Policy Analyst focusing on international climate and energy policy at the Center for American Progress, holds an M.A. in public policy from the Harris School of Public Policy at the University of Chicago, and Daniel J. Weiss, Senior Fellow and Director of Climate Strategy at the Center for American Progress, holds a Master of Public Policy degree from the University of Michigan, 2010 (“Oil Dependence Is a Dangerous Habit,” Center for American Progress, January 13th, Available Online at http://www.americanprogress.org/issues/2010/01/oil\_imports\_security.html, Accessed 06-10-2012)

The United States has an opportunity right now to reduce its dependence on foreign oil by adopting clean-energy and global warming pollution reduction policies that would spur economic recovery and long-term sustainable growth. With a struggling economy and record unemployment, we need that money invested here to enhance our economic competitiveness. Instead of sending money abroad for oil, investing in clean-energy technology innovation would boost growth and create jobs.

Reducing oil imports through clean-energy reform would reduce money sent overseas for oil, keep more money at home for investments, and cut global warming pollution. A Center for American Progress analysis shows that the clean-energy provisions in the American Recovery and Reinvestment Act and ACES combined would generate approximately $150 billion per year in new clean-energy investments over the next decade. This government-induced spending will come primarily from the private sector, and the investments would create jobs and help reduce oil dependence.

And by creating the conditions for a strong economic recovery, such as creating more finance for energy retrofits and energy-saving projects and establishing loans for manufacturing low-carbon products, we can give the United States the advantage in the clean-energy race. Investing in a clean-energy economy is the clear path toward re-establishing our economic stability and strengthening our national security.

## \*\*\* 2AC—Solvency

### FYI

#### FYI: Definition of High Speed Rail

Todorovich et al. 11 — Petra Todorovich, Director of America 2050—a national urban planning initiative to develop an infrastructure and growth strategy for the United States, Assistant Visiting Professor at the Pratt Institute Graduate Center for Planning and the Environment, Member of the Board of Advisors of the Eno Transportation Foundation, holds an M.A. in City and Regional Planning from the Bloustein School of Planning and Public Policy at Rutgers University, et al., with Daniel Schned, Associate Planner for America 2050, Lecturer at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, holds an M.A. in City and Regional Planning and a Certificate in Geographic Information Systems from Rutgers University, and Robert Lane, Senior Fellow for Urban Design at Regional Plan Association, Founding Principal of Plan & Process LLP, former Loeb Fellow at the Harvard Graduate School of Design, holds an M.A. in Architecture from Columbia University, 2011 (“Chapter 1: International Experience with High-Speed Rail,” *High-Speed Rail: International Lessons for U.S. Policy Makers*, Policy Focus Report of the Lincoln Institute of Land Policy, ISBN 9781558442221, Available Online at https://www.lincolninst.edu/pubs/dl/1948\_1268\_High-Speed%20Rail%20PFR\_Webster.pdf, Accessed 06-08-2012, p. 6)

The term high-speed rail refers to a variety of modern railway technologies that allow passenger trains to reach higher velocities than conventional trains. Due to advanced signaling systems, these high-speed trains can also operate with greater frequency, thus creating greater capacity to move more passengers. However, high-speed rail is more than just upgraded tracks and new trains. It is a complex system of rail operations and maintenance technologies and procedures, commercial and management policies and approaches, and innovative financing sources and mechanisms. Each component of this system contributes to high-speed rail’s utility and competitiveness (UIC 2010a).

#### FYI: How Fast HSR

Todorovich et al. 11 — Petra Todorovich, Director of America 2050—a national urban planning initiative to develop an infrastructure and growth strategy for the United States, Assistant Visiting Professor at the Pratt Institute Graduate Center for Planning and the Environment, Member of the Board of Advisors of the Eno Transportation Foundation, holds an M.A. in City and Regional Planning from the Bloustein School of Planning and Public Policy at Rutgers University, et al., with Daniel Schned, Associate Planner for America 2050, Lecturer at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, holds an M.A. in City and Regional Planning and a Certificate in Geographic Information Systems from Rutgers University, and Robert Lane, Senior Fellow for Urban Design at Regional Plan Association, Founding Principal of Plan & Process LLP, former Loeb Fellow at the Harvard Graduate School of Design, holds an M.A. in Architecture from Columbia University, 2011 (“Chapter 1: International Experience with High-Speed Rail,” *High-Speed Rail: International Lessons for U.S. Policy Makers*, Policy Focus Report of the Lincoln Institute of Land Policy, ISBN 9781558442221, Available Online at https://www.lincolninst.edu/pubs/dl/1948\_1268\_High-Speed%20Rail%20PFR\_Webster.pdf, Accessed 06-08-2012, p. 6)

How fast is high-speed rail? The internationally recognized definition of high-speed refers to rail operations at or above 155 miles per hour (mph). In 1996 the European Union (EU) officially adopted Directive 96/48, which defines high-speed rail as trains capable of reaching speeds of 155 mph on dedicated, high-speed tracks or 125 mph on conventional tracks. As of January 2011, trains in 11 countries already operate at speeds up to 185 mph, and several can reach 215 mph—the current international standard for new lines. The world’s fastest passenger train in commercial operation, in Shanghai, China, reaches top speeds of 260 mph using magnetic levitation technology (Givoni 2006; UIC 2011).

#### FYI: Four operational models of HSR

Todorovich et al. 11 — Petra Todorovich, Director of America 2050—a national urban planning initiative to develop an infrastructure and growth strategy for the United States, Assistant Visiting Professor at the Pratt Institute Graduate Center for Planning and the Environment, Member of the Board of Advisors of the Eno Transportation Foundation, holds an M.A. in City and Regional Planning from the Bloustein School of Planning and Public Policy at Rutgers University, et al., with Daniel Schned, Associate Planner for America 2050, Lecturer at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, holds an M.A. in City and Regional Planning and a Certificate in Geographic Information Systems from Rutgers University, and Robert Lane, Senior Fellow for Urban Design at Regional Plan Association, Founding Principal of Plan & Process LLP, former Loeb Fellow at the Harvard Graduate School of Design, holds an M.A. in Architecture from Columbia University, 2011 (“Chapter 1: International Experience with High-Speed Rail,” *High-Speed Rail: International Lessons for U.S. Policy Makers*, Policy Focus Report of the Lincoln Institute of Land Policy, ISBN 9781558442221, Available Online at https://www.lincolninst.edu/pubs/dl/1948\_1268\_High-Speed%20Rail%20PFR\_Webster.pdf, Accessed 06-08-2012, p. 6-7)

Over the last half century, four different operational models of high-speed rail have emerged, consisting of various combinations of new train and track technology (Campos and de Rus 2009; UIC 2010c).

1. Dedicated: The world’s first operational high-speed rail model is Japan’s Shinkansen (“new trunk line”), which has separate high-speed tracks that serve high-speed trains exclusively. The system was developed because the existing rail network was heavily congested with conventional passenger and freight trains and the track gauge did not support the new high-speed trains.

2. Mixed high-speed: Exemplified by France’s TGV (Train à Grande Vitesse), this model includes both dedicated, high-speed tracks that serve only high-speed trains and upgraded, conventional tracks that serve both high-speed and conventional trains.

3. Mixed conventional: Spain’s AVE (Alta Velocidad Espanola) has dedicated, high-speed, standard-gauge tracks that serve both high-speed and conventional trains equipped with a gauge-changing system, and conventional, nonstandard gauge tracks that serve only conventional trains.

4. Fully mixed: In this model, exemplified by Germany’s ICE (Inter-City Express), [end page 6] most of the tracks are compatible with all high-speed, conventional passenger, and freight trains.

### A2: HSR Fails

#### 14 countries demonstrate the feasibility of HSR.

Todorovich et al. 11 — Petra Todorovich, Director of America 2050—a national urban planning initiative to develop an infrastructure and growth strategy for the United States, Assistant Visiting Professor at the Pratt Institute Graduate Center for Planning and the Environment, Member of the Board of Advisors of the Eno Transportation Foundation, holds an M.A. in City and Regional Planning from the Bloustein School of Planning and Public Policy at Rutgers University, et al., with Daniel Schned, Associate Planner for America 2050, Lecturer at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, holds an M.A. in City and Regional Planning and a Certificate in Geographic Information Systems from Rutgers University, and Robert Lane, Senior Fellow for Urban Design at Regional Plan Association, Founding Principal of Plan & Process LLP, former Loeb Fellow at the Harvard Graduate School of Design, holds an M.A. in Architecture from Columbia University, 2011 (“Chapter 1: International Experience with High-Speed Rail,” *High-Speed Rail: International Lessons for U.S. Policy Makers*, Policy Focus Report of the Lincoln Institute of Land Policy, ISBN 9781558442221, Available Online at https://www.lincolninst.edu/pubs/dl/1948\_1268\_High-Speed%20Rail%20PFR\_Webster.pdf, Accessed 06-08-2012, p. 4)

Since the 1964 inauguration of Japan’s first Shinkansen bullet train connecting Tokyo to Osaka, commercial high-speed rail lines have been constructed in 14 countries. Together these lines provide billions of passenger trips, save many hours of travel time, and provide an exceptional level of safety. Now considered a well-established and proven technology, high-speed rail continues to offer benefits to the nations and regions it serves. This reliable, rapid, and safe ground transportation system offers increased regional mobility and accessibility, reduces fuel use, saves energy, regenerates cities and regions, and increases economic productivity.

### A2: No Ridership

#### Surveys prove there will be strong ridership.

Dutzik et al. 10 — Tony Dutzik, Senior Policy Analyst with Frontier Group specializing in energy, transportation, and climate policy, holds an M.A. in print journalism from Boston University and a B.S. in public service from Penn State University, et al., with Siena Kaplan, Analyst with Frontier Group, and Phineas Baxandall, Federal Tax and Budget Policy Analyst with U.S. PIRG, holds a Ph.D. in Political Science from the Massachusetts Institute of Technology and a B.A. in Economics from the College of Social Studies at Wesleyan University, 2010 (“Why Intercity Passenger Rail?,” *The Right Track: Building a 21st Century High-Speed Rail System for America*, Published by the U.S. PIRG Education Fund, Available Online at http://americanhsra.org/whitepapers/uspirg.pdf, Accessed 06-10-2012, p. 15)

Trains are often a preferred mode of travel, especially for distances between 100 and 500 miles. A 2009 survey found that if fare and travel time were equal, 54 percent of Americans would prefer to travel to cities in their region by high-speed rail, with only 33 percent preferring car travel and 13 preferring air travel. Of Americans who had actually ridden high-speed rail, an overwhelming 82 percent preferred it to air travel.29

### A2: HSR Bad

#### Conservative critics are wrong—prefer our evidence.

Reutter 10 — Mark Reutter, Fellow at the Progressive Policy Institute, former reporter for the *Baltimore Sun*, 2010 ("The Strange Logic of Samuelson’s High-Speed Rail Critique," Progressive Policy Institute, November 7th, Available Online at http://progressivepolicy.org/the-strange-logic-of-samuelson%E2%80%99s-high-speed-rail-critique, Accessed 06-10-2012)

Give Washington Post columnist Robert J. Samuelson credit – he’s a strong believer in recycling. Last year, he loudly derided the “mirage” of high-speed rail as “the triumph of fantasy over fact.” Yesterday, he denounced the “absurdity” of fast trains as “a triumph of politically expedient fiction over logic and evidence.” OK, he’s gotten a bit wordier, but you can see that once his mind is made up, it’s fixed in stone.

The same kind of thinking comes from nearly all critics of high-speed rail who bunker at the Heritage Foundation, Cato Institute, and other right-leaning groups – they have a curiously static view of transportation. To them, investing in future high-speed rail is an extravagant and illogical expenditure of public money because the lack of prior investment in high-speed rail has done little to change our travel patterns.

By that logic, America should never have built a transcontinental railroad. Consider that only a handful of wagon trains made it to California in 1862. Had Samuelson been writing then, he probably would have criticized President Lincoln’s proposal to spend taxpayer money on a steam railroad to San Francisco as a plan that “would subsidize a tiny group of travelers and do little else” – to borrow a phrase from yesterday’s column.

What’s missing from Samuelson’s worldview is that major advances in transportation drive economic growth. They have throughout human history. The joining of the Union Pacific and Central Pacific railroads in 1869 ushered in what economic historian Walt Rostow called the “takeoff period” of American industry.

Likewise, President Dwight Eisenhower did not justify interstate highways on the basis of established transportation patterns. U.S. railroads – not roads – carried the bulk of interstate freight, military personnel, and civilians during World War II. Instead, he warned that our national security in the Cold War 1950s depended on our ability to establish fast new highways to transport supplies throughout the country.

So when Samuelson denounces high-speed rail by citing today’s Amtrak ridership levels, he’s forgetting that rail traffic is far below what it would be if our passenger trains were remotely up to world standards. When we begin opening 200-mph railroads, a new level of traffic will appear very rapidly. It’s been dormant, waiting for a chance to move.

It is impossible to predict how much dormant traffic is waiting for a truly modernized rail system. Economic models don’t tell us, and Samuelson fails to even pose the question amid his attacks on high-speed rail as government “pork barrel.”

What’s remarkable (though not surprising, if one reads Cato’s Randal O’Toole and other rail critics) is Samuelson’s utter blindness to the fact that highways and airports require massive government “pork” to build and maintain. They don’t pay for themselves through fuel or ticket taxes, as their backers like to assert.

A Texas Department of Transportation study found that a new section of highway in Houston would generate only 16 percent of its total lifecycle cost from gas taxes. Texas DOT estimated a gas tax of $2.22 per gallon – nearly six times the present state and federal tax of 38.4 cents – reflected the actual cost of building and maintaining the highway.

Constructing 800 miles of high-speed rail in California is liable to cost more than $40 billion. Constructing and operating all 13 corridors proposed by the Obama administration could easily approach $200 billion. But these dramatic headline figures need context. The current transportation act allots $300 billion to highways – not for new construction since the interstate system is completed, but just for maintenance and rebuilding.

Huge costs loom as America’s highways reach the end of their productive life. Replacing the Tappan Zee Bridge in New York State is estimated to cost $17 billion. That figure is guaranteed to rise.

If interstate thoroughfares and vital bridges paid their way, private investors would be clamoring to commit funds to refinance them. They aren’t.

All modes of transporting people require subsidies. Amtrak’s direct subsidies of about $1.5 billion a year are transparent and highly publicized. Subsidies for cars and airlines are hidden in trust fund appropriations, user tax breaks, and local and state programs paid for by all taxpayers, including those who rarely drive and never fly.

In portraying himself as a hard-nosed realist free of the “fashionable make-believe” of rail advocates, Samuelson would do well to explain how he’d fix congestion, advance mobility, lessen pollution, and reduce our dependence on foreign oil by jettisoning an infrastructure program that directly addresses these issues.

## \*\*\* 2AC—DAs & CPs

### A2: Private CP

#### Government action is key.

Tierney 12 — Sean Tierney, Assistant Professor of Geography at the University of North Texas, holds a Ph.D. in Geography from the University of Denver, 2012 (“High-speed rail, the knowledge economy and the next growth wave,” *Journal of Transport Geography*, Volume 22, May, Available Online to Subscribing Institutions via ScienceDirect, p. 286)

For some, economic development is a euphemism for industrial policy. Undoubtedly, the government will have an important role to play, for financing, technological standardization, eminent domain and others. Many oppose any form of industrial policy, but not doing so cedes considerable ground to those countries with whom we are trying to compete. Compare the $8 billion that President Obama set aside in the stimulus bill as a down payment for HSR, with the estimated $500–700 billion that China plans to invest for its 19,000 km HSR network (Economist, 2011), or the $21 billion that Brazil will spend for just one line, a 225 mile spur connecting Rio with Sao Paulo (Magalhaes and Winterstein, 2011). But industrial policy is not about business cycles or stimulus, nor is it about corporate welfare or picking winners; done correctly, industrial policy is about steering public resources to lubricate an innovative economic ecosystem that benefits all fields over long periods of time (Porter, 2008).

Still, the cost to develop HSR will be high and detractors have a great deal of evidence to mount a vigorous opposition, most notably Amtrak (Perl, 2002). Nevertheless, while large capital commitments may be politically hazardous in this frugal policy environment, the economic benefits of large scale transportation projects are well understood (Lakshmanan, 2011). More importantly, what are the costs to the economy going to be in a future where oil eclipses the $147 per-barrel high set back in 2008? With fuel representing about 40% of an airline’s operating costs it is no surprise that Christopher Steiner (2009) argues that at $8 per gallon, the skies will empty. Electricity-based HSR offers up a logical hedge against rising oil prices. Furthermore, with the exception of the tiny number of plug-in vehicles, rail offers some energy diversification to our transportation system.

### A2: Airline Tradeoff DA

#### HSR doesn’t compete with long distance air—no link.

Tierney 12 — Sean Tierney, Assistant Professor of Geography at the University of North Texas, holds a Ph.D. in Geography from the University of Denver, 2012 (“High-speed rail, the knowledge economy and the next growth wave,” *Journal of Transport Geography*, Volume 22, May, Available Online to Subscribing Institutions via ScienceDirect, p. 285-286)

The principal resistance many people have against HSR is that it is a poor use of financial resources because it only fills a tiny niche. For distances under 200 miles, as with the city-pairs listed above, people will drive, while HSR is not competitive with air travel for distances over 800 miles. But these arguments miss the mark. HSR is not designed to compete with long distance air travel (Givoni, [end page 285] 2005) and the fact that HSR will lure away certain short-haul passengers should be viewed favorably by the airlines who are struggling with capacity constraints at the busiest airports (O’Connor, 2003). Nor is it going to eliminate the automobile. Despite the housing crisis, Americans remain enthralled with suburban living. But the country cannot accommodate more unsustainable housing and mobility options. Designed effectively, HSR can fuse our current system of city nodes operating largely independently of (and often in competition with) one another, to foster an era of regional conurbations with overlapping and accessible labor pools.

### A2: Automobiles Good DA

#### HSR won’t eliminate cars—no link.

Tierney 12 — Sean Tierney, Assistant Professor of Geography at the University of North Texas, holds a Ph.D. in Geography from the University of Denver, 2012 (“High-speed rail, the knowledge economy and the next growth wave,” *Journal of Transport Geography*, Volume 22, May, Available Online to Subscribing Institutions via ScienceDirect, p. 285-286)

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## \*\*\*Solvency deficits to the States Cplan – 2AC Options

### Experience Solvency Deficit – 2AC

#### ( ) Solvency deficit -- experience

#### States lack it on HSRH

GAO ‘10

Government Accountability Office: Report to Congressional Committees – “HIGH SPEED RAIL: Learning From Service Start-ups, Prospects for Increased Industry Investment, and Federal Oversight Plans” – June – http://www.gao.gov/new.items/d10625.pdf

The activities that helped states initiate and improve their services will be important for states seeking to initiate or improve services in the future—including developing conventional passenger rail, higher speed passenger rail, and high speed rail.15 Learning ways to build support, secure funding, obtain equipment, and effectively manage rail services will be even more crucial to states developing high speed rail because they will face long time frames, high costs, and a lack of experience in the U.S. passenger rail market for all stages of developing and managing these new passenger rail services. While other countries have experience with high speed passenger rail service, no state currently supports high speed intercity passenger rail service.16 While there are differences between conventional passenger and high speed passenger rail services, some of the lessons learned by states apply to both. As such, our review of state experiences with conventional passenger rail service could provide some insight into how states might accomplish both initiating and improving conventional passenger rail services, as well as developing higher and high speed passenger rail services.

#### It’s uniquely important on this issue

GAO ‘10

Government Accountability Office: Report to Congressional Committees – “HIGH SPEED RAIL: Learning From Service Start-ups, Prospects for Increased Industry Investment, and Federal Oversight Plans” – June – http://www.gao.gov/new.items/d10625.pdf

Developing high speed rail systems would involve long time frames, in part because acquiring dedicated right-of-way could involve many more local communities and private interests, lengthy environmental approval, and would require states to build consensus among a greater number of stakeholders than developing conventional passenger rail services on existing rights-of-way. We have reported that coordinating high speed rail projects among numerous stakeholders without an established institutional framework would make developing high speed rail difficult.29

#### ( ) More ev – experience key

GAO ‘10

Government Accountability Office: Report to Congressional Committees – “HIGH SPEED RAIL: Learning From Service Start-ups, Prospects for Increased Industry Investment, and Federal Oversight Plans” – June – http://www.gao.gov/new.items/d10625.pdf

Similarly, states that develop high speed rail services would need to build capacity to manage their programs. Theadministrative structures and technicalexpertise needed to manage these services would require consideration from states and affected stakeholders. Several state officials said that state departments of transportation would need additional technical expertise and staff resources to develop new high speed rail.

### Coordination Solvency Deficit – 2AC

#### ( ) Solvency deficit – coordination. Feds are key to it for HSR

GAO ‘10

Government Accountability Office: Report to Congressional Committees – “HIGH SPEED RAIL: Learning From Service Start-ups, Prospects for Increased Industry Investment, and Federal Oversight Plans” – June – http://www.gao.gov/new.items/d10625.pdf

Stakeholders are looking for federal leadership and funding to create a structure for high speed rail development, among other things.34 Federal leadership is important as most passenger trains operate over the national rail network and federal involvement could help states work cooperatively to develop routes that cross state lines. Aside from funding, stakeholders said that they were looking for a stronger federal policy and programmatic role. For example, stakeholders mentioned the need for a federal role in promoting interagency and interstate cooperation, and identified other potential federal roles, such as setting additional safety standards, promoting intermodal models of transportation, and assisting with right-of-way acquisition. The Recovery Act will provide a one-time infusion of federal funds, and PRIIA, among other things, provided the basis for a federal structure by mandating a national rail plan. However, stakeholders suggested that more funding and structure is needed. Although industry stakeholders are optimistic regarding intercity passenger rail implementation, they told us federal guidance could help provide structure to the intercity passenger rail market. According to industry stakeholders, there are several areas where federal guidance could help provide that structure: liability laws, safety regulations, Buy America requirements,35 and equipment standardization. (See table 3.) For example, industry stakeholders cited liability against accident and other train-related risks as a major challenge to high speed intercity passenger rail. This is a challenge because federal law provides limited protection to the operator or right-of-way owner since it only covers the claims of passengers, not third-party claims.36

### Private investor solvency deficit – 2AC

#### ( ) Solvency deficit – private investors

#### Feds key to *court investors*. Durable State fiat won’t cut it – investors don’t *perceive* States as trustworthy partners.

GAO ‘10

Government Accountability Office: Report to Congressional Committees – “HIGH SPEED RAIL: Learning From Service Start-ups, Prospects for Increased Industry Investment, and Federal Oversight Plans” – June – http://www.gao.gov/new.items/d10625.pdf

Industry stakeholders agreed that the time frame for building more intercity passenger rail capacity in the United States depends upon the level of public funding committed. They further stated that a stable federal funding stream would encourage firms to enter the marketplace and to make investments. For example, passenger rail car manufacturers discussed the time commitment involved in designing, testing, and manufacturing passenger rail cars. As a result, they stated that they need to ensure that funding will be available throughout the entire process. While the Recovery Act funding waives the PRIIA nonfederal match requirements for capital investments, the fiscal year 2010 appropriation for intercity passenger rail projects requires at least 20 percent of the project’s capital costs to come from nonfederal funding sources. If states or other grantees do not come up with their share, they will be unable to use the federal funds. Industry stakeholders stated that, in order to be successful, intercity passenger rail service would need stable state operating support in addition to capital funding provided by the federal government because allof the passenger railsystems we studied required some level ofpublic operational and capitalsubsidy.39 One freight railroad official noted that, historically, state fluctuations in ridership and inaccurate ridership and revenue predictions have resulted in a financial shortfall that put private railroads at risk, leaving right-of-way owners concerned about the potential sunk costs of underutilized passenger rail equipment and higher speed rail infrastructure. However, during the current economic environment, it is uncertain the extent to which states will be able to provide funding support—capital or operating—as simulations show near-term projected state and local deficits continuing for several years into the future.40

#### No solvency without private investors – quality, innovation, and long-term viability

Geddes ‘11

R. Richard Geddes – Associate Professor, Department of Policy Analysis and Management at Cornell University – Testimony before the House Committee on Transportation and Infrastructure – “The Federal Railroad Administration’s High Speed and Intercity Passenger Rail Program: Mistakes and Lessons Learned” – December 6, 2011 – available at: http://www.aei.org/files/2011/12/19/-geddes-12612-testimony-on-high-speed-rail\_145334197427.pdf

The public PPP sponsor may have a goal other than maximizing private investment in passenger rail infrastructure. The goal may be obtaining the best fare/service quality combination, for example. In that case, the sponsor can set the basic parameters of the contract, announce the precise criteria on which the winner will be determined, and accept bids. The key insight is that the PPP contracting approach is flexible enough to accommodate a variety of public sector sponsor objectives. I next review several salient benefits of the PPP contracting approach. The introduction of competition. One important social benefit of the PPP approach is that it allows for competition to be introduced into HSR service provision. Competition encourages firms to provide quality service at a low cost, to be responsive to customer’s needs, and to encourage competitors to innovate. The competitive benefits of PPPs can be realized on both NEC and non-NEC routes. The articulation and enforcement of clear key performance indicators. An important social benefit of the PPP approach is simply that a contract exists. The contract includes details regarding what actions constitute adequate performance on the contract. The PPP approach thus encourages the public sponsor to reflect upon, and articulate, what specific actions by the private partner constitute excellent, or poor, performance. This will improve service provision. This may include metrics about major issues, such as the reliability and frequency of train travel, but also more detailed considerations such as the cleanliness of cabins, restrooms, and dining cars. The provision of fresh capital. One key consideration is that the PPP approach allows fresh capital to be injected into passenger rail in the United States. In many cases, the public sector simply does not possess the necessary resources. Reliance on private capital is thus the only way to complete necessary renovations, upgrades, and maintenance that result in safer, faster, and more efficient service. But it also results in substantial savings, since a project will be completed faster under the PPP contracting approach where the private capital is readily available to get work done quickly. The introduction of new technologies and the fostering of innovation. One key advantage of the PPP approach is that the private sector has incentives to develop new technologies, and has the resources to implement them. This results in lower costs and improved service.

Note: “PPP’s” are “public-private partnerships”

### Grade Separation and High-Tech Signalling solvency deficit – 2AC

#### ( ) States can’t solve – grade separations and high-tech signaling

NCI ‘3

The National Corridors Initiative – “FORTY-SEVEN ORGANIZATIONS SIGN AGREEMENT TO PROMOTE FEDERAL INVESTMENT IN MODERN NATIONWIDE PASSENGER RAIL SYSTEM” http://www.nationalcorridors.org/papers/midwestpaper.shtml

The final statement in the American Passenger Rail Agreement calls upon Congress to provide full funding for Amtrak while a more advanced passenger rail system is being designed, so the national passenger rail operator can keep its nationwide fleet of trains operating and improve service levels. “Passenger trains represent the next great leap in American mobility, but they will need billions of dollars of new track, new grade separations, new stations and high-tech signaling to become effective. Only the federal government can provide that kind of oversight and funding,” said Joe Szabo of the United Transportation Union.

## \*\*\*Strong Fed Key cards – 2ACextensions

### Additional Fed Key extensions

#### Federal funding is key—every international project proves.

Todorovich et al. 11 — Petra Todorovich, Director of America 2050—a national urban planning initiative to develop an infrastructure and growth strategy for the United States, Assistant Visiting Professor at the Pratt Institute Graduate Center for Planning and the Environment, Member of the Board of Advisors of the Eno Transportation Foundation, holds an M.A. in City and Regional Planning from the Bloustein School of Planning and Public Policy at Rutgers University, et al., with Daniel Schned, Associate Planner for America 2050, Lecturer at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, holds an M.A. in City and Regional Planning and a Certificate in Geographic Information Systems from Rutgers University, and Robert Lane, Senior Fellow for Urban Design at Regional Plan Association, Founding Principal of Plan & Process LLP, former Loeb Fellow at the Harvard Graduate School of Design, holds an M.A. in Architecture from Columbia University, 2011 (“Chapter 1: International Experience with High-Speed Rail,” *High-Speed Rail: International Lessons for U.S. Policy Makers*, Policy Focus Report of the Lincoln Institute of Land Policy, ISBN 9781558442221, Available Online at https://www.lincolninst.edu/pubs/dl/1948\_1268\_High-Speed%20Rail%20PFR\_Webster.pdf, Accessed 06-08-2012, p. 4-5)

With the exception of the higher-speed Acela Express service operated by Amtrak on the Northeast Corridor, the United States has failed to develop high-speed rail and fully realize its benefits, despite numerous planning studies and aborted attempts to expand rail service in various regions since the 1960s. As a result, most Americans are unfamiliar with high-speed rail and its potential impacts on our cities, regions, and national landscape. [end page 4]

Significant investments in the U.S. Interstate Highway System since the 1950s initially produced excess surface transportation capacity, but congestion is now common on many highway sections, particularly in and around major metropolitan areas. The federal government has also subsidized the aviation industry, but has lacked a comparable federal commitment to funding passenger rail infrastructure (figure 1). Such funding has been a precondition for bringing large rail capital projects to fruition in every other country where they exist.

#### Stable federal funding is key.

Todorovich et al. 11 — Petra Todorovich, Director of America 2050—a national urban planning initiative to develop an infrastructure and growth strategy for the United States, Assistant Visiting Professor at the Pratt Institute Graduate Center for Planning and the Environment, Member of the Board of Advisors of the Eno Transportation Foundation, holds an M.A. in City and Regional Planning from the Bloustein School of Planning and Public Policy at Rutgers University, et al., with Daniel Schned, Associate Planner for America 2050, Lecturer at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, holds an M.A. in City and Regional Planning and a Certificate in Geographic Information Systems from Rutgers University, and Robert Lane, Senior Fellow for Urban Design at Regional Plan Association, Founding Principal of Plan & Process LLP, former Loeb Fellow at the Harvard Graduate School of Design, holds an M.A. in Architecture from Columbia University, 2011 (“Chapter 3: U.S. Policy and Programs for High-Speed Rail Investment,” *High-Speed Rail: International Lessons for U.S. Policy Makers*, Policy Focus Report of the Lincoln Institute of Land Policy, ISBN 9781558442221, Available Online at https://www.lincolninst.edu/pubs/dl/1948\_1268\_High-Speed%20Rail%20PFR\_Webster.pdf, Accessed 06-08-2012, p. 26)

Even though PRIIA is authorized through 2013, stakeholders in the rail industry, including one of the drafters of PRIIA, have remarked on the need to adjust federal rail policy to respond to current circumstances, including greater political instability in the Middle East and its implications for America’s dependence on foreign oil; growing international and private sector interest in helping to finance high-speed rail in the United States; and the president’s own ambitious proposals for a national high-speed rail network to give 80 percent of Americans access to high-speed rail over the next 25 years (Gardner 2011). Such a vision requires a stronger and more active federal commitment that must start with secure funding. The most recent setback of zero funding for high-speed rail in the FY 2011 budget underscores the need for a sustainable revenue source as reliable as funding for highway and transit programs in the past. President Obama’s proposal to include a $53 billion, six-year high-speed rail program as part of the surface transportation bill would help to achieve this kind of equity among transportation modes.

#### The status quo proves that the counterplan fails—strong federal support is key.

Todorovich et al. 11 — Petra Todorovich, Director of America 2050—a national urban planning initiative to develop an infrastructure and growth strategy for the United States, Assistant Visiting Professor at the Pratt Institute Graduate Center for Planning and the Environment, Member of the Board of Advisors of the Eno Transportation Foundation, holds an M.A. in City and Regional Planning from the Bloustein School of Planning and Public Policy at Rutgers University, et al., with Daniel Schned, Associate Planner for America 2050, Lecturer at the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, holds an M.A. in City and Regional Planning and a Certificate in Geographic Information Systems from Rutgers University, and Robert Lane, Senior Fellow for Urban Design at Regional Plan Association, Founding Principal of Plan & Process LLP, former Loeb Fellow at the Harvard Graduate School of Design, holds an M.A. in Architecture from Columbia University, 2011 (“Chapter 3: U.S. Policy and Programs for High-Speed Rail Investment,” *High-Speed Rail: International Lessons for U.S. Policy Makers*, Policy Focus Report of the Lincoln Institute of Land Policy, ISBN 9781558442221, Available Online at https://www.lincolninst.edu/pubs/dl/1948\_1268\_High-Speed%20Rail%20PFR\_Webster.pdf, Accessed 06-08-2012, p. 23-24)

The current federal policy framework for high-speed rail was shaped in response to both the history of unreliable and minimal federal contributions for passenger rail and the efforts of individual states acting on their own initiative and with their own funding to improve rail corridors. While PRIIA is an improvement over the previous lack of a U.S. passenger rail policy, it is not well-suited to a more ambitious, sustained federal commitment to building dedicated, multistate high-speed rail corridors. Unlike the U.S. highway and transit programs, which rely on dedicated revenue streams from the federal motor fuels tax, passenger rail has no dedicated source of revenue and thus relies on Congress for general fund appropriations. Prior to the passage of PRIIA, most passenger rail appropriations were made directly to Amtrak each year, but with no multiyear authorization since 2002. Numerous Amtrak officials have testified to Congress over the years that the uncertainty of these annual, often politicized, appropriations makes planning and operating the railroad difficult. In the absence of consistent federal support for passenger rail, states including [end page 23] California, North Carolina, Pennsylvania, and Washington have established dedicated funding streams to improve conventional passenger rail corridors operated by Amtrak. Other states, such as Illinois, Maine, and Vermont, have directed state general funds or flexible federal funds to subsidize and supplement their passenger rail service (U.S. GAO 2010). These state investments have led to the purchase of new rail cars in Washington, track upgrades for and re-electrification of the Keystone Corridor in Pennsylvania, and more frequent, reliable service and higher ridership on all state-sponsored lines. State funding for rail has come from various sources, including portions of state gas and diesel taxes, flexible funding from the federal Congestion Mitigation and Air Quality Improvement Program, state rental car taxes, and proceeds from specially branded Cash Train scratch lottery tickets in Washington state.

## \*\*\*Private investor solvency deficit – 1AR Backlines

### 1AR – Feds key to getting private investors

#### ( ) Feds key to boost private investment

GAO ‘10

Government Accountability Office: Report to Congressional Committees – “HIGH SPEED RAIL: Learning From Service Start-ups, Prospects for Increased Industry Investment, and Federal Oversight Plans” – June – http://www.gao.gov/new.items/d10625.pdf

Rail industry stakeholders, such as passenger rail operators, freight rail right-of-way owners, passenger rail car manufacturers, and general contractors are optimistic that they can meet increased public investment in intercity passenger rail, but they are looking for federal leadership and funding to create a structure for developing high speed rail. Additionally, stakeholders said that a stable federal funding stream would encourage firms to enter and invest in the intercity passenger rail marketplace. However, even after guidance is given on the application of federal laws and states advertise contracts, it could take several years to provide the necessary infrastructure such as new passenger rail cars, potentially making it difficult to spend Recovery Act high speed rail funds by September 30, 2017, as required by law. Industry stakeholders said that the rail industry is in decline due to the recession; however, once the federal government distributes funding and establishes standards, rail industry stakeholders stated that they can begin to increase capacity to meet the increased investments. Stakeholders we interviewed stated that they are ready to increase capacity because several rail industry companies have been forced to lay off workers.

#### Here’s a booster for our GAO ev – in a crunch, States cannot run deficits, but Feds key.

The Economist ‘10

(a periodical – and a quite credible one – November 18th – http://www.economist.com/node/17525731)

These revenues are falling just as many costs are rising. Unemployment benefits are a federal matter. But cities, counties and school districts, like states, showed indecent largesse during the boom years in their pension promises, often using wildly unrealistic investment assumptions. The result is budget deficits at the local as at the state *and federal* level. But local and state governments cannot legally run deficits. Nor can they easily declare bankruptcy. Each state has different laws about whether and how municipalities may file for bankruptcy. But even when a state allows it, this results in a gauntlet of legal woes, requiring insolvency tests, negotiations with bondholders and so forth.

### 1AR – Private Investment Key

#### ( ) HSR’s solves econ, oil dependence, and environment. But, *successful interaction with private investors* is key.

P.I.R.G. ‘11

The United States Public Interest Research Group – this report was jointly written by **Phineas Baxandall** is Senior Analyst for the United States Public Interest Research Group (U.S. PIRG). Previously he assisted in directing the Taubman Center for State and Local Government at Harvard University’s John F. Kennedy School of Government, **Tony Dutzik** is senior policy analyst with Frontier Group. Frontier Group is a think tank, producing ideas and research to promote a cleaner environment. His reports have received national media attention - gaining coverage in the New York Times, the Wall Street Journal, and other major newspapers - and have helped lay the groundwork for reforms such as state adoption of enhanced emission standards for cars, and **Jordan Schneider** is an analyst in the Frontier Group. Before joining Frontier Group she wrote grants for the Catamount Institute in Colorado Springs – “High-Speed Rail: Public, Private or Both? Assessing the Prospects, Promise and Pitfalls of Public-Private Partnerships – Summer 2011 – http://cdn.publicinterestnetwork.org/assets/85a40b6572e20834e07b0da3e66e98bf/HSR-PPP-USPIRG-July-19-2011.pdf

The United States is in need of new transportation solutions. Our highways and airports are increasingly congested, making travel, even between cities just a few hours apart, inconvenient and frustrating. Meanwhile, our reliance on oil continues to threaten our economy, our national security, and our environment. High-speed rail is a potential solution to many of these challenges. Americans are excited about the prospect of a clean, efficient new means of travel; nearly twothirds of Americans support federal or state funding for high-speed rail.1 But the American people aren’t the only ones enthusiastic about high-speed rail. Businesses from around the globe are eager to compete for the billions of dollars in infrastructure spending that will accompany the nation’s investment in high-speed rail. In 2009, 30 companies from around the world committed to establish a presence or expand their existing presence in the United States if they are chosen to supply components for high-speed rail.2 Prior to its cancellation, the Florida high-speed rail line attracted interest from seven teams including dozens of firms from around the globe.3 In California, a request for expressions of interest from private firms drew more than 1,000 responses, while 22 funds have expressed interest in financing part of the system’s construction.4 The construction of high-speed rail in the United States will inevitably involve both the public and the private sector. Effective “partnerships” between the public and private sectors are critical if the nation is to get the high-speed rail network it deserves at a price it can afford.

#### ( ) Investor Support key to HSR – quality of product and successful implementation

P.I.R.G. ‘11

The United States Public Interest Research Group – this report was jointly written by **Phineas Baxandall** is Senior Analyst for the United States Public Interest Research Group (U.S. PIRG). Previously he assisted in directing the Taubman Center for State and Local Government at Harvard University’s John F. Kennedy School of Government, **Tony Dutzik** is senior policy analyst with Frontier Group. Frontier Group is a think tank, producing ideas and research to promote a cleaner environment. His reports have received national media attention - gaining coverage in the New York Times, the Wall Street Journal, and other major newspapers - and have helped lay the groundwork for reforms such as state adoption of enhanced emission standards for cars, and **Jordan Schneider** is an analyst in the Frontier Group. Before joining Frontier Group she wrote grants for the Catamount Institute in Colorado Springs – “High-Speed Rail: Public, Private or Both? Assessing the Prospects, Promise and Pitfalls of Public-Private Partnerships – Summer 2011 – http://cdn.publicinterestnetwork.org/assets/85a40b6572e20834e07b0da3e66e98bf/HSR-PPP-USPIRG-July-19-2011.pdf

PPPs are often touted as being able to deliver infrastructure projects faster, cheaper or with better quality than a public-sector entity. This is not to say that private entities are inherently better suppliers of infrastructure than public agencies. Private entities bring many inherent disadvantages, including higher capital costs and the need to cover financial returns to shareholders. The process of undertaking a PPP also incurs transaction costs—such as the potential need to pay stipends to would-be bidders to help defray the cost of preparing proposals.24 States and localities that have pursued toll road PPPs in the United States, for example, typically pay millions to auditing, consulting and legal firms. A key question for government agencies considering PPPs is the degree to which the savings purportedly delivered by private companies are real or illusory. Real savings can result from a private company’s access to expertise and experience, its ownership of proprietary technologies, or economies of scale. In the case of high-speed rail, there are several international firms that have amassed decades of experience in the construction and operation of high-speed rail lines, and may be effective competitors to build similar systems in the United States. However, PPP savings can also be illusory if savings are merely generated by avoiding labor and wage requirements or regulatory standards that would otherwise govern projects built directly by government agencies. These changes might produce a nominal cost “savings” in the short run, but they are achieved by externalizing costs onto or transferring benefits from other residents and employees in the state rather than by adding unique value that can only be delivered by the private sector. To assess whether a PPP approach delivers added value to taxpayers, governments must carry out a “value for money” test, such as the public sector comparator. These tests are intended to determine whether a PPP or traditional public-sector contracting will deliver the greatest value, taking into account quality, price and risk. Access to Capital Access to capital is not typically a strong suit of private entities. Government agencies are capable of borrowing large amounts of money to finance public infrastructure at relatively low cost. However, in the current atmosphere of constrained public budgets, access to private capital may make the difference between building necessary high-speed rail projects and leaving them on the drawing board for years to come. Because of the multi-billion dollar price tag of most high-speed rail projects, governments in both Europe and the United States have stated that private investment will be necessary to build out their highspeed rail networks.

Note: “PPP’s” are “public-private partnerships”

#### ( ) PPP’s key to long-term success of HSR projects

Hauck ‘10

Oliver Hauck is chief executive officer of Siemens Mobility USA, a division of Siemens Industry Inc. Milwaukee-Journal Sentinel – April 19th – http://www.jsonline.com/news/opinion/91548664.html

Public-private partnerships are a relatively straightforward concept. Arrangements are made for the private sector to supply infrastructure assets and services that the government traditionally has provided. And many private companies, including rail technology suppliers like my own, have expressed a willingness to participate and accept some of the risk inherent in financing this major transportation system upgrade. PPPs are the best format to minimize risk for all concerned and guarantee that projects are delivered on time and on budget. They have been used successfully for decades here and abroad and have become an increasingly common financing mechanism for many types of urban infrastructure, including transportation. The parties involved in a PPP focus on providing needed services rather than merely selling equipment. In the case of high-speed rail project PPPs, private-sector technology suppliers take an equity stake, sharing responsibility with the other partners who also absorb the risk for the entire duration of the system and offer long-term perspective. There are also advantages for the public sector in a PPP. Taxpayers reap the benefits of the government transferring operating and maintenance among other long-term risks to the private sector, as well as receiving diligent upfront project analyses.

Note: “PPP’s” are “public-private partnerships”

#### ( ) Private investment key – *long-term* profit not enough

McEwen ‘11

(Bill –staff of Fresno Bee – Fresno Bee – Private investors will have final say on rail – May. 04, 2011

http://www.fresnobee.com/2011/05/04/2376440/private-investors-will-have-final.html)

High-speed rail supporters counter that these systems are long-term investments returning big dividends for society -- no different than dams, highways and airports. While this may be true, high-speed rail -- as writ in California -- requires private investment. Private investors typically want quick returns and, if possible, government guarantees.

### 1AR – Fed key, Debt Servicing Extensions

#### ( ) Perception of Debt Servicing

#### Covering debt servicing key to private investment in HSR

GAO ‘93

Government Accountability Office: Report to the House Committee on Energy and Commerce. High-Speed Ground Transportation – November 17th –

http://gao.justia.com/department-of-transportation/1993/11/high-speed-ground-transportation-rced-94-29/RCED-94-29-full-report.pdf

Second, the large scale of proposed hsgt projects increases the likelihood that construction delays and cost overruns could undermine financial feasibility. Generally, projects that issue debt to raise capital will need to begin repaying the debt by a specific date. Private investors fear that unless adequate revenues or other cash are available on that, date, the project could go into default Furthermore, system start-up delays cause interest to accrue on outstanding debt, further increasing the project's total cost, Third, large-scale projects like hsgt systems face a number of political risks, in part because many jurisdictions at different levels of government will be involved in issuing the permits and other clearances needed to build and operate the systems. According to an Amtrak official, improvements to the NEC between New York City and Boston will be subject to several clearances, including an environmental impact statement and public hearings. States must certify that the project complies with the Coastal Zone Management Act. The Clean Water Act requires that the states and Army Corps of Engineers certify that the project is consistent with state and federal regulations. Finally, the project could be subject to local zoning, conservation commission, and historical preservation clearances from up to 41 communities between New Haven and Boston. These risks impose obstacles for hsgt planners in obtaining commercial lines of credit or attracting lenders. Equity investments are often needed before commercial lines of credit can be obtained or investment-grade debt can be issued However, equity investors often demand high rates of return and a relatively quick payback, while lenders generally seek secure investments with guaranteed returns over time, hsgt projects do not meet either of these requirements. In light of these risks, members of the financial community familiar with large-scale projects told us that unless the federal government assumes a major role in hsgt development, thereby reducing the perceived investment risks, private capital generally will not be available.

Note: “HSGT” stands for “High-Speed Ground Transportation” and is a term that’s inclusive on “High-Speed Rail” in this report.

#### Fed involvement assuages debt servicing fears

Mead ‘93

Statement for the Record of Kenneth M. Mead, Director. Transportation Issues. Resources. Community, and Economic Development Division for the General Accounting Office – “HIGH SPEED GROUND TRANSPORTATION” – Testimony Before the Subcommittee on Surface Transportation. Committee on Commerce. Science, and Transportation. United States Senate – May 20th – p. 6-7

NUMEROUS HSGT PROJECTS HAVE BEEN PROPOSED BUT NOT BUILT BECAUSE OF LACK OF FUNDING Plans to introduce high-speed rail systems have been proposed in more than a dozen locations around the nation, as shown in figure 1. source: High-Speed Rail/Maglev Association The federal government has funded Aintrak'3 Northeast Corridor Improvement Program and has provided the first $5 million of a total of $30 million for grade-crossing improvements, a component of incremental improvements along five rail corridors. A HSGT project in Texas proposes to link the cities of Houston, Dallas, and San Antonio, using TGV technology. Maglev proponents planned to build a system connecting Anaheim, California, with Las Vegas, Nevada. In Florida, a 13-5 mile maglev system is planned to connect the Orlando International Airport with International Drive, the location of numerous hotels serving the area's tourist attractions. However, these HSGT projects—all of which have sought funding from the private sector--have not attracted sufficient investment to move beyond the planning stages. Members of the financial community told us that the private sector has been unwilling to commit financial resources to HSGT because of a number of perceived risks. Because of the lack of experience with HSGT in the United States, investors believe that ridership and revenue forecasts may be exaggerated. The financial community typically discounts traffic forecasts for demand-sensitive start-up projects like toll roads and, presumably, HSGT projects. Furthermore, investors require that projects generate sufficient revenues to cover their debt service needs, including a substantial cushion to cover contingencies. For some projects, this cushion could be as high as 150 percent of the actual debt service costs. Unless the financial community believes that HSGT projects can generate enough revenues to both cover debt service and provide a return on investment commensurate with the risks, it is unlikely that private capital will be forthcoming. Investment bankers with whom we spoke said that in view of the perceived risks of HSGT, major private-sector investment is unlikely without a considerable increase in federal commitment.

### 1AR – A-to “Private Sector not interested in HSR investment”

#### ( ) Private sector is willing to participate if the situation is right.

Hauck ‘10

Oliver Hauck is chief executive officer of Siemens Mobility USA, a division of Siemens Industry Inc. Milwaukee-Journal Sentinel – April 19th – http://www.jsonline.com/news/opinion/91548664.html

Given the current economy, another question must be raised: Is there an appetite among private capital providers to fund high-speed rail where there are sound ridership projections and cost estimates? Yes, it is out there. The large scale of the high-speed corridor projects will require a diverse mix of private-sector financing instruments, ranging from commercial bank project finance loans to capital markets instruments. And given the number of potential U.S. projects, federal, state and local funding programs cannot come close to covering the entire cost. Despite the financial crisis, in the U.S. a number of recent transportation projects successfully used public-private partnership components and saw private investors and lenders step up to get involved. A couple notable projects include the I-595 highway improvements in Florida and the Denver FastTracks Eagle, a rail sector project that is currently in the tender process. The Midwest Corridor high-speed rail project represents a great opportunity for America. And it, like the Florida and California proposals, can be developed into a well thought-out and structured project that benefits the community through the incorporation of public-private partnerships.

### 1AR – A-to “Squo already attracts private sector HSR investment”

#### ( ) Status Quo HSR efforts are insufficient at promoting private sector interest

Geddes ‘11

R. Richard Geddes – Associate Professor, Department of Policy Analysis and Management at Cornell University – Testimony before the House Committee on Transportation and Infrastructure – “The Federal Railroad Administration’s High Speed and Intercity Passenger Rail Program: Mistakes and Lessons Learned” – December 6, 2011 – available at: http://www.aei.org/files/2011/12/19/-geddes-12612-testimony-on-high-speed-rail\_145334197427.pdf

High-speed passenger rail is a potentially viable service that could offer the public a valuable alternative to current transportation options. The above analysis suggests that precious taxpayer dollars should be allocated to where they will yield the greatest benefit, which is likely to be through improvements to the Northeast Corridor. Those improvements will be costly. To mitigate taxpayer costs, the private sector should be engaged as a full partner through public-private partnerships. Unfortunately, recent attempts to expand and improve HSR in the United States have not created the institutional structure necessary to attract the available private investment.