# Bus Negative

## States C-plan

#### States can empirically keep the U.S. ahead in fuel cell technology

Curtin et al 11

Sandra Curtin, Jennifer Gangi and Elizabeth Delmont of Fuel Cells 2000, an activity of Breakthrough Technologies Institute in Washington, DC STATE OF THE STATES: FUEL CELLS IN AMERICA http://www.fuelcells.org/wp-content/uploads/2012/02/2011-State-of-States-July-2011-update.pdf

America’s fuel cell footprint is growing tremendously, helping to keep the United States at pace - and even ahead in some applications - of determined and increasing international competition.¶ In April 2010, Fuel Cells 2000 released State of the States: Fuel Cells in America, a report cataloguing the span of fuel cell and hydrogen activity and policies of all 50 states. In just over a year, the states have greatly expanded the playing field for the fuel cell industry, in some cases by adopting fuel cell friendly policies, but in most cases providing a marketplace for fuel cells and fuel cell powered systems.¶ The Message is More¶ Fuel Cells 2000 has found impressive movement on many market fronts, with significant numbers reported from both the states and fuel cell industry. There were more sales of primary fuel cell power and combined heat and power (CHP) systems to grocery and retail markets, corporate sites and production facilities, local governments, municipalities, schools and universities in the U.S.¶ • More than 50 MW of stationary power either installed or recently purchased.¶ • A dozen current or soon to be opened fuel cell installations in the megawatt (MW) range - between 1.2 and 2.8 MW in size each - in California alone.¶ • Repeat customers such as Coca-Cola, Cox Communications, and Whole Foods.¶ • Installations in new states such as Arizona, New Mexico and Wisconsin.¶ More fuel cell-powered forklifts were deployed at warehouses and distribution centers.¶ • The U.S. is the world leader in fuel cell forklift deployments.¶ • More than 1,500 forklifts deployed or ordered, in more than a dozen states.¶ • Repeat customers that include Coca-Cola (CA, NC), Walmart (OH, MO and Alberta, Canada), and Sysco (PA, TX, VA).¶ • New customers such as BMW (SC), EARP Distribution (KS) and WinCo Foods, LLC (CA).¶ More fuel cell buses and light duty vehicles were placed on American roadways.¶ • 30 fuel cell buses were either put on the road or plans were announced for deployment in numerous states, including AL, CA, CT, DE, IL, MA, MI, OH, SC, TN and TX.¶ • Honda and Daimler began leasing programs in California, and Toyota announced it will place more than 100 of its FCHV-adv fuel cell vehicles with universities, private companies and government agencies in both California and New York over the nextthree years. Two Toyota FCHV-adv vehicles have been delivered to New York, and 10 have also been delivered to Connecticut.¶ More hydrogen fueling stations were opened, serving light duty vehicles, buses and fuel cell forklifts.¶ • By the end of 2011, California plans to have at least 20 public stations operating or under construction, with California Energy Commission support for more stations down the pike.¶ • New hydrogen stations were opened in Delaware, New York, and South Carolina to fuel cars and buses.¶ • New private hydrogen fueling stations were opened at warehouses around the country to serve fuel cell-powered forklifts.¶ • Air Products reports 347,000 hydrogen fuelings per year at its fueling stations and hydrogen dispensers.

#### State procurement can drive innovation for commercialization of new technologies

Conway 12

Danielle Conway. Michael J. Marks Distinguished Professor of Business Law; Director, Hawai'i Procurement Institute¶ Sustainable Procurement Policies and Practices at the State and Local Government Level¶ <http://www.law.hawaii.edu/sites/www.law.hawaii.edu/files/webFM/Faculty/Chapter%203_Conway.pdf>

As market actors with massive purchasing power, state and local governments have considerable potential to encourage and drive market innovation. The federal government offers examples for state and local governments in this regard. The federal government has historically embraced its role as a promoter of new environmental initiatives and has used its procurement system to this end.26 As program responsibilities shift from the federal government to state and local governments, the latter entities are expected to promote new initiatives and to keep pace with the rate of technology development in the commercial marketplace. Accordingly, state and local governments are obliged to innovate by encouraging the creation of markets for green technology, products, and services.¶ In order to fulfill this obligation, state and local governments are being asked to use their large procurement budgets to seek out new innovative solutions to existing and projected agency needs. In pursuing new solutions for existing and projected needs, state and local governments can spur demand for both new and prototype green technologies, products, and services. In this respect, state and local governments are ¶ serving as "launch customers" in three distinct scenarios:¶ • Driving research and development for currently unavailable technologies;¶ • Serving as beta purchasers of prototype technologies; and/or¶ • Becoming users of available technologies that have yet to achieve market penetration.27¶ Sustainable procurement, the implementation of strategies that expressly address and integrate environmental, social, and economic factors in policy and acquisition planning, is central to state and local government requirements to manage and distribute scarce resources and to spend taxpayer dollars in a fiscally responsible manner. In essence, using state and local government procurement to create markets and produce demand for green technologies, especially those that exist but have yet to reach acceptance in the market, promotes green procurement policy as well as demonstrates state and local government leadership in sustainability efforts. Thus, to drive market creation, state and local governments should be encouraged to do the following:¶ • Engage in market research to identify industry capability to supply green technologies, products, and services;¶ Engage in acquisition planning to establish performance-based specifications30 that do not restrict innovation or disadvantage local suppliers of green solutions;¶ • Encourage the commercialization of green technologies, products, and services that have yet to penetrate the market;¶ • Support and maintain lines of communication with suppliers to stay abreast of innovations in green technologies, products, and services;¶ • Encourage a culture and philosophy of green markets; and¶ • Collaborate with industry to stimulate a market for green technologies, products, and services.¶ Exercising leadership in creating markets for green technologies, products, and services is consistent with the view that the state and local government procurement func¬tion is vital to promoting strategic social reform for the protection of the environment.

#### Empirically states can do bus projects

Go BRT 08

<http://www.gobrt.org/funding4.html>

State and Local Funding

Most major transit capital projects in the U.S. use federal funding supplemented by state and local dollars. However, some are built entirely with state and local funds. To date, most US BRT and rapid bus projects have used state and local dollars as the required federal match, but a few have been built almost exclusively with state revenues:¶ -- The Los Angeles Orange Line relied upon two California transit assistance programs and sales tax revenue.¶ -- Boston's Silver Line Washington Street service was built primarily with state highway funds.¶ -- Community Transit in Snohomish County, Washington is building a BRT corridor primaily with state and transit agency dollars, with only 20% of the budget from federal sources.¶ State and local funding sources¶ A 2006 APTA report found that most state funding for transit projects comes from: general funds, gas taxes, motor vehicle/rental car taxes, bond proceeds, vehicle registration fees, or general sales taxes. Most local revenue for transit comes from sales or property taxes, or general revenues.¶ Most BRTs to date have relied on these conventional state and local funding sources, but a few have used less conventional sources. For example, Oregon's Lane Transit District (LTD) receives funding through a local payroll tax. This provided the required local match to build the EmX Franklin Corridor BRT. LTD reports that this funding mechanism corresponds well with increased demand for transit service, by providing increased revenue during economic booms and lower revenue in downturns.¶ State and local capital infrastructure or maintenance budgets can be an important source of BRT project funds. Because BRT can operate on mixed-use roadways, agencies can tap into state and local commitments for road reconstruction, streetscape improvements, and traffic signal upgrades.¶ The Cleveland Regional Transportation Authority is using this strategy for its Euclid Corridor BRT project. Along with building the BRT, the agency is doing a complete re-build along a portion of Euclid Avenue, with roadway reconstruction and pedestrian zone enhancements. To support this, the city's is spending approximately $20 million on an upgrade of vaults, water and sewer lines along the renovated corridor. The state DOT's capital fund is spending $20 million for roadway improvements.¶ As described above, the Massachusetts Highway Department paid for most of the Silver Line Washington Corridor's road construction. This was because Washington Street is classified as a state highway. The state airport authority also paid for some of the Waterfront line's vehicles, since they serve Logan Airport.¶ Kansas City contributed about $4 million for street re-paving and traffic signal priority for the Kansas City Max line. The city directly awarded and managed these contracts through an agreement with the transit agency.¶ Voting to support transit¶ More states are sponsoring transit ballot initiatives to support transit investments and operations. APTA reported that, in 2006, voters in 13 states approved 21 out of 30 state and local transit-related ballot initiatives authorizing expenditures approximating $40 billion. ¶ One successful referendum was the King County, Washington "Transit Now" initiative. The referendum called for a one-tenth of one percent sales tax increase to fund major bus service improvements. The initiative will bring rapid bus to five county corridors and expand bus service by up to 20 percent. The county projects that Transit Now will create 21 million new annual bus rides in the next ten years.¶

#### State procurement can drive policy

Conway 12

Danielle Conway. Michael J. Marks Distinguished Professor of Business Law; Director, Hawai'i Procurement Institute¶ Sustainable Procurement Policies and Practices at the State and Local Government Level¶ <http://www.law.hawaii.edu/sites/www.law.hawaii.edu/files/webFM/Faculty/Chapter%203_Conway.pdf>

First, spending power at state and local government levels increases the profile of policymakers and procurement professionals who attempt to implement sustainable procurement as part of their public function. While too difficult to project accurately, it is conceivable that among the 50 states, six territories, and 87,525 local governments,4 state and local government procurement spending may be roughly valued at approximately $1.5 trillion5 annually for the purchase of goods, supplies, equipment, services, and construction. The dollar value of spending by state and local governments has risen significantly since 1979, when the estimate for spending was projected to be only $750 billion.6 The unprecedented growth of state and local procurement markets can be attributed largely to the federal government s policies shifting program responsibilities more and more to the states.7 State and local governments have the capacity to impact and drive public policy because of spending directed at implementing collateral policies such as sustainable procurement.

## Politics links

### Plan Popular Links

#### Bus programs are popular with conservatives

Weinstock et al 11

Annie Weinstock, Walter Hook, Michael Replogle, and Ramon Cruz of the Institute for Transportation and Development Policy in New York¶ May 2011¶ Recapturing Global¶ Leadership in¶ Bus Rapid Transit http://www.itdp.org/documents/20110526ITDP\_USBRT\_Report-LR.pdf

Fiscal conservatives and fiscally-conservative¶ organizations, such as the libertarian Reason Foundation, can be strong allies in support for¶ BRT[Bus Rapid Transit]. Many fiscal conservatives recognize the need¶ for mass transit or accept that the government¶ will continue to pursue it. But the high cost of rail¶ does not necessarily fit into a fiscally conservative¶ agenda. Thus, fiscal conservatives are likely¶ to be swayed by the case for an equal ( or better )¶ transit solution that is a fraction of the cost of¶ rail. The Reason Foundation, which already supports¶ BRT, states that “funds available for transit¶ will always be limited. It is therefore incumbent¶ on policymakers to invest these limited funds¶ in ways that produce the greatest value for the¶ taxpayer dollar.”1 Further, fiscal conservatives are¶ likely to support performance-based contracting¶ of BRT[Bus Rapis Transit operations over public monopoly operations.¶ The Reason Foundation also argues that¶ “competition is one of the best ways to improve¶ transit service.”2

#### Bus spending is popular even with people who would not use the system

Brosch 03

Gary Brosch¶ Executive Committee¶ National Bus Rapid Transit Institute; University of Florida ¶ Hearing: Bus Rapid Transit and Other Bus Service Innovations¶ Tuesday, June 24, 2003 <http://banking.senate.gov/public/index.cfm?FuseAction=Hearings.Testimony&Hearing_ID=c40237a7-97a6-42e2-93e5-29b6c307ee50&Witness_ID=bd0f6625-b1f2-4f79-9bbc-eeb2adc61072>

A surprising and important lesson we have learned is that non-users of transit respond positively to BRT systems. Let me tell you why this is the case and why it is important. Non-transit users like BRT [Bus Rapid Transit] systems because they are perceived as being cost-effective and highly utilized. No one likes to see near empty buses or trains. BRT systems operating with very frequent service, with mostly full buses, in a cost-effective manner are pleasing even to the non-user. Given the relatively low percentage of taxpayers riding transit, it is important that non-transit users perceive that their tax dollars are being used wisely. Without the support of non-users, local funding commitments would not be possible. With the support of BRT system users and non-users, local communities are finding BRT a truly win-win alternative.

#### Plan is popular--Unions will support bus transit expansion

Weinstock et al 11

Annie Weinstock, Walter Hook, Michael Replogle, and Ramon Cruz of the Institute for Transportation and Development Policy in New York¶ May 2011¶ Recapturing Global¶ Leadership in¶ Bus Rapid Transit http://www.itdp.org/documents/20110526ITDP\_USBRT\_Report-LR.pdf

Recently, new reformist leadership was elected to¶ the presidency of the Amalgamated Transit Union¶ ( ATU ), the branch of the Teamsters that works in¶ public transportation. ATU represents most of the¶ bus drivers in most cities in the United States. The¶ Transport Workers Union ( TWU ) represents bus¶ drivers only in New York City,4 Philadelphia, Houston,¶ and San Francisco.5 The rest belong to ATU.¶ Due to the current fiscal crisis, the union movement¶ is taking a new interest in BRT[Bus Rapid Transit]. There were¶ 1,100 layoffs in Chicago recently. Detroit lost¶ twenty-five percent of its bus drivers, and the¶ remainder took a pay cut. The entire bus system¶ of Clayton City, Georgia ( a suburb of Atlanta ) was¶ shut down, resulting in the loss of hundreds of¶ union jobs. Transit sector job losses are a major¶ issue in dozens of cities across the country.

### Plan Unpopular Links

#### Bus investments are unpopular

Freemark 11

Yonah Freemark is reporter for the Transport Politic http://www.thetransportpolitic.com/2011/05/25/the-silly-argument-over-brt-and-rail/

The real divisions between bus and rail are political: For those who would fight for improved transit systems in their cities, the truth is that rail projects do certainly have more appeal among members of the public. Thus a billion-dollar rail project may be easier to stomach for a taxpaying and voting member of the citizenry than a quarter-billion BRT line. While the former is qualitatively different than what most car drivers are used to, the latter mode is too easily lumped in with the city bus, which car users have already paid to avoid.¶ Better transit can come in many forms, but in a country in which the vast majority of people have no contact with public transportation this side of Disney World, making the argument for investments in more buses is difficult, to say the least. BRT is just not sexy until you’ve experienced it. Which is why the considerable success of BRT in South America has not convinced many U.S. cities to abandon their ambitions for more rail.

Pro Bus political forces are small and insignificant and swamped by groups opposing it

Weinstock et al 11

Annie Weinstock, Walter Hook, Michael Replogle, and Ramon Cruz of the Institute for Transportation and Development Policy in New York¶ May 2011¶ Recapturing Global¶ Leadership in¶ Bus Rapid Transit http://www.itdp.org/documents/20110526ITDP\_USBRT\_Report-LR.pdf

The chapter reviews political obstacles to the¶ development of BRT[Bus Rapid Transit] in the United States, including¶ lack of awareness of BRT in political circles,¶ politicians’ lack of control over transit systems, a¶ small, less politically-powerful transit-riding constituency,¶ and lack of a clear corporate lobby in¶ support of BRT. Organized labor has the potential¶ to be a strong proponent of BRT, and presents no¶ real obstacle to gold-standard BRT, but thus far¶ has played a minor role. Local citizens’ groups,¶ businesses, motorists, and concerned individuals¶ are also more empowered in the United¶ States than in other countries to oppose changes¶ proposed by the government, and this provides¶ another obstacle to BRT development.

#### Bus expansion is unpopular and will generate backlash from the suburbs and the cities

Weinstock et al 11

Annie Weinstock, Walter Hook, Michael Replogle, and Ramon Cruz of the Institute for Transportation and Development Policy in New York¶ May 2011¶ Recapturing Global¶ Leadership in¶ Bus Rapid Transit http://www.itdp.org/documents/20110526ITDP\_USBRT\_Report-LR.pdf

Many communities in the United States have¶ opposed new BRT[Bus Rapid Transit] lines in higher-income neighborhoods¶ because they feared it would bring¶ lower-income minorities and elevated crime rates¶ to the neighborhood, though groups will rarely¶ admit that this lies behind their opposition.¶ On the other side, some lower-income neighborhoods¶ have opposed BRT because of the concern¶ that they are getting a second-class solution.¶ This is especially the case in cities where higherincome¶ neighborhoods get light rail or where¶ lower-income communities have been promised¶ rail and are instead getting BRT.¶

#### Bus expansion is unpopular

Earl Blumenauer 11

Rep, Third Congressional District, Oregon

Opening letter In Annie Weinstock, Walter Hook, Michael Replogle, and Ramon Cruz of the Institute for Transportation and Development Policy in New York¶ May 2011¶ Recapturing Global¶ Leadership in¶ Bus Rapid Transit http://www.itdp.org/documents/20110526ITDP\_USBRT\_Report-LR.pdf

While bus rapid transit has worked well in large and medium-sized cities from Bogotá, Colombia to¶ Curitiba, Brazil to Guangzhou, China, it is less well known in the United States. BRT[Bus Rapid Transit is sometimes met¶ with skepticism and resistance from transportation planners and engineers who are unfamiliar with¶ how to build high-quality BRT systems, since we have limited examples here at home. Citizens too¶ are often concerned about dedicating the requisite street space to buses.

### Rust Belt Links

#### Obama will lose now because of Unemployment

Cafferty 7-19-12

Jack Cafferty- CNN

http://caffertyfile.blogs.cnn.com/2012/07/19/should-the-economy-prevent-president-obama-from-winning-a-second-term/?hpt=hp\_t2

Storm clouds are gathering for President Barack Obama.¶ The latest New York Times/CBS News poll shows Mitt Romney with a 1-point lead over Obama with 4% of voters undecided. And when asked about the economy, the difference is even more glaring. Romney holds an 8 percentage point lead over the president. Just 39% of those surveyed approve of the president's handling of the economy. That's down from 44% in April.¶ More bad news for the president:¶ In the crucial battleground of Virginia, Romney has closed a 12-point gap with Obama, and the two are now tied, according to the latest Quinnipiac University poll. In 2008, Obama became the first Democrat to win that state since 1964.¶ Suffice to say that if there is no significant improvement in the economy - and it better start soon - Obama could have problems in Virginia and elsewhere.¶ The jobs picture remains bleak. Unemployment has been above 8% for 41 consecutive months now. Forty-one months. This morning, first-time jobless claims jumped sharply - up 34,000 from the previous week.¶ A new Gallup Poll shows Americans overwhelmingly say creating "more or better jobs" is the most important thing the government can do to jump-start the economy. That’s why some of the president's words and actions aren't helping much.

#### Obama will lose the rust belt now and it will cost him the election

Feehery 6-20-12

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While tactically this segmented strategy may be smart, strategically it could turn out to be a disaster for the President. It has become clear that the Obama campaign is giving up on white, working class voters. They don’t like the Obama very much, and with the economy continuing to be a basket case, they blame him for their economic troubles.¶ Making specific appeals to African-Americans, gays and Hispanics doesn’t help win white voters. And this can hurt in especially in the Rust Belt. Pennsylvania is 80 percent white. Michigan is 76 percent white. Wisconsin is 83 percent white. Iowa is 88 percent white.¶ If Obama gets less than 30 percent of the white vote in these states, he is toast. And right now, the trend lines are not looking good for him.¶ On the other hand, Mitt Romney has be careful not to alienate the entire Hispanic community. Florida’s non-Hispanic white vote percentage is only 58 percent. Texas, shockingly, is only 45 percent.¶ This tells me two things.¶ First, Obama is in big danger of losing the Rust Belt in this coming election.

#### Lack of job stimulation will cost Obama the election

Thomasson 7-12-12

Dan K. Thomasson, former editor of the Scripps Howard News Service

<http://www.reporternews.com/news/2012/jul/13/dan-k-thomasson-82-percent-unemployment-obamas/>

The latest job figures make it increasingly easy to see a change in the White House in November based on an economy that can't seem to pull itself out of the doldrums and a president who insists he's not to blame. With a few more months of substandard job creation, how likely is it that President Barack Obama will be the only incumbent since Franklin D. Roosevelt to survive an unemployment rate higher than 7.2 percent?¶ The Labor Department's announcement Friday of just 80,000 new jobs in June — 20,000 less than had been forecast — didn't budge the overall jobless rate off the current 8.2 percent mark, meaning unemployment has been stuck above 8 percent for 41 months. The stock market responded negatively to the jobs number.¶ Some 13 million Americans are out of work, and a whole bunch of them have given up looking. Time's a-wasting for any kind of a serious turnaround that might save this administration. If history is any judge, it doesn't matter much whether Mitt Romney can do any better. A whole lot of voters — more every day — will be willing to roll the dice in Romney's favor.¶ Now we are told that the Federal Reserve is laying plans for more economic stimulation, under the assumption that it may be necessary to keep away the wolves of a second recession.¶ What exactly the Fed would do is not clear — take another shot at lowering interest rates, perhaps. But some economists don't think the Fed has enough arrows left in its quiver to matter much.¶ There are some positive signs in all this. The housing market limped up slightly and some sectors showed minor gains in employment. Health care and manufacturing had 13,000 and 11,000 new jobs, respectively. But all in all, it was a bad day for the president and his campaign, made worse by a realization that too much time has been spent worrying about the health care reform law and its big price tag.¶ If you doubt the impact the economic numbers have on the election, go back to 1992. The first George Bush had an 89 percent approval rating after Desert Storm, but it declined sharply later that year to 36 percent when Democratic challenger Bill Clinton's campaign tried to show the president lacked concern over hard times. As Clinton campaign strategist James Carville said of the key issue, "It's the economy, stupid."¶ In the current campaign, Romney wasted no time in charging that the president's policies had led to the continued anemic outlook.¶ The 200,000-plus jobs created a few months ago would have to be repeated for three years, the experts say, before the economic picture could be as rosy as before 2008.¶ You have to wonder what the president can do at this stage to overcome the situation. He has called for more spending on infrastructure that would bolster the public employee numbers. Good luck with that from a Congress in which Republicans and even some Democrats now are committed to cutting spending. Besides, don't look for any relief from Capitol Hill until after November.¶ Romney contends the job market is being curtailed by corporate tax rates that are too high and U.S. trade policy that is too restrictive. He also lambasted the administration for overregulation, a common complaint among Republicans.¶ Obama's tour through the hard-hit Rust Belt states has been predictable. He has taken credit for policies that he claims saved the auto industry and he has talked about such elusive goals as tapping into the American character. It is difficult, however, to imagine how this will sell among people who have lost their jobs or fear they are about to and see no way out of the dilemma.¶ This president is in what the first Bush liked to refer to as "deep doo-doo." The pocketbook issue is the only thing that matters.

#### Unemployment in the rust belt is the key to a Romney win

Stirewalt 6-18-12

Chris Stirewalt is digital politics editor for Fox News ¶ Romney’s Path to Presidency Runs Through Rust Belt¶ http://www.foxnews.com/politics/2012/06/18/romneys-path-to-presidency-runs-through-rust-belt/#ixzz21Tyf99Xe

It’s no accident that Mitt Romney’s first barnstorming bus tour as de facto Republican nominee takes him through the Rust Belt. Economically distressed, packed with working-class white voters and politically volatile, these states represent Romney’s best chance for a victory in the fall.¶ While Romney must certainly win Florida and reclaim the two southern states snatched by President Obama in 2008, Virginia and North Carolina, Romney has the most room to grow in the Rust Belt.¶ During his five-day swing Mr. Romney’s bus will be driving through eight states worth 105 electoral votes, all won by Obama. While Indiana is all but certain to switch back to red, and Ohio and Iowa stand out as true swing states, most of the rest promise to be tough tests for Romney, particularly Pennsylvania, Michigan and Wisconsin.¶ But there is more potential in this region for Romney than any other GOP nominee in a generation. The key to winning these states for Republicans in the modern era is to forge a coalition between moderate suburbanites and more conservative rural and small-town voters.¶ With antipathy toward Obama very strong in rural counties and Romney a candidate seemingly tailor-made for suburban voters, that coalition may be in reach for the GOP in a way not seen since the Reagan era.¶ The Rust Belt was where the Republicans got wiped out in 2006 and 2008 House elections, but also where the GOP staged its strongest comeback in 2010.¶ More than half of the 35 seats reclaimed by Republicans in the 2010 election from Democratic victories in the previous two cycles came in the states on Romney’s circuit and 22 of the 63 overall Republican pickups nationwide came from these states along Interstate 70 and to its north.¶ Obama says his target region is the Mountain West, partly a function of the fact that his campaign manager hails from the region and has staked so much on holding and gaining in that part of the country. Obama’s move to grant temporary amnesty to illegal immigrants who came to America as minors is evidence of how far the president is willing to go to keep Colorado, Nevada and New Mexico in his column and try to make Republicans waste resources in Arizona.¶ President Obama also needs to play some defense out West, too. Since Obama is almost guaranteed to give back 26 electoral votes from North Carolina and Indiana, Romney could really box in the president if he were to pluck another 15 electoral votes from Nevada and Colorado away from the blue team.¶ But there are only 20 electoral votes up for grabs in states beyond the Mississippi River Valley.¶ With Obama staggering a bit after the opening round of the general election fight, the political universe is already shrinking down to a trapezoidal swatch of the nation from Richmond, Va. to Des Moines, Iowa to Milwaukee, Wis., to Manchester, N.H. and back to Richmond. The residents of this quadrangle will see more of the candidates (and political ads) than anyone else.¶ Florida, with as many electoral votes now as shrinking New York, will remain a strong temptation for Obama, but the real battleground for this election will be the same as it has been for three consecutive cycles. And at the heart of it is the Rust Belt.¶ The demographics and economic conditions of these states bode well for Romney. After 40 years of economic decline, the Panic of 2008 and resulting recession has proven particularly painful in these states. Areas with shrinking populations and low-growth economies are generally shielded from the worst of a downturn, but also often have the hardest time regaining even nominal growth.¶ There are success stories – a natural gas boom in some regions to the east and strong, stable job growth in Iowa – but the overall picture is of a region pushed to the brink by a perpetually lousy economy.¶ Romney’s message is that Obama has made the recession worse and longer than necessary by adding an expensive, complex health-insurance entitlement program and new environmental and labor restrictions onto an already sagging economy.

#### The plan would create an employment boom in rust belt swing states

Crowley 09

Environmental Defense Fund Environmental Defense Fund has linked science, economics, law and innovative private-sector partnerships to create breakthrough solutions to the most serious environmental problems.

http://world-wire.com/news/0910260001.html

Increasing government investment in conventional and green transit bus systems would create high-quality manufacturing jobs, especially in states with double-digit unemployment rates, while significantly cutting auto-related global warming pollution, according to a new report released today.¶ The high unemployment states include: California (12.2%), Indiana (10%), Michigan (15.3%), and Ohio (10.1%). The study is timely because Congress is debating renewal of the federal transportation bill, which provides funds to help local bus systems purchase equipment. The current transportation bill expired in September, but was extended until later this month, and is expected to be extended longer as Congress continues developing the renewed bill.¶ Current U.S. transportation policy favors highway spending and deemphasizes public transit, so bus orders are small and sporadic, making it difficult for the bus industry to grow, according to the study. “If federal, state, and local policy were to shift to a clear, sustained commitment to public transit, the nation would have the manufacturing capability to meet the resulting increased demand for transit buses,” the study concludes.¶ Entitled “Public Transit Buses: A Green Choice Gets Greener,” the study is the 12th installment of the series, “Manufacturing Climate Solutions: Carbon-Reducing Technologies and U.S. Jobs,” prepared by researchers at the Duke University Center on Globalization, Governance & Competitiveness and sponsored by Environmental Defense Fund.¶ While domestic uncertainty about transit funding stymies bus manufacturing for U.S. markets, the study notes that U.S. companies still have managed to establish themselves as global leaders in hybrid bus manufacturing. However, European firms are rapidly catching up, in part because of their governments’ long-term commitment to public transit.¶ The United States was an early leader of compressed natural gas (CNG) transit bus technology development, the most common type of green bus worldwide, and already has an extensive refueling infrastructure for CNG, with CNG pipelines connecting the entire continental United States. Bus fleets throughout the United States have incorporated CNG, including the Los Angeles Transit Authority, which operates 2,200 CNG buses, comprising 88 percent of its fleet. However, diesel-electric hybrid buses are rapidly overtaking CNG as the primary green bus option in the United States.¶ Early testing for hydrogen-electric hybrids is ongoing in California, at Sunline Transit, Santa Barbara Valley Transit Authority and AC Transit, and in Connecticut at CTTRANSIT. Proterra, a firm developing an electric hybrid transit bus, plans by June 2010 to have infrastructure in place for the Foothills Transit Agency, operating in the San Gabriel and Pomona Valleys in California, with four more cities to come online afterwards.¶ U.S. manufacturing for transit buses and components is located in nearly every state in the eastern United States, with the highest concentrations in Indiana, Michigan, Ohio and Pennsylvania.¶ “Many of these jobs are in Midwestern states deeply affected by the recession, where manufacturing employment and capacity, especially in the motor vehicle industry, are crucial for maintaining a leadership position throughout the recovery period and beyond,” said Marcy Lowe, lead author of the study and a research associate at the Duke University Center on Globalization, Governance & Competitiveness.

#### The plan creates an immediate increase in jobs in critical rust belt swing states Pennsylvania, Michigan and Ohio

Lowe et. al. 09

Marcy Lowe, Bengu Aytekin and Gary Gereffi of the Center on Globalization, Governance & Competitiveness, an affiliate of the Social Science Research Institute at Duke University¶ Public Transit Buses: A Green Choice¶ Gets Greener¶ http://www.cggc.duke.edu/environment/climatesolutions/greeneconomy\_Ch12\_TransitBus.pdf

It is possible, however, to make useful job estimates based on general rules of thumb in the¶ industry. For example, the leading transit bus OEMs employ approximately one employee per¶ finished transit bus, in a U.S. market estimated by the FTA’s National Transit Database at 5,000¶ to 5,500 buses annually. The bus value chain consists of supplied components, however, such¶ that a multiplier can be applied in order to approximate total employment. According to industry¶ interviews, a multiplier of 5 to 6 appears to be appropriate for the bus industry, higher than the¶ multiplier of 4 often used for the motor vehicle industry as a whole. Applying the bus multiplier,¶ total employment in the bus industry is likely to amount to 25,000 to 33,000 jobs. Many of these¶ jobs do not entail work exclusively on bus components but include overlap with other segments¶ of the motor vehicle industry.¶ The geographic distribution of selected U.S. manufacturing locations for transit buses and¶ components is shown in Figure 5. These jobs are located in nearly every state in the eastern¶ United States, with the highest concentrations in Indiana, Michigan, Ohio and Pennsylvania.¶ Several OEMs and firms involved in tires, windows, lighting and aftermarket are found in¶ California. North Carolina and South Carolina each have a number of relevant manufacturing¶ locations in nearly all segments of the value chain, including major firms such as Daimler Buses¶ North America (Orion), Freightliner Custom Chassis, Cummins, and Michelin.

#### Employment in the Rust Belt is key to the election

Kotkin 6-25-12

Joel Kotkin is a presidential fellow in urban futures at Chapman University¶ Despite Obama’s Policies, The Rust Belt’s Revival Could Save His Campaign¶ http://www.thedailybeast.com/articles/2012/06/25/despite-obama-s-policies-the-rust-belt-s-revival-could-save-his-campaign.html

The health of the manufacturing economy may prove even more important to the president’s reelection than the Dow Jones index. If industrial growth softens or goes into reverse—for instance, if Europe’s economic troubles cross the Atlantic—the Midwest will feel the effects first.¶ And if the Rust Belt suffers, Obama’s path to a second term gets that much tougher.

#### Improving status for rust belt workers equals an Obama win

Kotkin 6-25-12

Joel Kotkin is a presidential fellow in urban futures at Chapman University¶ Despite Obama’s Policies, The Rust Belt’s Revival Could Save His Campaign¶ http://www.thedailybeast.com/articles/2012/06/25/despite-obama-s-policies-the-rust-belt-s-revival-could-save-his-campaign.html

Yet improving conditions for those workers—particularly in the industrial heartland—could save his flagging presidency.¶ The industrial zone’s four key states—Michigan, Ohio, Wisconsin, and Pennsylvania—constitute the most critically contested territory in this year’s contest. Fifty-four electoral votes are at play here, with Pennsylvania’s 20 votes alone equaling all those at stake in the much-ballyhooed battleground of the Intermountain West (Colorado, Nevada, and New Mexico).

## Case Defense

#### Time Frame for transition is decades away

Ogden 11

Edited by Joan Ogden and Lorraine Anderson Institute of Transportation Studies¶ University of California, Davis SUSTAINABLE TRANSPORTATION ENERGY PATHWAYS¶ A Research Summary for Decision Makers¶ http://steps.ucdavis.edu/steps-book/Introduction%20-%20Imagining%20the%20Future%20of%20Transportation.pdf

How fast can we make a transition to alternative fuels and vehicles? Transitions in the¶ transportation sector take a long time, for several reasons.¶ First, passenger vehicles have a relatively long lifetime (15 years average in the United¶ States). Even if a new technology were to rapidly capture 100 percent of new vehicle¶ sales, it would take a minimum of 15 years for the vehicle stock to turn over. In practice,¶ adoption of new vehicle technologies occurs much more slowly; it can take 25 to 60 years¶ for an innovation to be used in 35 percent of the on-road fleet.2 For example, research¶ into gasoline hybrid electric vehicles (HEVs) in the 1970s and 1980s led to a decision to¶ commercialize in 1993, with the first vehicle becoming available for sale in 1997. HEVs still¶ represent only about 3 percent of new car sales nationally in the U.S., 5% in California¶ and fewer than 0.5 percent of the worldwide fleet. This slow turnover rate is also true for¶ relatively modest technology changes such as the adoption of automatic transmissions or¶ fuel injection. The time frame for new technologies relying on electric batteries, fuel cells,¶ or advanced biofuels could be even longer since they all need further RD&D investment¶ before they can be commercialized.¶ The steps needed to commercialize a new vehicle technology add up to a long time horizon. An alternative¶ vehicle technology for which research and development began in 2000 might not reach 50 percent market¶ penetration or hope to capture 75 percent of new vehicle sales until 2050. Source: Joshua M. Cunningham,¶ Sig Gronich, and Michael A. Nicholas, Why Hydrogen and Fuel Cells Are Needed to Support California¶ Climate Policy, UCD-ITS-RR-08-06 (Institute of Transportation Studies, University of California, Davis,¶ 2008).Second, changing the fuel supply infrastructure, especially if this means switching on¶ a massive scale from liquid fuels to gaseous fuels or electrons, will require both time¶ and a signifi cant amount of capital. Historically, major changes in transport systems such¶ as building canals and railroads, paving highways, and adopting gasoline cars have taken¶ many decades to complete. Transitions will require developing new supply chains using¶ renewable or other low-carbon sources and replacing existing fossil fuel and electricity¶ plants. Such paradigm shifts will require close coordination among fuel suppliers, vehicle¶ manufacturers, and policymakers. It takes 30 to 70 years to fully implement new infrastructures, judging by historical data on the time it has taken¶ for major U.S. transportation infrastructures to reach their peak market penetration. Source: Jesse H. Ausubel,¶ Cesare Marchetti, Perrin Meyer, Toward Green Mobility: The Evolution of Transport, European Review,¶ Vol. 6, No. 2, 137-156 (1998). Posted with permission on http://phe.rockefeller.edu/green\_mobility/.¶ Each fuel/vehicle pathway faces its own transition challenges, which can vary with¶ region and can slow market penetration. These include infrastructure compatibility,¶ consumer acceptance (based on, for example, limited range or long recharging times¶ for batteries or and limited initial infrastructure for hydrogen fuel cell vehicles), cost,¶ availability of primary resources for fuel production, greenhouse gas emissions, and other¶ environmental and sustainability issues (such as air pollutant emissions, and water, land,¶ and materials use).

#### China won’t win now—fuel cell progress is slowing

Business Insider 4-24-12

Here's Why China Failed In Its Quest To Dominate The Electric Car Industry¶ http://articles.businessinsider.com/2012-04-24/news/31391176\_1\_electric-car-byd-electric-vehicle

China's leaders are finding it's a lot tougher to create a world-beating electric car industry than they hoped.¶ In 2009, they announced bold plans to cash in on demand for clean vehicles by making China a global power in electric car manufacturing. They pledged billions of dollars for research and called for annual sales of 500,000 cars by 2015.¶ Today, Beijing is scaling back its ambitions, chastened by technological hurdles and lack of buyer interest. Developers have yet to achieve breakthroughs and will be lucky to sell 2,000 cars this year, mostly taxis. The government has hedged its bets by broadening the industry's official goals to include cleaner gasoline engines.¶ The government has repeatedly changed targets because the "technology isn't advancing quite as fast as people had hoped," said Joe Hinrichs, Ford Motor Co.'s president for Asia, at this week's Beijing auto show.¶ The government has yet to lower sales goals that ramp up to 5 million vehicles a year by 2020. But officials including Premier Wen Jiabao started acknowledging last year that progress was slow and developers need to improve quality instead of rushing models to market.¶ About 13,000 all-electric and other alternative energy vehicles are being tested in 25 cities, but that is "still small despite government subsidies," the deputy director of the Ministry of Science and Technology's electric vehicle bureau, Zhen Zijian, said in March, according to the business magazine Caixin.¶ China's most advanced developer, BYD Co., in which American investor Warren Buffett's Berkshire Hathaway Corp. owns a 10 percent stake, says its electric e6 sedan can travel 300 kilometers (190 miles) on a charge, similar to Western models.¶ BYD has sold 300 taxis and 200 electric buses used in the southern city of Shenzhen, a center for business and technology near Hong Kong, according to Henry Li, general manager of its export division. BYD has invested heavily in research and has thousands of engineers working on battery and motor technology.¶ "We think our EV (electric vehicle) platform is one of the most advanced in the world, and our capability for mass production is quite high," Li said.¶ But as for the rest of the industry, "there are not many manufacturers with really reliable or commercialized products," he said.¶ Chinese leaders saw electric cars as a way to curb demand for imported oil, which they regard as a strategic danger, and to help transform China from a low-cost factory into a creator of profitable technology.¶ "China has run up against the same technical obstacles as anyone else," said Michael Dunne, president of Dunne & Co. Ltd., a Hong Kong-based industry researcher.¶ "They said: Hold on, maybe we shouldn't marry ourselves to electrics just yet. Let's look at the alternatives. Maybe we have to take an incremental approach, just like everyone else," Dunne said.¶ Wary consumers have been put off by news reports of batteries in Chinese-made cars catching fire. A lack of charging stations is causing "range anxiety" — fears a car might run out of power, leaving the driver stranded.¶ Under the Communist Party's latest five-year development plan for China's economy, issued in 2011, the government has released guidelines for other industries but not for alternative vehicles — a possible sign officials have gone back to the drawing board.¶ Developers were encouraged last week by a Cabinet statement that repeated support for electric vehicles. But it also called for work on developing non-plug-in hybrids and energy-saving internal combustion engines.¶ "The momentum has been slowed down," said John Zeng, chief of Asian forecasting for LMC Automotive, a research firm.

#### U.S. will win fuel cell race now

Hydrogen and Fuel Cell News July 2012

http://www.whec2012.com/wp-content/uploads/2012/07/HFCL12-July-WHEC-2012.pdf

Contrary to the perception that the United States is falling behind¶ in putting fuel cells to use, two European presentations highlighted¶ the fact that Europe is lagging behind North America in putting¶ fuel cell-powered forklift trucks and material handling equipment¶ into warehouses and factories. The European Hydrogen¶ Association’s Marieke Reijalt, in her review of Europe’s Hylift¶ demonstration project, said that there is much slower customer¶ acceptance of fuel cells in this area, urging Europe to come up¶ with “much more specific targeted support than what we see here¶ in North America.”¶ And Imam Mansouri, of the University of Hertfordshire, UK pointed¶ out that U.S. ARRA (American Recovery and Reinvestment Act)¶ funding already led to the deployment of more than 500 additional¶ fuel cell forklift trucks in 2010 (2012: More than 690 fuel cell lift¶ trucks with ARRA funds, plus more than 3,500 lift trucks deployed¶ or ordered with no government money, according to the Energy¶ Department’s Hydrogen Program website). In contrast, two¶ European projects underway now are aiming to demonstrate a¶ total of 40 fuel cell forklift trucks, said Mansouri. Reijalt’s abstract¶ added the next planned Hylift demonstration is targeting deployment of 200 vehicles.

# AT: Transition Wars

#### No transition war with China. Power transitions will not lead to war with China and there would be no escalation even if a war happened

Art 08

Robert J. Art is Christian A. Herter Professor of International Relations at Brandeis University, and Fellow at MIT Center for International Studies In¶ China's Ascent: Power, Security, and the Future of International Politics¶ Ed. By Robert S. Ross, Feng Zhu p. 270-2

China's rise does not constitute the same type of geopolitical threat to the United States that the Soviet Union did. If China ends up dominating the Korean peninsula and a significant part of continental Southeast Asia, so what? As long as Japan remains outside the Chinese sphere of influence and allied with the United States, and as long as the United States retains some naval footholds in Southeast Asia, such as in Singapore, the Philippines, or Indonesia, China's domination of these two areas would not present the same type of geopolitical threat that the Soviet Union did. As long as Europe, the Persian Gulf, Japan, India, and Russia (once it reconstitutes itself as a serious great power) remain either as independent power centers or under U.S. influence, Chinese hegemony on land in East and Southeast Asia will not tip the world balance of power. The vast size and central position of the Soviet Union in Eurasia constituted a geopolitical threat to American influence that China cannot hope to emulate. ¶ If judged by the standards of the last three dominant power-rising power competitions of the last one hundred years, then, the U.S.-China competition appears well placed to be much safer. Certainly, war between the two is not impossible because either or both governments could make a serious misstep over the Taiwan issue. War by miscalculation is always possible, but the possession of nuclear weapons by both sides has to have a restraining effect on both by dramatically raising the costs of miscalculation, thereby increasing the incentives not to miscalculate. Nuclear deterrence should work to lower dramatically the possibility of war by either miscalculation or deliberate decision (or if somehow such a war broke out, then nuclear deterrence should work against its escalation into a large and fearsome one.) Apart from the Taiwan issue, it is hard to figure out how a war would start between the United States and China. There are no other territorial disputes of any significance between the two, and there are no foreseeable economic contingencies that could bring on a war between them. Finally, the high economic interdependence and the lack of intense ideological competition between them help to reinforce the pacific effects induced by the condition of mutual assured destruction.¶ The workings of these three factors should make us cautiously optimistic about keeping Sino-American relations on the peaceful rather than the warlike track. The peaceful track does not, by any means, imply the absence of political and economic conflicts in Sino-American relations, nor does it foreclose coercive diplomatic gambits by each against the other. What it does mean is that the conditions are in place for war to be a low-probability event, if policymakers are smart in both states (see below), and that an all-out war is nearly impossible to imagine. By the historical standards of recent dominant-rising state dyads, this is truly exceptional.¶ In sum, there will be some security dilemma dynamics at work in the U.S.¬China relationship, both over Taiwan and over maritime supremacy in East Asia should China decide eventually to contest America's maritime hegemony, and there will certainly be economic and political conflicts, but nuclear weapons should work to mute their severity because the security of each state's homeland will never be in doubt as long as each maintains a second-strike capability vis-a-vis the other. If two states cannot conquer one another, then the character of their relation and their competition changes dramatically from what would be the case if they could.

#### Power transition will not cause war with China

Lai 11

DAVID LAI is Research Professor of Asian Security Studies at the Strategic Studies Institute (SSI) of the U.S. Army War College The United States and China in Power Transition <http://www.scribd.com/doc/77084151/The-United-States-and-China-in-Power-Transition>

¶ By many accounts, China does not want to have war, hopefully not for the next 30 years. This is so,not because the Chinese are inherently peace-lovingas Chinese analysts have long claimed,¶ 201¶ but because China’s modernization mission demands a war-free environment. There is a theoretical reason for this operation as well. Indeed, in a power transition process, if¶ the upstart sees that its comprehensive national pow-er will surpass that of the extant hegemonic power byvirtue of its expected development, it will be foolish for the rising power to initiate a premature fight with the latter.¶ 202 The Chinese apparently have taken both their practical need and the logical prescription by the pow er transition theory into account. Indeed, there have been repeated calls in China for the Chinese leaders to¶ continue their¶ tao-guang yang-hui¶ (¶ 韬光养晦¶ ) strategy for the next 30 years and more.¶ 203¶ Chinese governmentis well advised to go along. However, the Chinese also understand that conflict with the United States is inev itable, and their response is unavoidable. To deal with this difficult relationship, they have a formula called“at odds, but not at war” (¶ 斗而不破¶ ). This strategy is more proactive than the¶ tao-guang yang-hui¶ , which is¶ primarily about avoiding confrontation. Thus in addition to developing its capabilities through the modernization mission, China will engage with the United States, confront the United States if necessary, but stop short of going to war. It is a strategy loaded with SunTzu’s teaching, the most familiar of which is about subjugating the enemy without fighting.¶

#### Transition will not lead to U.S. China war

Ikenberry 10

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American Review http://americanreviewmag.com/authors/view/30

There are three ways of looking at the rise of China and the policy challenges facing the United States. First, the rise of China does create dangers for international conflict but these dangers are not inevitable or predetermined. Scholars have described these dynamics of conflict generated by shifts in the global balance of power as “power transitions” and the “problem of peaceful change”. The rise of Germany in the late 19th century, challenging British hegemony, is the classic case of how power transitions can lead to war. In seeking a strategic response to the rise of China, the Obama administration needs to place the current moment in the context of these grand problems of power shifts and global change, understanding the dynamics, dangers and opportunities.¶ ¶ Second, the rise of China does not need to trigger a world-wrenching hegemonic power transition. The Sino-American power transition is potentially manageable if only because the international order that China faces is profoundly different from the orders that previous rising states have confronted. China does not just face the United States; it faces a Western order with global reach. Compared with previous international orders, the current one is much more open, expansive, integrated and rule-based. At the same time, the nuclear revolution has made war among great powers less likely. This has eliminated the major method by which rising powers have overturned old international orders defended by declining hegemonic states. China also has incentives to use the rules and institutions of the current Western order to protect its interests. In short, the international order today is different from orders of the past: it is harder to overturn and easier to join.¶ ¶ Third, unlike rivals in earlier power transitions, China and the United States have remarkable common or overlapping interests. These interests are in areas such as energy, the environment, and the “new security” issues related to terrorism and failed states. The ongoing global economic downturn has reaffirmed Chinese-American mutual dependence. In crafting a policy towards the rise of China, the Obama administration should find ways to seize upon this alignment of interests to develop a long-term strategic partnership.

#### Declining powers are less likely to start wars or escalate wars

MacDonald & Parent 11

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Assistant Professor of Political Science at the University of Miami. Graceful Decline International Security, Vol. 35, No. 4 (Spring 2011), pp. 7–44 <http://belfercenter.ksg.harvard.edu/files/ISEC_a_00034-MacDonald_proof2.pdf>

With regard to militarized disputes, declining great powers demonstrate¶ more caution and restraint in the use of force: they were involved in an average¶ of 1.7 fewer militarized disputes in the five years following ordinal change¶ compared with other great powers over similar periods.67 Declining great¶ powers also initiated fewer militarized disputes, and their disputes tended to¶ escalate to lower levels of hostility than the baseline category (see figure 2).68¶ These findings suggest the need for a fundamental revision to the pessimist’s¶ argument regarding the war proneness of declining powers.69 Far from being¶ more likely to lash out aggressively, declining states refrain from initiating and¶ escalating military disputes. Nor do declining great powers appear more vulnerable¶ to external predation than other great powers. This may be because external¶ predators have great difficulty assessing the vulnerability of potential¶ victims, or because retrenchment allows vulnerable powers to effectively recover¶ from decline and still deter potential challengers.

#### Declining powers retrench, they do not lash out

MacDonald & Parent 11

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Based on our universe of cases, the predictions of retrenchment pessimists receive¶ little support. In contrast to arguments that retrenchment is rare, we find¶ that great powers facing acute relative decline adopted retrenchment in at least¶ eleven and at most ªfifteen of the eighteen cases, a range of 61–83 percent. By¶ any accounting, a majority of the countries in these cases retrenched shortly after¶ their ordinal transition. Nor does the evidence support the view that domestic¶ interests constrain retrenchment. Every one of the great powers in our sample that chose to retrench did so within five years of the ordinal transition.¶ This suggests timely responses to external constraints rather than domestic¶ intransigence.¶ Moreover, there does not appear to be a strong connection between regime¶ type and retrenchment. Democracies account for about two-thirds of the great¶ powers in our study, and are slightly more likely to face acute relative declines,¶ accounting for thirteen of our eighteen cases, or 72 percent. Of the twelve democracies,¶ seven retrenched, two did not, and three are debatable, yielding parameters¶ from 58 to 83 percent. There are only three cases of autocracy, which¶ makes comparison among groups difªcult, but of these, two retrenched and¶ one case is arguable, producing a range of 67–100 percent.59 In short, evidence¶ at the coarse-grained level tentatively supports the neorealist approach outlined¶ above: during acute relative decline, a significant majority of great¶ powers of differing regime types elected to retrench.¶ Wars, preventive or otherwise, do not appear to be a common fate for declining¶ states, and recovery of lost rank was fairly frequent. Declining great¶ powers found themselves embroiled in an interstate war in only four of the¶ eighteen cases, and in only one of these cases—1935 United Kingdom—did¶ the declining power go to war with the power that had just surpassed it in ordinal¶ rank.60 In addition, in six of ªfifteen cases, declining great powers that¶ adopted a policy of retrenchment managed to rebound, eventually recovering¶ their ordinal rank from the state that surpassed them. These findings suggest¶ that retrenching states rarely courted disaster and occasionally regained their¶ prior position. Further, even if retrenchment was not successful, this does not¶ prove that a preferable policy existed.61 In many cases of decline, there are few¶ restorative solutions available; politics is often a game of unpalatable alternatives.¶ Short of a miracle, it is hard to say what great powers such as Britain,¶ France, or the Soviet Union could have done to stay aloft, even with the beneªt¶ of hindsight.

#### Turn, Rapid declines are key to causing the U.S. to embrace multilateralism

MacDonald & Parent 11

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A closer examination of the data, however, reveals an intriguing pattern:¶ whereas great powers facing small or medium declines are no more likely to¶ seek new alliance partners, those facing large declines appear to aggressively¶ do so. This is consistent with neorealist claims that states prefer internal to external¶ balancing. Great powers facing large declines in relative power sign an¶ average 3.6 new agreements, nearly three times the great power average. This¶ pattern suggests that desperation encourages states to give up their traditional¶ preference for self-help, but only when facing extreme external pressures. It¶ also highlights a tool that declining great powers often use to try to limit the¶ impact of rapid declines. The interlocking alliance agreements embodied in institutions¶ such as the British Commonwealth or the Commonwealth of Independent¶ States can be seen as an effort by declining great powers to reinforce¶ dependent relationships with former colonial possessions.66

#### As a declining power the risk of U.S. involvement in a war and the risk of U.S. escalation is reduced

MacDonald & Parent 11

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Our findings are directly relevant to what appears to be an impending great¶ power transition between China and the United States. Estimates of economic¶ performance vary, but most observers expect Chinese GDP to surpass U.S.¶ GDP sometime in the next decade or two.91 This prospect has generated considerable¶ concern. Many scholars foresee major conflict during a Sino-U.S. ordinal¶ transition. Echoing Gilpin and Copeland, John Mearsheimer sees the¶ crux of the issue as irreconcilable goals: China wants to be America’s superior¶ and the United States wants no peer competitors. In his words, “[N]o amount of goodwill can ameliorate the intense security competition that sets in when¶ an aspiring hegemon appears in Eurasia.”92¶ Contrary to these predictions, our analysis suggests some grounds for optimism.¶ Based on the historical track record of great powers facing acute relative¶ decline, the United States should be able to retrench in the coming decades. In¶ the next few years, the United States is ripe to overhaul its military, shift burdens¶ to its allies, and work to decrease costly international commitments. It is¶ likely to initiate and become embroiled in fewer militarized disputes than the¶ average great power and to settle these disputes more amicably. Some might¶ view this prospect with apprehension, fearing the steady erosion of U.S. credibility.¶ Yet our analysis suggests that retrenchment need not signal weakness.¶ Holding on to exposed and expensive commitments simply for the sake of¶ one’s reputation is a greater geopolitical gamble than withdrawing to cheaper,¶ more defensible frontiers.

#### Claims that transition increases war is refuted by empirical data

MacDonald & Parent 11

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Some observers might dispute our conclusions, arguing that hegemonic¶ transitions are more conflict prone than other moments of acute relative decline.¶ We counter that there are deductive and empirical reasons to doubt this¶ argument. Theoretically, hegemonic powers should actually find it easier to¶ manage acute relative decline. Fallen hegemons still have formidable capability,¶ which threatens grave harm to any state that tries to cross them. Further,¶ they are no longer the top target for balancing coalitions, and recovering¶ hegemons may be influential because they can play a pivotal role in alliance¶ formation. In addition, hegemonic powers, almost by definition, possess more¶ extensive overseas commitments; they should be able to more readily identify¶ and eliminate extraneous burdens without exposing vulnerabilities or exciting¶ domestic populations.¶ We believe the empirical record supports these conclusions. In particular,¶ periods of hegemonic transition do not appear more conflict prone than those¶ of acute decline. The last reversal at the pinnacle of power was the Anglo-¶ American transition, which took place around 1872 and was resolved without¶ armed confrontation. The tenor of that transition may have been influenced by¶ a number of factors: both states were democratic maritime empires, the United¶ States was slowly emerging from the Civil War, and Great Britain could likely¶ coast on a large lead in domestic capital stock. Although China and the United States differ in regime type, similar factors may work to cushion the impending¶ Sino-American transition. Both are large, relatively secure continental great¶ powers, a fact that mitigates potential geopolitical competition.93 China faces a¶ variety of domestic political challenges, including strains among rival regions,¶ which may complicate its ability to sustain its economic performance or engage¶ in foreign policy adventurism.94

#### The faster the rate of hegemon decline the lower the risk of war

MacDonald & Parent 11

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This article has advanced three main arguments. First, retrenchment pessimists¶ are incorrect when they suggest that retrenchment is an uncommon policy¶ response to great power decline. States often curtail their commitments and¶ mellow their ambitions as they fall in the ranks of great powers. Second¶ and related, declining great powers react in a prompt and proportionate manner¶ to their dwindling fortunes. They do this for the same reason that they¶ tend to seize opportunities to expand: international incentives are strong inducements. In the high-stakes world of great power politics, states can seldom¶ afford to fool themselves or pamper parochial interests when relative power is¶ perilously slipping away. Third, the rate of relative decline explains not only¶ the extent of retrenchment but also the form. The faster the rate of decline, the¶ more likely states are to reform their militaries, increase reliance on allies, and¶ refrain from using force in international disputes. Taken together, these ndings¶ suggest that retrenchment is an attractive strategy for dealing with great¶ power decline. Although we make nofi claim that the rate of relative decline explains¶ everything, we suggest that our study represents a solid ªrst cut and¶ that domestic political factors loom too large in discussions of power transitions¶ and hegemonic change.

#### U.S. Military dominance assures hegemony

Kagan 12

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<http://www.brookings.edu/research/opinions/2012/01/17-us-power-kagan>

Military capacity matters, too, as early nineteenth-century China learned and Chinese leaders know today. As Yan Xuetong recently noted, “military strength underpins hegemony.” Here the United States remains unmatched. It is far and away the most powerful nation the world has ever known, and there has been no decline in America’s relative military capacity—at least not yet. Americans currently spend less than $600 billion a year on defense, more than the rest of the other great powers combined. (This figure does not include the deployment in Iraq, which is ending, or the combat forces in Afghanistan, which are likely to diminish steadily over the next couple of years.) They do so, moreover, while consuming a little less than 4 percent of GDP annually—a higher percentage than the other great powers, but in historical terms lower than the 10 percent of GDP that the United States spent on defense in the mid-1950s and the 7 percent it spent in the late 1980s. The superior expenditures underestimate America’s actual superiority in military capability. American land and air forces are equipped with the most advanced weaponry, and are the most experienced in actual combat. They would defeat any competitor in a head-to-head battle. American naval power remains predominant in every region of the world.¶

## Inherency

#### The U.S. is already doing Fuel Cell Bus Demonstrations

Eudy et al 11

Leslie Eudy¶ National Renewable Energy Laboratory¶ Kevin Chandler¶ Battelle¶ Christina Gikakis¶ Federal Transit Administration Fuel Cell Buses in U.S. Transit Fleets: Current Status 2011 http://www.nrel.gov/hydrogen/pdfs/52927.pdf

FTA initiated the National Fuel Cell Bus Program (NFCBP) in 2006, with an overall goal of developing and demonstrating commercially viable fuel cell technology for transit buses. This multi-year, cost-shared research program provided $49 million for various projects including fuel cell bus demonstrations, component development projects, and outreach projects. In 2010, FTA expanded the NFCBP with an additional $13.5 million in Bus and Bus Facilities funding that was made available in the FY 2010 DOT Appropriations Bill. The legislative language establishing the NFCBP required FTA to work with up to three geographically diverse non-profit organizations. Because of this, FTA accepted proposals for follow-on projects from the three existing consortia already selected through the original competitive process. The project proposals covered work in the following areas:¶ 1. Extensions or enhancements to existing projects with existing teams¶ 2. New development and demonstration projects¶ 3. Outreach, education, or coordination projects.¶ The selected project awards were announced in December 2010 and included four development and demonstration projects, two component projects, one enhancement to an existing project, and one analysis, outreach, and communication project. The demonstration projects that are currently underway are included in Table 1 (blue shaded rows). Table 2 lists the remaining demonstration projects that will field seven more fuel cell buses by the end of 2012. An additional $13.5 million in funding was appropriated in 2011, leading to another call to the three consortia for proposals that expand or enhance the current projects under the portfolio. Those proposals are under review and selected projects will be announced later in 2011.¶ Beyond the NFCBP, FTA funds fuel cell bus research at several universities and transit agencies around the country.

#### The present system has just launched a program to spur new fuel cell buses that will succeed

Willis 12

Paul Willis reporter for Earthtechling April 21, 2012

<http://www.earthtechling.com/2012/04/fuel-cell-buses-get-6-6-million-federal-boost/>

The federal government has given $6.6 million in funding to Calstart, an alternative-transportation consortium for the development of zero emission fuel cell buses. The funding came from the Federal Transit Administration (FTA) and will go towards regional development efforts around cleaner mass transit options. Five projects in total are getting support. These are:¶ - An advanced generation fuel cell bus which integrates a smaller, lighter, and more powerful fuel cell in a full-size transit bus. Built by New Flyer Industries and utilizing a BAE Systems hybrid electric drivetrain, CTTransit will operate the bus in Hartford, CT.¶ - The San Francisco Municipal Transportation Agency with BAE Systems will integrate and test an enhanced 30 kW Hydrogenics fuel cell to power the auxiliary systems in a lower cost commercial hybrid powertrain.¶ - Ballard will develop a more robust and affordable fuel cell for integration and testing in a bus operated by SunLine Transit Agency in the Coachella Valley, Calif.¶ - US Hybrid, a Torrance-based company, will develop and test a high-voltage, high efficiency, converter to power air conditioning systems for hybrid buses. Air conditioning systems are one of the biggest sources of energy consumption beyond the traction system.¶ - Calstart will conduct an analysis to assess the current market viability of fuel cell buses and provide recommendations on actions to accelerate the growth of the segment.¶ Nearly 60 percent of all 40-foot transit buses purchased in the United States rely on funding provided by the FTA. To qualify for this funding, buses must meet the agency’s “Buy America” requirements, which require 60 percent American-made components.¶ The FTA is currently overseeing a national program – the National Fuel Cell Bus Program [PDF] - focused on developing commercially viable fuel cell bus technologies. Calstart is one of three non-profit consortia chosen to manage projects competitively selected under the program.¶ They work with bus companies and fuel cell technology firms, acting as a catalyst for the growth of the clean transportation technology industry. One of their partners is BAE Systems, which has been manufacturing hybrid drive propulsion systems for over a decade and has more than 3,500 hybrid buses operating around the world.¶ Hybrid buses are growing more common in public transport systems around the world and yet many authorities still remain to be convinced. Not least because of the high cost of fuel cells. A 2007 U.S. Department of Transportation study put the fuel cell costs for an entire life cycle at three times that of diesel, CNG or diesel hybrid buses.¶ “We are extremely pleased with the announcement by Secretary LaHood,” said Calstart President and CEO John Boesel in a statement. ”Matched on a 1:1 basis by other sources, these federal grants will play an important role in accelerating the market adoption of zero emission fuel cell buses.”

#### The FTA just launched a new fuel cell bus demonstration program

NAFTC 6-5-12

National Alternative Fuels Training Consortium

http://naftcenews.wvu.edu/naftc\_enews/2012/06/05/department-of-transportation-funds-fuel-cell-bus-research

U.S. Transportation Secretary Ray LaHood recently announced that $13.1 million in federal funding will go toward research and demonstration projects under the Federal Transit Administration (FTA) National Fuel Cell Bus Program. The program aims to advance hydrogen fuel cell power for transit buses and reflects the Obama administration’s commitment to address the U.S.’s energy challenges, reduce the country’s dependence on foreign oil and promote cleaner air. “President Obama’s all-of-the-above energy strategy includes adopting alternative fuels that let transit agencies bypass the gas pump altogether and reduce our carbon footprint,” said LaHood. “This investment moves us closer to achieving the President’s goal of reducing oil imports by a third in a little over a decade.”¶ The funds were disbursed between CALSTART in Pasadena, Calif.; the Center for Transportation and the Environment in Atlanta and the Northeast Advanced Vehicle Consortium in Boston. All three will engage in work to develop various fuel cell components, test American-made buses under real-world conditions powered by fuel cells and conduct educational outreach.¶ “With gas prices on the rise, we know that the availability of reliable transit as a transportation choice is a significant part of relieving the pain at the pump for millions of riders each day,” said Federal Transit Administrator Peter Rogoff. “And, the Department is taking it a step further by investing in a new generation of clean-fuel technology to make transit an even more significant part of our nation’s overall approach to a secure energy future.”¶ The funding aims to bring fuel cell buses into commercial service faster, which would have a positive impact on the environment, as well as save energy. According to the National Renewable Energy Lab (NREL) and the FTA, every fuel cell-powered bus put into service in the U.S. could reduce carbon released into the atmosphere by 100 tons annually, as well as eliminate the need for 9,000 gallons of fuel every year over the life of the vehicle. That translates into a savings of more than $37,000 per year per vehicle for buses currently running on diesel fuel.¶ The FTA’s National Fuel Cell Bus Program was created to develop affordable hydrogen fuel cell buses for the nation’s public transit agencies and to increase public acceptance of fuel cell-powered vehicles. The 11 projects were selected among 26 proposals seeking $52 million in federal funds.