

Background

No. 2184
September 23, 2008



Published by The Heritage Foundation

Building Infrastructure Resiliency: Private Sector Investment in Homeland Security

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America's infrastructure is in need of repair. Contributing to this problem is that Americans are focused solely on protecting the country's infrastructure from terrorist attack. The greatest danger facing these structures, however, is not terrorism. The danger lies in the fact that the United States infrastructure system lacks resiliency—the ability to keep the country running even after a disaster has struck. Rather than spending vast sums of money protecting deteriorating infrastructure from terrorists, we must incorporate resiliency in order to keep the nation safe, free, and prosperous in the face of any threat, natural or man-made.

Resiliency is not a federal task. The answer lies in the free market principles that made our nation great. Congress and the new Administration must promote policies that encourage private-sector investment in American infrastructure.

Defining Infrastructure

Infrastructure is composed of the physical and technical structures that support the day-to-day functioning of society. Traditional infrastructure, such as roads, bridges, dams, and power plants, and non-traditional infrastructure, such as the Internet, work together to keep America moving. Although infrastructure is constantly changing in the face of new technology, politics, and security concerns, this is clear: Infrastructure is the lifeline of our financial institutions, emergency responders and health care system, military defense, and much more. Power

Talking Points

- America's infrastructure is in need of repair. The greatest danger facing that infrastructure, however, is not terrorism. The danger lies in the fact that the United States infrastructure system lacks resiliency—the ability to keep the country running even after a disaster has struck.
- Rather than spending money protecting deteriorating infrastructure from terrorists, we must incorporate resiliency in order to keep the nation safe, free, and prosperous in the face of any threat.
- In order to mitigate the challenges associated with private-sector investment in infrastructure, Washington should define the difference between private-sector and government roles, recognize the amount of infrastructure that must be improved at the borders, and protect U.S. sovereignty in transnational projects.
- Resiliency is not a federal task. The answer lies in the free-market principles that made our nation great. Congress and the new Administration must promote policies that encourage private-sector investment in American infrastructure.

This paper, in its entirety, can be found at:
www.heritage.org/Research/HomelandDefense/bg2184.cfm

Produced by the Douglas and Sarah Allison
Center for Foreign Policy Studies
of the
Kathryn and Shelby Cullom Davis
Institute for International Studies

Published by The Heritage Foundation
214 Massachusetts Avenue, NE
Washington, DC 20002-4999
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generators only work so long, potentially compromising the ability of hospitals to provide medical care in the event of a power outage. Police, firemen, and medical teams must be able to communicate with each other.

State of Disrepair. Infrastructure upkeep has not been a priority. For example, due to ill-equipped infrastructure, a terrorist attack on oil pipelines in Philadelphia could easily endanger the lives of hundreds of thousands of people.¹ A ruptured pipeline in this area would send deadly chemicals into the air that Pennsylvanians breathe.² Homeland Security Secretary Michael Chertoff described this problem when he stated that “we have failed time and again to devote the energy and the effort and the investment to make sure...structures can be preserved in the face of a...natural disaster or...ordinary degradation of any physical structure that comes year-in and year-out.”³

Furthering the poor state of American infrastructure is its interconnected nature. This interconnectedness was demonstrated in 2003 when overgrown trees, soft electrical lines, and a failed alarm system produced a power outage for a majority of the Northeast.⁴ Translated in a security sense, a terrorist attack on our nation’s weak infrastructure could be a crippling blow to millions of Americans.

Mission Impossible

As Americans have become increasingly obsessed with protecting infrastructure from terrorist attacks, they have focused less and less on keep-

ing that same infrastructure in good condition.⁵ The idea persists that installing ever more guns, gates, and guards is critical, and will prevent all threats.⁶ When everything is critical, however, nothing is critical.⁷ As a result, any security gains garnered by threat prevention are jeopardized, while adequate upkeep, the less glamorous of the two, is largely abandoned.

Attempting to safeguard against all threats, of course, is an impossible mission. There are too many people and too many targets to be able to ensure that attacks never happen again. Furthermore, natural disasters are simply unpredictable. Nevertheless, Congress remains dedicated to this dangerously narrow focus. Members of Congress continue to form policy focused exclusively on terror evasion. The Department of Homeland Security (DHS) Appropriations Act of 2007 contained funding for vulnerability assessments for high-risk chemical facilities as well as other chemical security standards.⁸ The Act is just one example of a long litany of protection-based policies.

We cannot center society on feel-good security measures that do little except to promote a false sense of security. The fact is that threats remain, and we can never predict precisely where terrorists will strike next. In his book *Simplexity*, Jeffrey Kluger describes the misdirected nature of the current risk mindset.⁹ He emphasizes that we often over-prepare for the events least likely to occur (i.e., terrorist attacks), but are perfectly willing to drive without our seatbelts (the likelihood of a car crash is much

1. Stephen Flynn, “5 Disasters Coming Soon if We Don’t Rebuild U.S. Infrastructure,” *Popular Mechanics*, October 19, 2007, at http://www.popularmechanics.com/science/worst_case_scenarios/4227310.html (September 12, 2008).
2. *Ibid.*
3. Press release, “Remarks by Homeland Security Secretary Michael Chertoff at Brookings on the Nation’s Critical Infrastructure,” Department of Homeland Security, September 5, 2008, at http://www.dhs.gov/xnews/speeches/sp_1220876790967.shtm (September 15, 2008).
4. *Ibid.* See also Kevin Poulsen, “Did Hackers Cause the 2003 Northeast Blackout? Umm, No,” *Wired Blog Network*, May 29, 2008, at <http://blog.wired.com/27bstroke6/2008/05/did-hackers-cau.html> (September 12, 2008).
5. James Jay Carafano, “Resiliency and Public-Private Partnerships to Enhance Homeland Security,” *Heritage Foundation Backgrounder* No. 2150, June 24, 2008, at <http://www.heritage.org/Research/HomelandDefense/bg2150.cfm>.
6. *Ibid.*
7. *Ibid.*
8. The Department of Homeland Security Appropriations Act of 2007, Public Law 109-295.
9. Jeffrey Kluger, *Simplexity* (New York: Hyperion, 2008), pp. 190–209.

higher). We will never be 100 percent safe against threats or disaster, but we can be prepared to handle such events when they occur.

Resiliency is the Solution

What we need instead is resiliency. In a national security context, resiliency is the capacity to maintain continuity of activities even in the face of threats.¹⁰ Resiliency ensures real security—both physical and economic; a dual approach of protecting against attack and ensuring that if we are attacked, society will continue.

Resiliency does not mean that we need to forget the prevention-of-terrorism aspect of infrastructure. It simply means that prevention is not the end of the equation. We must change the infrastructure mission to one that aims to improve infrastructure adequacy across the board while protecting high-risk targets. If we lack the ability to accommodate the infrastructure needs of the population, a catastrophic event would stymie the transportation and delivery of essential aid—whether goods or people. Well-maintained infrastructure can lessen or largely eliminate damage from an attack—minimizing loss of lives and property.

How to Achieve Resiliency

The best way to achieve resiliency in infrastructure is through the free market. The private sector can—and should—play a role in the development of resilient infrastructure. Developing 21st-century infrastructure requires the private sector, whose members are generally well informed on current infrastructure needs because of the need to stay competitive.¹¹

First Principles First. Private-sector investment in infrastructure falls directly in line with the principle of limited government—the notion that government is restricted to well-defined functions and should not expand its role beyond them. This

premise is embedded in the Constitution through the specifically enumerated federal functions of Article 1, Section 8.¹² Citizens are the “boss” of government, and its sole source of authority flows from the people. Therefore, the only actions that can legitimately be taken are those *specifically* granted by the people in the vocabulary of the Constitution.

There are certain circumstances for which the public has recognized the value of delegation to the federal formation and these are clearly enumerated. Absent this enumeration, it is clear that action should not be taken by Washington, but by private citizens and local governments. The Tenth Amendment of the Constitution states that “the powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the United States respectively, or to the people.”¹³

The private sector is the most appropriate actor to improve infrastructure because of its creativity, flexibility, and economic savvy. Congress and the new Administration must recognize that this type of investment is simply not Washington’s responsibility. The Founders were keenly aware that the government is not always the best vehicle for change. Citizens and lawmakers alike must learn to respect this constitutional tradition again.

Free Market Front and Center. The constitutional case for private-sector investment is not the end of the argument. The free market is one of the best means of countering regulatory inadequacy. In the environmental arena, the free market has been used to solve a multitude of regulatory dilemmas.¹⁴

Environmental issues, much like homeland security, have been highly regulated and over-federalized from the beginning. While the system continues to lack significant progress on a number of environmental goals, the notion that the federal government is the best means by which to tackle environmental issues persists. The Endangered Species Act (ESA) of 1973, which attempts to preserve

10. Carafano, “Resiliency and Public-Private Partnerships to Enhance Homeland Security.”

11. *Ibid.*, p. 9

12. U.S. Constitution, Art. 1, § 8.

13. U.S. Constitution, Amend. X.

14. Terry L. Anderson and Donald R. Leal, *Free Market Environmentalism* (New York: Palgrave, 2001), revised ed., pp. 4–5.

endangered species through classifications and federal protections, has led to the perverse effect of encouraging pre-emptive habitat destruction by landowners of their own land.¹⁵ If an endangered species is discovered on a landowner's property, the ESA can cause tremendous financial loss because the landowner will be required to preserve the habitat, regardless of his intended economic use of the land. The landowner then has the perverse incentive to destroy the animal habitat so that the endangered species will not enter his or her land, but will find a habitat elsewhere. Similarly, the private-sector owners of infrastructure have largely ignored maintenance because there is a larger financial disincentive associated with maintaining adequacy than with protection.

The free market approach recognizes that the private sector naturally responds to property rights. Property rights enable environmental or infrastructure actors to achieve gains in the market.¹⁶ One of many examples of this property rights incentive can be found in a recent decision by Wal-Mart to move toward using solar power in all of its stores.¹⁷ Wal-Mart's property rights drive it to create economic gains, which can be achieved through increased efficiency. The store chain recognized—without government intervention—that a shift toward solar power can be simultaneously economically advantageous (decreased electricity bills) and environmentally beneficial.

Currently, 85 percent of critical U.S. infrastructure is privately owned¹⁸—though subject to increased government bureaucracy. It is logical to assume this property right drives the private sector's quest to be profitable. Improving infrastruc-

ture allows economic gains, as long as the private sector is not forced to spend all of its assets on protection-based actions. The government should not stand in the way of this pursuit and should encourage both new infrastructure ownership and pre-existing ownership investment so that adequacy gains can be achieved.

The free market can improve and maintain infrastructure while stimulating economic growth. Wise investment by the private sector can lead to dollar gains to investors. This translates into more capital for these private-sector entities to reinvest in the market. The more the government spends, the less the private sector can engage in investment. A decrease in government spending can have an enormous effect on the economy. When Washington is too large, the "high spending undermines economic growth by transferring additional resources from the productive sector of the economy to government, which uses them less efficiently."¹⁹ In other words, federal spending is associated with significant transaction costs not experienced by the private sector. For example, the government must take money from individuals, meaning the U.S. population, before it can spend it.²⁰ Instead of wasting time on the bureaucratic struggles and wasting American tax dollars on transaction costs, Washington should look past the Beltway and rely on the entrepreneurial energy of the private sector. As Secretary Chertoff stated, "What these businesses do need is information and guidance about the best way they can carry out what they're already motivated to do, which is to make sure that their investments are secured and that the people who work to carry out their businesses are safe."²¹

15. Nancy Marano and Ben Lieberman, "Improving the Endangered Species Act: Balancing the Needs of Landowners and Endangered Wildlife," Heritage Foundation *WebMemo* No. 861, September 23, 2005, at <http://www.heritage.org/Research/EnergyandEnvironment/wm861.cfm>.

16. Anderson and Leal, *Free Market Environmentalism*, p. 6.

17. Press release, "Wal-Mart Announces Solar Power Pilot Project," Wal-Mart, May 7, 2007, at <http://walmartstores.com/FactsNews/NewsRoom/6442.aspx> (September 14, 2008).

18. Department of Homeland Security, "Critical Infrastructure Sector Partnership," http://www.dhs.gov/xprevprot/partnerships/editorial_0206.shtm (July 26, 2008).

19. Daniel J. Mitchell, "The Impact of Government Spending on Economic Growth," Heritage Foundation *Background* No. 1831, March 15, 2005, at <http://www.heritage.org/research/budget/bg1831.cfm>.

20. *Ibid.*, p. 6.

The Model for the Free Market

The Ambassador Bridge connecting the United States and Canada is a model for private-sector investment in infrastructure because it demonstrates how to improve infrastructure while achieving national security and economic gains. Built in the 1920s, this bridge was the work of two private financiers.²² At the time, the bridge cost only \$23.5 million.²³ The bridge furthers commerce between the two countries and today functions as a key DHS border checkpoint.

In 2005, recognizing the vital role Ambassador Bridge plays between the U.S. and Canada, DHS worked with the private-sector bridge stakeholders to reduce border wait time—which had been resulting in significant delays in commerce—by 25 percent.²⁴

Presently, several actors are looking to continue the private-sector tradition by building a second bridge span.²⁵ Instead of looking to the federal government, the new bridge will be built entirely with private dollars by the Ambassador Bridge Company.²⁶ Estimated to cost \$400 million, the new bridge will require significant investment—and will most surely translate into even more commercial gains.²⁷ The competition associated with the second span can only lead to positive benefits for both the private sector and the public.

Politics, however, threatens to undermine the second span of the bridge. The Canadian government has acted reluctant at times to give the

Ambassador Bridge Company a permit.²⁸ The disagreement lies largely in the fact that Canada does not allow private companies to own an international border crossing.²⁹ There is undoubtedly a solution in the midst of the controversy. The United States must continue to negotiate this problem with U.S. interests in mind.

Priorities for Private-Sector Investment in Infrastructure

Projects such as the Ambassador Bridge demonstrate the benefits and challenges associated with private investment. In order to mitigate these challenges, it is necessary to:

- **Define the difference between private sector and government roles clearly.** A good deal of confusion exists between the roles and responsibilities of the private sector and federal government in risk management. This is especially true for infrastructure. DHS should work to define reasonable roles so that projects will produce the best outcome. Assessing and reducing terrorist threats are a government responsibility.³⁰ Determining criticality, however, should be shared by the public and private sectors.³¹ Assessing vulnerability, determining the best risk mitigation means, and managing and providing the resources to reduce vulnerability are largely the responsibilities of the entity that owns and operates a particular piece of infrastructure.³²

21. "Remarks by Homeland Security Secretary Michael Chertoff at Brookings on the Nation's Critical Infrastructure."

22. Ambassador Bridge, "History," at <http://www.ambassadorbridge.com/history.html> (September 14, 2008).

23. *Ibid.*

24. Douglas Doan, "The 25% Challenge: Speeding Cross-Border Traffic in Southeastern Michigan," *Journal of Homeland Security* (April 2006), at <http://www.homelandsecurity.org/journal/Default.aspx?oid=142&ocat=1> (September 14, 2008).

25. Pam Fessler, "Private Bridge on Canada Border a Security Concern," *National Public Radio*, May 21, 2007, at <http://www.npr.org/templates/story/story.php?storyId=10241088> (September 14, 2008).

26. *Ibid.*

27. *Ibid.*

28. Marisol Bello, "Bridge Plan Draws Fire in Canada: Project Faces Hurdles Beyond Windsor," *Detroit Free Press*, April 11, 2007.

29. *Ibid.*

30. Carafano, "Resiliency and Public-Private Partnerships to Enhance Homeland Security."

31. *Ibid.*

32. *Ibid.*

- **Recognize border opportunities.** At the border, infrastructure plays a vital role in national security. Fences, bridges, and walkways can be found throughout the southern and northern borders. The ability of individuals to cross the border illegally is aided by structurally deficient infrastructure, contributing to the struggles DHS experiences when it comes to apprehending these individuals. Border infrastructure is also the lifeline of our economic vitality, linking the United States to the south and the north, accelerating commerce throughout the world. Projects that can improve this process while protecting U.S. sovereignty are highly valuable. We should recognize this opportunity and seek vigorous private-sector investment in these projects.
- **Protect U.S. sovereignty in transnational projects.** Many infrastructure projects have an international dimension. This is demonstrated in the diplomatic challenges facing the second span of the Ambassador Bridge. The U.S. cannot afford to lose U.S. sovereignty in the process of improving the bridge. Protecting American interests is not about protectionism—it is about resiliency, because today's actions affect the future. One of the major aspects to resiliency is that America cannot focus merely on “from the gut,” politically driven policy initiatives, but must look to the long term to ensure that society can continue in the face of adversity. The private sector must understand these challenges and must ensure that American priorities are not blurred in the negotiation process.
- **Re-evaluate CIFUS regulations.** The Committee on Foreign Investments in the United States (CIFUS), the group that reviews foreign investments in U.S. infrastructure, has the ability to reject foreign investments that might be a threat to national security.³⁵ Although foreign investors do possess ownership of some U.S. structures, critics of CIFUS argue that it has often been slower than preferred in confronting the national security element of foreign investment in infrastructure (as evidenced by the Dubai Ports World debacle—where CIFUS frustrated a foreign investor to the point that the investor forfeited its ownership of several U.S. ports). This is bad news for infrastructure because investors have vast sums of money capable of improving infrastructure quickly, without U.S. government intervention. The notion that precluding foreign ownership of U.S. assets offers a measure of security is flawed. Of course, CIFUS should have the ability to consider national security when it reviews foreign investments. But it must be careful not to use national security as a means of economic protectionism. Such protectionism would ensure that infrastructure continues to deteriorate, and that real security is not achieved.

How to Get There

The United States must move quickly to improve the adequacy of our nation's infrastructure. In order to be successful, the new Administration and Congress must:

- **Strengthen and promote the SAFETY Act.** The Support Anti-Terrorism by Fostering Effective

33. Support Anti-Terrorism by Fostering Effective Technologies Act of 2002, Public Law 107-296.

34. *Ibid.*

35. Alan P. Larson and David M. Marchick, *Foreign Investment and National Security* (Washington, D.C.: Council on Foreign Relations Press, 2006) Council Special Report No. 18, pp. 3–6, at <http://www.cfr.org/publication/11146> (September 15, 2008).

- **Train senior government leaders to develop private-sector opportunities.** Homeland security needs the foundation of a professional development system that will provide the cadre of leaders required to meet the demands of the 21st century.³⁶ Congress should require that homeland security officials undergo training in the core competency of homeland security. Infrastructure is part of this core competency. By establishing strong leaders at the federal government level who understand the challenges currently facing infrastructure, investment by the private sector is certain to increase. This training should include information on the most effective means by which to encourage private-sector investment in U.S. infrastructure.

Resiliency as the Future of Infrastructure

The infrastructure of the 21st century requires a 21st-century approach. America must expand beyond the protection-based mindset and shift to resiliency. Without resiliency, America's infrastructure will continue to crumble and any catastrophic event will be all the more devastating. Investment by the private sector preserves American notions of limited government, while preserving American livelihoods for future generations.

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36. James Jay Carafano, "Missing Pieces in Homeland Security: Interagency Education, Assignments, and Professional Accreditation," Heritage Foundation *Executive Memorandum* No. 1013, October 16, 2006, at <http://www.heritage.org/Research/HomelandSecurity/em1013.cfm>.