

October 2005

American Cities and Sustainable Development in the Age of Global Terrorism: Some Thoughts on Fortress America and the Potential for Defensive Dispersal II

Edward H. Ziegler

Follow this and additional works at: <https://scholarship.law.wm.edu/wmelpr>



Part of the [Environmental Law Commons](#), and the [National Security Law Commons](#)

Repository Citation

Edward H. Ziegler, *American Cities and Sustainable Development in the Age of Global Terrorism: Some Thoughts on Fortress America and the Potential for Defensive Dispersal II*, 30 Wm. & Mary Envtl. L. & Pol'y Rev. 95 (2005), <https://scholarship.law.wm.edu/wmelpr/vol30/iss1/4>

AMERICAN CITIES AND SUSTAINABLE DEVELOPMENT IN THE AGE OF GLOBAL TERRORISM: SOME THOUGHTS ON FORTRESS AMERICA AND THE POTENTIAL FOR DEFENSIVE DISPERSAL II

EDWARD H. ZIEGLER*

INTRODUCTION: TERRORISM, URBAN FORM, AND SUSTAINABLE DEVELOPMENT

America's cities, with their population density and concentration of fragile transportation, telecommunications, electric and other utility lines, will surely be prime targets for attack—the 'front line' . . . of the war on terrorism, or more accurately, terrorism's war on us.¹

—Richard Briffault, 2002

* Professor of Law, University of Denver Sturm College of Law. The author extends his appreciation to Ms. Christina Robertson, a student at the Sturm College of Law, for her helpful assistance in the preparation of this article. Copyright © 2005, by Edward H. Ziegler.

¹ Richard Briffault, *Facing the Urban Future After September 11, 2001*, 34 URB. LAW. 563 (2002).

The terrorist attack caused nearly 3,000 deaths, or nearly five times all the other murders committed in New York City in 2001. The attack destroyed or damaged nearly 30 million square feet of office space, or almost 7 percent of all the office space in Manhattan. The total economic loss to New York has been estimated at \$83 billion, including \$30 billion in capital losses, \$14 billion in cleanup and related costs, and \$39 billion in loss of economic output through the end of 2003, as well as the loss of over 125,00 jobs More controversially, for at least some people, the openness and diversity of our cities raise questions about our ability to secure them from future attacks.

Id.

Aristotle's statement that a city is 'built politics' suggests the often significant level of interaction between the design and form of the built environment and the dominant political values that shape a city's governance.² Throughout the history of the United States, the form of the built environment has embraced at various times and places both the closed stockade values of fear and terror and the more open, hopeful, and exuberant values of cosmopolitan urban modernity.³ Today, of course, our major cities are shadowed by our largely suburban nation.⁴ Nearly two-thirds of the people in this country now live and work in suburban areas, and these numbers are increasing.⁵

Throughout most of the twentieth century, this country's built politics embraced the suburban modernity of low-density automobile-dependent hypersprawl.⁶ Today, the growing threat of global terrorism has initiated a new debate about this country's built politics. The debate raises critical questions about the sustainability of the design, form, and footprint of both our major cities and suburban areas.⁷

"The terrorist attacks on the World Trade Center in New York City were the most devastating attacks by a foreign power on an American city since the British burned Washington, D.C. in

² Voula Mega, *Urban Renaissance: Enhancing the Past Inventing the Future Drivers and Obstacles to Innovation and Change*, INNOVATION J., (May-Aug. 2000), <http://www.innovation.cc/discussion-papers/urban-renaissance.htm>.

³ See WITOLD RYBCZYNSKI, CITY LIFE 51-83 (1995) (discussing city development in the United States).

⁴ See generally PETER CALTHORPE, THE NEXT AMERICAN METROPOLIS: ECOLOGY, COMMUNITY AND THE AMERICAN DREAM 9 (1995); ANDRES DUANY ET AL., SUBURBAN NATION: THE RISE OF SPRAWL AND THE DECLINE OF THE AMERICAN DREAM 4 (2000); ROBERT FISHMAN, BOURGEOIS UTOPIAS: THE RISE AND FALL OF SUBURBIA 16-17 (1987); JAMES KUNSTLER, THE GEOGRAPHY OF NOWHERE: THE RISE AND DECLINE OF AMERICA'S MAN-MADE LANDSCAPE 10 (1993).

⁵ See DUANY ET AL., *supra* note 4, at 4.

⁶ See Edward H. Ziegler, *Urban Sprawl, Growth Management and Sustainable Development in the United States: Thoughts on the Sentimental Quest for a New Middle Landscape*, 11 VA. J. SOC. POL'Y & L. 26 (2003).

⁷ See *infra* text accompanying notes 8-12 (discussing the economic impact of the September 11, 2001 terrorist attacks and of the fight against global terrorism).

1814.”⁸ This attack alone caused nearly 3,000 deaths, destroyed or damaged nearly thirty million square feet of office space, caused the loss of 125,000 jobs, and resulted in a total economic loss to New York City of an estimated \$83 billion.⁹ A federal government study completed in 2002 estimated that, because of the terrorist attacks on September 11, 2001, the nation’s 315 metropolitan areas lost \$191 billion from diminished economic activity in 2001 alone.¹⁰

We are presently spending hundreds of billions of dollars each year in foreign lands in the fight against global terrorism.¹¹ We also spend billions of dollars each year on domestic “homeland,” and state and local “hometown” anti-terrorist security programs.¹² The September 11th terrorist attacks also caused Americans to lose the belief that they could forever remain isolated from the hatreds of the world. In place of that illusion is the increasing awareness of the inherent vulnerability of our major cities and urban places to terrorist attacks.¹³ These fears are fueled by both our media culture and the potential dangers of the complex technological and unpredictable human mobilities of modern urban life that now threaten destruction and death.¹⁴ In this context, the

⁸ Briffault, *supra* note 1, at 563.

⁹ *Id.*; see also Peter Eisinger, The American City in the Age of Terror: A Preliminary Assessment of the Effects of 9/11, Address Before the Urb. Affairs Ass’n 11-14 (Mar. 30, 2004-Apr. 3, 2004), available at <http://www.culma.wayne.edu/pubs/eisinger/Terrorism%20manuscript.pdf>.

¹⁰ See GEN. ACCOUNTING OFFICE, REVIEW OF STUDIES OF THE ECONOMIC IMPACT OF THE SEPTEMBER 11, 2001 TERRORIST ATTACKS ON THE WORLD TRADE CENTER (2002); Eisinger, *supra* note 9, at 12.

¹¹ See John Aloysius Farrell, *Rationalizing War, Its Financing*, DENV. POST, Jan. 30, 2005, at 29A (noting that United States defense spending in fiscal year 2004 to finance the wars in Iraq and Afghanistan totaled over \$200 billion).

¹² New (post-September 11th) major federal grant programs funding state and local security and preparedness activities totaled over \$5 billion for the fiscal year 2004. See Eisinger, *supra* note 9, at 8.

¹³ See *infra* text accompanying notes 128-57 (discussing the move toward decentralization of urban areas and the decline of skyscrapers in light of global terrorism concerns).

¹⁴ STEPHEN GRAHAM, IN A MOMENT: ON GLOBAL MOBILITIES AND THE TERRORISED CITY 1 http://www.acturban.org/biennial/DOC_planners/inamoment.doc (last visited Nov. 1, 2005).

terrorist attacks call attention to the particular vulnerabilities of both major cities and outlying suburban areas. Now, everyone labors under the threat of global terrorism.

Some observers view the September 11th terrorist attacks not just as attacks on America's largest city, but as "assaults on our cities as urban places."¹⁵ Peter Eisinger, for example, notes that

[i]n targeting these open and unprotected places, populated by a large, socially diverse workforce engaged in the knowledge-intensive occupations of the new cosmopolitan economy in signature buildings that had come to represent some of our most powerful symbols of modern urban achievement, the terrorists took aim at the very essence of American cities.¹⁶

Similarly, Richard Briffault referred to the September 11th terrorist attacks as "an attack on urbanism"¹⁷ that threatens to accelerate the problems of urban sprawl in this country and thereby turn "many urban virtues upside down."¹⁸

The events of September 11th were a macabre yet subtle exploitation of the multiple and interconnected mobilities, continuously telescoping between the local and global, that sustain global urban capitalism: mobilities of people and machines; mobilities of images and media; mobilities of electronic finance and capital. They provided the latest in a long line of dawning realisations [sic] that urban modernity, despite its promises of absolute technological and material progress, is actually utterly interwoven with fragility and vulnerability.

Id.

¹⁵ Eisinger, *supra* note 9, at 2.

¹⁶ *Id.* Eisinger goes on to say "[i]t would hardly be surprising under the circumstances, therefore, if Americans did not begin to wonder in the aftermath of the attacks about the security, role, and importance of urban life and forms in modern society." *Id.*

¹⁷ Briffault, *supra* note 1, at 563.

¹⁸ *Id.* In addition, Briffault commented that

[a]lthough cities have continued to retain their appeal, the cost/benefit ratio has been shifting against cities for some time, as the steadily declining city share of our national population

Major American cities will remain in the shadow of the September 11th terrorist attacks if people and businesses either leave for outlying suburban areas or stop locating in core urban areas. Yet, in the aftermath of September 11th, there have been a number of voices arguing in favor of an urban dispersal. The late military historian Stephen Ambrose, for example, argued for an urban form mindful of the infantry's mantra "don't bunch up."¹⁹ Others have joined in this call for further dispersal of people and businesses. Admiral William Crowe, former Chairman of the Joint Chiefs of Staff and now a corporate security adviser, has stated that "[c]ompanies should be in low-profile locations . . . we recommend that clients decentralize if its practical."²⁰ Moreover, the United States government encourages this policy of deconcentration; the Federal Reserve, the Securities and Exchange Commission, and other federal agencies recently issued a draft white paper that encouraged financial institutions to disperse people, records, and operations and to duplicate business functions at multiple sites, often hundreds of miles from existing business centers.²¹

Urban dispersal strategies designed to protect major cities from enemy attack are not an entirely new phenomenon. During the

and economic output indicates. By raising new concerns about the safety of dense urban areas, the World Trade Center attacks threaten to shift that cost/benefit calculus still further against the cities. Whatever the economic and cultural opportunities of working, living, or doing business in a city, firms, employees, and residents will flee if they are not, and do not feel secure. Urban public safety departments, particularly those in big cities, will have to give a new and high priority to the deterrence, prevention, and detection of terrorist threats.

Id. at 567.

¹⁹ Stephen E. Ambrose, *Beware the Fury of an Aroused Democracy*, WALL ST. J., Oct. 1, 2001, at A24, available at <http://www.opinionjournal.com/extra/?id=95001245>.

²⁰ Daren Fonda, *Girding Against New Risks*, TIME, Oct. 8, 2001, available at 2001 WLNR 10078673.

²¹ See Interagency Concept Release: Draft Interagency White Paper on Sound Practices to Strengthen the Resilience of the U.S. Financial System, 67 Fed. Reg. 56,835-42 (Sept. 5, 2002).

1950s, in the early years of the Cold War, the federal government heeded the advice of urban planners and security experts and officially adopted a policy of “defensive dispersal,” (“Defensive Dispersal I”) to protect major cities from nuclear attack.²² This policy was an important factor in the passage of the Federal-Aid Highway Act of 1956 and the construction, “[a]t a cost topping \$4 trillion and still rising,” of the American Interstate Highway System.²³

As proponents of sustainable development have been quick to point out, there is more than a little irony in the post-September 11th call for adopting a “Defensive Dispersal II” national urban policy.²⁴ The irony in this view is that our hypersprawl, automobile-dependent landscape, and modern lifestyle are already extremely vulnerable to the threats of global terrorism and will become even more vulnerable by further dispersal. Rather, the September 11th terrorist attacks suggest the need for more compact, walkable, and transit-oriented communities. This view also argues for a less petroleum-dependent and more sustainable economy where America would feel less compelled to involve itself in the religious and ethnic conflicts in the Middle East.²⁵ As Michael Dudley stated:

[d]efensive dispersal planners both then and now are correct about one thing: the shape of the city has national security implications—just not in the way these planners believe. While it would be both absurd and monstrous to lay blame for the tragedy of September 11 on urban sprawl, it is not too much to say that planning compact and self-sufficient cities

²² See *infra* text accompanying notes 37-55 (describing this policy and its history in detail).

²³ OLIVER GILHAM, *TERRORISM AND DECONCENTRATION* 3 (2003), <http://www.architects.org/emplibary/Density.Gilham.pdf>.

²⁴ See *infra* text accompanying notes 111-19 (outlining various arguments against such a defensive dispersal policy).

²⁵ Hank Dittmar & Sarah C. Campbell, *Will September 11 Bring Us Together or Push Us Apart? The War on Terror and Metropolitan Stability*, *TRANSP. Q.*, Fall 2002, at 43-49.

could make significant contributions towards a more stable, equitable—and therefore more secure—world.²⁶

Similarly, Keith Schneider observed that

[t]he aftermath of Sept. 11 added an unpredicted and visceral new dimension to the Smart Growth movement. More sprawl won't enable Americans to run away from terror. Rather, the deaths of so many Americans on our own soil heightened the urgency to design communities in the 21st century that use energy and natural resources much more efficiently.²⁷

Today, the 'built politics' debate continues about the future form and design of urban development in this country. At present, little seems clear about the future of our public policy in this regard, particularly if further devastating terrorist attacks occur in this country.²⁸ More of the same automobile-dependent sprawl is expected and this trend may even be accelerated in the coming years.²⁹ One thing is clear about the link between sustainable development and global terrorism—we are committing an enormous amount of public financial resources to the fight against

²⁶ Michael Dudley, *Low Densities Are No Answer to the Threat of Terrorism*, PLANETIZEN, Oct. 23, 2001, <http://www.planetizen.com/node/30>.

²⁷ Keith Schneider, *Sprawl No Antidote to Terror*, MICH. LAND USE INST. (2001), <http://www.mlui.org/growthmanagement/fullarticle.asp?fileid=11872>.

It is understandable that we should have reacted to the attacks of September 11, 2001 by curtailment of civil rights, by defiance of laws, and by resort to overwhelming force, for those actions are the ready products of fear and hasty thought. But they cannot protect us against the destruction of our own land by ourselves. They cannot protect us against the selfishness, wastefulness, and greed that we have legitimized here as economic virtues, and have taught to the world.

WENDELL BERRY, CITIZENSHIP PAPERS 6 (2003).

²⁸ See *infra* notes 114-57 and accompanying text (discussing the current trend toward the decentralization of American cities).

²⁹ See *id.*

terrorism, both in the foreign and domestic realms and by all levels of government.³⁰ This drain on our resources is likely to exacerbate the pre-existing problems of infrastructure sustainability associated with our present pattern of hypersprawl land development.³¹

It is also clear to many observers that if people do not feel safe from terrorist violence in America's major cities, then the mere threat of terrorism has the potential to worsen the environmental and sustainability problems associated with hypersprawl development.³² Integration of homeland security concerns into building design and the urban planning, review, and permitting process has just begun in this country.³³ The incorporation of these security concerns into the governing fabric of both public and private land use and development poses a critical challenge for the future of major American cities.

There is a growing realization that the openness and diversity of our cities raises important questions about both our ability to safeguard them from future attacks and about the unintended, but potentially sprawl-inducing, consequences of security measures that attempt that task. Some already believe that our efforts to safeguard major cities through "target hardening" and the "militarization" of our architecture may detract so greatly from the aesthetics of urban living that these efforts could actually further the outward dynamic of urban sprawl.³⁴ This view cautions against embracing Max Weber's observation on the origins of the city as "the fusion of fortress and market."³⁵ This Article examines this debate and the more general question of how America's fight against terrorism could impact sustainable development issues related to urban sprawl in this country.

³⁰ *Id.*

³¹ See *supra* notes 11-12 and accompanying text (discussing these defense costs).

³² See *infra* notes 109-62 (discussing the potential ramifications of continued urban sprawl).

³³ See generally GILHAM, *supra* note 23, at 4-5.

³⁴ See *infra* text accompanying notes 165-209 (discussing modifications to urban architecture in light of global terrorism threats).

³⁵ Briffault, *supra* note 1, at 566.

I. A SHORT HISTORY OF DEFENSIVE DISPERSAL I

A single flight of planes no bigger than a wedge of geese can quickly end this island fantasy, burn the towers, crumble the bridges, turn the underground passages into lethal chambers, cremate the millions. The intimation of mortality is part of New York now: in the sound of jets overhead, the black headlines of the latest edition. All dwellers in cities must live with the stubborn fact of annihilation; in New York the fact is somewhat more concentrated because of the concentration of the city itself, and because, of all targets, New York has a certain clear priority. In the mind of whatever perverted dreamer who might loose the lightning, New York must hold a steady, irresistible charm.³⁶

—E.B. White, 1948

Over fifty years ago, the United States government embraced a deliberate land development policy of low-density sprawl in reaction to Cold War fears about nuclear attacks on American cities.³⁷ According to a recent study based on government documents and urban planning literature during that period, America's urban policy came to embrace Cold War civil defense planning as well as consumer demand for suburbia motivated, in part, by a growing nuclear fear.³⁸ This Defensive Dispersal I policy of suburban deconcentration was essentially a "don't bunch up" reaction to the futility of our then urban civil defense policy of "duck and cover."³⁹

³⁶ E.B. WHITE, *Here is New York*, in *ESSAYS OF E.B. WHITE* 118, 132 (1977).

³⁷ Michael Quinn Dudley, *Sprawl As Strategy: City Planners Face the Bomb*, 21 J. PLAN. & RES. 52, 53 (2001).

³⁸ *Id.*

³⁹ See generally Thomas L. Bosworth, *The Bomb and the Suburbanization of America* (1997); *The atomic age opens; American culture confronts the atomic bomb. Selected proceedings from the conference sponsored by the Popular Culture Library and the Department of Popular Culture, Bowling Green State University*, July 13-15, 1995. Bowling Green OH: Bowling Green Center for Popular Culture

Public opinion polls taken shortly after the American bombings of Hiroshima and Nagasaki found that a majority of Americans believed their own families were in danger of dying in nuclear attacks.⁴⁰ An article in the September 1951 issue of the *Bulletin of the Atomic Scientists* noted the rising consumer demand for suburbia and exurbia as a result of nuclear fear. They note that this trend was in existence before the Korean War, but now received added emphasis because "the possibility of atomic attack [has] ceased to seem remote to the general public."⁴¹

The American Institute of Planners ("AIP") appointed a committee to develop a response to the atomic bomb led by former AIP president Tracy Augur.⁴² Augur had earlier worked as a planning consultant on the development of "Oak Ridge," the secret "atomic city" built in rural Tennessee to support the manufacture of atomic bomb components for the Manhattan Project.⁴³ In a 1948 article, *The Dispersal of Cities as a Defense Measure*, Augur argued that if cities were clearly designed to continue functioning after an atomic attack, then such an attack would be unlikely, and rather than adding to its existing urban core areas, America should create

Studies, 275-86; *The Atomic Café*, produced and directed by Kevin Rafferty, Jayne Loader, and Pierce Rafferty, Archives Project (1982).

⁴⁰ See Dudley, *supra* note 37, at 53.

⁴¹ Donald Monson & Astrid Monson, *A Program for Urban Dispersal*, 7 BULL. ATOM. SCI. 244 (1951).

Land speculators were quick to sense this fear and have exploited it effectively. Around the periphery of many of our large cities sales of vacant land are booming, with more or less open references to the fact that here there will be safety in case of war. Slogans were coined and may be found in the newspaper want-ads, 'beyond the radiation zone,' 'outside the fifty-mile limit,' 'buy now for security later.' The desire to escape the dangers of atomic bombings, however unintelligently it may be expressed in the buying of vacant lots in the middle of a prairie, is a force to be reckoned with.

Id.

⁴² See Dudley, *supra* note 37, at 53.

⁴³ *Id.* at 53-54.

a "dispersed pattern of small efficient cities."⁴⁴ Other urban planners expanded on Augur's thesis. A 1950 *Life* magazine article, entitled *How U.S. Cities Can Prepare for Atomic War: MIT Professors Suggest a Bold Plan to Prevent Panic and Limit Destruction*, introduced the concept of dispersion to the public, suggesting a building scheme for cities with radiating expressways, intersected 10 miles out by "life belts" of city-circling freeways.⁴⁵

By 1951, Augur was working for the National Security Resource Board as that agency undertook two important initiatives: (1) President Truman's Industrial Dispersal Policy and (2) the classified civil defense study *Project East River* (named because of its central hypothetical of an atomic bomb detonated on New York City's East River).⁴⁶ In 1952, the *Project East River* report recommended limiting central city growth and accelerating emerging trends towards deconcentrated metropolitan growth by, among other means, the funding and construction of new expressways.⁴⁷

At its annual meeting in San Francisco in June of 1953, the AIP officially endorsed this defensive dispersal policy and the statement endorsed was entitled "Defense Considerations in City Planning."⁴⁸ AIP based its endorsement on recommendations from a committee chaired by Tracy Augur.⁴⁹

⁴⁴ Tracy B. Augur, *The Dispersal of Cities as a Defense Measure*, J. AM. INST. PLANNERS, Summer 1948, at 29, 29-35.

⁴⁵ See Dudley, *supra* note 37, at 55.

⁴⁶ See *id.* at 58.

⁴⁷ See *id.* at 59.

⁴⁸ See *id.*

⁴⁹ See *id.* The statement, in part, read as follows.

Defense considerations have become primary considerations in American city planning. The United States is an urban nation . . . to the extent that . . . [cities] . . . are vulnerable to enemy attack, the nation is vulnerable. The emergence of nuclear weapons vastly more destructive than any hitherto developed make necessary a complete reassessment of the forms that cities must take to continue their vital role in our national life. The old rules are no longer valid The American Institute of Planners does not claim competence in military measures of national defense, but it holds this fact self-evident, that *the best*

The Federal Office of Area Development of the Department of Commerce (which at that time encouraged industrial dispersal)⁵⁰ now was joined by three additional federal agencies: the National Security Resources Board, the Department of Defense, and the Federal Civil Defense Administration, all of whom recommended accelerating low-density dispersal.⁵¹ The United States Congress integrated this recommendation into the 1954 Housing Act and charged the Federal Housing and Home Finance Agency with promoting that goal.⁵² Section 910 of the Act, *Reduction of Vulnerability to Enemy Attack*, provided in part that "[a]ll housing functions and programs of the Federal Government shall be carried out, consistent with the requirements of the functions and programs, in a manner that will facilitate progress in the reduction of vulnerability of congested urban areas to enemy attack."⁵³

This policy of defensive dispersal generated support for construction of the largest public works project in the history of this country—construction of our interstate highway system—our yellow brick road to suburban hypersprawl for the remainder of the twentieth century.⁵⁴ In his study of these events, Michael Dudley concludes with the following observation on this policy of defensive dispersal: "Viewed this way, sprawl becomes not so much an accident of history as it may be seen, at least in part, as an intentional but misguided strategy for survival in the nuclear age."⁵⁵

way to prevent attacks upon this country is to deprive potential enemies of targets that will make such attacks profitable to them.

The grave danger that now confronts us stems from the fact that our productive strength is at present so distributed as to facilitate destruction . . . plain common sense dictates that it should be remedied with all possible dispatch.

American Institute of Planners, *Defense Considerations in City Planning*, 9 BULL. ATOM. SCI. 268 (1953).

⁵⁰ See Dudley, *supra* note 37, at 58.

⁵¹ *Id.*

⁵² National Housing Act of 1954, Pub. L. No. 560, § 910, 68 Stat. 590 (1954).

⁵³ *Id.*

⁵⁴ See Dudley, *supra* note 37, at 60.

⁵⁵ *Id.* at 62.

II. SUSTAINABLE DEVELOPMENT AND THE COSTS OF URBAN SPRAWL

It takes only the first raw scent of the smoldering piles of debris at Ground Zero in New York, and a quick glance at the guts of blasted, black-charred buildings fluttering in a smoky wind, to immediately agree with President George W. Bush that the attacks were a direct strike at what he called "the American way of life." That way of life is not only tied to our freedom and mobility. It's also expressed in the wasteful design of our sprawling communities and the need to sustain them by reaching ever deeper into the far corners of the globe to satisfy American demand for oil, minerals, timber, labor, and capital.⁵⁶

—Keith Schneider, 2001

The forces and policies of automobile-dependent suburbanization that were accelerated by the Defensive Dispersal I policy of the 1950s have continued in this country virtually unabated. The vast majority of all new residential and business construction occurs outside major cities while residential densities continue to decline.⁵⁷ Despite calls for "Smart Growth," there is in fact little

⁵⁶ Schneider, *supra* note 27, at 1.

⁵⁷ Robert Burchell, *The State of the Cities and Sprawl*, BRIDGING THE DIVIDE-MAKING REGIONS WORK FOR EVERYONE 3 (1999) (U.S. Dep't of Housing and Urban Dev.). Between 1950 and 1990, the number of people in highly urbanized areas (areas with populations over one million in 1990) increased by ninety-two percent while average population density actually decreased by forty-four percent. *Id.* at 7. As a result, fewer people are taking up a relatively larger amount of space. In 1920, there were about ten people per acre in America's cities, suburbs, and towns. By 1990, there were only four people per acre and in areas built since 1960, there are just over two people per acre. *Urban Sprawl Not Quite the Monster They Call It*, ECONOMIST, Aug. 21, 1999, at 24. A recent report by Harvard University's Joint Center for Housing Studies found that the vast majority of new single-family homes continue to be built in the suburbs and exurbs of major cities. Between 1990 and 1997, the housing stocks of low-density metropolitan counties increased by fifteen percent while stocks in high-density

real prospect for major change in this pattern of land development in the near future.⁵⁸ As Joel Kotkin, a senior fellow at the Davenport Institute for Public Policy at Pepperdine University has pointed out, "the overwhelming trend borne out by the 2000 census is that the decentralization of industry and population seems inexorable."⁵⁹ A prestigious 2005 report on real estate finance and investment in the United States similarly notes, in regard to a national survey of trends in land development, that

[i]nterviewees don't expect Americans to give up on their dreams of suburban "McMansions" and expansive backyards despite traffic snarls and growth restrictions. "There is smart growth and then there is real growth," says a Dallas developer. "You may be able to control growth to certain cores or suburbs, but then places around them are going to do what they want to do—grow and sprawl. Nothing much you can do to stop it. Real growth is suburban sprawl."⁶⁰

core areas increased by only five percent. This report found that central cities across the country are either losing population outright or are growing more slowly than their suburbs. *Harvard Report Finds Suburban Growth Isn't Slowing*, GROWTH/NO GROWTH, Aug. 2000, at 2; see also JOEL GARREAU, *EDGE CITY: LIFE ON THE NEW FRONTIER* (1991). See generally, WILLIAM FULTON ET. AL., *WHO SPRAWLS THE MOST? HOW GROWTH PATTERNS DIFFER ACROSS THE U.S.*, SURVEY SERIES JULY 2001 THE BROOKINGS INST., available at <http://www.brook.edu/es/urban/publications/fulton.pdf>; Bruce Katz, THE BROOKINGS INST., *MUNICIPALITIES IN TRANSITION* presented to THE NATIONAL LEAGUE OF CITIES March 8, 2002, <http://www.brookings.edu/es/urban/NLC.ppt>; AMY LIU, *THE BENEFITS AND REALITIES OF HIGH DENSITY DEVELOPMENT* presented to the SAN FRANCISCO URBAN INST. CONF. Oct. 31, 2003, THE BROOKINGS INST., http://www.brookings.edu/es/urban/speeches/20031031_uli.ppt.

⁵⁸ Ziegler, *supra* note 6, at 26-65.

⁵⁹ Martin C. Pedersen, *Cities in the Digital Age*, METROPOLIS MAGAZINE, Jan. 2004, http://www.joelkotkin.com/Urban_Affairs_list.htm (follow "Cities in the Digital Age" hyperlink).

⁶⁰ *Emerging Trends in Real Estate 2005*, URBAN LAND INST. AND PRICEWATERHOUSECOOPERS L.L.P. (Oct. 2004), at 12.

Suburban sprawl and rising automobile use and traffic congestion are now worldwide phenomena.⁶¹ On a global basis, the inventory of vehicles is accelerating almost twice as fast in percentage terms as is population growth.⁶² During the period from 1980-2000, the total vehicle count increased from 380 million to 752 million, accounting for a compound annual growth rate of 3.5 percent while the human population increased by 1.6 billion, or a compound annual rate of 1.6 percent.⁶³

In the United States, the densities of these sprawling development patterns are generally so low that, by a world wide standard, the resulting built environment can appropriately be called "hyper-sprawl."⁶⁴ European development densities, for example, are generally about ten times greater than development

⁶¹ See MOSHE SAFDIE, *THE CITY AFTER THE AUTOMOBILE 3* (Lynne Missen ed., 1997).

Is there a common denominator to the ailments of the cities of the industrialized West and of the populous Third World, in the North and in the Tropics—of New York and Mexico City, Jakarta and Hong Kong, Toronto, and Copenhagen? Despite distinct differences of scale and resources, of climate and history, there is indeed, a universal pattern. Everywhere in the world we find examples of expanded regional cities—cities that in recent decades have burst out of their traditional boundaries, urbanizing and suburbanizing entire regions, and housing close to a third of the world's population.

Id.

⁶² The Counselors of Real Estate, *Can Cities Cope? 60 Million People Streaming into Urban Areas Annually*, Oct. 31, 2002, http://www.cre.org/newsroom/news_article.cfm?lid=504.

Downs warned that globalization will lead to an endless stream of automobiles, trucks and buses, fueled partly by humankind's thirst for self-mobility, and compounded by urban sprawl creeping endlessly outward. Political and fiscal pressures will make sufficient roadways and alternative transit options unattainable, said Downs, with the condition so acute that private toll roads may become an increasing, albeit inadequate, reality.

Id. (Anthony Downs is a Senior Fellow at the Brookings Institute.).

⁶³ See *id.*

⁶⁴ ROBERT BURCHELL, ET AL., *THE COSTS OF SPRAWL—REVISITED 6* (1998) (Transit Cooperative Research Program Report 39).

densities in the United States.⁶⁵ Suburban residential densities in some developing areas in America even fall below twenty residential dwellings per square mile.⁶⁶

The national debate in America about our built politics has focused in recent years on sustainable development issues related to urban sprawl.⁶⁷ The concept of sustainable development, though often controversial, can be described fairly easily. It embraces the notion of a widely shared decent standard of living, even the good life of urban modernity, but reasonably balanced with notions of economic and environmental sustainability.⁶⁸ In this view, our present standard of living should be both widely attainable and sustainable for future generations. In this important respect, social equity, and particularly intergenerational equity, along with resource conservation and environmental protection, are central concepts in sustainable development philosophy.⁶⁹

⁶⁵ *See id.*

⁶⁶ This calculation is based on an allowed residential density limit of one residential unit per thirty-five acres of land, a density restriction found in some developing suburban areas. Boulder County, Colorado, for example, imposes this density restriction in its agricultural zones, some of which are directly in the path of suburban development northwest of Denver. *See* Boulder County, Colo. Land Use Department, *Zoning Table: Article 4-100*, http://www.co.boulder.co.us/lu/lucode/article_4_zone_table.htm (last visited Nov. 20, 2005).

⁶⁷ *See* Robert Burchell, *The Evolution of the Sprawl Debate in the United States*, 5 HASTINGS W.-N.W. J. ENVTL. L. & POL'Y 137 (1999); Richard Moe, *Growing Smarter: Fighting Sprawl and Restoring Community in America*, ENVTL. & URB. ISSUES (1997), at 13.

⁶⁸ *See* Patrick Gallagher, *The Environmental, Social and Cultural Impacts of Sprawl*, 15 NAT. RESOURCES & ENV'T 219 (2001); Michael Lewyn, *Suburban Sprawl: Not Just an Environmental Issue*, 84 MARQ. L. REV. 301 (2000); Francesca Ortiz, *Biodiversity, The City and Sprawl*, 82 B.U. L. REV. 145 (2002).

⁶⁹ A number of law review symposia have addressed a variety of issues related to these topics. *See* Symposium, *2001 Gulliver Conference*, 34 CONN. L. REV. 511 (2002); Symposium, *Land Use in the 21st Century: The Next Frontier for Environmental Law*, 23 WM. & MARY ENVTL. L. & POL'Y REV. 705 (1999); *Land Use Law Reform Symposium*, 13 PACE L. REV. 315 (1993); Symposium, *The Nexus Between Environmental Justice and Sustainable Development*, 9 DUKE ENVTL. L. & POL'Y R. 147 (1999); Symposium, *The Role of Law in Defining Sustainable Development*, 3 WIDENER L. SYMP. J. 1 (1998); *Seminar on the Law of Sustainable Development—United States*, 13 PACE ENVTL. L. REV. 503 (1996);

The sustainable development issues raised by our hypersprawl pattern of land development have been widely recognized for years and are now increasingly measured and reported.⁷⁰ The United States consumes far more resources per capita than any other country in the world.⁷¹ As a result, the environmental degradation of the average person in this country is estimated to be thirty to fifty times that of the average citizen in a developing country like India.⁷² Urban sprawl generates, among other ills,⁷³ an unhealthy amount of water and air pollution, and

Symposium, *Smart Growth and Sustainable Development*, 36 VAL. U. L. REV. 381 (2002); *Symposium on Sustainable Growth: Evaluating Smart Growth Efforts in the Southeast*, 35 WAKE FOREST L. REV. 509 (2000); *Symposium on Urban Sprawl: Local and Comparative Perspectives on Managing Atlanta's Growth*, 17 GA. ST. U. L. REV. 923 (2001).

⁷⁰ See ROBERT BURCHELL, ET AL., *Introduction, THE COSTS OF SPRAWL—REVISITED* 6 (1998) (Transit Cooperative Research Program Report 39). See generally RANDALL ARENDT, *GROWING GREENER* (1999); JUDY CORBETT & MICHAEL CORBETT, *DESIGNING SUSTAINABLE COMMUNITIES* (2000); HENRY L. DIAMOND & PATRICK NOONAN, *LAND USE IN AMERICA* (1996); DOUGLAS PORTER ET AL., *THE PRACTICE OF SUSTAINABLE DEVELOPMENT* (2000); J. WILLIAM THOMPSON & KIM SORVIG, *SUSTAINABLE LANDSCAPE CONSTRUCTION: A GUIDE TO GREEN BUILDING* (2000).

⁷¹ See Burchell, *supra* note 57, at 3.

⁷² Lelia Cabib, *Balancing Act*, E MAGAZINE, Nov.-Dec. 2000, at 1, available at <http://www.emagazine.com/view?871&src=>.

⁷³ A recent study links automobile-dependent suburban sprawl with increased levels of obesity, high cholesterol, and high blood pressure in children. The report was issued by the "Children's Health Protection Advisory Committee, a group of pediatricians, child advocates, environmentalists and business representatives that are asking the Environmental Protection Agency to recognize the link between declining health in children and the lack of sidewalks, crosswalks, or walkable schools." *Group Links Sprawl and Child Health*, GROWTH/NO GROWTH, 2003, at 6. The report notes that since 1980, the percentage of obese children has tripled and that only about thirteen percent of schoolchildren walk to school, down from an estimated fifty percent during the 1960s. *Id.*; see also Robert Steuteville, *I Love Freedom, It's Sprawl I Hate*, NEW URBAN NEWS, Oct.-Nov. 2004, available at <http://www.newurbannews.com/CommentaryOct04.html>. A study funded by the Robert Wood Johnson Foundation finds that "[p]eople who live in sprawling metropolitan areas are more likely to have high blood pressure, arthritis, headaches, and breathing difficulties compared to residents in less sprawled-out areas. [The reason is simple, as] people drive more in these

it results in the loss of nearby open space, forests, prime farmlands, scenic views, wetlands, and wildlife habitat.⁷⁴ By fragmenting ecosystems, urban sprawl threatens the goal of biological diversity and sustainability.⁷⁵ Scientists now tell us that increasing pollution by cars and trucks may be creating a process of global warming and climate change that eventually could rival the devastating consequences of the nuclear winter feared during the Cold War era.⁷⁶

Our decentralized, automobile-dependent pattern of land development increases the urban footprint at many times the rate of population growth.⁷⁷ This is true even in areas near such transit-friendly cities (by American standards) as Chicago and Boston.⁷⁸ As a result of our automobile usage, the United States (which has less than five percent of the world's population) accounts for about twenty-five percent of global oil usage.⁷⁹ Our economy is completely oil-dependent, which renders it particularly vulnerable to fluctuations in oil price and supply, and potential interruptions of foreign

areas, they walk less." *Suburban Sprawl's Effects Add Up*, CBS NEWS.COM, Sept. 27, 2004, <http://www.cbsnews.com/stories/2004/09/27/health/main645670.shtml>. See generally PETER CALTHORPE, *THE NEXT AMERICAN METROPOLIS: ECOLOGY, COMMUNITY, AND THE AMERICAN DREAM* 9 (1995); ANDRES DUANY ET AL., *SUBURBAN NATION: THE RISE OF SPRAWL AND THE DECLINE OF THE AMERICAN DREAM* 4 (2000); ROBERT FISHMAN, *BOURGEOIS UTOPIAS: THE RISE AND FALL OF SUBURBIA* 16-17 (1987); JAMES KUNSTLER, *THE GEOGRAPHY OF NOWHERE: THE RISE AND DECLINE OF AMERICA'S MAN-MADE LANDSCAPE* 10 (1993).

⁷⁴ See *id.*

⁷⁵ See WILLIAM B. HONACHEFSKY, *ECOLOGICALLY BASED MUNICIPAL LAND USE PLANNING* (2000); BJORN LOMBORG, *THE SKEPTICAL ENVIRONMENTALIST, MEASURING THE REAL WORLD STATE OF THE WORLD* (2001); JOHN RANDOLPH, *ENVIRONMENTAL LAND USE PLANNING AND MANAGEMENT* (2004); JANE SILBERSTEIN & CHRIS MASER, *LAND-USE PLANNING FOR SUSTAINABLE DEVELOPMENT* (2000); DAVID G. VICTOR, *CLIMATE CHANGE, DEBATING AMERICA'S POLICY OPTIONS* (2004) (Council on Foreign Relations).

⁷⁶ GILHAM, *supra* note 23, at 1.

⁷⁷ Robert Geddes, *Metropolis Unbound: The Sprawling American City and the Search for Alternatives*, AM. PROSPECT, Nov.-Dec. 1997, at 40.

⁷⁸ *Id.* (noting that between 1982 and 1997, Chicago had a 9.6 percent change in population, but a 25.5 percent increase in urbanized land. During the same period, Boston's population increased by 6.7 percent, but urban land increased by 46.9 percent). See FULTON, *supra* note 57, at 19-20.

⁷⁹ See Schneider, *supra* note 27, at 2.

oil imports (which account for about fifty-eight percent of consumption).⁸⁰ This dependency necessitates our involvement in the religious and ethnic conflicts of the Middle East, an area that provides about thirteen percent of our consumption.⁸¹ Moreover, the issue of sustainability will become even more critical for the United States when our known and proven domestic reserves of oil (including the Gulf of Mexico) are exhausted. This exhaustion is expected to occur within the next eight years.⁸² Beyond that point, no one really knows what the supply of domestically produced oil will be, but nearly everyone expects ever-increasing demand and ever-increasing prices for oil in the world market.⁸³

The infrastructure and related economic costs associated with the high level of automobile use in this sprawling built environment are enormous.⁸⁴ The cost to an individual household of owning, maintaining, and operating two automobiles averages more than \$12,000 each year.⁸⁵ Traffic congestion costs this

⁸⁰ *Id.*; Energy Info. Admin., Country Analysis Briefs—United States of America (2005), <http://www.eia.doe.gov/emeu/cabs/usa.html>.

⁸¹ Tom Kenworthy, *Energy Independence May Be a Pipe Dream*, USA TODAY, Oct. 25, 2004, at A17; see also Schneider, *supra* note 27, at 2.

To the extent the horrendous attacks laid bare America's oil dependence, or our unwelcome presence in the Middle East, the Smart Growth vision of more energy-efficient, environmentally sensitive, livable communities is certainly one of the most cogent long-term responses yet put forward about how to truly strengthen national security.

Id.

⁸² See *id.*

⁸³ See GILHAM, *supra* note 23, at 5.

Like the highway-building program of the past, a renewed effort at deconcentration might take so long to accomplish that it would be obsolete as policy long before it could be realized. Meanwhile, the suburbanization that has already occurred has caused vast social and environmental damage while increasing U.S. dependence on foreign oil, making further deconcentration a far greater risk today than it was in the 1950s.

Id.

⁸⁴ See Burchell, *supra* note 64.

⁸⁵ JAMES H. KUNSTLER, HOME FROM NOWHERE 69 (1996).

country about 5.7 billion person-hours of delay annually.⁸⁶ Public costs directly associated with automobile use amount to about \$300 billion a year in America.⁸⁷ Moreover, this country is incurring an enormous and largely road-related infrastructure maintenance deficit. A 2003 report estimated this infrastructure maintenance deficit to be \$1.6 trillion and noted that this deficit is likely to increase at a rate of over \$100 billion each year.⁸⁸ Whether these costs, which are obviously inflated by our hypersprawl urban landscape, should be passed on to (or can even be paid by) future generations should be the subject of increasing debate.⁸⁹

Urban sprawl has also contributed to the deteriorating economic viability and social livability of the core areas of most major cities and towns.⁹⁰ In some cases, its destructive impact on

⁸⁶ U.S. Dep't of Transp., Fed. Highway Admin., Traffic Congestion and Sprawl—Press Club Event (Nov. 19, 2002), <http://www.fhwa.dot.gov/congestion/congpress.htm>.

⁸⁷ KUNSTLER, *supra* note 85, at 71.

⁸⁸ AMERICAN SOCIETY OF CIVIL ENGINEERS, REPORT CARD FOR AMERICA'S INFRASTRUCTURE: 2003 PROGRESS REPORT, www.asce.org/reportcard/pdf/fullreport03.pdf. The Colorado State Department of Transportation recently estimated that the state's transportation funding deficit by the year 2030 will be \$103 billion. Editorial, *Slower State Growth Means Time to Plan*, DENV. POST, Dec. 24, 2004, at B6.

⁸⁹ This is a core issue in the debate about sustainable development in America. See Michael McCloskey, *The Emperor Has No Clothes: The Conundrum of Sustainable Development*, 9 DUKE ENVTL. L. & POL'Y F. 153 (1999) (discussing problematic issues involved in interpreting the concept of sustainable development with respect to the goal of inter-generational equity).

⁹⁰ Moe, *supra* note 67, at 15. The author therein notes that "[s]prawl has drained the life out of thousands of traditional downtowns and inner-city neighborhoods, and we've learned that we can't hope to revitalize these communities without doing something to control the sprawl that keeps pushing further and further out from the center." *Id.*; see also Robert Bullard et al., *The Costs and Consequences of Suburban Sprawl: The Case of Metro Atlanta*, 17 GA. ST. U. L. REV. 935, 938 (2001).

All communities are not created equal. Apartheid-type employment, housing, and development policies have resulted in limited mobility, reduced neighborhood options, decreased residential choices, and diminished job opportunities for African Americans and other people of color. American cities continue to

cities has been cumulatively similar to the destruction of nuclear weapons. In the last decade alone, 28,000 houses were razed in Detroit, a city that has lost half of its population since 1950.⁹¹ The less affluent are left behind in decaying crime-ridden neighborhoods and schools, and in areas far from new job opportunities.⁹² Deteriorating conditions in central cities, in turn, discourage more affluent households and businesses from moving to these areas.⁹³ This cycle of outward expansion and inner deterioration is now operating in older suburban areas.⁹⁴ There are now an estimated four thousand abandoned shopping malls in this country, many of which are located in older suburban areas impacted by ever-expanding outward development.⁹⁵

Automobile-dependent sprawl in this country has been as destructive of people as it has been of physical places. Since 1950, more than 2.3 million people have died in traffic accidents on the nation's roads.⁹⁶ This is more than twice the total number of American battle deaths incurred in all of this country's wars combined, from the Revolutionary War through the present War in Iraq.⁹⁷ There have been, of course, hundreds of millions of traffic

be racially separate and unequal. Residential apartheid is the dominant housing pattern for most African Americans—the most racially segregated group in America. Nowhere is this separate society contrast more apparent than in the nation's largest metropolitan areas.

Id.

⁹¹ See Jodi Wilgoren, *Detroit Urban Renewal Without the Renewal: Derelict Houses Razed but Not Replaced*, N.Y. TIMES, July 7, 2002, at A10.

⁹² See Bullard, *supra* note 90, at 936-39.

⁹³ See generally OLIVER BYRUM, *OLD PROBLEMS IN NEW TIMES: URBAN STRATEGIES FOR THE 1990S* (1992).

⁹⁴ See generally WILLIAM H. LUCY & DAVID L. PHILLIPS, *CONFRONTING SUBURBAN DECLINE: STRATEGIC PLANNING FOR METROPOLITAN RENEWAL* (2000).

⁹⁵ See Moe, *supra* note 67, at 15.

⁹⁶ U.S. Dep't of Transp., Fed. Highway Admin., *Highway Statistics Summary to 1995*, Table F1-200 (1995), <http://www.fhwa.dot/ohim/summary95/section5.html>.

⁹⁷ DEP'T OF DEF., *PRINCIPAL WARS IN WHICH THE UNITED STATES PARTICIPATED: U.S. MILITARY PERSONNEL SERVING AND CASUALTIES*, <http://web1.whs.osd.mil/mmjd/casualty/WCPRINCIPAL.pdf> (last visited Oct. 13, 2005).

injuries.⁹⁸ To keep the risk of terrorism in perspective, a conservative estimate would be that the number of people killed in traffic accidents in 2005 in this country will easily surpass more than ten times the number of people killed in the terrorist attacks on the World Trade Center.⁹⁹

III. THE THREAT OF TERRORISM AND THE POTENTIAL FOR DEFENSIVE DISPERSAL II

A change in thinking occurred in WWII that made cities a much more terrifying place to live: in total war, cities filled with noncombatants were legitimate targets. The recent terrorist attacks show that America's enemies also consider cities and their civilian residents to be targets. In the wake of WWII, consumer demand for suburbia soared, and national as well as local policies supported the move outward from city centers. Given current suburbanization trends and a new reason for residents and businesses to leave city centers, it appears that the ongoing rush to the suburbs and beyond will only accelerate.¹⁰⁰

—Brice Hoskins, 2001

Shortly after the September 11th terrorist attacks, the National Science Foundation financed a study by Harvard University professors Edward Glaeser and Jesse Shapiro to examine the relationship between violence and urban form and density.¹⁰¹ The study found that throughout human history,

⁹⁸ See GILHAM, *supra* note 23, at 4.

⁹⁹ The most recent data available indicates that in 2003, 42,643 individuals died on American highways. See BUREAU OF TRANSP. STAT., NAT'L TRANSP. STAT. 2004, Table 2-1: Transportation Facilities by Mode (2005), http://www.bts.gov/publications/national_transportation_statistics/2004.

¹⁰⁰ Brice Hoskins, GROWTH/NO GROWTH, Vol. 4, No. 10 (2001).

¹⁰¹ See generally Edward L. Glaeser & Jesse M. Shapiro, *Cities and Warfare: The Impact of Terrorism on Urban Form* (Nat'l Bureau of Econ. Research, Working Paper 8696, 2001), available at <http://www.nber.org/papers/W8696>.

warfare has had at least some impact on the development of cities across time and place.¹⁰² The study noted that cities were probably the original defensive agglomeration economy as relatively safe harbors from attack.¹⁰³ Large concentrated urban areas, however, were found to have sometimes suffered attacks and destruction from the target effect of violence during chaotic periods.¹⁰⁴

The study found that major American cities are likely considered rich targets by terrorists seeking to maximize damage.¹⁰⁵ The authors note that the September 11th terrorist attack in New York city targeted the single highest density area in the United States.¹⁰⁶ The study points out that while it is impossible to measure the change in the perceived risk to tall buildings and high-density urban areas associated with the September 11th terrorist attacks, future construction projects in America may be affected by these concerns.¹⁰⁷ The study concluded that, while

¹⁰² *Id.* at 24.

¹⁰³ *Id.* at 2.

¹⁰⁴ *Id.* at 8. The study also noted how the urban world that grew under the Pax Romana nearly disappeared from much of Europe during the subsequent middle ages, how the Thirty Years War led to a massive de-population of German cities, and how the great cities of Pre-Colombian America all but disappeared during the Spanish conquest. *See id.* at 9.

¹⁰⁵ Glaeser, *supra* note 101, at 9. The authors observe that “[f]uture construction projects may therefore be affected by safety concerns [since the September 11 terrorist attacks] even if those concerns have not been terribly important in the past. Since we cannot measure the true change in perceived risk to tall buildings associated with the September 11 attacks, this must remain an unresolved issue.” *Id.* at 18.

¹⁰⁶ *See id.* at 9.

¹⁰⁷ *Id.* at 18; *see also* Thomas Fisher, *Architecture in the Crosshairs*, 95 ARCHITECTURE 96 (2003).

If you have any doubt about the impact of weaponry on architecture, look at the post-World War II period, during which we rebuilt cities—consciously or not—in ways that resisted the effects of the carpet-bombing and atomic explosions that our military used to such devastating effect during the war. Siting tall buildings in ample open space reduces the likelihood of the firestorms that carpet-bombing creates in dense cities. Likewise, suburban sprawl moves people farther away from the probable ground zero of an atomic attack, via an interstate highway

"the expected impact of terror on America's urban landscape is unclear,"¹⁰⁸ the "attraction of terrorism to density will continue and will create an added cost to urban agglomeration."¹⁰⁹

This is not good news for America's major cities. Obviously, proponents of sustainable development and smart growth are not sanguine about any increase in the rate of sprawl.¹¹⁰ They view with horror the potential impact of a new Defensive Dispersal II policy. Michael Dudley notes that

[t]he Cold War version of defensive dispersal was a tacit argument for learning to live with the bomb, rather than insisting upon its prohibition; its 21st Century counterpart would have us adjust our cities to the threat of terrorism without reference to its contexts. In both cases, there is a failure to recognize deeper connections.¹¹¹

Similarly, another report critical of defensive dispersal stated that "[a] new wave of dispersion in our nation may well create far more damage than the terrorism it is intended to protect us from."¹¹² Speaking of the link between higher density development and environmental protection and resource conservation in this country, Eric Goldstein at the Natural Resources Defense Council states simply that "the [number one] environmental concern is that the center holds."¹¹³

system that Congress once justified for defensive purposes. We won World War II, but we ended up reshaping our own cities as thoroughly as those we destroyed, bringing to mind the old adage that, in war, the victor becomes the victim.

Id.

¹⁰⁸ Glaeser, *supra* note 101, at 24.

¹⁰⁹ *Id.* at 9.

¹¹⁰ See generally Dittmar, *supra* note 25; GILHAM, *supra* note 23; Schneider, *supra* note 27.

¹¹¹ Dudley, *supra* note 26.

¹¹² GILHAM, *supra* note 23, at 1.

¹¹³ Randal O'Toole, *Is Sprawl a Defense Against Terrorism?*, ENV'T NEWS, (Dec. 1, 2001), at 1, available at <http://www.heartland.org/Article.cfm?artId=802>.

Many cities had been losing population steadily during the half century prior to the September 11th terrorist attacks.¹¹⁴ Other major cities that had been gaining population during the urban renaissance of the 1990s¹¹⁵ actually had a rate of growth during that decade of about only one half the rate of suburban population growth.¹¹⁶ A recent Brookings Institution study of Census Bureau data for the period from 1982 to 1997 found that densities had dropped significantly during that period in all regions of the country, and even in hot metropolitan real estate development markets such as New York, San Francisco, Boston, and Chicago.¹¹⁷ This study also found that of the population growth between cities and suburbs during the last decade, suburbs were capturing the overwhelming majority of fiscally-favored household types and key age groups.¹¹⁸ The urban renaissance of the 1990s, when the population growth rate of this country's hundred largest cities increased as a group from 6.3 to 8.1 percent, was not exactly a stampede back to urban core areas.¹¹⁹

One positive finding of the Harvard study was that terrorism made only a small impact over the last thirty years on the growth and urban form of London and Jerusalem.¹²⁰ That experience is relevant to this country, of course, only if land development options are comparable and if Americans share the disposition and habits of the British and Israelis. There are many reasons, however, to believe that this is not the case.

¹¹⁴ See ANTHONY DOWNS, *NEW VISIONS FOR METROPOLITAN AMERICA* 60-94 (1994). In New York, for example, Manhattan's population has decreased more than a third since 1920. See O'Toole, *supra* note 113, at 3. See generally Burchell, *supra* note 57.

¹¹⁵ See Dittmar, *supra* note 25, at 43-45.

¹¹⁶ See generally BRUCE KATZ, *MUNICIPALITIES IN TRANSITION: ADDRESS AT THE NATIONAL LEAGUE OF CITIES* (Mar. 8, 2002), available at <http://brookings.edu/es/urban.NLC.ppt>.

¹¹⁷ See generally AMY LIU, *THE BENEFITS AND REALITIES OF HIGH DENSITY DEVELOPMENT: ADDRESS AT THE SAN FRANCISCO INST. CONF.* (Oct. 31, 2003), available at http://brookings.edu/es/urban/speeches/20031031_uli.ppd.

¹¹⁸ See generally *id.*

¹¹⁹ See generally KATZ, *supra* note 116.

¹²⁰ See Glaeser, *supra* note 101, at 4.

Americans are highly mobile almost by habit,¹²¹ show little attachment to places or particularly cities,¹²² still overwhelmingly prefer a roomy house in a suburban neighborhood,¹²³ and are generally able to afford suburban living.¹²⁴ Americans also tend to view housing as an economic investment in a large bulk commodity,¹²⁵ and are willing to drive until they qualify to attain a suburban lifestyle, even in worsening traffic congestion.¹²⁶ Americans are also highly risk averse.¹²⁷

¹²¹ See PIETRO NIVOLA, *LAWS OF THE LANDSCAPE* 7 (1999).

¹²² See RYBCZYNSKI, *supra* note 3, at 109. "An American . . . changes his residence ceaselessly." *Id.* (quoting Alexis de Tocqueville).

¹²³ Burchell, *supra* note 67, at 149 (pointing out that surveys show that eighty percent of Americans prefer a detached single-family home with a yard, and to afford it, would rather live further away from their place of employment than take a second job).

¹²⁴ See *Emerging Trends in Real Estate*, *supra* note 60, at 11.

Low mortgage rates and federal subsidies, including down payment grants, have pushed U.S. homeownership close to 70 percent, a record by any measure. Huge buyer demand has spurred homebuilders and multifamily developers into construction overdrive—subdivisions, high-rise condominiums, infill and fringe projects spring out of the ground like wherever builders can muster entitlements. Existing homeowners marvel at how rising property values over the past decade have increased their net wealth beyond any other "investment"—forget about the stock market. During the 2001-2003 period alone, the median price of an existing home in the United States jumped 15 percent and prices are expected to increase nearly another 10 percent in 2004.

Id.

¹²⁵ *Id.*

¹²⁶ Tom Dooley, *Downtown Living Remains Strong: Fueled by childless households, in-town homes prospers*, REALTOR MAGAZINE ONLINE, 2002, <http://www.realtor.org/rmoprint.nsf/pages/indwatch200211252>.

¹²⁷ See generally MICHAEL CRICHTON, *STATE OF FEAR* (2004); DANIEL HOROWITZ, *THE ANXIETIES OF AFFLUENCE* (2004); DAVID L. ALTHEIDE, *CREATING FEAR: NEWS AND THE CONSTRUCTION OF CRISIS* (2002); FRANK FUREDI, *CULTURE OF FEAR: RISK TAKING AND THE MORALITY OF LOW EXPECTATION* (2002); BARRY GLASSNER, *THE CULTURE OF FEAR: WHY AMERICANS ARE AFRAID OF THE WRONG THINGS* (2000); AARON WILDAVSKY, *BUT IS IT TRUE?: A CITIZEN'S GUIDE TO ENVIRONMENTAL HEALTH AND SAFETY ISSUES* (1997).

With respect to potential business relocations, there appears to be a ready supply of land and space outside of major cities capable of accommodating any significant acceleration in suburban business growth in the years ahead.¹²⁸ Deconcentrating telecommunications technologies, as well as the conveniences and amenities of growing suburban “edge cities,” are likely to provide sufficient suburban agglomeration economies to attract and absorb increased business growth outside urban core areas.¹²⁹ Corporations in central business districts facing perhaps higher city taxes, in part to finance ‘hometown’ security programs, and increasing operating costs, particularly for private security and high-event hazard insurance, may find less expensive suburban locations increasingly attractive.¹³⁰ Many people expect the fear of terrorist attacks to accelerate already-existing trends toward corporate decentralization and declustering in favor of primary suburban office hubs.¹³¹ While the risk of terrorism is low and insignificant at any one central urban location, the risk is even lower in suburban and rural areas.¹³²

Some observers suggest that the prevailing American business location mantras may become “don’t bunch up” and “keep

¹²⁸ See *Emerging Trends in Real Estate*, *supra* note 60, at 56-57.

¹²⁹ See JOEL GARREAU, *EDGE CITY: LIFE ON THE NEW FRONTIER* 5 (1991) (discussing how automobile-dependent suburban employment centers have evolved in the latter half of the twentieth century into largely distinctly identifiable areas or “edge cities” around which most Americans now live, work, shop, and play); see also Christopher Leinberger & Charles Lockwood, *How Business is Reshaping America*, ATLANTIC MONTHLY, Oct. 1986, at 43.

¹³⁰ See JOHN S. BAEN, THE IMPLICATIONS OF SEPTEMBER 11, 2001 AND TERRORISM IN INTERNATIONAL URBAN FORM AND VARIOUS CLASSES OF REAL ESTATE 13-19 (2003), <http://www.coba.unt.edu/firel/baen/911article.htm>; Pedersen, *supra* note 63 (responding to whether the threat of domestic terrorism will hurt cities) “From a corporate point of view, it will certainly encourage de-clustering. David Schulman at Lehman Brothers says, ‘terrorism demolishes agglomeration economies.’ This is a complicated way of saying people are scared. So I think that high-rise construction is not going to be en vogue.” *Id.*

¹³¹ See *Emerging Trends in Real Estate*, *supra* note 60, at 56-57.

¹³² See BAEN, *supra* note 130, at 7.

a low profile.”¹³³ Joel Kotkin, who studies the changing urban landscape in the United States, commented in a 2004 report that

[p]eople will not want to call attention to themselves. Companies will look for redundant systems. Plus you'll have people a little more reluctant to live in a place that is seen as a primary terrorist target. Now the reality is terrorists could blow up Des Moines tomorrow. It's possible. But they do seem to concentrate on high-profile locations. The threat is going to have an impact over time.¹³⁴

Examples such as Wal-Mart, Microsoft, SYSCO, and Merrill Lynch illustrate that major corporations have no real economic need for trophy headquarters, or even large offices in the downtown areas of major cities.¹³⁵ Corporations may adopt long-term strategic plans to move to a single suburban or semi-rural defensible campus, with high security fencing, controlled gated access, landscaping and buffer zones, and with no fear of a tenant mix that could include a higher risk “target tenant.”¹³⁶ “Executives calculating where to house their employees are factoring in the need not to build something a suicide bomber might be tempted to knock down.”¹³⁷ In fact, some firms whose offices were in the World

¹³³ See O'Toole, *supra* note 113, at 1-2; see also James T. Berger, *Will Terrorism Affect Conventional Wisdom on Industry Clusters?*, Plant Sites & Parks (2003), <http://www.google.com> (search “James Berger ‘Will terrorism affect’” then follow “cached” hyperlink); Density: Myth & Reality, National Conference and Design Competition, Session Notes C6, New York, New York, Boston Society of Architects (Sept. 2003), http://www.architects.org/shaping_communities/index.cfm?doc_id=116.

¹³⁴ Pedersen, *supra* note 59.

¹³⁵ See Joel Kotkin, *Bye-Bye, Big Apple: Omaha and Orlando Are Jumping Now*, WASH. POST, Sept. 7, 2003, available at <http://www.washingtonpost.com/ac2/wp-dyn?pagename=article&contentId=A34590-2003Sep6¬Found=true>; see also BAEN, *supra* note 130, at 7.

¹³⁶ See BAEN, *supra* note 130, at 7.

¹³⁷ Holman Jenkins, *Don't Rebuild the World Trade Center*, WALL ST. J., Sept. 19, 2001, at A21, available at <http://www.opinionjournal.com/columnists/hjenkins/?id=95001173>.

Trade Center before September 11th subsequently signed leases “on nondescript properties outside the city on terms which suggest they have no plans to return.”¹³⁸ A 2002 *Barron's* article warned that the threat of future terrorist attacks reinforces “the importance of geographical diversification” and warns that corporations concentrated in urban areas may be risky investments for investors and insurers.¹³⁹

A number of observers believe that, at least in America, the rise of global terrorism will bring the age of skyscrapers to an end.¹⁴⁰ In this view, skyscrapers should “now be considered an experimental building typology that has failed.”¹⁴¹ Architect Stephen Graham points out that “[t]he iconic power of the skyscraper—a symbol of urban progress and modernization for a century—has been instantly reversed. From icon of power, progress, and dynamism of urban America it has been transmitted into a symbol of fragility that builds deep vulnerability into the cityscape.”¹⁴² A 2003 Allianz report on insurance risks associated with high-rise construction states that

[s]ome market observers note a tendency toward lower high-rise buildings and office space on lower levels. For example, Donald Trump's planned Chicago tower was approved for a height of 86 floors, down from initial ideas of more than 100 floors, and office space at very high levels is generally less in demand, according to press reports.¹⁴³

By comparison, the World Trade Center towers were 110 floors high with office spaces going nearly up to the top floor.¹⁴⁴ The

¹³⁸ *Id.*

¹³⁹ Jim McTague, *A Lesson of Terrorism, Spotlighting the Need for Geographical Diversification*, BARRON'S, July 15, 2002, at 31.

¹⁴⁰ See O'Toole, *supra* note 113, at 4.

¹⁴¹ GRAHAM, *supra* note 14, at 7.

¹⁴² *Id.* at 6.

¹⁴³ *Sky High Risks: New Trends in High-Rise Protection*, ALLIANZ GLOBAL RISKS (2003), <http://www.allianzgroup.com/azgrp/dp/cda/0,,169701-44,00.html>.

¹⁴⁴ *Id.*

report later notes: "Terrorism risk, for its part, is not seen attaching purely to the height of a building but rather to its location and status, owners and occupants. For the most part, [insurance] does not provide terrorism coverage for property risks outside the scope of statutory requirements."¹⁴⁵

It is hardly surprising that many people believe that the threat of terrorist attacks on America's urban places will accelerate suburban sprawl in this country.¹⁴⁶ Some predict that in the long term, this country will likely experience "a rapid increase in the rate of suburbanization and decentralization of businesses and urban dwellers."¹⁴⁷ It is important to put these expectations about the acceleration of sprawl into perspective. These expectations do not involve a paradigm shift in this country's present development pattern—only an acceleration in the pre-existing pattern of low density sprawl that has been underway for nearly a century.¹⁴⁸

¹⁴⁵ *Id.*; see also O'Toole, *supra* note 113, at 2.

California sociologist J.F. Scott points out that the notion financial districts need towering skyscrapers to bring traders close enough together to do their work is refuted by Silicon Valley's financial district in Menlo Park, California. That district, observes Dr. Scott, "consists of low-rise buildings (none over 3 stories) with abundant parking."

Id.

¹⁴⁶ See O'Toole, *supra* note 113; BAEN, *supra* note 130; GRAHAM, *supra* note 14, noting that the threat of terrorism

will deepen the ambient fear that surrounds life in highly concentrated and iconic urban centers, especially in Western cities. They will undermine efforts to build obvious, iconic urban structures rather than featureless, generic urban landscapes. And they will support the massive growth of relatively anonymous, low-level, fortified business spaces that are heavily networked by multiple data infrastructures. The purpose-built disaster recovery sites in New Jersey that were hastily colonized by WTC firms after the attacks may provide a model for longer term development solutions here.

Id. at 5-6.

¹⁴⁷ BAEN, *supra* note 130, at 23.

¹⁴⁸ See Ziegler, *supra* note 6, at 28-30.

Recent reports examining new office construction, office and apartment vacancy rates, locations of federal facilities, and business activity in downtown areas, indicate that, as yet, "no such change has occurred" and that "suburbs haven't benefited conspicuously at the expense of cities."¹⁴⁹ According to one report, as the events of September 11th recede in time, other economic forces, such as immigration, globalization, and technological innovation may be more important factors in urban growth and development.¹⁵⁰ According to a recent GAO report, stronger-than-anticipated economic growth mitigated some of the economic impacts of the terrorist attacks on cities.¹⁵¹ The September 11th terrorist attacks exacerbated the recession that began prior to the attacks, suggesting that accelerated sprawl might not show up yet in the data examined.¹⁵² Corporate ownership of major buildings and long-term leases might also delay the decentralization of some businesses.¹⁵³ Additional sprawl-accelerating consequences may result from the risk of terrorist attacks on cities. These consequences include increasing taxes to fund homeland security and preparedness programs, the rising costs of private security systems and safeguards, deteriorating urban amenities and aesthetics from

¹⁴⁹ Eisinger, *supra* note 9, at 16 (quoting PricewaterhouseCoopers' *Emerging Trends in Real Estate* (2003) at 12).

¹⁵⁰ Alan Berube & Alice Rivlin, *The Potential Impacts of Recession and Terrorism in U.S. Cities*, WASHINGTON, D.C. CENTER ON METRO. POLICY, BROOKINGS INST. 3 (2002).

¹⁵¹ See U.S. GOV'T ACCOUNTING OFFICE, REVIEW OF STUDIES OF THE ECONOMIC IMPACT OF THE SEPTEMBER 11, 2001, TERRORIST ATTACKS ON THE WORLD TRADE CENTER (2002), available at <http://www.gao.gov/new.items/d0700r.pdf>.

¹⁵² See Eisinger, *supra* note 9, at 12.

¹⁵³ See BAEN, *supra* note 130, at 7-8.

Existing ownership and long-term lease commitments by companies will soften or delay property decisions of corporations and city governments that will not require them to consider these questions simultaneously in the near future. However, over time, urban growth and increased security measures in regard to design, structural requirements, emergency planning, and property management will add a great deal of cost to traditional high density urban development.

the potential militarization of city life, and the deteriorating fiscal condition of major cities.¹⁵⁴

Some data already suggests that an acceleration of sprawl may actually be underway in some metropolitan areas of the country.¹⁵⁵ According to 2003 census data, some of the nation's major cities, including Boston, Chicago, and San Francisco, that were gaining population in the last decade, have now started to lose population.¹⁵⁶ In addition, a number of major cities, including Detroit, Philadelphia, St. Louis, Cincinnati, Cleveland, New Orleans, and Savannah, that were losing population during the last decade, are now losing population at an even faster rate.¹⁵⁷

No one is predicting that major cities will become depopulated ghost towns. The stable market for residential housing in downtown areas is likely to continue in the years ahead due to the increasing number of childless households.¹⁵⁸ Similarly, at the end of 2004, two primary terrorist-target areas, Manhattan and Washington, D.C., had office vacancy rates that were the lowest in the country and tourists again flocked to these areas.¹⁵⁹ The risk of terrorism has not affected these cities' standing as global

¹⁵⁴ See *id.* at 13-18.

¹⁵⁵ See *id.* at 20.

Some interesting trends have been noted recently although they may subside over time if no other terrorist attacks occur anytime soon:

- 1) Second homes and vacation homes have been selling in far greater numbers than usual for the Northern Hemisphere slow winter months.
- 2) Rural farm-lets and lifestyle blocks or building sites have been selling extremely well throughout the U.S. and are usually the first market to slow at the first signs of a U.S. recession.
- 3) U.S. farms and ranches have been selling at relatively high prices although farm commuting prices and incomes are expected to drop 20% during 2002.

Id.

¹⁵⁶ Haya El Nasser & Paul Overberg, *Housing Crunch Revives Old Cities; Sun Belt Booms, Northeast Blooms*, USA TODAY, June 24, 2004, at A01.

¹⁵⁷ See *id.*

¹⁵⁸ *Emerging Trends in Real Estate*, *supra* note 60, at 11; Dooley, *supra* note 126.

¹⁵⁹ *Emerging Trends in Real Estate*, *supra* note 60, at 13.

centers. A 2005 report on America's real estate markets points out that "[t]o some degree, terrorism has been factored out of the system as everyone goes about their business."¹⁶⁰ That report, however, also states that

[f]or all the business as usual, terrorism remains an immutable force and cloud on the real estate markets. "It pervades the entire economy, creating uncertainty," says an interviewee. "You can't quantify it, you hear very little discussion about it, but it's there even if it isn't factored into pricing."¹⁶¹

It is important to remember that anxiety levels need not be that high to cause a significant acceleration of sprawl.¹⁶² The same report notes in this regard that "[t]he uncontrollable risk of a 'bolt

¹⁶⁰ *Id.*

¹⁶¹ *Id.*

¹⁶² See Jodi Wilgoren, *Terror Threat Strikes Fear in Sears Tower in Chicago*, N.Y. TIMES, Sept. 23, 2001, at 1A, available at <http://www.searstower.org/news.html> (worker anxieties have increased in tall buildings with some office tenants actually having operational military surplus parachutes under their desks on the 49th floor and higher of the Chicago Sears Tower), and available at 2001 WLNR 3374009; see also Eisinger, *supra* note 9, at 19-20 (citing several surveys that indicate that, while fear of terrorism may not have changed the ordinary habits of daily life in cities, anxiety about terrorism does exist). A 2003 survey indicated that sixty-eight percent of New York City residents were personally very concerned about another terrorist attack, thirty-four percent reported feeling nervous or edgy because of the September 11th terrorist attacks; a 2002 national survey indicated that eight percent reported being very worried and thirty-one percent were somewhat worried about terrorist attacks; in a 2002 California survey, seventeen percent of people in San Francisco and twenty-nine percent of people in Los Angeles thought terrorism and security were a big problem, forty-one percent in both metro areas thought they were somewhat of a problem; a 2000 Michigan survey indicated that seventy-five percent thought an attack on their community in the next year somewhat or very likely. *Id.*; see also U.S. Conference of Mayors, *Providence Mayor Cicilline, Cleveland Mayor Campbell Address Urban Homeland Security*, Oct. 18, 2004, http://www.usmayors.org/uscm/us_mayor_newspaper/documents/10_18_04/cicilline_campbell.asp (describing survey results).

out of the blue' is considerably higher than it was before 9/11,"¹⁶³ and that "[n]obody is ready to venture a guess as to what might happen 'next time.'"¹⁶⁴

IV. DESIGNING FORTRESS AMERICA AND THE POTENTIAL FOR DEFENSIVE DISPERSAL II

As the September 11 attacks and the Iraq conflict have demonstrated, architecture now stands at the very center of modern warfare, with truck bombs, commandeered planes, and smart missiles able to annihilate buildings with unprecedented precision. This militarization of architecture—especially architecture that has perceived symbolic or strategic value—will change the way in which we design buildings and cities in the future.¹⁶⁵

—Thomas Fisher, 2003

Local governments have the primary responsibility for instituting anti-terrorism safeguards and security systems that might serve to protect our local public monuments, buildings, parks, plazas, and other critical public infrastructure.¹⁶⁶ They are responsible for designing, financing, and implementing safeguards for the hardening of vulnerable public targets and preparing plans to mitigate the consequences of possible terrorist attacks.¹⁶⁷ Local governments are also the source of security standards and development review programs that govern the design and development of

¹⁶³ *Emerging Trends in Real Estate*, *supra* note 60, at 13.

¹⁶⁴ *Id.*

¹⁶⁵ Fisher, *supra* note 107, at 96.

¹⁶⁶ See Richard Schneider, *American Anti-terrorism Planning and Design Strategies: Applications for Florida Growth Management, Comprehensive Planning and Urban Design*, 15 U. FLA. J.L. & PUB. POL'Y 129, 131-32 (2003).

¹⁶⁷ See *id.* at 142. The author discusses "hardening the target," which is "one of the oldest crime prevention strategies generally associated with access control, a place-based crime prevention principle." Target hardening involves "creating a built environment that is difficult to attack, resilient to consequences of attack or accident, and protective of its occupants should an incident occur." *Id.*

privately-owned buildings and infrastructure. Local governments are assuming these new responsibilities as the guardians of our built environment.¹⁶⁸

Major cities are particularly concerned about reducing their vulnerability to future terrorist attacks. Until only recently, city land use design and development review programs focused largely on preparedness, response, and mitigation related to natural disasters.¹⁶⁹ These developmental review programs are now expanding to embrace the prevention and mitigation of terrorist attacks.¹⁷⁰

¹⁶⁸ See GRAHAM, *supra* note 14, at 2 (quoting PAUL VIRILIO, *LOST DIMENSION* (1991)).

Urban architecture has to work with the opening of a new technological space-time based on unstoppable flow, unpredictable mobility, and the risks of these enormously complex technological systems being perverted to disrupt, destroy and kill. Here we have to contend not just with mass airline coercion. We must also face strategic computer hacking, and IT viruses of cyberware, potential mass water poisoning, and possible terrorist use of nuclear, chemical or biological weapons.

Id. (internal quotation marks omitted); see also Jennifer S. Light, *Defense Planning and Urban Planning, Past and Future*, J. AM. PLANNING ASS'N (Sept. 2004), available at http://www.findarticles.com/p/articles/mi_go2503/is_200409/ai_n9441957 (subscription required), and available at <http://www.planning.org/japa/byissue.htm> (payment required).

Since the events of September 11, 2001, there has been much talk about the future of American cities. With the War on Terrorism projected to last for years and urban areas understood to occupy its domestic frontlines, the nation's city officials have begun to acknowledge that defense planning must become a new priority. In cities across the nation—even some such as Seattle, where city councilors voted to reject the provisions of the U.S.A. Patriot Act—administrations have begun to work with security experts to identify potential threats, prepare preventative measures, and organize for emergency response.

Id. (citations omitted).

¹⁶⁹ FEMA: INTEGRATING MANMADE HAZARDS INTO MITIGATION PLANNING, FEMA Doc. 386-7 (Sept. 2003), available at <http://www.fema.gov/pdf/fima/howto7.pdf>.

¹⁷⁰ See *id.*; see also BAEN, *supra* note 130, at 23.

Modern technology in the form of air travel, micro-biology, manufactured nuclear materials, and the creation of chemical

Potential threats to high-density urban sites and possible targets with high symbolic value are of particular concern.¹⁷¹ The federal mandate in this regard reads:

The Department of Housing and Urban Development, and any other departments or agencies of the Federal Government having powers, functions, or duties with respect to housing under any law shall exercise such powers, functions, or duties in such manner as, consistent with the requirements thereof, will facilitate progress in the reduction of the vulnerability of congested urban areas to enemy attack.¹⁷²

Since September 11th, the General Services Administration ("GSA") expanded its program to secure the 8,000 buildings that it owns or leases in 1,600 American communities across the country. The program now embraces a variety of new security concerns and technologies.¹⁷³ Joseph Moravec, Commissioner of the Public Buildings Service within the GSA, notes that

warfare agents, have become tools of destruction and fear for modern 21st century cities. The fact that three (3) jet airliners, or letter containing small amounts of Anthrax dust, or a low-tech nuclear dust truck bombs could render an entire building and large areas of CBDs destroyed, unusable and worthless for years, decades, even centuries, . . . is a serious threat to the civilized world, their economies, and even governments. The effected area in New York was approximately 400 acres covered by toxic asbestos dust. This area of land, in the shape of a triangle (1.2-1.2-.9 miles), would more than cover most U.S. CBD high-density downtown areas.

Id.

¹⁷¹ See, e.g., INTEGRATING MANMADE HAZARDS INTO MITIGATION PLANNING, *supra* note 169, at Worksheet 2 (2-15) (PDF at 41).

¹⁷² *Id.*

¹⁷³ See *Public Buildings Security Hearing Before the H. Subcomm. on Tech. and Procurement Pol'y of the H. Comm. on Gov't Reform*, 107th Cong. (2002) (statement of F. Joseph Moravec, Comm., Pub. Bldgs. Serv., Gen. Servs. Admin.), available at http://www.securitymanagement.com/library/GSA_testimony0702.pdf.

[s]ince September 11, 2001, our security needs and response to threats have changed. Prior to September 11th, our greatest threat was perceived to be a vehicular bomb that could result—as in the case of Oklahoma City—in the total collapse of a building. September 11th made us realize that the universe of threats we face has expanded, and the mentality of those who wish to do harm is even more dangerous than we imagined. We now must be prepared not only for truck bombs, but also chemical and biological weapons and weapons of mass destruction delivered by individuals who have no regard for human lives, including their own.¹⁷⁴

Each federal facility and tenant agency operation is analyzed individually and GSA countermeasures are now building-specific.¹⁷⁵

¹⁷⁴ *Id.*

¹⁷⁵ See *id.* at 2; see also Fisher, *supra* note 107, at 94.

This [the old adage that, in war, the victor becomes the victim] suggests that we may increasingly become like the Iraqis we just defeated. They developed a number of architectural strategies to resist our precision bombing, and we have much to learn from them, especially now that terrorists have demonstrated themselves capable of doing the same to us. The models for this already exist. Just as the urban ideas of Le Corbusier and Frank Lloyd Wright had defensive value for cities threatened by new kinds of bombing after World War II, so to might the architectural ideas of the 1960's and 1970's prepare us for the threat of precision bombing.

Id.; see also Moravec, *supra* note 173, at 2. Mr. Moravec identified the factors the GSA considers in determining the minimum level of security in a Federal building:

The factors that we rely upon to establish and maintain this [minimum] level of security are derived from two principal sources. The first source is actually two publications—the 1995 Department of Justice Vulnerability Assessment of Federal Facilities Report (the 1995 DOJ Report), and the 2000 Interagency Security Committee Security Design Criteria for New Federal Office Buildings and Major Modernization Projects (ISC Security Design Criteria). These two publications provide

For new federal buildings and federal buildings undergoing major modernization, the security process begins with the design of the building itself, including such items as "construction provisions to address progressive collapse, window/glass protection, building setback, HVAC protection, and a comprehensive perimeter security system."¹⁷⁶ Common security technologies and

recommendations and guidelines for minimum-security standards and form the basis that GSA uses when determining security standards.

The second source is the Building Security Assessment (BSA) program developed by the Public Buildings Service's Federal Protective Service to determine the specific building security measures needed for each building to eliminate or reduce threats directly associated with the building. In conducting a security assessment, factors such as: the facility's unique features and existing countermeasures, identification of credible threats, determination of risk level for each threat, determination of risk level for each threat, determination of acceptability of certain risks, identification of countermeasure upgrades, and reassessment of risk level after new countermeasures are implemented—are used to ultimately reach the optimum security level for each building

[W]e address each building on a case-by-case basis to make certain the highest level of security is achieved for each building For new buildings this process will begin with the actual design of the building itself to ensure all aspects of the building are considered. This would include such items as construction provisions to address progressive collapse, window/glass protection, building setback, HVAC protection, and a comprehensive perimeter security system.

Id.

¹⁷⁶ See Moravec, *supra* note 173, at 3.

Since the September 11th attacks, we have seen an increase in requests for implementation of additional countermeasures at our buildings. The type of countermeasures recommended and requested since the terrorist attacks have been geared toward items such as: explosive detection systems, under vehicle inspections, air intake sensors, bomb dogs, and biological/chemical detection equipment. Based on the type of threat

equipment employed at GSA-managed buildings and facilities include:

- Security Lighting
- Barriers—Physical and Vehicle, High Security Locks
- Closed Circuit TV
- Security Systems—Intrusion Detection/Fire Systems, etc. with Central Station Monitoring
- Uninterruptible Power Supply
- Photo Identification
- Visitor Control
- Security Guards
- X-Ray Machines
- Magnetometers
- Explosive Detection Systems, Hand Held Units, Mobile Units, Canine
- Under Vehicle Inspection System
- Air In-Take, HVAC Protection
- Backups for Critical Infrastructure Components (Radio Communication/Computer Facilities).¹⁷⁷

Similarly, state and local governments are integrating anti-terrorist security measures into the planning, design and operations of major public buildings and facilities that are potential targets.¹⁷⁸ Private sector owners and operators, who manage about eighty-five percent of this country's critical infrastructure, are also directly responsible for implementing risk assessment and mitigation measures under President Bush's national strategy for the protection of critical infrastructure and key assets.¹⁷⁹ Leaders in the

identified at a building and/or at the request of a Building Security Committee or client agency, GSA has purchased and implemented many of these countermeasures.

Id. at 6.

¹⁷⁷ *Id.* at 3-4.

¹⁷⁸ INTEGRATING MANMADE HAZARDS INTO MITIGATION PLANNING, *supra* note 169.

¹⁷⁹ Rufus Calhoun Young, Jr. & Dwight H. Merriam, *Homeland Security Begins*

field of urban planning and design are now calling for adaptation of place-based crime prevention techniques in the formulation of defensive anti-terrorist urban planning strategies and standards, including layered defenses and target hardening by defensive perimeters, access control, lighting, and sight lines.¹⁸⁰ One report discusses how Crime Prevention through Environmental Design ("CPTED") principles can be used to address homeland security concerns in the design of the built environment.¹⁸¹

At the building and site level, CPTED principles are often operationalized in military installations or in other key federal facilities. This may include the design of structures that minimize niches (hiding places) around the building envelope; the maximization of surveillance of exterior entrances and parking areas through window placement (a natural design element); electronic means, or guards; the protection of delivery areas remote from the main structure; the establishment of sufficient stand-off distances from parking areas and vehicle traffic; the design of

at Home: Local Planning and Regulatory Review to Improve Security, LAND USE L. & ZONING DIGEST, Nov. 2003, at 3, available at <http://www.planning.org/PEL/pdf/Nov03.pdf>; see also Schneider, *supra* note 166, at 133.

In the private sector, response planning is epitomized by the recommendation of a Rand report commissioned by the Building and Managers Association of Greater Los Angeles (BOMA). The report suggested policy and program changes by government and the private sector to deter and mitigate the effects of a terrorist attack on eighteen high rise buildings (those over five hundred feet) in the city's central business district. The importance of private sector participation in anti-terrorism planning and design is evidenced by the fact that approximately eighty-five percent of the nation's infrastructure, including that which is considered critical, is owned and operated by private enterprise. A significant portion of that critical infrastructure is located in the nation's fourth largest state, Florida.

Id. (citations omitted).

¹⁸⁰ Schneider, *supra* note 166, at 134-42.

¹⁸¹ *Id.* at 136.

curvilinear entrance drives; and the placement of hardened street furniture or, where feasible, indigenous plant and landscape material that are effective vehicle deterrents. The buildings themselves may be hardened against blast (as new or modernized American embassies are presently), or they may contain a blast wall and blast resistant windows. The site may be zoned so as to group or disperse particularly sensitive facilities or infrastructure and to contain layers of access control devices.¹⁸²

A recent commentary in an American Planning Association publication calls for the full integration of homeland security measures and anti-terrorist planning strategies throughout the local urban planning and land use and development review/permitting processes.¹⁸³ The authors recommend that local governments undertake comprehensive reviews of their land development review and permitting processes and incorporate homeland security considerations.¹⁸⁴ Checklists and processing steps will require revisions to incorporate homeland security concepts, and ordinances and codes may also have to be revised.¹⁸⁵ Local governments might also consider audits or inspections by law enforcement personnel and building inspectors for compliance with homeland security defensive steps.¹⁸⁶

Land use planners, architects, developers, and building owners must also consider Homeland Security measures in the planning phase. Due diligence in the acquisition of existing structures also requires consideration of these Homeland Security factors. Homeland Security considerations must also be a factor in retrofit and remodeling decisions.¹⁸⁷

¹⁸² *Id.* at 136-37 (citations omitted).

¹⁸³ See Young, *supra* note 179, at 10.

¹⁸⁴ *Id.*

¹⁸⁵ *Id.*

¹⁸⁶ *Id.*

¹⁸⁷ Young, *supra* note 179, at 10.

The report identifies the following buildings and sites as potential "terrorist-sensitive"¹⁸⁸ facilities:

- Airports
- Bridges
- Chemical Plants
- Computer Center and Internet Hubs
- Convention Centers
- Cruise Ship Terminals
- Dams
- Government Buildings (especially those with high traffic and symbolic recognition, including courthouses, jails, police stations, and post offices)
- Hospitals
- Hotels (especially those with symbolic recognition)
- Nuclear Reactors
- Office Buildings
- Ports
- Power Plants
- Railroads, Rail Yards, and Passenger Terminals
- Schools
- Stadiums
- Shopping Centers and Restaurants
- Multifamily Apartment Buildings and Planned Urban Developments
- Symbolic Structures (*e.g.*, Statue of Liberty, Golden Gate Bridge)
- Transportation Terminals (especially hazardous materials freight facilities)
- Tunnels
- Waste Water Plants and Facilities
- Water Utilities

¹⁸⁸ *Id.* at 4.

- Others, particularly those with high concentrations of people, identified through site- and threat-specific analysis¹⁸⁹

The report calls for site-specific assessments of the vulnerabilities of and potential threats to terrorist sensitive facilities through design, planning, and site-plan review, the implementation of prudent homeland security measures, and strategies to reduce and mitigate those threats and hazards.¹⁹⁰ The report discusses a number of considerations related to planning strategies that might address particular site vulnerabilities. These include

- Site Perimeter Security
- Landscaping
- Identification and Facility Entry Checkpoints
- Inspection Facilities
- Surveillance Measures
- Access Controls
- Building Design to Minimize Blast Waves and Progressive Collapse
- External Cladding
- Office Placement and Orientation
- Hardened Shared Partitions
- Emergency Stairs
- Mailroom Design
- Loading and Storage Areas
- Computer Systems Control Room
- Window Design, Blast Curtains, and Ballistic Resistant Glazing
- Exterior Walls and Blast Loads
- Ventilation/HVAC Systems

¹⁸⁹ *Id.* at 4.

¹⁹⁰ See *id.*; see also Gen. Servs. Admin., *Public Building Service Security Criteria* (Jan. 1997); INTEGRATING MANMADE HAZARDS INTO MITIGATION PLANNING, *supra* note 169; SECURITY AND SAFETY IN LOS ANGELES HIGH-RISE BUILDINGS AFTER 9/11 15-20 (Rae W. Archibald et al. eds., 2002), available at <http://www.rand.org/publications/DB/DB381/DB381.pdf>; Schneider, *supra* note 166, at 144-47.

- Fire Protection
- Emergency Generator Fuel Tanks
- Blast Deflection
- Lighting
- Vehicle Barrier Devices
- Low Speed "S" Entry Turns
- Use of Bollards and Moats to Protect Against Truck Bomb Access to Building Lobbies
- Maximize Distance Between Parking and Building
- Eliminate or Control Underground Parking
- Separate Service Routes
- Setback and Buffer Zones
- Isolation of Trash Bin Facilities¹⁹¹

The report's authors, both leading urban planning law attorneys, note that potential tort liability might exist for failure to address properly foreseeable threats to terrorist sensitive facilities.¹⁹²

The movement to safeguard our cities raises potentially complex and problematic issues of reconciling and balancing security measures with the need to maintain and promote vibrant, livable, aesthetically pleasing, and pedestrian-friendly high density urban environments.¹⁹³

¹⁹¹ Young, *supra* note 179, at 3-5.

¹⁹² *Id.* at 3, 4, 9-10.

Local government officials, land use planners, architects, developers, and building owners who fail to take proactive Homeland Security steps—such as reviewing building design, lighting, and landscaping plans and providing for the protection of heating, ventilating, and air conditioning systems, mail rooms, delivery docks, and parking facilities—do so at considerable risk. The full extent of the liability risk is unknown, but after the recent decision in *In Re September 11 Litigation*, our concern is that the risk could increase and past actions and inactions will form the basis for liability. This seems to us to be indeed a case of better to be safe than sorry.

Id. at 10.

¹⁹³ Philip Langdon, *Three Years After 9/11, Security Mindset Threatens Civic Design*, NEW URBAN NEWS, September 2004, at 1, 1-5.

New security measures will, in the long run, prove counterproductive if they unduly burden the movement of people goods, information, and ideas that make our cities thrive. Even if people feel safe in the cities, they may still prefer to live, work, or do business elsewhere if getting around is too difficult, or if security measures make movement too time-consuming. So, too as Jane Jacobs explained, the lifeblood of a city is its streets, sidewalks, and public places. Even if safer, cities may lose their energy and cultural appeal if their public places are closed off or hemmed in by bunkers and barriers.¹⁹⁴

The militarization of our architecture and built environment through anti-terrorist security and design planning is seen by some as a wrong-headed national anti-urban strategy.¹⁹⁵ Some in the planning and design professions are troubled by the siting requirements of government buildings, site-perimeter security measures, setback requirements, the regulation of parking to distant open lots or above ground parking, and the resistance to incorporating retail and other uses into a building's ground floor perimeter.¹⁹⁶ Reports note the potential, if not obvious, incompatibility between these types of home security strategies and the development of smart growth and new urbanist projects that are characterized by high-density, mixed use, and open pedestrian-friendly public spaces.¹⁹⁷

One critic points out that "[m]ost of the tested [security] elements are simply inappropriate for an urban environment. They've been developed for overseas, for embassies, the Third World, et cetera."¹⁹⁸ Another critic argues that "the war against terrorism threatens to become a war against the livability of

¹⁹⁴ Briffault, *supra* note 1, at 569.

¹⁹⁵ See Langdon, *supra* note 193, at 5.

¹⁹⁶ *Id.* at 1, 4.

¹⁹⁷ See *id.* at 3; Young, *supra* note 179, at 8.

¹⁹⁸ Langdon, *supra* note 193, at 5.

American cities.”¹⁹⁹ While there is growing recognition that a more imaginative, sensitive, and flexible approach to anti-terrorist measures is needed, the process is reportedly dominated by bureaucratic caution and worst-case-scenario planning.²⁰⁰

Rather than target hardening through urban design and planning strategies, some have actually proposed the decentralization of cities and the acceleration of sprawl as a national anti-terrorist strategy.²⁰¹ Planner Joseph Feinberg argues for a form of regional decentralization and dispersal with population and business centers linked together by a new national railway system.²⁰² These “decentralizing the target” anti-terrorist strategies are likely to encounter strong opposition from most urban planning professionals.²⁰³ The American Planning Association in recent years expressed strong support for such anti-sprawl strategies as ‘smart-growth’ and ‘new urbanism,’ which both embrace concentrated high-density development in urban core

¹⁹⁹ *Id.* at 1.

²⁰⁰ *See id.* at 3-4; FIRST TO ARRIVE: THE STATE AND LOCAL RESPONSES TO TERRORISM (Juliette N. Kayyem & Robyn L. Pangi eds. 2003); *see also* Langdon, *supra* note 193, at 4.

Bureaucratic caution has aggravated the tendency toward anti-urban decision. Christine Saum, director of urban design and plan review for the National Capital Planning Commission (NCPC), which exercises limited authority over federal building projects in the Washington region, notes that there are no regulations specifically prohibiting ground-floor retail in federal buildings. However, when that kind of use is proposed, “often the people from the Federal Protective Service [in Homeland Security] are uncomfortable with it,” Saum says. Mixed-use is not formally banned, she says. “They just don’t like it.” On the positive side, NCPC spokesman Denise Liebowitz points out that the federal response is not yet fixed or unchangeable. “These regulations and standards are still evolving in response to risk assessments,” she says.

Id.

²⁰¹ *See* Schneider, *supra* note 166, at 141-42.

²⁰² *See id.*

²⁰³ *Id.*

areas.²⁰⁴ Sam Casella, President of the American Institute of Certified Planners, strongly criticized the decentralization of cities approach to fighting terrorism.²⁰⁵ He notes that our present pattern of urban sprawl “requires over-reliance on relatively inefficient internal combustion engines, with a resulting decline in environmental quality, escalating infrastructure costs, inefficient separation of land uses, and loss of social support.”²⁰⁶ More directly, he argues that

[s]cattered development does not necessarily offer more security. Terrorism is a dynamic threat, not limited to tall buildings. As we have seen, terrorists are just as capable of attacking the Pentagon in suburban Virginia as the World Trade Center in lower Manhattan. We could scatter Manhattan’s population to the winds and still offer the juicy target of a college football stadium packed with 100,000 people on a Saturday afternoon. The answer to terrorism is eradication of terrorism, not eradication of their targets.²⁰⁷

Oscar Newman, an architect and early proponent of defensible space urban design strategies, agrees with Casella that finding and eliminating terrorists is likely to be a far more cost effective use of resources than target hardening.²⁰⁸ Robert Schneider, an urban planning professor, supports anti-terrorist “place-based” design strategies when adopted as part of a larger strategic plan

²⁰⁴ See AM. PLANNING ASS’N, AMERICAN PLANNING ASSOCIATION POLICY GUIDE ON SMART GROWTH (2002), <http://www.riapa.org/policyguides/FinalSmartGrowthPolicy02.htm>; AM. PLANNING ASS’N, CODIFYING NEW URBANISM, (2004). The American Planning Association is a National Member of Smart Growth America, <http://www.smartgrowthamerica.org>.

²⁰⁵ Sam Casella, *Let Cities Be Cities*, AM. PLANNING ASS’N, <http://www.planning.org/viewpoints/letcities.htm> (last visited Oct. 14, 2005).

²⁰⁶ *Id.*

²⁰⁷ *Id.*

²⁰⁸ See Schneider, *supra* note 166, at 142-43.

since, he argues, it could be "as foolhardy to abandon, ignore, or fail to refine place-based anti-terrorism prevention strategies as it would be to lay down arms in the middle of the battle while one is negotiating with the enemy."²⁰⁹

Public debate over the efficacy and cost efficiency of target hardening strategies in our cities has been undermined to a significant degree by the fact that information which would allow for independent evaluations of risk assessments and security requirements is typically unavailable to the public.²¹⁰ Public and private clients and their architects generally do not disclose design plans, photos, or other written information related to security.²¹¹ David Dixon, a Boston planner and critic of the federal target hardening security regime, stated that

[o]ur public officials owe us a reasoned explanation of the extent of the threats, so that lawmakers and citizens, in conjunction with specialists, can tailor a security program to genuine needs rather than to wild, worst-case scenario speculations. The current approach—of putting Jersey barriers, bollards, walls, fences, and distance around a vast number of buildings—will ultimately do more harm than good.²¹²

Philip Langdon, an editor at New Urban News, also criticizes the secrecy surrounding many current target-hardening programs.

Some information, obviously, is too sensitive to disclose. No one wants to aid an enemy. But a democratic society does require wide access to facts and ideas. Without them, there can be no informed debate and no assurance of progress. It looks like America is in a stalemate. There's too little information about

²⁰⁹ *Id.* at 143.

²¹⁰ See Langdon, *supra* note 193, at 2.

²¹¹ *Id.*

²¹² *Id.*

what's needed, what works, and what doesn't. The loser in all this is the vitality of our cities.²¹³

There is a thread in the debate about the fight against terrorism that emphasizes addressing the alleged root causes of terrorism itself. While purporting not to justify terrorism, this line of thought is evident, for example, in some speeches of Vernon Jordan, the former head of the National Urban League, who posits that terrorism is spawned and supported when the absence of social justice and equitable division of the benefits of the free market leave the disenfranchised embittered and hateful.²¹⁴ In the

²¹³ *Id.*; see also Eisinger, *supra* note 9, at 17-18.

Dixon notes some of the measures that cities might take to protect buildings and people that could conceivably add to a pervasive sense of menace and siege. These suggestions are drawn from a report by the American Institute of Architects ("Building Security by Design"), and they include setting concrete Jersey barriers around the driveways and loading areas of vulnerable buildings; removing underground parking; mandating deep building setbacks; controlling building access; hardening potential target buildings with reinforced concrete walls and shatterproof windows; and using hardened street furniture—benches, planters, decorative bollards—and strategic landscaping to provide a buffer between potential car bombers and their targets.

As early as the mid-1990s, the federal government had begun to undertake some of these measures to protect its property in Washington, D.C. The result, according to the Task Force of the National Capital Planning Commission, was "an unsightly jumble of fences and barriers [that made us] look like a nation in fear" (2001 Introduction). The Task Force called for an integrated design for the capital's Monumental Core, including landscaping, building setbacks, decorative street furniture, and various traffic and parking modifications. The message of the Task Force was that Americans must resist the impulse to build garrison cities but rather develop unobtrusive and aesthetically pleasing security measures, while maintaining an open and accessible public environment reflective of democratic values.

Id. (citations omitted).

²¹⁴ See "Terrorism's Fertile Fields," AM. PLANNING ASS'N (Oct. 1, 2001), <http://www.planning.org/deline/2001/date100101.htm>.

urban planning context, this view argues for a greener, less consumptive, and more globally equitable urbanism, rather than the militarization of our architecture.²¹⁵

Perhaps the leading advocate for this view is John Friedmann, a professor emeritus of planning at UCLA. His "Open City" anti-terrorism proposal calls for curbing sprawl by reducing our urban footprint so that "a hegemonic America" is not as readily portrayed as "The Great Satan."²¹⁶ Rather than engaging in target hardening and the retreat into "Fortress America," Friedmann proposes a less consumptive lifestyle that interferes less with the legitimate aspirations of people elsewhere on the globe.²¹⁷ "Reducing our cities footprints will not help to bring people out of poverty. But it will perhaps be seen as a sign of our willingness to accept the finiteness and indivisibility of the global environment and our readiness to share the world's resources on a more equitable basis."²¹⁸

A 2004 report assessing the consequences of the September 11th terrorist attacks expresses the view that early pessimistic predictions about the closing of public spaces and the emergence of fortress cities have not, as yet, come to pass.²¹⁹ As Peter Eisinger states, "[t]he American city has not been transformed into a garrison state."²²⁰ He further notes that

²¹⁵ See *id.*

²¹⁶ John Friedmann, *City of Fear or Open City?*, 68 J. AM. PLANNING ASS'N 237, 238 (2002).

²¹⁷ See *id.* at 237.

²¹⁸ *Id.* at 239.

²¹⁹ See Eisinger, *supra* note 9, at 2-3.

²²⁰ *Id.* at 3.

In Washington, D.C., where anti-aircraft batteries are visible on the roof of the New Executive Office Building and on the ground near the Pentagon, federal buildings and monuments are ringed with various barriers, and more security-related construction is underway. In a few scattered neighborhoods of New York City—Grand Central Station, the Port Authority Bus Terminal, select consulates—there is also an unusual police presence and a scattering of concrete Jersey barriers. But the casual pedestrian in the American city, including in most parts of

[i]f the texture and pace of city life are clouded somewhat by public anxieties about terror, the actual changes urban dwellers encounter in their daily lives in most places in the country and at most times are small and relatively unobtrusive. Retail and entertainment remain vibrant in most places, affected by economic fluctuations to all appearances more than by fears of terror. The urban streetscape has hardly become fortified, except in the official precincts of the nation's capital, nor is the police presence oppressive in these places.²²¹

Washington and New York, in fact rarely encounters security measures designed to thwart murderous terrorism.

Id. at 18.

²²¹ *Id.* at 20. Some observers believe that we are seeing an acceleration in the "militarization of civil society" wherein the "surveillance, tracking, and correctional industries will deepen and intensify their colonization of urban civil society as resistance movements face being undermined and marginalized." See also GRAHAM, *supra* note 14, at 7-8.

[W]e are likely to see the deepening of the urbanization of the military, a process already underway in response to intensifying civil unrest (the Los Angeles riots . . .), rising social polarisation [sic] and urban segmentation, the growth of essentially urban post Cold War military conflicts (Sarajevo, Grosny . . .), and the intensification of staged urban resistance to globalization (Seattle, Genoa, Washington, London, Prague . . .). Thus, military doctrine and strategic protection of the political and economic key sites, and zones and spaces of the global capitalist system. This will occur through new surveillance and control systems and, as at the recent Genoa WTO meeting, through the much more widespread siting of air defense missile systems around strategic urban sites. Already, the U.S. military machine is already starting to focus its efforts on defending domestic urban space. Aircraft carriers and combat air patrols will now be renewed features of the New York and Washington and California urban landscapes. Major western cities are thus emerging as more or less permanent war zones. Already, several generals have been given the power to shoot down civilian airlines in the event of future attacks.

Id. at 8-9 (citations omitted).

CONCLUSION: SOME THOUGHTS ON SUSTAINABLE DEVELOPMENT AND THE THREAT OF GLOBAL TERRORISM

The threat of global terrorism underscores a number of sustainable development issues related to America's built environment. The threat of terrorism in our major cities and this country's war on terrorism abroad both emphasize, in their own way, important sustainability issues related to our hypersprawl pattern of suburban development. The economy and lifestyle supported by this automobile-dependent built environment is unlikely to be sustainable in the indefinite future and is highly dependent upon, and vulnerable to, foreign oil imports and world oil markets.²²² The energy consumption, environmental degradation, and infrastructure costs that are necessary to support this pattern of land development all argue against its sustainability.²²³ It is also possible, perhaps even likely, that the fear of terrorist attacks on America's major cities will accelerate this pattern of suburban sprawl.²²⁴ One thing seems certain. Given the enormous amount of financial resources that this country is allocating to fight terrorism, both in foreign lands and at home,²²⁵ our current infrastructure maintenance deficit related to this pattern of sprawl development may considerably worsen in the years ahead. This infrastructure maintenance deficit is an enormous burden that will likely be simply passed along to the next generation.²²⁶

²²² See *supra* text accompanying notes 77-83 (discussing the sustainable development issues raised by the hypersprawl pattern of urban development); see also ENERGY INFO. ADMIN., U.S. DEP'T OF ENERGY, ANNUAL ENERGY OUTLOOK (2005); ENERGY INFO. ADMIN., U.S. DEP'T OF ENERGY, COUNTRY ANALYSIS BRIEFS: UNITED STATES OF AMERICA, <http://www.eia.doe.gov/emeu/cabs/usa.html>; *Not If, But When: Oil Production Peak Will Bring Hard Transition*, REGISTER-GUARD (EUGENE, OR.), Sept. 27, 2004, at A10.

²²³ See *supra* text accompanying notes 77-89 (outlining these negative trends in detail).

²²⁴ See *supra* notes 120-64 and accompanying text (discussing the impact of terrorism-related fears on patterns of suburban sprawl).

²²⁵ See *supra* notes 9-12 and accompanying text (discussing these costs in detail).

²²⁶ See *supra* notes 88-89 and accompanying text.

It is probably too soon to know or calculate what impact the threat of terrorism will have on America's major cities. Many believe that people and businesses will leave cities for our suburban areas if they do not feel reasonably safe or secure from terrorist attacks.²²⁷ American cities may face an enormous challenge now and in the years ahead. Defensive Dispersal II, in fact, may already be underway.²²⁸

Major cities are implementing a variety of measures in response to the threat of terrorism. Cities are target hardening key public buildings and critical infrastructure²²⁹ and are incorporating homeland security safeguards and standards into urban planning and design review procedures.²³⁰ A variety of other actions must accompany these responses, including a more visible police presence, improvements in intelligence gathering, threat detection technology, and emergency response and public health systems.²³¹ All of this, of course, will be enormously expensive.²³²

The debate about target hardening and the increasing militarization of civil society will surely continue in this country.²³³ Some compromise, however, needs to be made with respect to the secrecy surrounding this type of design and security information. Without sufficient baseline data on these topics, important questions about the cost efficacy and efficiency of our domestic fight against terrorism remain outside the scope of informed public debate.²³⁴ While the focus of our efforts and resources should be on eliminating terrorists, it is clear that target hardening and similar

²²⁷ See *supra* notes 120-57 and accompanying text (discussing the impact of terrorism-related fears on patterns of suburban sprawl).

²²⁸ See *supra* Part IV.

²²⁹ See *supra* notes 146-57 and accompanying text.

²³⁰ See *supra* notes 166-89 and accompanying text (discussing those urban planning strategies).

²³¹ See Briffault, *supra* note 1, at 567; Schneider, *supra* note 166; Young, *supra* note 179.

²³² See *supra* notes 191-200 and accompanying text (outlining the potential costs of this strategy).

²³³ See Eisinger, *supra* note 9, at 5-8.

²³⁴ See *supra* notes 193-218 and accompanying text. See generally Briffault, *supra* note 1, at 572-73.

domestic anti-terrorist measures will continue since, in our democratic society, the first question asked of a politician at any town meeting likely relates to what the politician is doing to make children and families safe from terrorist attacks.

Our cities are likely to face a severe financial crisis, at least in the near term. State and federal grants are unlikely to fully reimburse cities for the enormous expense incurred in funding local homeland security programs.²³⁵ Many of America's largest cities were already operating at their fiscal limits at the time of the September 11th terrorist attacks.²³⁶

Major cities not only have the greatest safety-related security concerns but also the greatest concentrations of our poor, whose basic programs may be cut back to finance security programs. Moreover, it will be the poor in our major cities that suffer most if security concerns accelerate urban sprawl in this country.²³⁷ Social justice issues involving the urban poor should be an important concern in any debate about the allocation of resources in the domestic fight against terrorism.

There is some hope on the horizon that our present pattern of sprawl development may be curtailed somewhat in the years ahead. Some reports suggest that "New Urbanist" development (higher density, mixed use, and more integrated pedestrian-friendly development) has the potential to significantly increase density in both older suburbs and outlying areas.²³⁸ This increased density in suburbia may occur through integrated redevelopment projects centered around mixed use suburban villages.²³⁹ As Joel Kotkin notes: "The next great frontier is going to be the urbanization of suburbia."²⁴⁰ This development trend will be fueled by the

²³⁵ See *supra* notes 210-13 and accompanying text.

²³⁶ See Eisinger, *supra* note 9, at 5-8; Briffault, *supra* note 1, at 575-76; U.S. Conf. of Mayors, *supra* note 162.

²³⁷ See Briffault, *supra* note 1, at 576.

²³⁸ See *id.*; see also notes 90-95 and accompanying text.

²³⁹ See generally RYBCZYNSKI, *supra* note 3 (regarding so-called suburban 'village' development projects).

²⁴⁰ Pedersen, *supra* note 59; see also *Emerging Trends in Real Estate*, *supra* note 60, at 12.

trend toward business decentralization and the advantages provided by suburban "Edge City" business locations.²⁴¹ It will also be driven by changing demographics. By 2010, seventy percent of our population is expected to consist of singles and empty nest households.²⁴² The majority of these childless households are likely to prefer suburban but lifestyle-friendly village center type environments.²⁴³ Americans may be moving toward a regional multi-centered business environment with higher density and more integrated suburban core developments.²⁴⁴

Mass market developers gladly appropriate new urbanist concepts—integrating parks, sidewalks, retail centers with apartments, townhouses, and single-family homes in pedestrian-friendly neighborhoods. Quaint retro-village developments of the 1980s and early 1990s have become "a product of choice." Smart growth influences are "no fad," says the CEO of a major home-builder. "New urbanism has definitely been mainstreamed."

Denser infill, village center developments will force homeowners to trade off size for convenience. Expect these projects to concentrate in obsolescent urban industrial zones or inner-ring suburbs "where people will tolerate greater density" and where failing greyfield malls present opportunities for reardowns and reuses. Some developers, lenders, investors, and local officials also focus on major urban mixed-use redevelopment, converting forlorn urban sites into residential and retail space with offices and possibly hotels or even stadium/arenas included. "To have any chance of success there must be housing."

Id.

²⁴¹ RYBCZYNSKI, *supra* note 3, at 229.

²⁴² See Dooley, *supra* note 126.

²⁴³ See *id.*

²⁴⁴ See Pedersen, *supra* note 59.

If you look at where single people and couples without children are moving, there's been a dramatic shift to the suburbs. Their growth has been more dramatic than the growth of families. So the way we're going to contain sprawl will be by creating these village-like environments in suburbia, both in the older suburbs and further out.

Id.

Higher density suburban redevelopment projects ultimately may be less automobile-dependent as many regions formulate plans for higher density transit-oriented New Urbanist developments. These suburban projects and plans are at risk of being derailed or significantly curtailed, however, by built environment NIMBY-ism (Not-In-My-Back-Yard).²⁴⁵ Neighborhood opposition to higher density infill and redevelopment projects is typically very strong and now often comes supported by and wrapped in public interest, smart growth, and environmental protection rhetoric.²⁴⁶ If the threat of terrorism refocuses even greater attention on home and neighborhood, we might expect NIMBY-ism to become even worse. Future terrorist attacks on our cities also might curtail our ability to finance mass transit to serve these types of developments

²⁴⁵ See Pedersen, *supra* note 59; *Emerging Trends in Real Estate*, *supra* note 60, at 12. See generally Berger, *supra* note 133.

²⁴⁶ See *Emerging Trends in Real Estate*, *supra* note 60, at 10.

Hardening antigrowth sentiment and environmental restrictions also constrain the supply side in some regions. The NIMBY syndrome impinges on developer options and delays new projects in expensive, drawn-out entitlement processes that often lead nowhere. Some interviewees champ in frustration over the restrictions. "It's just a huge problem that must be overcome." Antidensity movements lead to the election of "antigrowth government officials" and "poor or impractical regulations." The "one- and two-acre lot mentality" exacerbates affordable housing shortages and actually encourages sprawl.

Id.; see also Ziegler, *supra* note 6, at 53.

Local zoning codes continue to promote urban sprawl in another way. Severe restrictions on the density or type of development allowed within a community often reflect, from a regional perspective, a dysfunctional and virulent environmental NIMBYism (Not In My Back Yard) that results from the political activism (and often class or racial bias) of existing residents concerned about the "quality" and impact of new development on their neighborhood and within their community. Today, zoning restrictions on the development of "open space" and on other "environmentally sensitive" areas are the hallmark of any well-drafted smart growth "Gucci" or "Birkenstock" sprawl zoning codes.

Id.

and might even lead to a target-hardened and anti-pedestrian built form that would lose much of its appeal.

In short, the road to sustainable development in this country is likely to be long and difficult. There are no easy answers and no easy policy solutions. When it comes to solving the problems of sprawl in this country, most of us seem to be largely sentimentalists, willing to change policy but not behavior.²⁴⁷ The changes that will be necessary to significantly curb urban sprawl will likely require a substantial change in how Americans envision, design, and regulate the built environment that accommodates our affluent suburban lifestyle. The threat of terrorism, viewed in the context of sustainability, may provide the opportunity for some starting point down that road. The search is for the deeper virtues in the notion of thinking globally and acting locally.²⁴⁸

²⁴⁷ Burchell, *supra* note 64, at 39.

Sprawl is a type of growth in the United States that even the most unenlightened realize needs rethinking. Yet sprawl is so endemic to the culture of the United States that it is almost impossible to change. Americans like its outcome. It provides safe and economically heterogeneous neighborhoods that are removed from the problems of the central city. In low-density, middle-class environments, life takes place with relative ease, and when residents wish to relocate, they typically leave in better financial condition—the result of almost certain housing appreciation in these locations.

Id.

²⁴⁸ There are, of course, no guarantees here. See generally JARED DIAMOND, *COLLAPSE: HOW SOCIETIES CHOOSE TO FAIL OR SUCCEED* (2004).