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American Anti-Terrorism Planning and Design Strategies: Applications for Florida Growth Management, Comprehensive Planning and Urban Design

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ESSAY

AMERICAN ANTI-TERRORISM PLANNING AND DESIGN STRATEGIES: APPLICATIONS FOR FLORIDA GROWTH MANAGEMENT, COMPREHENSIVE PLANNING AND URBAN DESIGN

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I. INTRODUCTION

Whether cloaked in economic, religious, or political guises, government planning, land use, and growth management policies over the past five decades have often been catalysts of terrorist violence in the Middle East, Northern Ireland, Africa, and across the Indian Subcontinent. It is only recently, however, that a progression of terrorist attacks against Americans[1] has caused academics as well as planning, design, and legal practitioners to begin seriously examining the role that these endeavors play in preventing or deterring terrorist events and in responding to the consequences of those events when they do occur.

This Essay examines anti-terrorism and anti-terrorist strategies and practices that might be compatible with Florida's existing growth management and planning legislation and practice. After defining relevant terms and issues, providing a background of emerging viewpoints, considering available risk assessment approaches, and reviewing relevant evidence from survey research and other jurisdictions that have been victimized by terrorism, this Essay suggests anti-terrorist strategies and policies that ought to be considered for inclusion in Florida's fundamental growth management and comprehensive planning laws.

While the state has compulsory emergency management planning for every county,[2] Florida has no provision in the State's Comprehensive Plan,[3] in the Growth Management portion of the plan,[4] or among the mandatory or optional elements of its comprehensive planning legislation requiring jurisdictions to think through anti-terrorism growth management, planning, or related urban design possibilities.[5] This is so despite the preamble to chapter 252, Florida Statutes, which states:

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1. Beirut, Lebanon, Marine Barracks (1983); New York City, World Trade Center (1993); Oklahoma City, Murrah Building (1995); Dharan, Saudi Arabia, Khobar Towers (1996); Dar es Salaam, Tanzania and Nairobi, Kenya, American Embassies (1998); Aden, Yemen, U.S.S. Cole (2000); New York City, World Trade Center (2001). Note this is a list of major attacks only.

2. *See* FLA. STAT. § 252.35(2)(b) (2002).

3. *See* FLA. STAT. ch. 187 (2002).

4. *See* FLA. STAT. § 186.009 (2002).

5. *See* FLA. STAT. § 163.3177 (2002).

> The Legislature finds and declares that the state is vulnerable to a wide range of emergencies, including natural, technological, and manmade disasters, all of which threaten the life, health, and safety of its people; damage and destroy property; disrupt services and everyday business and recreational activities; and impede economic growth and development. The Legislature further finds that this vulnerability is exacerbated by the tremendous growth in the state's population, especially the growth in the number of persons residing in coastal areas, in the elderly population, in the number of seasonal vacationers, and in the number of persons with special needs. This growth has greatly complicated the state's ability to coordinate its emergency management resources and activities.[6]

Building anti-terrorism planning and growth management provisions into existing state law will provide Florida with valuable tools with which to help prevent, deter, and respond to terrorist attack and to mitigate its effects.[7] Moreover, it would help the state better coordinate a comprehensive approach to emergency management that is only slowly emerging following September 11. Prior to that date, these issues and the linkages between growth management, comprehensive planning and anti-terrorism were rarely raised in Florida or in the United States, but now they are becoming much more salient as we struggle to respond to the reality and fear of terrorism.

II. DEFINITIONS OF TERMS

A. *Anti-Terrorism vs. Counter-Terrorism*

Anti-terrorism and counter-terrorism are sometimes confused. Anti-terrorism refers primarily to defensive measures that can be taken to protect people and property from terrorist acts, whereas counter-terrorism refers primarily to offensive measures to combat terrorism.[8] The latter category is the province of federal agencies such as the Department of Defense, the FBI, and the CIA. The former category includes a wide

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6. FLA. STAT. § 252.311(1) (2002).

7. This is so, we believe, despite the convincing argument that existing planning and growth management legislation, though good in theory, is badly flawed in implementation. *See, e.g.*, Thomas G. Pelham, *Restructuring Florida's Growth Management System: Alternative Approaches to Plan Implementation and Concurrency*, 12 U. FLA. J.L. & PUB. POL'Y 299 (2001).

8. *See Integrating Human-Caused Hazards Into Mitigation Planning: Guide Number Seven*, FEMA Doc. 386-7 (2002), *available at* http://www.fema.gov/fima/planning_toc6.shtm (last visited Oct. 27, 2003) (The author helped edit the document for the agency).

variety of activities, including growth management, comprehensive planning, and micro-level urban design activities. These anti-terrorism activities can be utilized by state and local governments as well as by private individuals to defend against terrorist attack.

Terrorism itself has been variously defined by different federal and international agencies. One widely used definition is "the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives."[9] To this, one must add religious objectives.

Within the realm of anti-terrorism planning, there are two general categories of action and a third that crosses both categories. The first is preventive measures and the second is responsive measures. The third type of action, mitigation, applies to both prevention and response.

B. *Preventive Measures*

Preventive strategy, in the context of anti-terrorism land use and urban design, is epitomized by the National Capital Planning Commission's recently released plan for Washington, D.C.'s monumental core area,[10] which contains a large number of potential terrorist targets. This plan suggests a range of zoning, transportation, and street-level design changes aimed at melding security with aesthetics.[11] Effective preventive strategy can mitigate a terrorist attack by minimizing damage to targets or by displacing the attack to other less vulnerable but also less desirable targets (from the perpetrator's point of view).[12]

C. *Responsive Measures*

Responsive measures include, but are not limited to, policy planning that minimizes the effects (especially long-term) of a terrorist attack on the rebuilding of property and the reintegration of affected or damaged areas into the fabric of the existing community. One example is the planning and

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9. 28 C.F.R. § 0.85(l) (2003).

10. National Capital Planning Commission, The National Capital Urban Design and Security Plan, Oct. 2002, *available at* http://www.ncpc.gov/publications_press/publications.html (last visited Nov. 21, 2003).

11. *See infra* Parts III.B, IV.D.

12. The concept of target displacement is controversial to be sure and there is a growing body of literature in the place-based crime prevention-planning field that deals with the practical problems and ethics of displacement. *See* RICHARD SCHNEIDER & TED KITCHEN, PLANNING FOR CRIME PREVENTION: A TRANS ATLANTIC PERSPECTIVE, 91-103 (RIPI Library Series) (2002).

regeneration policies of the city of Manchester, England, in response to the 1996 IRA bomb attack that devastated the city's center. These policies greatly expedited redevelopment efforts, and as a result, helped restore public confidence in the viability of the urban core area.[13]

In the private sector, response planning is epitomized by the recommendations 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 the eighteen high rise buildings (those over five hundred feet) in the city's central business district.[14] 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.[15] A significant portion of that critical infrastructure is located in the nation's fourth largest state, Florida.

Most current anti-terrorism planning that involves growth management, land use, or urban design issues focuses on one aspect of the so-called full-spectrum of threats. This spectrum includes attacks with chemical, biological, nuclear, radiological, and explosive-incendiary (CBRNE) devices.[16] This focus is on explosive devices carried in land or water vehicles such as those used in all strikes against American targets (with the exception of the September 11 hijackings, and the subsequent anthrax mail attacks). These are widely seen as being most subject to deterrence and to mitigation by state and local government or by the private sector. It is acknowledged that little can be done at these levels to prevent or deter attack from hijacked airlines or by most weapons of mass destruction (WMD).[17] Rather, counter-terrorism and prevention of these types of attacks are, for the most part, the province of federal military, law enforcement and intelligence agencies, although responses to all types of

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13. *See* Ted Kitchen, *Planning in Response to Terrorism: The Case of Manchester*, 18 ENGLAND J. ARCHITECTURAL & PLAN. RES. 330 (2001).

14. RAE W. ARCHIBALD ET AL., SECURITY AND SAFETY IN LOS ANGELES HIGH-RISE BUILDINGS AFTER 9/11 (2002).

15. The National Strategy for Homeland Security: Office of Homeland Security Protecting Critical Infrastructure and Key Assets, *available at* http://www.whitehouse.gov/homeland/ (last visited Mar. 18, 2003). Critical infrastructure is defined as a system whose incapacity or destruction would have a debilitating impact on the defense or economic security of the nation. *See* Critical Infrastructure Assurance Office, *at* www.ciao.gov (last visited Mar. 18, 2003).

16. *See Integrating Human-Caused Hazards*, *supra* note 8.

17. *See* 18 U.S.C. § 2332a (2003).

attack generally are within the power (albeit not the financial abilities) of local, regional, or state governments.

III. ANTI-TERRORISM PLANNING AND DESIGN AND PLACE-BASED CRIME PREVENTION PLANNING

Anti-terrorism planning and design have increasingly borrowed techniques and strategies from place-based crime prevention planning. Place-based crime prevention planning has already been incorporated into Florida urban planning and design through existing legislation.[18] Other forms of crime prevention research and practice focus on either offenders, the legal system (including police, courts, and the correctional system), or crime targets (people and property). Alternatively, place-based crime prevention planning concentrates largely on the physical area(s) where crimes occur.[19] It involves asking questions: What about this place attracted this crime? What is it that motivated the offender to act here? Does the crime have to do with the design or management of the place? Is the crime related to a specific use of the place or a certain timing relative to the place? Could all the foregoing questions be relevant, in some combination? Moreover, what can we do to "design out" crime here? Only since the early 1970s have police, criminologists, planners, urban designers, and architects begun to recognize the fundamental importance that place plays in the criminal event.[20] Indeed, this acknowledgment caused one leading American crime researcher to question that since we now know that future crime is six times more predictable by the address of the occurrence than by the identity of the offender, why are we not doing more about it? Why are we not thinking more about wheredunit rather than just whodunit?[21]

Despite its growing status among crime prevention strategies, place-based crime prevention does not play the dominant role in preventing or

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18. *See* Safe Neighborhoods Act, FLA. STAT. §§ 163.501-166.522 (2002).

19. *See generally* P.J. BRANTINGHAM & P.L. BRANTINGHAM, ENVIRONMENTAL CRIMINOLOGY (1981); RONALD V. CLARKE, SITUATIONAL CRIME PREVENTION: SUCCESSFUL CASE STUDIES (2d ed. 1997); C. RAY JEFFREY, CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (2d ed. 1977); OSCAR NEWMAN, DEFENSIBLE SPACE: CRIME PREVENTION THROUGH URBAN DESIGN (1973).

20. *See generally* SCHNEIDER & KITCHEN, *supra* note 12.

21. L.W. Sherman, *Hot Spots of Crime and Criminal Careers of Places*, *in* CRIME AND PLACE 35, 36-37 (J.E. Eck & D. Wisburd eds., 1995). It is interesting to note that terrorists have twice attacked the same target in the United States (the World Trade Center) and have repeatedly attacked military, federal and diplomatic symbols of the nation.

deterring crimes. Indeed, we know that most crimes are the result of a combination of factors, and that the suitability (or unsuitability) of a place is only one of these factors. Nevertheless, a growing body of empirical evidence suggests that planning, designing, and managing places to deter crime are effective strategies when implemented appropriately.[22] Given what we now know, it is foolhardy to ignore a tool in the battle against crime (or anti-terrorism), even if its role is relatively minor. Moreover, in an uncertain world, seemingly minor roles may assume major importance in any given circumstance.

Over the past forty years, four primary theories have evolved to explain crime in places and to devise strategies to design crime out of places. These are the theories of defensible space, crime prevention through environmental design (commonly known as CPTED), situational crime prevention, and environmental criminology.[23] The first three theories are discussed below, leaving environmental criminology for a separate paper as it is not as relevant to the present argument as are the other theories.

A. *Defensible Space*

The initial applications of defensible space were in residential areas, primarily in public housing complexes across the nation. Though some elements of the theory have been the subject of intense criticism, it nevertheless strongly influenced the philosophies of the U.S. Department of Housing and Urban Development as well as the British government in their public (council) housing design and construction practices. As one result, neither nation now supports building high-rise public housing towers although this was once the norm in both countries.

B. *Crime Prevention Through Environmental Design (CPTED)*

A related approach, CPTED, was independently developed by C. Ray Jeffrey as a theory of human learning,[24] with specific applications relative

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22. *See generally* SCHNEIDER & KITCHEN, *supra* note 12; J.E. Eck, *Preventing Crime at Places, in* PREVENTING CRIME: WHAT WORKS, WHAT DOESN'T, WHAT'S PROMISING, A REPORT TO THE UNITED STATES CONGRESS 7-1 (L.W. Sherman et al. eds., 1997), *available at* www.ncjrs.org/works/wholedoc.htm (last visited Dec. 23, 2003); J.D. FEINS ET AL., SOLVING CRIME PROBLEMS IN RESIDENTIAL NEIGHBORHOODS: COMPREHENSIVE CHANGES IN DESIGN, MANAGEMENT AND USE (1997); M. FELSON & R. PEISER, REDUCING CRIME THROUGH REAL ESTATE DEVELOPMENT AND MANAGEMENT (1998); L.W. Sherman et al., Preventing Crime: What Works, What Doesn't, What's Promising, National Institute of Justice, Research in Brief (July 1998), *available at* http://www.ncjrs.org/pdffiles/171676.pdf (last visited Dec. 23, 2003).

23. *See generally supra* note 19. The four theories are the products of the authors listed.

24. *See* JEFFREY, *supra* note 19.

to the interaction of people and the environment. Since the initial articulation of CPTED in 1971, it has evolved to provide specific place-based crime prevention analysis techniques and strategies used by police agencies, and increasingly by planning and land development departments, throughout the United States and Britain. CPTED and defensible space principles overlap in some areas, principally in the idea that human territoriality is a powerful, albeit ambiguous, force that helps shape behavior and that can be used to deter criminal activity in certain circumstances.

Besides territoriality, other modern principles of CPTED include access control, surveillance, activity generation, and placement, as well as emphasis on the importance of appropriate property maintenance.[25] Each of these principles has numerous sub-elements. For instance, target hardening and layered defenses are related to access control; lighting and sight lines are components of surveillance.[26] Moreover, aside from intelligence gathering and dissemination functions that, as noted in Part II, are the primary responsibilities of federal intelligence and law enforcement agencies, these principles remain key aspects of most defensive anti-terrorist planning.[27]

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 curvilinear entrance drives;[28] and the placement of hardened street furniture or, where feasible, indigenous plant and landscape materials that

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25. *See* SCHNEIDER & KITCHEN, *supra* note 12, at 91-103.

26. The author has used these principles in helping to devise an anti-terrorist land development and design plan for a Department of Defense facility at the Key West Naval Air Station. The plan is currently being implemented by the DOD. *See* ALAN MATHER, DESIGNING TROUBLE AWAY, SECURITY MANAGEMENT (2002) (documenting this project).

27. *See, e.g., Protection of DOD Personnel and Activities Against Acts of Terrorism and Political Turbulence*, DOD Doc. 0-2000.12-H (1993); *see also* Juliana Prevatt, Crime Prevention Through Environmental Design (CPTED) and the Role of Facilities Planning in Force Protection (1998) (Terminal Project, Department of Urban and Regional Planning, University of Florida) (on file with the Department of Urban and Regional Planning, University of Florida).

28. Curvilinear drives minimize the ability of vehicles to gather speed and momentum.

are effective vehicle deterrents.[29] 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.

These feature outgrowths of CPTED principles are adaptable, in total or in part, to many other applications in the urban civilian context. In that respect, a key goal is to skillfully blend them into the environment so that the CPTED principles are part and parcel of the existing urban fabric and citizens do not feel like they are living or working in a fortress. Indeed, these are the guiding principles behind the National Capital Planning Commission's new security plan for Washington, D.C. The plan proposes that the component streetscape elements, such as trees, shrubbery, and other vegetative materials, connect with manmade elements to produce barriers that are effective against attacks from vehicles, yet are pleasing to the eye.[30]

CPTED principles are presently incorporated into Florida law through Florida Statute Section 163.513 of the Safe Neighborhoods Act, titled Crime Prevention Through Environmental Design Functions of Neighborhood Improvement Districts. The substantive heart of this legislation provides for:

> an analysis of crimes related to land use and environmental and physical conditions of the district, giving particular attention to factors which support or create opportunities for crime, which impede natural surveillance, which encourage free circulation through the district, or which hinder the defense of social territories perceived by residents as under control. Any factor used to define or describe the conditions of the physical environment can serve as a basis of a crime-to-environment relationship. These factors include streets, alleys, sidewalks, residential blocks, position of dwellings on a block, single vs. multifamily dwellings, abandoned houses, parking areas and parking lots, informal pathways, functional areas of the environment, traffic flow patterns, and the existence of barriers such as fences, walls, gullies and thick vegetation.[31]

The intent of the Act, first promulgated in 1987, was to help rescue deteriorating urban neighborhoods, specifically those that demonstrated crime problems. Originally budgeted with $1.6 million and with implementation authority placed in the Department of Community Affairs,

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29. *See* MATHER, *supra* note 26; *see also* Curt P. Betts, *Mitigating Terrorist Attack Through Environmental* DESIGN, AIA-SEC. DESIGN CONFERENCE PROC. (June 2002).

30. *See* National Capital Planning Commission, *supra* note 10.

31. FLA. STAT. § 163.513(2) (2002).

the legislation has languished for lack of funding and attention. Only two communities, Tampa and Plantation, have taken advantage of the Act's enabling provisions and initial funding to create Safe Neighborhood Improvement Districts. Now enforced by the Attorney General's Office, the Act is not a priority of the current state administration and has no budget. As such, its implementation potential is fundamentally flawed.

Given very recent evidence that terrorist organizations, specifically al Qaeda, have been training for years for urban attacks,[32] it seems prudent to think through the desirability of putting teeth back into this legislation and building upon it as one vehicle to help Florida communities plan for and deter attacks. Moreover, such legislation could be linked to existing and newly proposed comprehensive planning and growth management legislation, as discussed in Part VII below.

C. *Situational Crime Prevention*

Of the remaining place-based crime prevention theories, situational crime prevention provides a broad context encompassing both defensible space and CPTED. Articulated by Ronald V. Clarke from ideas developed while he was at the British home office in the 1960s and early 1970s, situational crime prevention suggests that effective crime prevention depends upon opportunity reduction. This can be accomplished by increasing the perpetrator's risk of being seen or apprehended, by increasing the effort required to commit a criminal act, or by decreasing the rewards of the act.[33] According to the theory, any one of these factors may be sufficient in and of themselves to deter or prevent criminal (or, by extension, terrorist) acts. An example of situational crime prevention strategies at work comes from the New York City Transit Authority's Clean Car Program.

When all other means of protecting New York's subway cars from being defaced by graffiti artists failed, the city began interviewing those apprehended to understand the motivations for their acts. When it was discovered that the main reward of "tagging" was getting one's "tag" (identification) in public view for as long as possible, the city instituted a program that required defaced cars to be immediately removed from service and cleaned. The effect was to dramatically reduce the incidence

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32. CNN Report, tapes Show that al Qaeda Trained on Urban Jihad on West CNN.Com, *available at* http://www.cnn.com/2002/US/08/20/terror.tape.main/index.html (last visited Mar. 18, 2003). Among other things, "the [video] tapes show al Qaeda's trainees using explosives to destroy simulated houses, office buildings, and bridges." *See id.*

33. *See generally* CLARKE, *supra* note 19.

of graffiti in New York's subways. This policy has been adopted by scores of sites around the United States, often with significant results.[34] When rewards for specific criminal acts are reduced, the number of criminal acts focused on that reward structure tends to decline.[35]

While motivated by different intents and sometimes a willingness to die for their cause, we have evidence that many terrorists are nonetheless guided by opportunity, risk, effort, and reward. Recently, for example, American news agencies reported, based on information and videotapes captured in Afghanistan, that al Qaeda operatives in Indonesia were deflected in their choice of attacks against the American Embassy in Jakarta by the perceived risks resulting from increased physical security surrounding the facility.[36] Israel's El Al airline, certainly an inviting target for terrorists, has one of the best anti-terrorism safety records of any airline in the world, due largely to Israel's investment in a multi-layered airline defense system that presents unacceptably high risks of detection to terrorists and similar unacceptably high costs for efforts to breach that system.[37]

A safe guess would be that numerous attacks throughout the world on high-profile targets have been thwarted for similar reasons. Indeed, reducing the opportunities for such attacks by changing the nature, hence the attractiveness, of the target (the reward structure), or by making a target more difficult to approach, is a subject of current and intense debate among a growing number of planning theorists and growth management practitioners. These views and their implications are discussed in Part IV.

IV. GENERAL ORIENTATIONS AND PHILOSOPHIES

Given this definitional context, some of the general philosophies currently emerging in the growth management, planning, and design community relative to the linkages between growth management and terrorism tend to fall into four relatively distinct viewpoints. There is no doubt that other views will emerge as the academic and professional study of this area matures.

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34. SCHNEIDER & KITCHEN, *supra* note 12, at 139-41.

35. *See generally* CLARKE, *supra* note 19.

36. *See* Terrorism Questions & Answers, *available at* http://www.terrorismanswers.com/havens/indonesia.html (last visited Mar. 18, 2003).

37. Airline and airport security in Israel is the responsibility of the Israeli government. *See, e.g.*, Jane Black, *El Al's Security Vs. The U.S. Approach*, BUS. WK., Aug. 25, 2003, *available at* http://www.businessweek.com/bwdaily/dnflash/aug2003/nf20030825_5134_db039.htm (last visited Nov. 21, 2003).

A. *Changing the Target*

One viewpoint, articulated by John Friedmann, suggests that the potential for terrorist attack in the United States can best be reduced through a monumental shift in planning, design and development practice and philosophy.[38] This shift effectively limits the footprint of U.S. cities, emphasizing sustainability and green design and building practices. The shift in emphasis could potentially reduce American consumption of such a disproportionate share of the world's resources, consumption which may be detrimental to developing nations, especially those in the Muslim world who in any case perceive the United States as an arrogant, infidel exploiter of world wealth and power. Friedmann states:

> That we should act according to a global sense of responsibility in the use of natural resources as a utopian ring. But we live in an increasingly interdependent world. Most of the population in the belt of Islamic nations that extends from Indonesia to the Middle East and the desert regions of northern Africa, and is the source of our present unease, live under conditions of unimaginable poverty. Their claims on global resources are but a tiny fraction of ours. It is these poverty-stricken peoples that constitute the social base for the terrorist threats on our cities.[39]

Friedmann's answer is to change the fundamental nature of the target so as to remove its real and symbolic value to terrorists. He rejects the notion of fleeing from terrorists by hiding behind walls or transforming the nation's cities into fortresses.

B. *Decentralizing the Target*

A second viewpoint espoused by historian Stephen Ambrose and other planners suggests that, due to technological advances, "it is no longer necessary to pack so many people and office [sic] into such small space as lower Manhattan [or other large cities]. They can be scattered in neighboring regions and states, where they can work just as efficiently and in far more security."[40] Without dealing with the philosophy of resource equities, Ambrose argues for the diffusion of targets as a strategic response to terrorist attack. Others, such as planner Joe Feinberg, similarly suggest that the answer lies, in large part, in regional decentralization that will reduce the vulnerabilities of densely packed central cities.

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38. John Friedmann, *City of Fear or Open City*, 68 J. AM. PLAN. ASS'N 237 (2002).

39. *Id.* at 238.

40. Stephen Ambrose, *Beware the Fury of an Aroused Democracy*, WALL ST. J., Oct. 1, 2002, at A24.

Feinberg argues that this is the logical extension of a trend that is already underway for business, specifically large corporations in America.[41] Now we have the chance, he says, to reduce the daytime concentration of population in our central cities and to reduce sprawl in our suburban areas.[42] Many American urban and suburban areas have become unmanageable, he suggests, making traffic congestion a terrible problem and disaster evacuation a nightmare. He links this argument with one that emphasizes the restoration of our national railroad system.[43] This would help reduce the terrorist vulnerability of air travel since, he says, we are far too reliant on airline transportation. Similar to Ambrose's argument, this view is more about moving the target and making it less obvious to the enemy than it is about transforming the target, although the rapid decentralization of cities would no doubt result in a transformation.

C. *"Let Cities Be Cities"*

A third viewpoint is diametrically opposed to those above. It is perhaps epitomized best by Sam Casella's recent statement, "Let Cities Be Cities"[44] and is echoed by a large segment of planning, urban design, growth management and anti-terrorist academics and practitioners across the nation. Casella, President of the American Institute of Certified Planners, argues that decentralizing development does not necessarily offer increased security since terrorism is a dynamic threat, not limited to tall buildings.[45] To illustrate this point, he notes "[w]e 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."[46]

Casella suggests that population and industrial sprawl are dangerous answers to terrorism since they promote too much reliance on pollution emitting vehicles, the spread of road networks, and inefficient land-use systems and policies; they also degrade the connectivity that humans need with each other. Moreover, he points out that dense urban areas are the

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41. *See* Joe Feinberg, AICP, Viewpoint, APA Web Site, *available at* www.planning.org/planning/member/2002mar/viewpoint.htm (last visited Mar. 18, 2003).

42. *See id.*

43. *See id.*

44. *See* Sam Casella, FAICP, Let Cities be Cities, Viewpoint, APA Web Site, *available at* www.planning.org/viewpoints/letcities.htm (last visited Mar. 18, 2003).

45. *See id.*

46. *Id.*

crucibles of civilization and dispersing them would not only give terrorists a great victory, but it would not make us any safer.[47]

Jane Holz Kay also writes on anti-sprawl themes. She says, in response to the reduced density proponents "Give me a break. If we're going to continue to sprawl, and spew one-third of our global warming gases from automobiles, we will be succumbing to a disaster of a different sort."[48]

D. *Hardening the Target*

A fourth viewpoint focuses less on moving or dispersing targets and more on target hardening, one of the oldest crime prevention strategies generally associated with access control, a place-based crime prevention principle. This viewpoint is perhaps best expressed in the plans developed by an interagency task force of the National Capital Planning Commission to increase security around the nation's monumental core area by developing a coordinated array of aesthetically pleasing landscape treatments and street furniture (benches, planters, seating areas, etc.) that will nevertheless be strong enough to thwart an attack against a building by a bomb-laden vehicle.[49] This notion is somewhat akin to the "ring of steel" philosophy that London adopted after a series of IRA bombings in the Docklands, but which other British cities, such as Manchester, rejected in favor of a more low-key approach.[50] FEMA puts another face on this general approach, within the context of mitigating what they term human-caused hazards: "Rather than removing potential victims from the hazard, then, mitigation strategies for human-caused hazards [should] focus primarily on creating a built environment that is difficult to attack, resilient to consequences of an attack or accident, and protective of its occupants should an incident occur."[51]

While a time-honored and effective approach to crime prevention, target hardening has been criticized when applied to cities and regions to defend against terrorist attacks. Aside from Friedmann, one of the most notable critiques comes from Oscar Newman, an architect and father of the aforementioned defensible space design strategies. Newman suggests that the vast majority of anti-terrorist efforts should go into eliminating terrorists since it would be: "far more cost effective than target hardening and it will keep us from imprisoning ourselves and closing down that very

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47. *See id.*

48. *See* APA, *Planning After September 11*, Oct. 1, 2001, Dateline (quoting Jane Holz Kay), *available at* www.planning.org/dateline/2001/date100101.htm (last visited Oct. 27, 2003).

49. *See* National Capital Planning Commission, *supra* note 10.

50. Kitchen, *supra* note 13, at 330.

51. *Integrating Human-Caused Hazards*, *supra* note 8, at 3-2.

aspect of our society that is the envy of every impoverished and authoritarian nation in the world: its openness."[52]

Newman underscores his contention that almost all access control efforts can be overcome and that these are likely to be ineffective against terrorists, who would merely find ways around the barriers. There is no doubt that terrorists, like ordinary criminals, are infinitely adaptable. However, there is a growing emphasis among architects, planners, and designers who specialize in crime prevention applications to make their designs, ideally, one step ahead of adaptable criminals. The fundamental concept for modern designers and planners is to think as much in terms of the misuses of the product or property being designed as they do in terms of its proper uses.[53] The same notion applies to anti-terrorist planning and design strategies in the design of safer cities, even if at the same time we are pursuing more long-term, socially responsible and resource-equitable solutions such as those proposed by Friedmann. Arguably, 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 a battle while one is negotiating with the enemy.

In further response to Newman, Israeli military planners point to the case of El Al airline's layered security perimeter.[54] As of this writing, not one suicide bombing has been perpetrated by Islamic militants living in the Gaza Strip, a land area surrounded completely by a security fence and associated barriers. Indeed, this access control device has been perceived as so successful that it has been endorsed by the Israeli Parliament as a means of protecting Israel from attack by West Bank militants. Work has already begun on a 217 mile security corridor along the West Bank that will ultimately include a combination of fences, walls, ditches, patrol roads, and electronic surveillance devices.[55] This is being done in the face of critics who point out that physical means of combating terrorism provide a temporary and imperfect fix and ignore long-term political and economic solutions.

The basic psychological reality remains that when citizens' lives are in jeopardy, they will grasp any solution at hand, even if it is short-term and

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52. *Planning Practice Expert Advice*, APA Web Site, Dec. 2001 (quoting Oscar Newman), *available at* www.planning.org/planningpractice/2001/dec01.htm (last visited Oct. 27, 2003).

53. *See generally* Paul Ekblom, *Gearing Up Against Crime: A Dynamic Framework to Help Designers Keep up with the Adaptive Criminal in a Changing World*, 2 INT'L J. RISK SECURITY & CRIME PREVENTION 249 (1997).

54. *See* Black, *supra* note 37.

55. CNN.Com/WORLD, Israel Building Fence Along the West Bank, *at* http://www.cnn.com/2002/WORLD/meast/06/17/mideast/ (last visited Oct. 27, 2003).

shortsighted. Certainly, there can be no complete guarantee that physical barriers, no matter how cunning and strong, or that public policies, no matter how equitably they distribute resources, will protect us against terrorists, whether foreign or homegrown.

Perhaps target access control and target hardening can become two of many choices utilized for protecting people and property from all types of harm. The real danger may be to fixate on any one choice. It is highly unlikely that there will be a single or a simple answer to terrorism, however skillfully we craft or resource it. Assuming that we will continue to live in a world filled with risks and uncertainties from terrorism, how can we best fashion our responses?

V. PLANNING FOR UNCERTAIN FUTURES: RISK ASSESSMENT

If planning is anything, it is an attempt to make uncertain futures more certain by culling knowledge from data and applying that knowledge to future events through present action.[56] Fundamentally, planning is a strategy with proven survival value for our species that reduces risk and uncertainty. There seem to be no greater and more fearsome uncertainties than those posed by modern terrorism. Exacerbating these uncertainties are other factors, including the adaptable nature of terrorist behavior noted above, the great multiplicity of potential targets in our nation, and a high level of public fear and anxiety; the mere threat of a terrorist attack can be even more destructive and longer lasting than the attack itself.

Under normal circumstances insurance companies would be a primary source for risk assessment techniques and approaches. However, the September 11 attacks produced the largest single blow ever in terms of combined insurance claims, estimated at forty to fifty billion dollars. While liable for those claims, the insurance industry has been frantically searching for ways to protect itself against similar catastrophic events in the future.[57] Recently two insurance consulting groups, AIR Worldwide Corporation and Eqecat Corporation, have developed algorithms to assess the probabilities and costs of an attack on any given property in any given year. Both models have been described as "rough guides."[58] Shortly after

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56. Friedmann and Hudson's definition of planning is centrally concerned with the linkage between knowledge and organized action. *See* John Friedmann & Barclay Hudson, *Knowledge and Action: A Guide to Planning Theory*, 40 A.I.P. J. 2-3 (1974).

57. *See* Joseph B. Treaster, *The Race to Predict Terror's Costs*, N.Y. TIMES, Sept. 1, 2002, § 3 at 1.

58. *Id.*

the one-year anniversary of September 11, these proprietary programs were made available to insurance companies.[59]

First, we know that we cannot guard against every risk. Rather we must protect ourselves based on a prioritization of risks by measuring the probabilities that different sets of targets may be more or less attractive to terrorists than other targets. Even though the infrequency of terrorist attacks within the United States makes statistical analysis impossible, we know from worldwide experience that some targets are indeed more attractive than others based upon the expected rewards terrorists hope to gain. As damage to buildings or sites of high symbolic value (e.g., the Washington Monument) or critical infrastructure (e.g., Hoover Dam) moves along a scale of intensity from negligible to catastrophic, the attractiveness of the reward also increases.[60]

Further, if the *probability* of achieving the maximum reward (catastrophic damage) is also high, then we can say that this is a site or building that we must protect with maximum available resources. The Rand Corporation's "Risk Reduction Matrix"[61] illustrates this combination of factors, although "vulnerability" is substituted for "effort and risk." Vulnerability is largely a function of the ease of building or site accessibility. The objective of effective anti-terrorist planning is to reduce vulnerability (i.e., by reducing opportunity through increased risk and effort) and lessen the severity of the consequences (i.e., by reducing the reward structure through mitigation efforts).

Rand's risk assessment scheme draws upon the U.S. General Services Administration's risk evaluation algorithm devised for all new construction of federal buildings under its domain and for the modernization of existing federal buildings.[62] The system takes into account the size of the facility, the number of employees, the structure's rating of critical importance, its symbolic value, and the consequences of the attack.

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59. Lynna Goch, *Loss/Risk Management Notes: Terrorism Models Can Help Insurers*, BEST'S REVIEW, Nov. 2002, *available at* http://www.absconsulting.com/news/EQECAT.pdf (last visited Nov. 21, 2003).

60. Two other classic aims of terrorist attack are to inflict mass casualties and to take hostages. One result of the September 11 attack was to add the infliction of mass economic harm to this list. *See, e.g.*, Robert Shapiro, *Al-Qaida and the GDP*, MSN Slate, *available at* http://slate.msn.com/id/2079298 (last visited Nov. 21,2003).

61. *See* RAE W. ARCHIBALD ET AL., SECURITY AND SAFETY IN LOS ANGELES HIGH-RISE BUILDINGS AFTER 9/11, 15-20 (2002), *available at* www.rand.org/publications/DB/DB381 (last visited Nov. 21, 2003).

62. General Services Administration, Public Building Service Security Criteria (Jan. 1997).

This, in conjunction with a detailed site evaluation, provides information to assign any federal building one of five protection levels, each of which carries with it a series of related protective strategies, from increased mechanical access control security (such as the provision of delta barricades, mechanically operated vehicle impediments), to increased electronic surveillance and guardianship. The highest threat assigned to any facility is E level, which means that an extreme level of protection is warranted. For instance, the White House merits E level protection.

As noted in the Capital National Planning Commission's report for security design in Washington, D.C.:

> Not all buildings and facilities require the same level of security. The Interagency Security Committee, a group examining federal security responses, circulated design criteria to federal agencies in May 2000. These criteria and responses form the basis of the current federal policies and guidelines for assessing security risks. Buildings are assigned a "protection level" based on factors that include symbolic importance, critical nature of operations, consequences of an attack, and surrounding site conditions. This approach, used in conjunction with a detailed risk assessment, identifies the appropriate level of protective measures to be applied to any federal facility. Concerned that agencies may have a natural tendency to elevate the require level of protection and to over-design security, the National Capital Planning Commission recommends that the federal government develop a protocol similar to that used by the General Services Administration for agencies under its jurisdiction be taken to enhance facility security and blast resistance.[63]

GSA's threat assessment algorithm is tied to the specific nature of the possible attack (here from a vehicle carrying a bomb, which is the most common delivery method against American targets) and suggests countermeasures that are known to be effective in these circumstances. In this case, increased standoff distances (the distance allowed between curbside parked or driven vehicles from the building's facade) and physical access control devices, which may include a wide range of constructed barriers, are primary protective devices. Risk assessment strategies are applied by the Commission and these result in a comprehensive range of site and urban design countermeasures that are being suggested for the city's designated monumental core area.

The Federal Emergency Management Agency (FEMA) offers a step-by-step human hazards planning and risk assessment approach for local communities that is designed to be compatible with local planning efforts.

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63. National Capital Planning Commission, *supra* note 10, at 9.

Indeed, the agency said at the outset of its most recent publication on the subject "If your community has begun developing or updating its comprehensive plan, capital improvement plan, urban design guidelines, land development regulations, growth management or sustainability plans, or other community-oriented guidance, this is a prime opportunity to incorporate planning for human-caused disasters."[64]

FEMA's process involves four basic mitigation planning steps: 1) Organizing Resources, 2) Assessing Risks, 3) Developing a Mitigation Plan, and 4) Plan Implementation.[65] The second step, Risk Assessment, is divided into four phases: identifying potential hazards, inventorying assets, providing a profile of hazard events, and estimating losses. Each of these is further subdivided into logical elements that provide specific how-to instructions for local officials in terms of preventing, responding to, and mitigating the effects of human-caused hazards. Guidance in the prioritization of assets (specific facilities, sites, systems, or other locations that could potentially be targeted for attack)[66] is a central feature of FEMA's advice in this regard. Much of their advice parallels the Rand Risk Reduction Matrix noted above. FEMA's risk assessment approach is accompanied by a discussion of probabilities and cost-benefit factors that guide the viability of prevention and mitigation efforts:

> The frequency factor is much more complex in the case of human-caused hazards than for natural hazards. While it is possible to estimate how many natural disasters will occur (for example, a structure located in the 100-year flood plain is considered to have a 1 percent chance of being flooded in any given year), it is very difficult to quantify the likelihood of a terrorist attack or technological disaster. Quantitative methods to estimate these probabilities are being developed but have not yet been refined to the point where they can be used to determine incident probability on a facility-by-facility basis. Therefore, the planning team must use a qualitative approach based on threat and vulnerability considerations to estimate the relative likelihood of an attack or accident rather than the precise frequency. Such an approach is necessarily subjective but can be combined with quantitative estimates of cost-effectiveness (the cost of a measure compared to the value of the lives and

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64. *Integrating Human-Caused Hazards*, *supra* note 8, at 1-3. The agency is very concerned that most state and local governments, including Florida, have no mandatory, comprehensive, and coordinated approach to human caused hazard mitigation that connects with ongoing planning efforts. *See generally id.*

65. *Id.* at 2-1.

66. *Id.* at 2-7.

> property it saves in a worst-case scenario) to help illustrate the overall risk reduction achieved by a particular mitigation measure.[67]

Thus, the planning team may determine that the pipe bombing of a courthouse is probably more likely than the paramilitary assault of a shopping mall, and base its mitigation priorities in part on this assessment. Despite the subjective nature of this process, it does comport with a commonsense understanding of not only the assets, but also the political, social, and economic forces within a jurisdiction.

Quantitative shortcomings notwithstanding, FEMA provides an extensive list of Terrorism and Technological Hazard Mitigation Measures that cover site planning and landscape design (CPTED implementation), architectural and interior space planning, structural engineering, mechanical engineering, electrical engineering, fire protection engineering, security, and parking.[68] There are tools available, imperfect as they may be, to aid planners, as well as state and local officials, in coping with the uncertainty and risk of a terrorist attack.

VI. WHY INCORPORATE ANTI-TERRORISM PLANNING INTO GROWTH MANAGEMENT AND COMPREHENSIVE PLANNING IN FLORIDA?

There are four primary reasons why state and local comprehensive planning and growth management policies and regulations should include anti-terrorism planning provisions. First, based on evidence and experience, place-based crime prevention planning can be effective in preventing and deterring crimes by reducing opportunities for such action through increasing risks, reducing rewards, and increasing efforts to obtain those rewards. Moreover, emerging evidence indicates that such techniques can also be effective against terrorism.[69] Although such activities may only prevent or deter a relatively small number of criminal or terrorist incidents, they are nevertheless valuable additions to our menu of defensive techniques. Florida has already begun to acknowledge the value of place-based crime prevention activities through the Safe Neighborhood Act,[70] even though funding and implementation of the Act has been less than stellar.

Second, planners have access to a vast array of essential information concerning land, real property, and land uses, and are more likely than

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67. *See id.* at 3-3 - 3-7.
68. *Id.* at 3-5.
69. National Capital Planning Commission, *supra* note 10.
70. *See generally* FLA. STAT. § 163.502 (2002).

other local and regional agency staffs to employ cutting edge computer technology such as geographic information systems (GIS) and related computer modeling techniques to keep track of that data. These extremely valuable tools are presently being used by planners to identify and map infrastructure of all types and they can easily be adapted to locate and map potential targets as well. These tools lend themselves to cataloging development that alters the physical landscape — certainly a rapidly changing picture in urbanized Florida[71] — and can be indispensable for tracking terrorist threats by location, type of facility, and threatened adjacencies. Further, planners are already plugged into day-to-day development activities and into the network of agencies and individuals dealing with planning and development issues and are thus better positioned than other government officials to access information and personal networks that can mitigate the effects of a terrorist attack by, among other things, reducing property loss.

Further, there is tangential evidence that when hazard elements are included in local comprehensive plans, community property losses can be significantly reduced. The same effect can be accomplished relative to the inclusion of human-caused hazard (anti-terrorism) planning in local and regional level comprehensive planning. Steinberg and Burby report a University of North Carolina study finding that

> appropriate land-use measures could reduce expected property losses by one-third over the next 50 years . . . in all cases maximum savings can only be realized if local comprehensive plans contribute to the effort.
>
> When local plans include hazard safety policies, it is easier to implement the relevant zoning ordinances and building code requirements. It is also easier to keep everyone informed about natural hazards and their risks, including municipal departments, developers, and the public.[72]

Third, since the interconnected web of legislation that spells out comprehensive planning and growth management is the fundamental law governing all public and private development in Florida,[73] this is the appropriate locus for the inclusion of place-based terrorist prevention strategies, particularly those mandating that jurisdictions implement risk assessment evaluations for critical infrastructure and other potential targets. Indeed, anti-terrorism planning that seeks to affect land

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71. *See, e.g.*, GeoPlan Center Web Site, *at* http://www. geoplan.ufl.edu/ (last visited Oct. 27, 2003).

72. MICHELE STEINBERG & RAYMOND J. BURBY, GROWING SAFE PLANNING 22-23 (Apr. 2002).

73. *See generally* FLA. STAT. § 163.3161(5) (2002).

development practices and urban design (by creating special districts or zones, redesigning local streets, and providing designs for hardening street furniture) is more sensibly connected to the state's existing land planning and growth management legislation, specifically the State's Comprehensive Plan,[74] and the Local Government Comprehensive Planning and Land Development Regulation Act,[75] than to other legislation, even that dealing with emergency management. This is so despite the cogent arguments recently raised by Tom Pelham, that the existing comprehensive planning and growth management legislation has been subverted by the state's unwillingness to properly fund or implement key provisions, especially those pertaining to concurrency and to regional planning, directly resulting in urban sprawl and the mismanagement of growth.[76] Among other things, Pelham argues forcefully for a restructured growth management system that provides a better defined State Comprehensive Plan such that the state will live up to its stated aims and decrease oversight of local plan review, shifting more power to regional planning councils.[77]

Fourth, the incorporation of anti-terrorism planning into the existing planning, legal, policy, and operational frameworks is more efficient than creating entirely new legislation or new operational staffs. This is particularly important in terms of post-attack response and regeneration, as distinguished from urban design changes that harden targets or that deflect attacks through other opportunity reducing measures. The experience of the city of Manchester, England illustrates this issue.

Manchester, one of England's largest cities, was bombed by the IRA in June 1996, an attack that destroyed or badly damaged more than a half million square feet of retail floor space in the city center.[78] Although that nation has been the target of scores of such attacks over the past four decades, this assault stood out as the largest peacetime bombing ever in mainland Britain.[79] The effect of the bombing was not only to destroy public and private property, but to devastate business in the city's downtown, a center for particularly small businesses with little fall back resources. The bombing also severely disrupted transportation networks

74. *See generally* FLA. STAT. ch. 187 (2002).

75. FLA. STAT. ch. 163, pt. II (2002).

76. *See generally* Pelham, *supra* note 7.

77. *Id.* at 309. Pelham also suggests that the state should build upon its experimentation with transportation concurrency exemption areas. In the end, all of this depends on having the political will to make these things work. *Id.* at 309-10.

78. Kitchen, *supra* note 13.

79. *Id.* at 327.

and badly shook public confidence in this critical area of the city, the heart of its shopping district. The long-term economic fallout of the bombing promised to be just as serious as the property loss, similar to the effect that the September 11 attacks have had on the American airline industry. The essence of the Manchester experience was that the response mechanism for rebuilding the city center was crafted from existing planning law and policy, rather than from new legislation or from that in other functional policy areas. As Kitchen points out:

> the primary benefits of an interpretation by the local planning authority that its existing development plan framework was adequate for the purpose of shaping the redevelopment process were that no new planning actions had to undertaken and no new by-laws or similar powers had to be sought before the recovery process could get underway, thus saving the time (and no doubt also the public debate) that these processes would have involved.[80]

The fact that regeneration of the city center grew out of the existing planning context and policy meant that existing public-private partnerships were more easily harnessed for the vast effort required to rebuild the center and reintegrate it into the fabric of the city once more. Moreover, the city's planning information systems were invaluable in accurately assessing business losses and locating housing for displaced residents.[81] As a result, Manchester restored its city center with minimum delay, which was essential to the restoration of faith and confidence in its downtown core. Furthermore, the speedy response helped to greatly diminish citizens' fears, an enormously important and often underemphasized by-product of such disasters.

VII. WHERE DOES ANTI-TERRORISM PLANNING FIT INTO EXISTING FLORIDA LEGISLATION?

A restructured, better articulated, and invigorated State Comprehensive Plan should include a clear anti-terrorism planning goal statement. The statement should specify that local governments complete asset inventories and risk assessment processes. These might be modeled along the lines of those suggested in this paper, although there are certainly other models to choose from.

Moreover, to promote planning consistency, the Local Government Comprehensive Planning and Land Development Regulation Act should

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80. *Id.* at 336.

81. *Id.* at 337-39.

include provisions, within the context of its required and optional elements of comprehensive plans,[82] that mandate jurisdictions to develop asset inventories and associated risk assessment processes to identify critical infrastructure, critical protection zones, and vulnerable targets subject to catastrophic damage from terrorist attack. Such provisions might be accomplished through the inclusion of an entirely new mandatory element that replaces the existing weak language of Florida Statute sections 163.3177(7)(h) and (i), providing for *optional* safety elements from "manmade or natural catastrophe" and *encouraging* local governments that are not subject to coastal management elements to adopt hazard mitigation post disaster redevelopment plans (emphasis supplied).[83]

In the alternative to adopting an entirely new anti-terrorism element, existing provisions of section 163.3177(6)(a) of the Florida Statutes, dealing with future land use, could be modified to provide for future land use maps that identify and depict areas designated by an accepted risk assessment process as "critical protection zones." The statute could then outline reasonable preventive measures for these zones. One model for such a process and for possible street level design anti-terrorism countermeasures may be the National Capital Planning Commission's plan for Washington, D.C., as discussed previously.

Further modifications could be applied to section 163.3177(6)(b), dealing with the required transportation circulation element, providing for a risk assessment and countermeasure design process for those portions of the transportation infrastructure identified as critical. Section 163.3177(6)(d), dealing with water conservation, could also be modified to focus specifically on risk assessment for critical water recharge areas, including rivers, bays, and lakes. Attention could also be given to section 163.3177(10) which focuses on the preservation of historic and archaeological resources.[84]

In the case of section 163.3177(10), it is important that sites of high symbolic value should be protected by appropriate design and planning techniques. The National Capital Planning Commission's plans are instructive for these purposes. In this context, it is also clear that some of Florida's public buildings and related facilities are obvious targets such that section 163.3177(e) should be amended to include appropriate risk assessment requirements for these structures. Consideration should be given as to how best to include adjacent land uses that may also be threatened. Here too, changes should be made to section 163.3177(7)(f),

82. FLA. STAT. § 163.3177 (2002).
83. *Id.*
84. *Id.*

the recommended community design element, to provide for anti-terrorist design strategies based on the emerging national models noted above.

The inclusion of language that identifies and protects the state's critical infrastructure is essential. It is clear that capital improvement planning is central to section 163.3161 of the Florida Statutes generally and is a critical element specific to section 163.3177. Therefore, the legislation requires provisions for the asset inventory of both public and private infrastructure and the development of concomitant risk analysis and preventive design plans.

The above recommendations are not exhaustive, but they are a start. Moreover, this Essay has not explored their ramifications relative to administrative review processes,[85] or to the concurrency implications, which are bound to be huge. Those topics are the subject of further research and will almost certainly be on the agenda of those who see the value of incorporating anti-terrorism planning into ongoing comprehensive planning and growth management in Florida and elsewhere.

VIII. CONCLUSION

Anti-terrorism planning, as it is emerging from place-based crime prevention planning, has a legitimate place among prevention and response tools that Florida (and indeed the nation) should have on the menu of available defense and mitigation techniques in the war against terrorism. Certainly these are not the only tools, nor are they guaranteed to be effective in every instance, but there is evidence that they can work and, artfully applied, will not harden the urban landscape so as to turn our cities into fortresses. Further, such planning and urban design provisions should be incorporated into existing growth management and comprehensive planning legislation in Florida, especially the State Comprehensive Plan and the Local Government Comprehensive Planning and Land Development Regulation Act.

These laws, no matter how poorly funded or implemented, nevertheless provide the fundamental direction for local, regional, and state policy and practice relative to all public and private development. Beyond the laws themselves, the incorporation of anti-terrorism planning into comprehensive planning highlights this issue to those local, regional, and state agencies and officials that have access to a vast amount of data and data management techniques that are essential to both preventive planning design, and even more significantly in the case of attack, to response

85. *See, e.g.*, FLA. ADMIN. CODE ANN. r. 9J-5.001 (2000).

mechanisms and networks. These mechanisms and networks can mitigate the effects of terrorist attacks through the reduction of recovery times, the reduction of public fear, and ultimately the restoration of public confidence.