# 9/11 REASSESSMENTS OF URBAN LOCATION COSTS AND RISKS

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Following the September 11, 2001 terrorist attacks, corporate leaders, their employees, and the insurance industry—all began to re-evaluate location risks and costs associated with occupying commercial real estate in densely settled urban centers, especially downtown high rise office towers. In this article, we review these post 9/11 re-assessments and their likely impact on corporate location decisions and employment distribution across U.S. cities and metropolitan areas.

## PRE-9/11 LOCATION DYNAMICS

Over the last three decades, corporate and municipal leaders have worked closely with commercial real estate developers to transform our largest downtowns into major administrative, financial and transactional nodes. Huge and often grandiose skyscrapers, typically housing headquarters of firms with global reach, have been erected as prominent symbols of our nation's economic success and influence in the international marketplace. Interspersed between or among the skyscrapers are smaller structures housing a range of businesses that provide an array of professional, technical, logistical and other support services to these global firms.[1]

Urban planners and local economic development officials also have

promoted development in varying degrees of intensity beyond city boundaries. In terms of form and function, these outlying economic nodes include suburban office parks, regional shopping malls, edge cities or self-contained multi-functional centers on the metro fringe, and exurban corporate campuses, which are linked by information technology and limited-access highway corridors.[2]

## RE-EVALUATIONS OF GEOGRAPHICAL RISKS POST-9/11

After 9/11, perceptions of metro area location risks changed dramatically -- among corporate heads, their employees, and the insurance industry.[3] The perspectives of each of these groups are discussed in turn below.

## CORPORATE AND EMPLOYEE PERSPECTIVES

For corporate heads, research indicates that since 9/11, "risk management has moved beyond its traditional spheres of technological and financial risk assessment and now permeates virtually all aspects of corporate decision-making," including safety and security, facility site selection, and employee relocation decisions.[4] Not surprisingly, downtown high-rise office properties have generated the greatest concerns, which have resulted in increased employee and visitor screening and overall increased security costs. For example, the Empire State Building in New York City increased security personnel by over 250 and added scanning machines to all five entrances, costing several million dollars and creating serious delays and hassles for tenants and visitors entering the building.[5] Whether such entry delays and hassles together with employee fears of working in downtown high-rise structures will reduce current tenant propensity to renew their long-term leases in these structures becomes a pertinent question.

There is some evidence that the market demand for super-high rise properties was on the wane prior to the terrorist attacks.[6] But commercial real estate brokers and corporate relocation consultants report that since 9/11 an increasing number of their clients are expressing an aversion to locating in so-called trophy properties, especially those taller than 30 stories, and "run of the mill" properties within the "shadow" of such facilities, other large gathering venues (stadiums, arenas, major retail establishments), energy generating facilities, and infrastructure projects (bridges, tunnels, natural gas pipelines, water and sewer plants).[7]

Even companies with operations in suburban and nonmetropolitan locations are changing their site preferences after 9/11. According to corporate relocation consultants, some are "...now opting for no interstate visibility...locations in the rear of business parks...[and] sites outside of airport flight patterns."[8] And, all firms reportedly are evaluating more carefully co-tenants after 9/11, avoiding buildings where they will have to share occupancy with a U.S. government agency or high profile private company. In short, "What may have been perceived as isolation in the past is [perceived as] safety and security [today]."[9]

Firm-level reassessments of facility and site location are driven, at least in part, by employees who have raised concerns about working in or within the shadow of super tall office buildings like the Sears Tower in Chicago. To quell employee concerns, some firms that were concentrated in Lower Manhattan prior to 9/11 reportedly turned down incentives to stay in the area and have made moves resulting in some cases in a doubling of the rent "to keep people focused on their jobs and not on worrying about coming to work everyday." [10]

Firms are likewise re-evaluating their facility and site location in terms of safety and the higher occupancy costs associated with heightened building security. [11] Most high rises were not designed for mass evacuations. According to building design experts, "the stairwells are too small, there are not enough of them, and [oftentimes] the stairwell door[s] open into the fire stairs, impeding passage."[12] And, as noted, in the post attack environment, building owners reportedly are hiring more security guards, installing surveillance cameras, requiring screening badges for all building employees, and reducing the number of entry points. Along with building entry delays and hassles, beefed-up security poses a major dilemma for tenants because "almost all commercial leases contain pass-through provisions that leave [them] responsible for common areas maintenance costs." [13]

## INSURANCE INDUSTRY PERSPECTIVES

Paralleling the re-evaluation of risk among firms and their employees, especially those inhabiting high-rise buildings, the business of insuring commercial real estate also changed dramatically after the terrorist attacks.[14] Prior to 9/11, insurance rates were on the rise—increasing 20%-25% on renewals—as insurers sought to recover invest-

ment losses due to declines in the stock market and large scale payouts following several major disasters (e.g., Hurricanes Andrew and Fran, the Northridge Earthquake, etc.).[15]

After 9/11, insurance premiums for businesses and properties perceived to be high potential targets for future terrorism, including Class A high rise buildings, stadiums and entertainment complexes, and convention centers, increased sharply (Table 1).[16] Moreover, by February of 2002, 45 states, the District of Columbia, and Puerto Rico had approved terrorism exclusion provisions for property and casualty insurance, which meant it was unlikely that such coverage would be available to property owners in these states at renewal time.[17]

Both the heightened cost and the declining availability of terrorism insurance coverage are sending shock waves throughout the commercial real estate industry.[18] It is affecting both new construction and resale markets, particularly in large metro areas, as "financing is contingent upon full insurance coverage for collateral assets backing the loan or investment."[19] A Mortgage Bankers Association survey of 25 commercial real estate firms revealed that, since the beginning of 2002, "$8.2 billion worth of commercial property developments have been cancelled, delayed, or altered due to the high price tag on terrorism insurance or its unavailability altogether."[20] Table 2 lists some of the commercial mortgage backed securities (CMBS) projects that

**Table 1:**
**Examples of Property/Casualty Risk Insurance Price Hikes**
*Source: Complied by authors from various newspapers*

| Property | 2001 | 2002 |
|---|---|---|
| California Landlord (53 Offices & retail buildings) | $373,000 | $559,000 |
| Midwest Manufacturing Plant | $2.1m | $5.4m |
| Northeast Manufacturing Plant | $250,000 | $550,000 |
| Minneapolis Metrodome | $283,000 | $500,000 |
| Miller Park Stadium (Milwaukee, WI) | $225,000 | $2.25m |
| NYC Intermodal Transportation | $6.0m ($1.5b) | $18.0m ($500m) |
| NYC Terrorism Policy | N/A | $7.5m ($70m) |
| Combined Construction Group Ltd. | $120,000 | $1.2m |

**Table 2:**
**Securities Placed on Ratings Watch List for Lack of Terrorism Insurance Coverage**
*Source: National Mortgage News, 2002*

| |
|---|
| 280 Park Avenue Trust |
| 1211 Avenue of the Americas Trust |
| 1251 Avenue of the Americas Trust |
| 1345 Avenue of the Americas Trust |
| 1633 Broadway Trust |
| Four Times Square Trust |
| Host Marriott Pool Trust (incl. Marriott Marquis in Times Square) |
| Opryland Hotel Trust |
| Houston Galleria Trust |

were placed on the ratings companies "watch list" due either to the lack of terrorism insurance coverage or gaps in coverage that left lenders and investors with less protection than they had prior to the tragedy of September 11.[21] In instances where terrorism insurance was available post-9/11, most policies excluded several types of terrorism incidents, including coverage for the use of biologicical and chemical weapons. Such exemption clauses, according to one observer of the CMBS market, cause another problem: they made it easier for insurance companies to cancel policies altogether on short notice. [53]

The retail, industrial, and multi-family housing sectors also face rising insurance costs and coverage issues.[23] In fact, approximately two-thirds (65%) of the companies surveyed recently by the Risk and Insurance Management Society (RIMS) have no terrorism insurance and 71% found it virtually impossible to obtain coverage.[24] The skyrocketing cost and decreasing availability of terrorism coverage are forcing many property owners to self-insure, that is, to establish disaster funds using money that otherwise could be used for business investments and new job creation.[25]

And the problem is not limited to commercial real estate or large cities.[26] Studies reveal that municipalities are facing spiraling cost of insuring city and town halls, public parks, and other public infrastructure like bridges, tunnels, and ports.[27] Property insurance rates reportedly have increased between 45% and 75% over the last year in small and medium-sized cities.[28]

The rate hikes have been even higher in large metro areas.[29] For example, the risk insurance package for Miller Park Stadium in Milwaukee, Wisconsin increased from $250,000 annually prior to 9/11 to $2.25 million annually afterwards.[30] These added costs will likely reduce the attractiveness and competitiveness of large cities and metro areas as the cost of living and doing business in them will increase disproportionately.[31]

This problem with terrorism insurance coverage arises in part because re-insurers, who typically backstop primary insurance carriers, raised their rates threefold following 9/11. Moreover, most now exclude terrorism coverage, which leaves "many [primary] carriers liable for 'first dollar' coverage with no backup from reinsurers."[32] Industry analysts contend that the only way to solve this problem is for the federal government to provide a financial backstop, as it does in the case of natural disasters.[33] And a GAO report concluded that the federal government's failure to address this problem would likely slow the economic recovery by placing thousands of businesses (especially small businesses) at the risk of bankruptcy, layoffs, and loan defaults.[34]

Despite the prognosis of these adverse economic impacts, Congress did not fully embrace the federal insurance backstop idea for more than a year following the terrorist attacks.[35] In fact, it was not until after the 2002 mid-term elections, when the Republicans swept most of the Senate and House races--largely on the basis of their stance on post-9/11 national security issues--that such legislation was enacted into law.[36]

The Terrorism Risk Insurance Act of 2002 provides "for the federal government to pay up to $100 billion in terrorism losses annually for three years."[37] The Bush Administration contends that the new law "will aid the economy by allowing the resumption of thousands of building projects stalled by lack of such insurance."[38] Others proponents argue that the law "could free up $15 billion in construction and real estate business and 300,000 jobs," although some analyst argue that these figures are overblown.[39]

Notwithstanding the passage of Terrorism and Risk Insurance Act of 2002, real estate developers and property owners in U.S. cities still have to contend with the accelerating costs of insurance coverage as well as increases in deductibles in the post-9/11 environment. In New York City, for example, insurance premiums for large accounts (greater than $1 million) increased 73.3%, for medium sized premiums ($50,000 to $1 million) 49.5%, and for small premiums (less than $50,000) 39.3% in the year following 9/11.[40] And industry analysts conclude that "insurance rates will continue to rise in 2003 and into 2004 on a national basis before this so-called hard market has run its course."[41]

## LONGER TERM IMPACTS OF TERRORISM LOCATION RISKS

Commercial real estate analysts predict a lagged effect of these developments on business activity and employment trends in U.S. cities and metro areas.[42] The general consensus is that the effects will not be evident until 2004 and later when many longer-term commercial real estate leases will begin to expire. This raises several related

questions about the impact of 9/11 on the economic prospects of U.S. cities and their downtown office markets.

(1) Will major corporations continue to concentrate high proportions of their employees in a single downtown location or will they attempt to reduce their exposure to potential terrorist attacks by dispersing their operations and employees across multiple locations linked and backed up by the latest information technologies?

(2) Will they keep their headquarters office at prestige downtown addresses in cities like New York, Chicago, and San Francisco, yet relocate many executives, as they have back office employees, to suburban and smaller city locations?

(3) Will office building size and style as well as location be influenced in the post-9/11 search for anonymity?

(4) Will security and insurance costs along with building entry delays and hassles lead to a reconsideration of the net benefits of a downtown location?

(5) Even if downtown office complexes are occupied in the future at near capacity levels, will lease rates be lower and discounts higher to attract and retain tenants?

Answers to these questions will require carefully designed longitudinal research. To accurately gage the impacts of the terrorist attacks, this research will have to monitor business demographics (i.e., firm births, firm deaths, expansions, contractions, in-migrating firms, and out-migrating firms) by location and their employment and leasing dynamics by type of establishment across a representative sample of U.S. metro areas. Investigators should monitor establishment turnover and employment change for various geographic subareas, including the CBD, the balance of the central city, the inner ring suburbs, the outer ring suburbs, and the exurbs, as well within the vicinity of high-risk properties (e.g., skyscrapers, sports and entertainment complexes) and facilities (e.g., airports, seaports, power stations, etc.), which are deemed to be vulnerable targets for future terrorist activity. Micro-level databases that provide business demographics, annual employment, and leasing information down to the establishment street address level (such as Dunn and Bradstreet Market Identifier files, State Employment Security Commission, ES-202 files, and Real Estate Information Source [REIS] files), though not without certain methodological shortcomings, should permit researchers to assess such outcomes. Ideally such secondary data research should be supplemented by surveys and case studies of corporate relocation activities. [43]

## CONCLUDING REFLECTIONS

We should note that several analysts contend that 9/11 will not significantly affect the economic prospects of U.S. cities and metro areas.[44] Based in large part on historical examples of wars and urban terrorism, which did not trigger either wholesale population or commercial de-concentration, Glaser and Shapiro argue that 9/11 probably will not have the detrimental impacts on cities suggested herein.[45] Dittmar and Campbell also assert that, "[t]he events of September 11 are unlikely to encourage sprawl, or migration between dense metro areas and other parts of the country."[46] Based primarily on mass transit rider-ship data and commercial real estate trends prior to and immediately after 9/11, they go on to argue that, "[i]n fact, many trend lines are beginning to point the other direction, and if anything the uncertain economy may lead to a slowing of sprawl and a renewed emphasis on reinvestment in existing places."[47] And Rivlin and Berube posit that "[t]he growth and development of cities will continue to be shaped by complex economic, social and technological forces, among which terrorism plays a very minor role."[48]

We believe that past instances of warfare (WWII, in particular) and urban terrorism (IRA bombings in London and terrorists incidents in Israel) offer useful but incomplete insights into the likely impact of 9/11 on cities. Today's U.S. transportation and communications infrastructure allows immense freedom in location, especially in administrative, financial, information-processing and business service functions that now constitute the bulk of city employment bases. The 9/11 aftermath, which inhibited people and product flows to major cities, raised security and insurance costs of downtown locations, and heightened employee perceived vulnerability of working in large central city properties, is likely to accelerate the employment deconcentration trend that has characterized the U.S. urban system for nearly 100 years.

Fear of terrorism in U.S. cities is certainly much different in the post 9/11 era, and legitimately so.[49] It is broadly recognized that today, terrorists (at least the leaders or brain trust of these organizations) are better educated, better financed, and better organized than ever. Contemporary terrorists also have access to better information and communications technologies and non-conventional weapons of mass destruction than their counterparts in the past, which provides them considerable flexibility in terms of both options and targets for attacking the U.S. and its interests around the world.

Writing in *The New York Times*, Mitchell captured the essence of the homeland defense challenge when she posed the following question[50]: "How...does one secure a target-rich nation entered by roughly 1.3 million people, over 340,000 vehicles, and close to 59,000 cargo shipments every day?" The current strategy involves instituting tougher airport and border security measures. But, as a recent Council on Foreign Relations study reveals,[51] "America remains dangerously unprepared to prevent and respond to a catastrophic terrorist attack on U.S. soil," owing to the failure of the federal government to address a number of risks that confront the nation.

We suggest that this ill preparedness together with the continuing fears of future attacks on the U.S. urban centers will have a significant impact on both the nature and the level of employment and business activity in major U.S. cities, resulting in diminished short- and long-term commercial real estate demand. More specifically, we posit that:

(1) Corporate leaders will make strategic decisions not to concentrate all or most of their assets in a single location, be they operational infrastructures, products, or people.

(2) The rising costs of major downtown locations due to accelerating insurance and security-related expenses will further encourage corporate decisions to decentralize business functions.

(3) Employee fears of working in high rise office properties as well as the increased hassle associated with gaining access to them due to the heightened security will play a significant role in future site selection and corporate relocation decision-making.

The upshot, we believe, will be an acceleration of commercial real estate deconcentration trends which have been manifested over the past 40 years in two ways: (1) business relocation and employment redistribution down the urban hierarchy from large metros to small and medium-sized metros[52]; and (2) employment shifts within metro areas from central cities to the suburbs and the exurbs And, given the industries most adversely affected by the attacks, it is likely that the urban blue-collar workforce will continue to bear a major brunt of the job losses associated with the resulting business relocation and employment shifts.[53] Combined, these developments could exacerbate—in both racial/ethnic and geographical terms—inequality in U.S. cities and metro areas.

Of course, no one has a crystal ball, so results will have to play out over the coming decade before solid conclusions can be drawn. But, as previously noted, longitudinal establishment-level and building address databases do exist in the private and public sectors (e.g., Dun and Bradstreet, state ES-202, and REIS) that will enable detailed monitoring and documentation of post-9/11 spatial impacts. Such geospatial monitoring of firm dynamics will provide valuable information on post-9/11 employment redistribution and commercial real estate development trends.


1. Saskia Sassen, *The Global City* (Princeton: Princeton University Press, 2001).

2. John Kasarda, "Logistics and the Rise of Aerotropolis," *Real Estate Issues* 25. 4 (2000/2001): 43-48; Steve Van Amburgh, "Office in the Park: Trends in Mixed-use Suburban Office Park Development Continue to Address a Variety of Needs," *Urban Land*, June. 2002: 36-43.

3. Edwin S. Mills, "Terrorism and U.S. Real Estate," *Journal of Urban Economics* 51 (2002): 198-204.

4. Daniel H. Levine, "Risk Deconstruction and the Site Selection Process," *Site Selection Magazine* (Mar. 2002): n. pag., online, Internet, 16 May 2002.

5. Kerry A. Dolan, "The Detour Economy," *Forbes* 18 Feb. 2002: 52-55.

6. "Manhattan's Urban Future After the Terrorist Attacks, An Interview with Samuel R. Staley, Ph.D., Director of the RPPI Urban Futures Program," *Reason*, Public Policy Institute (5 Oct. 2001): n. pag., online, Internet, 20 July 2002; Sarah H. Wright, "Architecture Experts Ponder Future of Skyscrapers in the Digital Age," *MIT Tech Talk* (2001): n. pag., online, Internet, 20 July 2002.

7. Phyllis Feinberg and Chris Clair, "World Trade Center Destruction Bad News for Trophy Buildings," *Pensions & Investments* 19.19 (2001): 2, online, Business Source Elite 25 Aug. 2002: A20; Jack Lyne, "More Complex, Costly, Expert Panel Says," *The Site Selection Online Insider* (13 May 2002): n. pag., online, Internet, 16 May 2002; Jack Lyne, "Terrorist Aftermath Creates Huge Challenges, Questions for New York Market," *The Site Selection Online Insider* (17 Sept 2001): n. pag., online, Internet, 16 May 2002.

8. Jack Lyne, "More Complex, Costly, Expert Panel Says," *The Site Selection Online Insider* (13 May 2002): n. pag., online, Internet, 16 May 2002.

9. Peter Kilborn, "Remote Town Sells Safety in Shadow of September 11," *The New York Times* 14 Mar. 2002: A20.

10. Charles V. Bagli, "Downtown, An Exodus that Cash Won't Stop," *The New York Times* (July 24, 2002): n. pag., online, Internet, 24 July 2002.

11. Maureen McAvey, "The Price of Security and the Competition for Scarce Resources," *ULI on the Future 2002: Cities Post-9/11*, ed. by Deborah L. Myerson (Washington, DC: Urban Land Institute,2002) 4-11.

12. Jack Lyne, "More Complex, Costly, Expert Panel Says," *The Site Selection Online* Insider (13 May 2002): n. pag., online, Internet, 16 May 2002.

13. Jack Lyne, "Security Concerns Raise Host of Real Estate Questions," *The Site Selection Online Insider* (15 May 2002): n. pag., online, Internet, 25 May 2002.

14. Kathleen M. Beans, "Terrorism Insurance for Commercial Real Estate," *Insurance Advocate*, (13 May 2002): 29-36, online, Internet, 25 Aug. 2002; Stephanie Coleman, "Valuation in the Aftermath of 9/11," *The Appraisal Journal* (Jan. 2002): 102-105, online, Internet, 25 Aug. 2002; James R. DeLisle, "Real Estate and the Capital Markets: A Special Look at the Impact of Terrorism," *The Appraisal Journal* (Jan. 2002):10-20, online, Internet, 25 Aug. 2002; John Levy, "Market Takes Insurance Issue in Stride," *National Real Estate Investor* Mar. 2002, online, Lexis/Nexis, 22 June 2002; "Today's Insurance Crisis At a Glance," *Journal of Property Management*, (Jan./Feb.): 26-27, online, Internet, 25 Aug. 2002.

15. Staff, "Rising Insurance Rates Require Renewed Vigilance," *Cahners Business Information*, 1 May 2002: online, Lexis-Nexis, 22 June 2002.

16. Don Walker, "Insurance Increases Hit Sports Teams Hard," *Milwaukee Journal Sentinel* 3 May 2002: 6C, online, Lexis-Nexis, 22 June 2002.

17. Albert Warson, "The Terrorism Insurance Impasse," *Mortgage Banking* May 2002: 76-85, online, Business Source Elite, 25 Aug. 2002.

18. Beth Mattson-Teig, "High Expectations," *National Real Estate Investor* 44.3 (Mar. 2002): 105-108, online, Proquest, 1 July 2002.

19. Richard J. Hillman, "Terrorism Insurance: Rising Uninsured Exposure to Attacks Heightens Potential Economic Vulnerabilities," Testimony before the Subcommittee on Oversight and Investigations, Committee on Financial Services, House of Representatives, February 27, Washington, DC (General Accounting Office, GAO-02-472T, 2002).

20. Barbara Murray, "Mortgage Bankers Assoc: Lack of Terror Bill Costs $8.2B," *Globest* (19 July 2002): n. pag., online, Internet, 21 July 2002.

21. Peter Grant, "Moody's Real-Estate Review Puts Terrorism Insurance in Spotlight," *Wall Street Journal* 3 June 2002: C18.

22. Rebuz, "U.S. Commercial Real Estate Underlying CMBS Should Rally to Healthy Condition by Mid-2003," April 23, 2002, available at http://www.rebuz.com/retech02/0402/us_cmbs_real_estate.htm

23. Cristina Gair, "Insurance Rates Rise for Office, Retail," National *Real Estate Investor* Jan. 2002: 32, online, Business Source Elite, 22 June 2002. "Rising Insurance Rates Require Renewed Vigilance," *Hotel 2002*, online, Lexis-Nexis, 13 June 2002.

24. "65% of US Companies Have No Terror Cover-RIMS Study," *Insurance Day*, 12 Sept. 2002, online, Lexis-Nexis, 13 June 2002.

25. Alvdrea Felsted, "Looking After Number 1: Self Insurance," *Financial Times* (London), 24 May 2002: 2;

26. Meredith Cohen, "Insurers Put Business, State in Bind," *The Baltimore Sun*, 21 July 2002: 1C.

27. Steve Levin, "Public Gets Tab for Terror Insurance," *Pittsburgh Post-Gazette*,18 August 2002: A-1.

28. Lorenzo Perez, "Cost of Insuring Cities Spirals," *The News and Observer* (Raleigh, NC) (27 July 2002), online, Internet, 29 July 2002.

29. Beth Mattson-Teig, "High Expectations," *National Real Estate Investor* 44.3 (Mar. 2002): 105-108, online, Proquest, 1 July 2002.

30. Don Walker, "Insurance Increases Hit Sports Teams Hard," *Milwaukee Journal Sentinel* 3 May 2002: 6C, online, Lexis-Nexis, 22 June 2002.

31. As a pertinent aside, some religious groups, especially Jewish charities and organizations which tend to be concentrated in large cities, contend that insurance companies are unfairly targeting them with rate hikes ("Setting Rates by Religion," 2002). Some of the affected groups reportedly have been forced to cut staff and services in order to pay the premiums (Goldsmith, 2002).

32. Jenny Jones, "Insuring Property Post-9/11," *Urban Land*, May 2002: 26-27.

33. Barry Meiners, "Commercial Insurance Market Index Indicates Need for Federal Terrorism Backstop," The Council of Insurance Agents & Brokers, (16 April 2002), online, Internet 22 June 2002.

34. Richard J. Hillman, "Terrorism Insurance: Rising Uninsured Exposure to Attacks Heightens Potential Economic Vulnerabilities," Testimony before the Subcommittee on Oversight and Investigations, Committee on Financial Services, House of Representatives, February 27, Washington, DC (General Accounting Office, GAO-02-472T, 2002).

35. Stephen Labaton and Joseph B. Treaster, "Initiative Deal is Reported on $100 Billion in Aid to Insures," *The New York Times*, (18 October 2002): n. pag., online, Internet, 16 May 2002.

36. "Strengthening Homeland Security, Eliminating Threats Highest Priorities for Voters," PR Newswire Association, Inc., 8 November 2002, n. pag., online, Lexis-Nexis, 16 May 2002.

37. Joseph B. Treaster, "Senate Passes Bill Limiting Insurers' Liability After an Attack," *The New York Times*, (20 November 2002): n. pag., online, Internet, 16 May 2002.

38. Alan Fram, "House Gives Initial OK to Terror Insurance Bill as Congress Tries to Wrap Up Work for Year," *The Associated Press*, 14 November 2002, online, Lexis-Nexis, 16 May 2002.

39. Alan Fram, "House Gives Initial OK to Terror Insurance Bill as Congress Tries to Wrap Up Work for Year," *The Associated Press*, 14 November 2002, online, Lexis-Nexis, 16 May 2002.

40. Karen Matthews, "Comptroller Says Insurers Are Hurting City," *Local Wire*, 13 November 2002: n. pag., online, Lexis-Nexis, 16 May 2002.

41. Karen Matthews, "Comptroller Says Insurers Are Hurting City," *Local Wire*, 13 November 2002: n. pag., online, Lexis-Nexis, 16 May 2002.

42. "WTC Tenants Stabilize With 53% Returning Downtown; However Downtown Continues to Weaken with a 20% Availability Rate," *TenantWise* (2002):n. pag., online, Internet, 22 July 2002.

43. "WTC Tenants Stabilize With 53% Returning Downtown; However Downtown Continues to Weaken with a 20% Availability Rate," *TenantWise* (2002):n. pag., online, Internet, 22 July 2002.

44. Alice Rivlin and Alan Berube, "The Potential Impacts of Recession and Terrorism on U.S. Cities," Washington, DC; The Brookings Institution, January, 2002.

45. Edward L. Glaeser and Jesse M. Shapiro, "Cities and Warfare: The Impact of Terrorism on Urban Form," *Journal of Urban Economics* 51 (2002): 205-224.

46. Hank Dittmar and Sarah C. Campbell, "Will September 11 Bring Us Together or Push Us Apart? The War on Terror and Metropolitan Stability," *Transportation Quarterly* 56 (2002): 43-49.

47. Hank Dittmar and Sarah C. Campbell, "Will September 11 Bring Us Together or Push Us Apart? The War on Terror and Metropolitan Stability," *Transportation Quarterly* 56 (2002): 43-49.

48. Alice Rivlin and Alan Berube, "The Potential Impacts of Recession and Terrorism on U.S. Cities," Washington, DC; The Brookings Institution, January 2002.

49. Jenny Jones, "Insuring Property Post-9/11," *Urban Land*, May 2002: 26-27; Chris Steele, "Rethinking Business Continuity Planning," *The Site Selection Online Insider* (21 October 2002), online, Internet, 16 May 2002; Malcolm Wheatly, "Living with Terror," *CIO Magazine*, (15 Feb 2002): n. pag., online, Internet, 16 May 2002.

50. A. Mitchell, "Give Me a Home Where the Buffalo Roam Less," *The New York Times*, 20 January 2002: Section 4, p. 5.

51. Hart and Rudman (2002) contend that one of the greatest risk is that "...only the tiniest percentage of containers, ships, trucks, and trains that enter the United States each day are subject to examination-and a weapon of mass destruction could well be hidden among

this cargo." Elsewhere, we have outlined a four-fold, comprehensive strategy, which will address this problem and other risks identified in the Council on Foreign Relations Report without constraining international commerce and trans border population movements (*See* JamesH. Johnson, Jr., "U.S. Immigration Reform, Homeland Security, and Global Economic Competitiveness in the Aftermath of September 11, 2001 Terrorist Attacks," *North Carolina Journal of International Law and Commercial Regulation*, 23 [2002: 419-464]). Unfortunately, the federal government have been slow to act on the types of recommendations contained in our study.

52. For example, a Wall Street disaster contingency plan, developed by "the Federal Reserve Board, Securities and Exchange Commission, and the Office of the Controller of Currency...to safeguard the critical financial markets from future terror attacks or other disruptions," calls for the development of "out-of-region backup sites" that would be separated, at great distances, from New York locations." It has been estimated that, if this plan is fully implemented, 20-25% of New York City's financial services jobs would be lost. See Douglas Feiden, 2002 "Wall Street Disaster Plan Proposal Could Cost City Thousand of Jobs, " *Daily News* (New York), October 21, p. 7.

53. Elizabeth Neff, "Insurance Cuts Hit Utah Public Safety Workers," *The Salt Lake Tribune*, 11 August 2002: A1.