AFTER THE 11th . . . ENDURING EFFECTS ON REAL ESTATE

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Since September 11, America has awakened to a harsh reality that directly affects real estate and our profession. It can be summed up in one word: vulnerability. During the last half-century, we behaved as if we were invulnerable. But two dates last fall showed that we are very vulnerable to what the military calls "asymmetrical threats"—that is, actions that cannot be deduced from hard data and linear analysis but must be induced from soft intelligence and disconnected events. September 11 compelled everyone to see terrorism as an asymmetrical threat and to support immediate, direct, forceful action. There is no room for weakness or equivocation. Yet December 2, the day Enron declared bankruptcy, was no less emblematic of asymmetrical threats to our economy and our business culture. The causes of December 2 must be countered with equal immediacy, vigor, and resolve. There is no room for excuses and grandstanding.

In these remarks, I will suggest parallels between these two awful—and apparently disconnected—events; highlight a new premise that is already reshaping corporate real estate strategies and urban planning policies; distill principles to guide real estate counseling under these new conditions; and outline the prospects I see for companies and communities alike as a consequence of the underlying trends and recent events.

THE PARALLELS

Both September 11 and December 12 were tragedies whose effects will linger for years. They claimed thousands of innocent, unsuspecting victims—one in lost lives and loved ones, the other in lost jobs and lifetime savings. Both events sapped the public's confidence—one in the invincibility of our homeland, the other in the buoyancy and integrity of our business system. Both events produced heroes—from New York's Rudy Giuliani and hundreds of others, to Enron's Sherron Watkins and those few who took great personal risks in speaking out about the cancerous behavior of their executives. Both underscored the value of technology—one to make society safer through better intelligence, the other to speed the economy's recovery and sustain the productivity gains of the past decade. Finally—and most critically for our role as counselors and trusted advisors to decision-makers—both events were predictable, not necessarily as to time and place but unquestionably as to the scale and scope of impact.

We quickly saw these parallels reflected in corporate applications of *The Apgar Score* [a system for evaluating real estate conditions]. Of the Score's five factors, the first four—Amount, Price, Grade and Area—dominated real estate decisions during the boom years of the 1990s. The fifth factor—Risk—was limited to specific, highly localized market, financial, and environmental risks. Since September 11 and December 12, however, Risk has received the greatest attention and taken on new meaning for executives concerned with asymmetrical threats. Both events brought into sharp relief the axiom that effective risk management depends on full information and thorough planning.

Security has emerged as a key element in assessing risk. Are company buildings and systems vulnerable to infiltration, sabotage, and direct attack? Are corporate facilities, once symbols of market power and prestige, too visible and recognizable? Is corporate infrastructure integral to the regional and local public infrastructure, such as power and communications grids, water supplies, and drainage systems?

Simplicity has also been recognized as a critical factor in managing systemic risk. Enron's derivatives contracts allowed executives to conceal the risks from investors and even from the company's Board. Their very complexity obscured the fundamental weakness of these financing instruments and, by placing unchallenged power in the hands of a few, threatened basic concepts of risk management. They revealed a different type of vulnerability—the highly complex, "off-balance sheet" techniques that often fuel infrastructure projects, yet may mask weak underlying economics. Ingenious financing schemes, so prevalent in the 1990s "bull market" and so potent in Enron's collapse, divert companies from applying new technologies and work practices to their infrastructure and business processes.

September 11 was very personal for me. With four other CREs, I had begun a week's consulting assignment in Washington with the General Services Administration (GSA) on September 10. As the hijacked plane hit the Pentagon, I was standing on the roof terrace of GSA's headquarters looking out over downtown Washington toward Virginia, discussing our work plan with their staff. We watched in horror as heavy black smoke billowed up. I knew instantly that it was near my former Army office and staff. Soon after our panel assembled and we agreed to press on with our assignment, I walked to the Pentagon to help survey the damage and, over the next few days, plan its rebuilding as well as consult with GSA.

I also saw the decisive leadership of several New York CEOs that week. They immediately spearheaded the search for survivors and relocated wherever they could. None had time to perform thorough site analyses. Concerns about safety and security were paramount. Like the Pentagon's leaders, their actions contrasted sharply with the arrogance and utter selfishness we observed in several Enron executives. I was struck by the moral strength and selflessness of so many—employees and emergency workers in New York, soldiers and civilians in the Pentagon.

It was not only the horror of the buildings' collapse that compelled the New York executives, but the scale. All told, nearly $30 billion in asset value disappeared. Thirty million square feet of office space was damaged or destroyed, including two major landmark buildings and a key communications center linking the entire financial district. Six of the largest financial firms lost over one million square feet each. Morgan Stanley's Philip Purcell mounted a full-time effort both to locate missing employees, using the firm's data and systems in Ohio, and to shoehorn the survivors into other Morgan facilities around Manhattan. Merrill Lynch's Stanley O'Neal

reopened his firm's headquarters within 24 hours amid the damage and debris. Lehman's Richard Fuld appealed personally to an arch-competitor, Citigroup's Sandy Weill, for the facilities, furniture and equipment required in a "24/7" operation.

In these and other firms, many displaced executives and staffs worked either from home or from makeshift sites. With cell phones and laptops, they adapted readily to remote locations. But they depended for remote work on parallel networks and servers that had to be separate from a single district. This realization of the need to decouple work locations from communications and computing systems greatly influenced decision-makers as they contemplated long-term location strategies and adopted lasting solutions soon after the attacks.

Beyond the tragic loss of life, the impact of September 11 on lower Manhattan real estate is now clearer. Half the tenants, who once occupied 17 million square feet, are unlikely to return. More than one-quarter of the jobs—100,000 out of 370,000—have been lost. Nearly every major firm has made lasting decisions. Morgan Stanley (MS) had been building a third office tower near Times Square to collocate most of its New York-based functions and staff with its Midtown headquarters. But September 11 convinced MS executives that they did not want all their trading and disaster recovery facilities concentrated in one Midtown block. MS decided to buy the former Texaco headquarters—a 107-acre, 750,000 square foot campus in suburban Westchester County—both to deconcentrate functions and to ensure business continuity. MS expects that most of its 14,000 New York-area employees will remain in the city, but 2,000 will move to the suburban site. Lehman Brothers decided to decamp from lower Manhattan to Midtown and buy the former MS building near Times Square as its new headquarters. American Express will return to its lower Manhattan headquarters in April with nearly all its employees, and maintain two backup sites in suburban New Jersey. Dow Jones is returning to the Wall Street area with about half of its 800 employees, and assigning the others to New Jersey. Marsh McLennan is preparing to move about 2,000 employees to a new waterfront building in Hoboken, New Jersey. Goldman Sachs plans to move its equity trading operation to the $1 billion complex it is building in Jersey City that includes New Jersey's tallest skyscraper. Goldman's decision is a blow to lower Manhattan because the jobs are part of the firm's core business. In the 1990s, Goldman had begun a corporate campus in lower Manhattan, and a training and backup trading center in Jersey City. But after September 11, the firm decided to move its entire trading function and related employees. At this writing, it is unclear how many employees will leave because of the commute.

With all these moves, it is not surprising that tensions are running high. Those affected by the New York attacks were understandably prone to rush into immediate short-term commitments. Now, they are reconsidering the long-tern implications. When AT&T announced its consolidation of only 70 technical jobs in lower Manhattan with a similar team performing similar functions in suburban Westchester, political and union leaders derided the move as a "betrayal" of the city—even though 1,200 jobs remain in New York. Others, in the aftermath of Enron and continuing anxiety about the recession, have been cutting capital spending at just the time when their cost of capital is the lowest in years and they should be investing in relocating and retooling the workplace.

THE PREMISE

"Deconcentration" will become the driving premise of corporate real estate strategy in the years ahead. By deconcentration, I mean the redistribution of work from a few large monolithic buildings to many smaller sites within the city, within the region, and globally, without compromising the teamwork and efficiencies that collocation provides.

This premise is not just about real estate: it is about corporate infrastructure. Infrastructure combines the *places* where people work and the *technologies* they use to compute and communicate, wherever they are. In other words, two elements—facilities and systems—comprise the 21st century workplace and are inextricably intertwined.

Since the Industrial Revolution, work has been concentrated in centralized, hierarchical organizations. The resulting workplace model is local, site-specific and rule-driven. This traditional model has become a costly, unproductive drag on economic growth and organizational performance. Sprawl forces communities to invest heavily in roads, sewers, and other "public" infrastructure. Employees, living long distances from their workplaces, increasingly lose valuable time in long commutes.

Because employee workspace is assigned by standards, not tasks, employers (often unwittingly) host cultures that become characterized by workspace entitlement ("the corner office") and are subjected to derision (such as *Dilbert's* "cubicle").

The "information economy," with its emphasis on employee initiative, connectedness, and agility, offers the opportunity to redesign and deconcentrate the industrial era workplace. There are four reasons to deconcentrate: greater productivity, increased safety, improved efficiency, and lower cost. Moreover, the new workplace is not only for "white-collar" employees. The factory, the depot and even the farm increasingly are characterized by skilled professionals with extensive training, similar interests and high aspirations for personal growth and fulfillment.

As Counselors, we should be helping CEOs—especially those with large employee and facilities concentrations—to address five key issues that are central to deconcentration. Where should we locate for security and interoperability as well as cost and convenience? What facilities should we maintain to ensure continuity and performance? How should we organize functions and people to reduce risk while improving efficiency and effectiveness? Who *should* work in corporate facilities, and who *could* work elsewhere? When, where, and how should we disperse employees and facilities for maximum benefit with minimum risk to the individuals, the company and the community?

Before September, few companies had strategies and toolkits to guide their deliberations on such issues. Now, companies everywhere need to reexamine the fundamentals that drive business capacity and trends that are reshaping the workplace. For some, an immediate solution is to outsource responsibility for workspace provision to global specialists who plan, lease and service their offices.

Deconcentration is *enabled* by technology, but it is *promoted* by those who seek to balance work, family, and individual pursuits. Deconcentration is entirely consistent with "smart growth." It will neither doom downtowns nor revive suburban sprawl. However, deconcentration is not the same as decentralization. Through technology, a decentralized firm can concentrate its locations and a centralized company can deconcentrate its workplace. Management theorists are forever debating centralization and decentralization as core concepts of business structure. But companies, and we as their Counselors, must distinguish workplace strategy from this organizational debate.

THE PRINCIPLES

As companies address the questions I posed earlier, five principles will help not only to mitigate risks but also to manage economic recovery.

The first principle is that infrastructure is a strategic resource. Infrastructure is now seen in most organizations as a necessary (but sleeping) asset and as a fixed (and therefore uncontrollable) expense. Decision-makers ignore it until they confront periodic needs to relocate operations, build new plants, or reduce staff overhead (and the facilities that house them). Then, with little preparation, they try to become instant experts or simply abdicate their responsibilities to the experts. Most companies manage infrastructure with one of two mindsets: either technical and cost-driven, or transactional and deal-driven. They treat it as a commodity to be traded, not as a resource to be used and protected. They focus on objects, not assets, and price, not value. Managers outsource infrastructure matters, or delegate them to specialists several rungs down the organizational ladder. In short, infrastructure is a large but under-managed organizational resource. In nearly all organizations, however, infrastructure is the largest balance sheet asset and the second highest operating expense. It can help or hinder the achievement of organizational mission and objectives. Thus, it is critically important to the organization's strategic positioning, competitive advantage, and operating performance.

During the 1990s, a few businesses and government agencies alike awakened to the need for a radically different approach to managing infrastructure. American Express, AT&T, Dun and Bradstreet, and IBM, along with two federal agencies, the Army and the General Services Administration, were among the first to recognize two profound changes in the environment for infrastructure decisions. First, technology could enable considerable flexibility in workplace locations. Second, business process re-engineering and other "best business practices" could empower employees to work both alone and in teams in various locations without being tethered to the corporate office. These organizations defined infrastructure as a strategic resource, placed infrastructure issues on top management agendas, and integrated infrastructure decisions with business strategy.

With top management commitments, and considerable effort and investment, they achieved significant savings and far-reaching productivity improvements: AT&T freed up $550 million in cash flow, IBM redeployed $100 million in annual savings, and American Express increased productivity by 70 percent (among other benefits).

The second principle is that the workplace can be anywhere. Deconcentration challenges traditional real estate location theory. Technology moves work to the workers instead of the workers to work. Workplaces, like markets, are now global, not local. Work is now teamed through technology, not dependent on specific sites. Time leverages the opportunities to redistribute work, achieving "24/7" operations across the globe. The new workplace infrastructure is defined by networks of people, information and resources—not by buildings. These networks are linked *electronically,* through the Web and phones; *spatially,* through "hotel-like" offices; and *socially,* through teams with shared interests and resources. Individuals and teams can be efficient and effective anywhere. As workspaces shift from single locations owned by the company to multiple sites owned by others (including employee homes), the workplace remains essential to production but its economics change radically. Leaders in organizations as diverse as American Express, Ernst and Young, GSA, IBM, and Sun Microsystems have championed this concept.

Consider Sun's "anywhere, anytime" strategy. The home is for individual work, connected by phones and computers as needed. "Drop-in centers" accommodate those needing high bandwidth, sophisticated programs, and focused teamwork. The "hub" has formal meeting space, high-tech communications, full support services, and file storage. On an average day, 30 percent of Sun's employees are "on the road," reserving workspace as needed in numerous locations that are provided either by Sun or by others. As Sun's CEO Scott McNealy says, "I'm paying rent, depreciation, and utilities on all kinds of office space just so someone can have a nice place to hang a picture of his dog. I include myself in this, by the way. The only tools I need are a browser, a wireless phone, and access to a network. When I show up in the office, I mostly read my e-mail. My secretary is the one who needs a big office with a couch because she's duct-taped to her chair 12 hours a day. I tell CEOs to walk down the halls in some of their buildings on Wednesday at 10 o'clock in the morning and note to themselves what the peak occupancy is. It's usually 40 percent, at most. So why are they paying for all that unused space?" With deconcentration, Sun projects $240 million in savings on its $800 million annual infrastructure cost.

Others are outsourcing responsibility for workspace provision to global specialists who plan, lease, and service their offices. Compaq, on the eve of its merger with Hewlett-Packard, recently contracted with Regus, a global services provider headquartered in the UK, to take over and manage all of its office space in the UK. Compaq gained flexibility and minimized financial risk while reducing overall occupancy costs.

The third principle is that "significance" does not require skyscrapers. The office towers that dominate downtowns are triumphs of engineering. But only a few, such as Rockefeller Center, excel as urban design. The World Trade Center (WTC) towers did not. From the 1960s on, building size and visibility proclaimed corporate success. "Curb appeal" became architectural dogma. AT&T, GM, Sears, and other icons competed for naming rights.

As security concerns prevail, companies prefer less visible buildings that not only are safer but assimilate better into their environments. The relationships among building height, shape and mass, and surrounding public spaces, reflect a balance of aesthetics and economics. Companies are the fulcrums, for they determine the market. One WTC rebuilding plan envisions four 50-story buildings to replace the two 100-story towers: half the height, twice the number, yet equivalent mass. Is that mass critical—or should it be reduced? Surveys show that employees want to be closer to ground and less crowded. Washington, D.C.—a city built to human scale—has a 12-story height limit, and public spaces occupy 40 percent of its land. The five-story Pentagon, though equivalent in size to one WTC tower, suffered far less in the attacks because of its distributed mass. As former Senator Daniel Patrick Moynihan has observed, "You don't need 100 stories to be significant."

The fourth principle is that the "three Ss" of corporate real estate—safety, security and survival—depend on contingency planning. Corporate America can learn much from the military in preparing for the unexpected. In my experience, the military is more advanced than business in adapting its strategies, structures and systems to the challenges of uncon-

ventional, nonlinear thinking about infrastructure. Military doctrine is rooted in "mobility." From the Romans' portable encampments to the current American focus on "special operations," officers are infused with the attitudes and know-how to balance permanent installations and "heavy" infrastructure with flexible structures and mobile, "just-in-time" logistics.

Contingency planning in the military is a probing, proactive process that continuously re-examines assumptions, highlights uncertainties, builds in flexibility, and writes scenarios for disaster response. The Army is especially effective at contingency planning because it has institutionalized that most difficult of human activities—critically examining the beliefs we hold about reality. It has revised strategies, redesigned structures, and retooled systems to counter the "asymmetrical threats" I defined earlier. To fund and leverage this transformation, it has also launched a comprehensive program to outsource and privatize much of its infrastructure, such as housing, maintenance operations, and storage facilities. The strategy is fueled by partnerships with industry, and it has unleashed substantial new capital for construction and maintenance, while transferring assets, responsibilities, and risks. Cost savings, operational efficiencies, and quality improvements have resulted already from this far-reaching initiative.

Contingency planning made all the difference immediately after the WTC attacks. Morgan Stanley, with 3,700 WTC employees, had prepared evacuation and "back-up" plans during the Gulf War, and reinforced these after the 1993 WTC bombing through disciplined organization, systematic training, and detailed manuals. It established alternate facilities in three other New York locations, with storage and communications systems in Dallas. These plans were critical in enabling the firm to save nearly all its employees and immediately restore operations. Citigroup activated dormant facilities reserved for disaster recovery with "hot seats" for its critical trading functions. Professionals and administrators decamped to work from home and various company sites. Citigroup executives and staff continued their meetings without delay, as video-conferencing seamlessly replaced hundreds of prescheduled trips that week.

The final principle is that information and analysis underpin infrastructure strategy. Until they define, analyze, and convey the strategic implications of infrastructure issues, few executives have an immediate and intuitive grasp of the underlying factors that drive real estate costs, limit strategic moves, and cloud (or even foreclose) the options for improving them. The keystone is to link "business" data on customer service, employee productivity, financial performance, and operations with "facilities" data on locations, costs, utilization, design, construction, and value. These linkages, when integrated with creative problem-solving, produce fresh insights for top management. The analysis of real estate profit economics and key success factors established enduring principles for a "business approach" to real estate, and the strategies that are now employed by successful entrants.

Moreover, information must be transparent to all stakeholders. Counselors' opinions in many cases define the values that drive others' decisions. Therefore, both clients and Counselors must consider which elements of their advice and analysis should be documented and disclosed to those who are affected by real estate activities and outcomes—including shareholders, employees, analysts, and ultimately the public.

In this respect, the Enron analogy goes beyond December 12. Enron's executives and accountants recognized that corporate debt, bank borrowings, and other conventional financing methods could have reduced its credit ratings and made future borrowing more costly. Drawing on relationships with three major institutions—JP Morgan Chase, Citigroup, and Credit Suisse First Boston—they concocted clever techniques to make loans look like assets and accounts receivable and loan repayments look like liabilities and accounts payable. The bank loans were recorded as financial hedges rather than balance sheet debt, further obscuring the company's excessive leverage. These entries quadrupled in two years. But they were so complex that even securities analysts called them "impenetrable."

THE PROSPECTS

While September 11 required immediate reactions, we must now take time for reflection. The challenge ahead is to sustain top-level focus on the issues raised by deconcentration beyond crisis management. As one CEO observed recently, "Six months ago, facilities were not even on my radar; now they're right in the center." Managers should rethink business infrastructure in terms of strategic

advantage, productivity, and morale. In their zeal to grow and change, many firms overlook the basic risks to their business of destroyed, impaired, and excessive infrastructure. Ingenious financing schemes, so prevalent in the 1990s bull market and so powerful in Enron's collapse, divert companies from applying new technologies and work practices to their infrastructure and business processes. As recently as 2001, rosy assumptions led many to add space at more than double the rate of job growth, creating a huge real estate overhang. Now they must shed that excess, and then some. As they do so, companies with strong balance sheets and cash reserves should take full advantage of the depressed market and low cost of capital and consider how to streamline and improve the workplace itself. By reinvesting in employee-centered, customer-friendly, cost-saving facilities and systems, they will improve employee safety, satisfaction, and productivity.

With this perspective, I expect that the WTC's successors will be measured more in quality than in size. The 16-acre site had a building density of 11.3 million square feet. But nearly all civic leaders and experts now agree that the site should accommodate a memorial park and other public uses with much lower new building density. The developer proposes to build 10 million square feet of office, 500,000 square feet of retail, a museum and a performing arts center on ten of the 16 acres. My personal view is that this unique site should be the new "hub" for all of lower Manhattan, combining office, retail, residential, cultural, and extensive public space—a complement to Battery Park and an urban oasis for Wall Street workers whose frenetic pace is legion and who need places outside their workspace for rest, relaxation and reflection.

As Winston Churchill opined in rebuilding Britain after World War II, "We shape our buildings and they shape us." Sound choices on corporate infrastructure will help to reshape communities for tomorrow. Companies that effectively balance concentration and dispersion will help cities to retain their luster but reduce their mass. Buildings will be more horizontal than vertical. Skyscrapers will attract multiple new uses. "Exurbia" will flourish. Deconcentration, properly managed, will help to create more livable places. REI