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EDITORIAL CALENDAR

Fall 2002
Articles on general real estate-related topics
This issue will be published in a joint effort with the *Journal of Real Estate Portfolio Management*, in connection with the symposium, "Global Cities in an Era of Change." Authors are encouraged to submit articles concerning topics relating to international real estate investment and global cities.
(deadline for manuscript submission - October 1, 2002)

Winter 2002/2003
Articles on general real estate-related topics
(deadline for manuscript submission - December 2, 2002)

Visit www.cre.org for information on submitting a manuscript for publication consideration or contact info@cre.org; 312.329.8427.

SUBSCRIPTION INFORMATION

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ABOUT THE COUNSELORS OF REAL ESTATE™

The Counselors of Real Estate, established in 1953, is an international group of high profile professionals including members of prominent real estate, financial, legal and accounting firms as well as leaders of government and academia who provide expert, objective advice on complex real property situations and land-related matters.

Membership is selective, extended by invitation only on either a sponsored or self-initiated basis. The **CRE Designation** (Counselor of Real Estate) is awarded to all members in recognition of superior problem solving ability in various areas of specialization such as litigation support, asset management, valuation, feasibility studies, acquisitions/dispositions and general analysis.

CREs achieve results, acting in key roles in annual transactions and/or real estate decisions valued at over $41.5 billion. Over 300 of the Fortune 500 companies retain CREs for advice on real estate holdings and investments. CRE clients include public and private property owners, investors, attorneys, accountants, financial institutions, pension funds and advisors, government institutions, health care facilities, and developers.

Enrichment Through Networking, Education & Publications

Networking continues as the hallmark of The Counselor organization. Throughout the year, programs provide cutting-edge educational opportunities for CREs including seminars, workshops, technology sessions, and business issues forums that keep members abreast of leading industry trends. Meetings on both the local and national levels also promote interaction between CREs and members from key user groups including those specializing in financial, legal, corporate, and government issues.

CRE members benefit from a wealth of information published in The Counselors' quarterly award-winning journal *Real Estate Issues* which offers decisive reporting on today's changing real estate industry. Recognized leaders contribute critical analyses not otherwise available on important topics such as institutional investment, sports and the community, real estate ethics, tenant representation, break-even analysis, the environment, cap rates/yields, REITs, and capital formation. Members also benefit from the bi-monthly member newsletter, *The Counselor*, and a wide range of books and monographs published by The Counselor organization. A major player in the technological revolution, the CRE regularly accesses the most advanced methodologies, techniques and computer-generated evaluation procedures available.

What is a Counselor of Real Estate (CRE)?

A Counselor of Real Estate is a real estate professional whose primary business is providing expert advisory services to clients. Compensation is often on an hourly or total fixed fee basis, although partial or total contingent fee arrangements are sometimes used. Any possibility of actual or perceived conflict of interest is resolved before acceptance of an assignment. In any event, the Counselor places the interests of the client first and foremost in any advice provided, regardless of the method of compensation. CREs have acquired a broad range of experience in the real estate field and possess technical competency in more than one real estate discipline.

The client relies on the Counselor for skilled and objective advice in assessing the client's real estate needs, implying both trust on the part of the client and trustworthiness on the part of the Counselor.

Whether sole practitioners, CEOs of consulting firms, or real estate department heads for major corporations, CREs are seriously committed to applying their extensive knowledge and resources to craft real estate solutions of measurable economic value to clients' businesses. CREs assess the real estate situation by gathering the facts behind the issue, thoroughly analyzing the collected data, and then recommending key courses of action that best fit the client's goals and objectives. These real estate professionals honor the confidentiality and fiduciary responsibility of the client-counselor relationship.

The extensive CRE network stays a step ahead of the ever-changing real estate industry by reflecting the diversity of all providers of counseling services. The membership includes industry experts from the corporate, legal, financial, institutional, appraisal, academic, government, Wall Street, management, and brokerage sectors. Once invited into membership, CREs must adhere to a strict Code of Ethics and Standards of Professional Practice.

Users of Counseling Services

The demand continues to increase for expert counseling services in real estate matters worldwide. Institutions, estates, individuals, corporations and federal, state and local governments have recognized the necessity and value of a CRE's objectivity in providing advice.

CREs service both domestic and foreign clients. Assignments have been accepted in Africa, Asia, the United Kingdom, the Caribbean, Central and South America, Europe and the Middle East. CREs have been instrumental in assisting the Eastern European Real Property Foundation create and develop private sector, market-oriented real estate institutions in Central and Eastern Europe and the Newly Independent States. As a member of The Counselor organization, CREs have the opportunity to travel and share their expertise with real estate practitioners from several developing countries including Poland, Hungary, Bulgaria, Ukraine, Czech Republic, Slovak Republic, and Russia as they build their real estate businesses and develop standards of professional practice.

Only 1,100 practitioners throughout the world carry the CRE Designation, denoting the highest recognition in the real estate industry. With CRE members averaging 20 years of experience in the real estate industry, individuals, institutions, corporations, or government entities should consider consulting with a CRE to define and solve their complex real estate problems or matters. REI

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A Tribute to Richard Marchitelli, CRE, Editor in Chief —a true example of the CRE commitment to excellence

CRE Richard Marchitelli

In 1999, CRE Richard Marchitelli took the reins as editor in chief of The Counselors' signature publication, *Real Estate Issues*. Serving as editor in chief is one of the most demanding and rewarding tasks that a CRE can embrace; it is a job that requires a tremendous amount of time, energy, and dedication. Richard consistently fulfilled the role capably and enthusiastically. For his outstanding commitment, he is to be commended. We thank him for his three years of service to the CRE organization.

The Counselors of Real Estate has been fortunate that such a distinguished group of volunteers has been willing to serve in the role of chief editor. At the Journal's inception in 1976, the position was handled jointly by CREs James McMullin and Jean Felts. Then came CRE Jared Shlaes, who took charge of the journal for a record-breaking nine years, from 1977 to 1986. CRE Rocky Tarantello followed Shlaes and served as editor for six years from 1987 to 1993. Following Tarantello, Halbert Smith, CRE, accepted the challenge from 1994 to 1998. Each devoted volunteer strove to elevate the position of *Real Estate Issues* both inside and outside the CRE organization, and each editor made a mark.

Richard Marchitelli, too, added his imprint on *Real Estate Issues*. Under his leadership, the journal created new departments and columns, established an Editor's Council, and most importantly, expanded the author base for the journal. As a result, we have seen the publication grow in both form and content as an important resource for real estate practitioners.

In the tradition of exceptional leadership, we are pleased to announce that CRE Hugh Kelly will take the helm of *Real Estate Issues* in the fall of 2002. We welcome Hugh and look forward to his guiding the *Real Estate Issues* journal ever onward and upward.

Sincerely,

Albert S. Pappalardo, CRE
2002 National CRE President

The World Trade Center and Me: From Camelot to Bin Laden

By Philip Cottone, CRE

ABOUT THE AUTHOR

Philip Cottone, CRE, *is the president of Property Trust Advisory Corp. in Devon, Pennsylvania. He specializes in providing counsel on raising capital and the restructuring, financing, and placement of real estate transactions; in serving as expert witness and providing litigation support in real estate securities; acting as a mediator; and providing right of way contract services and advice on eminent domain. He is 2004 president-elect of The Counselors of Real Estate.*

This article originally appeared in the March/April 2002 issue of right of way *Magazine and is reprinted with permission.*

It was June, 1961, when my involvement with the Twin Towers began, and I had just graduated from Columbia College in New York City and started work as an administrative trainee at the Port of New York Authority (as it was then known) headquartered in Chelsea, 15th Street and Eighth Avenue, Manhattan. John Kennedy was in the White House, and Camelot was on the horizon. The postwar Eisenhower years had just ended and the civil rights struggle, assassinations, Vietnam, Watergate, and Bin Laden were yet to come. The world was simpler then.

While in college, I married my grade school sweetheart and we had three kids. I thought I wanted to be a teacher, and planned to work a year or two to get out of debt, and then to go on to get a Master's degree in English literature, my college major. But I wasn't really sure what I wanted to do, and the Authority had a wonderful reputation as a first-class training ground for business and public service. Moreover, importantly, it was a bi-state agency of New York and New Jersey and operated in the Port District, a 25-mile radius around the Statue of Liberty. I wouldn't have to travel too far from home, which in those days was an apartment in Bensonhurst, Brooklyn, on the second floor of a two-family house.

The Authority hired only eight to ten trainees as future managers after recruiting at 55 colleges and graduate schools around the country. Incidentally, our starting salary in 1961 was $5,600 a year and that compared very favorably with starting salaries at the very best companies nationwide. When we started we went through a six-month program of seven-week work assignments in different departments (mine were in the Director's Office of the Aviation Department—the Authority ran JFK, Newark, LaGuardia, and Teterboro Airports then, and now—the Real Estate Department, and the Lincoln Tunnel). Work was interspersed with formal classroom training in public administration, transportation economics, sensitivity training, management, and decision making. The Authority operated about 25 facilities in the Port District, which included, in addition to the airports, port facilities, bridges, tunnels, truck and bus terminals, and one of the largest office buildings in the city by cubic content at 111 Eighth Avenue. At the end of the six months we chose where we wanted to go and the different department heads selected people for permanent assignments. I eventually ended up in Real Estate because the seven-week assignment had been interesting, and the head of the Department was Bob Curtiss, CRE, and Columbia Class of '27, who liked the idea of taking another Columbia man to work for him.

The Port Authority had very ambitious plans for helping the Port District grow and prosper, and one of them was to construct a central facility in New York City for doing international trade, a world trade center. We heard about the plans very early in our career. At that time the facilities for doing international trade were spread all over the city, from the consulates on the east side in Midtown, to the freight forwarding firms and port facilities themselves scattered throughout the district, to the Customs House downtown in the battery. Authority research concluded that one out of four jobs in the port district depended upon international trade for its existence, and that improving the process by getting the players under one roof would increase the prosperity of the entire region. Therefore it conceived of a $350-million World Trade Center to be located on the east side of Manhattan, a site that included the Sugar Building at 120 Wall Street and extended into the East River, not far from the Customs House. The cost of the project was not inconsiderable, and the officials of New Jersey objected to the Authority spending all that money in New York City without any direct benefit to them. The governors of New York and New Jersey have to approve Port Authority actions and each appoints half of the 12-person Board of Commissioners, which functions as the board of directors of a corporation. Controversy surrounded the birth of the Trade Center, and it was to last years after the project was built, for a number of different reasons. Little did we know then how all that early controversy and publicity would pale compared to that which accompanied the demise of the Twin Towers about 35 years later.

The Authority encouraged the trainees to get involved in its Speakers Bureau, which sent employees to local Kiwanis, Lions, and other groups around the district to talk about current plans and programs. At that time the most frequent request was for speakers about the World Trade Center because that was in the news with the Governor of New Jersey saying, "Never," and the executive director of the Authority and New York State officials lobbying in favor. That was when the Twin Towers got personal for me. About once a month in those early years I would give a talk at lunch or dinner with my slide projector and pretty pictures of a World Trade Center, a project that was to become a significant part of my life in the following ten years, and after.

Meanwhile my career in the Port Authority Real Estate Department was underway as a junior administrative assistant working on sale of the property remnants left over from the George Washington Bridge second deck acquisition in the late 50s; securing rights for lighting runway obstructions in Rockaway Beach near JFK Airport; doing property research in Staten Island, in connection with expansion of the bridge crossings to New Jersey; and researching ownerships on the east side of Manhattan where the World Trade Center was to be located if approval to build it was ever obtained.

While the Port Authority had a number of projects underway or in planning stages in the early sixties, the WTC was clearly the most ambitious. And it was stalled . . . until an agency employee had the bright idea to relocate it to the west side of lower Manhattan and combine it with the acquisition and rehabilitation of the Hudson & Manhattan (H&M) tubes, the subway, built at the turn of the century, which brought New Jersey commuters to Manhattan. The system opened in 1908, and was privately owned and in disrepair. The main stop for the tubes in lower Manhattan was the Hudson Terminal at 30-50 Church Street, two 22-story office buildings, which sat atop the railroad terminal. The clever idea to move the WTC site to that location, now known as Ground Zero, broke the political deadlock with New Jersey politicians. The Authority agreed to acquire and rehabilitate the old

H&M Railroad at an estimated cost of $70 million in exchange for agreement to construct the World Trade Center. New Jersey politicians also insisted that a transportation center be built in their state as part of the quid pro quo, the Journal Square Transportation Center, which would rehabilitate 7.5 acres of downtown Jersey City, New Jersey, with a train and bus terminal and office building complex to be built as part of the H&M project.

From 1961 to 1965 I was learning about business, real estate, management, and public administration. I was working with lawyers a good deal, and realized there was quite a bit I didn't know about contracts, torts, and the laws that govern our lives. So in 1962 I started NYU School of Law, Evening Division, with a full-tuition grant from the Authority while I worked in the real estate department during the day learning about appraisal, management, leasing, property records, abstracting title, and such. In the mid-60s I took Appraisal Institute Course 1 from James Gibbons, CRE, at the Brooklyn Academy of Music; a year later I took Course 2, Income Capitalization, from William Kinnard, CRE, in Storrs, Connecticut. It was an intense learning period for me, and one of real growth and development. I was introduced to "Ground Zero" by going to the courthouse to search titles to determine who owned the 13-square block area we had targeted for the World Trade Center. When we started that work I was part of a top-secret group that was developing the information without letting anyone in the City of New York administration or the neighborhood know what we were doing.

The site is familiar to most of the world now—13 square blocks, the area extended from Barclay Street on the north to West Street on the Hudson River, excluding the New York Telephone Company (now Verizon) building that still exists on the corner of West and Barclay that took such a hit in the devastation on September 11. Church Street was on the east, then anchored by the Hudson Terminal Buildings, and Liberty Street was to the south. About 15 acres, it was the largest assembly of property in the City up until that time. My recollection is that there were 560 tenants—residential, retail, office, and some light industrial—that had to be relocated, 143 fee claimants or real property owners, and more than 100 owners of compensable trade fixtures, all of whom would have to be paid just compensation for their property. Little did I know then that I would be personally responsible for that acquisition, management, and relocation program in just a couple of years.

Lower Manhattan in those days was a financial services back office and insurance center which had not seen a new office building since David Rockefeller had the courage to build the 60-story Chase Manhattan Plaza building in the late 50s. People thought he was crazy at the time, and once the Port Authority announced its plans a few years later, many thought it was crazy too for planning a major office development in a part of Manhattan that was not considered prime office territory. The WTC site was immediately south of an area known as the Washington Markets where produce was sold early every morning to the stores and restaurants of the City. Plans were underway then to relocate that market to the Hunts Point section in the Bronx, and it eventually did move. The WTC site consisted of the old H&M Terminal Buildings, and about 140 other structures, mostly three- to five-story lofts built around the turn of the century, with electronics stores on the first floor and largely vacant upper floors. It was called "Radio Row" and had quite a following for those interested in radio, television, and electronics, looking to purchase second-hand or off-price equipment.

Bi-state legislation authorizing construction of a World Trade Center and acquisition of the H&M Railroad was passed in 1962. The Port announced its plans for the project, as we know it, in 1964, but the final City approval wasn't obtained until 1966. It had hired Minoru Yamasaki of Birmingham, Michigan, as the lead design architect. A plan for the tallest buildings in the world, consisting of 110 stories and 10 million net rentable square feet, evolved, and there was uproar. Architectural critics denounced the pedestrian design. Building owners decried the Port Authority getting in the real estate business, depriving them of profits by glutting the market with space, and depriving New York City of tax ratables (the Authority made "in lieu of tax" payments to municipalities based upon assessments in place at the time of acquisition). Larry Wien, owner of the Empire State Building, formed what he called "The Committee for a Reasonable World Trade Center" and brought one of many lawsuits against the Authority; and the site owners themselves organized a group called the Downtown West Small Business Survival Committee and brought suits questioning the "public use" and featuring civil liberties lawyers and other names. This was New York, after all, so it wasn't going to be easy. In the Courtesy Sandwich case (named for the lead plaintiff who was one of the site tenants) an appellate court eventually upheld the enabling legislation.

Meanwhile I had been promoted to increasingly responsible jobs . . . real estate representative, real estate agent, then senior real estate agent. On

December 1, 1965, the Port Authority vested title in condemnation to the World Trade Center site by virtue of filing a plat with a perimeter description pursuant to the eminent domain statutes of the State of New York, and I was the principal witness on possession matters in the proceeding. The World Trade Center from a property point of view had become my baby, and the following year when I graduated from law school and was admitted to the bar, I became the head of all of it—acquisition, interim leasing and management, tenant relocation, property engineering. I was the youngest manager in the history of the Authority, but was aging fast now that I had a division of more than 100 people to run, and projects with budget responsibility exceeding $100 million. Bob Curtiss, my old mentor, had moved on to Ely-Cruishank, a well known New York real estate firm, and in 1973 he became the national president of The Counselors of Real Estate organization.

Our first official contact with WTC site owners and neighbors was the result of the need to obtain rock anchor tie back tendon easements from a few property owners so a test slurry wall could be built, a portion of what our engineers called "the bathtub," which was to keep out the seawater when the towers were erected. The original water line for the Hudson River was along Greenwich Street, running north-south in about the middle of the site, almost two blocks east of West Street, the current westerly boundary. That meant much of the site was on landfill, and the water table was high. The anchors would tie to bedrock under properties adjacent to the site, about 70 feet down. When the tower floors were in, the concrete was poured and steel was in place, the rock anchors could be, and were, released. I read now that there is concern again about the stability of the bathtub walls without the towers to secure them, and new rock anchor tendons have been installed.

The World Trade Center project was fascinating, and whether you liked the architecture or not (I did not), and whether you thought the Port Authority should be in the business of building office space or not (again, I didn't) made no difference because the scale of it was breathtaking. The price tag kept going up, from $350 to $500 million, and I understand it ended up costing more than $1 billion. Elevators had to be rethought, and for the first time a large tower was conceived as three, one on top of the other, with an express-local elevator system to avoid all the dead space that usually accompanies elevator shafts in large buildings. HVAC and lighting systems were rethought and new procedures and technologies were pioneered. Curtain wall construction was employed, with the steel being supported by the exterior walls to allow column free space on the interior. They were built to withstand an accidental crash from a jet, in those days a 707, without collapsing, but this technique, I understand, indirectly caused the towers to buckle in the great heat of the fires after the airplane collisions on September 11. The soil dug from the Trade Center site provided the landfill for the World Financial Center and Battery Park City, and helped turn lower Manhattan into a 24-hour community. The initial lease-up was difficult, however, because the enabling legislation specified conditions for rental that required prospective tenants to be in international commerce or a related business, and in addition, the Manhattan office market softened considerably in the economic slowdown of the late 60s and early 70s. Occupancy was boosted by State of New York agencies which took the bulk of one tower, some said because then Governor Nelson Rockefeller wanted to help out his brother David in reviving the downtown area. Nonetheless, before too long, the WTC was prime space, and it sparked a lower Manhattan building boom that hadn't been seen since the early years of the 20th century.

In the Real Estate Department we had three major trials underway; one the valuation of the H&M tubes, the railroad we had acquired and renamed PATH, Port Authority Trans-Hudson Corporation; the second involving the valuation of the real property and trade fixtures within the Trade Center site; and the third, the Journal Square proceeding in New Jersey, another acquisition and tenant relocation program. On the New York cases I worked very closely with Milton Pachter, Esq., a young lawyer and friend who is now senior litigation counsel at the Authority. At the time of the September 11 tragedy Milton was the longest-term Port Authority employee, and he spoke eloquently at the memorial service about the Port Authority family. We retained as our valuation expert on the condemnation, the services of Ed Kazdin, MAI, a former national president of the Appraisal Institute, and vice president, appraisal, of Cushman and Wakefield, who was assisted by a young associate named Larry Gaines, now a CRE. I learned a lot about real estate appraisal from Ed and Larry, and also from Frank Hannoch, Sr. and Frank Hannoch, Jr., both CREs, of course, (the latter our national president in 1994 and my sponsor in The Counselors), who were our experts in the Journal Square proceeding. We had a number of other real estate programs in process during this hectic period of 1966 to 1972 including the Bus Terminal expansion in mid-Manhattan, the expansion of Port Newark-Port Elizabeth in New Jersey, the upgrad-

ing of Newark, JFK, and LaGuardia Airports, and the New Jersey Turnpike widening requiring new connections with Port Authority bridges, to mention a few.

By far my biggest project was the Twin Towers. It dictated my life, and over about three years we negotiated the settlement of more than half of the fee claims by purchasing assignments of rights to the condemnation awards (my recollection is that we bought 75 percent by voluntary acquisition, but attorney Pachter says it was less), and probably 90 percent of the fixture claims. The total project cost, including the Railroad, was almost $100 million, just under budget. We relocated all the tenants without a single eviction (but came close on a couple) and pioneered implementation of the federal Uniform Relocation Act before it became law. In New Jersey, at Journal Square, we conducted a pilot federal program with HUD, the Urban Mass Transportation Administration, and the local Redevelopment Agency. This fall the federal government celebrated the 30th anniversary of the Uniform Relocation Act at a program in Mesa, Arizona, which I was pleased to attend as General Counsel for the International Right of Way Association.

I left the Port Authority in 1972, the year the towers were opened, because the Trade Center acquisition was completed as were all the other major projects that were involved in the Authority's great expansion under its visionary executive director, Austin Tobin, who had retired in 1971. I had done what there was to do from a real estate point of view, and it was time to move on, but my youth and many friends were left behind, and a matchless period of personal growth and development while working in public service would not be forgotten. Even so, the Twin Towers, the private Club at the WTC, and Windows on the World restaurant at the top of the North Tower, remained a part of our lives . . . for parties, dinners, retirements, my oldest son's college graduation, and countless visits, whenever I was in New York. That is over now, brutally so.

The World Trade Center site is in a third phase in the almost 40 years that I have known it—from Radio Row, to the Towers, to Ground Zero—and it is a phase I cannot yet bring myself to go see. There are folks in that rubble I knew and worked with, and that is something I share with thousands of people all over the world. I expect a World Trade Center of sorts, and a memorial, will rise again on the site, but I fear what it had become, an incomparable symbol of New York and America, eclipsing even the bold dreams of Austin Tobin who just wanted a recognizable image for the Port of New York, will never again be duplicated in our lifetimes. Those quirky towers were, perhaps, the wrong buildings in the wrong place at the wrong time, built by the wrong folks . . . but they became everything they were designed to be, and more. They rejuvenated lower Manhattan and helped revive the City of New York economically and spiritually. They did take on a larger mantle over the years, and came to represent the financial strength, vitality and, yes, audacity of New York and America. Now, alas, they have become a permanent symbol of so much that is both good and evil about our world, and all of our thoughts about them, even mine, relate to both unspeakable horrors and unceasing bravery, in short, a national tragedy, the implications of which are still being played out on the world stage. REI

ACKNOWLEDGMENTS

Two people I respect and admire were instrumental in my writing this article and I want to acknowledge them. The first was my oldest son Anthony, a trial lawyer in Providence. He wrote an article about his feelings regarding the WTC tragedy for the Rhode Island Bar Journal. *He, of course, grew up with the WTC because he is my son, and his article, "A New York Frame of Mind" was very well done, and helped express, with poignancy and clarity, my own feelings in those early days after the incident.*

A few weeks later we had a CRE Committee dinner in Chicago, and the conversation turned to the WTC. I guess I became somewhat animated, and after dinner CRE Richard Voelker, from Dallas, Texas, suggested I write it for Real Estate Issues *because other Counselors would be interested in the story of my involvement, and in the politics and real estate details of the project. He also said it would probably be a good catharsis for me. I frankly wasn't too enthused because my feelings on the subject were still somewhat raw, but I said maybe. But Richard didn't give up, and he called me two weeks later to inquire about the status of the article. I said I was thinking about it. He offered to prepare a list of questions for me to answer. I replied that instead I would really try to get something on paper. The following week I had to go to California so I took my laptop on the plane, and in the next two days, stealing time here and there, the approximately 3,500 words of the article came out just about the way they have been published. They literally poured out, and Richard was right...it helped me deal with the events of September 11, to put them in perspective, and to move on.*

Thanks to both Anthony and Richard for helping me get this done.

After the 11th . . . Enduring Effects on Real Estate

By Mahlon Apgar, IV, CRE

Remarks to the National Conference, The Counselors of Real Estate, The American Association of Chartered Surveyors, Washington, DC, February 26, 2002

ABOUT THE AUTHOR

Mahlon Apgar, IV, CRE, *is a director of The Boston Consulting Group and advises major corporations on real estate and infrastructure. He also teaches at Princeton University. He was assistant secretary of the Army for installations and environment from 1998 to 2001. He created "The Apgar Score," the only patented system and method for evaluating real estate conditions, and authored "The Alternative Workplace" and numerous other publications. His* Harvard Business Review *series is a standard reference on managing corporate real estate.*

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

Preface: Case Studies on the Interface of Technology and the Real Estate Industry

by John McMahan, CRE

 This preface introduces three case studies. The first case appears in this issue; the second and third will be published in an upcoming issue of REI.

ABOUT THE AUTHOR

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The purpose of this preface is to provide a briefing for readers who do not have an extensive background in the technology/real estate interface and to supply updated statistics and observations for those who do. A brief history of how we got to where we are is followed by a discussion of the opportunities inherent in the successful implementation and use of new technology and how well the industry is responding to these challenges.

THE TECHNOLOGY REVOLUTION

In the mid-1990s, the United States experienced an unprecedented increase in economic growth, employment, and personal financial wealth. The growth in the economy was based on a major expansion in corporate earnings, largely fueled by unprecedented increases in worker productivity. These increases emerged primarily as a result of a confluence of technological innovation, which had been in the development process for many years but finally came on stream in the 1990s.

In the late 1990s, all of these seemingly independent technologies became increasingly integrated through the evolution of the Internet or "World Wide Web." The Internet allowed individuals and organizations to communicate instantaneously through electronic mail. E-mail

has subsequently become so ubiquitous that it is now the preferred means of communication for a large part of the world.

E-BUSINESS

Sensing an opportunity, business firms began developing commercial applications for the Web. These generally fell into one of two categories: business to consumer (B2C) and business to business (B2B).

B2C: A wide range of B2C applications proliferated in the late 1990s and early 2000s. Several of these were "portal" websites, which attempted to provide users convenient access to the myriad of offerings on the Web and thereby (hopefully) collect advertising, transaction, and other revenue. Other applications focused on selling products such as books, computers, CDs, clothing, food, drugs, and even furniture to individual consumers. Still others targeted service areas such as stock brokerage, commercial banking, mortgage banking, travel, insurance, and real estate. A few connected individual buyers and sellers through auction-based systems. By 2000, B2C commerce had reached $28 billion annually, up 62 percent over 1999, but still less than 2 percent of total retail sales.[1]

B2B: While the B2C market received most of the media attention, the vast market for business firms to sell to each other represented a much more significant opportunity. Increasingly, business managers were learning that the Web could dramatically reduce operating costs through higher employee productivity, the need for fewer employees, better inventory control, and more direct distribution channels, which promised the opportunity to reduce or eliminate the need for a "middle person."

In fact, the Web was revolutionizing the manufacturing process itself. Firms, unable to finely tune customer-purchasing needs, have traditionally had to produce large amounts of inventory that don't sell during the business year. This not only increases inventory-holding costs but also results in heavy discounts as unsold inventory is liquidated. Utilizing the Web, it was believed that manufacturers could now allow the customer to design, order, and pay for the product that they want, often before it goes into production.

Many believed that the economic benefits of the Web could be further enhanced by the use of auction-type "exchanges" to facilitate information flow between firms and to execute the transaction at the lowest possible price. Several industries such as autos, airplanes, energy, building materials, and others considered organizing exchanges to tap this opportunity.

BUSINESS OPERATIONS

While most of these assumptions were based on some elements of truth, it soon became clear that (1) the volume potential for most applications was vastly overestimated; (2) the execution requirements were dramatically underestimated; (3) too much emphasis was placed on "cool" technology rather than hard-headed business realities; (4) the proposals were generally overhyped; or (5) all of the above.

As a director of Dell Ventures put it, "There were a lot of businesses getting funded that weren't really businesses at all. There were really just interesting features on a website."[2]

FINANCING

This lack of business reality was compounded by the fact that the e-business expansion was financed largely by venture capital investment funds. The usual pattern was for venture firms to fund start-up costs and then be taken out of most or all of their investment position by an IPO, usually offered on an ever rising NASDAQ. With the public's insatiable thirst for new technology issues, there appeared to be an unlimited source of capital available to fuel the "New Economy."

And there was a lot of truth in this. In 2000, venture capital firms raised a record $92.3 billion, much of it from pension funds, for investment in Internet and other technology-related companies over the following three to five years.[3] This represented a 54 percent increase over the $60 billion raised the previous year, but was down considerably in the fourth quarter, as concern developed over the economic value of Internet start-up companies.

DOT-COMS TO DOT-BOMBS

The financing nirvana began crumbling in early 2000. From a peak in the first quarter, the NASDAQ index declined over 34 percent by year-end.[4] Major technology firms were significantly

depressed from previous highs and were continuing to report missed earnings (revenue) projections into 2001. Several companies, trading for less than $1 per share, were under active consideration for delisting; many were heading into bankruptcy. The B2C sector was particularly impacted. Firms that failed to achieve profitability had their market valuations slashed by as much as 95 percent between 1999 and 2001.

Lacking a take-out option through the public markets, many venture firms began reevaluating their positions. The first step was to suspend future funding for start-up companies until they could get a better fix on when the company could expect to become profitable. Underwriting standards were tightened regarding additional capital and new investments were largely deferred until the situation clarified. Many firms were encouraged or pushed to consolidate with other firms to preserve remaining capital. Many that wouldn't or couldn't consolidate went bankrupt. By the second quarter of 2000, the pre-IPO valuation of e-commerce start-ups had dropped 75 percent.[5]

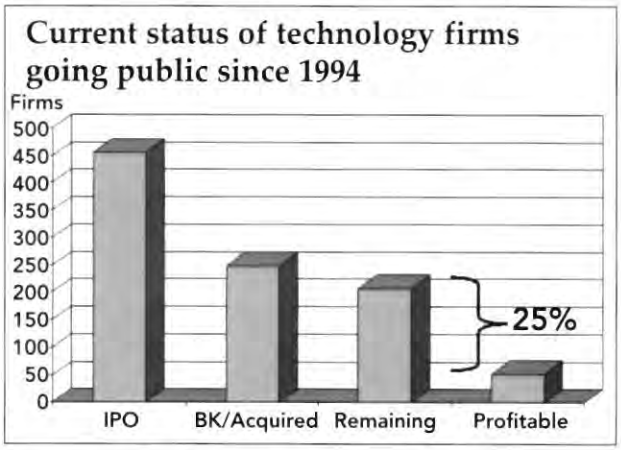
Many of the venture firms concluded that surplus funds had encouraged unwise investments in questionable businesses. Some observers argued that the collapse of the dot-com financing bubble did not change the magnitude of the fundamental changes occurring in the world's way of doing business, nor did it alter the significant investment opportunities that these changes would offer investors over the longer term.

CURRENT SITUATION

Sifting through the carnage, there are some reasons for this optimism. Worldwide Internet usership continues to grow: up 48 percent in 2000 and 21 percent in 2001 (500 million people). Last year, B2B trade increased 73 percent to $496 billion; online retail spending increased 56 percent to $112 billion.[6]

Most importantly, a large part of this activity was increasingly profitable. According to a recent Business Week survey, of the 456 Internet companies that went public since 1994, 11 percent were currently profitable (first quarter 2002). Of the 208 public net companies that are still in business and were not acquired, 25 percent were profitable.[7]

Exhibit 1



The best performers were in the travel (Expedia, Hotels, and Priceline) and finance companies (E*Trade and Charles Schwab), followed by media and advertising (AOL Time Warner), retail (1-800-Flowers), exchanges (eBay), and software firms (Intuit and McAfee). Currently profitable, but not doing as well, are infrastructure operations (WebEx Communications) and consulting firms (Modem Media, Razorfish, and Inforte).[8]

What are the characteristics of profitable e-business companies? Virtually all are selling information and not products that require shipping. But even in the retail area, results are better than many would acknowledge. While still a relatively small fraction of total retail sales, this performance indicates that net retailing continues to grow in consumer acceptance.

In terms of B2B penetration, almost 90 percent of America's business firms are doing some kind of e-business, although most of it is relatively small scale. Only about one third have more ambitious undertakings such as supply-chain management projects or customer-relations management (CRM) applications.

WHAT DOES THE FUTURE HOLD?

Looking forward, many observers expect the emphasis to be on in-the-trenches applications in which new technology will be adapted to the work that ordinary people do rather than forcing employees to adapt to new technology. Organizations will continue to change, adapting to the improved efficiency and challenges of new ways of doing things. Increasingly, change will be led by a new generation of workers that have been weaned on technology almost from birth.

IMPACT OF THE TECHNOLOGY REVOLUTION ON REAL ESTATE

By 2001, America's real estate industry also was licking its wounds from the dot-com collapse. Many firms and industry organizations had committed significant resources to information and communications technology (ICT) with a wide variety of real estate applications ranging from new reporting and control systems to virtual markets for everything from the purchase of toilet paper to the sale of individual properties.

As the collapse became apparent, many real estate managers weighed in with a belief that the whole experience had been a "flash in the pan," mostly hype and exaggeration, and that now, thankfully, they could return to the business of developing and managing their properties.[9] There were others, however, who viewed the dot-com collapse as a wake-up call, believing that, as fundamental structural changes begin taking hold, real estate could be altered irretrievably, perhaps more than other industries.

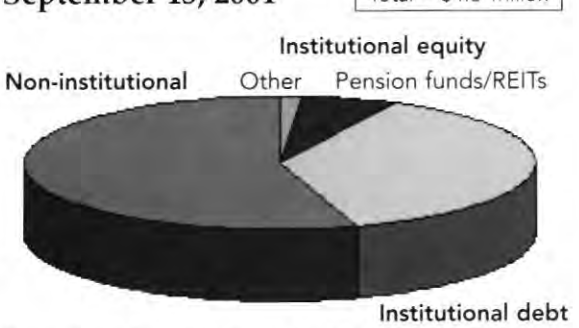
THE COMMERCIAL REAL ESTATE MARKET

The U.S. commercial real estate market represents approximately $4.6 trillion in assets, 45 percent of which is institutionally owned. Within the institutional market, $373 billion (18.2 percent) represents equity investments, 77.9 percent of which is owned by pension funds and Real Estate Investment Trusts (REITs). Properties include retail, office, industrial, and multifamily investments.[10]

A large service sector exists to buy, sell, and manage these properties. Players include brokers, property and facility managers, financial service specialists, contractors, and other service providers such as lawyers, title insurance, appraisal, etc. Total annual revenues generated by the commercial real estate service sector are estimated to exceed $35 billion annually. The largest service sector, real estate brokerage, generates $12.8 billion annually, of which $7.6 billion represents leasing commissions and $5.2 billion in investment sales commissions. Commission income is divided relatively evenly across each of the four major property types.[11]

Exhibit 2

Commercial real estate market
September 15, 2001



Source: Rosen Consulting Group, Lend Lease Real Estate.

The real estate market is characterized by a large number of relatively small transactions that are very labor intensive both in terms of time and data collection and storage. Information and documentation often is not standardized and is further complicated by a maze of regulatory legislation imposed by federal, state, and local jurisdictions.

Currently a web of organizations and individuals operate in and around real estate markets. Users and owners of real estate are surrounded by vendors and service providers attempting to manage and facilitate the operational stages of real estate investments. Each of these groups has its own needs and expectations, each requiring a different approach, management, and communications.

In most cases, a seemingly unending paper trail and tedious communications are associated with these activities. Services such as maintenance and operations as well as financial information are often forwarded through many hands.

THE PROMISE OF THE TECHNOLOGY/ REAL ESTATE INTERFACE

Many observers believe that effectively applied technology can open the door to more efficient communications between players, resulting in a wider range of products and services, which will ultimately provide a better quality and experience for tenants, users, and owners alike.

In terms of communications, property managers now have access to a wide range of Internet-enabled communication tools that allow for integrated and seamless communication with each tenant. Requests for tenant improvements, maintenance, equipment, and even office supplies can be made through extranet-types of applications that keep track of each transaction. Additionally, direct links to the financial accounting systems of the property manager allow for instant up-to-date

reporting on the status of each transaction and activity with each tenant and each property.

On the service side, a variety of tools increasingly provide for improved services to the tenant. Displays in elevators inform tenants and users of weather and the latest news, as well as property announcements. Interactive displays in lobbies replace largely static directories. Rooms and services can be ordered and scheduled via a building's intranet system. In retail properties, Internet connections and displays now allow for a seamless convergence between the virtual and physical, linking the shopper to both physical and online retail space, thereby enhancing the shopper's overall experience.

IMPACT ON PHYSICAL SPACE

As we learn to adapt to new technologies and innovation, physical space itself may change. Examples of this metamorphosis already occurring include:

- Changes in the physical workplace with open planning systems, aided by technology, providing greater flexibility in an increasingly team-oriented work environment.
- Dispersed workplace locations, linked by technology, where employees can effectively interface with their colleagues while being closer to family and other personal obligations and opportunities.
- Changing retail environments that combine virtual and physical shopping experiences to give shoppers more product information, match sizes and preferences better, and provide better, more competitive pricing.
- Regional throughput facilities, located at major transportation hubs, which speed up the movement of goods, thereby reducing inventory holding costs and accelerate product delivery to purchasers. This is enhanced by smaller re-distribution centers, where large shipments can be broken down into individual delivery packages.
- The "smart" residence where virtual and physical merge, effectively combining working and living environments.

These are just a few examples of changes occurring in our physical environment as a direct result of the development and application of technology. The continuing development in fiber optics, wireless applications, and other promising technologies will permit us to be even more virtually accessible in the future. This should lead to additional changes in our physical environment as well.

IMPACT ON REAL ESTATE TRANSACTIONS

Emerging technology is expected to improve the efficiency of real estate transactions in a variety of ways:

- Provide a broader market of potential buyers or sellers (tenants or buildings)
- Provide more information in a timely fashion to make better decisions
- Provide greater transaction transparency
- Reduce transaction time
- Reduce transaction costs
- In some cases, eliminate the service provider altogether (i.e., principal to principal)
- Improve reporting and process control

It is anticipated that most of these benefits would initially accrue to principals in the transactions. While service providers will not be eliminated from the market, their role and value proposition with real estate principals is expected to change dramatically.

IMPACT ON INTERMEDIARIES

As a result of these changes in real estate transactions, brokers and other intermediaries are expected to become either:

- Advisors who add significant value through expert advice and insight
- Process facilitators who guide transactions using Web-based tools

In either case, brokers will be under increasing pressure to do more work in less time, probably for lower individual transaction fees. This will probably result in fewer brokers, but higher total commission income to those remaining who learn to master and effectively use the new tools and systems.

In anticipation of this trend, most U.S. brokerage firms, either individually or in collaboration with other firms, are striving to develop more efficient transaction models. Most of these models are based on aggregating buyers and sellers through a common, Web-based platform which offers aggregated information (listing and availability), standardized documents, established processes, instantaneous messaging and event logs, and contract management (lease administration). Such a platform is expected to facilitate market information, negotiations, and firm/personal relationships.[12]

CURRENT INDUSTRY INITIATIVES

Most people agree on the promise of the technology and real estate interface. The real question is:

> "What's happening "on the ground" as the industry attempts to reap the benefits of the promised rewards? What's worked and not worked and why?"

In a 2001 survey of 508 technology/real estate interface firms by Rick Huijbregts,[13] 39 of the firms focused on the design, development, and use of physical space and 468 on improving existing processes and providing services to the real estate industry. Of the 468 firms, 70 had ceased to exist in their original form, with 28 having been bought or merged. Of the remaining 398 companies, 243 could be characterized as "process providers" and 156 as "service providers."

Process providers focus on the facilitation of core business processes such as brokerage, financing, procurement and property management. Approximately half of these services focus on the early stages of the real estate process (from planning through design to construction). The other half targets operational and financial real estate sub-markets such as property and portfolio management. More than half of the studied process providers targeted the residential sector with the remainder focused on commercial real estate.

Huijbregts observed a growing trend by these firms to provide portals and hubs, where front and back-end systems are directly linked to customers, tenants, and users. Firms moving in this direction include Realm, Bricsnet, and Loopnet. Several technology companies that had previously focused on other industries also had entered the real estate field with integration products (e.g., Microsoft, SAP, i2).

Based on his research, Huijbregts concludes:

> "These evolving online service providers will rapidly provide complementary products and services to enable a total product delivery and to establish a one-stop shop for integrated services and products. The traditional industry players will undergo similar evolution and consequently provide a wider range of complementary products and services to their customers. . . ."

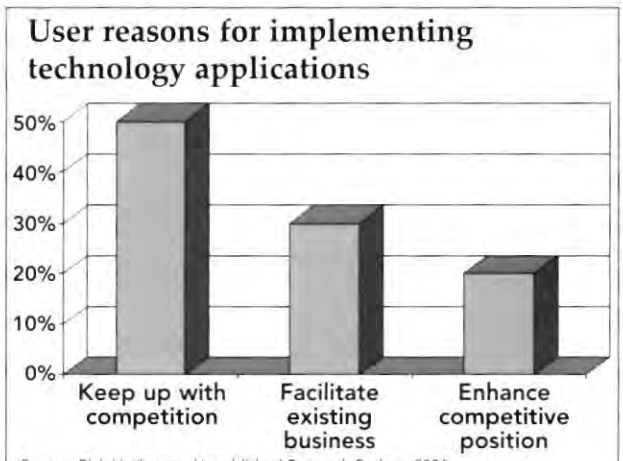
USER RESPONSES

The impact of these industry initiatives on users, however, was noticeably mixed. In a subsequent survey of real estate investment managers, Huijbregts found that only 30 percent were strong proponents of investing in technology, mostly to improve internal efficiencies.[14] A typical response was:

> "We just need the technology to facilitate our existing business processes—without the technology we would not be able to grow as we do."

Another 20 percent claimed to have embraced technology to enhance their competitive position vis-à-vis their clients. The remaining 50 percent had made the investment to "keep up with the competition" and anticipated significant cost reductions in the future.

Exhibit 3



Source: Rick Huijbregts, Unpublished Research Project, 2001
User reasons for implementing technology applications

None of the surveyed firms had studied in depth the return on their technology investment. REITs tended to view technology as an "investment" whereas other respondents viewed it as a "cost" factor, creating a difference in perception that could directly affect future expenditures. Still others saw technology as creating "headaches" and "unwanted change." None of the respondents had replaced services provided by brokers, consultants, or appraisers through technology solutions or by bringing the responsibility in-house.

Huijbregts also found that a significant number of respondents did not have a clear understanding of the impact of technology on their organization and individual employee performance prior to imple-

mentation. In cases where proper employee education occurred, the success rate was high and visible.[15] In cases where training and education was underestimated, the result was largely negative.

CONCLUSION

What can we conclude about the technology/real estate interface? Clearly the proper application of technology provides an unprecedented opportunity to restructure an industry that is cumbersome and inefficient for all concerned. The progress to date, however, has been slow, sporadic, and mostly uncoordinated.

If we look at the historical experience of other radical changes brought on by technical innovation (such as steam power, railroads, electricity, the automobile, and the airplane) we find a similar pattern where large-scale acceptance takes time to evolve. While there will be some significant technological breakthroughs in the future that will accelerate the rate of change, there will also no doubt be many false starts, disappointments, and financial loss.

One thing we do know: Change always brings excitement and opportunity for those involved and the technology/real estate interface is no exception. REI

1 U.S. Department of Commerce.
2 San Francisco Chronicle, February 23, 2001.
3 Venture Economics.
4 Economy.com.
5 *The Industry Standard.*
6 Source: researcherIDC.
7 Business Week, May 13, 2002.
8 Business Week, *ibid.*
9 It should be noted that, historically, this "back to basics" theme accompanies most real estate downturns.
10 Source: Rosen Consulting Group, Lend Lease Real Estate Investments, as of September 15, 2001.
11 Octane: Knowledge and Transaction Platform, Jones Lang LaSalle, May 2001.
12 Jones Lang LaSalle, ibid.
13 An unpublished research project conducted in the summer of 2001 by Harvard Design School doctoral candidate Rick Huijbregts in collaboration with Agnes Ng from the Harvard Center of Design Informatics, Harvard University, Cambridge, Massachusetts. Publication scheduled for summer, 2002.
14 Huijbregt: *ibid.*
15 This has also been the case in other industries such as online stock brokerage and airline ticketing.

CASE STUDY 1: BOSTON PROPERTIES

by John McMahan, CRE

*This case was prepared by **John McMahan, CRE,** executive director of the Center for Real Estate Enterprise Management (Centerprise), a non-profit research and educational organization. The case is to be utilized as a basis for discussion and does not necessarily illustrate either effective or ineffective handling of a business situation. Funding for development of the case was provided by PikeNet, where this case has been previously published.*

Boston Properties (BP) was founded as a private office development and management company in 1970. In June 1997, the company became a public REIT. At its IPO, the company and its management team had directly developed more than 89 percent of its portfolio. Most of BP's properties are located in four core markets—Boston, Midtown Manhattan, Washington, D.C., and San Francisco. The properties consist of Class-A office buildings such as the Embarcadero Center in San Francisco, Citigroup Center in New York City, The Prudential Center in Boston, and One Freedom Square in Reston, Virginia.

As of March 31, 2002, BP's portfolio consisted of 144 properties comprising more than 41.2 million square feet. This included 10 properties under development totaling 4.3 million square feet. The overall occupancy rate for buildings in service was 95.1 percent.[1]

MANAGEMENT STRATEGY

With emphasis on providing a consistently high standard of service, BP manages its portfolio out of five fully staffed regional offices located in its core cities as well as Princeton, New Jersey. By focusing on only a few select markets, the company achieves efficiencies in managing and

operating its properties. Concentration also allows the firm to build a regional brand, which establishes it as a landlord of choice in its core markets.

A high level of tenant satisfaction was evidenced by BP winning the 1999 and 2000 Building Owners and Managers Association (BOMA) National Customer Service Award for Excellence.[2] Recognizing BP as the "Best in the Industry," the BOMA award is based on tenant responses to questions regarding readiness to solve problems, responsiveness and follow-through, property appearance and condition, quality of management services, quality of leasing services, property rating, relationship rating, and renewal intention. On the occasion of the award, Robert E. Burke, EVP of Operations commented:

> "We pride ourselves on our commitment to provide outstanding work environments and responsive property management services, and we are honored by this recognition from our peers and tenants."[3]

U.S. OFFICE MARKET

The year 2001 was disappointing for the U.S. office market. The Torto Wheaton Office Rent Index dropped 10.9 percent, slightly greater than the largest previously recorded drop in 1992 of 10.6 percent.[4] The reason for the decline, however, was very different. In the early 1990s, the drop largely resulted from extensive overbuilding during the late 1980s, reduced demand due to a recession, and extensive corporate reorganization. In 2001, the decline was primarily caused by the collapse of dot-com firms and the leasing of space for future growth that drove increases in rents in 2000. The good news was that delivery of new supply was low and many firms were already lean and required fewer employee cuts to weather the recession.

With demand outpacing new supply, BP's core markets witnessed some of the highest rent increases during 1999 and 2000. Coming off these historic highs, the economic downturn triggered some of the sharpest declines in rents in 2001[5]:

City	Annual Rent Change
Boston	- 24.9%
San Francisco	- 23.0%
New York,	- 17.5%
National Average	**- 10.9%**
Washington, D.C.	- 9.8%

As highlighted in BP's Annual Report 2001, the challenges of operating during a recession were accentuated by the economic impacts of September 11, and resulted in a steep decline in demand for office space. Tenants who, as recently as the start of 2001, had strong appetites for further growth, began offering for sublease space to which they were already committed. Robust leasing activity was replaced by limited new deal flow.

In the first quarter of 2002, BP announced completion of two major projects: One Discovery Square, a 180,052 square feet office building in Reston, Virginia and 5 Times Square, a 1,099,154 square feet office building in New York City. Mortimer Zuckerman, chairman of BP, remains cautiously optimistic about the long-term prospects of the office building market, saying:

> "You're going to have demand going up and no supply and you're going to have another huge spike in rents. I don't see any real recovery in rents (however) through 2003."[6]

Zuckerman went on to say that he does not see a resurgence in demand for real estate until business confidence rebounds, and he does not anticipate any significant rebound in the office market for new supply at least until 2004.

FINANCIAL PERFORMANCE

For the last 12 months, BP's stock has moved mostly in concert with or above the S&P 500. Funds from Operations for the first quarter of 2002 were up 9.4 percent over the first quarter of 2001.

OPERATING ENVIRONMENT

Boston Properties strives to differentiate itself from its competitors by emphasizing the quality of its assets and its approach to management. The retention of existing tenants is always paramount but is heightened in a down economic cycle. The objective of maintaining a high quality of service and achieving the highest levels of tenant satisfaction is ongoing.

A FOCUS ON TENANT SERVICES

Technology management at BP is the responsibility of the Information Systems Department (IS). After its IPO in 1997, BP undertook a wholesale replacement and upgrade of its technical and systems infrastructure. The initial focus was on core accounting controls and financial reporting solutions to accommodate its growth; Boston Properties acquired $2.88 billion in new properties in 1998.

Beginning in 1999, BP began to shift emphasis to extending its core systems out to the property operations and to improve relations with its customers. The challenge of implementing change across 130 in-service buildings posed different obstacles. The technical complexities were secondary to the challenges of changing processes and workflow, implementing data standards, and increasing the technical skills of personnel.

The approach to the property locations began with incremental changes, focusing on simple solutions to support workflow efficiencies and improve tenant services. "Keep it simple—walk before you run" were the watchwords as IS approached the formulation and implementation of what would ultimately be a very effective operating system for tenants and managers alike.

TENANT SERVICE REQUESTS: A STANDARD SOLUTION

In early 1999, IS was charged with implementing a standard solution for the tracking and reporting of service requests initiated by tenants. Informations Systems and Property Management jointly developed a solution and launched the application at Democracy Center in Bethesda, Maryland and 599 Lexington Avenue in Manhattan. Building management now had tools to collect service requests and to develop proactive service programs to address trends and recurring issues. By year-end, the solution was in use across BP's portfolio. For example, the new application enabled the property management staff at 599 Lexington Avenue to reduce its volume of requests by 10 percent by developing a program to proactively address recurring issues.

EXTENDING THE TENANT SERVICES APPLICATION TO THE INTERNET

In late 1999, BP undertook the extension of the tenant services application to permit the entry of requests by tenants via the Internet. The new interface was designed to give tenants a streamlined procedure for initiating work requests by saving time in communicating with the management office and reducing reliance on telephone communication.

Objectives:

The new features enabled properties to:

- Provide tenants with an easier and faster means of:
  - Submitting service requests
  - Reviewing the status of requests
  - Generating reports
- Increase the accuracy of information
- Complement phone and face-to-face interaction
- Provide a foundation for additional services

Property management benefited from the new system almost immediately. Within the first month of use, 54 percent of all requests came in over the Internet connection indicating an early-adoption by tenants.

Tenants also saw immediate benefits. Tara Clifford, facilities coordinator for a major tenant in the building, began using the Internet for her daily service requests. Clifford noted:

> "The process is more efficient. It means less paperwork and the reporter function is a real plus."

The reporter function replaced a manual log that Clifford maintained in the past and helped her to keep track of repeat calls for the same request so that chronic situations could be identified that may require different solutions. Clifford also noted that she could save valuable time by creating a service request online while she is still on the phone with her internal customer.

Adoption:

IS worked with property staff to promote the entry of requests over the Internet. Properties where staff took the lead in promotion and training regularly achieved adoption rates in excess of 60 percent. For example, IS partnered with the on-site team at The Prudential Center in Boston to achieve a 56 percent adoption rate throughout the 3.9 million square foot complex.

Andrew Markey, Tenant Services Coordinator at The Prudential Center noted:

> "The tenant service system has become a highly welcomed addition. Tenants have been quite pleased with the ability to manage and electronically document all requests submitted through the system. Tenants certainly have not shown any signs of missing the phone."

Current Situation:
As of the end of 2001, BP had expanded the *tenant services application* to 120 buildings in the company's portfolio, servicing in excess of 100,000 service requests annually. During the month of April 2002, the company recorded 6,684 requests from tenants, of which 37 percent came in over the Internet.[8] By June 30, BP anticipated achieving an adoption rate in excess of 50 percent.

Boston Properties publishes monthly reports that highlight regional and property adoption statistics. In addition, reports on request and resource usage provide valuable information to analyze trends for a property or for a specific tenant. These reports provide valuable benchmarks for project and service initiatives.

Integration with Accounting System:
Approximately 20 percent of BP's total volume of requests result in a billable event. In 2001, BP integrated the *tenant services application* into its accounting system, JD Edwards. The new interface is allowing BP to streamline the processing of a large number of invoices and to realize dramatic efficiencies. For example, over 5,800 invoices totaling $1.3 million have been posted through the new interface over the last 6 months replacing a highly manual process.[9]

Benefits to Tenants and Property Managers:
After three years of use, BP summarized the benefits of implementing its *tenant services application* as follows:

- **Reduced Transaction Costs:** The entire flow of information is significantly improved through:
  - Reduced phone calls (direct input via the Internet replaces more time-consuming phone calls and online access to completion information reduces follow-up calls). For a tenant, the time needed to submit a request over the Internet versus the telephone is reduced by one-third from 45 to 75 seconds to 15 to 25 seconds.
  - Reduced mistakes caused by reinterpretation or disruptions when translating information.
  - Reduced number of "information handlers" throughout the process. Going forward, wireless technologies promise further efficiencies in reducing time spent on the information cycle.

  As an example, Pat Duesbury, property manager of One Freedom Square in Reston, Virginia said:

  > "One of the greatest benefits I have seen is that there is less chance of making a mistake since the information is right in front of you vs. writing it down while distractions are happening all around you. It has definitely cut the amount of phone calls we receive a day for service calls."

- **Greater Staff Responsiveness & Utilization:** Boston Properties believes that one of the most powerful benefits has been "connecting" the customer directly to the person who completes and satisfies the service request, thereby reducing the number of "information handlers."

  One of the reasons for this is that the system creates a mutual information dependency between the tenant and the person who performs the work. Because tenants have direct access to the completion information, there is a heightened accountability among employees of the company. Overall, the tenant services application has empowered tenants and employees while, at the same time, reduced dependency on others to support the information flow.

  Christina Martin, facilities supervisor at a major advertising firm, said:

  > "The website helps us feel like we know the status of our requests at all times. Follow-up is very important and the site has been great at keeping us informed and saving time as well."

- **Higher Tenant Satisfaction:** Due to its simplicity, tenants naturally gravitate to the system. If a tenant is introduced to the application, they usually use it. The solution makes the process easier for office and facility managers.

Generally, BP found that the system provided greater benefits to larger tenants with a dedicated facilities staff. For example, NASA's office headquarters at One Independence Square has a facility team of five who receive requests from coworkers and submit them via the Internet. Similarly, Ernst & Young's facilities staff at 5 Times Square began using the system in the initial phases of a 3-month, 4,000 employee move-in.

It also was clear that tenants trained in the operation of the system usually used it, particularly when the building's property management staff handled the training.

ASP Alternatives: While concentrating primarily on internal solutions, BP has kept abreast of the progress being made by application service providers (ASPs) that survived the Internet boom-bust cycle. The reasons for considering an ASP application as a potential replacement for BP's internal system include:

- Maturing technologies (e.g., wireless services)
- Availability of solutions that are integrated into back-end accounting systems for handling billable requests
- Availability of integrated preventive maintenance solutions (not just service requests)
- The evolution of lower cost models
- Increasing costs to enhance and maintain the internal application

Boston Properties is reviewing several providers but is ultimately looking for a single, integrated solution to handle non-billable service requests, billable work orders, and preventive maintenance tasks.

ISSUES AND CHALLENGES

As of spring 2002, BP's management faced the following challenges for supporting its tenant services application:

- Consider ASP applications
- Integrate wireless technology
- Implement systems for preventive maintenance programs

The IS team felt confident that, with their prudent, incremental approach to change, they would be able to meet challenges and continue to be in the forefront of increasing tenant satisfaction while adding value to Boston Properties' bottom line. REI

Editor's Note: Case Studies 2 and 3 will appear in an upcoming issue of REI.

NOTES

1. Company press release, April 23, 2002.
2. BOMA was assisted in the survey by CEL & Associates of Los Angeles, one of the real estate industry's leading benchmarking firms.
3. Company News Release, May 24, 2001.
4. Torto Wheaton Research, *About Real Estate*, April 22, 2002.
5. Torto Wheaton Research, ibid.
6. *Dow Jones Business News*, April 17, 2002.
7. The database utilized Lotus Notes-Domino.
8. Company document; statistics through April 29, 2002.
9. Company document, ibid.

The Real Estate Market in Kiev: History and Issues

by Gary Roseman

ABOUT THE AUTHOR

Gary Roseman *received his Ph.D. in Economics, Emory University, 1997, and spent several years in the 1990s in Donetsk and Kiev, Ukraine, on educational programs. He is an Assistant Professor of Economics at Berry College in Mount Berry, Georgia. (E-mail: ghroseman@campbell.berry.edu).*

THE MARKET IN KIEV

The real estate markets in the former Soviet republics are evolving. This article reviews some of the background and history of the Ukrainian housing market situation and concludes with some measurements of sizes and prices in the rental and sales markets so that the reader will have some quantifiable characteristics for possible comparisons to other markets. The focus of this article is primarily on the local market properties that affect Ukrainian citizens. The topic is of interest because housing constitutes a significant portion of a typical household's wealth in the Ukraine and other former communist and emerging market countries.

Many studies on East European real estate have focused on various problems that slow the development of these markets, such as the legal uncertainties in land ownership (Kaganova, 1998), the lack of mortgage markets comparable to those in the West and the complete absence of a secondary market[1] (Kaganova, 1998), and the undeveloped state of the appraisal industry (Levine, 1995). The Ukrainian market faces all of these difficulties.

BACKGROUND ON KIEV

The city of Kiev was home to the first organized eastern Slavic state, which reached prominence under Prince Vladimir in the 10th century. Mongols, Tatars, Poles, and Russians invaded the city in later centuries and while it remained a religious and cultural center, it began its renaissance only in the 17th century with the expansion of Russian power in Ukraine. By the 19th century, Kiev was a prosperous administrative, educational, and industrial center.

The Germans and Austro-Hungarians occupied the city in World War I and stayed there until 1919 when anarchists, Ukrainian nationalists, Bolsheviks, and anti-Bolsheviks all vied for power. The Bolsheviks won and Kiev lost its position as Ukrainian capital to Kharkov until 1934. During World War II, the Germans again occupied the city. Retreating Soviet forces left time-delayed bombs that destroyed buildings on the main thoroughfare, Khreshchatik Street. The Germans retaliated but Kiev gained a respite until November 1943, when Soviet advances and German retreats again destroyed parts of the city.

After the war, the Soviet government poured resources into rebuilding Kiev. These efforts included construction of an extensive subway system. Rising communist Nikita Khrushchev, who was head of the Ukrainian Communist Party, supervised the overall effort. Kiev was the third most populous city in the Soviet Union.

After the Ukrainian declaration of independence in August 1991, Kiev became the capital of Europe's second largest country in land area after Russia. Foreign embassies and representative offices of corporations eager to do business in a country of 52 million arrived. A shortage of suitable office space led these companies and embassies to move into renovated hotel suites, apartments, and offices in institutes. Recognizing that the demand for reasonable office space was growing while the supply was still small, builders embarked on a minor construction boom in the years that followed. Some of the funds for this construction were from local sources, some from Russian and Western sources. There were also Swiss and Cypriot investors who, according to widespread belief, funneled Ukrainian and Russian untaxed profits into real estate projects. The mild spurt, which was not much in comparison to the construction booms in Warsaw, Prague, Budapest, or Moscow, lasted until the Russian default of August 1998.

While the increased construction moderately increased the availability of office space for Western and Ukrainian companies, the residential offerings increased only slightly. There had been a housing shortage in Kiev with its artificially low Soviet rental payments system with the result that several generations of a family often shared the same apartment. Privatization of the housing stock was the first step toward the efficient rationing of housing, but the additional requisite conditions of a functioning banking system and legal support for contracts and property rights were absent. New owners who had no need for a three-room apartment in the center of the city were nevertheless reluctant to part with this asset without money up front. When housing sales did occur, the medium of exchange was often something other than Ukraine's first currency, which was a raffle ticket-dimensioned and rapidly depreciating coupon for the proposed currency unit, the *karbovonets*. On September 1, 1996, after some months of stability with the *karbovonets* at a rate of approximately 176,000 to the dollar, the *hryvna* became the official currency at 1.76 *hryvnas* to the dollar. Gradually, with growth in the banking system and some limited recognition of property rights, some construction of apartments began. Still, the sale of existing apartment units remains hampered by the lack of both a foolproof title check system and a market for title insurance.

The municipality owns the common areas of a residential building, unless the whole building is privatized as a cooperative, which is not the usual case. The municipality assesses a fee to apartment owners for maintenance and cleaning of the common areas. The common lines for utilities and water/sewage are also municipal property. Given the state of municipal governments in Ukraine, this means that cleaning, repairs, and maintenance are often lacking.

Problems with land ownership rights affect the location and quantity of housing. As in many Soviet cities, residential growth in Kiev in the 1960s and later occurred on the edges of the city. Because land could not be bought and sold, no bidding process could reallocate land parcels in the more central areas from their current uses. Even with an increased demand for housing in central areas, the absence of a market for land prevented this demand from resulting in the construction of new housing in these areas.[2] Families located in the outer districts because this was the only avail-

able option and commuted to jobs in the center, usually on crowded public transportation. The presence of large residential districts in the outer areas and long commutes are features of life in Kiev today.

The ability to own land is nominally guaranteed under certain parts of the Ukrainian legal system, but there have been no practical steps to implement this right. In 1992, a land code for the country allowed local administrative councils to authorize the sale of land with exceptions for strategic reasons. In 1996, the Constitution guaranteed the right to own land, and a presidential decree in 1999 allows the sale of non-agricultural land. But unlike Russia, where sales of certain types of land are becoming practical realities, land is still held by the state. Strong opposition to allowing the sale of land remains. For example, a former speaker of parliament, Alexander Tkachenko, called the sale of land "misanthropic." Remedies of this impediment to the development of the real estate market in Ukraine do not appear imminent.

RENTAL MARKET

Kiev's status as the capital brings with it many of the benefits of a modern city. Because of its attractiveness, the rental market there is more active than in other Ukrainian cities. These benefits of living in Kiev range from the more mundane aspects of personal comfort, like regular running water and garbage disposal, to the presence of job opportunities that do not exist in other cities. For the relatively educated and ambitious, opportunity in Kiev means a chance to work in a Western company, embassy, or in a Ukrainian company that has regular dealings with Western entities and can therefore regularly pay salaries. The state sector is also large and offers some security as well as possibilities for extra, off-the-job income.

Broadly, there are two residential rental markets in Kiev, both of which usually offer furnished apartments: "Western standard" and regular Soviet-style. Renovated "Western standard" housing can be found in either old Soviet apartment buildings mixed in with the Soviet-style apartments, or in completely refurbished buildings. Kiev has no "Western Quarter"; Western apartments are typically mixed in with local-standard apartments in the same building. In the rare case of a building built to above-local-standard specifications, these buildings are on the same street with local-standard buildings.

The characteristics that separate "Western standard" from Soviet or local standard housing are the quality of the furniture, appliances, water heater, and the finishing on the floor and wall, as well as the use of materials in construction that will prevent the cold drafts of wind in the winter. Western apartments will have relatively new furniture and appliances from Western Europe or Slovenia, German water heaters, some type of independent heating, plastered walls and ceilings, and floors that are carpeted or, if hardwood, with individual planks that fit neatly together. Western apartments will also have new windows, usually with plastic frames that will close evenly so that cold air does not come in. Often there will be window air conditioning units and a telephone line serviced by one of the private telecommunications companies that operate in Kiev. Local apartments have Soviet-made furniture and Soviet or Ukrainian appliances. They depend on the city for hot water, which is sometimes not available, and heating. In Russian and Ukrainian cities, residential heating comes from district distribution centers, which date from Soviet times and distribute heat wastefully. Apartments have no individual control over the temperature. Adjusting the heat involves either opening a window to reduce the temperature if that occasion arises, or buying a space heater, which is necessary if one wants heating before the date which the local authorities have determined for the start of the heat distribution period. The number of rooms in an apartment includes bedrooms and a living room or den area; that is, a two-room apartment has two rooms, one of which is typically furnished as a bedroom, in addition to a toilet and bathroom, either in separate rooms or combined, and a kitchen.

On the demand side of the Western standard rental housing market are primarily corporations, embassies, and Western taxpayer-funded programs that have sprouted in the capital cities of the former Soviet Union. The supply of this housing is from locally based entrepreneurs, both native and Western, who started activities in the early 1990s when apartment sales prices were very low. They bought these properties, renovated them, and earned high rental yields, often in excess of 20 percent annually. Apartments in this Western standard market are concentrated in the center of the city.

The demand for local-standard housing is from Ukrainians who arrive in Kiev from the rest of the country looking for job opportunities. The supply is from Kiev residents who have vacated their housing while retaining ownership. The common reasons for vacating can be related to health, as extended care is a family-provided service in Ukraine and often requires the sharing of accommodations, or simply the desire to generate income from a property. For some elderly and low-income households, rental income from the apartment in which they lived for decades may be their main source of income. Because the allocation of housing was for years based on non-market considerations, lower-income households still own properties in the central areas of many formerly socialist cities.

There are similarities in the working of the markets for Western and local rental housing. Both markets rely on leases, which are hard to enforce given the state of the judiciary. A measure that prevents this institutional failure from destroying the leasing market is an institutional feature called the *propiska* (meaning registration or residence permit) system, which requires a registered address, stamped in the civil passport issued to citizens at age 16, for all residents in Ukraine. In order to have a valid registration for a time period, a person must present proof of residence to the authorities, and this proof, for a tenant, can be a lease. If this lease is terminated and the tenant moves to another location, the tenant must provide proof of residence at the other location. This change would mean nullification of the registration of the previous lease and the opening of possible questions to both lessor and lessee from authorities, who can be capricious.

Both the Western-standard and the local markets often use dollars, called "conventional units" in leases, as the unit of account. Specification of dollar payments in the lease is prohibited even though most lessors insist on payment in this currency. Thus, one of two options arises: either using the dollar as the unit of account while specifying *hryvnas* as the medium of exchange with a verbal agreement that the actual medium of exchange is dollars, or signing a second legally invalid lease with a written provision for dollar payments. A lease with *hryvnas* is required for registration purposes.[3]

REAL ESTATE VERSUS OTHER INVESTMENT ALTERNATIVES

Like many who have experienced hyperinflation, Ukrainians see real estate as a relatively low-risk income-generating asset. A specification of the payments in dollar terms (conventional units) preserves the purchasing power of the rental income stream. There is a low probability of confiscation by the government of the housing asset, in contrast to bank deposits. Dollar deposits have been subject to forced conversions at unfavorable exchange rates in many post-Soviet republics, while local currency deposits were effectively seized by inflation in the 1990s. Banks have sometimes been unable to meet withdrawal demands in a timely manner, thus further decreasing the desirability of bank deposits as a store of wealth. With alternatives such as securities, the ownership rights are often not well defined. For example, charters and by-laws of some corporations are often arcane and they may, in some cases, conceivably allow spin-offs of subsidiaries without due compensation to the corporation, or dilution of shareholders' ownership. Not only has this state of Ukrainian corporate governance made securities undesirable in international finance, but it has not inspired confidence among Ukrainians, who look to other assets, like real estate, for holding wealth.

OBSERVATIONS ABOUT SIZE AND PRICES

For some insights into some of the quantifiable variables in the local market, data come from three city districts where the local-standard rental market is most active. The Obolon district is north of central Kiev and is known as a bedroom community. The Darnitsa district is across the river from the city center and is the location of several affordable new housing developments. Both districts are filled with high-rise Soviet-style apartment buildings and both have extensive connections to the center by subway, streetcars, and bus routes. The Moskovskiy district is south of the city center with easier access to the center. Building there began in the 1950s. These buildings are more often from brick, instead of the concrete pre-fabricated construction that was common in later periods. Other districts of the city had limited numbers of observations, with the exception of the central districts, where both local- and Western-standard properties were advertised.

The observations were drawn from the only city-wide real estate publication in Kiev at the time of collection, *Vestnik Nedvizhimosti*,[4] which first appeared in June 1997 and in March 2000 had a fortnightly print of 15,000 copies. The intervals between the chosen months allow time for advertised properties to clear out in the market.

The observations in Table 1[5] are from the districts and apartment types for which sample sizes were above 20 in November 1999, and March 2000 and November 2001. There were, for example, three-room apartments for rent and sale in the districts at these times, but the numbers available were small, and not all districts had sufficient sample sizes of one- and two-room apartments for rent or sale at each time. The data are separated into one- and two-room categories to control for size.

compared to the rental market. In Table 2 there is a clear positive correlation between size and sales price,[7] while in Table 3 no pattern appears for correlation between size and rental rates.[8] A reason for this is the nature of the demand side in the rental market. As discussed, many renters are relatively young arrivals in Kiev who are in search of opportunity. Without dependents, they would not put much value on marginal space, and the results attest to this market feature.

Table 1
Average Sizes of Properties (with standard deviation of each sample in parentheses)

Region, Type	Month	Average Size of Units for Rent (square meters)	Average Rental Price per Month (dollars)	Sample Size	Average Size of Units for Sale (square meters)	Average Sales Price (dollars)	Sample Size
Obolon, 1 Room	November 1999	23.429 (8.971)	101.76 (31.39)	37	34.241 (5.674)	11,180.95 (3,333.55)	63
Obolon, 2 Rooms	November 1999	36.706 (9.511)	168.38 (59.20)	34	50.038 (8.259)	17,476.47 (7,115.77)	85
Obolon, 1 Room	March 2000	24.806 (9.115)	94.81 (18.74)	36	34.050 (4.739)	10,761.78 (2,349.95)	57
Obolon, 2 Rooms	March 2000	38.595 (9.998)	166.62 (53.28)	37	51.170 (8.878)	17,091.49 (6,647.14)	94
Darnitsa, 2 Rooms	March 2000	36.739 (10.150)	128.70 (30.16)	23	47.866 (6.076)	13,319.72 (4,113.28)	71
Moskovskiy, 1 Room	March 2000	24.183 (8.978)	178.26 (57.23)	35	34.438 (5.793)	15223.08 (4257.47)	39
Moskovskiy, 1 Room	November 2001	23.454 (7.347)	196.82 (53.04)	22	36.543 (5.229)	16443.48 (4362.43)	23
Moskovskiy, 2 Rooms	November 2001	43.280 (10.761)	373.80 (145.50)	50	54.804 (9.444)	26642.47 (9637.82)	74

Table 1 shows that the average size of properties for sale are larger than those for rent. If Kiev property purchasers allocate their resources to the highest valued use, then the reason for this difference must be a greater value for increased size in the sales market than in the local-standard rental market. An examination of the correlation coefficients[9] between apartment size and both sales prices and rental rates offers evidence of a difference in valuation of space among buyers and renters. The higher correlation coefficients in the sales market are evidence of a greater premium for additional space in that market when

Space in the Moskovskiy district is more valuable than that in the other districts for both the sales and rental markets. This is a reflection of the greater ease of transportation to the center, where many jobs and shopping opportunities are located.

Factors other than size, such as quality and location, affect price. These factors are not likely to vary greatly among units in the current sample. Limiting the calculations to intra-regional data provides some control for variation in location. The access to public transportation, on which most Kiev residents rely, does vary within regions but,

Table 2
Coefficients of Correlation Between Size of Apartments and Sales Prices

	November 1999	March 2000	November 2001
Obolon			
1 Room	0.7915	0.6801	
2 Rooms	0.7429	0.7429	
Darnitsa			
2 Rooms		0.6412	
Moskovskiy			
1 Room		0.5993	0.7377
2 Rooms			0.7320

Table 3
Coefficients of Correlation between Size of Apartments and Rental Prices

	November 1999	March 2000	November 2001
Obolon			
1 Room	0.1709	0.1384	
2 Rooms	-0.2974	-0.0412	
Darnitsa			
2 Rooms		0.3842	
Moskovskiy			
1 Room		0.4128	0.3465
2 Rooms		0.0770	0.3067

given the small physical area of each region, the differences are small. Quality and style are also fairly uniform within a region. The inner regions, which are not discussed in this paper, are older and have some variation between pre- and post-war buildings and between refurbishment levels. The buildings in Obolon and Darnitsa regions are mostly from the 1970s and 1980-90s, respectively, with refurbishment almost exclusively of a post-Soviet quality.

CONCLUSION

The Kiev real estate market is still in transition from its tough beginnings a little over a decade ago. Property rights are still an issue to be settled satisfactorily. The state of development of financial markets is not conducive to an active housing sector. For example, the mortgage market is still small and hampered by a lack of access to funds from savings. The rate of inflation has been low for the past six years, but vivid memories of the early 1990s, when inflation rates were at times 50 percent per month, have prevented the emergence of a pool of domestic savings that is necessary for a mortgage market. In addition to these fears of another period of inflation, skepticism toward banks exists because of misgivings caused by the lack of transparency in firms in all sectors of the economy, including the banking sector. The result is that prospects for savings to supply adequate funds to mortgage markets in the near future are dim.

Even with the considerations in the preceding paragraph, real estate should be an attractive investment vehicle for Ukrainians, if and when a large class of savers emerges. Its relative attractiveness in this market, compared to other countries, is likely to be greater because of risk and uncertainty associated with other assets in Ukraine, whether they are securities, bank accounts, or holdings of money balances. While foreign financial institutions have offices in Ukraine, their activities are limited and Ukrainians' access to their services is restricted because authorities fear increased capital flight and tax evasion.

In attaching some quantitative measures to this market, this paper found different mean sizes for apartments for sale and those for rent. That apartments for rent were smaller is to be expected, given the sources of demand in the rental market, which consist largely of younger tenants with few dependents who arrive in Kiev for the unique opportunities afforded by the capital city. Space does not command a premium in the rental market in Kiev.

NOTES

1. For a review on how mortgage markets have fared in the former Soviet Union, see Olga Kaganova's 1998 article (see references). David Clapham (1995) reviews the situation in Bulgaria, where almost no banks were engaged in mortgage lending in 1992, even though it had been permitted since 1989.
2. The article by Alain Bertaud and Bertrand Renaud examines land use in the absence of markets for land.
3. In the Western-standard lease, it is common for a landlord to have an offshore company that signs the lease with the Western firm or embassy for offshore payment. The lease may specify settlement of disputes in a non-Ukrainian court but this is of questionable legality in leases for Ukrainian properties. In other words, a Western lessee may disregard a lease with these terms and suffer little monetary damage, but Western lessees generally have fixed periods of employment in Kiev and lack the market knowledge and available time to arrange for other living conditions without some costs. The probability that a Western tenant will seek to prematurely terminate a lease is therefore sufficiently low for Ukrainian landlords to enter into agreements.
4. The title is translated as *Real Estate Bulletin*. The publication is primarily in the Russian language, which remains the language of business in most of the former Soviet Union.
5. Sources: *Vestnik Nedvizhimosti*, Numbers 52, 66, 97 for all tables. A

test of $H0: m1=m2$, where $m1$ and $m2$ are the means for the sizes of apartments for sale and for rent, respectively, is rejected at the $a=.01$ level for all regions and types of apartments.

6. A correlation coefficient is the covariance between two variables divided by the product of their standard deviations. A value of 1 for the coefficient means a perfectly linear relationship exists between the two variables, and close to 1 means that there is a strong positive but not perfectly linear relationship, such that large values of one variable are associated with large values of the other. Conversely, negative correlation coefficients mean that large values of one variable are associated with smaller values of the other. In Tables 2 and 3, coefficients closer to 1 mean that large sizes of apartments are associated with large prices, smaller positive coefficients imply a weaker relationship between these variables, and negative coefficients mean that large sizes are associated with lower prices.
7. All coefficients are statistically significant at the $a=.01$ level.
8. Only the coefficients for Obolon, 2 Rooms in November 1999 and the Moskovskiy coefficients for each month and category are statistically significant at the $a=.05$ level.

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Better Real Estate Market Analysis for Metro Areas Through the Use of Unique Sources of Internet Data

by Donald R. Epley

The purpose of this paper is to identify specially selected Internet sites that contain unique, useful, and typically free data that can improve the level and quality of real estate market analysis particularly at the metro area. The sites described here have been used for the generation of trade area data at the metro area and for selected comparable markets. They should be scrutinized by all market analysts as each one contains useful data that can certainly add to the ability of the analyst to generate trade reports on individual local markets and further, find comparable data that can be used for competitive regions.

The intent is to strengthen the real estate market analyst's array of analytical tools and sources of data to provide more informed conclusions on overall market trends, and specific site marketability. Another objective is to reduce the analyst's search time as the hourly investment can be significant to search for the appropriate sites and icons and to categorize the type of data and potential use.

All of these sites have been used and examined frequently. Also, they have served as the basis for one university class in real estate market analysis where students are asked to conduct various types of market studies as assignments for typical, market analysis techniques. The

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result is a student-assembled portfolio of methodology and market analysis that can be used immediately on the first market analysis assignment. [1]

This site information is organized to answer fourteen typical questions that can arise in the analysis of real estate markets. Every reader who conducts market analysis at any level needs to invest the time to peruse these sites and bookmark and document the information found on each. An effort has been made here to provide a brief description only as each reader will concentrate on the specific data that is of interest to his/her type of analysis once the site is visited.

Also, real estate brokerage sites have been omitted. Those can be visited for a particular assignment if desired.[2] The purpose here is to identify unique sources and types of market data that might not be commonly known to the market researcher.

SPECIFIC MARKET ANALYSIS TASKS

The practice of counseling has been described by The Counselors of Real Estate as a *process* rather than a *procedure*.[3] Reliable sources of Internet data are a necessary prerequisite to timely real estate market analysis and an integral part of the decision-making process.

Real estate market analysis has been explained as the identification and study of demand and supply for a particular (real estate) product. [4] It asks three basic questions:

- Will users exist to buy or rent?
- What is the rate of absorption in rent or price terms?
- How can the product be designed or planned to make it more competitive?

The sites below have been selected and used to find specific data that will help in analyzing the demand and supply conditions in a metro market and find answers to the above questions. These resources allow the user to:

a. Estimate the potential demand. Determine the population, employment, and housing characteristics in the trade area. Use data that is similar to allow comparisons among cities for an estimate investment potential. Several of these sites below offer user-friendly data that are very useful and, in one site, detailed to the census tract level.
b. Compare cities and regions with comparable data for the U.S. The task may be to develop comparisons of selected indicators among regions that are also comparable to the same indicator for the U.S. Several of these sites contain comparable figures.
c. Find data that is hard-to-locate and unique such as a quality-of-life indicator. A quality-of-life indicator that can be used for comparisons among regions is found on one site for a number of metro areas. Another example would be construction costs that have been aggregated for use in one area, and can be used for cost comparisons in competing areas. Another site contains this information.
d. Find population projections for the metro market that are comparable to projections in competitive areas. A population projection for the metro area is needed frequently for the calculation of a gap that may exist between the current and future level of demand and projected supply for a specific real estate product. Reliable projections are not plentiful, and further, not always comparable to projections for competing metro areas.

SOCIO-ECONOMIC DATA

Where do I find personal income by county that can be compared to the U.S. on the same site? Will the site allow the user to calculate percent changes between selected years?

A little known site with very useful and valuable socio-economic data for the five Northwestern states and the U.S. is maintained by the Agricultural Economics Department at Washington State University (**http://niip.wsu.edu/**). It contains a significant amount of census information that has been selected and loaded in a user-friendly manner. Additionally, the site contains a summary of selected economic indicators that are updated periodically. It is a good source of comparable U.S. data that has been designed for convenient use. The author is a professor of agriculture economics and maintains the information as part of his university assignment.

Further, for those analysts who are interested in the amount of local growth from a change in local industry mix compared to the amount of growth from the industry's share of the total, this site has a rare calculation routine for *shift-share* coefficients between two selected years.[5] Area regional analysts will find these calculations useful in comparing growth areas and searching for explanatory reasons. Many of the economic indicators found on the WSU

site have been taken from data accumulated by the Bureau of Economic Analysis (**http://www.bea.gov**). One observation about the WSU data is that it is often dated information. For example, the latest personal income estimate is three years old.

Where can I locate the minority composition, percent of owner occupied and renter occupied housing, and selected income and population characteristics by census tract for a given Metropolitan Statistical Area (MSA)? Does any site contain data that is recent compared to common government sites that contain important but old information?

The Federal Financial Examination Council (**http://www.ffiec.gov**) requests combinations of data from the U.S. Census to conduct its examination of financial lenders that must comply with the Community Reinvestment Act. The data is available on the Web, and can be purchased at a very reasonable price from the Federal Reserve Bank. It contains census tract information for selected MSAs such as population and housing characteristics under the *Census Reporting System* heading. One interesting feature is that the site offers census tract income data that is updated annually by the U.S. Department of Housing and Urban Development.

Where would I locate a summary set of statistics on an MSA that that could be compared quickly to similar statistics in another similar community?

The U.S. Census (**http://quickfacts.census.gov/**) offers prepared "quickfacts" that can be printed easily and used to crosscheck other statistics from other sources or attached to reports. It is very useful to compare quickly the characteristics of local regions and cities.

In addition, the Census maintains a site where socio-information for the U.S., state, and local areas can be gathered (**http://factfinder.census.gov**). One difficulty is that the user will need to aggregate files for comparisons among comparable areas. Also, selected census information can be mapped and printed at the U.S. Census Bureau's Mapping and Cartographic Resources site (**http://tiger.census.gov**).

Does any source of information exist similar to "quickfacts" from the U.S. Census that contains a snapshot of socio-economic information that can used as comparison among metro areas and states? Is the state and metro data similar and comparable?

Yes, similar comparable data can be found at Site Selection Online (**http://www.siteselection.com**), which provides information on population, housing, income and occupation, transportation to work, and consumer expenditures. The user should select the *Area Demographics* followed by the *Metro Index* or *State Index* icons.

Further, this site contains a set of indicators that have been selected to determine the "quality of life" in each metro area and state. This information is readily available and a very useful part of market analysis comparisons among regions.

Where can I locate a user-friendly site for many different socio-demographic topics that could be classified as U.S. Demographics, Economics, and Education?

The Government Information Sharing Project, at Oregon State University, contains data that is divided into categories entitled "Demographics, "Economics," and "Education." The first category, "Demographics," contains data for U.S. counties; a Census of Population and Housing; Population Estimates by Age, Sex, and Race; and a file for Equal Opportunity. The "Economics" category includes Regional Economic Information; Agricultural Census information; U.S. Import/Export History; Consolidated Federal Funds Report; and Earnings by Occupation and Education. The "Education" category contains the School District Data Book Profiles. (**http://govinfo.kerr.orst.edu/**)

The state provides employment data for local areas, but, unfortunately, it is always six months old. Does any site contain local employment data that is as detailed and more current?

Yes. The Bureau of Labor Statistics (**http://www.bls.gov/**) offers employment data as recent as two months old for the state and selected local areas. Additional information is available on consumer expenditures and a national compensation survey. A number of local economic indicators for population, housing, and income are available.

Where can I locate information on current population and the saturation rate of convenience stores?

Those analysts who are involved with retail analysis should investigate the trade data maintained at **http://www.c-store.com**. Use the *Trade* icon that

will present population by state, the number of convenience stores, and a saturation rate.

Where can I locate reliable population projections for the metro market? Further, are these projections comparable to similar projections in comparable metro areas?
Free population projections on the Internet are limited. The U.S. Census provides projections to the year 2025 for state population and categories of age, race, sex, and Hispanic. The data can be found at **http://www.census.gov**, and the user should select the *People* and *Projections* icons.

A private site found at Site Selection Online (**http://www.siteselection.com**) contains projections for the percent of population growth for two years for both metro areas and states. Also, this site has a percent growth in the number of households for the next two years.

Detailed population projections typically rely on a statistical model that contains the analyst's assumptions on growth relationships to other indicators. The projections can be purchased from a number of private companies that are not covered here.

PUBLIC RECORDS

Where can I locate specific site information similar to the data in the public records?
Selected public record information on selected locations such as the assessed valuation and the parcel number of a post office address can be found at the Public Record Research System (**http://www.brbpub.com/**). Users should use the *Public Record Sites* icon and scroll down to the *County/City Sites* heading.

COMMERCIAL BUILDING ENERGY USE

What is the energy consumption and average cost of usage using various types of fuels in a commercial building in the U.S.?
The Energy Information Administration of the Department of Energy (**http://eiainfo.eia.doe.gov/**) distributes monthly and historical data on various types of commercial buildings. After opening the site, find the *Historical Data* icon, the subsequent *End Use Consumption*, and finally, *Commercial Buildings*.

BUILDING COSTS THAT ARE COMPARABLE ACROSS THE COUNTRY

A number of private sources provide building cost data. Where can I locate building cost data that is reliable and comparable across regions of the country?
The site of *Engineering News-Record* provides an historical and current building cost index that can be used for comparison among regions (**http://www.enr.com/cost/costcci.asp**).

MULTIFAMILY VACANCY RATES THAT ARE COMPARABLE ACROSS THE COUNTRY

Where can I locate the most recent U.S. multifamily vacancy rates for various types of units that can be used for comparison to the rates that can be generated from local sources?
The U.S. Census (**http://www.census.gov/**) maintains a site for multifamily vacancy rates. It contains rental vacancy rates and the same for housing. Once on the site, a user should select the *People/Housing* and the *Housing Vacancy/Data* icons.

COMMERCIAL TRANSACTIONS AND CAPITALIZATION RATES BY REGION

Where can I find regional commercial transaction prices and capitalization rates that are reliable? I can locate rates from individual brokerage firms, but they vary for the same region, and I don't know which to use?
Prices and rates are available from the National Council of Real Estate Investment Fiduciaries (NCREIF; **http://www.ncreif.com/indices**). This group maintains a portfolio of properties and extracts statistics for regions of the U.S.

HOUSING PRICES AND NUMBERS OF TRANSACTIONS

Where can I find U.S. and regional figures on transaction prices and numbers of housing sales other than those provided by the U.S. Census?
The National Association of Realtors Research Division (**http://www.realtor.org/research**) publishes statistics on housing markets that includes prices, sales, and affordability. A user should select from several icons that cover the volume of residential sales and prices.

CONCLUSION

Needed data that can help make a real estate market analysis better, particularly on local and metro areas, can be found at a number of unique websites. This paper has provided a brief introduction to each one by identifying a typical question that can be answered from the data available at the site. Every real estate professional who is involved in market analysis at any level and location should investigate these sites periodically to maintain and improve their knowledge of trends.

Several unique sites provide data that are difficult if not impossible to locate. One example is a quality-of-life indicator that is provided on one site for a number of metropolitan locations. Another site maintained by a university contains a shift-share calculator that will provide estimates for two periods of time selected by the user. Another is a site that provides a construction cost index that has historical statistics for comparing and tracking construction costs. All of the sites cited here have been used extensively and can save significant amounts of time for the real estate market analyst. REI

NOTES

1. These sites are the basis for a number of assignments in a college level class entitled *Real Estate Investments*. The students are asked to use the data for selected metro areas to determine the gap between demand and supply for a particular real estate product or service. The result is that the student has learned the methodology from the text and applied these techniques to various cities. Other valuable insights are extracted from the process such as the reliability of the data, metro areas where data is difficult to locate, and data that can be used for comparisons across the country.
2. Commercial brokerage sites are a source of data for specific property types such as price-per-square foot, rent-per-square foot, and vacancy rates for office or retail space. Sites may report the data by submarkets including the suburban area, central business district, and the total market. Selected data, such as rent-per-square foot, may be reported by several companies for the same market area. Every analyst must decide which data from which site is the best to use for the purpose of the study.
3. See The Counselors of Real Estate website (*http://www.cre.org*).
4. Schmitz, Adrienne and Deborah Brett, Real Estate Market Analysis, Washington, Urban Land Institute, 2001, p. 3.
5. *Shift-share* analysis is used to determine the reasons for growth in a specific region, and to compare one region with another. It is composed of three parts. The first is the *national growth* which is the change in local employment that would have occurred for a specific industry if it had growth at the national growth rate. The second is the *industry mix* which is the additional gain (loss) that would have occurred for a specific industry due to the industry growing faster (slower) nationally than all industries combined. The third is the *regional shift* which is the gain (loss) in local employment for a specific industry beyond the national growth and industry mix effects resulting from a specific industry growing faster (slower) than the same industry nationally. The "actual growth" of an area equals the sum of the *national growth, industry mix,* and *regional shift*.

Using Cost Segregation Studies to Improve the Bottom Line Amid Economic Uncertainty

By David Grant

To say that 2001 was a turbulent year would be an understatement of significant proportions. Virtually every aspect of American life was dramatically altered during the past year, and the commercial real estate industry was certainly no exception. At the outset of 2001, an unprecedented economic expansion fueled dynamic growth and prosperity throughout the industry. As the year drew to a close, however, the industry found itself at the mercy of a shallow, yet broad recession, the effects of which have begun to reverberate on a national scale. While uncertainty will undoubtedly be among the buzzwords of the 2002 economy, one thing can be said with absolute certainty—everyone will be looking for innovative ways to improve the bottom line.

While not a revolutionary new idea, the Cost Segregation Study (CSS) is an extremely valuable tool that often allows owners and investors to properly identify and depreciate property assets and realize significant, immediate tax benefits. Although the 2001 tax season is coming to a close, it is never too late to evaluate whether or not a CSS can benefit you.

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HOW MUCH CAN BE SAVED?

Cost segregation studies have generated millions of dollars in current federal and state income tax savings to owners of real estate. However, given the complicated nature of the study, it requires a tax expert with an intimate knowledge of the IRS code and the relevant tax cases, as well as a network of resources to maximize the benefits. To date, a relatively small number of CPA firms provide this service to their real estate clients.

The amount of the benefits from performing a CSS will vary depending on i) the type of property; ii) the cost of the property; and iii) the year it was placed in service.

Our experience in performing cost segregation studies for the real estate industry indicate that the savings can be as high as 5 percent of the asset cost. Savings of anywhere from $50,000 to $1 million, or more (depending on the type and size of facility) are routine.

WHAT TYPE OF PROPERTY BENEFITS THE MOST?

While almost every type of real estate can benefit from a CSS, experience indicates that certain types of property yield highest tax saving benefits from a CSS. Those properties include specialty use buildings, such as medical facilities, manufacturing facilities and high-end office buildings, to name a few. Warehouses and industrial properties tend to yield lower benefits, while residential garden apartments fall somewhere in the middle. We have found that even large tenant fit-outs can qualify for substantial benefits as well.

WHAT IS A CSS?

Almost anyone can identify and properly depreciate items such as office furniture and equipment over seven years for federal tax purposes. However, a high percentage of construction related costs, sometimes as high as 40 percent, are too commonly lumped into the building component of the property and depreciated on a straight-line basis over 39 years.

A CSS is the process of reviewing and identifying the costs a company incurs to acquire, construct, or expand its real estate holdings. It identifies the specific types of assets being placed in service and often leads to a cost allocation that assigns part of the cost to 15-year real property and seven- or five-year personal property. An analysis of costs can be conducted from either the detailed construction records—in the case where such records are available—or by using qualified appraisers, architects, or engineers to perform the cost allocation analysis. In both instances, a tax expert is also needed to identify the specific types of property that will qualify as shorter-lived assets.

HOW COST SEGREGATION WORKS

While personal property is usually depreciated over a five- to seven-year life, real property is typically depreciated over 39 years (commercial property) or 27.5 years (residential property). With a CSS, owners of real estate can shelter large sums of income now rather than later, by shifting certain property costs from a 39-year life to 15-year, 7-year, and even a 5-year life.

Construction-related soft costs have historically been lumped together as part of real property. However, by performing a CSS, these soft costs can be allocated to various components of the property, many of which have shorter depreciable lives than the real property component. The result is a faster write-off of costs previously included as real property.

Cost segregation studies can be performed on purchased facilities as well as newly constructed facilities, not to mention major renovation of existing facilities. Studies can be performed for real estate holdings placed in service as far back as 1987, even if the year is "closed" for tax purposes. Recently issued IRS revenue procedures permit companies that have claimed less than the allowable depreciation to claim the omitted amount in the year of the study. In addition, the segregated components continue to be depreciated over shorter lives going forward.

HCA CASE LIGHTS THE WAY

The Hospital Corporation of America (HCA) case, concluded in 1997, constituted a major win for tax practitioners and owners of real estate. In this case, the court concluded that property qualifying as tangible personal property under former investment tax credit (ITC) rules would also qualify in the same manner for purposes of tax depreciation. Thus, practitioners can look to the guidance under the former ITC rules when determining whether property is depreciated as real property (i.e., 39-year recovery period) or personal property (i.e., generally a five-year or seven-year recovery period).

The HCA ruling concluded that items such as kitchen hoods and exhaust systems and wiring for telephone and communications systems, to name a few, were tangible personal property rather than structural components of the building because the items were related to furnishing medical services rather than providing building services. These items can therefore be depreciated over a five- or seven-year period, generating immediate savings for property owners. Similar logic applies to other industries and activities, particularly where a part of a building's features are for the specific use of the company's business operations.

The key to deriving maximum benefit from a CSS is to understand the intricacies of the IRS code, and the definitions of Tangible Personal Property versus Structural Components as set forth by the IRS. The opportunity for individuals and companies that own or have investments in sizable real estate portfolios to realize significant financial benefits through cost segregation is substantial, as are the savings. With tax laws and interpretations continually changing, the time to act is now. A qualified tax expert can help you determine if a CSS is right for you in these times of economic uncertainty. REI

California Civil Code §3110.5: Is the Cure Worse Than the Disease?

by Robert J. "Mike" Cathcart and Bryan C. Jackson

Seeking to cure perceived slow payment practices by owners, the California Legislature may have created an ineffective cure that is worse than this infrequent disease by enacting Civil Code §3110.5. This new statute was sponsored by the Construction Employers' Association, supported by several subcontractor associations, and passed through the Legislature without any significant opposition or notoriety. Now, a broad range of construction consumers and contractors are scrambling to understand §3110.5 and how it affects their projects. Essentially, §3110.5 will add significant costs to private projects, increase the possibility of disputes, and will probably fail in its primary goal of securing the contractor's timely payment stream from the owner. During these recessionary times, neither the contractors nor the owners should welcome the expensive burdens imposed by §3110.5. Adequate "traditional" protections already existed to secure payments to contractors through mechanics' liens, stop notices, prompt payment rights, bond remedies, work stoppage rights, and private contract rights, to name a few. Perhaps a better cure for slow-paying owners would be to streamline these traditional protections rather than to invent a new, and arguably ineffective, costly, and burdensome scheme.

ABOUT THE AUTHORS

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SUMMARY OF §3110.5

Provide and Maintain Security: This new statute requires non-exempt owners of non-residential, private construction projects costing more than $5 million, or owners of less than a full interest in such projects costing more than $1 million, to provide and maintain a payment bond, an irrevocable letter of credit or a construction security escrow account inuring to the benefit of the original contractor. The amount of such bond, letter of credit, or escrow account must be 25 percent of the contract amount for projects scheduled to be completed within six months, and 15 percent of the contract amount for projects scheduled for six months or more. The bond, letter of credit, or escrow account is intended to secure the owner's timely payment obligations to the general contractor on the project.

Threshold Levels: Owners of a fee simple interest in the project, defined to include certain leases of 35 years or more, and owners of lesser interests, are obligated to provide the required financial security. If the owner is a fee simple owner or long-term lessee under the statute, the security is required for projects with a construction cost in excess of $5 million. If the owner holds a non-fee simple interest, such as a lease with a term less than 35 years , then the security requirement is triggered for projects costing in excess of $1 million.

Disclosure of Loan Amounts: At the time of contracting for any construction project covered by §3110.5, the contracting owner must supply to the original contractor a certified copy of the recorded construction mortgage or deed of trust disclosing the amount of the loan. Requiring an owner to provide loan amounts could constitute an invasion of privacy and may encourage contractors to assert claims for more money if they perceive that additional funds are available on the project.

EXEMPTIONS

Majority Ownership: Owners who are a majority owner of the original contractor are exempt from the requirement of posting the security. Perhaps this exemption will spur the formation of new joint ventures with contractors. However, owners who hope to form such joint ventures will have to have their own contractor's licenses before forming such joint ventures under current law, Cal. Bus. & Prof. Code § 7029. Alternatively, rather than joint ventures, perhaps this statute will cause more owners to acquire subsidiary construction companies.

Qualified Publicly Traded Companies: By its terms, §3110.5 does not apply to those owners who pass certain financial strength tests. One exemption is for "qualified" companies whose non-subordinated debt securities are rated as "investment grade" by a nationally recognized rating agency and are publicly traded on the New York, American, or NASDAQ stock exchanges. If a qualified company's stock is downgraded below investment grade, it will no longer be exempt from §3110.5. Also, an owner is excluded if it is a wholly owned subsidiary of a qualified company provided the parent guarantees "the obligations of the subsidiary under the construction contract." The statute does not appear to limit the guarantee to the payment obligations of the owner.

Qualified Private Companies: Also, §3110.5 does not apply to "qualified private companies" with "net worths" in excess of $50,000,000. The net worth must be calculated according to "generally accepted accounting principles." The statute is silent as to how that net worth must be demonstrated, whether by letter, certificate, affidavit or declaration under penalty of perjury, unqualified or qualified opinion, or by whom.

Fairness Concerns: The financial strength exemptions seem unfair and prejudicial to smaller or midsize owners and lack a credible nexus to the alleged purpose of securing timely payment to the contractor from the owner. Small owners, despite excellent payment histories, will be unfairly saddled with significant additional transaction costs while bigger "qualified" owners will have the advantage of avoiding the added §3110.5 transaction costs, even if the qualified owners have checkered payment histories. Again, the Legislature should have left the evaluation of owner payment risks to a contractor's own due diligence rather than placing unfair and arbitrary thresholds on transactions to the disadvantage of smaller to midsize owners with excellent payment histories.

HISTORY

Legislative Analysis: The Legislative Analysis for the underlying bill indicates that the bill was proposed in response to *Wm. R. Clarke Corp. v. Safeco Ins. Co.*, (1997) 15 Cal. 4th 882 ("Safeco") and *Capitol Steel Fabricators, Inc. v. Mega Construction Co., Inc.*, (1997) 58 Cal. App. 4th 1049 ("Mega"), which held that construction contract "pay if paid" clauses are unconstitutional waivers of subcontractor mechanic's lien rights, even if the contract specifically agreed to preserve those rights. According to sup-

porters of Civil Code §3110.5, under *Safeco* and *Mega*, a contractor may no longer delay paying its subcontractors while waiting for payment from the owner. Therefore, supporters of §3110.5 argued that without the "pay if paid" clause, contractors may be required to pay their subcontractors before they receive payment from a "slow-pay" owner. Accordingly, contractors may, in a sense, become financial guarantors of a portion of the owner's payment obligations on the project.

The bill's supporters, including the Construction Employers' Association, the California Chapter of the American Fence Contractors' Association and the Flasher/Barricade Association apparently argued that the existing traditional remedies available to contractors and subcontractors to secure payments from owners were insufficient. Traditional remedies include statutory mechanic's lien and stop notice rights, payment and performance bonds, and contractual protections that the parties might fashion. Also enacted in 1998 in response to *Safeco*, Civil Code §3260.2 allows contractors to stop work upon ten days' notice for nonpayment of undisputed amounts by the owner. Essentially, §3260.2 provides stop work remedies similar to §3110.5 without the costly bond, letter of credit, or escrow account requirements. Nevertheless, proponents of the Civil Code §3110.5 complained that the existing legal remedies could take too long. Perhaps the Legislature should have shortened deadlines and streamlined procedures in existing traditional remedies, rather than create a whole new set of costly barriers to private construction projects.

Governor's Analysis: Governor Davis signed this law in October 2001, even though Governor Wilson vetoed a similar bill in 1998. Also, according to the legislative history, a similar bill previously "died" in the Legislature. As Governor Wilson stated in his veto message, "[c]ontract matters such as payment terms and the use of security instruments are best left to the contracting parties. General contractors are free to negotiate terms that are similar to the provisions of this bill. Similarly, property owners should be able to negotiate these issues without legislative interference."

Now, rather than leaving payment terms and security to the contracting parties, and rather than relying on all the other traditional protections referenced above, the bill's sponsors, supporters, the Legislature and Governor Davis have created an ambiguous, burdensome, and expensive scheme that cannot be waived contractually. Participants in the construction industry now face the challenge of how to accommodate new and ongoing construction projects under the requirements of §3110.5.

APPLICABILITY OF CIVIL CODE §3110.5

The statute became effective January 1, 2002. By its terms, it applies to construction, alterations, or repairs on real property. It does not apply to public works, to single family residences including subdivisions, or to housing developments eligible for Government Code §65915 density bonuses. The term "single family residences" means "a real property improvement used or intended to be used as a dwelling unit for one family." Although somewhat vague and susceptible to dispute, the language probably does not exempt apartment or condominium projects unless the density bonuses apply.

RETROACTIVE APPLICATION

Another potential for dispute arises from the lack of language discussing retroactive application. While some will cite constitutional protections against retroactive application, the more troubling arguments will probably center on the ongoing payment obligations of various owners that occur after the law became effective on January 1, 2002. In other words, while the statute should squarely apply to construction contracts executed after January 1, 2002, will it also apply to payment obligations that commenced before January 1, 2002 but continue after that date? Further, does the statute apply to contracts signed in 2001 where work does not commence until 2002? Does the statute apply to projects where the work commenced in 2001, but the contract is not executed until 2002? What if the parties sign a contract in 2002 but date it "as of" 2001? In short, the statute's silence on these and similar issues may lead to disputes and uncertainty.

SECURITY

The amount of the security, whether through a bond, letter of credit, or escrow account, is 25 percent of the construction cost if the project is to be completed within six months, and 15 percent of the construction cost for projects scheduled for six months or longer. The amount is based on the fixed price contract amount, the guaranteed maximum price ceiling, or the parties' "good faith estimate" as to the total cost anticipated to be incurred if the contract is neither a fixed price nor a guaranteed maximum contract.

The security "shall be used only when the contracting owner defaults on his or her contractual obligations to the original contractor." Those obligations do not appear to be limited to the financial obliga-

tions of the owner except by implication from the other terms of the statute. This ambiguity could be used by a contractor to argue for securing non-payment obligations, such as delay, extra work, and injury claims which would increase the required security if they are converted to mutually agreed change orders that increase the contract amount.

The statute provides that the security may be in one of the three described forms. It does not give the contractor the right to demand one or another of the specified forms of security. Presumably, the owner may opt for whichever form it wants to provide.

Payment Bond: The bond option is a payment bond issued by a specifically defined, California-admitted surety in the required amount "payable upon default by the contracting owner of any undisputed amount under the contract that has been due and payable for more than 30 days." Again, while the intended purpose of the statute is to secure payment to the contractor, many owners may "dispute" their alleged late payments, thereby preventing timely payment to the contractor through the payment bond.

Letter of Credit: The letter of credit must be provided by a financial institution as defined in Financial Code §5107, in the 15 percent or 25 percent amount, "inuring to the benefit of the original contractor," with a maturity date and terms to be determined by agreement among the owner, original contractor and issuer of the letter of credit. The letter of credit must be maintained "until the contracting owner has satisfied all of its payment obligations to the original contractor." Of the three security options, the letter of credit allows the most flexibility by allowing the terms to be determined by the owner and contractor. Accordingly, perhaps the letter of credit can be fashioned to create the best mutually beneficial arrangement between the parties. Further, because most owners will obtain financing from a construction lender for their projects, the hope is that such lenders will begin to offer affordable §3110.5 letters of credit that are underwritten and funded by the construction loan. Essentially, if a lender has already underwritten a construction loan for the project, it should be able to provide a letter of credit that would be secured by the construction loan in the amount of 15 percent or 25 percent of the contract amount. Further, such letter of credit could only be drawn by the contractor pursuant to the specific terms and requirements contained in the letter of credit.

Escrow Account: The escrow account option is defined in the statute with the most detail. The account holder must be licensed or properly exempt from such licensing requirement under the Escrow Law contained in the Financial Code. The account must be located in California. Also, the owner is required to reasonably satisfy the original contractor that it has "a perfected, first priority security interest in the construction security escrow account and all funds deposited by the contracting owner therein and the proceeds thereof." Such satisfaction may be by a written opinion of counsel, which may increase transaction costs and malpractice risks when using escrow accounts.

Although the escrow funds are the property of the contracting owner, the funds are held as security on deposit for perfection of the secured interest. The funds are to be disbursed only on joint authorization of the owner and original contractor. Accordingly, there must be a certain level of cooperation between the parties before the funds can be released. Thus, if there is a dispute, either party may abuse this joint authorization requirement thereby again vitiating the underlying purpose of §3110.5, which is timely payment to the contractor.

The contracting owner is required to deposit the escrow funds into the account prior to commencement of the work in the same required amount of either 25 percent or 15 percent of the construction costs depending on the time for completion. If the contract authorizes withholding of retention, retention amounts are to be added to the escrow account as they are withheld. Accordingly, for owners, the escrow account may be the least desirable option since it has the added costly requirement of holding retention in addition to the underlying amounts. Accordingly, on a typical 10 percent retention project, the owner will need to advance 15 percent or 25 percent of the construction loan proceeds to fund the escrow prior to the commencement of work and then add retention amounts every month thereby causing up to 25 percent to 35 percent of the construction funds to be advanced and placed in an escrow account during the construction work. This retention requirement makes the escrow account option even more expensive in terms of interest amounts charged on such advanced funds.

The escrow funds can be used for progress payments to the contractor whenever the amounts on deposit exceed the amount remaining to be paid under the construction contract. When the original contractor has been paid in full under the contract, any remaining funds can be disbursed to the

owner. However, again, all of these payment options must be accomplished with the authorization of both parties. Therefore, if one of the parties decides to create difficulties, perhaps to gain leverage in another dispute, they might withhold their authorization for disbursements, again defeating the intent of the statute to secure timely payment to the contractor.

Finally, the statute allows the owner and original contractor to agree to additional conditions for the disbursement of the escrow funds, so long as the amounts required to be deposited are not less than the required amounts.

No Waiver: The statute provides that it is "against public policy to waive the provisions of this section in any contract for any private work of improvement to which this section applies."

REMEDY FOR NONCOMPLIANCE

The statute requires that the owner provide and maintain one of the three specified forms of security. The only remedy under the statute for the owner's failure to provide and maintain the required security is the contractor's right to stop work. Upon any such failure, the original contractor may make a written demand for compliance with §3110.5. If the owner fails to provide the required security under §3110.5 within 10 days of the written demand, the original contractor "may suspend work until the required security is provided and maintained in accordance with this section." However, since work suspension is not mandatory, the contractor may forego the statutory remedy and secure payment through other means, including the traditional means listed at the beginning of this article.

Contrary to the stated purpose, the statute does not provide an expedited or self-executing remedy. Except for the payment bond option, which requires that the bond be payable as to "undisputed amounts" not paid within 30 days, no expedited self-executing procedure for prompt payment exists. Further, as detailed above, if the owner disputes such payment, then even payment under the bond can be withheld. Therefore, the statute might not lead to speedier, more efficient legal remedies for the contractor as envisioned.

UNRESOLVED ISSUES

Contractors, owners and lenders are concerned about the impact of §3110.5 on construction projects. The statute is sufficiently ambiguous so as to make its applicability nebulous. The added cost through payment bond premiums, increased fees for a letter of credit or an escrow account, and increased interest charges from lenders having to advance construction funds for a letter of credit or escrow account can be greater than any supposed increase in benefits otherwise provided by traditional remedies under existing law.

Accordingly, the statutory vagueness of §3110.5 raises several initial questions:

- Does the statute apply to apartment and condominium projects? Although it probably does, that conclusion is arguable.
- Can an owner who lacks sufficient bonding capacity require a contractor to obtain the security, or to supply a guarantee or other evidence of bonding capacity in order to facilitate the owner's acquisition of a bond?
- Would such an effort constitute an impermissible attempt to waive the statute?

Although the payment bond option includes a requirement that the payment bond be payable if the owner is more than 30 days in arrears on undisputed payments, there is no similar requirement for payments under the letter of credit and the escrow account options, which only appear to provide "security" for the owner's payment obligations. In fact, the escrow account option apparently requires that amounts be disbursed "only upon the joint authorization of the contracting owner and the original contractor, or in accordance with an order of any court." Accordingly, will this joint authorization requirement lead to additional disputes, when one party withholds authorization of a disbursement to gain leverage in another dispute? Will an uncooperative contractor then be liable under its construction agreement indemnity clause, delay clause, or consequential damages clause?

Can the construction contract provide that the original contractor must hold the owner harmless from any consequential damages or third-party claims for delay, acceleration, or other losses resulting from the original contractor's stop-work rights under §3110.5, or will such contract provisions constitute impermissible waivers of §3110.5?

POSSIBLE EXEMPTIONS

Owners and contractors have several options for dealing with Civil Code §3110.5, assuming the statute applies to their project.

First an owner can try to rely on the exemption for a "qualified" company if it is publicly traded on the New York, American, or NASDAQ exchange and

has investment grade nonsubordinated debt securities, as defined in the statute. Similarly, an owner could rely on the exemption for a "qualified private company" if it maintains a net worth exceeding $50,000,000 "in accordance with generally accepted accounting principles." More small- to mid-size companies might form joint ventures or vest property ownership in wholly-owned subsidiaries of "qualified" companies thereby gaining the economic advantage of being exempt from §3110.5. In fact, more joint ventures and creative ownership formations may be the unforeseen response to §3110.5.

Second, an owner can provide a guarantee of its obligations from a parent "qualified publicly traded company" or "qualified private company." Under the terms of the statute, and by implication, the guarantee should be limited to the financial obligations of the owner to make timely payments of undisputed amounts under the contract. Unfortunately, the express language of the statute at subsection (f) requires that the "obligations of the subsidiary under the contract" be guaranteed. Nevertheless, a prudent parent company should carefully consider limiting its guarantee to avoid onerous performance obligations such as provision of a coordinated design, construction administration services, or other duties. If the contractor ever threatens to stop work by alleging that the guarantee is too narrow, the parent company should carefully consider fighting such threats rather than expanding its guarantee to cover anything more than the payment of undisputed amounts under the contract.

Third, even if the statute applies to the project and the owner is not exempt, the owner and original contractor can choose to do nothing. The statute does not require any specific act until or unless the original contractor decides to serve notice demanding security on penalty of a work stoppage. For many participants in the construction process, acting in good faith, performing carefully, working together, communicating openly, and trusting each other could work to avoid compliance with §3110.5, which drives up the cost of construction for the owner, and ultimately, the users of such projects. For others, or on projects where the "honeymoon" turns sour, Civil Code §3110.5 provides the original contractor with another "arrow in its quiver" leading to a work stoppage and an additional dispute. The problem with the strategy of ignoring §3110.5 is that construction lenders will most likely add compliance with §3110.5 to their long list of requirements. Therefore, if an owner wants a loan, it will most likely have to comply and further certify that it is in compliance with "all" laws.

However, if initially not complying with §3110.5 remains an option for an owner, any risk that the security demand will surface should dictate steps to line up the security in advance, whether the security will be a payment bond, a letter of credit, or an escrow account. Preparatory steps to verify bonding capacity or the availability of a loan or loan terms to cover the escrow or letter of credit requirements could avoid the added trouble and expense of a last minute effort to do so under the threat of a 10-day stop-work notice from the contractor.

Finally, if a letter of credit, escrow account, or payment bond is the chosen vehicle for security, advance negotiation of the terms with the issuer, surety, or lender in order to facilitate issuance or funding if and when necessary during the project can forestall a work stoppage. Then, if the contractor demands that the security be provided and maintained, the process should be smoother. Nothing in the statute prevents the letter of credit, bond, or escrow account from being secured by loan funds, and prior planning could make the terms for such a procedure more acceptable. Novel loan products, creative arrangements for issuance of letters of credit secured by the construction loan, and innovative escrow accounts funded on a contingency basis from the construction loan will hopefully be created by the lending community to address these needs.

CONCLUSION

The Legislature has created a series of problems that only an underemployed lawyer could love. Owners and contractors, eager to get about the business of construction will have to retain counsel to navigate through the various demands created by Civil Code §3110.5. What the Legislature and the statute's proponents intended as a cure for slow payment may be worse than the perceived illness. At a minimum, many owners will need to re-evaluate project feasibilities, with increased construction costs attributable to the costs of providing the required security or arranging for it in advance in case the dreaded 10-day notice to stop work is asserted by the contractor. During the current recession and anticipated recovery, §3110.5 and its costly burdens on the development industry could not be more poorly timed. Perhaps a careful reevaluation of the traditional remedies should be undertaken by the Legislature, contractors and owners, so that costly overreactions to slow-payment concerns can be remedied in more effective ways.

Case Study: Greyfields as an Emerging Smart Growth Opportunity with the Potential for Added Synergies Through a Unique Mix of Uses

by David C. Bucher

ABOUT THE AUTHOR

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Greyfields are failing regional and super regional malls located in inner city and first-ring suburbs. Mixed-use redevelopment on these sites has the potential to benefit local and regional communities as well as provide for sustainable, long-term, economic returns to investors. The proposed design concept incorporates green design with a unique mix of uses that includes an educational component. The green design and the mix of uses combine to create synergies that translate into a higher capture of the target market—the X and Y generation of immigrants and minorities; create a 24-hour hybrid sub city; utilize in-place public services and infrastructure while increasing tax revenues; and provide on-site necessity retail and services as well as educational and civic facilities by which residents can increase personal income and their quality of life. This redevelopment concept, although not found in the market today in entirety, is a combination of strategies currently being utilized in various locations and product types.

SMART GROWTH

Smart growth guidelines encourage the development of communities that facilitate the use of mass transit and that utilize increased density in infill locations where the infrastructure of public utilities and roads already exist. Design guidelines that emphasize pedestrian-friendly

live-walk-work communities are the goal of smart growth initiatives, and good working relationships between local governments and metropolitan and rural interests are essential in promoting smart growth projects.[1]

Higher density development puts less strain on local and regional finances, as there is less expense to supplement infrastructure build-out and the expansion of mass transit systems. Some argue against higher densities and urban living. Some say, "The draw of more centralized living places must be viewed as, at best, an emerging trend."[2] The decaying inner suburbs and cities cannot be erased nor ignored. They are a reality that can improve or continue to decay. Governments, developers, and investors need to move the areas in a direction of positive outcome.

Americans spent 4.5 million hours stuck in commuter traffic, a 325 percent increase since 1982. Rush hour has grown to six hours a day, twice as long as 1982. [3] What are the social costs associated with commuting? These costs include increased pollution levels, lost labor hours, lost time of families being together, increased stress levels resulting in health issues, and many more. Who absorbs these costs? Who really benefits from sprawl? Will fuel prices forever remain affordable to all economic groups? If not, then how will the increase in fuel prices affect consumer behavior in the long run? These questions are of ongoing debate within the urban planning and development communities. With immigration trends and the growing number of working class families with less disposable income and time, more centralized living places are inevitable, are in demand, and will provide financial rewards for those who promote the option and include uses that reinforce positive externalities (the creation of synergies).

GREYFIELDS

"Greyfields are America's best opportunities for developing transit-oriented, in-fill neighborhoods."[4]

There are approximately 2,076 regional and super regional malls in the United States. Sales dollars per square foot of retail space in a mall usually denotes the productivity of the retail property. Malls are classified as Greyfields if their sales are at or below $150 per square foot. In comparison, Class "A" malls have sales of $400 per square foot and higher.[5] As of 4Q 2000, there were approximately 140 retail malls (7 percent of all regional and super regional malls) that were considered to be Greyfield sites and another 200 to 250 (12 percent) malls with the potential to decay to Greyfield status within five years. Together these represent 18 percent of the national enclosed mall inventory).[6]

Greyfield malls have a lower occupancy rate than non-Greyfield malls (84 percent versus greater than 90 percent). The expectation is that Greyfields have lower occupancies than 84 percent. The conclusion is that with significantly lower rents, these malls simply reduce vacancy without increasing profits from percentage sales rent. Gross Leasable Area ("GLA") of most Greyfields is approximately 500,000 SF where the average size of the better performing malls is 780,000 SF. Greyfields are 8 to 10 years older than non-Greyfield malls. The average Greyfield mall is 32 years old with the last renovation over 13 years ago. They tend to be architecturally obsolete, in locations with declining economic conditions, and do not have top-tier anchors if the anchors have not already gone dark.

These properties are more often located in inner cities or first-ring suburban neighborhoods of moderate to low-income levels. These areas offer older single-family and duplex housing options that are priced below the broader market. As cities expanded, these close-in areas lost value as population, capital, and investment shifted to the more distant affluent suburbs.[7]

Most in-fill sites are not big enough to generate the synergies necessary to justify the costs and risks associated with mixed-use development, but the average Greyfield site is just over 45 acres.[8] Greyfields are big enough to distribute site development costs to various product types. In addition, many Greyfields are able to utilize mass transit because they are either already bus hubs, or are on transit lines, or allow for sufficient density and activity to support transit service. A specific mix of uses can create synergies in sufficient scale to enable sustainable (if not accelerating) cash flows over the long run. This concept embraces the full range of smart growth principles.

MALL REVITALIZATION STRATEGIES

The average Greyfield has 2.3 million SF of competing retail space in 22 centers within a 5-mile radius. These Greyfields are most often older and smaller than competing regional malls. The small-

er structures do not accommodate the current anchor strategy that calls for larger stores providing a larger market capture. According to the Gravity Model of retail strategy, a mall's capacity to capture a larger trade area is directly related to its size.[9] More inclusively, drawing power of a retail mall depends on size, architectural design, location, age, type of anchors, tenant mix, and the general economic conditions of the surrounding area.

In order to enhance financial performance, mall owners often expand, renovate, or re-tenant the existing mall structure. Some owners have converted these failed regional malls into data centers or offices. None of these approaches allow for the urban synergies created by a mixed-use strategy.[10]

According to Life Cycle Theory, retail properties depreciate in value without ongoing capital expenditures and maintenance, or occasional modernization or renovation. The majority of Greyfield malls are privately owned; this may result in a lack of working capital needed to maintain the property.[11] Other important variables that reinforce deteriorating mall sales are changing demographics of the market area over time, changing consumer patterns, and changing retail strategies.[12]

An example of a repositioning attempt is that of Baltimore's Westview Mall. Over the past 5 years, more than $45 million was invested in the asset. Westview Mall opened in 1958 as an open-air mall and was converted into an enclosed regional mall in the mid-1980s. Recent renovation dollars were spent in an effort to expand and renovate the existing retail center and now yet another strategy is focused on converting the enclosed mall back into a strip center.[13]

What these strategies fail to recognize is that the property's market demographics no longer support a regional platform. New retail platforms in the area are better located and are better tenanted. "A retail form locates at the center of its market."[14] The original market demographic for Westview Mall has shifted. The capture area has become local and will continue not to support a regional strategy.

Greyfield sites could better benefit from a mixed-use redevelopment strategy that includes residential, necessity retail and services, and civic uses that include an educational component. These uses are more in-line with community needs and are more apt to create externalities that reinforce usage. These sites are potential hybrid Edge City neighborhoods.[15] Edge cities are defined as new concentrations of office, retail, residential, and employment outside the CBD.[16] "I see this as one of the prime opportunities to repair the (first-ring) suburbs." says Peter Calthorpe, principal of Calthorpe Associates, a Berkley, California, urban design firm that specializes in developing pedestrian-friendly, mixed-use communities.[17]

INEVITABLE GROWTH

America's demographic trends are creating substantial demand for redevelopment in built-out inner city districts and close-in in-fill locations. These demographic trends offer the most promising returns in multi-family housing. Developers that are able to tap into these opportunities should be able to sell projects quickly and at strong multipliers.[18]

Two longer hold strategies are to begin investing in the development of these Greyfield sites now and benefit from long-term appreciation or evolve the development of such sites as a core competency and collect development fees from Greyfield owners who want to benefit from the value creation potentials of mixed-use redevelopment. Post Properties is an example of an institutional investor that has adopted an "infill" program—developing vacant land or redeveloping land in close-in suburbs and the city.[19] Other investors need to have foresight and recognize and embrace this inevitable trend.

The Middle Atlantic, Pacific Coast, South Atlantic, and East North Central regions of the United States account for 68 percent of all Greyfield sites in the United States.[20] These are some of the fastest urban growth areas in the country. This growth is being spurred by immigration, which continues to generate some 700,000 new U.S. residents each year—with Spanish speaking nationalities continuing to lead the way.[21] The 2001 census revealed the "Browning of America." Non-white resident population growth was highest among residents and immigrants of Latin and Asian descent.

The combination of supply constrained centrally located infill sites and the increasing population growth trends attest to the Greyfield development strategy beginning to ripen. Baby-boomers, younger singles, and newly formed families in larger metropolitan areas are more frequently

rejecting suburban subdivisions in favor of close-in developments within mixed-use configurations.[22] With this continued growth in demand for such development, mixed-uses pose the highest and best use for these Greyfield sites if the interaction between the needs of tenants and residents is carefully considered in the selection of uses.

NIMBY

"Today, opposition to development seems to be more sophisticated, vociferous—and effective," and this opposition was identified by ULI Trustees as their number one concern.[23]

"Housing development today has less to do with getting approvals than with wooing local residents. The day of forcing a product on cities and communities is over." Smart-, controlled-, and slow-growth sentiment manifests itself through long approval processes, increased environmental reviews, and higher impact fees.[24]

Neither residents nor local governments should be opposed to Greyfield redevelopment. In the case of Greyfields, the mall has ceased to yield sufficient tax revenues and areas immediately adjacent to the sites are already in decay. Residents, once educated about the mix of uses, should welcome the new amenities. Developers need to remember that approval comes from the grass roots: by attending public meetings and by listening to what the public wants and does not want. They need to perceive what the community needs and to educate people on the potential uses to be provided. "Developers reacting to the marketplace—not to rules—conceive the best plans for a community."[25]

It costs the local government more to provide public services to housing than tenants pay in taxes. Local residents can be expected to block as much housing development as possible and to try encouraging as much retail development as possible to raise the amount of local sales tax receipts.[26] Projects of high density will also increase traffic volume, congestion, and noise, but the inclusion of Performance Zoning[27] can resolve negative externalities. "All developments manifest external economies: environmental degradation, loss of agricultural lands and open spaces, private costs of traffic congestion, and fiscal impacts on local governments and utilities. Compact, mixed-use development significantly reduces the impact of each of these external costs."[28]

ECONOMIC IMPACT

Greyfield sites are located in decaying urban areas. Conversion of these non-productive, large, urban, in-fill locations into high-density residential and mixed uses will result in increased property and sales taxes and will provide a positive value impact on surrounding properties.[29] With an educational component that focuses on technology, literacy, math, and communication skills via a fiber optic network integrated throughout the property, residents can improve their skill sets resulting in better jobs, an increase in personal income, increased retail sales, and more tax revenue. The redevelopment of Greyfield sites will also enhance the performance of remaining regional malls by reducing the supply of regional retail and increasing the population density within their market area.

In the Greyfield development case, clustering or agglomeration economies of mixed-uses on the site and the resulting economies of scale associated with the surrounding community are necessary to support the high fixed costs associated with such a project. Buildings situated in greater mass also allow for a less extensive sewer delivery and collection system resulting in lower tap fees and impact fees.[30]

Areas surrounding Greyfield sites are most often devoid of community spaces, child and elderly care, medical services, office space, quality schools, educational programs for adults—including English as a second language, civic uses such as libraries, community centers, and police substations. An inclusion of these uses in the redevelopment mix has the potential to drive up surrounding property values and to provide additional benefits to local residents. These positive externalities are the synergies associated with the clustering of specific uses that, together, create a competitive advantage for the mixed-use development and make it less susceptible to economic downturn as well as produce a functional community for the long run.

In essence the local community, in the Greyfield development case, experiences positive synergies and the region receives increasing tax revenues over time as well as a more productive population.[31] In addition, the revitalization of underutilized resources (land and work force), and the benefits it will bestow on existing residents, will result in an additional inflow of new residences and businesses that will rehabilitate or replace additional

under-performing assets. This trend begins to feed on itself and offers further revitalization of surrounding neighborhoods while again increasing tax revenues to the region through increased property, income, and sales tax revenue.[32]

REDEFINING A GREYFIELD

Built in 1968, Cinderella Mall in Englewood, Colorado, was the largest enclosed mall west of the Mississippi River. The site contained some 7,000 parking spaces and 275 shops within 2 square miles of shopping area. In 1974, the center contributed 52 percent of the city's sales tax revenue. By the mid-1980s, the mall was stagnating and the first anchors began to go dark. The city bought the property in 1997 after the last anchor vacated.[33]

After the town of Englewood bought the failing mall, a master developer was selected and the site was rezoned to accommodate a mix of uses. A development was erected with apartments (438 units—one, two, & three bedroom), 40,000 SF of office, a civic center, 140,000 SF of necessity retail and restaurant space, a health club, a 65,000 SF multi-screen cinema, and two stand-alone retail stores, all on a light rail connecting the site to downtown Denver. In addition, the 55-acre site accommodated a town hall and community library. The first retailer to go in was a stand alone 134,000 SF Wal-Mart, which is in line with the surrounding demographics. The new mixed-use project is called "City Center Englewood." In 1980, when Cinderella Mall was at its peek, the annual property sales tax revenue topped out at approximately $3.5 million. For FY1997, sales tax revenue fell to below $250,000. The redevelopment of Cinderella Mall, in its first year, is expected to generate $500,000 to $1 million in tax revenue.[35] The sales tax revenue for the mixed-use development, although not expected to ever reach the levels of the mall in 1980, provides for a more sustainable cash stream over the long run.

The public private partnership associated with this development was instrumental in the development's fruition. The city of Englewood contributed $11 million of the $34 million of infrastructure costs and the Regional Transportation District contributed another $5.7 million.[36] Although there was an initial investment on the part of the local government and agencies, the end result is a long-term return of taxes and increased quality of life for residents.

THE MODEL TO FOLLOW

City Heights is a close-in suburb in San Diego that was part of the second wave of urbanization to follow the development of the Central Business District (CBD) in the late 1800s. The trolley, which served to carry workers from City Heights to the CBD, was shut down in the 1940s. Because the area was developed before autos were the main source of transportation, streets were narrow and parking was almost nonexistent. Single family homes were divided into three- and four-apartment units and the area deteriorated quickly. In 1960, the first shopping mall was built to the North of City Heights, which attracted retailers and businesses away from the close-in suburb.

The concept behind the new City Heights Community Center was to convert a 37.6-acre portion of the decaying, low-density, single-family neighborhood into a higher density live-walk-work community with self-help opportunities in the form of a learning center and recreation facilities combined in the form of an urban village. Elements of the City Heights development that were not included in the City Center Englewood example include: a police substation; a new elementary school; a swim center; four classrooms for a Head Start learning center with an adjoining day-care center (elderly care could be an added synergy here); and a 32-classroom community college for adult education, literacy training, and English as a second language classes.[37]

The master plan encourages a 24-hour synergy with respect to the educational, recreational, retail,

and residential facilities. State of the art information technology is the nervous system that creates the essential capacity for the library and learning centers to produce the greatest economic return and public benefit. Area residences learn new skills in order to get better paying jobs and become more productive workers.[38]

PUBLIC PRIVATE PARTNERSHIPS

Public private partnerships are the essential element in any development of this magnitude. Greyfield development, with its mixed components and complex financing, will require cooperation of local governments and residents as well as an initial public investment. Public investment can be further promoted through corporate sponsorships. There exists the potential for a co-branding strategy where a corporation, in exchange for some contribution of material or funds might have their name associated with some component of the uses (i.e., The Apple Adult Learning Center—Think Different).

Cities spend their community development grants on four types of projects: improved housing, renewed infrastructure, job development, and programs that support the young and the old.[39] Greyfield development with the educational, residential, and retail and service components promote all of these initiatives. Instead of using large tax breaks to entice retailers to lease space in these failing retail centers, local governments can facilitate the mixed-use zoning and promote redevelopment. ". . . Failed regional shopping malls can be transformed into vibrant profitable new neighborhoods."[40]

POSITIVE IMPACT

"If economic trends reverse themselves—and begin to support economic and racial equality—then central cities and first-ring suburbs may be able to support genuinely diverse neighborhoods."[41]

Greyfield development incorporates a positive impact on five of "the ten most likely influences on the American metropolis for the next 50 years." These five influences are: 1) growing disparities of wealth; 2) a perpetual "underclass" in inner cities and inner ring suburbs; 3) the Internet; 4) the deterioration of "first-ring" post-1945 suburbs; 5) racial integration as part of the increasing diversity in cities and suburbs.[42]

By incorporating educational centers into the mix of uses, Greyfields have the potential to facilitate residents' ability to pursue careers with higher incomes. The locations of these sites are within the inner cities and inner ring suburbs or "first-ring," post-1945 suburbs. The mix of uses and resulting synergies can reverse the decay currently taking place. The mix of uses being proposed here can enhance the integration of these areas as will be discussed later in the marketing segment. The incorporation of the fiber optic technology provides the educational elements, office component, library, residential units, and services with access to information, the Internet, and intranet communities.

DESIGN

"Where there is no vision the people perish."[43]

One type of hybrid development already conceived, as in the City Heights example, is to place a traditional town center in the midst of a conventional suburban neighborhood. Older enclosed shopping centers from Winter Park, Florida to Lafayette, California are being razed and replaced with mixed-use residential intertwined with pedestrian-oriented shopping streets.[44] The educational component, which promises to result in the greatest synergy creation for both retail and residential uses, is most often overlooked.

The goal of Greyfield development is to provide a mix of uses that benefits the surrounding communities. These communities are made up of mostly working-class minorities. If done correctly, Greyfield sites can provide for workforce housing, business advocacy, economic and community development, an increased quality of life for the surrounding community, an increase to the local tax base, local public service efficiencies, and an acceptable yield to investors.[45]

The Bauhaus movement in Germany in the 1920s focused on both providing housing for working families as well as the incorporation of technology and function into residential design. William Whyte, a social observer known as the "Thoreau of the streets," embarked on a study in the 1970s known as the Street Life Project. He came to the conclusion that, ". . . design influences behavior."[46] The design and mix of uses within a Greyfield redevelopment is essential to the magnitude of its financial success as well as to the benefits it will bestow on its surroundings. Design must encourage interaction and self-reliance. "The final mission of the city (the city center) is to further man's conscious participation in the cosmic and the historic process."[47]

FOCUS ON EDUCATION

"Immigration is creating a new demand for centers and urban places. These places must be safe and interesting and allow for access to functional public education."[48]

The potential of a Specialized Sub Center focused on education in the typical Greyfield location can expand the associated benefits of uses.[49] "One way of meeting the challenges of ethnic diversity is to improve the availability and quality of educational opportunities."[50] The proposed uses can combine to create a 24-hour hub of activities that promote mutual benefit and synergy creation.

"Education specialists have compiled increasingly strong evidence that preschool intervention is crucial if children from lower economic backgrounds are to do well in school and in subsequent work experience."[51] This is a special consideration in deciding on which levels of education to focus. Perhaps both a preschool as well as adult education component can be provided in the mix. Certainly both uses can benefit from the proposed technology infrastructure. Indeed, there is the further potential to create an additional synergy by combining preschool and elderly care promoting interaction between the two groups.

AFFORDABLE COMPONENT

A study of demographics surrounding Greyfields reveals a dominance of middle and lower income working households. Increasingly, affordable housing is beyond the reach of working families. A household is considered "cost burdened" if it pays more than 30 percent of gross income on housing,[52] and statistics show that 76 percent of moderate-income households spend more than half of their income on housing. A family with one full-time worker earning the minimum wage cannot afford (at 30 percent of income) the average market rent for a two-bedroom apartment anywhere in the country.[53]

The lack of affordable housing is the fastest growing housing problem in the country. Greyfield developments, with an educational component, have the potential to provide the greatest economic return if utilized to service the surrounding communities. The residential component should allow for rents in the low, moderate, and median-income levels. As low-income residents learn new skills at the educational component, they increase their personal income and move towards earning moderate and median incomes.

GREEN BUILDING DESIGN

"Ninety-four percent of renters want higher energy efficiency buildings."[54]

"Building innovations at the turn of the last century introduced new mechanical systems (air conditioning, elevators, etc.) to multifamily design. No real leap of technology since then has influenced multifamily design in the same way. The time has come for new concepts and ideas. One such innovation is the 'Green Building' movement."[55] The economic feasibility of green residential development is becoming more prevalent through advances in construction technologies and financial incentives. Also, when utilizing energy efficiencies, property owners lock in an inflationary hedge against rising energy prices that results in more predictable cash flows and lower capitalization rates.

Sustainable green building utilizes whole-system design concepts to minimize a project's environmental impact, increase energy efficiencies, and provide a healthier internal environment.[56] Advanced engineering techniques can provide onsite storage of energy from renewable sources such as wind and solar, and efficient HVAC systems can filter outdoor air removing pollutants and suspended particles and providing healthier indoor environments. Other "green" features can include innovative plumbing systems that recycle building wastewater (gray and black water) reducing flow to sewers. Innovative designs provide for sod roofs that can become public spaces and reduce storm water run off and flow to storm water drainage systems. Daylighting effects bring natural light further into interior building spaces reducing the need for electrical illumination during daylight hours. Building materials are often recyclable or made from recycled materials, and the accessibility of mass transit to the site is encouraged.

Upfront costs of green design elements are beginning to be subsidized by federal and state incentives. In May 2000, under Governor George Pataki's first-in-the-nation green building tax credit program, New York became the first state to offer incentives in the form of tax credits to developers who build environmentally friendly buildings.[57] The state of Maryland is in the final stages of creat-

ing a similar green building tax credit program. Other states are also creating green building incentives that will advance green design as a component in new development.

Greyfield development can benefit from green design. The intended user will be drawn to the concept of environmentally friendly development. It has the potential to further differentiate the product from competitors and to advance the self-help mentality the mix of uses intends to foster in the community.

AN EMERGING MARKET: MINORITY 20- & 30-SOMETHINGS

". . . First-ring suburbs could well be the proving grounds for a new and vibrant multicultural identity for the whole country."[58]

Affirmative marketing can be utilized to attract minorities and immigrants in the X and Y generation demographic.[59] This group tends to be more upwardly mobile, more interested in technology, more conscientious of environmental issues, more tolerant of other ethnic groups, and open to more innovative residential design. The Benetton Clothing Company, through their "United Colors of Benetton" campaign, captured the attention of this focus niche market with enormous success.

Although the clothing industry is a different industry than the real estate development industry, the success experienced by the United Colors of Benetton campaign defines the attitudes of the target market and demonstrates that diversity can be celebrated and glamorized. The intended target market is primed for self-revelation in a place created in their interest. The place will have authenticity because of the uses and the users that together create the synergies that make such a mixed-use development successful.

CONCLUSION

"The essential dynamic driving the development process is innovation. Innovation is conceptualized variously in different theories as new combinations, improvisation, or creative risk taking."[60]

Jane Jacobs ". . . insisted that 'de-slumming' ultimately depends on slum residents themselves,"[61] but unless investors, developers, and local governments initiate the provision of tools by which residents of these decaying suburban neighborhoods can help themselves (i.e., access to information and technology, safe environments, efficient housing, necessity retail and services, civic uses, healthcare, and educational facilities), then the cycle of underachievement and lack of productivity is doomed to repeat itself—the potential creation of a welfare state. What are the costs of not providing such uses to these low and moderate-income neighborhoods surrounding Greyfield sites? What is the alternative?

Redefining Greyfields has the potential to bring the full gamut of smart growth development to inner-ring suburbs and inner cities. Local and state governments need to provide incentives and zoning that will enable developers and investors to provide residents of these lost neighborhoods with opportunity and hope for something better—the pursuit of the American Dream, which in turn provides these areas with a more educated workforce and a higher level of productivity. Greyfield sites offer the perfect vehicle by which to facilitate the needs of these decaying neighborhoods. The time is now that we can move to reverse the trend of decay and not only enrich these pockets of population, but also provide for higher tax revenues and create assets that provide acceptable long-term economic returns. REI

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Toxic Mold: What You Should Know about It and What You Can Do about It

by Kerri L. Barsh

The past eighteen months have seen a plethora of toxic mold lawsuits rivaling the asbestos and lead-based paint tort claims for litigation potential. This article discusses this recent phenomenon; the measures that can be taken to protect against such claims; and the prospects for future mold-specific governmental regulation.

WHAT IS "TOXIC MOLD" AND WHY IS IT A CONCERN?

Mold is a fungus that is naturally occurring and found both indoors and outdoors. To survive, mold requires only a source of food, warmth, and moisture. Its food sources are many, including building materials such as wood, carpet, ceiling tiles, drywall, upholstery, wallpaper, and sheetrock. Warmth and moisture are plentiful, especially in humid climates. The United States Environmental Protection Agency (EPA) estimates that more than 20,000 species of mold exist, many of which are harmless. Nevertheless, molds such as stachybotrys, aspergillus, cladosporim, and penicillium may be potentially harmful to health, especially when present in high dosages.

Exposure to mold spores or mold may cause, in sensitive individuals, allergic reactions such as dermatitis, runny nose, sneezing, and red eyes and may exacerbate asthmatic conditions in those who have asthma. Inhaling or touching mold may also irritate one's eyes, skin, throat, and lungs or cause hypersensitivity pneumonitis. For those molds that produce mycotoxins (potentially toxic substances), the symptoms of such exposure include liver cancer, toxicosis, infant pulmonary (lung) hemorrhage, and kidney disease. Although scientific research of the long-term health impacts of mold has not been exhaustive or conclusive, claims for damages for personal injuries have not abated. According to an independent insurance association, toxic mold lawsuits against building owners and managers, building product manufacturers, builders, architects, engineers, contractors, and insurance carriers "are beginning to rival 'construction defect' claims in their number and magnitude." Examples of such litigation include:

1. Recovery of a $14 million verdict by Martin County, Florida, which was upheld on appeal, against the builders of the County courthouse.
2. A verdict of $32 million by a Texas jury against an insurance carrier for acting in an unfair, deceptive, and fraudulent manner when evaluating the homeowner's property damage claim.
3. Recovery by Polk County, Florida, of $47.8 million in settlements against various companies involved in the construction of the Polk County courthouse (including $35 million from the general contractors' builder's risk insurer).
4. Award of $6.7 million against a North Carolina motel owner for construction defects that resulted in water intrusion and mold accumulation.

Pending litigation includes the purported filing of two class action suits against the owners of a number of California apartment buildings and a reported lawsuit by tenants of a subsidized housing project in New York against the building owners and managing agent seeking over $12 billion in damages for cancer and multiple organ failure alleged caused by fungal contamination. The lack of definitive governmental regulations establishing safe exposure levels and the dearth of conclusive scientific data on the health impacts of mold will only foster the proliferation of mold-related litigation and concerns.

WHAT CAN YOU DO ABOUT MOLD?

Given this emerging mold problem, possibly driven by modern energy-efficient building practices and the increased use of new building materials, building owners and operators, contractors, insurance carriers, and property managers are inquiring as to the steps, if any, that can be taken to avoid or minimize liability for mold-related claims. Protection comes in a variety of forms: legal, technical, insurance-related, or a combination of each.

On the legal front, many building owners and managers are incorporating into their purchase and sale agreements and leases, disclosures or similar language acknowledging that mold is "naturally occurring" and that the builder owner or man-

ager is not responsible for mold-related impacts. The reasoning underlying such language is similar to that of the radon disclosures—namely, to provide notice to the buyer or lessee of the potential for mold and avoid any claim based upon a failure to disclose an environmental problem. Because these disclosures have not been the subject of extensive litigation, their effectiveness has yet to be determined. In addition, condominium developers are including in condominium documents certain language restricting the use by owners of building materials such as non-breathable wall coverings on exterior walls, low-permeability paints, and vinyl wall paper, which trap moisture in gypsum wallboard.

To no great surprise, the extent to which current or pre-existing insurance policies provide coverage for mold-related damage is the subject of increasing dispute. Coverage under general liability policies often revolves around the insured's ability to show that the damage resulted from a "covered" cause of loss such as a ruptured pipe. Insurance carriers themselves have responded to the wave of mold litigation by modifying new policy language to clarify that mold-related damages are excluded from coverage or canceling policies thought to have provided mold coverage. Although certain insurance companies will insure against mold-related risk, the cost for such coverage is market-driven and reflective of recent monetary settlements and verdicts.

As noted in one EPA publication, "[t]he key to mold control is moisture control." The initial step to moisture control is the performance of physical inspections by competent and experienced environmental consultants or industrial hygienists. Common indicia of mold are musty, mildewy odors, and discoloration of walls and ceilings. The objective of the inspection is to confirm the presence, extent, and origins of suspected mold contamination and sources of moisture such as leaking roofs of windows, malfunctioning or poorly designed ventilation systems, and plumbing failures. Bulk sampling or surface sampling may be necessary as part of the assessment to verify the existence of mold or identify specific fungal contaminants.

Somewhat surprisingly, neither the New York Guidelines nor the EPA guidelines recommend air monitoring as part of a routine assessment unless the visual reconnaissance reveals a contaminated HVAC system; the presence of mold cannot be confirmed visually (behind walls) but is suggested; or health-related symptoms have been diagnosed. If air monitoring is conducted, the monitoring should include concurrent outdoor testing, for comparative purposes. Ultimately, however, the scope of the inspection also depends upon a number of non-scientific factors: whether health impacts are being asserted; whether significant potential liability exists; and whether a lawsuit has been filed. One significant benefit of a comprehensive assessment is that it may reveal the party or parties responsible for any mold infestation.

Upon learning of a mold problem or a prospective fungal source, the New York Guidelines recommend that "[b]uilding materials supporting fungal growth must be remediated as rapidly as possible . . ." and similarly recommend the removal of mold "as soon as it appears." The guidance document sets forth five different types of abatement, varying with the size of the mold-infested area. Typical remediation efforts include, without limitation, cleaning with a detergent solution; removal of porous materials that have been infected; abrasive cleaning of contaminated surfaces; demolition of plaster walls; air monitoring; hazard communication to building occupants in the affected area; and post-remediation inspections. The primary emphasis of abatement is the elimination or remedy of the source of water accumulation through proper maintenance and expeditious repair, to prevent the reoccurrence of fungal growth.

FUTURE REGULATION

Until specific quantitative standards regulating the presence of mold-related toxins are developed and enacted, this area of the law will remain murky. Common-law case law will help refine the respective obligations of the affected parties but given the stare decisis effect of such cases, the protracted nature of such litigation and the potential for settlement, such refinement is expected to be slow and incremental, putting a premium on prevention and expedient, comprehensive remediation. REI

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FOCUS ON THE ECONOMY

WELL, STANLEY, THIS IS ANOTHER FINE MESS YOU'VE GOTTEN US INTO

by Hugh F. Kelly, CRE

Hugh F. Kelly, CRE

When the conceptual schedule for this year's series of columns was laid out, I indicated that the summer's essay would treat with the private sector's key contribution to economic recovery: attaining a sustainable trajectory of long-term profit growth. That subject has become exceptionally timely over the past few months. At first glance, the return of the bear market in corporate stocks in the April to July period would seem to make the story obvious. But there is a difference between investors' frustration at companies that missed their quarterly earnings and the far more serious business of managers disregarding long-term profit planning almost entirely.

Often the burden of pulling the economy out of its cyclical downturns is assumed to fall on the federal government. As we reviewed in the Spring 2002 issue, there is a critical role for Washington to play. It has fiscal tools: the power of the federal purse. Recent estimates of the federal budgetary deficit are running at an annual rate of $165 billion. That's $165 billion more that's being spent by Washington than it is withdrawing from the economy in taxes and fees, money that in effect is being largely spent in the private sector for goods and services, either directly in appropriations or indirectly through government employment, transfer payments, or revenue sharing grants. The other side of the coin is the Federal Reserve's monetary operations. The sustained reduction in interest rates has cut the cost of capital across the entire economy. In just one measure, mortgage refinancing, lower interest rates had the effects of generating $450 billion (roll that number around for just a minute; macroeconomic figures can be numbingly large, and it helps to think about their magnitudes before just reading on) in the fourth quarter of 2001 alone. If you are wondering how the first quarter GDP could grow by 5.0 percent, fueled by consumption when the unemployment rate was still rising, that $450 billion will clear up a lot of the mystery.

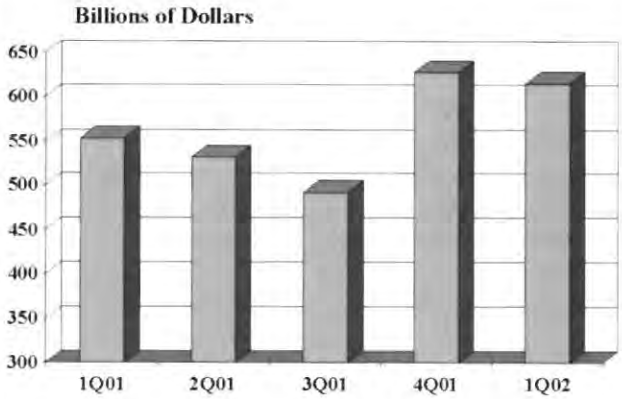
Business really likes to pretend that government is supposed to do the heavy lifting in recessions and immediately thereafter. But as big as Big Government might seem, combined federal, state, and local spending accounts for just $591 billion of a $9.5 trillion Gross Domestic Product, about 6 percent of total output. It is the private sector that, rightfully, needs to provide most of the lift to an economic expansion.

Profits are the yardstick by which we evaluate how well private businesses are doing their part. There is no question (Figure 1) that profits took a serious tumble during 2001, falling from $551 billion (after tax) in the first quarter to $492 billion in the third quarter. That's a drop of 10.7 percent, and surely not what investors were expecting when they bid stock prices up to their highs in early

Exhibits 1 - 4

Exhibit 1

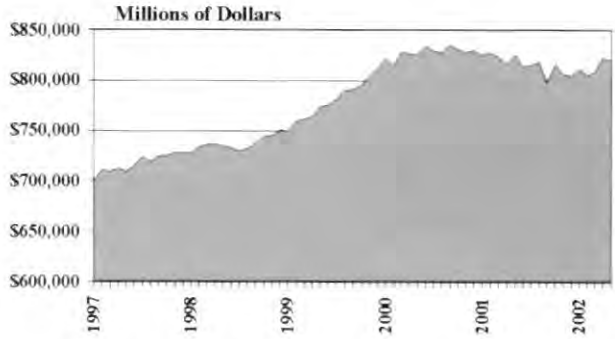
Corporate Profits Come Off the Mat



Source: BEA; "corporate profits after-tax, with inventory valuation and capital consumption adjustments"

Exhibit 2

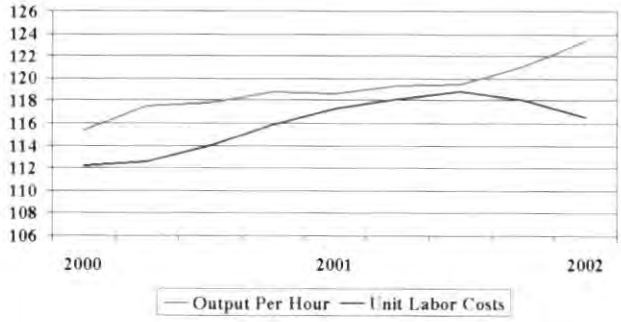
Total Business Sales Firming Up



Source: U.S. Bureau of the Census

Exhibit 3

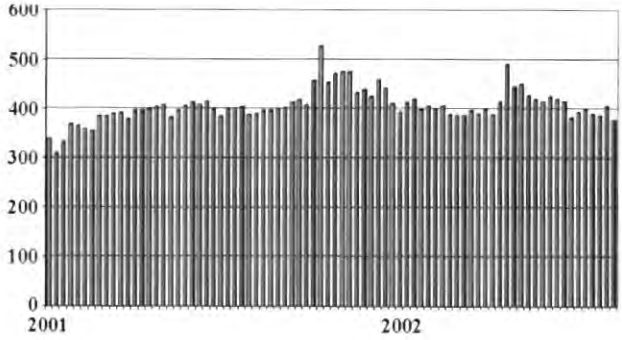
Productivity Resumes Its Advance; Labor Cost Start to Dip



Source: U.S. Bureau of Labor Statistics

Exhibit 4

Unemployment Claims Retreating



Source: U.S. Bureau of Labor Statistics

2000. But fourth quarter profits bounced back nicely to $628 billion (up 28 percent), and stocks rallied accordingly through March of 2002. Profits slipped slightly in the first quarter 2002 (2.0 percent), but nothing in those numbers prepared us for the destructive experience ahead on Wall Street. From March to July, the S&P 500 dropped 22 percent, the DJIA 24 percent, and the NASDAQ Composite 30 percent in value.

Second quarter earnings announcements could hardly be blamed for the plunge. Better than expected results were reported by a range of firms, including Daimler Chrysler, General Motors, Microsoft, Sun Microsystems, Motorola, and even Merrill Lynch. The issue, of course, lay with another array of companies: Enron, Tyco, Global Crossing, Worldcom, ImClone, and others—an uncanny number of which were audited by the disgraced Arthur Andersen & Company. The market was punishing uncertainty in the most sensitive of places: in earnings reports audited under Generally Accepted Accounting Principles. At the heart of the troubles, the so-called "management" of earnings to meet or exceed quarterly targets. When investors lose confidence in the reliability—the honesty, to use an old-fashioned term—of the numbers in financial statements, then who can blame them from leaving a casino where the odds suddenly look unacceptably stacked against them? Alan Greenspan ruefully remarked, "My view was always that...the market value of companies rested on the integrity of their [financial] operations. I was wrong."

With the sell-off in mid-July, however, the markets dipped below a critical historical measure. At the levels of the Dow and S&P indexes, as of this writing, the market's price/earnings ratio had fallen beneath its long-term average. This should signal a buying opportunity for value-oriented investors, if they themselves can get comfortable with some economic basics and can regain some of their trust in corporate management.

What are the economic fundamentals? First of all, after posting flat to declining figures for more than a year, total business sales (which include sales at the manufacturing, merchant wholesaling, and retailing levels) bottomed out in the first few months of 2002, and began to rise during the spring (Figure 2). Improvement in sales is the key to increasing production, now that the inventory correction of 2001 has run its course. The industrial production index rose from 138.6 in March to 140.6 in June, and its rate of growth was accelerating as the year progressed. Consumer goods production was the most robust, but after a long slide, business equipment production picked up in both May and June.

New business equipment purchases are absolutely critical to this recovery. Not only was that the key area of weakness that softened the economy, leaving it vulnerable to recession, but business modernization is an ever-present need if we are to sustain productivity growth. Productivity, or "output per hour of work," is the driving force for U.S. GDP growth now and into the foreseeable future. This is because the nation is in a demographic trough that makes us a labor-short economy. There are many complicated ways to think of GDP growth, and one very simple shortcut to that basic economic statistic. The simple way is to take the change in the number of workers times the average hours worked, and then factor in the output per hour. The result is the percent change in real GDP: end of formula. If we can only grow our workforce by 2 percent per year or so (and we need a lot of immigrants to reach even that modest goal), and we hope to have GDP growth of 3 percent or higher, then productivity has to make up the difference.

So it is encouraging news (Figure 3) that output per hour has started to climb once again, after nearly two years of tepid growth. If you will, take another pause to think about the number. The productivity index of 124 means (since the index is set at 1992 = 100) that output per hour worked is 24 percent higher than just a decade ago. That's huge in an economy the size of the United States. Furthermore, unit labor cost increases have been lower than the output gains, and that differential helps the bottom line for U.S. businesses. It also helps the economy broadly speaking, helping keep inflation tame and giving the Fed necessary policy elbow room. Assuredly, there are limits to how much growth can come simply from productivity and when those limits are approached, businesses will have to step up their hiring once again. Unless the bear market on Wall Street turns utterly catastrophic, an acceleration in the job numbers should be in place by the end of this year.

Already the trend in weekly unemployment claims (Figure 4) seems to be setting the stage. This series

is a component of the Index of Leading Economic Indicators, and had the second strongest positive contribution (after Money Supply growth) for the June index. Incidentally, the S&P 500 had the heaviest negative influence on the index, which was unchanged overall from its May results.

Keeping some historical perspective, unemployment topped out at 6 percent in this downcycle. Six percent used to be considered the NAIRU benchmark that was the economy's putative speed limit. (NAIRU is one of those ugly economic acronyms, standing for an even more unwieldy phrase: the Non-Accelerating Inflationary Rate of Unemployment.) This was embedded in one of the concepts that virtually every business person learned in Economics 101: the Phillips Curve, which assumed a trade-off between inflation and unemployment. That relationship proved very weak during the 1990s, as unemployment dropped to 4 percent or so, while inflation stayed very mild. The reason? It looks like productivity overrides the Phillips Curve in a profound way. If you are looking for a measure of this era's "labor shortage," consider that the jobless rate peaked at 9.0 percent in the recession of 1975, at 10.8 percent in 1982, and at 7.8 percent in the recession of 1992. You have to go back to the 1960s, when the Baby Boom had yet to enter the workforce, to find peak jobless rates as low as we have recently.

Looking to the future, the question is this: Can American business operate profitably, without cooking the books, in a low-inflation, low interest rate era characterized by rising productivity and nearly full employment? And if the answer is yes, will investors regain the confidence needed to reinvest in American business, so that corporations can in turn devote their time, attention, energy, and resources of physical, human, and financial capital to providing quality goods and services to the public?

Perhaps that is a loaded way of posing the question, but I think it strikes at the heart of the matter. In the next column, I'll conclude this series with some thoughts on the international side of the story, how in a global economy we must "get by with a little help from our friends." REI

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FOCUS ON INVESTMENT CONDITIONS

Closing the Chapter on a Cycle of Boom, Bust, and Scandals

by Kenneth Riggs, Jr., CRE

Kenneth Riggs, Jr., CRE

The final chapter of the 1990s tech bubble is being written in the financial markets. Companies like Enron, Waste Management, Adelphia, Tyco, WorldCom, and Arthur Andersen have scandalized the investment community, and have fired a deep mistrust among investors about the financial markets. At least the Securities and Exchange Commission (SEC) and various other agencies appear intent on dousing the fire and cleaning house. Real Estate Research Corporation (RERC) recognizes the difficulty for the companies and individuals being prosecuted, but such a stance is necessary for restoring trust in the markets as well as the justice system, and allows investors and businesses to do what they do best—getting on with making money.

In spite of the fact that gross domestic product (GDP) fell to 1.1 percent second quarter from 5 percent first quarter 2002 and consumer confidence dropped to 97.1 from 106.3, there are some key indicators that the economy is moving in a positive direction, however slowly. Latest data show that technology spending rose by 1.2 percent, industrial production increased by 0.2 percent, and the Federal Reserve has thus far decided to leave short-term interest rates at 40-year lows. In addition, labor markets seem to be improving, personal income increased to $57.0 million (+0.6 percent), and disposable personal income (DPI) increased to $55 billion (+0.7 percent) in June. Personal consumption expenditures increased $35.6 billion (+0.5 percent). This is in the face of declining stock prices, the prosecution of scoundrels on Wall Street, federal government deficits, and the U.S. being in a wartime mode.

Economists have a surprisingly rosy view of the outlook for the economy in the months ahead, but this is all pinned on the consumer. While the consumer has kept the U.S. economy moving, the risk is that the consumer can also halt the economy in its tracks. When the tech companies tanked and triggered a recession and individuals saw 401k and other long-term savings evaporate with the hype, consumers surprisingly shrugged it off and focused on yearly earnings. However, RERC worries that the consumer may pull back as they see their jobs and their paychecks at risk.

RERC believes that the consumer will see the economy through these difficult times, as long as the deceitful business practices that some companies and individuals have been exercising is quickly and decisively dealt with. Otherwise, this cancer that is undermining the confidence in the stock market will unfortunately transfer itself to the consumer and put us back into a recession. Given household buying power, the pent-up demand for housing, positive demographics, and a historically low interest rate, RERC has confidence that the consumer has staying power.

Even so, it will be some time before we see a recovery in the physical (space) markets. As we continue to compile and analyze second quarter survey results provided by the institutional and regional respondents for the Summer 2002 *RERC Real Estate Report*, it appears that space markets may still be in decline. Vacancy continues to increase in most property sectors and in most of the 31 metro areas we cover due to increasing unemployment. In many areas, absorption is already negative while new space continues to come online. Clearly, demand has dropped, and until businesses expand their appetite for space, we can expect further contraction and deteroriation in demand for industrial and office space.

On a national basis, the space markets for commercial real estate are weak, and most likely will remain so for the next several quarters. Most properties are past their peak where sustainable prices are above long-term fundamental values. Capital availability, both for debt and equity, remains at all-time highs and most money sources have been chomping at the bit to chase down deals that can withstand scrutiny from investment boards. Deal junkies have grappled with the conundrum on timing the market for each property type. This has resulted in a bid-ask spread that dried up investment activity late last year. The juggernaut has passed and deal flow is beginning as buyers and sellers are gaining better clarity on the direction of the market, albeit at substantially reduced expectations for property earnings.

Investment prospects for commercial real estate are nowhere near the levels seen during the tech craze that drove demand to unsustainable levels. However, RERC's quarterly investment survey results demonstrated overall improvement in the second quarter 2002 over the prior quarter for investment prospects. CBD office, retail power center, and hotel reflected the strongest gains. Relative to other property types, these categories had been hovering around the bottom. RERC is starting to unearth a fundamental element that investors are taking to heart—the greatest attribute that real estate possesses today is extremely favorable risk-adjusted returns. RERC predicts that the transaction market will lead the space market recovery. We will see deals increasing significantly by first quarter 2003.

Expected yields and overall capitalization rates are reported at historical highs relative to equal term government issues. Overall expected total yields for all commercial real estate in the first quarter 2002 was 11.8 percent versus 10-year treasuries at 5.0 percent, which results in a yield spread of 6.8 percent. This spread was one of the highest levels recorded since 1980. Confirming this are our second quarter results, which reflect a narrowing yield spread of 6.5 percent (see Table 1).

The same could be said for the comparison of overall capitalization rates (one-year rate) versus one-year treasuries—the comparisons are done to keep the analysis on an equal-term-structure basis.

Table 1

One-Year Expectation Real Estate Vis-a-Vis Capital Market Returns

	2Q2002	1Q2002	2Q2001	2Q2000	2Q1999	2Q1998
Real Estate Yield (%)	11.7	11.8	11.5	11.8	11.5	11.1
Moody's Baa Corporate (%)	8.1	7.9	8.2	8.6	6.9	7.3
Moody's Aaa Corporate (%)	6.8	6.6	7.4	7.8	5.5	5.6
10-Year Treasuries (%)	5.2	5.0	5.5	6.2	5.5	5.5
Yield Spread (percentage points)						
Moody's Baa Corporate (%)	3.6	3.9	3.3	3.2	4.6	3.8
Moody's Aaa Corporate (%)	4.9	5.2	4.1	4.0	6.0	5.5
10-Year Treasuries (%)	6.5	6.8	6.0	5.6	6.0	5.6

Source: RERC Investment Survey, Federal Reserve

Expected rates are ex ante or anticipated rates are different than realized or ex post rates. Comparing expected versus realized yields would suggest that expected yields should be lower today for certain acquisitions, even in the face of the current economic and financial situation. RERC would deem a spread of 5.0 percent above 10-year treasuries for a total real estate yield to be attractive for assets that possess extremely durable income streams, which would put an expected yield at 10.0 to 10.5 percent. This is for extremely solid properties, not run-of-the-mill assets around the corner.

RERC survey respondents are seeing some light at the end of the tunnel as well. The SEC is cleaning up the stock market, the U.S. has taken a firm stance on terrorism, and the consumer is vigilant with his or her purchases, which is a positive sign for the future of the economy. There are also positive markings for commercial real estate, including overall yield requirements that are starting to see downward pressure, more positive investment conditions ratings, and increased investor confidence about future prospects. As the economic recovery solidifies and business shakes off the doldrums, watch for hotels and apartments to improve first, and the office market to improve last as businesses adapt to changing needs.

RERC looks at the second quarter as the end (hopefully) of a difficult, although necessary, chapter in U.S. economic and political history. This past year has changed personal and business attitudes forever, but it is also a time that will allow us to move into a new era. When considering our prospects for the future, it is good to remember what Warren Buffet said, "There is nothing dumber than betting against America. It has not worked since 1776." REI

ABOUT OUR FEATURED COLUMNIST

Kenneth P. Riggs, Jr., CRE, *is chief executive officer of Real Estate Research Corporation (RERC). RERC offers research, valuation, and consulting services, and provides investment criteria (cap rates, yield rates, expense and growth expectations, recommendations, etc.) for nine property types on a national and regional level and for 31 major U.S. markets through the quarterly RERC Real Estate Report and the RERC DataCenter. (E-mail: riggs@rerc.com)*

FOCUS ON HOSPITALITY ISSUES

A Hotel Investment Is Only as Good as Its Local Market!

by John (Jack) B. Corgel

John (Jack) B. Corgel

One real estate issue that has yet to be resolved in *Real Estate Issues* relates to the question of how human behavior affects returns on investment. On one side, proponents contend that real estate markets are sufficiently competitive and efficient to produce returns entirely based on the fundamentals (i.e., relative locations, growth of the local economy) while under the guidance of competent property and asset management. Others argue that human behavior in the forms of direct actions taken by managers, specific information generated by analysts, and involvement of uninformed and distressed participants will either create or destroy real estate investment opportunity. Unfortunately, the real estate academic literature offers little assistance in bringing closure to this issue.

Because of short-term rental periods and the intensity of business management, hotel investments are the most likely of all property types to experience return volatility due to the extraordinary behavior of the people involved. The conventional wisdom in the hotel investment community holds that excess returns cannot occur without superior management and brand affiliation. The only study (although unpublished) to empirically address this issue finds no relationship between returns and combinations of affiliation and management (Hanson, 1991).

At specific times, however, pricing in the hotel property markets has been altered substantially by non-fundamental human behaviors. Jan deRoos and I empirically demonstrated that Japanese buyers severely overpaid for hotels during the late 1980s and the RTC greatly under sold hotels in the early 1990s (Corgel and deRoos, 1994).

During the development and testing of a new method to forecast hotel property revenues called Share Down, we directly confronted questions about how much hotel revenues depend on the movements of local markets in which they compete. While revenues represent only one important component of investment returns, knowledge about the correlation between property revenues and local market revenues provides useful information to hotel investors about where to focus their attention. This article reports on our findings from early tests of hotel property and metropolitan market revenue co-movements.

THE BASIC IDEA OF SHARE DOWN

Students in introductory corporate finance courses learn that asset risk comes from two sources—the behavior of the market in which the asset trades and the unique characteristics of the income-producing asset. This simple, yet powerful, dichotomy provides a basis for generating answers to various

investment-related questions by separating problems into *systematic* or market driven forces and *unsystematic* or asset-specific forces. Extensions of this concept to other situations in which asset incomes are determined in organized markets become fairly straightforward.

Hotel real estate assets operate as part of a market system in which external forces continually affect financial performance. The financial outcomes for these assets also are determined by endemic factors, such as the decisions of management and development activity within close proximity to the hotel site. As with any asset, therefore, the movement of hotel revenues occurs because of both systematic and unsystematic forces.

Motivating the development of the Share Down forecasting method is a simple operating hypothesis—*the revenue patterns of a hotel over time have a large systematic component and a small unsystematic component.* If this hypothesis is correct, then econometric forecasts of market segment revenues for the metropolitan statistical area (MSA) market in which a hotel competes will serve as a virtual roadmap to future property revenues. This assumes that the proper linkages can be determined between the local market and the property revenue flows.

The Share Down forecasting models produced by the Hospitality Research Group (HRG) and Torto Wheaton Research (TWR) are based on the relationships between the historical interaction of demand and supply in the market and historical property performance. Specifically, Share Down uses econometric forecasts for MSA hotel markets from the quarterly HRG/TWR *Hotel Outlook* and the results of regression analysis of market and property performance to predict property revenue. Hence, the *Hotel Outlook* forecasts are "shared down" to the property level.

DETERMINANTS OF HOTEL REVPAR

The Share Down model takes the following form for estimating the historical relationships that underlie the property RevPAR forecast:

$$\text{Property RevPAR} = \alpha + \beta_1 (\text{MSA RevPAR}) + \beta_2 (\text{National RevPAR}) + \beta_{3,4,5} (Q2,Q3,Q4) + \beta_6 (\text{RENO}) + \beta_7 (\text{REPO}) + \beta_8 (\text{MANG}) + \beta_9 (\text{COMP}) + e$$

where,

- α, $\beta_1 \ldots \beta_9$—estimated parameters of the model.
- Q2, Q3, and Q4-quarterly dummy variables (i.e., 1 or 0 depending on the quarter of historical data).
- RENO-dummy variable to capture the effects of a major renovation to the hotel during the historical period.
- REPO-dummy variable to capture the effects of a repositioning of the hotel during the historical period.
- MANG-dummy variable to capture the effects of a management change in the hotel during the historical period.
- COMP-dummy variable(s) to capture the effects of major changes in the competitive set of the hotel during the historical period.
- e-error term.

The coefficient of MSA RevPAR (i.e., β_1) is the most interesting of the parameters in the equation because β_1 may be generally interpreted as the "beta" of the property—much like the beta of a traded stock. This interpretation comes from the assumption that the market effects on a hotel property largely result from local demand and supply forces. If, for example, a subject full-service property has an estimated RevPAR beta of 1.14 then the property RevPAR moves either up or down by an estimated $1.14 for every $1.00 movement in MSA full-service RevPAR. In capital market terms, the subject property has a moderate degree of systematic risk.

TEST RESULTS FOR 14 FULL-SERVICE HOTELS

A large hotel company graciously provided HRG/TWR with 25 quarters of historical RevPAR information for 14 of their full-service properties to perform initial tests of the Share Down method. As shown in Exhibit 1, the Share Down model performed well with these data. The average R2 equals .86 with a minimum value of .73. The beta estimate on the MSA, full-service RevPAR variable falls within a logical range of .60 to 1.72 (mean = 1.23).

Although the results of initial tests provide encouragement regarding the potential of the modeling approach, the 14 properties involved in the test are quite typical of hotels found in their respective MSA, full-service markets. The model may not perform as well for properties with historical RevPARs substantially above or below the average level of the market in which the properties compete.

Exhibit 1:

Test Results of the Hotel Share Down Model for 14 Full-Service Properties

Property	Number of Periods	Market Segment	Model Form	R^2	β MSA Full-Service RevPAR*	Other
1	25	FS	log	0.8842	0.6762	quarterly dummies
2	25	FS	log	0.7309	0.6067	quarterly dummies
3	25	FS	linear	0.8991	1.8786	quarterly dummies
4	25	FS	log	0.8999	0.6226	quarterly dummies
5	25	FS	linear	0.7565	0.9876	quarterly dummies
6	25	FS	linear	0.7955	1.1361	quarterly dummies
7	25	FS	log	0.9351	1.3384	quarterly dummies
8	25	FS	linear	0.8662	1.2743	quarterly dummies
9	25	FS	linear	0.8533	1.6831	quarterly dummies
10	25	FS	log	0.8623	1.5694	quarterly dummies
11	25	FS	linear	0.9535	1.0135	quarterly dummies
12	25	FS	log	0.7790	1.7297	quarterly dummies
13	25	FS	log	0.9276	1.6050	quarterly dummies
14	25	FS	linear	0.9627	1.1176	quarterly dummies
Averages	**N/A**	**N/A**	**N/A**	**0.8647**	**1.2313**	**N/A**

*All betas are significant at a 95% confidence level.

CONCLUSION

The initial tests of the Share Down model provide qualified evidence that a hotel investment is only as good as its local market. Interpretations must be hedged by noting that "good" investments can be made in "bad" markets and "bad" investments occur in "good" markets. The results do, however, indicate that that the revenues of a hotel property follow the revenues of the local market in highly predictable ways. Thus, forecasts of local market revenue translate smoothly into property forecasts. What is so surprising about the results is the tightness of the fit of these data, as indicated by the R2, and size of the beta, which aligns closely with expectations derived from capital market experiences. In the broader context, it would appear that hotel revenues are not as related to unsystematic factors, such as the specific actions of managers, as traditionally believed.

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ABOUT OUR FEATURED COLUMNIST

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FOCUS ON LEGAL ISSUES

MEDIATION: ANOTHER STRING TO YOUR BOW

by Edwin "Brick" Howe, Jr., CRE

Edwin "Brick" Howe, Jr., CRE

My tendency is to set a certain store by titles and subtitles. For example, the subtitle of this piece might have been "Another Arrow for Your Quiver," or "Another Weapon for Your Arsenal," or "Another Layer to Your Armor." I like the one I have chosen, however, because it seems to exemplify the "creative, flexible neutrality" that is inherent in the mediation process.

Put simply, mediation is a process whereby the parties to a dispute seek to resolve the dispute via the facilitation of an independent and neutral third party, ideally someone professionally trained and experienced in the field of mediation. Having said the foregoing, I have to disclose that I personally cannot quite claim that degree of professionalism. I have taken a course in mediation sponsored by the National Association of Realtors. I have subscribed to the very nearly spiritual point of view that an adherent to mediation seems to develop. And I have participated, with a degree of success I believe, in several mediation simulations. For the moment, though, I am espousing something like pure theory. When I have had practical experience with real-world mediations, I may be back to you with variations on the theme stated below. The theory to which I refer, however, has opened new vistas to me in more than one respect. I hope you will agree that it is worth the expenditure of paper and ink to summarize it here.

When I say "Another String to Your Bow," I am referring to the bow of a party to a dispute and his legal advisor. If the parties are unable to resolve their dispute via negotiation and compromise, their classical resort is to litigation. In that setting, *(1)* unless all of the lawyers on both sides are men of good will and integrity, having their respective clients' respective best interests at heart, *and (2)* if none of the parties themselves are the sort that say, "My way, right or wrong, and I'll fight the matter to the death!", the parties are in for an unpleasant and normally expensive and disappointing experience in choosing to litigate. Contrariwise, the lawyers involved are handed the ticket to the gravy train that litigation all too often represents.

Litigation is a highly formal process, involving discovery—exchange of documents, onerous written interrogatories requiring very carefully phrased written answers, and seemingly endless depositions—before the matter even gets to court. Both depositions and testimony at trial are governed by rules of evidence that are rather archaic and difficult to understand and apply. The tests for admissibility of evidence will normally be subject to seat-of-the pants interpretations by the trial judge that often are unappealable as a practical matter. The entire litigation process will be carried out under the supervision of a judge, or even a succession of judges, whose mission in life is to "clear the cal-

endar," that is, to take advantage of their own pretrial decisions in an attempt to force the parties into a settlement. All too frequently, neither party subscribes to the settlement, but the parties accept it in order to avoid the further expense of a full trial in court. Often that acceptance also spares the parties the uncertainties arising from a jury trial, which is truly a roll-the-dice process.

One alternative to litigation for dispute resolution is arbitration. In many cases the parties' contract calls for arbitration as a mandatory alternative to litigation. In other cases, the parties may simply agree that both of them want to go to arbitration, rather than litigation. In arbitration, there normally are no depositions, except in relatively complex cases and certain special situations (such as impending death of a witness whose testimony needs to be preserved); documentary discovery tends to be less onerous on the producing party than is the case in litigation; interrogatories are normally forbidden; and the rules of evidence are looser than in litigation. The parties frequently have the benefit of adjudication by an arbitration panel having a degree of expertise in the field from which the factual issues emerge (seldom the case in litigation, even where there is no jury). But a common frustration in arbitration (other than international arbitration) is that the arbitration panel is normally required to make an award—i.e., who wins and for how much—without a supporting opinion. Of course, this frustration is the same when a litigation is tried before a jury or is resolved at a bench trial where the judge decides not to render a written opinion.

Another virtue of arbitration in my judgment is that the arbitrators are encouraged to impose a resolution that is just and equitable, not necessarily strictly in accordance with principles of law (though some states, including New York, unfortunately are tending more and more to limit such discretion on the arbitrators' part). My own view of law vs. justice can be summarized by an incident that has resonated in my mind and soul for fully 41 years. I was attending the first week of my freshman course in real property law, taught by Michigan's legendary Dean Allen Smith. We were using Dean Smith's casebook, of course, and he had carefully dropped a moral trap into its early pages. A case had been decided in a manner, while in accordance with binding legal precedent, that was manifestly unfair to one of the litigants. After discussion of the case, one of the students raised his hand timorously and said, "But, Dean Smith, that result isn't just!" Feigning great indignation, the Dean replied, "Justice? JUSTICE! You're not here to learn about justice! YOU'RE HERE TO LEARN ABOUT LAW!!" An unforgettable introduction to the real world by one of its sages.

An increasingly popular alternative is mediation. ("Aha!" you will no doubt say, "at last he gets to the point of the column!" That reaction is entirely in order, but please understand that the characteristics of mediation can be well appreciated only against the background of its alternatives.) Although both mediation and arbitration fall within the purview of "ADR"—alternative dispute resolution, which is to say resolution that is alternative to traditional litigation in court—and are treated that way by The Counselors among many others, the two processes could not be more different from each other.

Arbitration is a quasi-judicial process in which *(1)* both parties offer exhibits and other evidence, *(2)* the members of the arbitration panel are forbidden to have *ex parte* dealings with a party without an opportunity for the other party to attend and participate, and *(3)* the panel renders a decision that is binding on the parties and is normally not subject to appeal.

By way of contrast, mediation usually is a voluntary procedure to which both parties subscribe, which results in no binding determination unless the parties are brought to agreement by the good offices of the mediator. If such a binding determination results, the parties are well advised to reduce their agreement to writing, however informal. The mediator helps in crafting that agreement *both* in open sessions involving both parties *and* in private "caucuses" involving just one of the parties in which the mediator can help the party to the caucus to evaluate, for example, the strength of his case, the strength of the other side's case and the likely remedy that will resolve the controversy. Indeed, it is not uncommon that, a week or two after a mediation session at which the parties fail to reach a mutually satisfactory settlement, the mediator phones one of the parties in an effort, often successful, to restart the mediation and bring it to a successful conclusion.

Occasionally, mediation is not voluntary. For example a court may order the parties to try mediation. Of course, if one party is not committed to

the process, he will normally be able to torpedo it subtly, without exposing himself to charges of contempt of court. But it will be the exceptional case in which a judge— normally a lazy jurist—prods his litigants in the direction of mediation without a good reason for doing so.

Likewise, it is not abnormal for parties who have commenced, or are about to become involved in, arbitration, to turn to mediation as an interim measure. For one thing, arbitration is binding and arbitrators are strongly encouraged not to "split the difference" between the parties but to decide affirmatively in favor of one party or the other and thereupon craft the remedy to fit the interest of the winning party. In mediation, compromise, splitting the difference and almost any other outcome you—which is to say, either the mediator or the parties—can think of is possible *without its being binding on the parties* unless and until they sign a written agreement embodying the settlement. Mediation can be abandoned by the mediator or any of the parties *at any time* before the parties arrive at a final, binding agreement, but part of the mediator's job is to avoid this result unless *(1)* achieving a settlement is beyond reasonable possibility and *(2)* it is in the parties' best interest to abandon the mediation effort.

In litigation and arbitration, the judge and the arbitration panel must respectively maintain the stern demeanor of the agency that will *decide* the issue for the parties. In mediation, the role of the mediator is subtly different. Of course, the mediator must retain control of the process, but he (a term which here includes "she," and it is clear that some of the very best mediators are women) is also in a position to play a role that will expedite the settlement process. The role models that may be of use to the mediator, depending upon the circumstances, will include age (does a given party need a father/mother figure to whom he will listen?); sex (does one or more of the parties need to be edged by a member of the opposite sex into a resolution that will also satisfy the opposing party?); experience (does a party need to sense that the position he has taken is callow or immature?); you name it. While the foregoing observation would not appear in a politically correct context, you can always count on the present columnist to be politically incorrect when such incorrectness represents a potential key to success.

I mentioned above that the concept of mediation carries with it an almost spiritual dedication. While the parties may not look at it that way initially, the mediator is virtually bound—professionally, psychologically and simply as a human being—to do so. He is *helping the parties arrive at the position which both of the parties find acceptable in the circumstances.* It is utterly necessary that the mediator subsume himself completely in this goal. He *must enable both of the parties to buy in* to the settlement crafted at the negotiation. Of course, the mediator himself has a record to defend—successful settlement of *X%* of his cases. But this self-interest of the mediator fits as nearly perfectly as you could ask into the broader schema of the mediation process. Assuming that all three participants are focused on success in reaching a settlement that will satisfy both parties to the dispute, the mediator and thus the mediation process will have an enormous leg up in arriving at a successful conclusion.

Finally, after taking the NAR course, I have realized that the precepts of mediation apply, in something like parallel fashion, to the more successful negotiations in which I have been involved over the years. For instance, don't pound the table, try to put myself in the other side's shoes to get some perspective on the issue, and at the same time seek to get for my client the best possible reasonable deal—which is to say, the best deal for my client that the other side is likely to honor in terms of performance. In a currently pending negotiation, I have consciously tried to apply these same precepts to the tenor of my dealings. At least for the moment, the discussions seem to be going exceedingly well for my client. We'll see, of course, what the outcome of this will be. When (and if) I get back to you with further observations regarding mediation following some practical experience, perhaps I will also have some further news concerning that negotiation. If not, well, you'll know that my high ideals haven't worked out and that in that case I will most likely be turning for the future instead to the mailed fist without reference to the velvet glove.

Note: The author acknowledges the material assistance afforded him by Gerald M. Levy, CRE, and Philip J. Cottone, CRE, in reviewing and commenting upon drafts of this column.

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RECOMMENDED READING

THE NEW GEOGRAPHY

by Joel Kotkin

as reviewed by David Kirk, CRE

David Kirk, CRE

RELATED READING RECOMMENDED BY THE REVIEWER

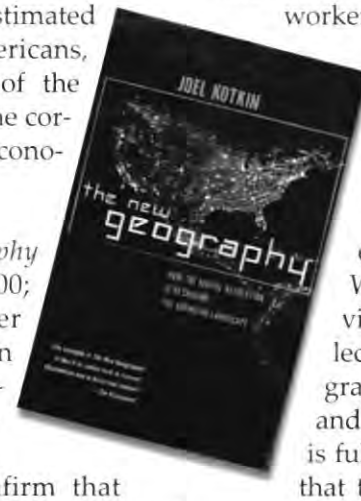
JOEL KOTKIN
Cities
Coming Soon

Tribes: How Race, Religion, and Identity Determine Success in the New Economy
Random House, 1993

RICHARD FLORIDA
The Rise of the Creative Class
Basic Books, 2002

NICHOLAS NEGROPONTE
Being Digital
Knopf, 1995

The pattern of personal preferences is reportedly the new golden rule that shapes today's virtual workplace. This is a departure from the well established pattern that "he with the gold rules." In the *Boston Globe Magazine,* Richard Florida ("Finding a Bright Idea," June 23, ©2002) noted that where the "creative class, estimated at 38.3 million Americans, roughly 30 percent of the U.S. workforce" go, the corporates of the new economy follow.



In *The New Geography* (Random House, 2000; paperback, October 2001), Joel Kotkin spins some wonderful anecdotal evidence and demographic data to confirm that indeed, some of the traditional values of quality of life have once again started to dominate site selection criteria. Kotkin likens the pattern to one that dominated the pre-industrial countryside both here in the U.S. and elsewhere. The information economy and its telecommunications have not created a placelessness but rather some new discernable patterns of growth worth measuring and discussing.

Joel Kotkin in the *The New Geography* develops a lexicon that evolves from the trends he identifies. The most memorable elements and prominent themes of his new geography include among others: "nerdistans"—Austin, Santa Monica, and sections of Boston, San Francisco, and Manhattan—urban concentrations of knowledge-workers and like-minded souls, "Valhallas"—Boulder, Colorado and Park City, Utah—beautiful remote places now connected by the new economy, and the "midopolises"—the older suburbs. With the terminology providing a helpful aid in collecting the supporting demographic data and anecdotes and related trends, the reader is fully persuaded by the book that these trends are clear and increasingly prevailing.

This group of personal preference pattern-makers is not limited to the telecommunications CEO, the telecommuter, and the virtual outsourcing contractor, but now includes a broad and deep and growing creative group with skill sets that will dominate the labor force in the information economy. People are increasingly making personal decisions based on preferences presumably not only

on quality of life but also on lifestyle interests that their prospective employers will be trying to anticipate by their own site selection criteria and corporate strategies, real estate and otherwise. Remember low cost, plentiful labor, favorable tax climate, and plentiful power? Distribution and transportation systems and airport accessibility? These criteria still govern our manufacturing site selection, but the growth is elsewhere.

Kotkin concludes that these trends prevailed during the pre-industrial period before requisites for industrial production dominated site selection criteria and the people patterns. In addition to describing the prevailing context for the pre-industrial patterns of growth of the American colonies and England, Kotkin describes the historic context for the development of Venice, Amsterdam, and Rome. He includes appropriate references to Lewis Mumford and Jane Jacobs and an array of contemporary economists, historians, demographers, planners and researchers. His book is truly a mixed bag of treasures and treats both profound and entertaining, that engages the serious student and the accomplished professional as well as the disinterested pattern-maker.

Not surprisingly, Kotkin is working on a new book that deals directly with the resonance and relevance of the history of cities. He has effectively and delightfully combined his academic background and journalistic experience in a substantive reading experience. Because I have heard Kotkin speak since the book's publication, I know he has continued to update his file on the new geography and I anticipate a rewarding appearance at the observations in the "Global Cities in an Era of Change" symposium on September 4-6, 2002 at Harvard University.

What are the common denominators that characterize successful cities and the forces that stimulate urban investment worldwide? That is a mouthful and headful and it is the question being asked by world economists and leaders, university presidents, corporate leadership and, at the macro level by the micro agents of change, real estate investors. Globalization and technology have been changing the traditional patterns of urban development.

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CONTRIBUTOR INFORMATION

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*(*If the manuscript is accepted for publication, the abstract/brief synopsis would appear on the table of contents page.)*
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3). Number all graphics (tables/charts/graphs) consecutively. All graphics should have titles.
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