Real Estate 1 s s u e s

THE COUNSELORS OF REAL ESTATE

www.cre.org

SUMMER 2003 Volume 28, Number Two



The Growing Water Crisis:
Public Policy versus Private Property Rights
James D. Timmons and Lara Womack

Measurement of Local Economic Growth as a Critical Part of Market Analysis Donald R. Epley

Deflation Risk On Income Property Permanent Loan And Investment Portfolios Marc R. Thompson, CRE

Education In The Real Estate Profession Joseph S. Rabianski

9/11 Reassessments of Urban Location Costs and Risks James H. Johnson, Jr., and John D. Kasarda, CRE

New Brownfields Incentives Add to Diminishing Inventory of Developable Sites in South Florida Michael R. Goldstein

INSIDERS' PERSPECTIVES

Focus on Investment Conditions Kenneth Riggs, CRE

Focus on the Economy Mark Lee Levine, CRE

Focus on Financial Reporting
Dale Anne Reiss



1976 - 2003 28 Years of Publishing Excellence

EDITOR'S COUNCIL

CORPORATE/ORGANIZATION MEMBERS

Appraisal Institute

National Association of REALTORS®

INDIVIDUAL MEMBERS

James R. MacCrate, CRE, New York, NY

Joseph H. Martin, CRE, Lawrenceville, NJ

Kenneth P. Riggs, Jr., CRE, Chicago, IL

Daniel Rose, CRE, New York, NY

Anthony F. Souza, CRE, Tracy, CA

Frank X. Troisi, CRE Emeritus, New York, NY

Ray C. Wilson, CRE, San Antonio, TX



1976 - 2003 28 Years of Publishing Excellence

EDITORIAL CALENDAR

Fall 2003

Articles on general real estate-related topics

(deadline for manuscript submission -October 6, 2003)

Winter 2003

A special edition focusing on the history of real estate, in the previous 50 years, as well as the trends that will shape the industry in the next 50 years. (deadline for manuscript submission - November 15, 2003)

Spring 2004

Articles on general real estate-related topics

(deadline for manuscript submission - February 15, 2004)

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

SUBSCRIPTION INFORMATION

Real Estate Issues publishes four times per year (Spring, Summer, Fall, Winter). To subscribe to Real Estate Issues or for additional information, contact The Counselors at www.cre.org; info@cre.org; 312.329.8427.

ADVERTISING OPPORTUNITIES

Real Estate Issues will bring your advertising message to users of counseling services in targeted industry sectors. To maximize your networking opportunities and reach leading real estate professionals, visit **www.cre.org** or call 312.329.8427 for pricing information.

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

Volume 28, Number Two



published by

THE COUNSELORS OF REAL ESTATE

1976 - 2003 28 Years of Publishing Excellence

TABLE OF CONTENTS

Page

- i About The Counselors of Real Estate
- iv Editor's Statement
- 1-35 Manuscripts

1 THE GROWING WATER CRISIS: PUBLIC POLICY VERSUS PRIVATE PROPERTY RIGHTS

by James D. Timmons

Water is the staff of life. We cannot survive without it. We drink it, cook with it, bathe in it, play in it, irrigate crops with it, and use it in manufacturing. Will water be in the 21st century what oil was to the last? It is quite possible that vast fortunes will be amassed by those who control water and nations will go to war to preserve access to one of earth's most precious resources.

8 MEASUREMENT OF LOCAL ECONOMIC GROWTH AS A CRITICAL PART OF MARKET ANALYSIS

by Donald R. Epley

An important part of real estate market analysis is an estimate of the economic growth of the local economy. The correlation between local economic growth and competitive, growing rental income and increasing property equity is a well-known relationship that causes profitable rates of return and signals new investment. This paper suggests that median family income is a conceptually correct and readily available indicator of family well-being that can be examined periodically to determine the level of productivity of the local work force. This statistic is used to show the history of one MSA, its comparative performance relative to other metro areas in the state, and its relative position with selected MSAs in the Midwest and West.

13 DEFLATION RISK ON INCOME PROPERTY PERMANENT LOAN AND INVESTMENT PORTFOLIOS

by Marc R. Thompson, CRE

Over the past 18 years, the author has observed patterns in large income property loan portfolios during both inflationary and deflationary investment cycles. An inflationary investment cycle is when rents-prices for investment properties are increasing in aggregate. This inflationary trend occurred in the San Francisco Bay Area Tech Boom period from 1997 through 2000. A deflationary investment cycle is when rents-prices for investment properties are declining in aggregate. There is significant evidence to support a deflationary trend in the San Francisco Bay Area investment properties commencing 2001 with a 3- to 5- year duration.

20 EDUCATION IN THE REAL ESTATE PROFESSION

by Joseph S. Rabianski

Real estate education takes at least three general forms: academic education in colleges and universities; professional education from professional organizations, trade associations, and educational programs; and experience garnered from on-the-job training. This article considers these three educational forms and discusses past and present relationships between and among these options. It points out the best interrelationship among these three options and discusses the benefits to the real estate profession that can come from the bonding of these educational options.

27 9/11 REASSESSMENTS OF URBAN LOCATION COSTS AND RISKS

by James H. Johnson, Jr., and John D. Kasarda, CRE

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

35 New Brownfields Incentives Add to Diminishing Inventory of Developable Sites in South Florida

by Michael R. Goldstein

All of the empirical evidence available to close observers of the brownfields marketplace points to this: the scarcity of land combined with the demand for land set against the backdrop of a maturing regulatory approach to contaminated property means that anyone involved with development needs to take brownfields redevelopment seriously and make it a viable part of their business strategy. Those that fail to do so will forego a competitive advantage and forfeit opportunity to industry peers and rivals.

INSIDERS' PERSPECTIVES

- 39 FOCUS ON INVESTMENT CONDITIONS by Kenneth Riggs, CRE
- 41 FOCUS ON THE ECONOMY by Mark Lee Levine, CRE
- 48 FOCUS ON FINANCIAL REPORTING by Dale Anne Reiss

The articles/submissions printed herein represent the opinions of the authors/contributors and not necessarily those of The Counselors of Real Estate or its members. The Counselors assumes no responsibility for the opinions expressed/citations and facts used by the contributors to this publication whether or not the articles/submissions are signed.

Currently published quarterly by The Counselors of Real Estate, a not-for-profit organization, of the National Association of REALTORS®, 430 North Michigan Avenue, Chicago, Illinois 60611. Copyright 2002 by The Counselors of Real Estate of the National Association of REALTORS®. All rights reserved. (Printed in U.S.A.)

Third class postage paid at Chicago. Real Estate Issues publishes four times annually (Spring, Summer, Fall, Winter). Subscription rates are: \$48 for one year (4 issues); \$80 for two years; \$96 for three years; \$42 per year to students and faculty; \$54 foreign rate, submit in U.S. currency; single copy \$15. Remittances may be made by credit card or personal check, payable to The Counselors of Real Estate. Remittances, change of address notices, undeliverable copies, orders for subscriptions, and editorial material should be sent to *Real Estate Issues*, The Counselors of Real Estate, 430 North Michigan Avenue, Chicago, Illinois 60611. *Phone*: 312.329.8427; *Fax*: 312.329.8881; *E-mail*: info@cre.org; *Website*: www.cre.org

Library of Congress card number LC 76-55075

Real Estate Issues is a registered trademark of The Counselors of Real Estate, a not-for-profit organization.

REAL ESTAT

EDITOR IN CHIEF Hugh Kelly, CRE Real Estate Economics - Brooklyn, NY

CO-EDITOR

Kerry Vandell, CRE University of Wisconsin - Madison, WI

2002 EDITORIAL BOARD Timothy Barnes, CRE

PricewaterhouseCoopers LLP - New York, NY

James T. Barry, Jr., CRE

James T. Barry Co., Inc. - Milwaukee, WI Owen M. Beitsch, CRE

Real Estate Research Consultants - Orlando, FL

Michael Y. Cannon, CRE

Integra Realty Resources-AREEA/South Florida -Miami, FL

Maura M. Cochran, CRE

Bartram & Cochran, Inc. - Hartford, CT

John A. Dalkowski, III, CRE

Phoenix Real Estate Counselors, Inc. - Miami, FL

Jack P. Friedman, CRE

Jack P. Friedman & Associates, LLC - Dallas, TX

John L. Gadd, CRE

Gadd, Tibble & Associates, Inc. - Wheaton, IL

Joyce Geiger, CRE

Insignia/ESG, Inc. - New York, NY

Donald P. Guarino, Jr., CRE

AEGON USA Realty Advisors, Inc. -Cedar Rapids, IA

Paul G. Johnson, CRE

Johnson & Zaddack, Inc. - Phoenix, AZ

James C. Kafes, CRE

AEGON USA Realty Advisors, Inc.

New York, NY

George R. Karvel, CRE University Of St. Thomas - Minneapolis, MN

Steven Kaye, CRE

CB Richard Ellis/Whittier Partners - Boston, MA

Gerald M. Levy, CRE

Gerald M. Levy & Co. LLC - New York, NY

Richard Marchitelli, CRE

PricewaterhouseCoopers LLP - New York, NY

Michael S. MaRous, CRE

MaRous & Co. - Park Ridge, IL

William P.J. McCarthy, CRE

W.P.J. McCarthy and Company Ltd. - Burnaby, BC

Roy J. Schneiderman, CRE

Bard Consulting - San Francisco, CA

Daniel L. Swango, CRE

Swango Appraisal - Tucson, AZ

David J. Wilk, CRE

Greystone Realty Advisors, Inc. - Wilmington, DE

Jerome W. Witte, Jr., CRE

Hein & Associates LLP - Houston, TX

Gerald N. Zaddack, CRE

Johnson & Zaddack, Inc - Phoenix, AZ

Jim Zemezonak, CRE

Core Realty Partners - Scottsdale, AZ

2002 NATIONAL OFFICERS

William L. Ramseyer, CRE - chair of the board Philip S. Cottone, CRE - first vice chair of the board Richard A. Hanson, CRE - liaison vice chair Mark B. Millburn, CRE - liaison vice chair

Anthony F. Souza, CRE - liaison vice chair

PRESIDENT

Mary Walker Fleischmann

MANAGING EDITOR Jonathan Laxamana

EDITOR'S STATEMENT by Hugh F. Kelly, CRE

ne of the real joys of working in the real estate field is its complexity. There is always something new to discover, and everything seems linked to everything else. The "seven degrees of separation" game has nothing on our business. At times, it feels like the only way to get away from real estate is to take a cruise and to stay out of sight of land. When it appears that real estate is ubiquitous, it helps to remember that the planet is two-thirds covered with water.



CRE Hugh F. Kelly

But even water intrudes on the property industry, as James D. Timmons' insightful and timely essay on "The Growing Water Crisis: Public Policy Versus Private Property Rights" forcefully argues. Many may think of this as largely either an agricultural issue or one that impacts sparsely populated areas between the Rocky Mountains and the Sierra Nevada. But Timmons brings home the issue of water to ques-

tions of urban growth and the sustainability of economic expansion in such huge states as California and Texas. Couple his investigation with an awareness of aquifer depletion in Florida, and real estate professionals should immediately start thinking about the distribution of projected population and employment change in some of the nation's most dynamic markets. This is a timely and provocative piece.

For most of our professional lives, the leitmotif of economic discussion has been the impact of inflation. For a while, real estate was touted as a great inflation hedge for investors. No one has been arguing that recently. For one thing, inflation has been largely tamed since the Oil Shocks of the 1970s and the double-digit CPI increases of the early Eighties. For another, real estate has witnessed some rather sharp ups and downs in its pricing and it is clear that whatever its ability to hedge inflation over the long haul, values can clearly fall behind inflation

and even drop substantially while the general level of prices is rising. The debate has shifted to the potential threat of deflation, and we are pleased to bring you a thoughtful analysis of asset deflation as it affects permanent loan and investment portfolios. Mortgage lenders have long known that they have to price the prospective change in the general prices into the interest rate. Now there is a further question of yield degradation and/or default risk due to systematic asset price deflation. If Alan Greenspan and his colleagues are talking up the Fed's preparedness for coping with deflation, it is clearly something for all of us to be thinking about.

Now that it has been two years since the watershed date of September 11, 2001, we have an opportunity to look somewhat more dispassionately at the ramifications of that date on our lives. James Johnson and John Kasarda offer us their views on "9/11 Reassessments of Urban Location Costs and Risks." Drs. Johnson and Kasarda, both at the Kenan-Flagler Business School at the University of North Carolina, examine the post-9/11 environment from the perspective of corporations, employees, and insurance firms. In this thoroughly researched article, they also examine the debate about the effects on central city business environments in the future. While they conclude that 9/11 is likely to accelerate the pattern of deconcentration of businesses, they acknowledge that how (and whether) such a pattern in fact plays out is quite uncertain and so they offer some useful hints on how to monitor this issue in the coming months and years.

Dr. Donald Epley, who holds both the CCIM and MAI designations, contributes an applications article that should prove of direct practical benefit to real estate counselors concerned with fundamental economic drivers, "Measurement of Local

Economic Growth as a Critical Part of Market Analysis." As a rule, real estate professionals look to employment statistics as the primary measure of economic vitality in any locality. Dr. Epley's article helps us understand incomes measures as a supplementary analysis. Clearly, income data is directly relevant to property types such as housing and retail, but also provides clues to the health of the local economic base, especially be comparison to alternative locations across states and the nation. Epley shows how this data is being used in the public and private sectors, and how to access it on the Web and elsewhere.

Our menu of feature articles is rounded out with Joseph Rabianski's overview of "Education in the Real Estate Profession." Dr. Rabianski, the chairman of the real estate department at Georgia State's J. Mack Robinson College of Business, takes headon the question of how academic and experiential learning confront one another - "book-learning" versus "on-the-job training." He seeks to transcend the debate with a "matrix approach" where the two intersect. Rabianski offers some pragmatic suggestions on how such an approach can be implemented by a partnering of academia and industry. We hope that this will be one in a series of articles *Real Estate Issues* will publish on the subject of educational challenges facing our business.

Rounded out by our Insiders' Perspective columns by Ken Riggs, Mark Levine, and Dale Ann Reiss, we hope that our readers will find this slim edition of our journal an example of "good things in small packages."

Hugh F. Kelly, CRE Editor in Chief

THE GROWING WATER CRISIS: PUBLIC POLICY VERSUS PRIVATE PROPERTY RIGHTS

By James D. Timmons and Lara Womack

Tater is the staff of life. We cannot survive without it. We drink it, cook with it, bathe in it, play in it, irrigate crops with it, and use it in manufacturing. Will water be in the 21st century what oil was to the last? It is quite possible that vast fortunes will be amassed by those who control water and nations will go to war to preserve access to one of earth's most precious resources.

GLOBAL PERSPECTIVE

From a distance, Planet Earth looks like a beautiful blue sphere. This special color arises from the vast amounts of water found on Earth. However, the apparent abundance of this life-giving source is an illusion. Almost all the water on Earth is salt water in the oceans and is not useful for normal human consumption. Only about 2 percent is fresh water, and of that, less than half is available for use by the nearly six billion people around the world.

Global consumption of water is doubling every 20 years. That is twice as fast as the world's rate of population growth, and according to United Nations data, more than one billion people on Earth already lack access to fresh drinking water. The U.N. estimates that by 2025, approximately 2.7 billion people will face severe water shortages if consumption continues at current rates.²

ABOUT THE AUTHOR

James D. Timmons is an associate professor at the Department of Economics and Finance, Middle Tennessee State University, Murfreesboro, Tenn.

(E-mail: jtimmons@mtsu.edu).

Lara Womack is an associate professor at the Department of Accounting and Business Law, Middle Tennessee State University, Murfreesboro, Tenn.

(E-mail: lwomack@mtsu.edu).

Obviously, some areas, like the Amazon River basin, have a surplus of water. Other parts of the world, such as the arid deserts of Africa and the Outback region of Australia, have very little. Water shortages are likely to grow as the world population increases and as the number of "mega-cities" continue to expand. In the past, many cities were located next to rivers. Today, a growing number of large cities, such as Mexico City and Los Angeles, depend upon distant outside sources for their water supply. Drought, pollution and unsanitary sewage conditions, and private control of water rights are some of the factors escalating the urban water crisis. History is littered with tales of major cities that disappeared mainly because they ran out of water. Can what happened in the past, happen again in the future?

U.S. PERSPECTIVE

This article will focus on water issues in the United States. North America is a region that is generally rich in water resources. In the U.S. most of the health problems associated with poor water quality have been alleviated, but we still may be facing a water crisis. Throughout the country, a recent drought and population growth have placed a premium on water. In many states, the days of plentiful water are gone. As the population grows and droughts occur, states will face continuing pressures on their limited supplies. To a large extent, the way we deal with this issue will determine our economic future and the quality of life we enjoy.

Who owns the water, and how will it be distributed for human consumption, agricultural needs, and recreational uses? The politics of water are becoming quite interesting. Private property rights will be severely tested as urban areas find they cannot sustain growth without securing water rights that may come from great distances. City dwellers will compete with farmers and ranchers for adequate amounts of affordable water. States sharing water resources such as rivers, lakes, and underground aquifers are already battling their neighbors when they perceive an unfair overuse of this precious commodity.

It is certainly true that water is no longer a "free good" so abundant and so commonly available that no person has to pay for its use. Rapid population growth, especially in the American "Sun Belt," has led to numerous conservation efforts, and in some cases outright rationing. Water seems to have suddenly become a valuable commodity,

and cities, individuals, and businesses have found that it has become much more expensive. Mark Twain once commented "whiskey's for drinking, and water's for fighting." This may have always been true out West, and today it may be true in many parts of the country.

DROUGHT

The Rio Grande was running so dry last spring that the famous Texas river, that shares an eight hundred mile border with Mexico, failed to reach the Gulf of Mexico for the first time in fifty years. Across America water supplies ran out, drained by drought and rising consumption. Drought is a normal, recurrent feature of climate. It occurs almost everywhere, although its features vary from region to region. For the record, 2002 was the 19th warmest year in the United States since record keeping began in 1895.3 Those above average normal readings, combined with lack of moisture across much of the nation, plunged more than half the country into drought by summer. It is part of a record-breaking cycle in which the 10 warmest years have occurred since 1987, nine of them since 1990. The year ended with approximately 36 percent of the nation still in drought, about the same amount as when 2002 began. That figure far exceeds the average of 20 percent of the country in drought annually since 1900.4 The most extensive drought on record in the United States was in July 1934, when 80 percent of the country was parched during what is often referred to as the "Dust Bowl." Researchers say global warming, which is the heating of the Earth's atmosphere because of exhaust gases from the burning of fossil fuels, is a major cause for the drought. Natural fluctuations in climate also affect temperature.

The abnormally warm weather conditions and accompanying drought have focused attention on U.S. water problems. This was particularly true last summer on the Eastern Seaboard, a region that is not as accustomed to drought. Heavy precipitation during the last three months of 2002 and early in 2003 helped to reduce long standing moisture deficits across the Eastern Seaboard.

Those who live in the Eastern part of the United States often do not realize that water is a scarce commodity until they actually experience a prolonged period of drought. And when a drought does occur in the East, it is generally the agricultural community who is hardest hit. Westerners are rediscovering a truism obscured during the

1980s when they experienced a relatively long, wet cycle that coincided with a period of unprecedented population growth: They live in a near-desert where water is a limited resource.

Despite semi-arid climates and public perception, the Rocky Mountain States are actually water rich. Winter snowfall provides an abundance of water. The challenge for water providers is to adapt the timing and location of snowmelt to meet the timing and location of water demands. Generally, this means storing spring snowmelt in reservoirs for use in other seasons. It also means moving water from resource-rich areas to demand-intense areas. A good example of this would be West Slope snowmelt moving to East Slope irrigation needs in Colorado.

URBAN GROWTH ISSUES

The desert Southwest is home to many of the nation's fastest growing cities, and none of them has grown faster than Las Vegas. It is the fastest growing major metropolitan area in the United States. Since 1980, the population has grown from 480,000 to 1.5 million. During the decade of the 1990s Las Vegas grew by almost 45 percent.⁵

Las Vegas is not the only example of a Southwestern boomtown. Phoenix, Tucson, Albuquerque, San Antonio, and many other western cities, have experienced substantial growth in recent years. All of these cities consume more water per person per day than cities in other regions of the country. In 1995, the U.S. Geological Survey reported that per-capita water use per day in its Lower Colorado River district was 120 gallons compared to only 70 gallons in the Northeast part of the U.S.6 Las Vegas uses 400 gallons per day per person, and Phoenix, the city with the next highest use consumes 310 gallons per day per-capita. Largely due to agricultural irrigation, total per capita "off-stream" water use in Colorado and other interior Western states exceeds 3,700 gallons/day. Off-stream use refers to water used for domestic purposes, commercial and industrial applications, thermoelectric power generation, irrigation, livestock, and mining. Off-stream use in Western states is nearly three times the national average of 1,280 gallons/day.7 Nearly eighty percent of the water used in Western states goes to agriculture and ranching, activities whose survival has been based upon federal subsidies related to massive water projects.

California and Texas have especially great water needs, and may be viewed as special cases in the water policy debates. California is the nation's most populous state, with 35 million citizens. Twenty-one million residents call Texas home, making it the nation's second most populous state. These two states perhaps face the greatest challenges of any state with regard to limited water resources being available to quench their enormous population demands. Both states have been actively involved with water rights issues for some time.

California relies for its existence on massive hydraulic works that move enormous quantities of water from areas of relative abundance, both within and outside the state, to areas of relative scarcity. Despite such impressive technological achievements, Californians are currently using more water than will be available on a long-term basis. It is estimated that they run a 1.6 million acre-foot deficit annually, and during years of drought, the shortfall can rise to over 5 million acre-feet. Currently, the shortage is made up from groundwater coming from aquifers that are being pumped of water faster than they can be recharged by nature.8

California's growth, and particularly that of Southern California, is directly tied to the 1922 creation of the Colorado River Compact. Los Angeles needed more water, and the Golden State's power let it take the lion's share of Colorado River resources. Arizona, Nevada, and five other states got what was leftover. The relationship between California and its neighbors, the junior partners in Western growth, was made clear by the allocation of water. Nevada got 300,000 acre-feet compared to California's 4.4 million acre-feet.⁹ This disproportionate sharing was not a real problem until the 1980s when other Western states started to grow even faster than California.

In 1999, the U.S. Secretary of the Interior told California that it had to cut its use of water from the Colorado from the 5.2 million acre-feet of actual use to its legal allocation of 4.4 million acre-feet a year. California was given three years to work out a plan for reducing consumption, and then until 2015 to phase it in. If the state could not come up with a plan, the department would simply cut off its share of the surplus water supply. Oddly enough, the deadline passed on December 31, 2002 without a plan, so the department has turned off

the tap. The Southern California Metropolitan Water District will lose one quarter of its water supply. Seventeen million people are served in this water district. Luckily, reservoirs have two years' supply to buffer the shock, and plans will speed up for building desalination plants and cutting consumption. Why did California not develop a plan? The sticking point that prevented a deal was the ongoing strife between cities and farms. Farmers account for only 3 percent of the state's economy, but use 80 percent of the water. The battle between urban water demands and agriculture's long standing access to water will continue to cause strife.

Texas also has its share of water problems. Texas is a growing state, with population expected almost to double by 2050. Rather than being uniformly distributed, growth will focus most heavily around urban centers. Although most rural communities and small cities are growing, they are not growing as fast as those areas near urban centers. This trend will create issues of resource sharing and competition between rural and urban areas.

By 2050, the Texas Water Development Board (TWDB) estimates that almost 900 cities, representing 38 percent of the projected population, will need either to reduce demand or develop additional sources of water beyond those currently available to meet their needs during droughts. Twenty percent of irrigation demand cannot be met by existing sources if a drought-of-record were to occur today. Seven percent of municipal demand cannot be met by existing sources of water were a drought to occur now. However, the TWDB estimates if a drought occurs in 2050, almost half (43 percent) of the municipal demand could not be satisfied by current sources of water. These dire forecasts have motivated Texas to pass two major water resource plans within the past six years.

In 1997, for the first time in their state's history, Texans mixed the concepts of development, conservation and management with the state's most precious resource---water. The state legislature passed a comprehensive statute that called for a statewide water plan to cope with drought, population growth, and environmental issues. One of the primary elements of this initiative was to change the planning process to one based on public participation at each step of the process and local and regional decisions to produce regional water plans, which will form the basis of the State

Water Plan. Approximately 450 representatives having a broad array of interests, including 11 special interest groups required by statute, worked for more than 3 years to develop their 16 regional plans.

Using the great wealth of information and the recommendations provided by the Planning Groups, the state enacted Water for Texas--2002, the first state water plan since the 1997 legislation. This action approved four of the six recommendations common to all of the regional plans. The changes were to continue the planning process, provide adequate funding for regional water planning, provide adequate funding for implementing water plan recommendations, and to clarify provisions in the 1997 act on unique stream segments.

In Texas all surface water is considered public, but groundwater is privately owned. In Texas the "right of capture" allows a landowner to take as much groundwater as he or she desires without regard for their neighbors, as long as the water is put to a "beneficial use." Back in 1991, Ron Pucek brought many of South Texas' water issues to a head when he opened his Living Waters Artesian Spring Catfish Farm just outside of San Antonio. News reports indicated Mr. Pucek was using enough water to raise catfish as would be necessary to support about 250,000 people, approximately the amount of water used by one fourth of the population of San Antonio.¹¹

Pucek had spent over \$1 million to drill the world's largest water well, a well that was capable of producing 40 thousand gallons of water per minute. Was this use of water a waste? Should anyone be able to use that much water? Certainly the City of San Antonio had grave concerns about their future supply of water, most of which comes from the same Edward's Aquifer that Mr. Pucek was pumping from. The law and the agricultural community were definitely on his side. And they found it easy to point out that his use of water to grow a food crop seemed much less wasteful than using water to keep lawns green in the summertime.

The catfish farm was fully operational for only one season before it was forced to shut down because they did not have the proper permit to discharge wastewater in the nearby Medina River. In 1996, Pucek reopened the project on a smaller scale, using a holding pond so that no water would escape from the property. Mr. Pucek did not need

any discharge permits if the water did not leave his land. The Edwards Water District determined that the project's holding pond design was faulty and that water was indeed still being discharged into the Medina illegally.

Faced with the prospect of enormous legal fees, Mr. Pucek agreed to once again shut down. In the farming community, and in the eyes of those who champion private property rights, Mr. Pucek's use of all the water he wanted was totally lawful and proper. Many hoped he would continue his fight to validate a property owner's legal right of capture. The city of San Antonio was relieved that the catfish farm wasn't operational, but was still very concerned about their capability to assure future water needs. Some believe Mr. Pucek and his backers were merely angling for a big buyout of their water rights. The fact is that on December of 2000 the San Antonio Water System agreed to buy the catfish farm and its water rights for \$9 million. 12 The sale brought an end to almost a decade of contentious squabbling and terminated the possibility of future litigation. The sale may also have caught the attention of other Texas entrepreneurs who know how to make a buck.

Texas is well known for its oil barons, but it may become known for its water barons. Water, not oil, may become Texas liquid gold. T. Boone Pickens, the former oilman and corporate raider whose takeover bids once struck terror in boardrooms, is now actively trying to corral and market water. Pickens owns ranchland on the high plains of the Texas Panhandle. His land sits atop the southern tip of the Ogallala Aquifer, one of the world's largest underground reservoirs. The Ogallala is the source of groundwater and irrigation for eight states in a 174,000 square mile area that stretches from South Dakota to Texas.¹³

Pickens has offered neighboring ranchers \$350 per acre for their water rights if he can secure enough acreage to provide adequate supplies of water for export to major Texas cities. He believes he can build billion dollar pipelines to cities such as San Antonio, El Paso, and Dallas and Fort Worth. He is betting that rising demand for water will cover the costs of the massive project and make a profit. Mr. Pickens is not the only big-time operator to see the possibility of megabucks in water. Billionaire brothers Ed and Lee Bass of Fort Worth, also oil barons, bought 45,000 acres of water rights in Southern California in 1997. They sold those water

rights to U.S. Filter Corporation, which provides water to a thirsty San Diego. The water rights brought a cool \$250 million, and the brothers are said to be interested in repeating their success in Texas. Not everyone in Texas is happy about transporting water from the Texas Outback to fast growing urban centers, but the movement of water over long distances to urban centers is an ongoing theme around the country.

FEDERAL WATER POLICY

In the Western United States, much of the land is still owned by the federal government. It is not unusual for more than forty percent of the land in Western states to be owned by the U.S. Government. In Nevada, for example, the figure is almost 83 percent, in Idaho 62 percent, Utah 64 percent, and 45 percent in California. For this reason, and many others, it is not unusual that the federal government has been involved in developing water projects for a variety of purposes. For more than a century, the federal government has been active in flood control, navigation, power generation, irrigation, and settlement of the West.

Two federal agencies are most actively involved in water projects throughout the country. The Bureau of Reclamation, in the Department of Interior, operates nearly 350 storage reservoirs and approximately 250 diversion dams that provide water to 17 states, over 31 million people, and irrigation to 9 million acres of land.14 The Bureau controls significant (40-85%) portions of river flows in nearly all major river basins in the West.¹⁵ The other federal agency that actively carries out water policy is the U.S. Army Corps of Engineers, which is housed in the Department of Defense. The Corps operates hundreds of flood control, navigation, and multipurpose works throughout the country. Over the last decade, both the Corps and the Bureau have undertaken projects or programs aimed at mitigating or preventing environmental degradation due to the construction or operation of large water projects. These initiatives have been quite controversial since each involves many stakeholders at federal, state, regional, and local levels. Water users, landowners, farmers and ranchers, commercial and sports fishermen, urban water suppliers and users, navigational interests, hydropower customers and providers, recreational users, and environmentalists are all parties-at-interest in an ongoing debate over water policy.

Developing new water through new dams and reservoirs has become increasingly difficult, large-

ly due to concerns over environmental protection and the fact that the most obvious water projects have already been built. Moving already developed water from one location to another is often a more practical option, but can bring negative consequences for rural agricultural Development of deep, mostly non-renewable, groundwater is also an attractive option in some situations, but it is not a permanent solution to the water demands of growth. For many Rocky Mountain States, the real issue is not one of impending shortages, but the very real problems of environmental, economic, and social costs that must be paid to keep the water flowing to growing regions. The cost of water will likely go up as competition increases for limited supplies.

STATE WATER LAW

There are two major approaches to determining legal rights to water in the U.S. One is the riparian rights system, which is generally followed in states east of the Mississippi River. The other is the system of prior appropriation, followed in Western states. The two systems are similar in that they determine who has the right to use the water. They do not determine who owns the waterway. As water becomes scarcer, and thus more valuable, there is a growing concern that neither of these systems adequately protects the rights of the general public.

The system of prior appropriation allows parties to acquire rights to water that exist independently of any other property interest. The acquisition of such rights is based upon actual use of the water. There must be a diversion of the water. Then the water must be applied to a beneficial use. When this appropriation is complete, the rights are treated similarly to real property rights. They can be conveyed, mortgaged, or otherwise encumbered. In states that recognize prior appropriation, the water rights thus acquired can be sold to remote buyers without regard for the interest of the public located in the area from which the water was derived. ¹⁶

Riparian rights refer to the rights of those through whose land a natural waterway flows to make reasonable use of that water. The water right is part of the land that borders on or contains the water flow. It is limited to a right to use the water on the riparian land. The water cannot be diverted to non-riparian property, even if the same party owns that property. The right is not however, dependent upon actual use. Ownership of the property, not previous use of the water, is the derivation of the right.¹⁷

There are several criticisms of the riparian system. One is that because the rights are not adequately defined, the system does not encourage investment in water development. Also, it depends upon litigation for enforcement of rights, and it lacks protection for environmental and other public values. Finally, because it is based upon ownership of the adjacent land, it places geographic limitations of the use of water. The riparian system has worked when the supply of water was sufficient, but these limitations have caused it to fail in areas affected by drought.

As concern over the quantity of water grows to include all states, not only those in the west, there is also growing dissatisfaction with the existing systems for establishing water rights. Some favor a public trust system that would reaffirm the public's paramount interest in water as a resource. This could be coupled with a regulated riparian system, which would allow those owning property adjoining the waterway to make reasonable use of the water, but would require a permit for any withdrawal over a stated amount. The water left after reasonable use would be for the benefit of the public and the environment. Others favor the privatization of the water use system. This would allow each user to appreciate the true cost of using water, and might best promote the conservation of this resource.

CONCLUSION

Many Americans take water for granted. For most of us, it took the recent drought to focus some attention on water shortages, and remind us how precious and perhaps scarce water can be. City dwellers in particular often have little appreciation for the difficulties that are associated with acquiring and transferring water. We turn the tap and water appears. In the United States, water is generally safe to drink, doesn't cost much, and we often don't make much of an effort to conserve it.

As our urban areas continue to grow, particularly in the arid southwest, the demand for water will create an even greater friction between those who use this limited natural resource. Urban growth will pit agricultural users against city dwellers. Ultimately, the political power and economic muscle of urban users will wrestle control of water away from those who have traditionally controlled its use. In the Western part of the country, water will be transported great distances from areas of surplus to areas of need. Federal, State, and local

jurisdictions will all take an active and direct interest in deciding how water is gathered and who shall have access to it.

As water becomes scarcer, and therefore more valuable, it will take on many characteristics of another important commodity--- oil. Water will become more expensive to many users, and those users who have the most money or political clot will get the water. Entrepreneurs may also get an opportunity to control water resources and exploit water's value. Undoubtedly, private property rights will be challenged as the public's need for water expands. The challenge of providing water, however, will vary greatly throughout the country. All states will protect their water resources. Water rich areas will have fewer concerns about water shortages, and may even find that their excess water provides a monetary benefit. Those areas of the country that are experiencing water shortages will continue to aggressively develop new approaches to deal with their water problems. These approaches will include water conservation, water marketing, the long distance transfer of water, waste-water reclamation, and probably an assault on private property rights as the general public requires greater amounts of water.

- 1. Barlow, Maude, "The Global Water Crisis and the Commodification of the World's Water Supply" 31 May 2002 Available at http://www.ifg.org/bgsummary.html.
- 2. Barlow, Maude, "The Global Water Crisis and the Commodification of the World's Water Supply" 31 May 2002 Available at http://www.ifg.org/bgsummary.html.
- 3. O'Driscoll ,Patrick, "Warmer World Driving Weather," USA Today, December 18, 2002, p. 3A.
- 4. O'Driscoll , Patrick, "Warmer World Driving Weather," USA Today, December 18, 2002, p. 3A.
- 5. Rothman, Hal, "Urban Oasis Cash Keeps Las Vegas Lush ... and It should," Urban Ecology, Spring 2001, pp. 14-8.
- 6. Rothman, Hal, "Urban Oasis Cash Keeps Las Vegas Lush ... and It should," Urban Ecology, Spring 2001, pp. 14-8.
- 7. Kenny, Douglas, "Frequently Asked Questions about Water and Growth in Colorado" Available at

http://www.colorado.edu/Law/NRLC/waterandgrowth.html.

- 8. Hundley, Norris Jr., The Great Thirst: Californians and Water History, Revised Edition, University of California Press, Berkeley and Los Angeles, California, 2001.
- 9. Rothman, Hal, "Urban Oasis Cash Keeps Las Vegas Lush ... and It should," Urban Ecology, Spring 2001, pp. 14-8.
- 10. The Economist, "Water Policy in the West Pipe Dreams," January 11, 2003.
- 11. Eckhardt, Gregg A., "Ron Pucek's Living Waters Catfish Farm," 28 February 2002 Available at

http://www.edwardsaquifer.net/pucek.html.

- 12. Eckhardt, Gregg A., "Ron Pucek's Living Waters Catfish Farm," 28 February 2002 Available at http://www.edwardsaquifer.net/pucek.html.
- 13. Shirley, Kathy, "Pickens Jumps into Water Market" 28 February 2002 Available at http://www.aapg.org/explorer/archives/07_01/pick-
- 14. Water Issue and the United States Government, "Water Issues," 28 February 2002. Available at

http://environment.about.com/library/weekly/blwater2.html.

- 15. Weinberg, Marca, "Assessing a Policy Grab Bag: Federal Water Policy Form," American Journal of Agriculture Economics, Vol. 84, no. 3,
- 16. Joseph W. Dellapenna, "The Law of Water Allocation in the Southeastern States at the Opening of the Twenty-First Century." 25 U.Ark. Little Rock L. Rev. 9 (2002).

18. George A. Gould, "A Westerner Looks at Eastern Water Law: Reconsideration of prior Apprppriation in the East, 25 U.Ark. Little Rock L. Rev. 89 (2002).

MEASUREMENT OF LOCAL ECONOMIC GROWTH AS A CRITICAL PART OF MARKET ANALYSIS

by Donald R. Epley

A n important part of local market analysis is the measurement of economic growth that can be used to track progress in the economy through time and assess the relative productivity of the local base in comparison to other areas. This information is a critical part of the analysis to determine if a market has the potential for sufficiently increasing rents and equity to justify an investment. One analytical approach is to derive a local indicator that is consistent with the concepts and tools used by the federal government to measure growth for the national economy.

The purpose of this article is to suggest that a useful local indicator is the median family income statistic that is produced annually by the U.S. Department of Housing and Urban Development. It is a measure of local income that results from the skills of the area labor force that have been employed by the historical accumulation of regional capital. Also, it is consistent with the federal and state governments' emphasis on the measurement of various income accounts as proxies for growth. The gross domestic product (GDP), gross national product (GNP), and personal income (PI) accounts have been published for a number of years under the label of "economic growth."

ABOUT THE AUTHOR

Donald R. Epley, Ph.D., CCIM,
MAI, is the Lyon Distinguished
Professor of Real Estate at
Washington State University.
(E-mail: depley@wsu.edu).

An accurate measurement and approximation of the economic health of the local economy should be of interest to every real estate analyst and counselor. The potential for maximum future income and appreciation will be directly influenced by the rate of economic growth, and these measurement tools will be a useful and essential part of every counselor's toolkit.

ECONOMIC GROWTH AND MEASUREMENT

Economists have traditionally labeled an increase in productivity from the traditional factors of production of land, labor, and capital, as economic growth. One method to measure the production function can be in goods and services which means that a heterogeneous combination of units of production must be aggregated. The current method used by the U.S. Department of Commerce is to total the dollar income generated from the demand or sale of all units produced. This income has been reported regularly as gross domestic product (GDP) and personal income (PI).

Two difficulties arise when the GDP or the PI measurements are used at the regional and local level. First, the income figures produced by the federal and state agencies typically are two years old. Second, the local income account data often does not exist, and if it is produced locally, may not be reliable or compatible with state totals.

Five methods are discussed typically for the measurement of economic growth and to project the economic future (Sullivan, 1990, pp. 134-154). One is to measure the amount of basic employment that produces primarily for export compared to the number of non-basic employees who produce primarily for local consumption. Economic growth is viewed as an increase in the base employees only as the sale of the products they produce generates new fresh dollars that are used in a multiple effect on the non-basic workers. Further, the number of basic workers can be expressed relative to total population which creates a ratio that can be used to project employment and the resulting impact on the economy.

The second method is to construct an econometric model that finds the best relationship between a dependent variable, such as personal income, and other independent variables such as employment and retail sales (Gordon, Mosbaugh, and Canter, 1996). The typical approach is a regression model

that can be used to find the best historical relationship among these variables that can be used for projections, if desired. The regression model relies on the skills of the analyst to accurately identify and update the variables and the equation(s).

The third approach is to rely on an input-output table that shows the relationship between the products that have been produced by local industries and the industries that supply the factors of production that are purchased (Epley, 1972-73). The results can be expressed in production dollars, employment, or income.

The fourth approach is to assemble a number of local economic indicators into an index that is labeled typically as "economic activity." Different methods of construction include one that is based on export prices (Cross, 1997), a heterogeneous grouping of indicators that are measured in varying units such as number of employees, dollars of retail sales, and number of building permits (Jones Lang LaSalle, 1998; Governor's Office, 1994), and an estimate of changes in the value added of the local work force (Epley, 2002).

The fifth approach is to locate or construct local indicators of family income. Following the same concept used at the federal level that economic growth is measured by a change in income, a good local indicator of family well-being, such as median family income, can be used.

In sum, the measurement choice depends on the potential use of the indicator and the available budget. The input-output method is the most detailed and the most accurate, and at the same time, the most expensive. Once constructed by state agencies, these models have almost been discarded as a tool that is too expensive.

The econometric model is the typical choice of the economist. Its accuracy is subject to the talents of the analyst and can require expensive data. The result is typically information on economic relationships and impacts that are difficult to understand and explain to users outside the economics community.

The economic base analysis is a good first step to determine the basic structure of the community. It is too simplistic and does not contain sufficient detail that can be used to explain changes in growth and income.

The result is that local economic growth must be explained by an economic growth index that is constructed around income levels of the workforce, or the selection of an indicator that can be used regularly and reliably. Such an indicator is the median family income statistic described in this paper.

MEDIAN FAMILY INCOME

Median family income is a critical component of consumer demand that drives a significant amount of local economic activity. One of the principal goals of the local planning process and government and private expenditures should be to increase the level of family income. It provides a good indicator of the future level of consumer purchasing power that will appear in retail sales, building permits, and housing purchases.

Every community has a historical investment of capital in firm assets that are used to produce products and services. This composition of investment will demand a workforce with special knowledge and skills that will result in a wage structure unique to the local economy. Measuring the resulting family income is a good indicator of the change in the composition of the workforce, wages, or both.

One local income account figure that is produced annually by the U.S. Department of Housing and Urban Development for every MSA and selected non-MSA areas is the median family income estimate. Used to determine family income qualification levels for Section 8 housing, these estimates may be found at the HUD Web site (www.huduser.org/datasets).

Another source for this income account are the tables shown on the website of the Federal Financial Interagency Examination Council (www.ffiec.gov/). This agency shows selected census data and median family income by census tract for MSAs in tables that can be downloaded.

CURRENT USES

Median family income is used currently by several organizations:

National Association of Realtors includes median family income in its affordability index which estimates the ability of the public to purchase housing.

Exhibit 1 Historical Assessment for One MSA

Year	Median Family Income	e Annual Growth	
2002	\$46,600	1.75	
2001	45,800	3.85	
2000	44,100	0.92	
1999	43,700	4.05	
1998	42,000	5.26	
1997	39,900	-	

- U.S. Department of Housing and Urban Development uses median family income in its estimation of low income and very low income levels to qualify for section 8 housing.
- U.S. Department of Health and Human Services uses median family income for its Low Income Energy Assistance Program.
- Federal Financial Interagency Examination Council, Washington, D.C., requires covered financial institutions to use median family income when accumulating local data for reports to indicate Community Reinvestment Act and Home Mortgage Disclosure Act compliance.

This family income estimate is produced annually by the U.S. Department of Housing and Urban Development for every U.S. metro area and non-area. The annual figures are based on the 1990 census data updated to 2002 using Bureau of Labor Statistics earnings and employment data and Census median family income data.

MEDIAN FAMILY INCOME VS MEDIAN HOUSEHOLD INCOME

Median family income measured by the U.S. Department of HUD is not the same figure as the median household income measured by the U.S. Census. A family consists of two or more people living in the same housing unit who are related by birth, marriage, or adoption. One must be the householder. A household consists of all people who occupy a housing unit regardless of relationship such as a single person, multiple unrelated individuals, or families living together. The median is the point where one-half of all numbers are above and one-half are below.

The Spokane, WA, MSA is shown in Exhibit 1. Six years of historical income figures were gathered and annual growth computed.

Exhibit 2 Spokane MSA and Nine State Reporting Areas: Median Family Income Level and Rank

	2000		2002		2000-02	
	MFI	Rank	MFI	Rank	% Growth	Rank
Nine Reporting Areas						
Bellingham	\$48,100	6	\$50,200	5	4.37	6
Bremerton	49800	3	51500	4	3.41	8
Olympia	49900	2	53000	2	6.21	2
Rich-Ken-Pasco	48200	5	49500	6	2.7	9
Seattle-Bell-Everett	65800	1	77900	1	18.39	1
Spokane	44100	7	46600	7	5.67	5
Tacoma	49100	4	52000	3	5.91	4
Yakima	38200	9	40500	8	6.02	3
Outside MSAs	38600	8	40200	9	4.15	7
median	\$48,200		\$50,200			

Although the Spokane economy has not maintained a growth rate equal to inflation in selected years, all rates are positive which reflects slow steady growth.

HISTORICAL COMPARISON IN THE STATE

Two criteria were used for a comparison of the Spokane MSA with other comparable regions. One was the absolute level of median family income. Using similar levels means that the local composition of the invested capital must be paying the workforce a similar amount. The second criterion was a similar growth rate This means that the workforce is paid approximately the same for increases in productivity.

Using these two criteria produced the ranking and comparable economies shown in Exhibit 2.

The Spokane MSA ranked seventh in median family income among the nine reporting areas in 2000 and remained in the same position in 2002. Although the growth rate between the two years was a respectable +5.67% and ranked fifth among growth rates, it was still not sufficient to increase the level of income to a higher relative position.

The Spokane MSA year 2000 median family income of \$44,100 was below the 9 reporting area median of \$48,200. The 2002 figure of \$46,600 remained below the 9 area median of \$50,200. The state is higher than the U.S. in all three categories (Exhibit 3).

Exhibit 3 State of Washington and the U.S., 2002

	Total	Metro	Non-metro
Washington	\$60,600	\$64,800	\$40,200
U.S.	54,400	58,600	39,700

COMPARISON WITH OTHER MSAS

The attached tables show a comparison of the Spokane MSA median family income with 44 selected MSAs. In the search for comparable areas, two criteria may be used: absolute dollar levels that are close to \$46,600, and a similar rate of growth (Exhibit 4).

The Modesto, CA, MSA median family income of \$46,500 in 2002 and the +5.92% rate of growth in 2000-02 makes it most comparable to the Spokane economy in the 44 MSAs examined

This method to select comparable MSAs is useful to local groups such as the Chamber of Commerce and any economic development organizations. It shows which MSAs can be emulated and used as benchmarks, and concurrently, the MSAs which have a similar capital structure and value added workforce that generates a similar level of income.

Exhibit 4

Median Family Income	2002	2000 %	growth
5% higher than Spokane			
Seattle-Bell-Everett,WA	77900	65800	18.39
Rochester, MN	74300	66500	11.73
Madison, WI	71300	64700	10.2
Racine, WI	65000	59800	8.7
Omaha, NB	64400	58600	9.9
Indianapolis. IN	64100	57700	11.09
Ft Wayne, IN	59800	54500	9.72
Topeka, KS	59200	54000	9.63
Wausau, WI	57700	54000	6.85
Sacramento, CA	57300	52900	8.32
Portland- Van, OR-WA	57200	53700	6.52
		20000000000000000000000000000000000000	77.17.5555
Salt-Lake City, UT	57200	53400	7.12
Colorado Spgs, CO	56800	51300	10.72
Boise City, ID	54500	50200	8.57
Olympia, WA	53000	49900	6.21
Sioux City, IA-NB	52300	48100	8.73
Tacoma, WA	52000	49100	5.91
Bremerton, WA	51500	49800	3.41
Provo-Orem, UT	50400	46500	8.39
Bellingham, WA	50200	48100	4.37
Rich-Ken-Pasco, WA	49500	48200	2.7
Springfield, MO	49200	45200	8.85
Comparable with Spokan	e		
Muncie. IN	48900	47900	2.09
Grand Forks, ND-MN	48800	45400	7.49
Billings. MT	48600	47300	2.75
Flagstaff, AZ-UT	48200	45500	5.93
Stockton-Lodi, CA	47500	45400	4.63
Spokane, WA	46600	44100	5.67
Modesto, CA	46500	43900	5.92
Waco, TX	10000000000000000000000000000000000000	7/4/46/2/000074/V	D110007
San Antonio. TX	46300	43800	5.71
	46200	43100	7.19
Lubbock, TX	45500	43600	4.36
Amarillo, TX	44800	43000	4.19
San Angelo, TX	44400	41300	7.51
5% lower than Spokane			
Joplin, MO	43600	40900	6.6
Grand Junction, CO	42700	40400	5.69
Great Falls. MT	41900	40000	4.75
Medford-Ashland, OR	41900	38800	7.99
Abilene, TX	41200	40300	2.23
Wichita Falls, TX	40900	39800	2.76
Yakima, WA	40500	38200	6.02
Fresno, CA	40300	37600	7.18
Outside MSAs, WA	40200	38600	4.15
Pueblo. CO	39400	37500	5.07
El Paso, TX	36300	34900	4.01
		J+700	7.01

CONCLUSION

Indicators of local economic growth should be part of every real estate market analyst's toolkit as the nature and amount of economic activity will be part of every investor's investment criteria. One good indicator is the median family income estimate that is produced annually for each MSA by the U.S. Department of HUD for determining the qualification level of families to receive housing support. It serves as a final measurement of the ability of the local historical capital structure to employ and pay a wage level that creates local spending power.

Median family income can be combined with other useful statistics such as the range of low and high family incomes in the area in question. The percent of families that fall at the high and low ends, respectively, is useful on the distribution of purchasing power. The community can be composed of high wage earners or those at the lower end which influences trade area and potential development.

Should the analyst want to compare the local economy with other comparable areas, two criteria are important. The first is the absolute level of income that shows the ability of the historical investments in the area to employ and pay a workforce. The second is the growth rate in income as it shows the ability of the invested capital to improve on its productivity.

REFERENCES

Conference Board, U.S. Leading Economic Index, (http://globalindicators.org).

Cross, A.P., Measuring External Shocks to the City Economy: An Index of Export Prices and Terms of Trade, *Real Estate Economics*, 25(1), 1997, 105-128.

Epley, Donald, A Test of Base Theory Using Income Indexes Constructed from a State Input-Output Table, *Review of Regional Studies*, Spring, 1972-1973.

Epley, Donald R., *The Spokane Economic Growth Activity Index*, quarterly newsletter, 2002-03, depley@wsu.edu.

Gordon, Jacques, Paige Mosbaugh, and Todd Canter. Integrating Regional Economic Indicators with the Real Estate Cycle, *Journal of Real Estate Research*, 12(3), 1996, 469-566.

Governor's Office, Economic Report to the Governor, State of Tennessee, 1994.

Jones Lang LaSalle, Regional Economic Growth Index, Chicago, 1998, 4 pages.

Sullivan, Arthur M., *Urban Economics*, Richard Irwin Publishers, 1990, chapter 6.

DEFLATION RISK ON INCOME PROPERTY PERMANENT LOAN AND INVESTMENT PORTFOLIOS

by Marc R. Thompson, CRE

ABOUT THE AUTHOR

Marc R. Thompson, CRE, has 18 years experience managing income property loan portfolios. Marc is president of The Equity Asset Managers Association in San Francisco, an association of income property loan work-out specialists serving Northern California. He currently serves as a lending manager for Bank of the West in Walnut Creek, CA and teaches Financial Management part-time at California State University, Hayward.

 $(E{-}mail:\ mthompson@bank of the west.com)$

ver the past 18 years, the author has observed patterns in large income property loan portfolios during both inflationary and deflationary investment cycles. An inflationary investment cycle is when rents-prices for investment properties are increasing in aggregate. This inflationary trend occurred in the San Francisco Bay Area Tech Boom period from 1997 through 2000. A deflationary investment cycle is when rents-prices for investment properties are declining in aggregate. There is significant evidence to support a deflationary trend in the San Francisco Bay Area investment properties commencing 2001 with a 3- to 5-year duration.

INVESTMENT PROPERTY MARKETS ARE CHAOTIC

Income property portfolios react similarly to chaotic or non-predictive patterns in other investment portfolios such as stocks and bonds. The primary difference is that the time of change is very slow as measured in years in income property loan portfolios compared to the more volatile stock or bond portfolio reaction measured in days. This time difference is rather large since it typically takes 6 minutes to sell a stock versus 6 months on average to sell an income property. These "sell times" are averages from the point an investor decides to market an investment to the time net proceeds are received. Further, income prop-

erty transaction times extend or contract depending on market conditions. Historically, income property is considered a safe, predictive investment alternative compared to the more volatilechaotic stock or bond markets. Investor winners and losers are measured daily in the stock and bond markets, while income property portfolios are measured over years. Income property investments move so slowly that most investors believe it is predictable. Since the average "sell time" takes six months, deflationary pressures can have a significant negative impact on income property investments held over long periods of time. Predicting when or if deflation will hit a market is debatable between buyers and sellers. As it takes about 6 months to get out of a property, investors display a propensity to hold on longer during the beginning of deflationary cycles. Therefore, when it is time to sell, most investors have waited too long to capture the sales gain at the market top. Most investors discover when the top of the inflationary market occurred after they are already on the investment cycle's down slope. When investors in aggregate believe it is time to sell, it is often too late as the top of cycle has already occurred. When investors try to sell on the down slope with vacancies increasing and with downward pressure on rental rates, it is very difficult sell since buyers typically have an uncertain outlook and are waiting on the sidelines for lower purchase prices. Spieker Properties, with the benefits of hindsight, selling to Equity Office is one example of a sale near the top of the inflationary cycle in February 2001. This transaction was observed by many CREs as the best-timed major income property portfolio sale in the San Francisco Bay Area marketplace.

INVESTMENT CYCLE PERIODS

Given the recent 10-year investment cycle (1991-2001) in the San Francisco Bay Area, the first 5 yearperiod through 1996 was in aggregate deflationary for income investment properties purchased or refinanced from the previous inflationary period--1986 through 1991. The last 5 years (1997 through 2001) was an inflationary period with rents/values in aggregate increasing on properties because of high demand for space related to the Tech-Boom economic expansion. Given existing lackluster demand with negative net absorption in the San Francisco Bay Area and given very high vacancy rates, the next five years will result for many property types deflationary pressures on rents/values for investment properties in aggregate. There will be exceptions. Some properties will not experience deflationary pressure in rents or investment sale prices because they have long-term leases backed by quality tenants occupying the entire property or are a "one-of-a-kind" superior location property.

INVESTMENT PROPERTY CAN BE ILLIQUID

Investment property real estate can be very illiquid when economic uncertainty is high. For example: buyers typically acquire income property if they Earnings, Before Interest, Depreciation and Amortization (EBITDA) being stable or having upside potential. Buyers will be out of the market if EBITDA growth is uncertain or has downward pressure due to negative economic data in the subject's market area or overall economic conditions. Income properties are an investment that can take years of financial hardship before recovering from a deflationary cycle experience. Many real estate investors lost their entire fortunes on income property investment alternatives over a ten year time period from 1987 through 1997.

SAMPLE SIZE

Income property loan portfolios provides for an excellent cross-section sampling of investment real estate pattern observations over many years of observation. Over a 10-year period from 1987 to 1997 on income property loan portfolios in excess of \$4.5 billion, many of the negative risks of income property ownership were discovered including most of the product types, locations, and various forms of ownership risks. The statistically significant sample size provided a portfolio overview perspective that over time displayed deflationary investment cycle trends. The size of the loans that are at risk of deflation does not matter since many loans affected were in excess of \$50 million with one at \$250 million. These loans were just as prone to deflationary EBITDA and value pressures as were smaller loans. However, the smaller income properties were more liquid in terms of disposition since there is a larger pool of buyers at the smaller end of the property size scale.

HISTORY

The last deflationary cycle in income property permanent loan portfolios began in the Oil Patch States in 1986. The weakness in the income property markets then expanded to the Atlantic seaboard in 1989, and to the West Coast in 1991. The carnage of losses for all financial institutions was significant with the brunt of this deflationary income

property cyclical trend impacting savings and loan institutions. The Resolution Trust Corporation was created in 1990 by the U.S. government to liquidate the income property assets of banks and savings & loan institutions with federal tax payers funding the liquidation process.

THE LOS ANGELES METRO MARKET LOAN PORTFOLIO EXAMPLE

Income property investment trends, loan defaults by location, and resolution patterns in income property loan portfolios were observed working out problem loans in the Los Angeles Metro Area during 1991-1997. The region was impacted during a three-year period commencing in 1991 with negative economic news including a nationwide recession, significant regionally concentrated military cutbacks, social strife driven by the Rodney King riots and finally the devastating Northridge earthquake. Los Angeles County lost 340,000 jobs in the early 1990s which was the greatest number of jobs lost on a percentage basis since the Great Depression.¹ It was not uncommon to recover only 50% of the loan amount on apartment income property loans in several depressed sub-markets in the Los Angeles Metro Area during this period with investors losing their entire investment. Many income property product types-office, industrial, retail, apartments-incurring earthquake damage in combination with the negative economy recovered less than 50% of the loan amount and some recovered less than 20% depending on deferred maintenance or physical earthquake damage. As a result, the income property investors lost their total investment in these properties incurred significant tax recapture issues creating additional tax problems years after foreclosure. In addition, loans with recourse provisions required investors to pay settlement amounts out-of-pocket or pay attorneys to defend against protracted litigation initiated by the financial institutions.

During this income property deflationary period, income property loans that incurred the highest incidence of default were originated from 1986 through 1989 in this Los Angeles Metro Area marketplace. This origination time period experienced high inflation rates on rents and values. For example, one institution averaged \$1 billion in loan originations each year during these inflationary years. This institution financed acquisitions or refinanced at higher leverage based on these inflated values. Many of these properties financed increased in value over 100% over this 4-year period.

From 1991 through 1996, a real estate advisory firm in contract with this institution, modified, received discounted payoffs, or foreclosed about \$700 million each year. Unfortunately, because of the duration of the deflationary cycle in Los Angeles Metro Area, most of the 1991 and 1992 loan modifications went into default in later years converting to either a discounted loan payoff or foreclosure. In those 1991 and 1992 loan modifications, financial institutions required investors to pay additional out-ofpocket cash to reinvest into the property in return for the financial institution modifying the interest rate or terms. The idea behind this additional cash infusion requirement by an investor was to modify the debt only if the investor believed that it would receive its additional investment back if the loan was modified. Otherwise, it was best for the financial institution to foreclose and sell the property. This financial institution believed that a loan modification was unstable if there was no additional financial commitment by the investor which proved to be true as most of these loan modifications later defaulted.

As the deflationary period progressed (1993-1994), this financial institution realized that it was best to negotiate stable resolutions to problem loans since reworking loans previously modified was a flawed strategy that typically postponed losses. A stable resolution was a loan foreclosure or discounted loan payoff to a third party or a well structured loan modification with a substantial additional cash investment.

INCOME PROPERTY LOAN DEFAULT PATTERNS

At the beginning of the Los Angeles Metro Area deflationary economic period in late 1991, loan defaults and foreclosures occurred first on nonrecourse loans. In a non-recourse loan, full loan repayment is not guaranteed by the borrower. The lender is relying upon the collateral as the sole source of loan repayment provided that no fraud or other recourse triggers are applicable. In this deflationary economic environment from 1991 through 1996, many investors experienced substantial decreases in Earnings Before Interest, Taxes, Depreciation, and Amortization (EBITDA) on most property types. Income property investors that had refinanced at maximum cash-out loan-tovalue ratios or purchased their properties at the peak of the cycle from 1987 through 1990 were at risk of being over leveraged and less able to service

their debt as EBITDA began decreasing. These investors were unable to service their loan payments originally based on higher economic rents and loan underwriting at origination. These properties had high debt loads based on loan underwriting rental rates and occupancy rates based at the peak of the inflationary economic cycle. A telling sign of properties affected by overleverage in a deflationary period was the discovery of significant deferred maintenance since this expense was largely discretionary by the investor. However, this strategy by apartment investors often shifted the property to a lower competitive position in the market place attracting only lower credit quality tenants resulting in higher turnover costs further decreasing EBITDA.

THE RECOURSE LOAN ARGUMENT

Later in the deflationary period during 1993, the weaker recourse borrowers fell victim to the length of the recession's negative economic cycle. As a common practice with some lenders in California, the recourse borrowers were sued (judicial foreclosure) for a deficiency between the loan amount and the lower appraised value. In California, a Trust Deed State, the common practice is to foreclose non-judicially within 120 days of a filing of a Notice of Default. However, even though recourse loans were pursued under a judicial foreclosure process, most, if not all, of the judicial foreclosure actions were abandoned or settled prior to going through the full extent of the judicial foreclosure process with these properties foreclosed non-judicially. These judicial foreclosure pursuits were abandoned because of business reasons of the financial institution filing suit, time/cost of the judicial foreclosure process, and primarily the California laws favoring debtors thereby reducing lender deficiency amounts. Many lenders pursued a parallel process of filing both a Notice of Default non-judicial foreclosure and filing judicially in conjunction with a request to appoint a receiver. Those borrowers with assets to protect responded well to judicial foreclosure claims resulting in more favorable results for the lender than just pursuing a nonjudicial foreclosure action. The cost benefit analysis was in benefit of the lender in most cases providing a good return pursuing this legal action. In the property investment loan portfolio, there was a significant trend with the financially stronger recourse borrowers holding on longer and paying out-of-pocket debt service until they became financially exhausted later in the deflationary period. In addition, many very financially strong borrowers

with recourse loans fed the negative debt service payments out of pocket throughout the deflationary period without going into default. There is a strong argument for full recourse provisions on investment property loans based on the good probability that many of these recourse loans will not go into default in deflationary economic periods. The portion of the investment property loan portfolio that had not experienced many defaults were loans originated prior to the inflationary peak of the cycle in 1985.

CURRENT INCOME PROPERTY PATTERNS

In today's income property loan portfolios, there is high deflationary pressure on office and "research & development" building rents-values due to historically high vacancy rates in the San Francisco Bay Area and Silicon Valley. For older stock class B and C apartments, new investment dollars are keeping prices stable or increasing as vacancy rates are increasing resulting from a lack of job growth. This appears to be a counter trend, however, it is only postponing potential investment losses for those investors who had purchased apartments at the inflated top of the market experienced in the past 3 to 4 years. There is deflationary pressure on apartments since 1997 as older stock class B and C apartments in most rental markets in the San Francisco Bay Area have doubled in price on a per unit basis. This is a similar trend observed in the Los Angeles Metro Markets prior to an extended deflationary period for apartments from 1991 through 1996. The luxury apartment market has dropped to 1997 rent levels in many markets from its 2001 highs. However, an important note, many new luxury apartments owned by Real Estate Investment Trusts had low vacancy because of corporate sponsored apartment units. After the Tech Bust in 2001, these corporate-sponsored apartments units went vacant and added to the supply of units over a short period of time increasing pressure to lower rents to shore up the vacancy. The luxury class A apartment market in the San Francisco Bay Area tech bust affected markets and were the first apartments to adjust to the deflationary apartment rental rate environment with rent rates declining up to 35% in 2001 and 2002. The probability of downward rent pressure on older stock class B and C apartments is increasing as a result of higher turn-over rates and lower credit quality of renters. In addition, apartment owners are faced with greater competition for quality renters as a result of high unemployment and a favorable financing environment for single family

homes through July 2003.

PROJECTED LOAN DEFAULT TIMING CYCLE

In today's investment property portfolios, most of the permanent loans originated in the past five years have limited recourse provisions. Once the full impact of the deflationary income property economic cycle is felt by lenders, it is probable that the default rate may climb higher within a shorter period of time than in the last deflationary economic cycle. This can be expected since there is less recourse debt to smooth out the default rate over a two- to five-year deflationary economic cycle period. Commercial mortgage-backed securities (CMBS) and savings bank loan servicers could see a flood of defaults on income property loans within a fairly short time period causing increased deflationary pressure on income property markets if these defaults turn into non-judicial foreclosures. If interest rates remain low, the carnage could be spread out over more time with a loan modification strategy. The probability of a stable loan resolution, based on a loan modification strategy in a long 3 to 5 year deflationary economic cycle, is not good based on experience from prior deflationary periods. If the CMBS markets or Savings Banks have a liquidity crisis forcing special servicers to liquidate defaulted income property loans to cash, the increased probability of further income property deflation could be as severe as the declining values observed in the Los Angeles Metro Area from 1991 through 1996.

There is a large negative investment impact of this potential deflationary cycle on the CMBS income property loan portfolios for a number of reasons. The CMBS market for income property loans is a new medium of financing income property loans and has not experienced a deflationary period in its short 10-year history as experienced in the early 90s with the savings and loan institutions. This risk appears to be real given that one large CMBS servicer's (confidential) default rate is twice as high as last year with its default loan rate climbing as of this writing. Also, Savings Banks have been expanding their loan portfolios in an effort to gain earning assets. Washington Mutual and California Federal (now Citibank) have been the leading apartment lenders in California. As with CMBS lenders, they may also be impacted by deflationary pressure risks when it becomes realized in apartments later in this deflationary cycle.

THE FORECLOSURE CLUSTER PATTERN

The most intriguing loan default pattern that emerged from observations of income property loan portfolios was of the emerging pattern of foreclosure clusters over a 3- to 5-year time period. Foreclosure clusters are the opposite negative pattern of the well understood positive pattern of development clusters. A development cluster is fueled by rapidly expanding enterprises such as the internet related business boom beginning in 1997 in Silicon Valley, Northern California, together with other areas of the country such as Austin, Texas, and Route 128 in the Boston Metro area. The development cluster grows as in a ripple effect as long as the synergistic economic positive driver remains strong. Think of a development cluster as a tornado lifting rents and investment prices higher and higher in ever bigger and bigger concentric rings influencing other areas for growth.

A foreclosure cluster forms when many random owners of loans foreclose in high concentrations within a sub-market or City during a relatively short period of real estate time ranging from 2 to 3 years. This pattern was observed for the first time in the Los Angeles sub-markets of North Hollywood, Van Nuys, and Northridge. Blocks of apartment units were in the process of being foreclosed within a 2year time span by numerous independent lenders and owners of Resolution Trust Corp sold loan portfolios. The new owners of foreclosed apartments would buy these apartment buildings well below replacement cost at a discount of up to 50% lower than competing apartment owners. These competing apartment owners were disadvantaged since they purchased or refinanced at the top of the economic cycle in the late 1980s and were located at the fringe of the foreclosure cluster. The new owners of foreclosed property could reduce rents to attract tenants at a rate that would yield a profit, whereas the apartment owners on the fringes of this foreclosure cluster who were stuck with higher debt service payments could not compete and would default on their loans. The foreclosure cluster would grow as in a ripple effect with the apartment income property investors located on the outward fringes of the foreclosure cluster at risk of going in default as time passed. Think of a foreclosure cluster as a vortex pulling rents and investment values down the drain. This vortex will influence other areas as the outer rings of the vortex grows and brings other investment properties down with those investment properties rents and prices adjusted to the bottom of the investment market.

PREDICTING FORECLOSURE CLUSTERS

At the time of the writing of this article, Northern California, specifically the San Francisco Bay Area, is falling into a high probability of experiencing a foreclosure cluster pattern in many submarkets in 2004 and 2005. As in Los Angeles County in 1990, commercial office was the first to become weak in the deflationary economic cycle. In the winter of 2003, San Francisco Bay Area vacancies were in excess of 23% or up to 33% when including "shadow space" in Silicon Valley driving down rents to 1996 levels of \$27/SF/year for class "A" office.2 Luxury apartment rents are approaching 1997 levels losing 35% to 50% from their peak levels with average occupancies decreasing because of higher turn-over rates. Hotels are averaging 55% occupancy with downward pressure on rack rates. For example: many hotels were financed at a 75% loanto-value based on peak average daily rates at occupancies in excess of 75% and with some hotels as high as 80%. Average daily rates have dropped significantly with EBITDA dropping to new lows increasing the probability of this property type falling in value as distressed hotel properties become more of a deflationary economic factor in the marketplace.

The San Francisco Bay Area building boom was in concert with the Internet interdependence/tech boom largely fueled by non-credit tenants directly bidding up the cost of office space for its businesses and apartment space for its employees. Unfortunately, in San Francisco, these non-credit tenants providing cash secured Letter of Credit lease deposits to lease space have forced out many long-term credit tenants out of San Francisco. When the "tech bust" occurred, many buildings leased by non-credit tech-interdependent businesses went vacant. In San Francisco, there is a 23% vacancy or 17 million square feet,3 well over a 10year supply by many accounts. Because of excess capacity of office and Research & Development buildings of well over 100 million square feet in the San Francisco Bay Area, there is a historical excess of capacity never experienced on such a large scale in the San Francisco Bay Area. As a result of this excess capacity, there is significant risk that any income property constructed, purchased, or refinanced at the maximum finance amount since 1998 has a significantly higher probability of a loan default. Properties that have mitigated market risk by leasing long-term to a high credit rated tenant are immune to this deflationary economic effect. This tech boom period had a significant building

boom as evidenced by driving South from San Francisco towards San Jose. The amount of "For Lease" signs on new buildings is unprecedented at this scale in the San Francisco Bay Area.

As for apartments, Santa Clara County had for its first time recorded an out migration of over 12,511 residents in 2002.⁴ Santa Clara County was the biggest development cluster driver of the Tech Boom creating a ripple effect through Northern California from 1997 through 2000. With outmigration, an unemployment rate of 8.4 percent,⁵ and with contract jobs down 63% which are not counted by the State's Employment Development Department, the deflationary pressures on income property investments appear to be climbing in Santa Clara County. From December 2000 to April 2003, the Valley lost 17.4% of its jobs, the biggest drop from peak employment for one region since the Great Depression.⁶

CONCLUSION

Unfortunately, almost all San Francisco Bay Area income property investors are adjusting to deflationary EBITDA property performance or will do so soon. Income property loans originated since 1998 based on higher rental rates and occupancies have a great deal of risk of going into monetary default in an income property loan portfolio. This conclusion is based on direct income property loan portfolio experience and speaking with other income property loan portfolio managers as President of The Equity Asset Managers Association in San Francisco. This conclusion is based on observations and confirmations from other lender portfolio managers who have observed across the board declines in EBITDA due to the loss of commercial and residential tenants in many properties financed by San Francisco based financial intermediaries. The magnitude of this deflationary recession in Northern California income property real estate markets is significant enough to be concerned about a repeating pattern of foreclosure clusters within the next 2 to 3 years. Since Commercial Mortgage Backed Securities (CMBS) and other financial intermediaries have originated billions of income property loans from the peak periods of 1997 through 2000 in the San Francisco Bay Area, it will be interesting to observe if past foreclosure cluster patterns will again repeat as observed in the Los Angeles Metro Area from 1993 through 1996.

A formal research study by an established real estate graduate program would conclude that foreclosure cluster patterns do occur in the investment real estate market place. A good study period would be from 1986 through 1996 in Los Angeles County with 1986 to 1989 being the inflationary period and 1991 through 1996 being the deflationary period. In addition, a continuing study of Santa Clara County or San Francisco County would be of great interest to many current investors in these markets. The inflationary period would be between 1997 and 2000, with the deflationary period between 2001 into the next few years. The benefit of studying this subject would provide lenders and investors with a better understanding of the risks associated with investing in long-term income property investments. Lenders and investors would obtain a better understanding of real estate investment cycles and its potential negative effects as a result of deflationary investment periods. The investment real estate markets are largely chaotic and therefore unpredictable. These studies will help to understand the inflationary and deflationary investment cycles and to provide more predictive patterns of income property investment holdings.

FOOTNOTES:

- 1. "Budget of Lost Jobs," Walter Russell Mead, Worth, March 1996.
- Silicon Valley business vacancies may be near 33%, Silicon Valley/ San Jose Business Journal, April 22, 2003.
- "Empty Hallways," By Dan Levy, San Francisco Chronicle, July 3, 2002.
- "Area population drops," Silicon Valley/ San Jose Business Journal, April 17, 2003.
- "Silicon Valley jobless rates jumps," Silicon Valley/ San Jose Business Journal, May 9, 2003.
- "The Future of Tech, The Big Picture," Business Week, August 25, 2003

The views expressed in this manuscript by Marc R. Thompson, CRE, CCIM, are clearly his own and are not to be construed in any way as the views or policies of Bank of the West, or any of its affiliates, officers, or senior management.

EDUCATION IN THE REAL ESTATE PROFESSION

By Joseph S. Rabianski

What does, and what should, the real estate learning process include? What are the conceptual models for real estate education? This article discusses these issues, offers answers to these questions, and provides some insight about the education process in the real estate profession. This article is a concept piece with a strong dose of opinion. Many points, if not most of the points, raised in this article are open for discussion and argument. The generation of such a dialogue could, should, and would benefit all dimensions of the real estate profession. Many issues raised in the article could be topics for serious academic investigation.

In very general terms, three aspects of real estate education exist. These aspects are academic or formal education provided by colleges and universities; professional education provided by a variety of entities in the real estate industry; and, on-the-job training. This training or hands on experience is often mandated as part of a professional designation or state certification. Each of these aspects or options for education has an important role to play and provides a set of benefits. These educational aspects or options are the focus of this note.

ABOUT THE AUTHOR

Joseph S. Rabianski is chairman of the Department of Real Estate at the J. Mack Robinson College of Business, Georgia State University. (E-mail: jrabianski@gsu.edu). Unlike many other education-oriented articles in the real estate literature, this note does not discuss the "body of knowledge" even though the body of knowledge is very important. This article does not discuss important real estate topics but instead discusses the process through which an individual gains knowledge and skills.

Individuals enter the real estate industry from a wide variety of other activities and endeavors. Individual success stories can be found in which the personal points of entry into the real estate business differ widely. This article does not try to identify the "best educational" package or background for success in the real estate industry. The article identifies these possible pathways but principally discusses the interplay of the three aspects of real estate education.

THE DICHOTOMOUS MODEL (THE "EITHER-OR" MODEL)

The education process in the real estate industry should not be viewed as an "either-or" relationship with academic education at one end of the spectrum and professional education, on-the-job training or experience at the other end. Figure 1 depicts the dichotomous model. It is not the model that exemplifies the best real estate education option. It puts individuals with different knowledge enhancing activities at odds when in fact they are complementary and should be used in consort.

This model has existed from the very start of the educational debate and still exists, but is much less accepted today than in the past. People on both sides think they know more than people on the other side. As an example of this model consider the following selected set of statements made by the professionals holding opposing views. Practitioners have made statements like the following ones about academics:

- "What do they know about the real world?"
- "They don't know a thing if they haven't done a deal."
- "People who can, do. People who can't, teach."

On the other side of the issue, academics have been heard to say:

- "What do you learn doing the same thing for the 50th time that you didn't know after the first or second time?"
- "Too much cookbook mentality."

Figure 1



The Dichotomous Model (The "Either-Or" Model)

"An appraisal or a market analysis is a biweekly term paper on the same topic."

Some participants in the real estate industry need an attitude adjustment. Too many academics trivialize the educational experiences provided by professional organizations and trade associations as being too simple or too much of a "how-to" approach. Similarly, too many practitioners condemn academic education as being too highbrow, too unrealistic, not "real world." It is time for both of these attitudes to disappear and for the professionals in all parts of the real estate community and business to work together for a common good. This form of inappropriate criticism is "old school" thinking and should not be "new school" thinking. For most of our discipline's early history each side turned its back on the other's education learning outcomes and programs. Over time this view has moderated to some degree. But, the change has not been fast enough and has not occurred with full reciprocity. It is mostly unidirectional with the professional organizations in the industry being more accommodating than colleges and universities. In the future the dichotomous view of real estate education must not only diminish, but it should disappear for our mutual benefit. It hints at a degree of disrespect that is not exhibited by other professions.

THE MATRIX MODELS OF EDUCATION AND EXPERIENCE

A second model of education and experience is the matrix model that displays the possible combinations of the educational experiences. This model can be presented in various levels of complexity. A simple form of the matrix model is depicted in Figure 2; a more complex form of the model is depicted in Figure 3. Academic education in real estate refers to three levels of activity - an associate's degree, a bachelor's degree, or a master's degree. The key consideration however is not the degree itself but the nature and number of courses in real estate taken as part of the education process leading to the degree.

Collegiate real estate education is a not standardized. Most business schools do not offer real estate education. In those that do, real estate is a small component typically found in a Finance Department where one, two, or three courses are offered. It can exist as part of a combination of disciplines coupled with insurance and legal studies. There are very few substantive real estate programs that offer more than a very few courses in real estate. Some real estate programs in the U.S. exist in colleges of architecture. But, again even these are few and far between. Therefore "academic education in real estate" in Figure 2 is a very diverse real world experience. Given this diversity, academic education needs to appear in a simple format in this simple specification of the matrix model.

In Figure 2, "no formal education in real estate" refers to a very broad array of circumstances. This category includes the liberal arts, social science, or natural science major holding a bachelor or master degree from a college, the holder of an associate degree from a junior college, and the high school graduate. It also includes the bachelor or master degree in business but without real estate course work. The key feature is that regardless of the degree, the student did not receive academic training in real estate.

Professional education in real estate also can consist of a broad category of possible educational experiences that can encompass:

- pre- and post-licensing courses for sales associate and broker licensure, appraisal certification courses, and continuing education seminars for sales associates, brokers, and appraisers taught by proprietary schools, technical schools, and junior colleges using local practitioners
- courses and continuing education seminars taught by educational centers that are either free standing entities or affiliated with colleges and universities
- courses and continuing education seminars taught by various professional organizations that are required for obtaining and maintaining a professional designation
- courses and continuing education seminars taught by various trade organizations

Figure 2: The Matrix of Education and Experience

	On-the-job Training	No On-the-job Training
Academic Education in Real Estate	Α	D
Professional Education in Real Estate	е В	E
No formal education in Real Estate	С	F

The model can be used to differentiate the pathways that real estate professionals took to attain their current position in the real estate industry. The answer is that we have come to our present situation from a complex series of circumstances; we are the products of the education paths identified in cells "A, B, or C." Other professions do not exhibit this array of entry possibilities. Accountants learn the fundamentals for their profession in cell A.

The model can also depict the starting point for our individual real estate careers. Cells "D and E" are two entry portals to a future in the real estate industry, but the on-the-job experience must be gained. Cell "F" can be a starting point but a movement into cells A or B is a necessary step. If we look around us we should be able to find successful people in our industry from "all walks of life," from cells "A through F." We are a very diverse group of professionals when viewed through the lens of background and preparation for the industry. We are dramatically unlike other professions. Accountants enter their profession in cell D and move to cell A. They do not enter their profession from Cells C or F.

The complexity of the matrix model is increased in Figure 3. Here the general categories of academic and professional categories are segmented. This array can be used to describe the situation when they entered the real estate industry and also to describe their current situation. For a discussion of the circumstances at the point of entry the "no onthe-job training (OJT)" cells would seem to be null sets. But, there are circumstances in which this is not true. The most likely such case is the "family real estate business." The daughter or son with no real estate education of any form is brought into the business - cell *t*. After many years in the business gaining OJT the son or daughter probably is depicted in cells D, H, L, or P.

Another example is the college professor who enters a faculty to teach real estate straight from either the dissertation topic defense or the dissertation defense - cell q. Too many college professors

Figure 3: The Matrix of Education and Experience -Segmented Display

	Proprietary	Education	Professional	Trade	None
	School	Center	Organization	Association	
Masters	A	E	I	M	Q
Degree	a	e	i	m	9
Bachelors	В	F	J	N	R
Degree	b				r
Associate	C	G	K	0	S
Degree	c				S
No	D	Н	L	P	T
College	d				t

remain in this cell for their entire career. Admitting that they may improve their skills by research and self-teaching, experiencing some form of professional education would provide an opportunity to learn new and interesting things. This would signal a move to at least one or a combination of cells *a*, *e*, *i*, *and m*. It is even advisable for the college professor to venture into some OJT situation. Many of our academic colleagues are cell I individuals who hold professional designations but this is a small percentage.

The typical real estate executive enters the real estate industry in cells r and s but as experience on the job is gained, the executive moves into cells *E*, *F*, *I*, *J*, *M* and *N*. Some executives in the course of their careers also take advantage of educational opportunities from professional organizations, trade associations or educational centers.

Residential brokers and residential appraisers with only state certification very often start in cell d after the state mandated courses are taken and move to cell D with OJT. As their desire for knowledge and prominence grows they very often also obtain the education in cells L and P.

The point of the story is that real estate professionals start out in four somewhat general portals to the industry (cells q, r s, and t) and can become successful by accumulating knowledge and skills from some combination of the choices depicted in Figure 3.

The realizations about entry points and career paths achieved in the context of the matrix model lead to the following question. What should real estate education entail in general, and specifically in the post-secondary education system of colleges and universities? Can this question be answered tactfully?

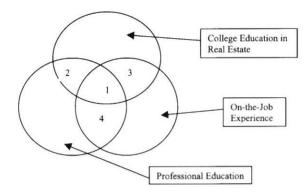
THE INTERSECTION MODEL

In general, real estate education should include elements from both academic and professional educational processes and on-the-job training. The graphical depiction of the interaction model comes from the theory of sets that you may remember from mathematics and appears as Figure 4. It is also known as a Venn diagram.

The ideal educational arrangement is the intersection of the three sets representing academic education, professional education and experience. This is the area signified as "1." In this area the individual experiences the interaction of the three elements that lead to the broadest spectrum of real estate knowledge. The benefits derived from the educational experiences signified by this intersection are at the highest level especially when the proper and pertinent material is put forward in all three sets of experiences.

Area 2 is high on both academic and professional education but is somewhat unrealistic as a path to success without experience in the industry. However, this is the best form of educational experience that prepares an individual for future success as industry experience is obtained. Here, knowledge is gained from two different educational orientations.

Figure 4: The Integration Model



Areas 3 and 4 are different educational experiences coupled with practical experience. Is one of these better than the other? Is academic education better than professional education? It depends on the content of the educational experience. An academic education based on strong industry examples and experiences is much better than a professional education experience based on personal stories with questionable relations to the topic of the course or seminar. On the other hand, an academic education based only on the memorization of terms and the study of theory is inferior to a professional education providing meaningful situational examples and analysis.

Area 4 is the area of interest for those individuals who do not have a college education in real estate. These people get their knowledge from professional education and on-the-job training.

In order to maximize the effectiveness of a college education, the real estate major at both the graduate and undergraduate levels should provide the most complete array of relevant courses. But, the story is not finished. Given the interrelationships portrayed in Figure 4, academic programs should be positioned in Area 1 of Figure 4. A strong link should be developed among academic education, professional education and on-the-job training. To accomplish this most desirable interrelationship, several key factors should exist on faculty side of the issue:

- Faculty members should have professional involvement in some form either past or present. This professional involvement can be direct experience that comes from working in the industry or it could come from consulting activities.
- Academic courses should utilize real world

examples brought to the classroom. All academic courses should have a major component that requires a real world experience garnered from a case analysis, a field survey, an appraisal, an investment analysis, a development project analysis, a search at the county offices, and a visit to the court house steps. This is how the onthe-job aspect is linked to academic education.

- Faculty members should fully recognize the nature and content of the courses taught by the professional and trade organizations. Periodically, faculty should make an audit of what is being taught by the professionals and make certain that academic courses reflect that material. This is the academic education to professional education link.
- Faculty members should actively participate in faculty development by taking executive education courses and seminars for real estate professionals to see what the industry is doing. This is an aspect of life-long learning for the real estate academic. If possible, academics should develop training programs based on their knowledge and skills for various entities in the real estate industry. In all states licensed appraisers, sales associates and brokers need continuing education credits. Academics could raise the standard for such education.
- Faculty members should do some applied research to round out their academic or scholarly research. They should strive to publish the output of this applied research in various professional journals. In many instances, if properly rewritten and edited, an article that stands well in an academic journal can also provide information to professionals in an applied journal.

To accomplish this most desirable interrelationship, several key factors should exist on professional education side of the issue:

- Professionals should recognize the benefits to clear thinking and problem solving provided by the study of concepts and theory. Proper cause and effect reasoning procedures need to be taught. Concepts and theory are an important element of the "how to do it" approach. Concepts and theory answer the question, "why did you choose to do it this way?"
- Professionals should minimize the personal

experience aspect of instruction. "War stories" should only be used as a means to amplify a more generally applicable concept or principle. Case studies can be too restrictive; they typically teach how to handle yesterday's specific problem instead of tomorrow's general problems.

■ Professionals, as well as many college instructors, need to remember that teaching is a learned and practiced craft. Teaching is time-consuming and enhanced by practice. Telling someone how to do something is not the same as explaining how and why something is done. Teaching requires the teacher to adopt the viewpoint of the audience in order to determine if the material is being learned and not just presented.

All of these factors point to a need for better cooperation and integration of the academic and professional parts of the real estate discipline. There is an old saying that the Americans and the English are two peoples separated by a common language. We should not be two groups of educated people interested in real estate separated by a common discipline.

IMPLEMENTATION OF THE INTERACTIVE MODEL

In order to bring the interaction model of education in the real estate professions, several actions must take place in the near term. These actions involve the generation of the following three relationships:

Strategic Partnerships with Reciprocity
Agreements
Cross Pollination
Outsourcing

Strategic Partnerships with Reciprocity Agreements— Strategic partnerships with reciprocity need to be created between academic programs and professional organizations to bring academic and professional entities together for the common good of the real estate discipline. Actions to accomplish the desired end should include the following:

Professional organizations need to accept academic courses in their educational program. This is occurring between the Appraisal Institute and several Master of Science programs.¹ The Royal Institution of Chartered Surveyors (RICS) has no accredited programs of study in wide ranging aspects of real estate that undergo a formal evalua-

tion by RICS accreditation officials.² The Real Estate Commissions of many states accept college credit as proof of knowledge and the requirement to take the licensure examination in that State.

Academic programs need to create educational internships (not part time jobs) and grant academic credit, and academic programs need to create procedures to accept professional training for academic credit. The difficult aspect of this is getting college and university approval for these activities. Some colleges have educational internships that generate academic credit other colleges do not have such programs. Only the college that is a rare exception can give academic credit for professional courses. A vehicle to accomplish the desired end is the appropriate use of a directed readings course, a field study course, or an internship course.³

Trade associations need to accept academic courses in their educational program. If a trade organization has courses in real estate finance and market analysis, the association could evaluate college courses in these subjects and accept them into their professional programs.

A benefit to the college or university from such strategic partnerships is industry support. Real estate programs are almost always under appreciated and under funded in the university setting. And at times and in different places, the very existence of a real estate program is threatened by financial exigency or administrative bias. In such instances the link to national professional organizations and trade associations can be very helpful to a program. The internship program relationships established in the local community can also help in such instances.

Cross Pollination—Cross pollination of ideas and experiences refers to more specific actions that can be undertaken within a strategic alliance or in a reciprocity arrangement. Several ideas for cross pollination of ideas between academics and professionals are:

- joining together to offer constructive criticism of the other group's educational offerings. Constructive criticism from a learned individual is good. It can shed a different light on a subject. It can add a new dimension to a topic or presentation.
- broadening their course offerings and course

- content by linking their learning experience to the other group's learning experience
- joining together to create courses and seminars for each other.
- exchanging educational materials.

Outsourcing—Outsourcing identifies activities in which one entity acquires services from another entity. In our case, it is the mutual provision of services between the academics and the practitioners. Several activities that can occur are:

- Professional programs given by both professional organizations and trade associations increase their use of academics to give seminars on specialized topics instead of the typical (but not universal) current practice of using only instructors and course developers from the organization.
- College real estate programs continue to use industry personnel to teach principles courses in their programs as they have been doing for many years. But to provide breath to the programs, consider using professionals in other courses that should be in the program but that the full-time faculty cannot teach due to either time or training constraints. For example, appraisers can teach the appraisal course. Real estate lawyers can teach real estate law and development regulations. Real estate consultants can teach market analysis. Real estate financial analysts can teach finance and investments.
- College courses could expand the students learning experiences by using more professionals as guest lecturers on topics of their expertise.

CONCLUSION AND SUMMARY

The real estate discipline in general, and education and training in both the academic and professional aspects in the real estate industry are on an upward path that leads to a higher and more recognizable level of prestige. Two things are happening. First, academic and professional education is steadily improving. Second, after many, many years, other aspects of the business community are now recognizing this enhanced education experience. Just as the accountancy discipline started to gain prestige and recognition in the first quarter of the 20th century, the real estate discipline is gaining that recognition in the first quarter of the 21st century. The accounting profession continued that growth in prestige throughout the 20th century even give the several major bumps in the road with WorldCom, Global Crossing, and Enron. The real estate discipline needs to emulate the successes of the accounting profession!

But, the accounting professional played a key role in the process; they provided tactical, emotional and financial support to the college-based accounting programs. We need this industry commitment and support from the real estate industry! To gain the prestige, accounting firms encouraged and gave all forms of support to the accounting programs in business schools. They created scholarships, they provided operating funds to supplement public funds and they created endowments in the form of Professorships and Chairs to encourage research.

On a smaller scale but still very effective, insurance companies have supported actuarial and risk management programs in the same manner as the accounting programs. Hospitality and Health Administration programs are also supported by their industry oriented professional constituencies.

It is now time for us to enhance this interrelationship in the real estate industry!

Currently, most real estate programs are academically underrepresented in business education. They are limited in scope due to lack of trained faculty on staff. These programs very often offer only a single real estate course, or at most a couple of courses. Real estate is a broad discipline. It cannot be compressed into a couple of courses and do it justice. Real estate is business, law, government, architecture, engineering, and planning. All real estate programs need enhancement. All real estate programs need support from the industry in order to move to their potential.

REFERENCES

- Upon completion of the academic degree, the Appraisal Institute accepts the academic course work as a substitute for a portion of its core courses leading to the MAI designation.
- 2. RICS has been involved in the accreditation of programs in the UK, Europe, Australia, and other areas of the world for many years. RICS has now started its accreditation in the Western Hemisphere and has accredited the Masters Programs at Georgia State University and Harvard University. At the date of this publication, it is considering other universities in the US.
- 3. The directed readings course is given under the direction and guidance of a faculty member. It requires the generation of an academic product such as a term paper, a case analysis or a report and may need to have an examination. The professional experience gained from the internship can be woven into a term paper or a case analysis. The concepts learned in the professional course can also be woven into a term paper or a case analysis, and a separate test can be designed to "justify" the academic credit.

9/11 REASSESSMENTS OF URBAN LOCATION COSTS AND RISKS

By James H. Johnson, Jr., and John D. Kasarda, CRE

ABOUT THE AUTHOR

James H. Johnson, Jr., PhD, is Kenan Distinguished Professor of Management at the University of North Carolina's Kenan-Flagler Business School and Director of the Urban Investment Strategies Center at the Kenan Institute of Private Enterprise at the UNC.

John D. Kasarda, PhD, CRE, is also a Kenan Distinguished Professor of Management at UNC's Kenan-Flagler Business School and Director of the Kenan Institute at the University of North Carolina. He also serves as a Trustee of the Urban Land Institute. Dr. Johnson and Dr. Kasarda have published numerous books and journal articles on urban development and the future of cities.

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

PRE-9/11 LOCATION DYNAMICS

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

Urban planners and local economic development officials also have

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

RE-EVALUATIONS OF GEOGRAPHICAL RISKS POST-9/11

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

CORPORATE AND EMPLOYEE PERSPECTIVES

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

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

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

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

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

INSURANCE INDUSTRY PERSPECTIVES

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

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

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

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

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

2001	2002
\$373,000	\$559,000
\$2.1m	\$5.4m
\$250,000	\$550,000
\$283,000	\$500,000
\$225,000	\$2.25m
\$6.0m (\$1.5b)	\$18.0m (\$500m)
N/A	\$7.5m (\$70m)
\$120,000	\$1.2m
	\$373,000 \$2.1m \$250,000 \$283,000 \$225,000 \$6.0m (\$1.5b) N/A

Table 2: Securities Placed on Ratings Watch List for Lack of Terrorism Insurance Coverage

Source: National Mortgage News, 2002

280 Park Avenue Trust

1211 Avenue of the Americas Trust

1251 Avenue of the Americas Trust

1345 Avenue of the Americas Trust

1633 Broadway Trust

Four Times Square Trust

Host Marriott Pool Trust (incl. Marriott Marquis in Times Square)

Opryland Hotel Trust

Houston Galleria Trust

were placed on the ratings companies "watch list" due either to the lack of terrorism insurance coverage or gaps in coverage that left lenders and investors with less protection than they had prior to the tragedy of September 11.21 In instances where terrorism insurance was available post-9/11, most policies excluded several types of terrorism incidents, including coverage for the use of biologicical and chemical weapons. Such exemption clauses, according to one observer of the CMBS market, cause another problem: they made it easier for insurance companies to cancel policies altogether on short notice. ⁵³

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

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

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

This problem with terrorism insurance coverage arises in part because re-insurers, who typically backstop primary insurance carriers, raised their rates threefold following 9/11. Moreover, most now exclude terrorism coverage, which leaves "many [primary] carriers liable for 'first dollar' coverage with no backup from reinsurers." ³² Industry analysts contend that the only way to

solve this problem is for the federal government to provide a financial backstop, as it does in the case of natural disasters.³³ And a GAO report concluded that the federal government's failure to address this problem would likely slow the economic recovery by placing thousands of businesses (especially small businesses) at the risk of bankruptcy, layoffs, and loan defaults.³⁴

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

The Terrorism Risk Insurance Act of 2002 provides "for the federal government to pay up to \$100 billion in terrorism losses annually for three years." The Bush Administration contends that the new law "will aid the economy by allowing the resumption of thousands of building projects stalled by lack of such insurance." 8 Others proponents argue that the law "could free up \$15 billion in construction and real estate business and 300,000 jobs," although some analyst argue that these figures are overblown. 39

Notwithstanding the passage of Terrorism and Risk Insurance Act of 2002, real estate developers and property owners in U.S. cities still have to contend with the accelerating costs of insurance coverage as well as increases in deductibles in the post-9/11 environment. In New York City, for example, insurance premiums for large accounts (greater than \$1 million) increased 73.3%, for medium sized premiums (\$50,000 to \$1 million) 49.5%, and for small premiums (less than \$50,000) 39.3% in the year following 9/11.40 And industry analysts conclude that "insurance rates will continue to rise in 2003 and into 2004 on a national basis before this so-called hard market has run its course."⁴¹

LONGER TERM IMPACTS OF TERRORISM LOCATION RISKS

Commercial real estate analysts predict a lagged effect of these developments on business activity and employment trends in U.S. cities and metro areas.⁴² The general consensus is that the effects will not be evident until 2004 and later when many longer-term commercial real estate leases will begin to expire. This raises several related questions about the impact of 9/11 on the economic prospects of U.S. cities and their downtown office markets.

- (1) Will major corporations continue to concentrate high proportions of their employees in a single downtown location or will they attempt to reduce their exposure to potential terrorist attacks by dispersing their operations and employees across multiple locations linked and backed up by the latest information technologies?
- (2) Will they keep their headquarters office at prestige downtown addresses in cities like New York, Chicago, and San Francisco, yet relocate many executives, as they have back office employees, to suburban and smaller city locations?
- (3) Will office building size and style as well as location be influenced in the post-9/11 search for anonymity?
- (4) Will security and insurance costs along with building entry delays and hassles lead to a reconsideration of the net benefits of a downtown location?
- (5) Even if downtown office complexes are occupied in the future at near capacity levels, will lease rates be lower and discounts higher to attract and retain tenants?

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

CONCLUDING REFLECTIONS

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

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

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

Writing in *The New York Times*, Mitchell captured the essence of the homeland defense challenge when she posed the following question⁵⁰: "How…does one secure a target-rich nation entered by roughly 1.3 million people, over 340,000 vehicles, and close to 59,000 cargo shipments every day?" The current strategy involves instituting tougher airport and border security measures. But, as a recent Council on Foreign Relations study reveals,⁵¹ "America remains dangerously unprepared to prevent and respond to a catastrophic terrorist attack on U.S. soil," owing to the failure of the federal government to address a number of risks that confront the nation.

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

- (1) Corporate leaders will make strategic decisions not to concentrate all or most of their assets in a single location, be they operational infrastructures, products, or people.
- (2) The rising costs of major downtown locations due to accelerating insurance and security-related expenses will further encourage corporate decisions to decentralize business functions.
- (3) Employee fears of working in high rise office properties as well as the increased hassle associated with gaining access to them due to the heightened security will play a significant role in future site selection and corporate relocation decision-making.

The upshot, we believe, will be an acceleration of commercial real estate deconcentration trends which have been manifested over the past 40 years in two ways: (1) business relocation and employment redistribution down the urban hierarchy from large metros to small and medium-sized metros⁵²; and (2) employment shifts within metro areas from central cities to the suburbs and the exurbs And, given the industries most adversely affected by the attacks, it is likely that the urban blue-collar workforce will continue to bear a major brunt of the job losses associated with the resulting business relocation and employment shifts.53 Combined, these developments could exacerbate-in both racial/ethnic and geographical terms—inequality in U.S. cities and metro areas.

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

- 1. Saskia Sassen, *The Global City* (Princeton: Princeton University Press, 2001).
- 2. John Kasarda, "Logistics and the Rise of Aerotropolis," *Real Estate Issues* 25. 4 (2000/2001): 43-48; Steve Van Amburgh, "Office in the Park: Trends in Mixed-use Suburban Office Park Development Continue to Address a Variety of Needs," *Urban Land*, June. 2002: 36-43
- 3. Edwin S. Mills, "Terrorism and U.S. Real Estate," *Journal of Urban Economics* 51 (2002): 198-204.
- Daniel H. Levine, "Risk Deconstruction and the Site Selection Process," Site Selection Magazine (Mar. 2002): n. pag., online, Internet, 16 May 2002.
- 5. Kerry A. Dolan, "The Detour Economy," Forbes 18 Feb. 2002: 52-55.
- 6. "Manhattan's Urban Future After the Terrorist Attacks, An Interview with Samuel R. Staley, Ph.D., Director of the RPPI Urban Futures Program," *Reason*, Public Policy Institute (5 Oct. 2001): n. pag., online, Internet, 20 July 2002; Sarah H. Wright, "Architecture Experts Ponder Future of Skyscrapers in the Digital Age," *MIT Tech Talk* (2001): n. pag., online, Internet, 20 July 2002.
- 7. Phyllis Feinberg and Chris Clair, "World Trade Center Destruction Bad News for Trophy Buildings," Pensions & Investments 19.19 (2001): 2, online, Business Source Elite 25 Aug. 2002: A20; Jack Lyne, "More Complex, Costly, Expert Panel Says," The Site Selection Online Insider (13 May 2002): n. pag., online, Internet, 16 May 2002; Jack Lyne, "Terrorist Aftermath Creates Huge Challenges, Questions for New York Market," The Site Selection Online Insider (17 Sept 2001): n. pag., online, Internet, 16 May 2002.
- 8. Jack Lyne, "More Complex, Costly, Expert Panel Says," *The Site Selection Online Insider* (13 May 2002): n. pag., online, Internet, 16 May 2002

- 9. Peter Kilborn, "Remote Town Sells Safety in Shadow of September 11," *The New York Times* 14 Mar. 2002: A20.
- Charles V. Bagli, "Downtown, An Exodus that Cash Won't Stop," The New York Times (July 24, 2002): n. pag., online, Internet, 24 July 2002.
- 11. Maureen McAvey, "The Price of Security and the Competition for Scarce Resources," *ULI on the Future 2002: Cities Post-9/11*, ed. by Deborah L. Myerson (Washington, DC: Urban Land Institute, 2002) 4-11.
- 12. Jack Lyne, "More Complex, Costly, Expert Panel Says," *The Site Selection Online* Insider (13 May 2002): n. pag., online, Internet, 16 May 2002.
- 13. Jack Lyne, "Security Concerns Raise Host of Real Estate Questions," *The Site Selection Online Insider* (15 May 2002): n. pag., online, Internet, 25 May 2002.
- 14. Kathleen M. Beans, "Terrorism Insurance for Commercial Real Estate," *Insurance Advocate*, (13 May 2002): 29-36, online, Internet, 25 Aug. 2002; Stephanie Coleman, "Valuation in the Aftermath of 9/11," *The Appraisal Journal* (Jan. 2002): 102-105, online, Internet, 25 Aug. 2002; James R. DeLisle, "Real Estate and the Capital Markets: A Special Look at the Impact of Terrorism," *The Appraisal Journal* (Jan. 2002):10-20, online, Internet, 25 Aug. 2002; John Levy, "Market Takes Insurance Issue in Stride," *National Real Estate Investor* Mar. 2002, online, Lexis/Nexis, 22 June 2002; "Today's Insurance Crisis At a Glance," *Journal of Property Management*, (Jan./Feb.): 26-27, online, Internet, 25 Aug. 2002.
- 15. Staff, "Rising Insurance Rates Require Renewed Vigilance," *Cahners Business Information*, 1 May 2002: online, Lexis-Nexis, 22 June 2002.
- 16. Don Walker, "Insurance Increases Hit Sports Teams Hard," *Milwaukee Journal Sentinel* 3 May 2002: 6C, online, Lexis-Nexis, 22 June 2002.
- 17. Albert Warson, "The Terrorism Insurance Impasse," *Mortgage Banking* May 2002: 76-85, online, Business Source Elite, 25 Aug. 2002.
- 18. Beth Mattson-Teig, "High Expectations," National Real Estate Investor 44.3 (Mar. 2002): 105-108, online, Proquest, 1 July 2002.
- 19. Richard J. Hillman, "Terrorism Insurance: Rising Uninsured Exposure to Attacks Heightens Potential Economic Vulnerabilities," Testimony before the Subcommittee on Oversight and Investigations, Committee on Financial Services, House of Representatives, February 27, Washington, DC (General Accounting Office, GAO-02-472T, 2002).
- 20. Barbara Murray, "Mortgage Bankers Assoc: Lack of Terror Bill Costs \$8.2B," *Globest* (19 July 2002): n. pag., online, Internet, 21 July 2002.
- 21. Peter Grant, "Moody's Real-Estate Review Puts Terrorism Insurance in Spotlight," Wall Street Journal 3 June 2002: C18.
- 22. Rebuz, "U.S. Commercial Real Estate Underlying CMBS Should Rally to Healthy Condition by Mid-2003," April 23, 2002, available at http://www.rebuz.com/retech02/0402/us_cmbs_real_estate.htm
- 23. Cristina Gair, "Insurance Rates Rise for Office, Retail," National Real Estate Investor Jan. 2002: 32, online, Business Source Elite, 22 June 2002. "Rising Insurance Rates Require Renewed Vigilance," Hotel 2002, online, Lexis-Nexis, 13 June 2002.
- 24. "65% of US Companies Have No Terror Cover-RIMS Study," *Insurance Day*, 12 Sept. 2002, online, Lexis-Nexis, 13 June 2002.
- 25. Alvdrea Felsted, "Looking After Number 1: Self Insurance," Financial Times (London), 24 May 2002: 2;
- 26. Meredith Cohen, "Insurers Put Business, State in Bind," *The Baltimore Sun*, 21 July 2002: 1C.
- 27. Steve Levin, "Public Gets Tab for Terror Insurance," Pittsburgh Post-Gazette,18 August 2002: A-1.
- 28. Lorenzo Perez, "Cost of Insuring Cities Spirals," *The News and Observer* (Raleigh, NC) (27 July 2002), online, Internet, 29 July 2002.
- 29. Beth Mattson-Teig, "High Expectations," National Real Estate Investor 44.3 (Mar. 2002): 105-108, online, Proquest, 1 July 2002.
- 30. Don Walker, "Insurance Increases Hit Sports Teams Hard," *Milwaukee Journal Sentinel* 3 May 2002: 6C, online, Lexis-Nexis, 22 June 2002.

- 31. As a pertinent aside, some religious groups, especially Jewish charities and organizations which tend to be concentrated in large cities, contend that insurance companies are unfairly targeting them with rate hikes ("Setting Rates by Religion," 2002). Some of the affected groups reportedly have been forced to cut staff and services in order to pay the premiums (Goldsmith, 2002).
- 32. Jenny Jones, "Insuring Property Post-9/11," Urban Land, May 2002: 26-27.
- 33. Barry Meiners, "Commercial Insurance Market Index Indicates Need for Federal Terrorism Backstop," The Council of Insurance Agents & Brokers, (16 April 2002), online, Internet 22 June 2002.
- 34. Richard J. Hillman, "Terrorism Insurance: Rising Uninsured Exposure to Attacks Heightens Potential Economic Vulnerabilities," Testimony before the Subcommittee on Oversight and Investigations, Committee on Financial Services, House of Representatives, February 27, Washington, DC (General Accounting Office, GAO-02-472T, 2002).
- 35. Stephen Labaton and Joseph B. Treaster, "Initiative Deal is Reported on \$100 Billion in Aid to Insures," *The New York Times*, (18 October 2002): n. pag., online, Internet, 16 May 2002.
- 36. "Strengthening Homeland Security, Eliminating Threats Highest Priorities for Voters," PR Newswire Association, Inc., 8 November 2002, n. pag., online, Lexis-Nexis, 16 May 2002.
- 37. Joseph B. Treaster, "Senate Passes Bill Limiting Insurers' Liability After an Attack," *The New York Times*, (20 November 2002): n. pag., online, Internet, 16 May 2002.
- 38. Alan Fram, "House Gives Initial OK to Terror Insurance Bill as Congress Tries to Wrap Up Work for Year," *The Associated Press*, 14 November 2002, online, Lexis-Nexis, 16 May 2002.
- 39. Alan Fram, "House Gives Initial OK to Terror Insurance Bill as Congress Tries to Wrap Up Work for Year," *The Associated Press*, 14 November 2002, online, Lexis-Nexis, 16 May 2002.
- 40. Karen Matthews, "Comptroller Says Insurers Are Hurting City," *Local Wire*, 13 November 2002: n. pag., online, Lexis-Nexis, 16 May 2002
- 41. Karen Matthews, "Comptroller Says Insurers Are Hurting City," Local Wire, 13 November 2002: n. pag., online, Lexis-Nexis, 16 May
- 42. "WTC Tenants Stabilize With 53% Returning Downtown; However Downtown Continues to Weaken with a 20% Availability Rate," *TenantWise* (2002):n. pag., online, Internet, 22 July 2002.
- 43. "WTC Tenants Stabilize With 53% Returning Downtown; However Downtown Continues to Weaken with a 20% Availability Rate," *TenantWise* (2002):n. pag., online, Internet, 22 July 2002.
- 44. Alice Rivlin and Alan Berube, "The Potential Impacts of Recession and Terrorism on U.S. Cities," Washington, DC; The Brookings Institution, January, 2002.
- 45. Edward L. Glaeser and Jesse M. Shapiro, "Cities and Warfare: The Impact of Terrorism on Urban Form," *Journal of Urban Economics* 51 (2002): 205-224.
- 46. Hank Dittmar and Sarah C. Campbell, "Will September 11 Bring Us Together or Push Us Apart? The War on Terror and Metropolitan Stability," *Transportation Quarterly* 56 (2002): 43-49.
- 47. Hank Dittmar and Sarah C. Campbell, "Will September 11 Bring Us Together or Push Us Apart? The War on Terror and Metropolitan Stability," *Transportation Quarterly* 56 (2002): 43-49.
- 48. Alice Rivlin and Alan Berube, "The Potential Impacts of Recession and Terrorism on U.S. Cities," Washington, DC; The Brookings Institution, January 2002.
- 49. Jenny Jones, "Insuring Property Post-9/11," *Urban Land*, May 2002: 26-27; Chris Steele, "Rethinking Business Continuity Planning," *The Site Selection Online Insider* (21 October 2002), online, Internet, 16 May 2002; Malcolm Wheatly, "Living with Terror," *CIO Magazine*, (15 Feb 2002): n. pag., online, Internet, 16 May 2002.
- 50. A. Mitchell, "Give Me a Home Where the Buffalo Roam Less," *The New York Times*, 20 January 2002: Section 4, p. 5.
- 51. Hart and Rudman (2002) contend that one of the greatest risk is that "...only the tiniest percentage of containers, ships, trucks, and trains that enter the United States each day are subject to examination-and a weapon of mass destruction could well be hidden among

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

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

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

New Brownfields Incentives Add to Diminishing Inventory of Developable Sites in South Florida

By Michael R. Goldstein

ABOUT THE AUTHOR

Michael R. Goldstein an environmental lawyer, is a shareholder with the Miami office of Akerman Senterfitt. He serves as chair of the Miami-Dade County Brownfields Oversight Committee, and chairs the Board of Directors of the Florida Brownfields Association. In addition, he chairs the Brownfields Sub-committee of the Florida Pollution Prevention Roundtable and co-chairs the Land Recycling Committee of the Greater Miami Chamber of Commerce. In 2000 he chaired the Third Annual Florida Brownfields Conference.(E-mail: mgoldstein@akerman.com).

Il of the empirical evidence available to close observers of the brownfields marketplace points to this: the scarcity of land combined with the demand for land set against the backdrop of a maturing regulatory approach to contaminated property means that anyone involved with development needs to take brownfields redevelopment seriously and make it a viable part of their business strategy. Those that fail to do so will forego a competitive advantage and forfeit opportunity to industry peers and rivals.

This admonition not only holds true for the private sector, where the coin of the realm is the conventionally commercial transaction and where vertical or horizontal development is contemplated, but also equally the case for communities where local governments distinguish themselves, and market quality of life, with and through the number and design of their conservation and open space amenities which may not involve any construction at all.

Given the amounts of money, the sweeping and innovative array of regulatory initiatives, and the comprehensive types of liability protection vehicles now being made available at all levels of government, cleanup, and reuse and redevelopment of contaminated lands are no longer esoteric, opportunistic adventures for the abnormally, precociously risk tolerant

but strategic and long term plays for both the traditional development community and the highly risk averse local government community.

The purpose of this article then is threefold. First, it is written to provide a sense for how successful the Florida brownfields program has become in just under six years. Second, to provide a broad overview of the tangible benefits that are now available to underwrite the cost of brownfields cleanup and facilitate redevelopment by making the process more predictable, more certain, and less risky and costly. Finally, to provide a step-by-step strategy for actually obtaining a brownfield designation such that a given project can take advantage of the many incentives that currently exist as well as that are likely to be created over the next several years.

A RAPIDLY MATURING ENVIRONMENT IN FLORIDA FOR BROWNFIELDS

The idea of utilizing market incentives to encourage the private sector to invest in and clean up contaminated lands is so simple and elegant that it has to qualify as one of the most important regulatory initiatives of the last fifty years. Although originally coming out of the federal government during the first term of the Clinton Administration, the Brownfields approach to redevelopment has spread spectacularly throughout the country, and just about every state in the union now has a viable and vigorous revitalization program, with Florida leading the way in many respects.

In 2002, the Florida Brownfields Program exhibited a surge in interest and activity. Twelve local governments throughout the State designated eighteen new brownfield areas in counties and municipalities, bringing the total number to sixty-three and encompassing almost 69,000 acres of land. Seventeen Brownfield Site Rehabilitation Agreements or "BSRAs" were entered into in 2002 for a total of thirty-two the inception of the program in 1997. Six "No Further Action Orders" were issued by the Florida Department of Environmental Protection this year. From 1998 through 2002, the State's Voluntary Cleanup Tax Credit program issued a total of just over \$850,000 in tax credits. Last year, the amount applied for exceeded \$1.125 million, with over 87% of that claimed for brownfield sites alone. According to of Tourism Trade and Economic Development figures, over \$26.5 million of new capital investment was directly attributable to redevelopment of old brownfield sites in 2002. These are all impressive statistics, which will likely continue to trend in the right direction.

Closer to home, in South Florida last year there were three broad areas designated as brownfields, two on behalf of local governments and one on behalf a private developer. In March, the City of Lauderhill designated 504 acres of land in the U.S. 441/State Road 7 corridor. In September, the City of Hollywood designated 148 acres in the Liberia/Oakwood Hills area. Finally, in December, a private developer designated a twelve-acre former landfill in the City of North Miami Beach and plans to build a grocery anchored retail center which is expected to create in the aggregate almost 400 jobs.

This activity builds on what has been historically strong participation by South Florida in the Brownfields program. In March of 1998, the City of Miami was only the second local government ever to designate a brownfield area, an impressive 3,932 acres of underutilized and partially blighted land ripe for cleanup, redevelopment, and job creation. Opa-Locka, an area where many believe we'll see significant investor interest over the next several years, followed shortly thereafter, designating 1,286 acres in February of 1999. Miami-Dade County got into the brownfields market in dramatic fashion in July of 1999, designating over 33,000 Pompano Beach, Miramar, Lauderdale Lakes, the City of Miami Beach, Dania Beach, and West Palm Beach round out the class of South Florida communities paving the way for private and public sector parties willing to tackle the many issues associated with brownfield sites.

THE INVISIBLE HAND: THE BROWNFIELDS INCENTIVES TOOL BOX

Here in South Florida, with land at a premium and large parcels of developable property simply not available, a strategy that involves the identification, remediation, and reuse of polluted property provides significant new opportunity for commercial, retail, residential and mixed use projects. The number and variety of success stories across the state is compelling, and we are seeing in Broward, Miami-Dade, and Palm Beach Counties a healthy mix of local, regional, and even national development firms aggressively compete for the rights to purchase old gas stations, dry cleaners, factories, nurseries, and landfills (especially landfills), environmental blemishes included.

Notwithstanding all of the activity, excitement, and progress being made with and on brownfield sites, many sophisticated actors in the real estate market remain in the dark as to the benefits associated with such an undertaking and, critically, the process required to have a site formally obtain brownfield status. While a complete briefing on these issues is beyond the scope of this article, we address four of the more basic building blocks to an integrated brownfields strategy: liability protection, risk based corrective action, financial incentives, and the brownfields designation process itself. The balance of this article focuses on the first three elements, while Part II discusses in detail what it takes to get contaminated property formally designated a brownfield and then eligible for a host of regulatory and financial incentives.

Liability Protection. Provided that a developer successfully obtains a local government resolution designating a site a brownfield and enters into what is called a Brownfields Site Rehabilitation Agreement or "BSRA." the State will provide the developer and its lender with comprehensive liability protection under State law against suits in cost recovery and to compel more cleanup than what is initially agreed to with the FDEP or, more likely in South Florida, a delegated local pollution control program such as Miami-Dade County DERM or Broward County DPEP. This helps to ensure that cleanup cost estimates you receive from a contractor stay relatively fixed. While there remains some level of exposure under federal law with respect to private third parties and under state law with respect to property damage and personal injury, thorough pre-acquisition due diligence along with an environmental insurance policy creates a comprehensive risk management strategy to address even the most complicated liability scenarios.

Risk Based Corrective Action. Obtaining the brownfields designation and entering into the BSRA also facilitates the use of Risk Based Corrective Action or "RBCA" as a cleanup strategy. RBCA is a relatively recent regulatory initiative which tailors the amount of cleanup required by the State to the actual risk posed by the reuse. In other words, where a redevelopment project involves, for example, the construction of a big box retailer with acres of parking, a remediation plan that calls for leaving contamination safely encapsulated in plan can be approved. The justification for such an approach is that by effectively capping

the site with concrete and asphalt, you have removed the risk of exposure of humans to contaminated soil. If, on the other hand, you were going to reuse this same site as a park with open space and playground facilities, the risk of exposure would be high, and excavation and removal of the contaminated soil would likely be required. As a general proposition and due to the dynamic nature of the redevelopment process, sites that are in the brownfields program are uniquely positioned to take advantage of the flexibility—and high cost savings—that RBCA provides.

Financial Incentives. In 100% of the sites that I have worked on for both private and public sector clients, the first question is always the same: "How much money is available for our project and how do we get it?" The list of funding sources is long, creative, and expanding, and a full catalogue is not possible in this space. That said, the first answer is this. Financial incentives come in the following forms: tax credits, tax refunds, low interest loans, loan guarantees, and grants. For private sector projects, the first four categories are directly available. By and large, significant grant dollars are available only to local governments and certain eligible non-profit entities but only on a highly competitive and somewhat attenuated and convoluted basis. This money - up to \$1 million in grant funding for eligible applicants - is accessible but requires skilled assistance during the application process.

In terms of funding available directly to the private sector, there are two incentive programs that can be lucrative and are fairly easy to understand and apply for. The first is the Voluntary Cleanup Tax Credit, referred to above. This program provides a tax credit of 35% of every dollar spent on assessment and cleanup activities up to \$250,000 per site per year. In the final year of cleanup, the state provides a "kicker" of 10% of the total cost of cleanup up to \$50,000 in tax credits.

The math here adds up very quickly. Take the following example: Cleanup of an abandoned strip mall with two heavily contaminated former drycleaner tenants is estimated to cost \$1.5 million and take three years. In year one, a major soil removal action takes place and \$750,000 is spent. In year two, groundwater contamination commences at a cost of \$500,000. In year three, the final year of the cleanup, the remaining \$250,000 is spent. Applying the 35% factor to the first year

cleanup costs yields \$262,500, however, that number exceeds the cap, and the total tax credit is thus limited to \$250,000. In year two, 35% of the cleanup costs amounts to \$175,000. Finally, in year three, the applicant would be entitled to a tax credit of 35% of \$250,000 - or \$87,500 - as well as the kicker, 10% of the entire cost of cleanup capped at \$50,000. Here, 10% of \$1.5 million is \$150,000, so the kicker would in fact be limited to \$50,000. The total award over three years comes to \$562,500 or an effective rate of 37.5%.

It's important to note that this is a tax credit that can only be used against personal intangible property tax or corporate income tax. That said, the credits are freely transferable once as of right. So even if the applicant doesn't have any qualified tax liability, such as would be the case for a local government, they can still be sold for value on the secondary market or transferred to an end user as a further inducement to build and create jobs in disadvantaged areas.

The other major incentive readily available for private sector developers is the Brownfield Job Program which is designed to reward job creation on brownfield sites. Provided that an applicant meets the eligibility criteria, which includes at least \$2 million in fixed capital investment and the creation of at least 10 new jobs, the applicant is entitled to an award of \$2,500 per job created. This is a cash tax refund - not a credit - against a broad array of tax obligations as set forth in Florida Statutes.

Where the reuse - such as a large retailer - is likely to create large numbers of jobs, the award can be quite significant. As just one example, most large grocery stores and big box retailers create on the average between 300 and 500 new jobs. If we use the above scenario, the abandoned strip mail, and assume that the end user will produce 400 new positions as an example, the total award for job creation would be \$1.25 million.

Several caveats are important here. First, the award is paid out in equal installments over four

years. Second, it's a one time award based on the number of full time equivalent jobs slots created. Third, an applicant must have as much tax obligation as potential tax refund in order to obtain the entire refund. And fourth, the program provides for a local government match of 20% - or \$500 per job - which, in most instances, is unlikely given today's budgetary constraints. Thankfully, the law was recently amended to allow local governments to opt out of their share and still provide applicants with an opportunity to obtain the balance - \$2,000 per job - from the State. Using the same example as before - 400 jobs - the award then becomes \$800,000, still very significant. If you now couple that amount with the Voluntary Cleanup Tax Credit discussed above, the total financial package for such a project would come to approximately \$1.3 million, an amount that almost completely subsidizes the original \$1.5 million cost of cleanup.

UNLOCKING A SECOND MARKET FOR DEVELOPABLE SITES IN SOUTH FLORIDA

To fully appreciate the significance, utility, and potential return on a brownfields site, it is important to become familiar with the incentives that such a status can confer on a project. The foregoing discussion provides some insight into how powerful those incentives can be - and integral to structuring and consummating a redevelopment project involving contaminated lands. While the financial incentives are important and can be considerable, it's important to keep in mind that the most significant benefit to be derived by a brownfields strategy is the ability to access the intrinsic redevelopment potential locked up in the contaminated land itself by virtue of the environmental conditions and associated regulatory uncertainty. This is especially so in South Florida where a rapidly diminishing inventory of developable sites makes the brownfields marketplace a viable and attractive alternative and places a premium on underutilized property irrespective of its status as impacted and subject to the costs and vagaries historically arising out of the cleanup process.

FOCUS ON INVESTMENT CONDITIONS

INVESTORS WORK AT SEPARATING THE WHEAT FROM THE CHAFF

by Kenneth Riggs, Jr., CRE



Like much of the rest of the nation, Real Estate Research Corporation (RERC) continues to watch for signs that the economy is strengthening. Unemployment increases seem to be slowing, and the stock market appears to be gaining momentum. Low interest rates continue, keeping the housing industry chugging along while providing the economy with a boost and giving consumers either more housing choices or more dollars to save or spend elsewhere. Most analysts believe that consumer spending will increase and business hiring will increase as the various new tax credits and incentives come into play.

With a more positive outlook for the economy, investors are hoping to see some signs of improvement in the demand, or tenant side of the commercial real estate market equation, too. Investor unease as investment dollars grow and flow into a deteriorating space market would be put to rest if at least the space markets would move in tandem with the capital markets. This easing of the disconnect will not happen quickly through demand fundamentals, as we must remember that real estate lags the economy by 6 to 12 months and it will be some time before definite improvement is seen in this investment class. There are certainly opportunities for well-leased properties with solid fundamentals and in good locations, but in general, total delivered returns have not met expectations.

RERC has noted during the last few quarters, that institutional investors have begun lowering their total return expectations to match the financial markets and the observed signals being sent by investors trying to get deals done in the commercial real estate market. In fact, in the summer 2003 RERC Real Estate Report, "Separating the Wheat From the Chaff," RERC reported lower expected pre-tax yield rates for all property types than any time during the last two years. Realized returns (returns reported by NCREIF) remain in the single digits as property values are being realigned to reflect the future market prospects.

A comparison of required total returns vs. realized total returns reflects that the two have yet to meet at a market equilibrium point. The confluence of pressures to push required total returns down and realized total returns up is at work, but these dynamics move too slowly in a technology-flush world that desires real-time information popping up on the screens of investors. We are in that frictional period where re-pricing, revaluations, and expectations change relatively slowly in a monolithic industry. The data is showing that slowly, over time, expectations are coming down, but most investors are vocal that they are too high to get deals done.

Over a 10-year average, all property types, except apartments and industrial R&D, show a negative variance between required total returns and realized total returns. Five-year returns look better, with industrial R&D properties, CBD offices, apartments, warehouses and power centers showing a positive variance between required and realized returns. Suburban offices, neighborhood and community centers, regional malls, and hotels, show negative variances between required and realized returns for a five-year time period.

However, a comparison between required total and realized total returns over the past one-year time period demonstrates that real estate expectations clearly are not matching market realities and shows how wide the current disparity is between sellers and buyers among all property types:

CBD office properties are showing a -6.17 percent one-year average variance between required total and realized total returns, and suburban office properties show a -10.04 percent variance over a one-year time period. The space fundamentals in this asset class are getting hammered and driving down rents, returns, and overall performance. Investors have a big pit in their stomach as they hope for space demand to return. If an investor can predict the cash flow performance (i.e., a fully leased building with long-term duration), return expectations are lower, but if it is a spotty asset with risk, expectations are not easily swayed. This asset class will continue to be characterized by fully leased properties that have value vs. properties with risky tenant structures (and who knows their value?). Re-pricing in the asset class has to come about through confidence in predicting where cash flows and values will be over the next several years.

Much like the situation with office properties, the one-year spread between total required returns and total realized returns for R&D properties is -9.25 percent. However, warehouse properties, which are expected to be one of the first property types to see improvement, shows a variance of only -3.88 percent between required and realized returns. For apartments, the property type generally considered to have the least risk, the one-year spread between required returns and realized returns is -2.15 percent. On the other hand, the gap between one-year required returns and realized

returns for power centers is 5.63 percent, and 0.74 percent for regional malls, and 0.13 percent for neighborhood/community centers. Retail remains a highly volatile investment, but at least the variance between one-year required returns and realized returns is positive, indicating that many retail assets have already been re-priced and prices have become more centralized. Hotels have the greatest volatility of the major property types, with a spread of -10.61 percent between one-year required returns and realized returns.

Adjusting to the market realities at hand takes time in an industry that is slow to change its ways, but it is becoming clear that in most cases the real estate industry has to lower their expectations if they want to compete in today's low-return environment. This is not easy when market fundamentals are deteriorating at such a fast pace, and doing so requires making some difficult decisions.

The investment world is becoming a place where those properties that have or can unequivocally attract tenants have value, and those that suffer vacancy are being written down or written-off the list to buy. However, the fact that investors are separating the wheat from the chaff is a solid sign that the real estate industry is indeed growing into a credible investment vehicle. As the stock market rebounds, the economy grows, and given the current prices of properties, commercial real estate is less attractive today than it was 6 months ago, at least for those properties directly related to joblessness and it appears this will hold true for the next 6 months.

ABOUT THE AUTHOR

Ken Riggs, Jr., CRE, is chief executive office of Real Estate Research Corporation (RERC). RERC offers research, valuation, portfolio services, corporate advisory services, litigation support, and other real estate-related consulting services. RERC also provides research, analysis, and investment criteria (cap rates, yield rates, expense and growth expectations, recommendations, etc.) for nine property types on a national and regional level and for 40 major U.S. markets through the quarterly RERC Real Estate Report, the annual RERC Industry Outlook, and the RERC DataCenter (E-mail:riggs@rerc.com).

FOCUS ON THE ECONOMY

REAL ESTATE IS DOWN: LET THE GAMES BEGIN!

by Dr. Mark Lee Levine, CRE

here is no question that the real estate market, for residential and commercial properties, is down in many sectors throughout the United States, with some exceptions. In the commercial area of most markets the real estate trend for the last half of 2002 has moved downward, and will continue to decrease, when compared to performance over the past several years. This is true whether the grouping of properties involves office space, industrial, retail, multi-family use, and most special purpose properties (such as hotels and golf courses).

Studies throughout the United States show a decline in the marketplace for these groupings of properties, with only a few exceptions throughout the U.S.

Nothing realistically appears on the horizon in 2003 for the general U.S. market to think that it will do other than continue to decline. The level of decline will vary in the markets, but few markets can hope to retain the posture which existed in 2001. Markets will go down.

The residential market has been strong for 5 years, but a recent article in *Inside Mortgage Finance* (January, 2003) noted the position by the FANNIE MAE economist which projects a drop in the market.

In the same edition, many industry experts noted their conclusions which seem to focus on a major reduction in activity of mortgage loans in 2004.

In this same edition of Inside Mortgage Finance, David Lereah, Chief Economist for the National Association of Realtors (NAR), noted that for 2003 there will be a drop of about 4% in home sales, even if the dollar volume remains fairly strong because of increased pricing of those homes.

Also noted in that same edition was a comment through the National Association of Homebuilders (NAHB) by Chief Economist David Seiders. Seiders noted that the question is "sustainability" relative to housing activity. It is clear to many economists that sustainability will not be present, given a number of factors existing in today's market. Those factors include increasing unemployment, with recent figures noting around the 5.5% level in many jurisdictions of the United States. Although interest rates are the lowest in 45 years, they are certainly postured to rise, whether in 2004 or in 2005. Such increase in interest rates reduces the incentive for some lenders to extend themselves as far as they might have extended in recent vintage.

Economic Prognostication

As noted in *Economic Outlook Summary* (February, 2003), published by AMG Guarantee Trust, and particularly noting its economist, Michael Bergmann, the economy is weak. Bergmann noted: "Economic output experienced little growth in the fourth quarter (of 2002). The anemic .7% growth rate for real GDP was a reflection of consumer spending on cars and trucks, which decreased after last summer's surge."

Unemployment

The unemployment position continues to be of great concern, notwithstanding that there have been some blips within the lines of unemployment. One looking through optimistic glasses might conclude that the economy is "out of the woods" relative to job losses. However, many other sources, economically speaking, support the position that unemployment will continue to be around the 5.5% level throughout 2003.

The Meyers Group Report for April, 2003, certainly noted this type of position as well. The implications of such outlooks are clear, as stated in this Report, when it noted: "Therefore, with continued negative readings for our demand/supply and employment/permit ratios combined with dampened income growth, we expect a far more moderate level of homebuilding activity in 2003 than seen last year."

Interest Rates

With interest rates remaining the lowest in 45 years, whether under the *Meyers Group Report*, as noted above, or other sources, the thought is that the housing market will continue to be strong.

However, rising unemployment, concern with consumer confidence, and the fear that interest rates will rise in the not too distant future, have led many to speculate that interest rates alone are not going to support continued strength in the residential real estate market.

With strains on the economy, reduction in the GDP growth rate, and other pressures for spending faced by the U.S. government, whether from the rebuilding of Afghanistan, rebuilding of Iraq, support for other foreign policies, additional credits and tax incentives approved by Congress within the United States to stimulate the U.S. economy, among other items, it is fairly certain that interest

rates face a potential increase. One cannot simply assume that interest rates will remain at low levels.

What About Other Market Aspects?

As noted in the *Cushman & Wakefield Market Beat Report* (year end 2002), there continues to be concerns with nonresidential markets as well.

The above-noted *Market Beat Report* cited, on Page 3, the *Moody's Report*, which concluded that the overall commercial position on industrial real estate is not strong.

This Market Beat Report also noted that many metropolitan areas have weakening economic conditions; therefore, average rent rates have been dropping, while vacancy rates are increasing.

Consumer Confidence

Consumer spending has declined. Consumer confidence continues to be a major question, and the confidence level also seems to be decreasing. The University of Michigan publishes the "Consumer Confidence Index." It noted in *The Economist* (February 22, 2003) that such confidence level has fallen in February, down to 79.2%, which represents the lowest level since 1993.

Consumers have been a key factor in the growth of economic activity within the United States. When the consumer confidence level continues to drop, this supports additional concern in the market-place and delays the recovery. Such recovery was projected by many to be at the end of 2002. Many prognosticators have moved this forecast to 2003. (As noted in the conclusion of this Note, it is the Author's opinion that recovery will not take place in the general real estate market in 2003.)

FRAGILE SETTING

Newspapers throughout the United States have a plethora of commentaries by economists and others regarding implications to the market as a result of deficits that the United States faces, and additional deficits that it will face as a result of new tax laws designed to create incentives and to energize the marketplace.

Whether incentives such as earned income credits - or additional refunds, elimination of the dividend tax, a reduction of the Alternative Minimum Tax (AMT), reduction of capital gains tax rates, increased depreciation allowances, increased

expending allowances, additional credits, additional deductions allowed above-line or below-line, for Federal income tax purposes -- or other incentives are present, there is concern that such positions will increase the deficit, which will damage the country, overall, and will not produce the anticipated incentives. Rather, many argue, such positions create a general negative impact on the marketplace and potentially increase interest rates.

The single factor of an increase in interest rates will substantially and negatively impact the entire U.S. market, and, in turn, other countries that tie their positions to the United States.

Given that the level of interest rates, historically, has peaks and valleys, coupled with the fact that the rates are the lowest in 45 years, such levels create great consternation for planning purposes, even if one anticipates an increased interest rate of only 100 basis points.

It is likely, in the opinion of many economists, that interest rates will rise in 2004 or 2005. It appears that interest rates will hold to their current range for 2003, and possibly until the Presidential election in 2004, although many economists and other prognosticators question even this assumption. The snowball impact of such change in interest rates could devastate the economy. It could further reduce consumer confidence, increase vacancies, cause corporations and other businesses to reduce or halt expansion activities, most likely raise unemployment levels and create other major economic concerns within the entire United States.

The costs to undertake business in the U.S. is relatively low, compared to other countries. There is concern with economic sustainability of growth in the United States, given the factors noted.

According to a DTZ Research Study, 6th Edition (2003), global "Class A" office rates in U.S. dollars is much higher in London, West End (\$146.70), or in Tokyo (\$91.90) or in Paris (\$81.40), as compared to the U.S. (Of course, it is of little comfort to consumers in midtown Manhattan that "Class A" U.S. lease rates are lower in the U.S. [\$62.80 per square foot per year].)

The U.S. is in a fairly fragile economic position,

given strains on the purse strings of the U.S., after facing an elimination of the prior surplus within the government. A deficit now exists within the U.S. government. Dependency on the marketplace to continue its growth position in many areas, or at least sustain close to its prior position, is very much aligned to the favorable interest rate position, since unemployment has been rising.

It is fairly clear in the view of many U.S. economists that if there is an additional spike upward on unemployment, or an increase in interest rates that is substantial (often defined as 200 basis points or more), the same would be devastating to the economic position in the U.S.

As mentioned, consumer confidence has continued to deteriorate. As reported in *The Economist* (February 1, 2003), such consumer confidence level fell to a 9-year low in January, 2003.

OTHER CONCERNS

Office space continues to be in an oversupply position throughout most of the United States. Vacancy rates have increased in most jurisdictions for office space, and rates have decreased. Concessions offered, through additional tenant finish, waivers of certain monthly rents, inclusion of parking benefits and other incentives have further distorted rent rates. This indicates that actual rents are certainly below those of stated rents in many leases for office space throughout the United States.

For additional comments on these same points, see the Studley Report for the Fourth Quarter (2002), which can be found at:

http://www.studleyreport.com

The office market continues with a high vacancy level, given negative absorption and the concern with additional supply of space in many markets, with some companies consolidating. Such vacancy increases are common in many markets throughout the United States.

In the Colliers International Report (January, 2003), which can be found at the web site at: http://www.colliers.com, the office market has continued to have problems in the U.S., as well as in many other markets. Collers International Report

stated: "Over two-thirds of global office markets registered rising vacancy levels in the second half of 2002." Many markets internationally were cited for additional vacancy, including London, Frankfurt, Paris, Hong Kong, Tokyo, and New York.

The office market generally has felt strong downturns throughout most of the world; therefore, the United States cannot assume that there will be stronger economic positions in other countries which will embolden the U.S. position. This is especially true when one considers terrorism issues, SARS, the prior war in Iraq, notwithstanding the "conclusion" of the same, the rebuilding processes necessary in especially Afghanistan and Iraq, and concerns in other countries that have faced internal wars or neighboring wars, among other issues.

THE MARKET IS DOWN: LET THE GAMES BEGIN

Historically, when many economic indicators are negatively inclined (such as increased unemployment rates, increased cost of doing business, reduction in consumer confidence, growth in vacancies, and so forth), there are many economic "games" or "adjustments" that seem to be generated. Some of these attempt to continue the image of positive positions and growth; others seem to generate outright fraud and perpetuate individual benefits.

Some of the Games . . .

Consider some of the following games or positions that seem to be generated once the market has negative indicators which arise following a positive growth phase.

Market Image—The market image of a company having positive earnings, growth, and a position of a bright future, was only one example of the "dot.com" (."com") companies that are now "dot.gone" (."gone"). These are good examples of an attempt to project positive positions, notwithstanding that such companies were often never productive, economically; however, they had the "image" of "potential" growth. With stocks skyrocketing, "potential" was the key synonym in the days of the late 1900s and early 2000s.

Creative Accounting—Which adjectives that might

be used with various accounting schemes allow one's imagination to wander. "New" accounting, "informative" accounting, "industry specific" accounting, and so forth, are only several examples of labels that were employed for presenting positions, such as those of Global Crossing, Enron, WorldCom and other companies which took positions that were not transparent. They often distorted positions of understanding for potential investors (assuming investors read financial reports and other financial information supplied to them).

Off-Balance Sheet—The approach to exclude some items from the balance sheet (because the given company was, arguably, not liable on a position, or was involved in a partnership and showed a net number, or for other reasons), exemplifies concern that the balance sheets presented by many companies were distortions. They did not reflect debt positions or potential surety positions that many companies faced if an investment or business which they undertook went south and resulted in losses. These accounting "irregularities" are now giving rise to bankruptcy positions and charges of liability and exposure for many executives in these companies.

"Nothing Down" Syndrome—Another indicator for the economic position of real estate, along with other major purchases, are acquisitions where the consumer is encouraged to buy property with "nothing down" or "very little down." That is, the purchaser invests very little of his or her own equity. In such circumstances, there is clear evidence that where the consumer has very little or nothing invested to buy, except as to payments over time, there is a much greater foreclosure or default rate. The investor/purchaser/consumer has very little of his or her own money involved in the transaction.

Pull Equity—Encouraging investors, consumers, and homeowners to "pull out" equity from their realty to utilize cash in other ventures (whether investing in the stock market, or for purchase of other real estate), further exemplifies concern within the marketplace. It is also an alarm that should encourage the cautious lender to review financial positions and consider whether there is the potential of a negative result which is forecast because of such alarms, such as the "highly leveraged" pur-

chase. (Often the concept of "leverage" is taught in university classes, in finance, real estate, etc. Such concept is that the return can be increased in many circumstances, where the return on such borrowed money is greater than the cost of borrowing said funds ["positive leverage"]. This simplified statement also emphasizes that such leverage position may prove to be very beneficial in some settings.)

However, if such positive posture changes, whereby the cost of said funds is greater than what those funds can produce, there is "negative leverage." In such event, disaster, financially speaking, will often not be far behind. Such result can easily take place where interest rates are projected, for purposes of the investment, to be at current low levels. If, in fact, they increase, for example, by a one-third amount of the anticipated interest rate, such increase can spell disaster for the entire investment position.

Artificial Rents—As indicated earlier, many concessions are being given by landlords to tenants to thereby encourage tenants to undertake leasing arrangements with the landlord.

Such concessions, or benefits, to the tenants can occur in the simple leasing of an apartment or home, as well as in nonresidential areas, such as with office leasing circumstances and retail leases. Certainly hotels and other special use properties utilize such approaches. These incentives produce a distorted rent figure. When one considers the cost of such concessions in reducing the "stated" rent to an "effective" rent, the reality of the rent being charged must be examined. Such artificial rents and rent concession positions must be carefully reviewed. These are often good prognosticators of a weakening market; they can be potential indicators for reduced property market values, or even a collapsing market.

Swaps and Other Arrangements—Swaps, or transactions between or among related parties, related entities, or actions involving a quid pro quo between or among entities, often arise when entities attempt to paint a better picture than reality would dictate. Transactions between related entities, such as lease payments between a parent and a subsidiary, or a controlled entity of another type, are only basic examples of this type of artificial, and thus distorted, rent positions which are often

reported in financial statements to indicate a positive earning position.

Many types of arrangements between related parties, whether by swaps or otherwise, are at the heart of some transactions being questioned today by the Securities and Exchange Commission (SEC) and state securities commissioners, among others, when examining companies that have entered bankruptcy over the last year or so because of a collapsed financial position that often distort and hide the true financial position.

Implications of the Games—The games noted above are played, or represented, to investors, governmental officials and other regulators as only a small sample of those that have been utilized within the marketplace. Lack of transparency, or lack of proper transparency, as to what has actually transpired within a given entity, through the use of games, cover-ups, "creative accounting," or accounting irregularities, to use some of the euphemisms, only illustrate some concerns in these areas.

This often means that a company could have been placed into bankruptcy, or it should have been terminated many years before its formal demise. However, because of the cover-ups or distortions, many companies continue down a path that causes actual damage to investors, employees, governments, and other companies that rely on what appears to be strong financial positions, only to learn, too late, that such companies had substantially negative financial positions for many years.

The argument that CEOs of many companies may be responsible for continuing to mislead employees, trusts, and others in these types of settings was illustrated in the article by Dugas, Christine, "CEOs May Be Liable For Losses In 408(k)s - Enron Lawsuit Sheds Light On Feds' Position," USA Today (September 30, 2002). This article noted potential exposure and some of the distortions that were present within Enron, and, in turn, the damage that was generated to retirement plans of employees within Enron, among other places.

In summary, these games that are played, these distortions and lack of proper transparency, and results that were taking place, clearly reflect circumstances that cannot go on without correction.

The damage to employees within companies, investors, the marketplace, governments, and tax-payers, to fund many of the bail-outs that resulted from such activities, are important issues to be addressed. The impact on the world economies must also be evaluated for countries and entities that follow the lead of the United States.

The SEC, the U.S. Senate, U.S. House of Representatives, and the President of the United States are attempting to address some of these issues, as are states and other regulatory bodies.

"THE RESULTS"

Some economists continue to suggest that the economic position in the United States will improve at the end of 2003; some suggest that such improvement will be at the end of 2004. For example, see the positive outlook on the economy, as written by Thredgold, Jeff, "Economic News of the Nation," *Insight* (Spring, 2003).

However, many other economists disagree with such projections, given the increase in unemployment, concern that interest rates may increase, problems with the global economies, potential of additional world conflicts between countries, lack of resolution of the Mid-East crises, continued concern with Iraq, terrorism, and uncertainty on many other issues, such as SARS.

When Will the Economy Recover

Certainly the economy will recover. The question is: "WHEN" will it recover? To what LEVEL will it recover? The more realistic position seems to be, in my opinion, that it will not occur, at the earliest, until sometime in 2004. Even then, it should not recover unless certain concerns, such as the potential of rising interest rates and increased unemployment are addressed in a way that is positive for the growth position.

Consumers need to feel a level of confidence. What issues are seen as impacting that confidence?

See "Trends" in *Development* (Winter, 2002), located at: http://www.naiop.org. Some trends that should be considered in the current marketplace, per this article, are:

- "1. The economy has no momentum, and the real estate business is dragging.
- 2. The economy is going nowhere.

- 3. Like the economy, business is stagnant.
- 4. Rents are down and aren't going anywhere fast.
- 5.Development profits are getting squeezed.
- 6.Building security remains a concern.
- 7.Mold is a big problem.
- 8. Recovery is a moving target."

See the comments by Doug Herzbrun, Managing Director, C.B. Richard Ellis Investors, Page 9, Development (2003).

This short list illustrates a concern with today's market and why it is unlikely that the market will change to the positive position in 2003. And, there are additional hurdles for 2004.

Market Projections

Obviously it is difficult to project what various markets will do. Jessica Roe addressed this in her article, "Deflating Expectations: A Pessimist's Guide To the 2003 Real Estate Economy," Page 1, Commercial Property News (January 1, 2003). (See also http://www.cpnonline.com.)

Ms. Roe stated in the article: "Perhaps there is no surer sign that commercial real estate will hit bottom this year and linger for a while than the near total refusal by industry insiders to volunteer forecasts on when the recovery will begin."

Ms. Roe continued to note that because of the sluggish job growth, and limits on business spending, there is probably no recovery reasonably in sight for the real estate marketplace.

See the comments by President Harvey Green, and Managing Director, Hessam, Nadji, in National Research Report - Apartment Report, Marcus & Millichap (First Quarter, 2003). They noted in the introductory comments to this Report that: "The economic recovery has fallen disappointingly short of historical post-often recession trends due to the absence of pent-up demand." "We cannot ignore risks posed by geo-political turmoil, increased layoff announcements, and evidence of potential cooling in retail and home sales."

CONCLUSION

The increase in the unemployment rate, and decrease in consumer confidence, among other items, bode well for the position that the 2003 market will not readily improve. It is likely that additional accounting "irregularities" and other distortions in reports coming forth in the last cou-

ple of years will continue to be publicized and will continue to create uncertainty within the marketplace.

Concern with many earlier-mentioned items (including the current U.S. deficit, questions on the recently passed Federal tax changes, economic strain in the economy because of commitments to rebuild Iraq, other global financial commitments, and overall, an increase in supply and lack of proportionate demand) are indicators that 2003 will not see a major recovery in almost all real estate markets throughout the United States. It is likely that such recovery and improvement in real estate cycles will not occur until 2004, at the earliest. AND, should any of the "indicators of concern" (such as rising interest rates, and unemployment, along with decreasing consumer confidence) not be favorable, such recovery could be even further postponed in the economic cycle.

FOCUS ON THE INVESTMENT CONDITIONS

BACK TO THE FUTURE FOR REAL ESTATE IN NEW TAX AND ACCOUNTING RULES

by Dale Anne Reiss



Astream of events over the last 12 months from passage of the Sarbanes-Oxley Act to President Bush's tax cut package to a wave of recently enacted accounting rules has hit the industry and corporate America. So much is new that it will take some time for real estate companies - and companies generally - to sort out all the ramifications for their businesses and the economy. This much is clear: governance, accounting and tax issues are front and center for the foreseeable future, and real estate companies will have to give them close attention, for they could have far-reaching effects on companies' financial statements and operations. In plain terms, the risk management profile for companies in the real estate sector just became much tougher.

Here are some of the changes that are particularly important for the real estate sector.

REITS

Real estate investment trusts may represent only 10 percent of the entire commercial real estate universe but they are a tremendously important and visible minority within the sector. The cumulative effect of Sarbanes Oxley, new tax reforms and various accounting changes, has hit REITs particularly hard. It still remains to be seen exactly how REITs will fare in the capital markets as a result of the removal of the dividend tax on corporate dividends. The dividend tax excludes from the taxable income of individual investors the dividends they receive each year from corporations, but only to the extent that the company pays taxes on this distributed income. This clearly creates an incentive for corporations to raise dividends, a fact that may make REIT dividends less attractive to some investors. REITs would not receive the same benefit because they already make tax-free distributions, and this could cause a possible loss of REIT share values. In fact, REIT prices already have fallen. The good news? Tax-exempt investors like pension funds, IRAs, and 401K investors could see improved yields from REIT investments.

The Sarbanes-Oxley Act required the SEC to issue rules about the disclosure of pro forma financial information in any report filed with the SEC, or in any public disclosures or releases. Regulation G, as it became known when adopted in January 2003, went beyond the requirements of the Act by restricting the presentation of non-GAAP financial information in SEC filings. Funds From Operations or FFO is considered a non-GAAP financial measure and REITs would have to defend its use as a key measurement of company performance.

Reg G requires that when a company presents non GAAP financial measures, a numerical reconciliation of the non GAAP financial measure must be made to the most directly comparable measurement calculated using GAAP (generally either Earnings per share (EPS) or operating cash flow.) If a REIT elects not to present FFO, it would have to use Earnings Per Share as the measuring tool, in which case depreciation would become a key issue for analysts and investors. For FFO calculations, depreciation is an add-back, so investors paid little attention to the useful life of an asset. By contrast, depreciation expense reduces EPS, and the useful lives of assets would be a key focus of investors if the SEC proposal were adopted.

It has been estimated that the overall impact of Sarbanes Oxley and increased corporate governance requirements on REITs could be anywhere from two to five cents per share on an earnings per share basis. There has been an expectation for some time within the industry that there is another major wave of consolidation coming in the REIT sector. Given the new playing field and it's heightened cost of doing business, this wave of mergers and acquisitions may be even closer at hand and there's also the strong possibility that some REITs will abandon the public arena once and for all and return to private status. Some REITs with weak share prices and portfolios of underperforming assets might improve shareholder returns by merging with larger, stronger REITs by converting to private companies or partnerships, or simply by liquidating assets and passing the proceeds along to investors.

OFF BALANCE SHEET TRANSACTIONS

The Financial Accounting Standards Board in January issued a final rule (Interpretation No. 46, Consolidation of Variable Interest Entities, also known as FIN 46) as to when companies must consolidate variable interest entities, including special purpose entities that have been widely used as off balance sheet financing vehicles. It is estimated that U.S. companies have financed approximately \$60 billion of real estate, much in synthetic leases, and another \$40 billion of equipment leases through property owning entities that are SPEs. Off balance sheet transactions have also been widely used by homebuilders, REITs, and other real estate companies.

Putting SPEs back on their balance sheets could saddle companies with major debt, raise debt covenant and credit rating issues, and make it more difficult for them to raise capital in the future. As an alternative, companies could dispose of the assets underlying SPEs through sales, sale-lease-backs and other disposition strategies, and a number of companies could follow this route.

One unintended victim of FIN 46 is the residential development sector. Homebuilders typically option land for development several years out and typically this land is held off balance sheet in joint ventures, development partnerships or other such structures until the land is "taken down" for development. Under FIN 46, homebuilders must now determine whether they are required to consolidate these entities - a move that may have significant financial ramifications for many.

FIN 46 came into effect immediately but public companies weren't required to comply with the rule until 10 Qs filed in the third quarter of 2003. For private companies, FIN 46 applies at the end of the first year beginning after June 15, 2003.

OTHER ACCOUNTING RULES

Other new or proposed rules that affect real estate include:

FIN 45 is a new FASB interpretation of a guarantor's accounting and disclosure requirements for guarantees. Because many real estate transactions contain some kind of guarantee, broader disclosure requirements could affect sellers, buyers, lenders, and others who issue guarantees, including the reevaluation of guarantor transactions. This new rule is already having an impact on business strategies in the sector. Look for an even wider impact as companies begin to gauge the impact of this additional disclosure requirement.

Under a clarification of a FASB rule, a portion of the cost of acquiring a property must now be allocated to existing leases, based on whether the lease is valued above, at or below market value. Historically the cost of the acquisition has been allocated between land and building, with the building being depreciated over its remaining useful life and with no value allocated to the in-place leases. This is retroactive to acquisitions since 7/1/01.

These are just the tip of the iceberg. There are many other new guidelines that must be followed by the entire sector or by certain companies operating within the sector - businesses such as opportunity funds, mortgage banks, pension funds and others. For some in the real estate industry, this is a time of tremendous upheaval, of momentous change. The good news is that, for others, this feels like back to the future. Which is to say that, to some degree, we've been here before. There have been times when the industry has had to adjust, reconfigure, regroup. The comforting aspect of all this is, that for as much as the industry has been forced to change or take steps back, it has always, eventually, moved on.

The views expressed by Ms. Reiss in this article do not necessarily reflect the views of Ernst & Young.



CONTRIBUTOR INFORMATION

Real Estate Issues publishes four times annually (Spring, Summer, Fall, Winter). The journal reaches a lucrative segment of the real estate industry as well as a representative cross section of professionals in related industries.

Subscribers to *Real Estate Issues (REI)* are primarily the owners, chairmen, presidents, and vice presidents of real estate companies, financial corporations, property companies, banks, management companies, libraries, and REALTOR* boards throughout the country; professors and university personnel; and professionals in S&Ls, insurance companies, and law firms.

Real Estate Issues is published for the benefit of the CRE (Counselor of Real Estate) and other real estate professionals, planners, architects, developers, economists, government personnel, lawyers, and accountants. It focuses on providing up-to-date information on problems and topics in the field of real estate.

REVIEW PROCESS

Member and non-member authors are encouraged to submit their manuscripts to:

Real Estate Issues, c/o The Counselors of Real Estate, 430 North Michigan Avenue, Chicago, Illinois 60611. All manuscripts are reviewed by three members of the editorial board with the author's name(s) kept anonymous. When accepted, the manuscript and any recommended changes is returned to the author for revision. If the manuscript is not accepted, the author is notified by letter.

The policy of *Real Estate Issues* is not to accept articles that directly and blatantly advertise, publicize, or promote the author or the author's firm or products. This policy is not intended to exclude any mention of the author, his/her firm, or their activities. Any such presentations however, should be as general as possible, modest in tone, and interesting to a wide variety of readers. If a product, service, or company is featured, it should be informational vs. promotional in nature. Potential conflicts of interest between the publication of an article and its advertising value should also be avoided.

Every effort will be made to notify the author on the acceptance or rejection of the manuscript at the earliest possible date. Upon publication, copyright is held by The Counselors of Real Estate (American Society of Real Estate Counselors). The publisher will not refuse any reasonable request by the author for permission to reproduce any of his/her contributions to the journal.

DEADLINES

See Editorial Calendar on inside back cover for deadlines.

MANUSCRIPT/GRAPHICS PREPARATION

- 1). Manuscripts must be submitted via e-mail or disk (along with hard copy) in IBM or PC format only—Mac files cannot be accommodated: .txt (text) file format or Word for Windows 6.0. All submitted materials, including abstract, text and notes, are to be double-spaced. Number of manuscript pages is not to exceed 25 single-sided sheets (approx. 7,000 words). Submit a 50- to 100-word abstract* and a brief biographical statement, including author's e-mail address. Computer-created charts/tables should be in separate files from article text. (*If the manuscript is accepted for publication, the abstract/brief synopsis would appear on the table of contents page.)
- 2). Graphics/illustrations are to be considered as "Exhibits," numbered consecutively and submitted in a form suitable for reproduction. Graphics must either be submitted camera-ready or computer-generated as PC compatible ONLY. DO NOT submit colorized computer files—the graphics <u>must be created in grayscale or black and white only.</u> If possible, save in all of or at least one of the following formats: .emf; .eps; .wmf.
- 3). Number all graphics (tables/charts/graphs) consecutively. All graphics should have titles.
- 4). All notes, both citations and explanatory, are to be numbered consecutively in the text and placed at the <u>end</u> of the manuscript.
- 5). If appropriate, and of good quality, include photographs to clarify and enhance the content of the article.
- 6). Article title should contain no more than eight to 10 words including an active verb.
- 7). For uniformity and accuracy consistent with our editorial policy, refer to The Associated Press Stylebook.

THE BALLARD AWARD MANUSCRIPT SUBMISSION INFORMATION

The *REI Editorial Board* is accepting manuscripts in competition for the 2002 William S. Ballard Award. All articles published in REI during the 2002 calendar year will be eligible for consideration, including member and non-member aauthors. The \$500 cash award and plaque is presented annually each spring, during The Counselors' Midyear Meetings to the author(s) whose manuscript best exemplifies the high standards of content maintained in the journal. The recipient is selected by a three-person subcommittee comprised of members of The Counselors of Real Estate. (The 2002 recipient will be honored at The Counselors 2003 Midyear Meetings.)



Subscription Information

As the adage goes, "the only constant is change." For 28 Years, Real Estate Issues has been a constant source of ideas, insights, and methods, assisting industry experts in meeting the challenges of a changing market.

Why not give the gift of a REI subscription to a colleague or business associate? *Real Estate Issues* publishes **four times per year** (Spring, Summer, Fall, Winter). Place your order today!

Order your single copies & subscriptions below or online at www.cre.org
Qty.
Single copies @ \$15 (+ shipping: \$3 U.S.; \$6 foreign). Vol (1-27); No (1-4)
Subscription prices: □1-year \$48 (4 issues) □2-year \$80 (8 issues) □3-year \$96 (12 issues)
Call for foreign and faculty/student subscription rates.
(#38-442-36001)
Check enclosed for \$ payable to The Counselors of Real Estate
Charge \$to: □ VISA □ MasterCard □ Am.Exp. □ Discover
Card NumberExp. Date
Signature
Name
Company
Address
City/State/Zip
Telephone

ORDER By: 1). Web: www.cre.org; 2). phone: 312.329.8427; 3). fax: 312.329.8881; 4). mail: The Counselors of Real Estate, 430 N. Michigan Avenue, Chicago, IL 60611



THE COUNSELORS OF REAL ESTATE, $_{\scriptscriptstyle \rm M}$

430 North Michigan Avenue Chicago, Illinois 60611-4089

> Telephone: 312.329.8427 Fax: 312.329.8881 E-mail: info@cre.org Website: www.cre.org