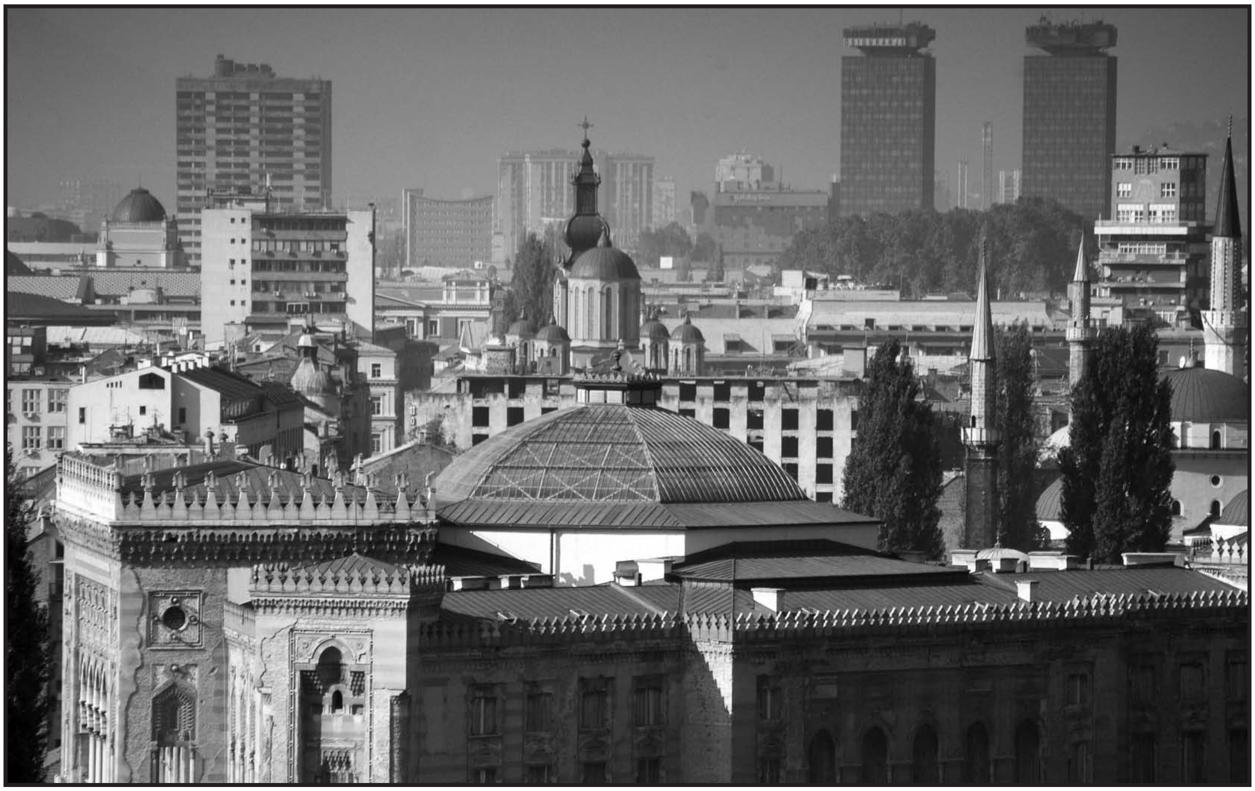
REAL ESTATE ISSUES

Published by THE COUNSELORS OF REAL ESTATE® *Volume 38, Number 3, 2013*



FEATURES AND PERSPECTIVES

RESOURCE REVIEW

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REAL ESTATE ISSUES

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Third class postage paid in Chicago. *Real Estate Issues*® publishes three times annually. Subscription rates are: $60 for one year (3 issues); $99 for two years; $120 for three years; $52 per year to students and faculty; $85 for two years; $97 for three years; $67 for one year (3 issues) foreign rate, $115 for two years; $142 for three years - submit in U.S. currency; single copy $25. Remittance may be made by credit card or personal check, payable to The Counselors of Real Estate. Remittance, 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 N. Michigan Ave., Chicago, IL 60611. Phone 312.329.8427; Fax: 312.329.8881; Email: *info@cre.org*; website: *www.cre.org*. Library of Congress card number LC 76-55075.

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RESOURCE REVIEW

Editor's Note

BY MARY C. BUJOLD, CRE

THIS ISSUE OF *Real Estate Issues*, the final issue of 2013, is packed full of informative and interesting articles. I am pleased to bring it to you. Although my original idea was to create a focus issue on unusual consulting assignments, limited response to that idea necessitated reaching out to incorporate other subject matter.

The result is an issue that includes a diverse group of topics and articles that reflect the broad expertise and background of The Counselors' organization.

"**Adversaries to Allies: Creating Wealth for the Republic of Serbia from Surplus Military Property**" by John Hentschel, CRE, MAI, FRICS, earned the 2011 James Felt Creative Counseling Award from The Counselors of Real Estate. We are especially pleased that John found time to summarize the assignment and provide important insights on the counseling process for our readers.

Last year, *REI* made a commitment to connect with the current External Affairs Committee, and has included articles in these past issues on topics that have been listed as the committee's Top 10 real estate issues.

In this issue, we present an article on the topic of global warming: "**Evaluating Coastal Real Estate Value vs. Risk in the Wake of Sea Level Rise**." This article describes the findings of a detailed cost-benefit analysis conducted to address the topic of protecting existing properties and critical infrastructure against sea level rise.

Also included is an article by Norm Miller, Ph.D., on the current trend of downsizing the amount of space per worker in the office market.

Peter Burley, CRE, contributed a book review on *New Deal Ruins: Race, Economic Justice & Public Housing Policy*, which discusses public housing policy in the United States.

This issue will undoubtedly keep you busy for some time.

Our first issue for 2014 will feature a new segment entitled "Viewpoint." The Viewpoint segment is intended to offer CRE members and others an opportunity to present their viewpoint on a topic that has an impact and/or implications for the real estate industry or other business-related topics. This segment will allow the author to take a specific viewpoint on a subject that they feel is important to them. We already have a viewpoint piece for our next issue of *REI* which will be published in April, but we invite each of you to submit your "Viewpoints" for future publication.

I look forward to an exciting year for *REI*! ■

Mary C. Bujold

MARY C. BUJOLD, CRE
EDITOR IN CHIEF

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Adversaries to Allies: Creating Wealth for the Republic of Serbia from Surplus Military Property

BY JOHN J. HENTSCHEL, CRE, MAI, FRICS

Editor's Note: *This project earned the 2011 James Felt Creative Counseling Award from The Counselors of Real Estate.*

BACKGROUND

THE U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID) had contracted with the Urban Institute to implement the Municipal Economic Growth Activity (MEGA) in the Republic of Serbia, part of the former Yugoslavia. The initiative sought to develop the skills of local governments to foster economic growth and employment by creating a business environment where the local private sector could flourish. I was recommended for the assignment by a fellow Counselor of Real Estate (Olga Kaganova, a senior associate at the Urban Institute) and was engaged to serve as a special advisor and consultant in conjunction with the Municipal Capacity Building component of MEGA, in particular a project involving the Conversion and Commercialization of Surplus Serbian Military Property for Local Economic Development. Although initially I was engaged to merely develop a manual and some training in valuation principles and practices for use by Serbian officials, subsequent critical inquiry and thoughtful analysis revealed a more profound underlying problem as well as an opportunity to resolve it.

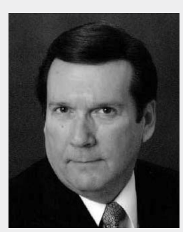
In addition to valuation, the assignment ultimately required the application of a host of other interdisciplinary skills including organizational dynamics, public policy, economic development, public sector asset and portfolio management, market analysis, property marketing, finance, educational course development and instruction, together with an ample dose of diplomacy in a foreign country with an emerging economy where the market framework and the rules of the game all were in transition and evolving.

Seldom is one presented with the opportunity to not only study a problem, devise a solution and guide the implementation of recommendations to resolution, but also be afforded the chance to help resolve a situation of national significance with the potential to influence the well-being of the general population.

THE ISSUE

The government of the Republic of Serbia had adopted a master plan for the sale, conversion and commercialization of surplus military immovable property which envisioned that the military would fund reforms, including housing for military personnel and pensioners, from the proceeds of surplus military property sales. At the same time, the national government had enacted legislation that granted provincial

About the Author



John J. Hentschel, CRE, MAI, FRICS, *is founder and CEO of Hentschel Real Estate Services, a real estate valuation, consulting and advisory firm that, for 40 years, has provided expert advice and guidance to assist leaders in business, government, law and finance make complex decisions, solve difficult problems, and seize strategic opportunities. A contributing author to Urban Institute's book,* Managing Government Property Assets-International Experiences, *he is an internationally recognized adviser, expert, speaker and author on real estate valuation and public sector asset management practices. A former member of the University of Baltimore Real Estate faculty, he was a trusted adviser to three mayors of the City of Baltimore and a former head of Baltimore's Department of Real Estate.*

governments known as Municipalities a pre-emptive right to negotiate purchases of the properties from the military.

The existing property disposal process was arcane, cumbersome and fragmented with roles and responsibilities divided among the Ministry of Defense (MOD); the Republic Property Directorate, the agency responsible for documenting and conducting property transfers; the Republic Tax Administration, the agency responsible for establishing property value; and the Municipalities. The process was not only inordinately complex and time-consuming, but was not administered in an efficient or uniform manner, thereby causing incessant delays and frustration resulting in tension between the MOD and the Municipalities.

These conflicting policies resulted in a paradigm that inadvertently pitted the MOD and the Municipalities in the role of virtual adversaries in a zero-sum rivalry that required both to commit considerable resources, yet yielded neither the immediate desired outcome. Despite a successful property conveyance, not only would MOD's goal of obtaining new housing remain unfulfilled, but the opportunity for MOD to harness or leverage private capital sources to accomplish its housing objectives was foregone. A Municipality that was able to accomplish an acquisition still faced sizeable risks, considerable time, and a daunting commitment of even more scarce capital resources before the property could yield any significant economic development benefits or revenues. As depicted in Figure 1, the paradigm merely transferred scarce capital resources between levels of government without creating any incremental benefits.

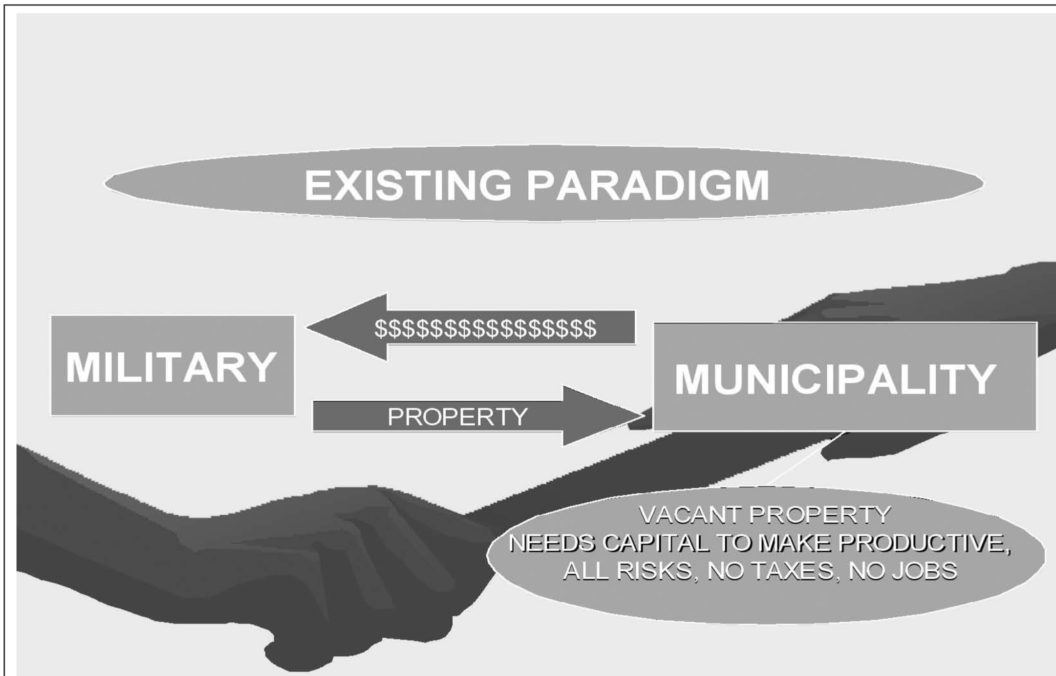
Under the existing paradigm:

- MOD sought to maximize the price to be paid by a Municipality;
- Municipalities sought to minimize the price to be paid to the MOD for properties;
- The diametrically opposed objectives, visions and viewpoints held by MOD and the Municipalities created an environment of mutual mistrust and frustration resulting in an impass, as well as missed opportunities to achieve reciprocal success. Indeed, many of the properties that the Municipalities now were being asked to buy originally had been conveyed at no cost to the MOD at the time of Yugoslavia's formation.

To further complicate the problem, Serbia was in transition from a centrally planned to a free market

Figure 1

Existing Paradigm



Source: John J. Hentschel, CRE, 2009

Figure 2
Republic of Serbia

economy. Many state-owned enterprises were yet to be privatized, a primary mechanism through which significant properties were acquired by private investors. Although emerging and evolving, the Serbian real estate market was immature and unorganized, with little transparency or transactional data available to corroborate value. All land within the country was still owned by the government with investors only able to acquire a right to use or a long-term lease with all rent payable in advance.

Notwithstanding its statutory role and responsibility, the Republic Tax Administration acknowledged that it lacked the knowledge, expertise, resources and capacity to accurately determine the value of the complex properties in the military portfolio. Although in some instances it engaged the services of local independent court experts (civil engineers with little or no training in market-based valuation techniques) to establish sale prices, their legacy bureaucratic valuation techniques based solely on replacement cost were insufficient for the task, seldom uniformly applied, and often skeptically viewed by Municipalities as overstating value. This further exacerbated the rancor between the MOD and the Municipalities.

Despite Serbia's high unemployment and need for economic growth, the adversarial nature of the relationship between the MOD and the Municipalities, together with the crisis of confidence regarding property valuation, resulted in stalled negotiations and few properties being transferred to induce much needed economic development.

THE ENVIRONMENT

Located in Eastern Europe, the Republic of Serbia is physically about the size of the state of Maine with a total population of 7.365 million, similar to that of the state of Washington.

The country is strategically located. The Pan European Highway Corridor 10, which runs from Austria to Greece, bisects the country at its approximate center. Principal Serbian cities of Novi Sad, Nis, and the capital, Belgrade, which is located in the center of the country at the confluence of the Sava and Danube rivers, abut Highway Corridor 10 and have attracted development of major industrial distribution centers. However, similar to other countries with emerging economies, substandard transportation infrastructure has hindered the expansion of economic activity, especially in the more remote regions of the country.

At the time of this assignment, Serbia was seeking candidacy in the European Union. With a parliamentary form of government, power was centralized and concentrated at the national level. The public sector was cumbersome and inefficient with considerable redundancy and overlapping authority among government ministries. Although politicians were quick to adopt reforms, the bureaucracy was resistant to change and slow to implement the reforms enacted.

The northern plateau sector of the country is more intensely developed and populated and accounts for a greater proportion of economic activity than the mountainous region in the south and west. With a population of approximately 1.6 million, the capital of Belgrade accounts for 22 percent of the country's total population, 30 percent of its employed population, and generates 30 percent of Serbia's Gross Domestic Product (GDP).

Agricultural production accounts for 9 percent of the Serbian economy, while manufacturing represents 15 percent. Principal industries include the manufacture of agricultural and transportation equipment; electronics and communications equipment; and the processing and production of pulp and paper. More than 25 percent of the workforce is employed by the government or state-owned enterprises.

The Serbian economy is highly dependent upon foreign direct investment which had declined from $2.2 billion in 2008 to $1.0 billion in 2010. Italy, Germany, Russia and Bosnia/Herzegovina comprise Serbia's principal trading partners. Major investors include Fiat (Italy), Gazprom (Russia) and Telenor (Norway). U.S. companies Phillip Morris, U.S. Steel and Coca Cola also had major stakes in Serbia. Most, if not all, of the foregoing investments were the result of acquisitions of formerly state-owned enterprises.

At the time of this assignment, the Serbian economy was slowing. Annual GDP growth had declined from 6.9 percent in 2007 to 1.8 percent in 2010, rebounding slightly to 3 percent in 2011. Nationwide unemployment, meanwhile, remained chronically high at 19 percent with a 30 percent rate prevailing in the more remote provinces. A 12.6 percent inflation rate and a corresponding 12.25 percent interest rate inhibited domestic growth and investment.

Serbia's population, according to its Census, had remained relatively static. During the previous decade, the population had declined slightly (2.5 percent) from 7.552 million in 1999 to 7.365 million in 2008. Housing production, however, had increased from 1.45 dwelling units per 1,000 people in 2000 to 2.5 dwelling units per 1,000 people in 2008, occurring mostly in the principal cities to replace historically substandard housing. The price of a typical 550–600-square-foot flat in Belgrade averaged approximately $75,000. The typical $521 monthly salary for a Belgrade worker yielded take-home pay of $440 after taxes, medical insurance and pension contribution.

Although a number of contemporary retail malls had been created in Belgrade and some other major cities, Serbia lagged the European Union in retail development (25 square meters per 1,000 people in Serbia versus 270 square meters per 1,000 people in the EU).

In Serbia, properties owned by the MOD often occupied the best and most strategic locations and thereby represented the foremost opportunities to create employment and promote economic development.

THE CHALLENGES

While each and every counseling assignment poses unique and sometimes difficult circumstances, this assignment was particularly challenging. The assignment addressed issues involving 447 disparate military facilities that included unimproved land; airports; barracks and housing structures; storage facilities; fortifications; training centers; army clubs; and sport, recreation, and tourist centers located throughout the Republic of Serbia. Some were located in major cities while others were situated in remote areas. Many of the structures improving the properties were antiquated, obsolete and poorly maintained.

PHOTOS DEPICTING EXAMPLES OF SURPLUS MILITARY PROPERTY

Military facilities are the classic special purpose property. They pose significant challenges for reuse and valuation, even in developed countries like the U.S. The perceived utility and corresponding value of such property to a military user may differ substantially from that of a private sector user/buyer. This assignment, therefore, required that I first educate government officials about the function and dynamics of a free market and the concept of economic utility and its influence on the contributory value of buildings, and thereafter devise measures that could be simply and uniformly applied in a limited data environment.

Bureaucratic institutions are highly resistant to change. In this instance decades of operating under a centralized authority within a centrally planned economy had narrowed their focus to the effect of existing laws, bureaucratic rules and procedures. Such shortsightedness was undermining opportunities to successfully redeploy assets to produce desperately needed economic development. Challenging and encouraging public officials at the local and national levels to think "outside the box" and consider not only what was permissible, but also what was possible, enabled the MOD and the Municipalities to discern and acknowledge a commonality of interest as well as muster the will to achieve it.

The assignment was in an unfamiliar foreign country with a transitional economy containing nascent, unorganized real estate markets, the framework and rules of which were in flux and evolving with few accessible or reliable sources of data.

THE PROCESS AND RECOMMENDATION

Beginning in January 2009, this assignment spanned approximately two years and was accomplished in a number of successive phases with the assistance and support of Urban Institute employees and contractors in Belgrade and Washington, D.C.

The first phase was focused on fact-finding—to gain an understanding of the current Serbian paradigm for valuation, disposition and reuse of surplus military properties to facilitate identification of problems and opportunities inherent in the existing model. Information was gathered indirectly through research and review of published data, and thereafter directly by traveling throughout Serbia to view representative military properties and to become acquainted with the country's business practices, economic and geographic linkages; the structure of the national and local economies; as well as the organization and framework of the real estate market. Interviews also were conducted with leaders of the Defense Ministry and local and national governments.

The second phase was devoted to analysis in order to develop recommendations that could resolve the problems inherent in the existing process and identify opportunities that could mutually benefit the military and Municipalities.

Money, people and property are the resources that all organizations use to attain a vision, accomplish a mission, and achieve goals and objectives. Their deft deployment enables businesses and investors throughout the world to create and accumulate wealth.

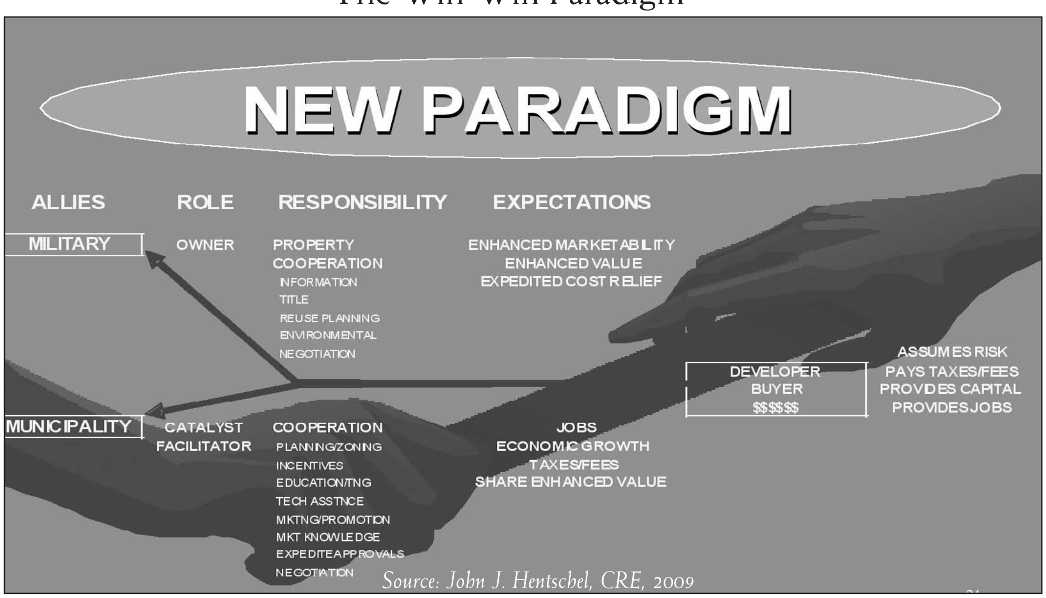
The wealth of a nation encompasses the sum of the collective resources of its towns, cities, provinces and regions. When local economies prosper, regions are healthy; when regions are healthy, a nation is strong. Economic development is a bottom-up process. Hence, when making resource deployment decisions, governmental entities at all levels—national, regional and local—need to coordinate their efforts and aim to create and expand the nation's wealth.

The existing property disposal process squandered the opportunity to use the nation's best-located properties to attract international investment that could spur job creation and economic development to augment the wealth of the nation. Although a Municipality might be induced to pay a price reflecting the MOD's unrealistic vision of value based on the replacement cost of the military structures, the Municipality's upside potential for the property would ultimately be capped and constrained by an entirely different perception of the property's value (which would be premised on its productive capacity) in the eyes of an international investor.

Over time, the MOD and the Municipalities had developed diametrically opposed, myopic visions and viewpoints that fostered an indifference to each other's needs, and engendered an environment of mutual mistrust which was only exacerbated by a property disposal process that lacked timeliness, transparency and uniformity. As a result, it became apparent that the parties were talking "at" each other instead of "to" each other.

Figure 3

The Win-Win Paradigm



Source: John J. Hentschel, CRE, 2009

The existing paradigm was inefficient, ineffective, and unproductive. Not only did resources merely transfer between layers of government without creating any new incremental wealth, but they were subject to further depletion from the insidious and sometimes imperceptible costs of inertia, as vacant deteriorating properties consumed even more of MOD's resources for the ongoing costs of maintenance, repairs, security and administration.

The solution seemed as clear as the problem was intractable—construct and implement a new paradigm, subsequently dubbed the WIN–WIN Paradigm, depicted in Figure 3, that would redefine the relationship, roles and responsibilities, and reposition the MOD and Municipalities as *allies* rather than *adversaries* who would mutually cooperate in the pursuit of common objectives to:

- leverage, enhance and maximize the value of surplus properties for the MOD;
- attract private investment and economic development to the Municipalities; and,
- create wealth for Serbia through mutual cooperation and a concerted effort to attract international investment capital.

The new paradigm re-cast the MOD and Municipalities as essential, albeit perhaps reluctant partners, each with singular vested interests, roles and responsibilities to entice and induce local and international developers and investors to acquire MOD properties. Whereas the MOD controlled large, significant properties in key locations with the capacity to contribute to local economic and community development, Municipalities had unparalleled local market knowledge and relationships as well as the ability to materially influence the utility and value of MOD properties through their regulatory authority. Although the MOD might have been exempt from local planning, zoning and permitting processes, any subsequent private buyer/user of MOD property would not be exempt.

The new paradigm envisioned a relationship that would be symbiotic, wherein the success, rewards and performance criteria of one would be linked to, dependent upon and measured by that of the other. In the new paradigm, the trust and confidence formerly absent in the relationship would transcend individuals and organizations in favor of a *process* wherein roles would be clearly defined, responsibilities clearly assigned, and value—whether contributed or created—would be measured uniformly, determined accurately and distributed equitably.

The third phase of the assignment focused on introducing, promoting and obtaining consensus for the new paradigm among senior policy makers from the Ministry Of Defense, the Office of the President, the Republic Property Directorate, the Republic Tax Administration, and the Municipalities to gain their support for the concept and achieve consensus for its adoption.

Although the Municipalities immediately embraced the concept, the leadership of the MOD, perceiving no apparent advantage or benefit, was initially, and understandably, wary of the idea. However, the MOD had acknowledged from the outset that it relied on and deferred to the Republic Tax Administration on issues of value. Perceiving the Tax Administration to be the critical linchpin to success, the focus turned to winning over Tax Administration officials to the merits of the new paradigm in hopes that the MOD would follow suit.

The fourth phase was devoted to swaying the Tax Administration to accept and adopt international valuation models and techniques founded on principles of productive capacity rather than on legacy administrative procedures based on reproduction cost. By adapting international valuation principles and techniques to the realities of the Serbian marketplace, the valuation process could thereafter be uniformly applied and understood by the MOD, the Municipalities, Republic Property Directorate and Republic Tax Administration when valuing military property.

The ensuing fifth phase of the assignment was focused on the development and delivery of training programs designed to aid personnel of the Defense Ministry, Republic Property Directorate, and the Municipalities understand, implement and execute the principles of the new Win–Win Paradigm. Another program was designed to provide technical advice and instruction in valuation techniques based on the productive capacity of property in a market with limited available or reliable data for Republic Tax Administration staff in support of the new Win–Win Paradigm.

To illustrate the principles of the new paradigm, I organized a study tour that brought 25 senior-level Serbian officials (representing the MOD, Tax Administration, Municipalities and the President of Serbia) to the United States to provide tangible examples of the cooperative principles advocated by the new Win–Win Paradigm and to demonstrate how inter-jurisdictional cooperation could leverage the benefits for each respective level of government when disposing and reusing surplus property assets.

The two-week fact-finding study tour included visits to surplus military properties that included presentations and discussions about:

- their potential for reuse and redevelopment;
- pertinent valuation issues;
- the roles and responsibilities of the respective parties; and,
- examples of conflict and cooperation that had transpired during the process of transferring the property from the military to the local government and/or a private developer.

The delegation also was introduced to the principles and practices of the military housing privatization process inherent in the U.S. Defense Department's Military Housing Initiative during a visit to Fort Meade.

Although fact-finding and education were the principal motives for the visit, an equally important mission was to build an operational team to foster communication and replace the mutual mistrust and tension with a sense of camaraderie and esprit de corps.

One example of this effort occurred during the group's stay in Baltimore, where I arranged for an evening crab feast at a waterfront restaurant. For the uninitiated, when presented with a whole, steamed Maryland blue crab in its shell, the inexperienced diner is confronted with the perplexing and daunting challenge of figuring out how to eat it, especially when the only utensils provided are a wooden hammer and a plastic knife. The experience can simultaneously be both humbling and hilarious. With seating intentionally and deliberately pre-assigned to ensure that the MOD, Tax Administration and Municipality officials were fully integrated, the former adversaries soon became steadfast allies in their quest to learn from each other how to navigate the nuances of eating a Maryland blue crab under the tutelage of my wife and adult children, thereby introducing a personal dimension to what had otherwise been an impersonal business relationship. By evening's end, an air of friendship and mutual cooperation would prevail and persist.

The study tour culminated with a day-long workshop at Urban Institute headquarters, during which each participant was guided in preparing an action plan for structuring and negotiating a transaction involving a specific military property in Serbia.

TEAMWORK
Serbian Delegation in Washington, D.C. During U.S.A. Study Tour

The final phase of the assignment focused on guiding the implementation of the principles of the Win–Win Paradigm and selecting a demonstration project to exemplify the application of the precepts of the new paradigm from which procedures, performance benchmarks and metrics could thereafter be developed for application in and monitoring of subsequent projects.

THE RESULTS

Oftentimes, clients discern and seek resolution for a symptom without first recognizing the larger underlying problem that was responsible for the symptom in the first place. In this instance, subsequent critical inquiry, thoughtful analysis of the situation, and a receptive and responsive client enabled me to refine and expand the Client's initially narrow perception of the problem and identify its true root source for which an appropriate and effective solution could thereafter be crafted to capture a strategic opportunity to advance Serbia's capacity for economic growth.

This assignment resulted in changes to the perspective, policies and procedures of national and local governmental institutions when disposing of surplus military property assets, replacing conflict with cooperation to create national wealth from idle and underutilized assets.

By agreeing to adopt the Win–Win Paradigm:

- The Republic Tax Administration committed to revise its procedures for the valuation of surplus military properties based on principles of productive capacity rather than administrative determination;
- MOD established a new real estate unit devoted to implementing the precepts of the Win–Win Paradigm and to serve as a liaison to communicate, coordinate and cooperate with Municipalities concerning the disposal of military properties;
- Municipalities, which control land use regulation, pledged to coordinate and cooperate with the military to enhance property value through planning, zoning and an expedited permitting process;
- MOD and Municipalities became better prepared to market surplus military properties to international buyers/financiers and promote sorely needed economic development and job creation since prices reflected the perceived productive capacity of property instead of bureaucratic formulae;
- Property transfers between the MOD and Municipalities began to transpire—the first transactions were consummated by the end of the assignment—with a firm model and framework in place to guide and expedite future transactions.

At the outset of this assignment, the level of mistrust and friction between representatives of the MOD and Municipalities was manifest and palpable. Relations were strained, communication was ineffective and, as a result, transactions languished. Two years later, at the conclusion of the assignment, representatives of the MOD and Municipalities were actively communicating and coordinating their efforts to maximize the benefits to be obtained from surplus military properties and to create wealth for Serbia. ■

Evaluating Coastal Real Estate Value vs. Risk in the Wake of Sea Level Rise

BY VALERIE SEIDEL, HUNTER RICHARDS AND OWEN BEITSCH, PH.D., CRE

INTRODUCTION

As recent hurricane events have demonstrated along the Eastern seaboard, even a relatively mild storm can cause enormous damage to coastal communities. When coastal properties become uninhabitable and roads impassable, the entire community sees the loss of economic output. Beachfront properties are highly coveted and offer some of the most valued real estate opportunities. However they are also vulnerable to erosion, inundation, storm damage and, consequently, insurance risk that begin to compromise that value, if not for an initial investor, possibly for a future investor or owner. In many coastal communities, waterfront property was developed decades ago, and initial development of a parcel is becoming a less frequent condition faced by local planning or permitting authorities. Stricter rules governing beachfront construction have been implemented throughout the country over the past four decades. As a result, some shorelines look very different than they would have had construction continued unabated. How does a coastal community balance the value of coastal economic development with the increasing costs of storm repairs as the shoreline shifts and changes?

In some communities, future revenues from tourist spending and property tax revenue are projected to fall by more than 30 percent by 2050 because of shifting shoreline patterns and loss of beach area. A one percent annual revenue decline says something about diminishing real estate values as well; this change represents a stark reality for any local government accustomed to growing tourism revenues and property values. The corollary issue is that local property owners or purchasers, even if not directly affected at their properties by the effects of sea level rise (SLR), will also experience the indirect effects of owning in communities with diminished budgetary resources to provide services. At the same time, a community may face higher costs for repair of infrastructure and beach clean-up of storm debris and restoration due to greater damage from storm events and more frequent flooding.

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Today, with declining stock of vacant coastal property and more restrictive development standards, most coastal communities face fewer planning decisions that would convert undeveloped land to new development. Rather, likely scenarios are redevelopment of previously built areas as part of economic revitalization efforts, or rebuilding after a disaster—most likely a hurricane. Property owners face a choice after storm damage: to rebuild a pre-storm structure or pursue other options. Coastal communities need to be prepared with flexible options and desirable alternatives for these landowners. By having the building blocks in place in advance, a property owner can weigh the outcomes and determine if building elsewhere may be in his or her best interest.

Communities with clear objectives to achieve coastal resiliency have tools at their disposal. Coastal resiliency aims to reduce the risk of loss of life and property, reduce the community costs of servicing coastal properties and infrastructure, and ensure the sustainability of coastal ecosystems that help to protect investment. Gradually reducing density along the coast while increasing density elsewhere provides one clear transition process for both the property owner and community.

ECONOMIC COSTS OF MITIGATION AND ADAPTATION

For the real estate industry, what are the relevant questions? Where is property most vulnerable/valuable? Which characteristics make this so? Where are the opportunities for the future? What are the costs and benefits of protecting existing property and critical infrastructure against SLR?

Literature Review

Researchers have attempted to quantify the costs of SLR in a variety of ways. In "Risk Increase to Infrastructure Due To Sea Level Rise,"[1] the authors set out to explore how the Metropolitan East Coast (MEC) region of New York, New Jersey and Connecticut would respond to a set of expected SLR scenarios. They looked at the costs and benefits brought on by SLR and the viability of potential adaptive strategies in the context of transportation and communication infrastructure such as bridges, roads, sewage, power, phone and other facilities. The study assessed storm surge risks while accounting for future SLR, finding that coastal flooding frequency will likely increase dramatically in the next century. Risk was defined as a regional sum of hazards (storm surge flood heights), assets (dollar values of transportation systems), and fragility (fractional loss of a facility given the hazard at the location).

Since construction in storm surge-exposed areas entails risk, an effort was made to estimate the economic impacts of SLR in the MEC. Loose estimates found potential losses as large as $250 billion, coming with the recommendation that the public and private sectors cooperate to assemble a thorough inventory of assets and risk for the region in the face of such high stakes. The study found that annualized costs of up to one billion dollars per year could be absorbed by the regional economy, but not without hardship to its residents. It was recommended that new developments avoid being implemented at low elevations through a new land use plan with tougher engineering codes and zoning enforcement.

Cooper, Beevers and Oppenheimer authored a relevant study [2] that examined the vulnerability of the New Jersey coast to SLR. Potential socioeconomic and natural resource effects, including coastal flooding, coastal beach erosion and saline intrusion also were considered. In addition to pinpointing the most vulnerable areas and calculating anticipated economic damages, the authors looked at the amount of damage that SLR could do to coastal wetlands. This damage consists of inundation of areas vital to supporting endangered plant species, and horseshoe crab and bird populations. A case study portion of the paper determined that immediate mitigation was needed at a site in Cape May Point, New Jersey. The case study concluded that although beach replenishment and rolling easements would likely be cost-effective in the near term, long-term strategies should focus on withdrawing development from the coast and moving inland over time.

A study conducted at the national level by Neumann, Yohe, Nicholls and Manion [3] adds additional insight to the issue of SLR. The authors of this study argued that the Mid-Atlantic, South-Atlantic and Gulf Coast states are among the areas in the U.S. most vulnerable to SLR because of their low elevations, high economic value and high storm frequency. Key geographical factors affecting vulnerability include slope and elevation, projected investment and population growth, and land management practices. The paper notes that because of expected population growth along coastal areas in the U.S., economic vulnerability is likely to intensify as property values and infrastructure investment increase.

The paper outlines three general policy options for responding to coastal threats: protection, accommodation and planned retreat. As the authors put it: "protection seeks to exclude the hazard; accommodation allows human activities and the hazard to coexist, while planned retreat removes human activity from the hazardous zone." Protection involves construction of structures such as dikes and sea walls, accommodation includes land use changes, and planned retreat might entail coastal development restrictions. The authors state in their conclusion that major coastal cities will need to improve their flood defenses and drainage systems to avoid significant losses.

A study by Bin[4] focused on the effects SLR likely would have on real estate in North Carolina. Using economic data and geospatial information, the study claims that North Carolina's rates of SLR are roughly double the global average. The study produced maps identifying the property that would be lost under different SLR scenarios with no adaptation; in addition, the study calculated the likely costs of lost property value associated with these scenarios. At the county level, the amount of property value at risk was estimated to be as high as 19 percent in some cases. The authors note that in addition to permanent flooding, temporary inundation caused by high tides and storms should also be taken into account when discussing coastal vulnerability. Last, the study addressed the value of North Carolina's wetlands and the environmental, recreational and aesthetic benefits they provide. Loss of these wetlands could have further effects on property values.

According to a 2012 article in *The New York Times,*[5] about 3.7 million people in the U.S. live in high-risk flood areas, with Florida being the most vulnerable state; however, no coastal area is entirely exempt from risk. One grassroots project, Climate Central, is publishing information online that allows the public to search community-level risk factors by typing in their ZIP code. As such information becomes well circulated among the population, the real estate industry likely will need to adjust to shifting perceptions and preferences regarding coastal property and the effects of SLR. Consensus suggests that land below the 3.3-foot line will be permanently inundated in the future, possibly as early as 2100. Fortifications can protect high-risk areas, but they come with their own costs, and destructive storm surges with increased frequency will be a problem before inundation occurs.

A University of Maryland Center for Integrative Environmental Research report by Ruth, Coelho, and Karetnikov [6] reviewed the economic literature on SLR and its effects in the U.S., organized by region. It is further broken down by economic sector, for which effects and costs are estimated. At its time of writing, the paper reported a SLR rate between 0.08 and 0.12 inches annually, with a total rise between one and three feet expected over the next century. The paper acknowledges that coastal effects will vary by region, but the densely populated Northeast and Mid-Atlantic regions will find their coastal infrastructures, including energy and transportation, to be particularly affected by sea level change. Replacing damaged infrastructure will not be the only necessary action that will affect land use and property; for instance, re-routing traffic and relocation of structures and amenities will have deep effects on the properties around these actions. These authors suggest, however, that the costliest policy option is delayed action or inaction. The study calls for a consistent adaptation system, but one that is customizable on ever finer geographical scales.

In sum, the literature review points to several main ideas concerning SLR that real estate professionals should consider while planning for the future. Real estate professionals must consider the specific risks faced in each region of interest as a very real source of potential cost that must be weighed. This, of course, includes coastal properties, and especially the most vulnerable ones such as areas in Florida and Louisiana. However, the *degree* of vulnerability is not the only variable to be considered. The *source* of risk must also be examined; for example, exposure to regional amenities may be more important than previously thought.

Study and Results

To address the questions at the outset of this article, a case study cost-benefit analysis conducted in Florida is considered. The Balmoral Group was retained by the Florida Department of Economic Opportunity to evaluate the feasibility of coastal resiliency strategies. In this case, adaptation, retreat and mitigation strategies were compared at the parcel level for two coastal counties with disparate demographics, topography and economies (see Figure 1). At the outset, the expectation was that specific strategies would prove to be cost effective, and should be incorporated into local planning documents, including the comprehensive plan and land development regulations, while other strategies would prove not to be and would no longer be considered, at least under current cost structures.

Figure 1. Coastal Resiliency Strategies Evaluated

Transfers of development rights
Purchase of development rights
Rolling easements
Conservation easements
Land use designation changes
Buy-outs
Armoring

Source: The Balmoral Group, "Community Resiliency Analysis for Martin and Okaloosa County, Florida," November 2011

COST BENEFIT ANALYSIS UNDER CURRENT CONDITIONS

The analysis began with a series of procedures designed to ensure transferability of this methodology to other coastal areas. For each county, the study examined all parcels in the Coastal High Hazard Area (CHHA).[7] Analysis was first completed at the parcel level on every single-family residential (SFR) parcel for each strategy, then completed for multi-family and commercial/industrial parcels. The parcel-level cost-benefit analysis estimated the measurable effects a policy change would have on all people (or communities) in each county over a 20-year period. The effects were monetized to quantify them in dollar terms. The dollar value of each effect was then discounted into current (net present value) dollars for comparison across policy alternatives.

Examination of the results found that benefit-cost ratios followed distinct spatial patterns, based on their proximity to specific amenities, such as beach recreation areas or conservation lands. For multi-family residential and commercial/industrial properties, cost and benefits were estimated by geographical area, based on the parcel's access to the amenities driving the benefit-cost ratio, which was categorized as high, average and low. The purpose of this approach was to isolate the effects of commercial property characteristics versus residential, in the same location. A list of costs and benefits associated with each strategy was generated, including:

1. Acquisition costs: to buy land, easements or development rights;
2. Construction costs: for armoring or demolition;
3. Administrative costs: to oversee programs such as transfers of development rights, conservation easements or land acquisition;
4. Avoided costs of municipal services: for properties that no longer need fire, water or sewer services;
5. Amenity values: values the public is willing to pay for open space, conservation land, recreational amenities or ecological protection;
6. Foregone revenues: such as future rents if a property is not rebuilt after a storm.

Figure 2 summarizes the specific cost-benefit measures applied to each strategy.

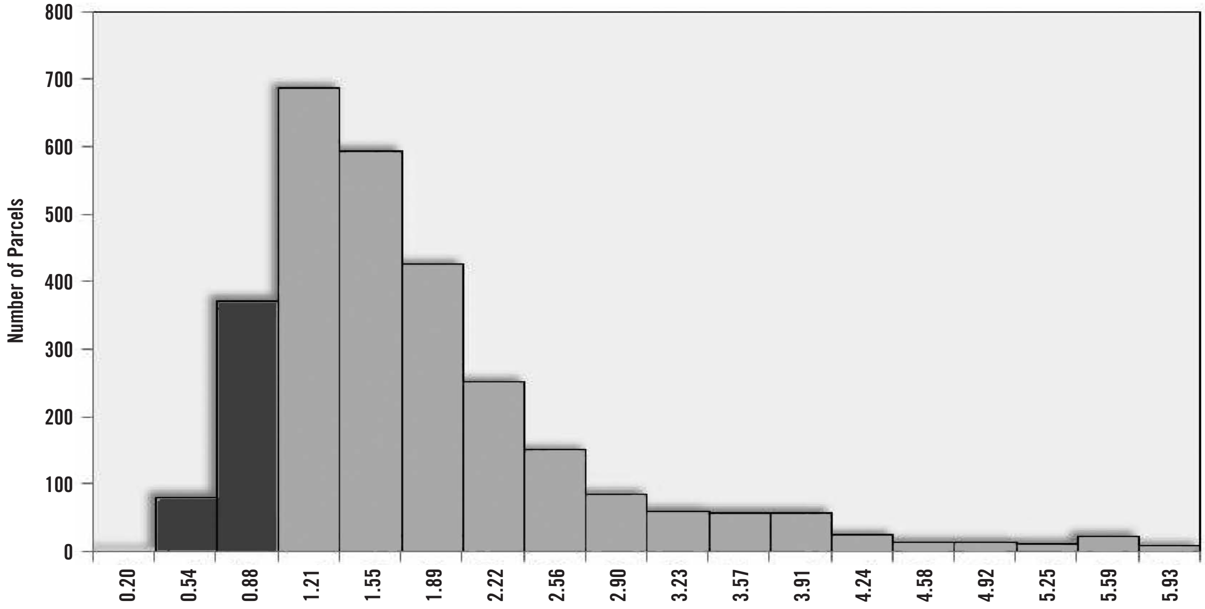
A strategy is considered viable if benefits exceed costs. Analysis was performed to identify which strategies were viable for each parcel in the CHHA. Cost-effectiveness

Figure 2. Application of Values to Coastal Resiliency Strategy

Measure	Transfers of development rights	Purchase of development rights	Rolling easements	Conservation easements	Land use designation changes	Buy-outs	Armoring
Construction Cost of Armoring			X		N/A		X
Acquisition Cost of Land or Easements		X	X	X	N/A	X	
Foregone Tax Revenue			X	X	N/A	X	
Administrative Costs	X						
Avoided Costs of Municipal Service	X	X	X		N/A	X	
Rental Income			X		N/A		X
Costs of Accelerated Development	X				N/A		
Exchange of Development Values	X				N/A		
Value of Conservation Land and Open Space	X	X	X	X	N/A	X	X
Wetland Values; Amenity Values or Migration	X	X	X	X	N/A	X	X
Beach – Ecological Value	X	X					X
Beach - Recreation Values	X	X	X	X	N/A	X	X

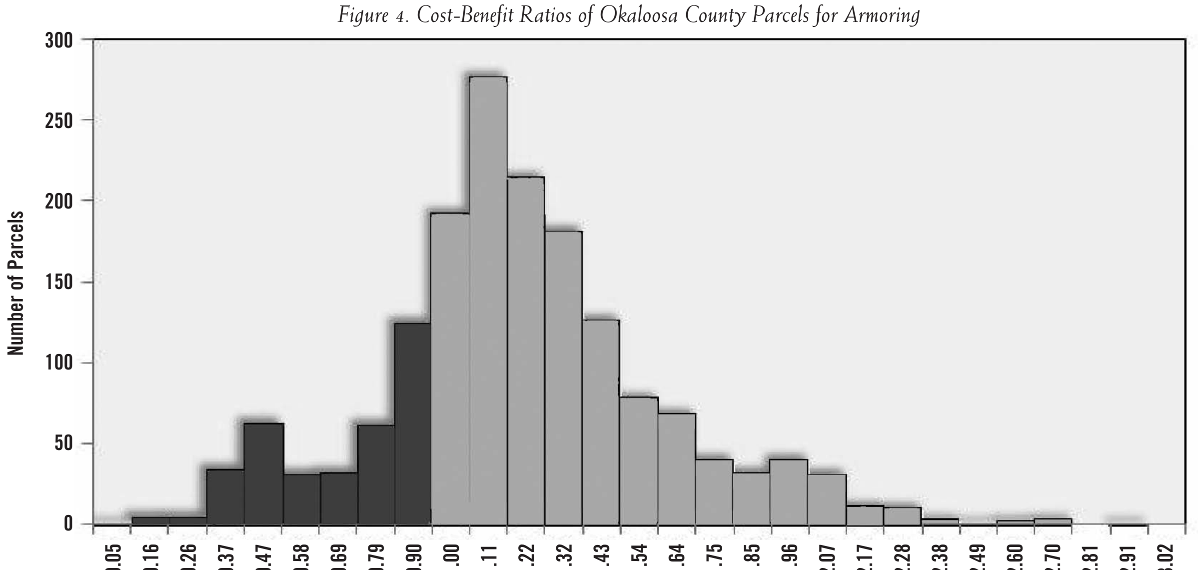
Source: The Balmoral Group, "Community Resiliency Analysis for Martin and Okaloosa County, Florida," November 2011

Figure 3. Cost-Benefit Ratios of Okaloosa County Parcels for TDRs



Source: The Balmoral Group, "Community Resiliency Analysis for Martin and Okaloosa County, Florida," November 2011

Figure 4. Cost-Benefit Ratios of Okaloosa County Parcels for Armoring



Source: The Balmoral Group, "Community Resiliency Analysis for Martin and Okaloosa County, Florida," November 2011

varied widely at the parcel level, and followed distinct spatial patterns. Properties closest to the most amenities have the most strategies that are feasible. Generally speaking, and possibly counterintuitively, properties with the highest property values have the fewest strategies that are cost effective. The reason is that the breakeven threshold is so high. For example, an oceanfront home faces different options for coastal resiliency than a parcel that is further from the direct energy of waves, and offers different ecological services, aesthetics and engineering challenges.

An example of the transfer of development rights (TDR) analysis for a specific parcel is provided in Figure 3. In this case, the parcel at hand is located near three important amenities: a public access point to the beach, a permanent conservation area and a sensitive wetland area. As a result, there are quantifiable benefits based on the parcel's proximity to the amenities and the public's willingness to pay for the amenities. The underlying premise of the TDR analysis is that the parcel would not be redeveloped after a storm, and instead redevelopment would occur inland at a higher density. Based on decision rules developed with state and county planners, the parcel is assumed to be eligible for a density ratio that is 2.5 times higher if redeveloped inland than the current density available to the existing site. This generates two costs and benefits: the avoided cost of no longer providing municipal services to the site, and the cost of making municipal services available earlier than might otherwise occur inland. Both are quantified based on the number of units at the existing site, using average costs of providing municipal services ($7,192 per unit in 2012 dollars), versus the cost of developing infrastructure to provide the same services at the new receiving area inland. The cost of providing the services inland is assumed to occur *earlier* but not *differently* than it would have in the absence of the TDR transaction; hence the monetized value of the difference in costs to the community is the cost to finance required improvements earlier than otherwise planned. Financing costs were estimated based on current market rates for municipal bonds applied to the $7,192 cost per dwelling unit for a 10-year time period.

Finally, value of the development right is calculated based on the differential between the existing parcel and the receiving area parcel. As an example, assume a coastal parcel within the CHHA consisting of two acres has current and actual density of four units/acre (average unit size of 2,000 square feet (sf)) with average and current sales indicating property values are approximately $220/sf. Faced with a decision of reconstruction after another major storm or other damage event, the landowner may opt to exercise TDRs to construct eight units on the existing parcel, or 20 units on a parcel within the receiving area further inland, where current sales indicate property values are approximately $80/sf. The value to the developer and community of the TDR is the differential value between the two developments, which can be estimated at ((20du/ac. X 2ac. X 2000sf x $80/sf) - (4du/ac. x 2 ac. x $220/sf x 2,000sf)), or (6,400,000 – 3,520,000), or $2.88 million. For the example parcel, this value calculated to about $500,000.

The ratio of benefits to costs gives a measure of the return on investment for a particular strategy; if the benefit-cost ratio is 2:1, the implication is that on average, for each dollar of cost, two dollars in benefits are returned. The examples in figures 3 and 4 show how benefit-cost ratios vary for two different strategies in the same county. The two strategies illustrated here, TDRs and armoring, are discussed in detail in the following section, but are used here to show how benefit-cost ratios vary across parcels and strategies.[8] TDRs have ratios greater than 1.0 (i.e., benefits exceed costs) for 2,490 residential parcels in the Okaloosa County CHHA, while for 456 residential parcels, the ratio is less than 1.0 (i.e., the costs exceed benefits). Across all Okaloosa CHHA parcels, the average ratio is 1.69: for every $100 in community costs, the community receives $169 in benefits. The ratio varies widely across parcels, ranging from a low of 0.24 to more than 5.0. Figure 3, where black columns indicate parcels that are not viable, and gray columns indicate the number of parcels with positive ratios. In contrast, Figure 4 shows that Okaloosa County has a relatively large number of parcels that are not viable candidates for armoring, with an average benefit-cost ratio of just 1.15, and a maximum ratio of less than 3.0.

Overall, the analysis found that multiple strategies were cost effective for the vast majority of single-family residential parcels. For example, out of 3,000 CHHA parcels in Okaloosa County, all but 38 had more than one cost-effective strategy. For multi-family, commercial and industrial land use types, spatial patterns generally mirrored SFR results. Some land use types showed greater variation in benefit-cost ratios than SFR parcels; others showed larger ratios. In general, land use type (SFR, commercial, etc.) is less important to the benefit-cost ratio than is the location of the parcel, and property value is less important than proximity to amenities.

The following sections identify key characteristics of each policy that drive the benefit-cost ratios, as well as specific characteristics that may make that policy an effective strategy.

Incentive-Based Approaches

In communities where property owners can change the development rights associated with their land readily without committing to achieving other community objectives, additional development rights will not have economic value, and cannot be used effectively as an incentive. Likewise, there will be little opportunity to create incentives if a community has already zoned properties to achieve high density in areas where there is no demand. Current practices toward granting development rights that are at odds with existing comprehensive plans or zoning require careful and realistic consideration. To achieve success with any incentive-based planning tool, development rights must be treated as having economic value.

Incentive-based approaches are cost effective for most property types and parcels. The average benefit-cost ratio for TDRs is 1.69 and 1.77 for Okaloosa and Martin Counties, respectively. While purchases of development rights (PDRs) have higher benefit-cost ratio averages of 3.61 and 3.21 for Okaloosa and Martin Counties, PDRs are beyond the reach of political will in most communities. Local ordinances that allow for flexibility in trading development rights between near-shore parcels and inland properties without restrictive criteria may have the greatest single impact in attaining coastal resiliency.

Transfers of Development Rights

Transfers of Development Rights may be used to promote coastal resiliency by providing landowners with alternatives to rebuilding in the CHHA after a storm. TDRs have failed to be used in most communities because of unfamiliarity with the process by developers, a failure by many local governments to "prime" the program with funds or development credits into the TDR bank and because of narrowly defined rules that have accompanied their introduction. TDRs are most likely to be effective if the landowner sees opportunity for flexibility in exercising his or her rights of property ownership. Research within Florida has found that many TDR transactions have occurred outside a formal program, as an ad hoc situation to achieve the objectives of both the landowner and local government.

Although TDRs typically have been envisioned as tools to control residential density on undeveloped land, land uses other than residential may be just as appropriate for TDR transactions. If the current land use on a beachfront piece of property is commercial, the community has just as much interest in transferring this land use landward as they do if the parcel is residential. Thus after a storm, the owner may rebuild on the property, transfer or sell the development rights so that an inland piece of property may be developed or redeveloped at a substantially higher density.

A useful example arose in Satellite Beach, Florida, when city officials negotiated with the owner of a destroyed oceanfront hotel. Rather than rebuild, the owner donated the parcel as public land and rebuilt at higher density inland. The oceanfront site has reverted to natural land, and the properties across the street will be the next oceanfront parcels as the natural site continues to erode. Thus, tax values will also migrate inland, as rebuilding events occur gradually over decades.

All parcels within the CHHA were considered potential TDR candidates. Generally speaking, the costs and benefits are driven by development values, administrative costs and nonmarket costs to the community of accelerated development in the receiving area for development.

Purchase of Development Rights

Development rights have value in communities that utilize development rights as having value. In theory, development rights can be bought and sold: a landowner who has accumulated development credits in excess of what he or she requires can sell the credits to another landowner or to the local government to be used elsewhere. A purchase of development rights by local government can be viewed as analogous to a corporation buying back its stock: if the county wishes to limit development, reducing the total quantity of development rights available increases the value of remaining development rights in circulation.

As with TDRs, all parcels within the CHHA were considered potential PDR candidates and the costs and benefits of PDRs are driven by development values, administrative costs, and nonmarket costs to the community of accelerated development in the receiving area for development.

Ownership-Based Approaches

Ownership-based approaches had the highest returns overall in both counties, but fewer applicable candidates. Benefit-cost ratios for conservation easements averaged more than 5.0 for both counties. Ratios for rolling easements averaged 2.47 and 1.49 for Okaloosa and Martin Counties respectively, and nearly every qualified parcel showed a ratio greater than 1.0. Ratios for land acquisition averaged less than 1.0, indicating that only a few parcels are good candidates for acquisition.

Conservation Easements

Conservation easements restrict the right to future development of defined parcels, or portions thereof, in exchange for cash or tax benefits. Conservation easements negotiated with the objective of coastal resiliency are likely to be motivated primarily by tax benefits to the seller, combined with a desire for the land to remain undeveloped.

All parcels within the CHHA with proximity to wetlands, conservation lands or the shoreline were considered potential conservation easement candidates. The fair cost of a conservation easement is the market value of the future net income lost because of restrictions on future development, and may include all or part of the reduced taxes (both income and property) for the seller; past transactions were used to estimate approximate costs. The benefits of conservation easements are estimated based on the value of ecosystem services that are generated by the specific easement.

Rolling Easements

Rolling easements exchange foregone future revenues from development or continued use for a current payment. A rolling easement can be applied to a property deed at the time of development (which would lower the property value) or it can be purchased in a fashion analogous to a conservation easement. In effect, a rolling easement allows a landowner a gentle transition to a future moment in time when rebuilding will no longer be an option; until that moment, the landowner may continue to rent, develop or otherwise use the property in permissible uses as if the easement had not been granted. However, the easement prevents the owner from taking steps to delay or prevent the encroachment of the coastline (and thereby protect the investment). A critically important component of a rolling easement is that it provides advance notice to property owners that their land must at some point revert to public or natural use. It is in this capacity that rolling easements can be used most beneficially with developed parcels. Of equal importance is the implied assertion that at some point, municipal infrastructure servicing the parcels will be part of the retreat strategy. If the parcel is allowed to revert to natural state after a third hurricane wipes it out, the accompanying assumption is that water, wastewater, electricity and other services would not be restored either.

All waterfront parcels within the CHHA below the elevation of the evacuation route were considered potential rolling easement candidates. Because of the slope of coastal lands in both counties, this criterion may be different in other states and regions across the county, but the concept is transferrable intact. The costs associated with a rolling easement scenario include monetary consideration given in exchange for the rolling easement payment, potential difficulty in establishing a value system, and likely (future) demolition costs of any structures on the property. For current conditions, the demolition cost would be zero, as rolling easements assume that only a future condition would create a need to exercise the easement option. Under future conditions, demolition costs are a factor.

Land Acquisition

Land has been acquired in both counties to achieve community objectives where repeated flooding events have occurred, or environmentally sensitive lands have been purchased to protect native habitats or provide access to the coast. Most local government land acquisition programs require taxpayer funding, and environmental stewardship programs often rely on a local millage dedicated to that purpose, while frequently flooded properties may be purchased by the city/county using federal grant money. In the former case, advisory panels may review potential parcels for purchase and prioritization based on established protocol and specific characteristics, within a predetermined budget amount. Land that is acquired also must be maintained in perpetuity, and is removed from the tax rolls permanently, so there are considerations beyond the immediate purchase transaction in an acquisition decision.

In the case of improving coastal resiliency, prioritization of acquisition efforts is likely to focus on parcels with repeated inundation or projected inundation at high frequency, in vulnerable evacuation zones, or subject to critical erosion events (and in many cases, these attributes overlap). Acquisition for coastal resiliency implies that the parcel is restored to its natural state. The costs include the actual purchase price, legal costs and loss of tax revenue to the county. There are additional costs if demolition or restoration is necessary or there are costs to provide public access (e.g., dune walkovers).

All waterfront parcels within the CHHA below the elevation of the evacuation route were considered potential acquisition candidates. The benefits may include avoided costs of damage repair, environmental or recreational benefits to the public depending on the site location, and avoided costs of continued municipal services. The acquiring body may rent the parcel for a few years to generate revenues sufficient to offset demolition costs.

Land Use Designation Changes

Land use designation changes include changes to the zoning of a parcel or to the future land use as designated in the county's comprehensive plan. All of the planning strategies discussed in this report incorporate some sort of land use assumption: that development rights associated with the existing land use can be sold or transferred to a different locale, or that a portion of the existing property rights can be sold or transferred under an easement. If used instead as a standalone strategy, land use designation changes that would improve coastal resiliency are likely to also diminish property rights. There are legal precedents defeating measures that diminish property rights without compensation (unless accepted by the owner, who may benefit from reduced property taxes).This constraint negated the need for analysis of land use designation changes as a separate resilience strategy. Accordingly, land use designation changes outside of those embedded as part of a larger strategy were not analyzed for full cost-benefit calculations.

Physical Protection

Physical protection (e.g., armoring, jetties and groins) generally may be a viable strategy for a similar number of parcels as for ownership-based approaches, but with lower average benefit-cost ratios of 1.15 and 1.77 for Okaloosa and Martin Counties respectively. Some negative effects of physical measures, such as increased erosion on adjacent properties, were not quantified in this analysis. For purposes of this analysis, shoreline armoring means engineered structures built along the water's edge intended to stop or slow erosion of the shoreline. Although armoring structures are mostly effective at meeting this objective, there are numerous negative consequences associated with their construction. Among these are accelerated erosion of adjacent properties, habitat displacement and limited beach access to the public. As a result, the use of coastal armoring is typically considered the last or most extreme option in addressing a coastal erosion problem.

A primary motivator for armoring is the assumption that without it a property may be uninhabitable within a short period of time. Costs and benefits of armoring are calculated using the topography of the parcel in question, all of which must border coastal waters to be considered. The value associated with extending the period of time that a property may be useful can be measured using rents; a benefit associated with the armoring is the market value of rents a beachfront parcel could generate if protected.

COST BENEFIT ANALYSIS UNDER FUTURE SCENARIOS

To evaluate the effects of SLR, the CHHA line was migrated inland one meter of elevation. In some areas this equates to a few feet inland, while in other areas this is a much greater distance, depending on local slope. The net present values of the costs and benefits generated by policy alternatives were recalculated based on the new shoreline, which reflected some degree of inundation.

When post-inundation benefit-cost calculations are compared to the estimates under current conditions, substantial changes to viable strategies can be identified. Important trends across policies included:

Post-inundation, the vast majority of parcels have fewer than two viable strategies. Under the current scenario, the opposite was true–more than 70 percent of parcels had two or more viable strategies. One reason for this is that many properties are lost to inundation, either because the parcel is inundated or access to it is blocked by inundation. If the center point of the parcel was below the inundation line, the parcel was considered inundated. The rationale is that if the inundation line covers the front (seaward) 20 meters of a parcel, but the structures are behind that, the additional costs of inundation may be a nuisance, but would not render the structure uninhabitable.

Another reason is that properties with proximity to more amenities under current CHHA lost a greater proportion of viable strategies under the future CHHA.

- A notable consequence is that properties with proximity to fewest amenities may have no cost-effective strategies as shorelines move inland.
- The change in viability for each strategy varied by county, and was directly linked to local topography.

Figure 5 shows the sharp increase in the number of parcels with no viable strategy. It also shows the large percent reduction in the number of parcels with four and five viable strategies.

Figures 6–9 show an aerial view of the changes described in Figure 5 for Martin and Okaloosa counties, respectively.

Transferability to Other Cities and Communities

Speaking in broad terms, most parcels have multiple planning strategies available to them currently.

1. Properties with proximity to beaches, open land, conservation areas and parks have greatest flexibility in current planning scenarios to pursue multiple avenues of coastal resiliency. Communities that encourage inward migration of development rights from these parcels, or easements along these parcels, are most likely to achieve coastal resiliency in a manner that is market-driven and cost effective for the property owner and larger community.
2. TDRs and PDRs are cost effective for most property

Figure 5. Frequency of Viable Strategies by Parcel

	Martin		Okaloosa	
Number of cost-effective strategies	Current CHHA - number of parcels	1 meter higher CHHA - number of parcels	Current CHHA - number of parcels	1 meter higher CHHA - number of parcels
0	14%	86%	3%	74%
1	8%	3%	9%	2%
2	29%	5%	27%	4%
3	34%	6%	41%	13%
4	14%	1%	18%	5%
5	0%	0%	1%	1%
	100%	100%	100%	100%

Source: The Balmoral Group, "Community Resiliency Analysis for Martin and Okaloosa County, Florida," November 2011

types and parcels, although PDRs are considered beyond the reach of political will in most communities. Local ordinances that allow for flexibility in trading development rights between near-shore parcels and inland properties without restrictive criteria may have the greatest single impact in attaining coastal resiliency.

3. Rolling and conservation easements have the highest returns overall in both counties, but have fewer candidates.
4. Land use type (SFR, commercial, etc.) is not as important to benefit-cost ratio as location of the parcel. Property value is not as important to benefit-cost ratio as proximity to amenities.

Collectively all of these strategies affect decisions about locating specific real estate activities. In addition, the real estate industry may begin to assess the population of investors, and users will become increasingly informed about flood and storm risks, and able to make more discriminating investments. The industry should plan for shifting tastes and preferences to change the location of ideal properties and to shift the value inland or to higher elevations. Paradoxically, however, despite the presence of projects such as Climate Central that will increasingly inform the public about the factors affecting climate change risk, there is also an overall dearth of information. The industry should keep a close watch on new publications in climate change research and data analysis to adapt as intelligently as possible. The real estate world also must accept that universal business practices cannot be extrapolated generally in the long term; geographical features and time frames must be carefully considered, and strategies must be as customized as possible to consider the unique market risks each community faces on the local level.

FINDINGS AND CONCLUSIONS

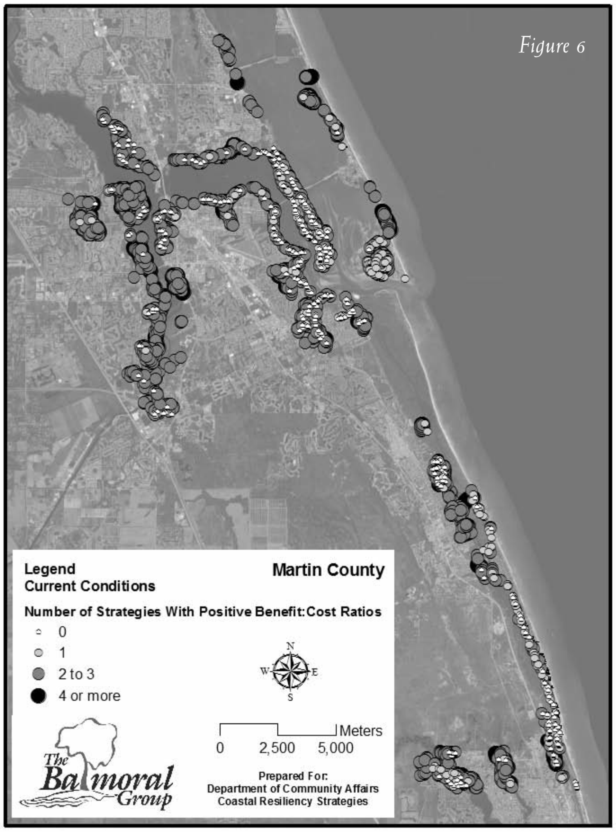
For the real estate professional, this analysis provides a framework for considering the questions posed at the outset. Where is property most vulnerable/valuable? Which characteristics make this so? Where are the opportunities for the future? And, what are the costs and benefits of protecting existing property and critical infrastructure against SLR? Do the risks associated with having no viable strategies in place warrant value premiums or costs?

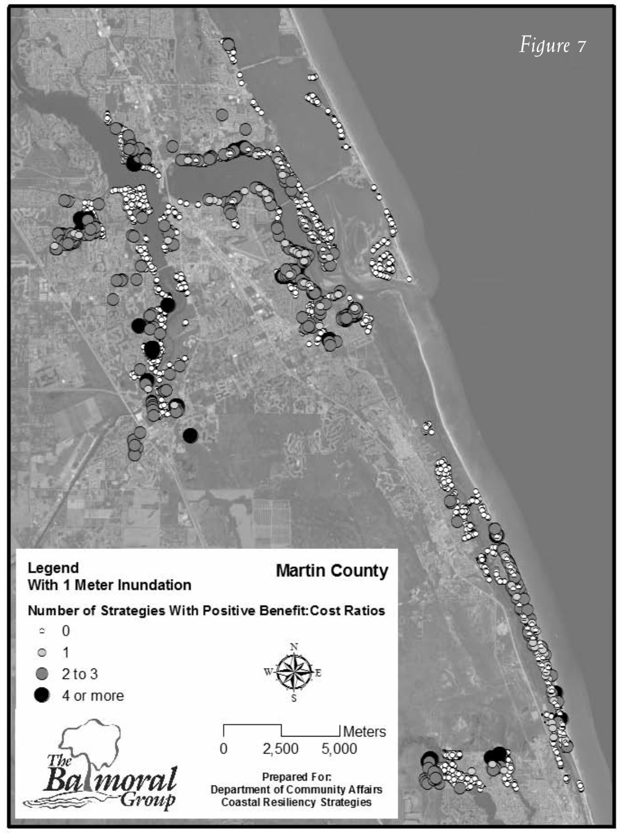
Considering each in turn, the analysis provided strong insights into where parcels were most vulnerable and most valuable. Parcels with close proximity to public amenities will have the most options in future; those without, the least. The public amenities referred to here are not restaurants and pubs, but beach access points and other natural resources that generate public willingness to pay.

The most expensive parcels under current conditions tend to have the fewest cost-effective options, simply because the breakeven point is higher for most calculations. This is a risk consideration that should be reflected in the course of due diligence analysis. The old saying about the cheapest house on the most expensive block may have a new twist: a moderately priced property (relatively speaking) with proximity to the most amenities may be the most desirable, in a SLR-impacted environment.

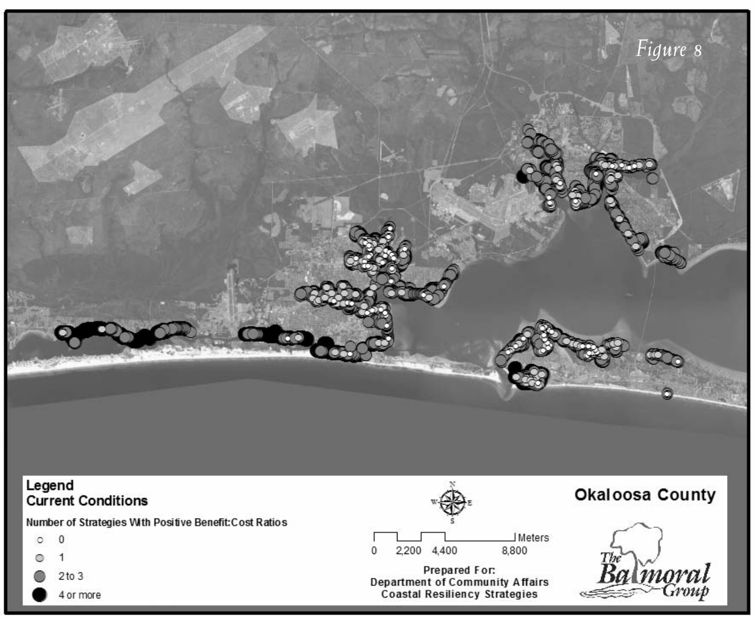
Opportunities for the future are presented by the need for coastal communities to migrate construction and

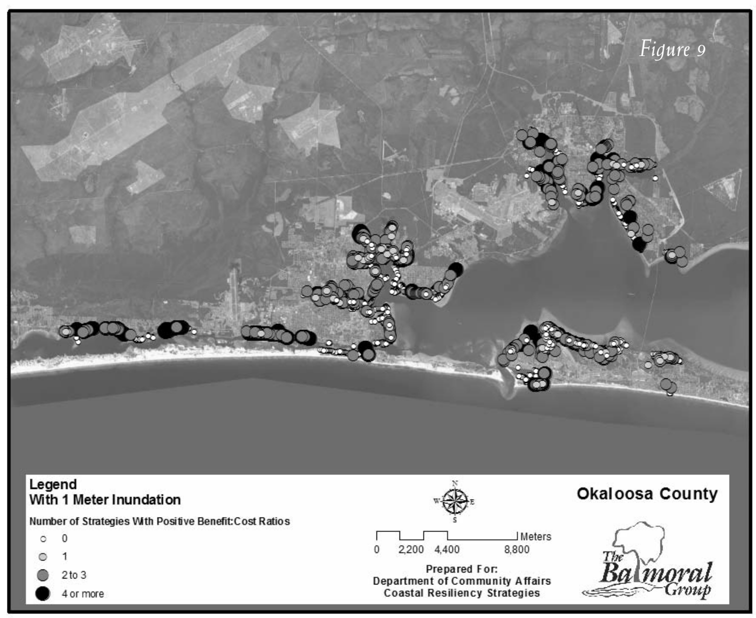
Martin County





Okaloosa County





redevelopment activities landward. Parcels slightly removed from the shoreline today may be the waterfront parcels of tomorrow, depending on local topography; an evolving situation that needs to be considered by the development community, investors and subsequent owners. Perhaps more important, parcels upland of critical coastal habitats will warrant more flexibility of development rights, and clever developers will seize the opportunity to be early adopters in this dynamic situation.

Finally, what are the costs and benefits of protecting property and critical infrastructure to mitigate losses due to SLR? At the outset of the analysis described herein, the expectation was that one or more strategies would be found to be cost effective and others not. On the contrary, the analysis found that no coastal resiliency strategy, or even a subset of strategies, is the single right answer for a community, so by extension, no single solution may work to achieve a specific investment objective. Instead, the characteristics of individual properties dictate the cost-effective strategies, and savvy property owners will begin to address this in their evaluation processes. What is clear is that more flexibility in local planning and development codes will be needed to achieve coastal resiliency. Communities that show leadership in establishing clear demarcation of areas where redevelopment or construction is undesirable, and provide flexible options for the market to respond accordingly, can be expected to reap the greatest long-term gains. Perhaps the lesson is that keen real estate professionals should be on the lookout for areas that show the political will to address SLR, and avoid areas that do not. ■

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8. A prototypical transfer of development rights (TDR) program allows landowners to transfer the right to develop from one parcel of land to a different parcel of land, and helps shift development from sensitive areas to designated growth areas with access to services. Shoreline armoring means engineered structures built along the water's edge intended to stop or slow erosion of the shoreline.

FEATURE

Downsizing and Workplace Trends in the Office Market

BY NORM G. MILLER, PH.D.

INTRODUCTION: DOWNSIZING SPACE PER WORKER IS A COST SAVINGS GOAL

A CORPORATE REAL ESTATE MANAGER TODAY MIGHT SAY THE space target for his/her firm is 150 square feet per worker or even much less. The Government Services Administration (GSA) seems to be aiming for much lower figures and even encouraging telecommuting.[1] Who is downsizing and how fast are they downsizing in the office market? Will less office space be needed? These questions are discussed below.

The typical firm in the United States occupies about half its capacity of space at any point in time, known as capacity utilization. If this figure could be improved, the thought is that occupants could save money. One way to increase the utilization rate is to embrace shared standardized space not dedicated by rank and not dedicated to specific employees, using shared digital cloud-style storage systems. However, low space targets per worker are only possible when the firm is able to match its leased space with a predictable number of employees spending a predictable amount of time in the office. Firms that are growing or shrinking or experiencing significant turnover struggle with matching fixed leased space with current needs. A second method to decrease space per worker is simply to allocate less space. We already witness much lower office space per person figures in Asia and the more expensive European markets, but one might argue that culture deters U.S. markets from squeezing workers together too closely. For example, based on the experience of the author, Americans speak louder on average than the French or the Chinese or Japanese, whether in the office or a restaurant, and this impedes the ability to pack workers too closely, as the noise level from side conversations can be a problem.

For forecasting future office demand, the estimate of office-using employment is no more or less critical an assumption than the space required per worker, and at the same time, the disparity of assumptions on space per worker that we observe in the market is baffling. More

About the Author

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refined office demand models will use space per worker by industry sector, with a forecast of the growth by each sector for each geographic market. Often the space planning decisions boil down to a reasonable guess on the space requirement per worker and how important it is for everyone to have space.[2] One minor but significant reason discrepancies occur in the amount of space assumed to be required per person is the differing terminology generated and used in the worlds of space managers and asset managers. However, this explains only approximately 16 percent of the difference. International Facility Managers Association focuses on useable space while NAIOP[3] and the commercial real estate industry generally focus on rentable building area (RBA). RBA averages 16 percent more than useable space.

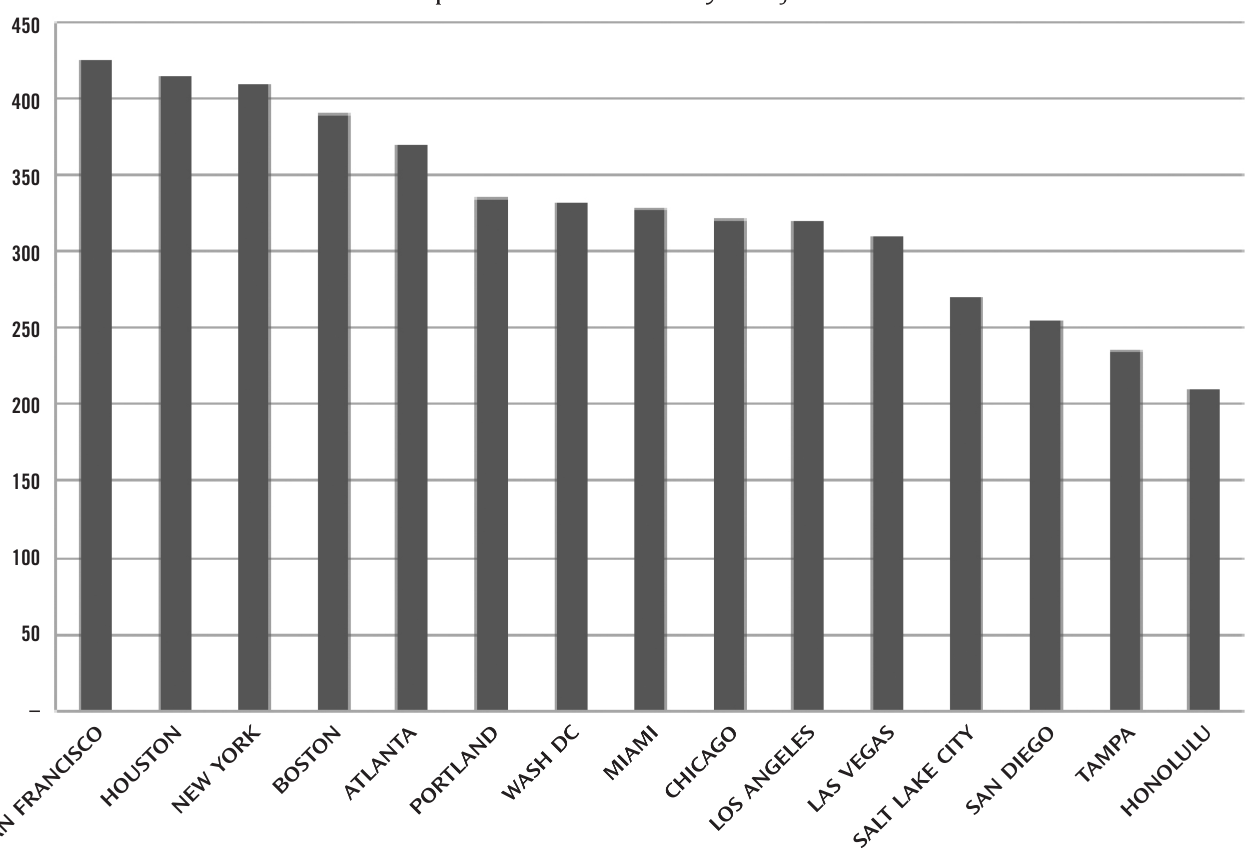
SPACE PER WORKER TRENDS

Looking only at the square footage per worker on *new* leases in the U.S. market, where the tenant moved in within the last 90 days, a downward trend can be observed. In September 2013 the most recent office leases averaged only 180 square feet per person while the same calculation for all leases is in excess of 300 square feet per person.[4] One would expect that space per worker would be less in the most expensive cities, but in the U.S. this is not the case. New York City, San Francisco and Boston use more space per worker while Columbus, Ohio and Tampa, Florida use less. Analysts at Property Portfolio Research have suggested this is because of the high-end wages paid to professionals in the first three above-mentioned markets. Back office workers are placed in less expensive locations. Perhaps this is true, but we do not see an inverse correlation of space per worker and rental rates. Another possible reason is simply data misclassification. In the CoStar database, a building that is primarily used for office is classified as 100 percent office, even though some space on the lowest and highest floors may be used as retail space or for restaurants. This is especially true in dense cities like New York, and thus the data may make the larger, expensive cities appear to have more space per person than they actually do.

Figure 1 shows the office space per worker for selected cities:

Figure 1

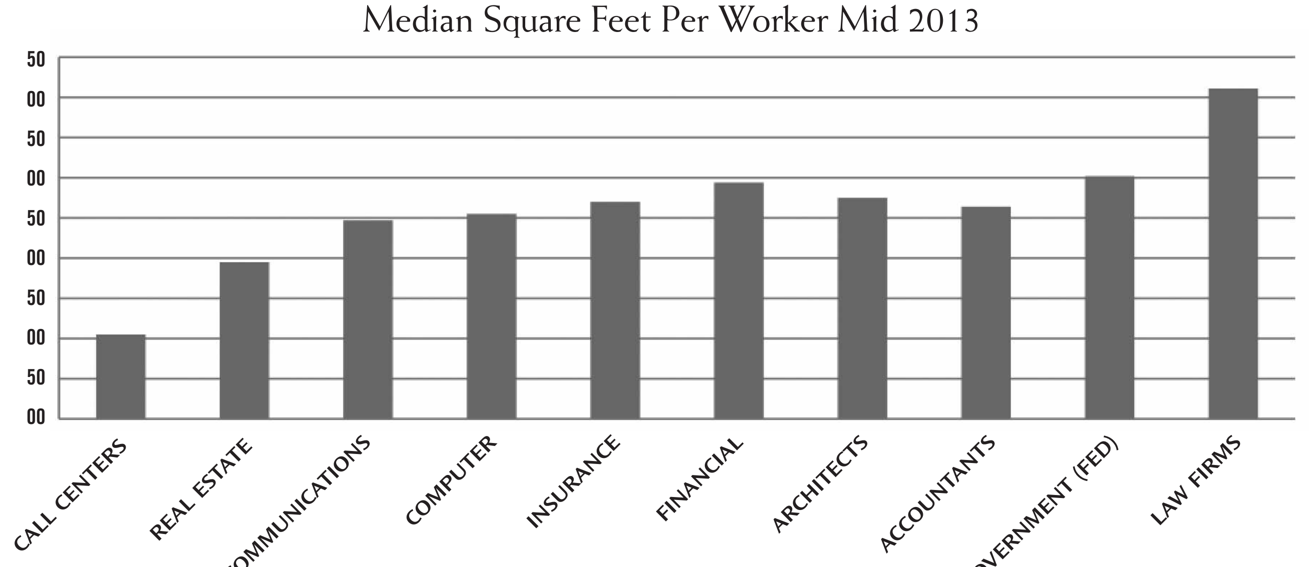
U.S. Office Space Per Worker by Major Market in 2013



Source: CoStar Data 2013

Huge differences in space per worker by industry should not be surprising. Figure 2 shows the typical spread among industry sectors. Not shown is the fact that leased space has been shrinking. Average footprints have shrunk by 24 percent from 2003 to 2013. The federal government figures are likely to shrink the most over the next several years because of Congressional mandates to the GSA to reduce occupancy costs and shrink overhead. This mandate already is starting to affect the Washington D.C. market.

Figure 2: Office Space Per Worker by Industry



Source: CoStar Data 2013

WHO IS DOWNSIZING?

In a 2011 survey by the author using help from CoreNet Global and CBRE Group, resulting in a sample of 78 CoreNet members and 212 CBRE tenants, it was clear that the group of CoreNet members was much larger by employee count, often using more than 50,000 square feet, while the group of CBRE tenants was much smaller, averaging less than 10,000 square feet. The contrast in their answers was clear. The larger groups of tenants were trying to increase utilization rates and lower space footprints, while most of the smaller groups of tenants were just focused on staying in business or growing. Office space downsizing was typically not in the plans, even though the techniques to lower space per worker are easy to implement at any size. What is not easy to do is to change the culture or to take away space from existing workers without some compensating benefits. Firms that did downsize through space-sharing typically added more amenities and collaborative space. They also were more open to third-place working and telecommuting, and often provided home equipment and even some financial support for home overhead. Third-place working is defined as neither working at home nor the normal office. It could be at a Starbucks or a library or an airport or plane, for that matter. Among the more extreme examples of third-place working and increasing workplace utilization rates, defined as the percentage of a normal work day each workstation is occupied, were Procter and Gamble (P&G), Accenture and now the federal government via the GSA. Both P&G and Accenture have moved to shared standardized space models and have achieved space utilization rates greater than 85 percent compared to approximately 50 percent for most businesses. A key factor in this move to non-dedicated space is use of the cloud for data storage, making files available from anywhere. When standard space is not available, some firms use conference rooms or temporary space providers such as LiquidSpace, HQ, Regus or others that provide monthly rentals of fully furnished spaces. The costs for a typical instant workstation may run from $800 to $900 per month for 120 square feet, plus access to conference space and common areas, converting to approximately double the rate for long-term leased traditional space in bulk. The firms that are downsizing also are frequently encouraging working part- or full-time from home offices. In order to accomplish this downsizing, firms must typically be good at productivity-based management, something that is not characteristic of many traditional firms. Even Yahoo's CEO Marissa Mayer has not been able to effectively manage workers from home.[5] Many home-based workers also suggest they are treated like second class citizens, so it is clear there is a learning curve for many firms, but flexible work schedules, third work places and some increases in telecommuting workers seem inevitable. Still, such trends are being embraced by the largest firms.

A more extreme form of downsizing is allowing telecommuting from home or working in third places. In a recent working paper by Kate Lister and Tom Harnish entitled "Federal Telework – Return on Taxpayer Investment" [6] the authors point out the following direct savings associated with encouraging productivity-based management and allowing workers to work from home:

- less rent and occupancy costs for the firm, with a smaller total footprint per office;
- greater worker productivity as a result of less time spent commuting, more sleep and less stress;
- absenteeism savings, for example, when a child is sick, and better employee health;
- less turnover as a result of home-based responsibilities that compete with work, for example, looking after an elderly parent;
- less need to subsidize transit and parking costs;
- more continuity of operations during disasters or power outages.

In addition to the direct savings calculated of at least $9,671 per person per year, there were many indirect societal benefits such as less carbon gas output and better air quality, and fewer insurance claims for injuries or accidents in transit.

But there are many factors making it difficult to downsize, aside from culture and general resistance. In a forthcoming paper in the *Journal of Corporate Real Estate*, this author simulates many factors that make it difficult to hit space planning goals. In particular, the following factors are considered:

- firms do not always grow, and most start-ups go out of business within five years;
- the higher the turnover rate of workers within the firm, the harder it is to maintain a good match between leased space and space needs;
- the longer it takes to fill positions, the more excess space per worker.
- the greater the number of layers of management, each with its own type of space, the greater the space friction in that workers from one level do not move into empty spaces of workers of a different level;
- the longer the lease term, the harder it is to hit an optimal level of space per worker.

Survey data from CoreNet Global members and CBRE tenants, discussed below, was used to input reasonable assumptions. The results showed that most firms would over-shoot their space goals by 20–33 percent, so that a firm with a goal of 150 square feet may end up at 200 square feet over the term of a lease. Another factor brought out by the surveys was the difficulty of using second generation space as efficiently as first generation space, but the lower costs associated with such space more than compensated for the force fitting of a firm assuming the space of a vacated firm.

What was most counterintuitive was the empirical result that most firms have less space per worker at the start of a lease compared to at the end of a lease. One might have expected the opposite for firms that expect to grow. The reality is that firms that grow are able to negotiate new leases as necessary and that firms that do not grow are stuck with more space than they may need. When the statistics are brought to bear on how few firms actually survive long term intact, whether by merger or simply not surviving, it starts to make sense that many firms are stuck with more space than they need and that the growing firms have much more negotiating leverage than struggling firms. The typical firm today is small relative to the CoreNet Global types, and is struggling to grow or maintain business. These firms account for the significant excess space the author's group observes per worker, especially in the aftermath of a recession.

WORKPLACE STRATEGIES AIMED AT GREATER PRODUCTIVITY AND GREEN BUILDINGS

During the past several years, the University of San Diego and CBRE have conducted a series of surveys asking tenants what they really want most in terms of space attributes. Aside from locational access and parking, the top five answers are nearly always the same. They are:

- good natural light—something that happens to be required by Leadership in Energy and Environmental Design (LEED) anyway and so the author's group observes a strong correlation among LEED buildings and buildings with a high percentage of workers having access to natural light. Open-air designs with large amounts of glass are easier to build today with better heat reflective insulating glass;

- good temperature controls. The more people can control temperatures the better. Air flows and fans are very helpful;
- good air quality. The author's group sees this demand often, and yet less than five percent of all the private buildings monitor and audit air quality on an annual basis, according to Healthy Buildings;[7]
- reasonable noise levels. Some ambient white noise creates a buzz which makes people feel part of a team, but too much noise or the lack of escape pods makes it unpleasant;
- collaborative spaces for meeting and amenities, such as a kitchen. Often the carrot to get people to go to non-dedicated space is more collaborative space, more recreational space and more amenities. Those familiar with the writers on workplace innovation realize the importance of collaborative work environments. Those who worked with Steve Jobs, founder of Apple, have spoken about his insistence on creating an environment of chance encounters and uninhibited private exchanges, which is why he wanted people to primarily work in person.[8] When Pixar set up their new offices, they made sure to provide ample natural light and collaborative space.[9] Other features typical of similar firms focused on collaboration include open floor designs that let people see others working—to provide a sense of excitement and a team concept, flexible space available for any kind of use, and recreation space where employees could have fun together.

What every firm is seeking is greater productivity. More productive space commands higher rents and it is no surprise that the research on green buildings, such as those achieving LEED Silver or Gold, reveal higher rents compared to the non-green peer properties. It may be a result of saving on utilities but it is more likely that these buildings are simply more productive with great natural light.

IMPLICATIONS

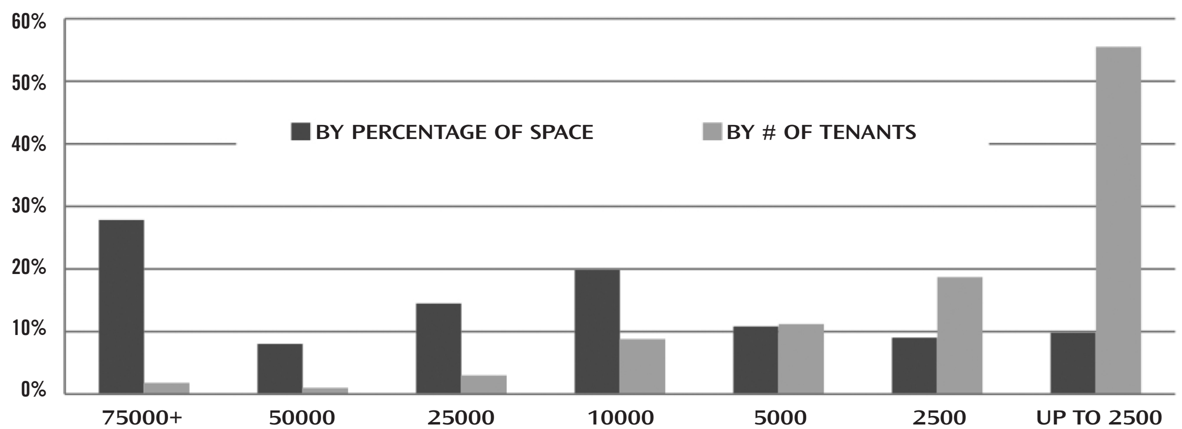
If every tenant moved from 50 to 90 percent office utilization rates, and tolerated working in third places, total office space required would dramatically decline; however, the type of space required would often need significant retrofit. Another reality is that the excess office space is not, and will never be, in the right places. There are struggling markets with significant excess space, and in such markets downsizing will only exacerbate the problem. Since it is impossible to take excess space from a declining metro Detroit and move it to a growing city, markets with economic growth will still need to build and retrofit new space.

Based on input from CoreNet Global members and CBRE tenants, the larger groups of tenants are working harder to use space more efficiently, especially those with footprints over 75,000 square feet. This group tends to encourage digital storage on centralized cloud-based servers and use non-dedicated standardized space for all but the most senior of managers, and represents only 1.8 percent of all tenants in the U.S. by count, and 27.9 percent of all office space. Those using more than 50,000 square feet represent 36 percent of the total office stock. Figure 3 shows the proportion of space occupied by tenant size and by tenant count. What we see is that more than half of the tenants by count are less than 2,500 square feet in terms of the occupied footprint. But these smaller tenants only occupy 10 percent of the total market by square feet. On the other extreme, the largest groups of tenants are small by count as a percentage of the whole but occupy a significant portion of the total market. If we speculate that those firms using 50,000 square feet or more all decided to use some of the space-sharing strategies described above, and reduce their primary leased office footprint by 50 percent, moving from 250 to 125 square feet, this would be the equivalent of 540 million square feet out of some 12 billion office square feet as of 2009.[10] Historically this is equivalent to 3.6 years of average U.S. deliveries of net new space to the market, which has averaged close to 150 million square feet per year since 1983. At the same time, it is well known that little space has been added from 2009–2012, and the office stock has actually shrunk because of increasing obsolescence. Absorption has been positive for the two years prior to the end of 2013.[11]

Decreases in total office consumption based mostly on higher utilization rates take time, and it is likely that these moves toward more efficient use of space will require many years of transition. At the same time that some downsizing is occurring, we are witnessing a new kind of space being required, one that lets in more natural light with better natural ventilation, with better temperature control, and provides for more collaborative and more productive workspace.[12] With this perspective in mind, much of the existing office space is obsolete and requires retrofitting. As such, there will be substantial opportunity for both redevelopment of old space and new development of better space in the growing markets.

Figure 3

Percent of Space Occupied and Percent of Tenants by Size Category



Source: CoStar Data 2012

CONCLUSIONS

The largest firms have embarked on a path toward more efficient use of space seeking much higher utilization rates. This is possible with extensive use of cloud-based storage of files, standardized non-dedicated space, and a policy that allows great flexibility in terms of where employees work. Slightly more than a third of the market is represented by larger firms, and many of these seem to be attempting to downsize footprints over the next several years. Others will follow over time. Still the culture of private space seems to remain entrenched in many sectors of the U.S.—most law firms for example—and the transition to smaller footprints may not occur at speeds greater than the normal net increases in office demand. Still some portfolios heavy with large private sector tenants and federal government tenants may be caught off guard by the significant downsizing plans of their occupants.

The need for collaboration and innovation works against the trend of working at home or even in private offices.[13] Some firms have also added significant play space or free food in attempts to keep workers happy and retain talent.[14] Overall, it's reasonable to expect the spread from lows to highs of square feet per worker figures to widen over the next several years, as some firms reduce footprints significantly while most others maintain current practices with private dedicated space.

Few firms will ever be able to hit their target allocations of space per worker.[15] The reasons are quite straightforward. Firms must anticipate growth and turnover, time to fill positions, and the types of spaces that are required. Temporary office space, using conference rooms, or letting employees work at home may alleviate some pressure when a firm reaches capacity, but temp space alternatives are fairly expensive compared with long-term leased space.

Firms retaining a multi-level hierarchy of management, with private dedicated office space configuration as a signal of rank, will find it harder to use space efficiently, just as second-generation tenants do not fit as efficiently into any given space as first-generation tenants.

Other trends that might help explain the seeming excess of space compared to space planning targets include the trend toward multi-office branches and the existence of global firms that require occasional office space for visiting colleagues and clients. Many a senior manager retains an empty office in one city while using a visiting office space in another city.

Based on reduced space usage, the demise of the office market has certainly been exaggerated, and a continuation of space demand in excess of the targets espoused by a few large public corporations and space planners is more likely to be seen. Moving forward, the expectation is that some firms will achieve square footage per worker of less than 100 square feet, but given the cultural impediments and the challenges of predicting growth rates, figures averaging 150–180 square feet per worker phasing slowly towards even lower figures at the end of the decade are more likely to be seen. This is a significant reduction in space per worker, but it parallels a need to retrofit much of the existing space to provide more collaborative team space and healthier, more productive environments. Ultimately, landlords are not selling space but rather productivity. More productive environments with better natural light, temperature and air controls, cleaner air and controllable noise are more productive and will command rental premiums. ■

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ENDNOTES

1. The Government Services Administration has plans to reduce its workspace to 82 square feet per worker at its own headquarters. Source: Colliers, March 28, 2012.

2. Some firms will allow employees to work at home or alternative workplaces when they run up to 100 percent utilization. Others will rent temporary space for overflow demand.

3. NAIOP, the Commercial Real Estate Development Association, originally stood for National Association for Industrial and Office Parks. In 2009 NAIOP dropped the words behind its acronym, which no longer reflected its current membership composition.

4. Source: CoStar data in September 2013.

5. *http://www.businessweek.com/articles/2013-02-28/the-excessive-uproar-over-marissa-mayers-telecommuting-ban*.

6. Kate Lister is with Global Workplace Analytics and Tom Harnish is with Telework Research Network.

7. See *http://healthybuildings.com/*.

8. For example, Greg Brandeau, formerly of Pixar and The Walt Disney Studios, worked with Steve Jobs and discussed these points on September 6, 2012, at the Global Forum on the Culture of Innovation by the Aspen Institute and the Urban Land Institute in San Diego.

9. For examples of similar workplaces around the world see *http://www.hongkiat.com/blog/creative-modern-office-designs/*.

10. Using CoStar estimates on the size of the market based on "Slicing, Dicing, and Scoping the Size of the US Commercial Real Estate Market," by A. Florance, N. Miller, J. Spivey and R. Peng, *Journal of Real Estate Portfolio Management*, Vol. 16, No. 2, 2010.

11. Source: CoStar reports.

12. Listed above in RESOURCES, see the work of Miller and Pogue (2009) or Miller, Pogue, Tu and Saville (2010). To achieve LEED certification, as developed by the U.S. Green Building Council, requires that 75 percent of the occupants have access to natural light. See *www.usgbc.org*. LEED certified office space now accounts for about 15 percent of the space of all U.S. office space.

13. Indeed Marissa Mayer of Yahoo announced in early March of 2013 that working at home would no longer be allowed at Yahoo. Best Buy followed suit soon thereafter.

14. For example, IDEO, Microsoft, Google, Facebook and Pixar all provide significant recreation facilities within their main offices. See *http://www.hongkiat.com/blog/creative-modern-office-designs/* or *http://www.fastcodesign.com/1664735/what-schools-can-learn-from-google-ideo-and-pixar*.

15. "At the end of the day you never have the right amount of real estate," James Watson, CEO of CT Realty Investors, Sept. 13, 2012.

FEATURE

Considerations for Selection of a Real Estate Expert

BY NICK NICHOLAS, CRE, CCIM, MAI

INTRODUCTION

LEGAL CASES INVOLVING REAL ESTATE DISPUTES CAN, AND often do, turn on a real estate expert's opinion—making the expert's role particularly important in the context of such litigation. While the underlying facts of a case are generally immutable, effective selection of an appropriate real estate expert is a controllable aspect of a case that can provide significant advantage to the retaining party. This article reviews the basic role of a real estate expert and explores the primary considerations in the expert selection process.

THE ROLE OF AN EXPERT

Qualified experts usually can review a case, along with the respective fact summary, and clearly identify and understand the issues of all involved parties. The expert's interpretation of, and opinion on, the matter may align with the argument on one side of the dispute. If this alignment is not the position of the prospective retaining counsel, then the expert will (or should) likely decline the assignment. If the expert's opinion is aligned with the position of the prospective retaining party, he/she will be prepared to convincingly present and defend an interpretation (consistent with that of the retaining party) of the relevant facts of the case. Further, an expert may be able to suggest additional considerations to strengthen the retaining party's case and to recognize weaknesses in the opposition's position—in the proper manner; this is done not as an advocate for the retaining party but rather as an extension of the expert's legitimate professional opinion. If the expert's opinion is a "fit" for the prospective client, the expert may be able to assist the retaining attorney with asking the correct questions of the opposing expert in deposition, and requesting the correct documents in discovery.

WHAT MAKES SOMEONE AN 'EXPERT'?

The law requires individuals to meet fairly strict criteria before judges will qualify them as experts and allow them to testify before a jury. In the 1993 decision *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), the U.S. Supreme Court established a formula to determine whether expert testimony regarding "scientific, technical or other specialized knowledge" would help a jury. Under a Daubert analysis, which is used in all federal courts and a majority of state courts, the general rule is that an expert's opinions must be both reliable and relevant to an issue in dispute.

The following are specific criteria one must meet to qualify as an expert:

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- the witness is qualified to offer an opinion by "knowledge, skill, experience, training or education;"
- the opinion will help the jury understand the evidence;
- the opinion is based on sufficient facts;
- the opinion is the product of reliable principles and methods;
- the witness reliably applies the principles and methods to the facts of the case.

While the letter of these criteria holds at both the federal and state court levels, the application of the standards sometimes varies; however, these differences are beyond the scope of this discussion.

CONSULTANTS VERSUS EXPERTS

Distinguishing between consulting experts and testifying experts is important. A good consultant, retained early in a case, can help determine whether a testifying expert is necessary, and may even eliminate the need for one. An expert's greatest value may be in helping evaluate whether litigation in a potential lawsuit is feasible; what the chances are for success; and what the costs of prosecution or defense might be. A good consultant can help in preparing a complaint for, or spot defense to, a lawsuit.

An expert may be retained as a consultant and later converted to a testifying expert, or one expert may be hired to serve as a consultant and a second hired to testify—separating the responsibilities so that the consulting expert's work is not subject to discovery.

CHARACTERISTICS OF AN EXPERT

What a Retaining Attorney Wants

A prospective retaining attorney wants an expert who will help win his/her case. A perfect expert from the attorney's perspective is one who listens to the case summary and wholeheartedly endorses the client's position, while pointing out multiple flaws or weaknesses in the opposing position that the attorney had not considered. Occasionally this happens, but most of the time it does not. Retaining counsel expects the expert to be available when needed and to keep time and delivery commitments, sometimes even if the schedule or those commitments become unreasonable. Counsel also generally expects professionalism and strict confidentiality.

Qualifications

While it may not always be possible for an expert to meet perfectly all the desired qualities below, it is important that an expert possess most of these attributes:

Testifying experts must be qualified to testify about the subject matter at issue. Has the expert regularly performed the task at issue or have extensive personal knowledge of the practice? When it comes to impressing a jury or countering opposing counsel, reading about an issue is no substitute for knowledge obtained in the trenches.

Experts should form their own opinions. The expert should understand the opposing party's position and thoughtfully explain why it is incorrect. An expert who is too agreeable with potential retaining counsel's position may become too agreeable with an opponent who provides additional information. Retaining counsel is better off with an expert who will reach a conclusion thoughtfully and then hold to that conclusion under pressure.

When possible, retaining attorneys should select experts who previously have been successful in expert work and who is enthusiastic about doing it again. Serving as an expert can be a difficult and rigorous job—many people are not well-suited to doing what is required.

Experts should have premier credentials in the particular field. Credentials and experience are extremely important. The expert a retaining attorney selects should be successful in witness work, have impeccable credentials and have experience with similar cases. A lack of credentials or experience can be easily questioned in front of the jury. Further, true credentials and experience should be differentiated from numerous, nearly meaningless, credentials that require little more than an application fee and a basic test that most people can pass.

Has the expert been published on the subject? Published experts can explain to the jury that their opinions have withstood industry scrutiny, which helps show the authority to offer opinions in the case. Under a Daubert analysis, a judge is supposed to give preference to peer-reviewed publications.

Does the expert give presentations or teach on the subject? Experts must be both knowledgeable and persuasive—two skills that do not necessarily overlap. Both skills, however, are essential to effective expert testimony. Presentations or teaching shows that an expert can handle the advocacy part of the role. An expert with strong presentation skills will be better able to stay on message during a deposition. At trial, an expert is ideally a teaching witness through whom the lawyer can explain to a jury such concepts as liability, causation and damages.

It is productive to think beyond "expert" to salesperson, teacher and communicator. The expert's function as teacher to the attorney and jurors is a critical one. The more persuasive an expert, the better.

In a way, an expert witness is like the anchor person on a television news program. Some networks emphasize polished delivery. Others rely on seasoned reporters, valuing their command of the facts over their appearance. Ideally, the anchor person is a combination of both types, and so is the expert.

Qualifying an Expert's Interpersonal and Communication Abilities

In addition to an expert's qualifications and experience, a successful expert also needs to present well and communicate effectively to the jury. There are several ways someone can show that they satisfy these criteria, and these are the attributes that retaining counsel will (or should) look for when deciding whether someone would make a good expert in a case—aside from the expert's experience and qualifications:

Looks the part: An expert should appear professional and credible and have jury appeal. As wonderful as an expert may sound on the telephone or via email, there is no substitute for in-person presence and interaction. Certainly, experts can be encouraged to dress differently or change hairstyles, but it is much easier for the retaining counsel if it is not necessary to spend time on these matters. Experts are increasingly expected by jurors to look, walk, talk and behave like the polished actor portrayals on such popular television shows as "Law & Order" and "CSI." Few experts can pull off such poise, posture and presence under any circumstance, much less under the intense crossfire of an opponent's examination.

Is juror-sympathetic: The expert's work environment often is not conducive to effective oral presentation. Most experts primarily work with highly educated and motivated peers and students who have the basic vocabulary and education necessary to be conversant in a specialized field of study. These people are nothing like the jury. Accustomed to television sound bites, jurors expect to hear succinct descriptions not only from actors portraying experts on television, but from real experts on the stand. Experts who cannot convey their expertise in anything other than jargon-filled, convoluted sentences will not sway jurors. Unfortunately, experts' written reports do not necessarily reflect their speaking styles. Retaining attorneys will want to select witnesses who can explain their craft to the people who will serve as jurors and, before retaining, might test an expert's ability to provide short answers that are directly on point.

Has good eye contact: Experts who cannot engage good eye contact with a potential retaining attorney when speaking are not likely to engage good eye contact with jurors. Eye contact is critical to jurors' accepting the sincerity and believability of a witness.

Appears credible and objective. Being an expert involves a special kind of advocacy. Rather than promoting the client's position (that's the attorney's job), experts are supposed to advocate the opinions they have reached in the case. At a deposition, this means experts must be able to state their relevant credentials and identify the factual basis for their opinions, then defend those opinions under cross-examination.

Testifying to Value

If experts will be testifying to value, their experience, specialized knowledge and credentials will almost assuredly be scrutinized. This scrutiny is often legislatively imposed, in which case real estate agents (brokers and salespersons) may need to comply with certain criteria when rendering an opinion of value—to avoid being misleading. Compliance with these criteria may include inserting jurisdiction-specific language (the language below is required in Texas), which may look something like the following paragraph, into broker opinions of value or broker pricing opinions:

THIS IS A BROKER PRICED OPINION OR COMPARATIVE MARKET ANALYSIS AND SHOULD NOT BE CONSIDERED AN APPRAISAL. IN MAKING ANY DECISION THAT RELIES UPON MY WORK, YOU SHOULD KNOW THAT I HAVE NOT FOLLOWED THE GUIDELINES FOR DEVELOPMENT OF AN APPRAISAL OR ANALYSIS CONTAINED IN THE UNIFORM STANDARDS OF PROFESSIONAL APPRAISAL PRACTICE OF THE APPRAISAL FOUNDATION.

In addition to the relevant local jurisdiction regulatory requirements, the performance of an appraisal subjects the appraiser to compliance with the Uniform Standards of Professional Appraisal Practice (USPAP). USPAP is to appraisal what Generally Accepted Accounting Practices is to public accounting.

USPAP was adopted by the Appraisal Standards Board of the Appraisal Foundation on January 30, 1989, and is recognized throughout the United States as the generally accepted standards of professional appraisal practice. USPAP contains standards for all types of appraisal services including real property, personal property, business and mass appraisal. The purpose of USPAP is to promote and maintain a high level of public trust in appraisal practice by establishing requirements for appraisers. Through the Financial Institutions Reform, Recovery and Enforcement Act, the federal government has mandated that the states enforce real property appraisers' compliance with USPAP.

USPAP compliance also is required by professional appraisal associations, by client groups and by dozens of federal, state and local agencies. In addition, many users of appraisal services (such as lenders, mortgage companies, etc.) have adopted USPAP and require employee or contract appraiser compliance.

USPAP sets the minimum standards for judging an appraiser's competence and credibility.

Although compliance with USPAP is generally not asserted as evidence of appraiser competency, failure to meet minimum standards can be, and frequently is, used to demonstrate negligence and/or incompetence. The importance of this fact cannot be overemphasized.

An expert should not assume that the retaining attorney knows about or understands USPAP. An expert's assistance to the litigation team can be greatly enhanced by ensuring that the attorney understands the importance of and is informed about USPAP. An expert providing the retaining attorney with questions concerning the opposing expert's compliance with USPAP can be extremely valuable.

Experts usually review the appraisal report produced by the other side in litigation for mathematical and theoretical errors, USPAP compliance, and confirmation of the accuracy of the data. Errors in any area of the report, whether or not they impact the value opinion, can damage the appraiser's credibility. Once any error is noted, the expert can expect critical questions such as:

- "What else did you miss?"
- "Where else did you miscalculate?"
- "If you were off by X percent here, could you be off by X percent in other areas as well?"

ENGAGING AN EXPERT

When Should an Expert be Retained?

There is general agreement that an expert should be involved in a case as early as possible, including in technical analysis, in preparation for deposition, in discovery, in analysis of documents in settlement and mediation discussions, and in summation of complex facts for jurors.

Therefore, a retaining attorney should start the search for an expert early. By talking to experts, retaining counsel also may learn of problems in the client's case. Getting unfavorable news early can potentially save the attorney and client a lot of time, money and aggravation. Furthermore, retaining an expert before discovery is complete may help ensure that the retaining attorney is requesting the right documents and asking the right questions during deposition. As a practical consideration, a retaining attorney also will want to "win the race" to retain the best expert for the case, and will want to make sure the expert has sufficient time to prepare.

Counsel's litigation plan should allow sufficient time:

- to identify the right expert;
- for experts to perform sufficient analysis (in the role as a confidential consultant) to know whether they will be helpful to the attorney's case; and
- for attorneys to alter their plans, if necessary, based on the consultant's preliminary conclusions.

Attorneys often start their search for an expert too late and then settle on the first individual who readily agrees with their position and is available on short notice. This poor timing on behalf of a retaining attorney can needlessly jeopardize a client's chances for success.

Locating Experts

Sources for expert witnesses include a personal referral (particularly when that source is another lawyer who has won with the expert), jury verdict reporting services, reported appellate decisions, directories, society membership rosters (though using a roster at random is generally unsatisfactory), trade associations, regulatory bodies, and private consulting firms. Additionally, it is becoming more common to utilize Internet search engines to locate experts, and many experts have Web sites, blogs and press releases posted on the Internet. Retaining counsel should be comfortable that prospective experts who have online presence are appropriately presented there. Retaining attorneys should avoid those who appear to be selling their services too hard, making guarantees or making statements about winning cases, etc.—individuals aggressively advertising their services as experts could be perceived as "hired guns," and therefore not impartial.

Reference Checks

In addition to obtaining the prospective expert's curriculum vitae, retaining counsel will usually ask potential experts for names of the attorneys involved in their most recent cases. Retaining counsel will (or at least should) contact the attorneys who used a potential expert because doing so can yield important insight, such as how the expert connects with a judge or jury and how the expert fares during testimony. The retaining attorney will also check whether the expert's opinions have ever been excluded or limited by a court, which can be done through searching published legal opinions.

It is also useful for retaining attorneys to check with individuals they know in the real estate profession who do not provide expert services to determine an expert's industry reputation. Retaining attorneys should verify that an expert they are looking to retain will follow through with the case until the end, and will be available when needed—retaining attorneys do not want an expert who might drop out before even getting to trial or at the last minute.

As part of the vetting process, experts should be prepared to provide their Rule 26 Testimony and Publication Log. If they do not know what this is or do not have one, it could indicate little experience in testifying (which occasionally is desirable).

Conflicts

Surprisingly, while attorneys are governed by strict ethical rules, conflicts-of-interest rules for experts are virtually nonexistent. Experts rely on their credibility and reputations, providing enormous incentive for self-regulation. In almost every case, before accepting an assignment, an expert and the expert's firm should perform a comprehensive conflict check. This topic is reviewed here in depth because of the importance of appropriately handling client interactions and avoiding conflicts of interest.

A conflict of interest does not automatically disqualify an expert from giving testimony. The key is whether the expert's opinion is independent of the parties in a specific case and the pressures of the litigation.

Situations that may preclude an expert from accepting an engagement, absent informed consent from the prospective client or retaining counsel, are as follows:

- An expert's acceptance of the engagement could materially harm a current client's interests;
- Acceptance of the assignment would create a conflict of interest, (i.e., the expert's provision of services would be materially limited by the expert's duties to other clients);
- The expert's relationship to third parties, if such relationships might not allow for a fully independent opinion from the expert;
- The expert's own interests may conflict with the case.

If the expert has already been retained by the client in pending, separate ongoing litigation, the expert could be testifying for a client in one case but against the same client in concurrent litigation. This potential situation raises difficult issues of confidentiality. If an expert proceeds with potentially conflicting engagements, it must be with the understanding with all attorneys involved that there will be no *ex parte* communication regarding any other assignments.

These conflicting assignments may make it difficult for counsel in one case to effectively cross-examine an expert because impeaching his/her credibility in one case could be harmful to counsel's own case. Legitimate efforts to attack an expert in one case would be ready ammunition for opposing counsel to use against the expert in another case. This effectively eliminates the potential right to challenge the expert's opinion and credibility in one case for fear of harming another case.

Experts should be mindful of the risks inherent to acting in cases involving former clients, as this can prompt allegations of knowledge or information gained while working for a former client being used to the former client's disadvantage. Whenever there is a conflict of interest of this kind, or it appears that there may be one, the expert should obtain the informed consent of both the old and new clients before agreeing to act for the new client. This will involve, at a minimum, disclosing to each client the other's name and nature of the assignment completed or contemplated. It will be necessary for the expert to clear with each client what they propose to tell each other. In securing the former client's consent, it may help if the expert has returned all of the documents relating to the case or cases in which evidence was given on behalf of the former client. If the former client does not consent ,the expert should decline the new assignment.

When accepting engagements, experts assume responsibility to clients to exercise care with regard to the investigations they carry out and to provide soundly based evidence and opinions. This requires experts to undertake only those tasks they are competent to perform and to give only those opinions they are competent to provide.

Expert testimony should be and should seem to be independent, objective and unbiased. The evidence should be the same regardless of who is paying for it. Personal, professional and/or financial links with parties to a dispute or with businesses in competition with the parties should normally preclude an expert from acting as an expert witness in any litigation in which the parties are engaged.

The primary duty of an expert witness is to the court—to be truthful as to fact, thorough in technical reasoning, honest as to opinion, and complete in coverage of relevant matters. This applies to written reports as much as to oral testimony regardless of whether the expert is under oath. Experts should consider making a statement at the end of their report along the lines of the following:

- the expert has no conflict of interest of any kind other than that disclosed in the report;
- the expert does not consider any disclosed interest affects suitability as an expert on any issue on which he/she has given evidence;
- the expert will advise the party by whom he/she is engaged if, between the date of the report and the trial, there are any changes in circumstances that affect the answers to the bullet points above.

Appropriate Communication

As either a retaining attorney or as an expert, it is important to use great care in communicating from the outset. It must be assumed that every conversation among counsel, client, attorney and anyone else concerning the expert's work on the case, along with all material in the expert's file and documents generated by the expert, will be discovered. It is usually better for a retaining attorney to look for another expert than to try to block discovery that might be embarrassing.

Written reports should be discouraged at the very first meeting. The retaining attorney should give the client clear guidelines as to what can and cannot be discussed with the expert: remember, all conversations with testifying experts are likely discoverable.

No Withholding Information

A retaining attorney should give the prospective expert all relevant information (good and bad), but especially the information that is unfavorable to the client's position. The withholding of unfavorable information from retaining counsel's expert will only lead to problems. When the unfavorable information comes out (and it will), the expert will have to choose between changing his/her opinion, or defending the unreasonable. If the expert is not credible because the retaining attorney withheld information, his/her testimony will not be useful. It can be helpful for retaining counsel to provide a case summary, either in writing or verbally from a well-prepared set of notes.

Over-Designation of Experts

Retaining counsel should be careful not to over-designate experts and should try to avoid having duplicate experts who cover similar topic or technical areas—this will reduce or eliminate the risk of inconsistencies in testimony. It may be in the retaining attorney's interest to focus on thoroughly preparing a single expert, as many experts are vulnerable because of lack of thorough preparation (often on the part of the retaining attorney).

Experts should not be over-extended—that is, they should not undertake assignments (or be asked to undertake assignments) if their credentials may be questionable or if they have concerns about their suitability or the case.

Who is the Expert's Client?

It is important that experts are aware who is serving as their client. There are advantages to the attorney or law firm engaging the expert, and some experts are leery of engaging directly with the attorney's client, preferring instead to be engaged by the law firm.

This can be important when engaging an appraisal expert, as an appraisal expert will need to specifically know who is actually the client.

Engagement Agreements

Most sophisticated experts require a written engagement. These documents should cover terms including the scope of work and services to be provided, fees, retainers, billing, travel expenses and other pertinent aspects of the engagement understanding.

What an Expert Should Consider Before Taking an Assignment

Even if experts meet the appropriate basic criteria from the perspective of a potential retaining attorney, it is important that they consider the following questions before accepting an assignment:

- What is their preliminary opinion, and how do they really feel about the case?

- According to the expert's knowledge and experience, is it apparent how the relevant law/statute/precedent applies to the facts of the dispute? If so, can he/she help with the case?
- Does the expert have any conflicts?
- Does retaining counsel expect the expert to advocate for his/her professional opinion or for the retaining counsel's case? The expert must understand that an attorney is a paid advocate and usually wants everyone on the attorney's team working toward the demands and satisfaction of the client.
- What is the prospective client's and retaining counsel's reputation in the community?
- Are those reputations with which the expert would want to associate?
- How does the expert "mesh" with the attorney?

Testimony

Many experts view giving testimony as one of the most difficult aspects of an expert engagement. In giving testimony, experts must effectively convey their professional opinions on the issues or topics they have investigated and analyzed. This process requires them to communicate to a jury in a manner not overly technical and not condescending—it is a teaching function in which experts relate the unknown to the known, in order to assist the jury with understanding the facts and the expert opinion. Testifying should be done in a succinct and efficient manner, and it often requires the use of analogy and/or metaphor.

For many experts, testifying is the least desirable part of an assignment because the expert's position is usually argued directly against that of an opposing expert. Holding oneself out to the world as an expert has been compared to a boxer leading with the chin and proclaiming, "Take your best shot." The opposing counsel's goal is to discredit the expert's testimony and possibly the actual expert. Consequently, it is common for billing rates to be higher for testifying.

SCOPE OF WORK AND COMPENSATION

Defined Scope of Work

A scope of work is the description of the expected services and functions that are to be performed for a given engagement. The retaining attorney should provide the expert with a well-defined written or verbal description (from a well-prepared set of notes) of the expected scope of services for the engagement so the expert can determine if the assignment is clearly within his/her realm of experience and expertise. This is also necessary if the retaining attorney is requesting a budget estimate for the engagement. The more detailed and descriptive the requested scope of services, the more credible and reliable the engagement fee estimate will be. A clear scope of work also serves as a checklist for the expert who is preparing a report or otherwise preparing for the case. If an expert has performed or prepared for all items in the defined scope of work (checklist), the expert should be finished and ready.

Expert Fees and Billing

Most expert fees are paid by the hour, with the expert's hourly rate usually determined by a combination of the following factors: the expert's experience, qualifications and credentials, reputation, availability of other experts and the amount at stake in litigation. Most experienced experts require, at a minimum, an initial retainer, and more sophisticated experts will generally ask for a replenishable retainer paid in advance to eliminate collections problems. At least a portion of the retainer is usually nonrefundable in case the expert is being retained to "conflict him/her out" of the case and in instances where the case settles after the expert is designated.

Travel and other pre-agreed expenses are applied against the retainer. Fee agreements with experts that are contingent (in whole or in part) upon the outcome of the case are unethical and potentially illegal in many jurisdictions.

It Pays to Prepare

No one knows everything—including experts. Retaining attorneys should be willing to pay for research and preparation time sufficient to allow the expert to be properly prepared for every stage of the case. This includes experts' refreshing themselves on case documents they might not have seen for months, depending on the case schedule, and includes real estate appraisers who may have prepared an appraisal report for the case six months ago and will be deposed the following week. These considerations should all be identified and accommodated when the budget is drafted.

Budgeting

- **Budget.** Before execution of a retention agreement, retaining counsel and the expert should commit to a budget. This will require the retaining attorney to define the scope of expected work and estimate and cap time required. It is unfair to expect a firm price without a well-defined scope of work and caps for time required, and a clearly defined scope of work can result in fewer misunderstandings and potentially lower total costs for the retaining party.

- **Verbal budgets.** There are benefits to utilizing verbal budgets instead of detailed written budgets. Detailed written budgets are likely discoverable and may be a source of aggressive or misleading cross-examination, (i.e., claims that the expert devoted minimal effort in certain areas as reflected in low budgeted fees).
- **Breakdown of litigation budget into separate phases**. Litigation budgets can be broken down into phases: 1) Initial review phase: time and cost to review file materials must be estimated. If the expert must travel to a location to provide an opinion, travel costs, time and inspection time can easily be calculated; 2) Discovery phase: during this phase, the expert must prepare a report or assist in preparing responses to expert interrogatories. The expert also may be required to give a deposition; 3) Costs associated with testing and demonstration: such costs that the expert intends to present at trial must be included in the budget; and 4) Trial preparation and trial phase: this phase may involve preparation for trial testimony, attendance at trial and testimony at trial.
- **Cost estimates.** If the scope of work has been clearly defined and has not been increased, the expert can expect to be held to the initial cost estimates.
- **Possible budget supplementation from unforeseen developments**. Retaining counsel should explain to the client that sometimes unexpected occurrences may require additional work from the expert, in which case there may be a need for expert budget supplementation.
- **Amended or supplemental budgets in the retention agreement.** Retaining counsel should ensure that both the client and the expert understand the circumstances under which amended or supplemental budgets may be submitted, including all factors to be considered in approving them.

CONCLUSION

Real estate experts have one of the most important and challenging roles in cases involving real estate disputes. While attorneys present evidence, expert witnesses serve *as* evidence, and are therefore subjected to closer and more personal scrutiny. Experts not only must have the skills to produce accurate and meaningful analysis and opinions, but they also must be consummately prepared to defend their positions under typically hostile circumstances. For this reason, experts must possess a balance of traits and characteristics that is often uncommon even among well-respected, seasoned real estate professionals. While these skills and characteristics can be cultivated throughout the course of a career, a long tenure in the industry is just a necessary, not sufficient, condition—and many veteran participants in the real estate industry still have a way to go before they are prepared to serve as experts.

The overview of the role and responsibilities of real estate experts contained herein does not cover all of the nuances of the practice but strives to serve as a broad introduction to the selection and use of expert witnesses. It is intended to convey that serving as a successful expert witness is, in some senses, an honor—in that it reflects a strong reputation in the local, regional or national real estate community; it reflects an acknowledgement of the capacities of an expert in the field as well as in the art of communication; and it reflects a confidence in the integrity and credibility of the individual serving as an expert. ■

Investigating the Effectiveness of Alternative Investment Strategies for REIT Portfolios

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INTRODUCTION

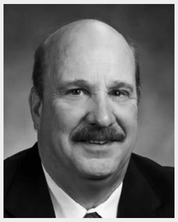
THIS ARTICLE INVESTIGATES WHETHER REAL ESTATE investment trust (REIT) investors might be able to enhance their return by pursuing investment timing strategies that have been demonstrated to be successful in the broad stock market. Two such strategies are the price momentum strategy, which posits that investors can profit by investing in shares that have recently risen in price because that trend will tend to persist, and the price contrarian strategy, which suggests investors can profit by assuming positions to capture security price trend reversals. Only a handful of studies, however, have applied either of these strategies to REITs exclusively. Most of these more focused studies investigate time periods that predate the modern REIT era, and none has directly compared the effectiveness of these competing strategies as a REIT investment timing mechanism. Another widely known investment strategy, "Dogs of the Dow," which suggests that superior share price performance will occur for firms with the highest dividend-to-share-price ratio, has not, to date, been tested using REITs. The purpose of the study presented in this article, therefore, is to investigate the effectiveness of each of these strategies over a more recent time period to determine which would have been most profitable for REIT investors. Each strategy is used to formulate a series of equally-weighted, non-overlapping portfolios held for a variety of holding periods (ranging from two to 52 weeks) over the 11-year study period (December 1999–March 2011).

In testing another investment timing strategy (i.e., that portfolios of low [high] price-to-earnings stocks outperform [underperform] the stock market), Anderson and Brooks[1] found that returns are enhanced if portfolios are restricted to the shares of relatively few firms from the tails of the price-to-earnings distribution. To determine if their findings apply to the strategies investigated here, the number of firms in each portfolio is restricted; ranging from 30 to five REITs. Only one of the strategies, the Dogs of the Dow, provided returns that were inversely related to the number of REITs in the portfolio, and when the number of REITs in the portfolio was limited to five, the Dogs of the Dow dominated the other strategies.

LITERATURE REVIEW

While the number of studies that have applied investment timing strategies to REITs is fairly limited, several strategies have been empirically tested. For example, in an early study which is at least indirectly related to the one presented here, Liu and Mei[2] develop a model to forecast excess returns by asset class and use the forecasts to make investment decisions for several asset classes including four real estate classes: equity REITs; mortgage REITs; real estate holding companies; and real estate building companies. They used their prediction each month between February 1981 and December 1989 to either invest in (or continue to hold) all firms in an asset class when the forecast was positive, or liquidate their investment in an asset class and move the money to Treasury bills when the forecast was negative (in a second iteration, asset classes with a negative forecast were shorted). Of particular interest to the study presented here, the total cumulative return for equity REITs was 97 percent, which exceeded the

About the Authors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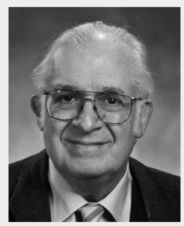
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buy-and-hold strategy return of 50.9 percent and 51.2 percent for equity REITs and the S&P 500, respectively.

A price momentum trading strategy prescribes that investors initially form a portfolio by purchasing stocks that recently have generated the highest returns (winners) and shorting those with the lowest returns (losers). The strategy is based, in part, upon the assumption that winners will continue to generate high positive returns and losers will continue to generate high negative returns. But momentum can wear out, so the strategy also requires that the portfolio be periodically reformulated, again populated with the most recent winners and losers. Studies by Jegadeesh and Titman[3], Hong, Lim and Stein[4] and others have documented that momentum strategies work well in the broad stock market when implemented over a large number of diverse stocks. In studies applying a price momentum strategy to a particular industry rather than to the broader market, results have been mixed. Moskowitz and Grinblatt[5], for example, found that the strategy did not work well when restricted to a particular industry. Three studies, however, have documented significant momentum returns in REITS.

Chui, Titman and Wei[6] analyzed momentum portfolios formed from all publicly traded (equity, mortgage and hybrid) REITs traded on the NYSE, AMEX and NASDAQ from February 1983 to June 1999. Value-weighted portfolios were formed each month based on the REIT's most recent six-month return. Any REIT whose return was in the top 30 percent of all REIT returns was purchased and those in the bottom 30 percent were sold short. They did not find a momentum effect in REITs in the pre-1990 period, but found a strong and prevalent momentum effect after 1990. As explained in the next section, 1990 may not have been the best demarcation point for their study.

Hung and Glascock[7] analyzed momentum portfolios formed from all publicly traded (equity, mortgage and hybrid) REITs traded on the NYSE, AMEX and NASDAQ with at least three years of monthly returns in Center for Research in Security Prices (CRSP®) from July 1983 to December 2006. Portfolios were formed each month and held for six months. When the requirement for a REIT to qualify for portfolio inclusion was that the most recent monthly return be in the top 30 percent of all REITs, the mean (equal-weighted) return for the long, overlapping portfolios was 1.71 percent. When the requirement for portfolio inclusion was tightened to the top 10 percent, the mean (equal-weighted) long portfolio return was 2.06 percent. Both of these were significant at the five percent level.[8] Using basically the same data and portfolio formation methodology, Hung and Glascock[9] report similar findings for momentum portfolios based on monthly returns during the time period of January 1972 to December 2000. In their study, momentum returns were regressed against a variety of variables, and it was determined that momentum returns are higher in up markets and, of particular interest to the study we present, that REIT winner portfolios have higher dividend-to-price ratios. This suggests that the Dogs of the Dow strategy might be a profitable way to formulate REIT portfolios. A search of the literature, however, uncovered no published studies to date that have tested this possibility.

Contrarian investment strategies essentially propose investing in securities on which other investors have turned their backs. Among the first to discover the potential for excess returns in contrarian investing were De Bondt and Thaler[10]. In their study, they examined the cumulative average residuals of winner portfolios (consisting of stocks with recent percentage price increases) and loser portfolios (consisting of stocks with recent percentage price decreases). They formed a series of non-overlapping portfolios consisting of either extreme losers or extreme winners from January 1933 to December 1980. The three-year return on their loser portfolios outperformed the market, on average, by 19.6 percent, while winner portfolios underperformed the market by about five percent.[11]

Conflicting results were obtained in two studies which applied price contrarian strategies to REITs. The first was conducted by Mei and Gao,[12] who formed portfolios consisting of equity REITs, mortgage REITs, real estate holding companies, and building companies between July 2, 1962 and December 31, 1990. Firms with low weekly returns were purchased and firms with high weekly returns were shorted. They reported that the returns their constructed portfolios generated were modestly profitable, but not enough to cover transactions costs.

Cooper, Downs and Patterson[13] subjected all publicly traded REITs in the CRSP file between 1973 and 1995 to a contrarian strategy, and report significant weekly returns. The performance of each REIT during the previous week was calculated and then, in separate iterations, any REIT whose shares had decreased (increased) in price during the past week by either 0–2%, 2–4%, 4–6%, 6–8%, 8–10%, or by more than ten percent was purchased (shorted). Their results indicate that the higher the return filter, the greater were the realized weekly returns. The more stringent the filter, however, the fewer the number of weeks in which a portfolio could be formed. For example, the ten percent filter resulted in long portfolios being formed in only 477 of the 1,294 weeks in the study. The average annual return for all long portfolios ranged from 11.33 percent to 58.12 percent, and (except for the portfolio based on the zero-to-two percent filter) exceeded the average annual return of 13.1 percent associated with a strategy of buying and holding all REITs over the study period. None of the annual returns for the short portfolios exceeded 13.1 percent.

One characteristic that all of the above-mentioned REIT studies have in common is that their study periods, either in whole or in large part, predate the modern REIT era. Before the modern REIT era, which according to many in the industry began with the IPO of Kimco Realty Corporation in November 1991, REITs tended to be relatively small, few in number, and there existed severe restrictions on REIT managerial autonomy. The market's interest in equity REITs, which today usually both own and manage properties, was limited, at least in part, because the ownership and management of assets were required to remain separate. Passage of the Tax Reform Act of 1986, which permitted REITs to both own and manage their properties as vertically integrated companies, helped set the stage for a secular wave of equity REIT IPOs in the 1990s. Passage of the Omnibus Budget Reconciliation Act of 1993 also was critical in increasing the number and size of equity REITS. Among other things, this Act changed the "Five or Fewer" rule which made it easier for pension plans to invest in REITs. This translated into substantial growth for the REIT market as institutional ownership of REITs soared.

The Dogs of the Dow is an example of another simple contrarian strategy. An article entitled "Study of Industrial Averages Finds Stocks with High Dividends are Big Winners," which appeared in *The Wall Street Journal*,[14] reported an intuitively appealing investment approach presented by John Slatter. Later dubbed the Dogs of the Dow investment strategy, Slatter suggested that investors confine their stock market selections to the 10 top yielding stocks found among the 30 industrial giants included within the Dow Jones Industrial Average (DJIA). According to Slatter, these "dogs" provide anything but dog-like returns. He offered evidence that a portfolio of high-yielding Dow stocks outperformed the DJIA by 7.59 percent.

An attractive attribute of the strategy is its simplicity. According to this strategy, the portfolio should be equally dollar weighted and consist of the common shares of the 10 firms in the DJIA with the highest dividend yield. The strategy also prescribes that the portfolio be annually reformulated to ensure it again contains an equal dollar allocation of the 10 stocks with the highest dividend yield at the time of the reformulation. Proponents of the Dogs of the Dow strategy argue that DJIA companies do not alter their dividend to reflect trading conditions and therefore, the dividend reflects the average worth of the company. Stock price, on the other hand, fluctuates through the business cycle. This should mean that firms with a high dividend relative to stock price are near the bottom of their business cycles and are more likely to see an increase in their stock prices compared to firms with a low dividend yield. Hence, an investor who is annually reinvesting in high-yield stocks should out-perform the market. The logic behind this is that a high dividend yield suggests: 1) the stock is oversold; and 2) management believes the company's prospects are bright, and it is willing to back its belief by paying out a relatively high dividend. Investors are thereby hoping to benefit from both above-average stock price gains as well as a relatively high dividend.

Additional empirical support for the Dogs of the Dow strategy has been provided by Prather,[15] and by Prather and Webb,[16] who both conclude that following the strategy would enable investors in the broad stock market to earn superior risk-adjusted returns. Whether a similar strategy might serve as a profitable investment strategy for REIT investors is an interesting issue that has not been empirically tested, perhaps because of the belief that there is little variation in REIT dividends. While each REIT is required to pay out at least 95 percent of (what would be) taxable income in order to qualify as a REIT and avoid federal income taxes, previous research[17] documents substantial variation in REIT payout policies.

DATA AND METHODOLOGY

REIT share price data were obtained from Zacks Investment Research.[18] Its database includes REITs listed on the NYSE, AMEX and the NASDAQ. Figure 1 reports the number of REITs listed in each exchange and the number of REITs in each of the four Zacks classifications from which the investment candidates were drawn.[19] Examination of the information presented in Figure 1 reveals that almost all of the REITs in the database were listed on the NYSE and that most were classified as an equity REIT. The number of REITs in each category grew over the study period. There were 56 more equity REITs in the database at the end of the study period compared to the start, but in percentage terms, mortgage REITs in the database increased at a higher rate. They constituted less than five percent of the database at the beginning of the study period, but more than 17 percent of the database at the end of the study period.

Figure 1

Number of REITs in Database

	Dec. 17, 1999	Mar. 11, 2011
NYSE	60	129
AMEX	0	3
NASDAQ	1	6
Total	61	138
Mortgage REITs (Zachs code 151)	3	24
Equity REITs – Retail (Zachs code 264)	15	25
Equity REITs – Residential (Zachs code 265)	13	17
Equity REITs – Other (Zachs code 266)	30	72
Total	61	138

Source: Larsen, Ainina, Akhbari, Wang and Gressis

The Zack's Research Wizard was used to apply several preliminary screens (described in the next paragraph), create a series of non-overlapping portfolios, and to back-test the portfolios. The study period begins December 17, 1999 and continues through March 11, 2011.[20] During this time period the stock market witnessed the dot-com bubble, the September 11 attacks and the sub-prime mortgage crisis. It would be safe to characterize this time period as less than stellar for the stock market in general. During the 11-year and nearly three-month study period, the S&P 500 index decreased from 1,421.05 to 1,304.28; a cumulative total negative return of 8.2 percent. An investor who bought and held REITs would have realized a substantially higher return over the same time period. The Dow Jones Equity REIT Index, for example, increased from 230.59 to 909.87; a holding period return of 294.6 percent.

Several screens were employed prior to portfolio formation. First, no ADRs or Canadian REITs were considered. Second, to help assure the trading strategies being examined could be executed in the real world, any thinly traded REIT was eliminated as a portfolio candidate. Consistent with Tziogkidis and Zachouris[21] and Ainina, James and Mohan,[22] any REIT with fewer than 50,000 shares traded during the 20 trading days prior to portfolio formation was eliminated from consideration. Third, because institutional investors, particularly mutual funds, are reluctant to buy stocks whose prices have fallen below five dollars, any REIT with a share price less than five dollars at the time of portfolio formation was also eliminated. Other researchers, including Cooper, Downs and Patterson noted above, suggest that another benefit of this last screen is that it reduces bid-ask bounce effects.

The following methodology was employed to test each investment strategy. The first of the two-week price momentum portfolios was formed on December 17, 1999 by identifying and combining into equal dollar weighted portfolios the (in separate iterations) five, 10, 20 and 30 REITS with the largest percentage price increase during the previous two weeks. A long position was assumed in each portfolio and, at the end of two weeks, the portfolio return was calculated and a new portfolio formed, which could include REITs contained in the previous portfolio. This process continued bi-weekly though March 11, 2011. A similar process was used to form the non-overlapping four-week, 12-week, 24-week and 52-week price momentum portfolios, but with the holding periods now equal to four, 12, 24, and 52 weeks, respectively, and the selection criterion equal to the REITs with the largest four-week, 12-week, 24-week and 52-week percentage price increase. The same process was repeated to form portfolios based upon the price contrarian and Dogs of the Dow strategies, where the selection criterion was, respectively, the REITs with the largest percentage price decrease, and the REITs with the highest dividend-to-share-price ratio.

Next, we incorporate transactions cost into the return data. Many recent studies have relied upon estimates of transaction cost data presented in Keim and Madhavan.[23] Their estimates include commissions paid by institutional investors as well as an estimate of the price impact of the trade. Several researchers using the Kiem and Madhavan (KM) estimates, including Avramov et al.,[24] conclude that abnormal pre-transaction cost returns associated with trading strategies, similar to those investigated here, disappear once transaction costs are considered. However, de Groot et al.[25] point out that the KM estimates (which were developed using transactions from January 1991 through March 1993) may be overstated for more recent time periods because of important market changes (e.g., increased trading volume, more competition among brokers, technological improvements, and the move to decimal pricing in 2001 all contributing to a large decrease in bid-ask spreads). Using more recent transaction cost data which de Groot et al. obtained from one of the world's largest brokerage houses, they estimate that the average one-way commission on institutional trades during the past 10 years of their study period, 2000–2009, was three basis points.

The rebalancing needed in our study to equally weight each portfolio at each reformation will require a trade for each REIT in the portfolio at each reformation (except in the unlikely event that the REITs already in the portfolio still constitute the best portfolio and that the relative value of each REIT in the portfolio has not changed since the previous reformation). For individual investors, transaction costs are obviously positively related to the number of portfolio reformations, but the (low) fixed-dollar commissions available through discount brokers over the study period means the exact percentage commission that applies to each portfolio is dependent on the dollar value of each transaction. It is assumed that our trades are small enough so that the price impact of each trade is effectively zero, and following de Groot et al., that trading costs are equal three basis points for each REIT in each portfolio for both the initial and last trade, and six basis points for each REIT in each portfolio when reformation occurs. For example, reformation of a five REIT portfolio would incur commissions equal to 30 basis points while reformation of a 30 REIT portfolio would involve 180 basis points.

Finally, to investigate the risk/reward relationship associated with each portfolio, the information ratio is calculated.[26] We follow a well-established precedent and use the S&P 500 as the benchmark, and in each case we match the holding period and reforming frequency of the benchmark returns with those used to form the subject portfolio. The information ratio is often used to gauge the skill of investment fund managers because it measures the active portfolio return adjusted for the amount of risk that the manager takes relative to the benchmark. Grinold and Kahn[27] report that top-quartile investment fund managers typically achieve information ratios of approximately 0.5. The information ratio (IR) is equal to:

$$IR = \frac{1}{N}\sum_{i=1}^{N} \left[\frac{(R_p - R_b)}{\sqrt{\sigma^2\,(R_p - R_b)}}\right]$$

where R_p is the portfolio return, R_b is the benchmark return, and the reward is defined as the average difference between the returns of the portfolio and the benchmark (the tracking error), standardized by risk (the standard deviation of the tracking error).

RESULTS

Examination of the cumulative returns shown in Figure 2 reveals that each of the 60 portfolios provided a handsome pre-transaction cost return compared to any broad market measure. For example, the S&P bi-weekly, monthly, quarterly, semi-annual and annual total compounded return for the study period was 9.9 percent, 10.4 percent, 10.2 percent, 5.3 percent and 0.2 percent respectively. Only 27 of the portfolios, however, outperformed the previously mentioned buy-and-hold cumulative return of 294.6 percent for the Dow Jones Equity REIT Index.

In Figure 2, the cumulative return for the strategy with the highest return for each combination of holding period and portfolio size **is shown in bold italics**. Of the 20 combinations of holding period and portfolio size tested, the Dogs of the Dow provided the highest return in nine cases, while the price momentum and price contrarian generated the top return in seven and four cases, respectively. The strategy that provided the highest pre-transaction cost return of any combination (774.6 percent) was the Dogs of the Dow, where the portfolio consisted of only five REITs and was reformed every two weeks.

Focusing on the influence of the frequency of portfolio rebalancing, the following observations can be made. Considering all portfolio sizes tested, if the portfolios are held for a relatively long period such as quarterly or semi-annually, momentum returns are higher, on average, than those of both the contrarian and the Dow strategy. However, momentum returns become smaller if the portfolios are rebalanced more frequently such as bi-weekly or monthly. In contrast, the price contrarian returns are positively related to the length of the holding period, and the Dogs of the Dow returns show a slight declining trend as the holding period increases. However, compared to the other two strategies, the Dogs of the Dow appears to produce relatively stable performance across different holding periods, suggesting that the Dogs of the Dow strategy is not as sensitive to the frequency of rebalancing as are the other two strategies. The performance of the Dogs of the Dow portfolios was particularly strong given either a two-week or annual holding period.

Switching the focus to portfolio returns as a function of portfolio size, it can be observed in Figure 2 that no strategy consistently provided the highest return for portfolios consisting of 10, 20 or 30 REITs. However, with portfolios limited to five REITs the Dogs of the Dow strategy generated a higher pre-transaction cost return than any other strategy for each holding period. Note that as the size of the portfolios grows, the effectiveness of the Dogs of the Dow strategy dissipates, suggesting that the Dogs' effect concentrates on the extreme case. An issue of particular interest in the our study was whether any of the strategies tested would provide results consistent with those reported by Anderson and Brooks[28] which suggest that portfolio performance may be enhanced by restricting the portfolio to those REITs with extreme values of the critical variable for each strategy. The Dogs of the Dow strategy was the only one that provided returns consistent with this suggestion. These results suggest that REIT investors looking to maximize their returns, when pursuing the Dogs of the Dow strategy, should restrict their investments to REITs in the extreme tail of the dividend-to-price ratio distribution. REIT investors applying either of the other two strategies, however, where performance tended to be positively related to the number of REITs in the portfolio, would benefit by including more REITs.

Figures 3 and 4 provide evidence that the positive portfolio performance was fairly consistent over the

Figure 2

Total Percentage Compound Return of Various Investment Strategies

Weeks between Portfolio Reformation	Number of REITs in Portfolio	Price Momentum	Price Contrarian	Dogs of the Dow
2	5	28.0	328.9	***774.6***
2	10	73.7	437.6	***453.3***
2	20	139.3	***575.2***	286.8
2	30	198.8	***507.5***	255.9
4	5	139.0	139.9	***692.8***
4	10	257.8	268.4	***421.8***
4	20	248.4	***377.9***	245.9
4	30	270.4	***312.4***	200.7
12	5	441.4	57.0	***589.3***
12	10	***451.8***	145.0	307.5
12	20	***348.8***	182.9	238.7
12	30	***372.1***	214.9	187.9
24	5	435.3	74.8	***453.3***
24	10	***384.6***	103.0	212.6
24	20	***370.6***	150.0	182.6
24	30	***427.2***	153.7	166.0
52	5	127.1	164.8	***728.4***
52	10	271.5	167.5	***370.5***
52	20	318.7	212.7	***358.6***
52	30	***347.7***	276.8	315.6

Source: Larsen, Ainina, Akhbari, Wang and Gressis

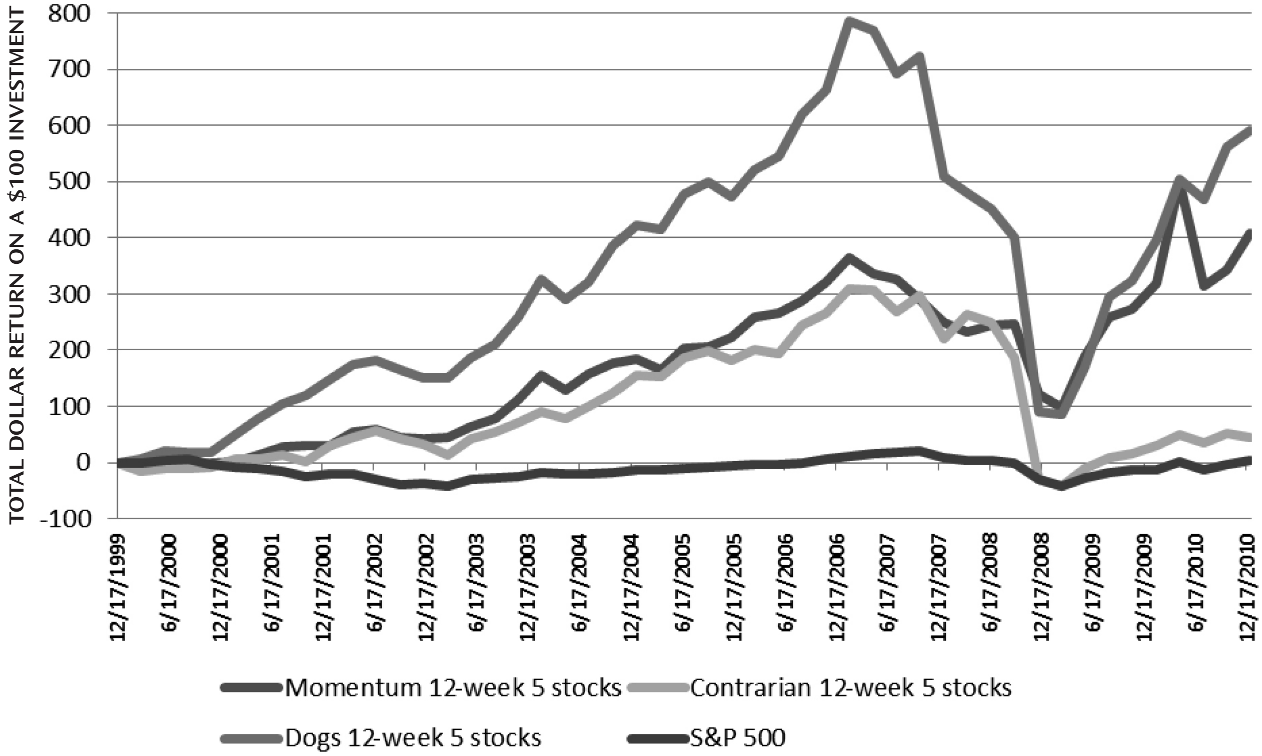
study period with a notable exception. All of the portfolios lost value for approximately 18 months, beginning at about the same time as the sub-prime mortgage crisis.[29] Figure 3 presents a comparison of total dollar returns for all three strategies along with the S&P 500 for the entire study period for portfolios that were formulated every 12 weeks and consisted of five REITs. The performance of the other holding periods and portfolio sizes (not shown here for space economy) depict similar patterns of total dollar returns.

Figure 4 takes a slightly different perspective and presents a comparison of the total dollar returns based again on 12-week holding periods, but in this case the results shown in the figure are for the portfolio size that produced the best results for each strategy. For the Dogs of the Dow strategy, the five REIT portfolio produced the largest return; for the contrarian portfolio, the 30 REIT portfolio produced the strongest performance; and for the momentum strategy, the best-performing portfolio was the 10 REIT portfolio. In both figures 3 and 4, the five REIT Dogs of the Dow portfolio outperforms the others often by a wide margin in all periods except a brief period near the end of 2008, at which point it was outperformed by the momentum strategy.

Comparison of the returns shown in Figure 5 and Figure 2 reveals the impact of transactions costs is substantial for

Figure 3

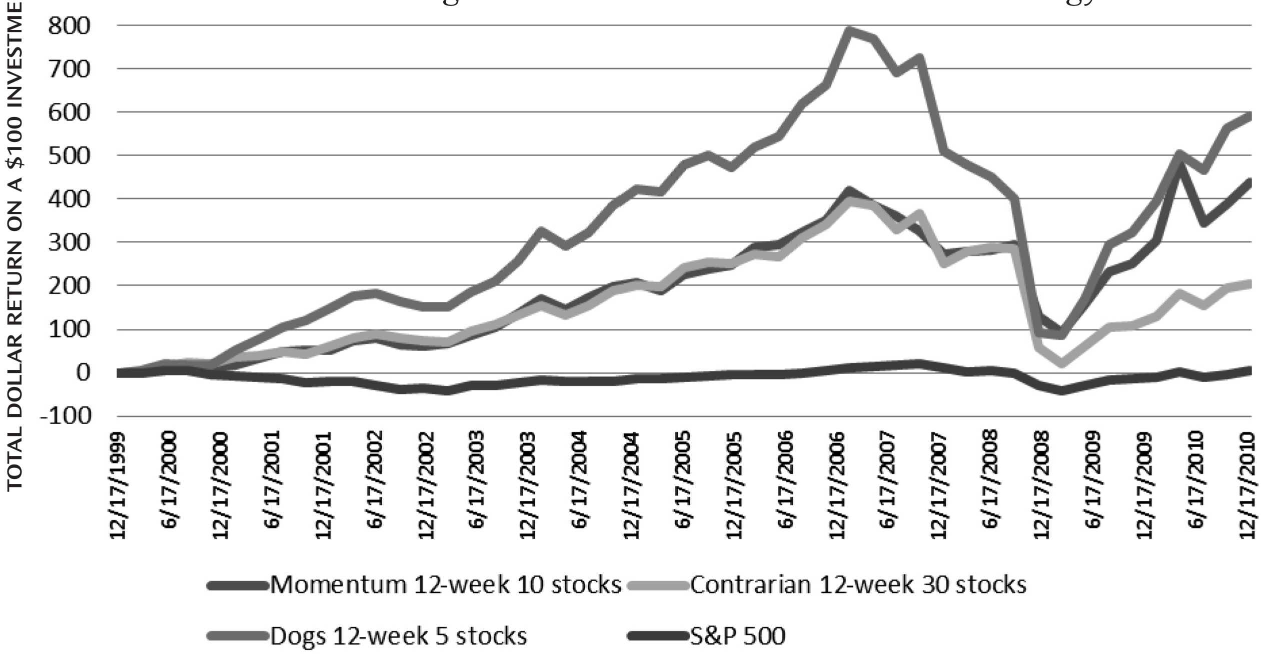
Total Dollar Return on $100 Investment
12-Week Holding Period 5 Stock Portfolio



Source: Larsen, Ainina, Akhbari, Wang and Gressis

Figure 4

Total Dollar Return for $100 Investment
12-Week Holding Period Best Portfolio Size for Each Strategy



Source: Larsen, Ainina, Akhbari, Wang and Gressis

Figure 5

Total Percentage Compound Return of Various Investment Strategies With Transactions Costs Included

Weeks between Portfolio Reformation	Number of REITs in Portfolio	Price Momentum	Price Contrarian	Dogs of the Dow
2	5	-46.9	77.9	263.9
2	10	-70.2	-7.4	-4.7
2	20	-93.0	-80.1	-88.7
2	30	-98.5	-97.0	-98.2
4	5	54.4	54.4	***412.8***
4	10	49.4	53.3	117.8
4	20	-39.5	-17.2	-40.2
4	30	-73.4	-70.5	-78.6
12	5	***370.4***	35.3	***498.2***
12	10	***316.4***	83.0	205.5
12	20	154.5	58.3	89.9
12	30	101.3	32.3	20.2
24	5	***401.0***	62.3	***416.6***
24	10	***324.1***	75.5	171.1
24	20	260.2	87.3	112.2
24	30	253.3	65.2	72.6
52	5	120.3	156.8	705.5
52	10	251.2	151.7	***343.4***
52	20	274.8	177.9	***308.4***
52	30	279.5	217.2	***250.0***

Source: Larsen, Ainina, Akhbari, Wang and Gressis

portfolios that were formulated every two, four and 12 weeks. The return on all but one of the two-week portfolios turns negative once transaction costs are incorporated, and the only portfolio with a positive return (five REIT, two-week, Dogs of the Dow) returned less than could have been earned during the same time period by buying and holding the Dow Jones Equity REIT Index (DJREIT). Further, note that only 10 portfolios (shown in Figure 5 in bold italics) generated a post-transaction cost return that exceeded what could have been earned following a DJREIT buy-and-hold strategy, that the highest return for each holding period was achieved by the Dogs of the Dow strategy, and that no price contrarian portfolio beat the DJREIT.

The returns reported here would be less impressive if they were achieved by assuming inordinate risk. Comparison of the returns in Figure 2 with the information ratios for each portfolio in Figure 6 demonstrates that, in fact, in all but two (of the 20) cases, the strategy with the highest return for a particular holding period also had the best risk return profile (the highest information ratio) for that holding period; the exceptions being the portfolios for the five REIT/24-week holding period and the 20 REIT/52-week holding period.

Several additional points are worth noting. First, note that, regardless of the timing strategy being tested, the value of the information ratio and the length of the

Figure 6

Information Ratios for the Different Strategies

Weeks between Portfolio Reformation	Number of REITs in Portfolio	Price Momentum	Price Contrarian	Dogs of the Dow
2	5	.02709	.11268	***.15424***
2	10	.05107	.13151	***.13458***
2	20	.08024	***.15177***	.11703
2	30	.10059	***.14877***	.11234
4	5	.10364	.11977	***.20857***
4	10	.16017	.14588	***.18004***
4	20	.16298	***.17789***	.14858
4	30	.16885	***.16963***	.13745
12	5	.40668	.20790	***.42551***
12	10	***.43147***	.27938	.35553
12	20	***.41290***	.31596	.34254
12	30	***.42746***	.33553	.31773
24	5	***.52716***	.30861	.48911
24	10	***.63019***	.35575	.42255
24	20	***.75468***	.44601	.44648
24	30	***.82301***	.46131	.45988
52	5	.43969	.48888	***.67845***
52	10	.59187	.49360	***.62378***
52	20	***.72752***	.60436	.68815
52	30	***.77748***	.73949	.71090

Source: Larsen, Ainina, Akhbari, Wang and Gressis

holding period are positively related. This relationship is consistent with the observation of Grinold and Kahn[30] that the value of the Information Ratio depends on the time horizon; increasing with the square root of time. In the case we present, for all three strategies, the risk-adjusted returns improve as the time horizon increases, with the momentum strategy demonstrating the most noticeable growth. Second, for both the price momentum and price contrarian strategies, the greater the number of REITs in the portfolio, the stronger the risk-adjusted performance. In general, rebalancing less frequently and holding more REITs in the portfolio contribute to a higher risk-adjusted return under both momentum and contrarian strategies. Third, just as it was for the raw returns, the risk-adjusted returns of the Dogs of the Dow strategy are inversely related to portfolio size. Finally, the information ratios shown in Figure 6 for portfolios reformulated annually compare favorably to the (approximately) .5 annual performance information ratios reported by Grinold and Kahn for top-quartile investment fund managers.

SUMMARY

This study is the first to extend the Dogs of the Dow strategy to REITs, and the first to directly compare the price momentum, price contrarian and Dogs of the Dow strategies for REIT investment timing effectiveness. It provides empirical evidence of the predictive power of the Dogs of the Dow strategy in the market for REIT shares between December 1999 and March 2003. The degree to which the timing strategies examined here will enable current and future investors to formulate REIT portfolios that outperform a buy-and-hold strategy cannot be guaranteed, but the results do provide REIT investors with something to consider in developing new trading rules that can capture the strengths of the various strategies.[31]

Each strategy provided impressive pre-transaction cost returns. The worst-performing portfolio generated a cumulative return of 28 percent during the same time period in which the S&P 500 generated a negative return of 8.2 percent. One dollar invested at the beginning of the study period in the best-performing portfolio would have been worth $7.75 at the end of the study. One way to achieve a high return is to assume high risk, but in this study the best performing portfolios also tended to have the best information ratios, indicating that superior performance was not the result of extreme risk assumption. However, only 10 portfolios generated a post-transaction cost return that exceeded what could have been earned by buying and holding the Dow Jones Equity REIT Index.

This study explores various versions of the three competing strategies in terms of the number of portfolio components and rebalancing frequency. With regard to rebalancing frequency, none of the strategies consistently generated higher returns than the others. With one exception, the same result is applicable regarding portfolio size. When portfolio size was limited to five REITs, the Dogs of the Dow strategy provided the highest return for every holding period examined. An issue of particular interest was the relationship between returns and portfolio size. There was a negative relationship for Dogs of the Dow portfolios, a positive relationship for price contrarian portfolios, and none for the price momentum strategy. This indicates that restricting a portfolio to relatively few REITs in the tail of the dividend-to-price ratio distribution may prove beneficial for REIT investors pursuing a Dogs strategy, but a similar restriction may reduce returns for REIT investors pursuing a price contrarian strategy. ■

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Thoughts on the Relationship Between Institutional Investors and Real Estate Emerging Managers

BY JOHN J. BACZEWSKI, CRE, CPA

INTRODUCTION

THE ONGOING INDUSTRY-WIDE DISCUSSION OF EMERGING manager investment is a topic this author has followed closely and discussed extensively with a number of industry participants. In April 2013, while presenting data from the *Institutional Real Estate FundTracker* database, John Hunt of Institutional Real Estate, Inc., noted: "There are 819 funds in the market today, trying to raise $250 billion. Of those 819 funds, 297 funds (36 percent) are first- or second-time funds." This highlights the challenge faced by both emerging managers and institutional investors. Investors often lack the necessary resources to sort through the volume and see investing in first- or second-time funds as exceeding their risk appetite. It isn't easy to stand out in the crowd. This article suggests several opportunities for behavioral and business model changes that could foster more and better relationships between institutional investors and emerging managers.

BENEFITS OF EMERGING MANAGER INVESTING

Investor Perspective

The institutional investment community generally recognizes several benefits of investing with emerging managers. These benefits include economic considerations such as obtaining exclusive rights to a unique pipeline of investments; an opportunity to identify best-in-class emerging managers, typically working directly with the firm's principals, who maintain "hands-on" investing and asset management responsibility; forming long-term relationships with the next generation of real estate investment managers; and an opportunity for those who provide programmatic equity capital to generate above-market terms and economics because of the scarcity of capital allocated to individual emerging managers.

About the Author

John J. Baczewski, CRE, CPA, *is president of Real Estate Fiduciary Services, LLC (REFS), Ipswich, Mass., which provides independent fiduciary services and consulting to institutional investors. He has nearly 30 years of experience in institutional real estate investment, finance, management and monitoring, as well as 10 years of 'Big Four' public accounting experience.*

Baczewski's institutional real estate experience includes independent fiduciary services, investment strategy development, portfolio and asset management, due diligence and transaction management, operational reviews, accounting, performance measurement, client service and capital formation. He chairs the REIS Board, which promulgates information standards for the institutional real estate investment industry, and formerly served on the REIS Council.

Baczewski is a Counselor of Real Estate; a fellow of the Homer Hoyt Institute, a former editorial board member of The Institutional Real Estate Letter-North America *and currently serves as a director of Benchmark Research Technologies, an independent research and strategic consulting firm serving the real estate industry. He participates in the National Council of Real Estate Investment Fiduciaries, Pension Real Estate Association, American Institute of Certified Public Accountants, CFA Institute, the Boston Security Analysts Society, and the Massachusetts Society of CPAs.*

A graduate of Merrimack College, Baczewski earned a bachelor of science degree in business administration. He has published several articles, and speaks frequently on pension real estate issues. Baczewski is a certified public accountant, licensed in Massachusetts and New Hampshire.

Thoughts on the Relationship Between Institutional Investors and Real Estate Emerging Managers

In addition to economic considerations, institutional investors can achieve several portfolio construction benefits through establishing an emerging manager investment program. These include capital diversification across a broader pool of operators from early stage to more established, including minority and women-owned business enterprises; and an opportunity to satisfy specific unmet portfolio construction objectives such as accessing a particular property type or building a specific geographic concentration.

Whichever of these benefits drives an institutional investor to develop an emerging manager investment program, an institutional investor can utilize any vehicle structure, target any property type, geography or risk position and use any investment advisory relationship in designing such a program. Emerging manager investments can be accessed through multi-investor commingled funds, single-asset joint venture/co-investments and programmatic joint venture relationships. Important for institutional investors, risk exposure can be targeted as emerging managers participate in a wide spectrum of property operating strategies, enabling institutional capital providers to select whatever investment strategy complements the balance of the portfolio.

So with apparent benefits easy to identify, why has so little institutional capital been allocated to emerging manager programs? One answer is simply that it is more difficult to identify, underwrite and manage emerging manager relationships and investments than those with established managers familiar with institutional investor expectations and requirements. This is especially true when considered against the reality that emerging managers tend to be smaller teams, focused on niche strategies. Investors often must become comfortable with a smaller allocation that can be made to emerging managers without overwhelming their internal infrastructure or execution capacity. It's often difficult for such investments to individually impact the portfolio.

Manager Perspective

An emerging manager often achieves greater platform stability by partnering with institutional investors. This predictable access to capital in larger amounts facilitates the investment process by focusing the manager on specified investment objectives while providing marketplace credibility in the pursuit of transactions. Additionally, institutional capital often precipitates both portfolio and company growth.

Why have emerging managers struggled to raise institutional capital? Emerging managers often are frustrated by the process of accessing institutional capital as they frequently don't intuitively understand the institutional capital formation process and need training in meeting the related information requirements and expectations. Additionally, emerging managers often desire greater investment discretion than institutional investors are comfortable providing at the inception of a relationship with a newer market participant.

FROM WHERE DO EMERGING MANAGERS 'EMERGE?'

Becoming an institutional real estate investment emerging manager suggests that your team has been formed in one of the following three ways:

Figure 1

Sources of Emerging Managers

Source of Emerging Manager	Examples
Existing Entity with Other Businesses Elects to Offer Real Estate Product	Private Equity Firms; Financial Institutions
Existing Real Estate Entity Migrates Capital Platforms	Developers and Operators
Early Stage	Team Lift-Out/Re-Grouping; Start-ups

Source: Real Estate Fiduciary Services

In the order shown in the chart: 1) during the past several real estate cycles, private equity, hedge funds and other financial firms have developed real estate investment products. Such firms tend to see real estate investing as augmenting existing investment activities and providing their clients with a broader array of investment vehicles, supporting overall business growth; 2) many real estate-focused entities have successful track records managing capital from other sources (internal capital, friends and family capital, etc.); and 3) the early stage organization may consist of a team leaving a larger organization or a group that sees a business opportunity and combines resources.

These managers have different capabilities:

- Financial firm personnel may have existing institutional relationships resulting from the firm's other businesses; they may not necessarily constitute an emerging manager as much as an extension of the business lines of an existing, successful investment organization. As part of an established entity, they are very likely to obtain capital allocations from institutional investors without the support provided by an emerging manager program;

- The second group, with a strong real estate heritage, frequently comprises those skilled in real estate acquisition and management with a developed, but perhaps undocumented, track record. They often lack the ability to "speak the institutional investment language" and that precipitates their struggles to access institutional capital. This type of emerging manager frequently elects to enter the institutional investment management arena by designing and seeking capital for a fund. Often, prior experience is re-characterized as having included one or more "funds," such that the new offering can be described as the first "institutional" fund;
- Finally, the start-up or early stage organization frequently brings real estate skills, but lacks the broad range of capital formation capabilities and entity management skills necessary to effectively serve institutional capital providers. There is a natural progression to the growth of a real estate investment management firm.

The core team needs to demonstrate its real estate capabilities in some fashion in order to attract ongoing capital. One potential approach is to raise capital for a transaction (or several), demonstrating real estate investment and management capabilities. This can be followed by sourcing programmatic equity capital, allowing for the development and demonstration of discretion-in-a-box capabilities. During this period, as the investment portfolio grows and revenue increases, institutional infrastructure should be continually developed. Finally, assuming the emerging manager has performed well, the organization will be qualified to enter the fund management business should it so desire.

FINDING EACH OTHER IN A CROWDED MARKET

Finding each other in a crowded marketplace and initiating an appropriate dialogue is challenging for both investors and emerging managers. They don't necessarily occupy the same market space or share a common language. Emerging managers can recognize clear benefits from combining their real estate talent with institutional investor capital, so the issue for any emerging manager seeking institutional capital becomes how to best present its investment thesis, firm and real estate capabilities.

Investor Perspective

Initiating and overseeing relationships between institutional investors and emerging managers differs from working with established investment managers. Investors seeking to provide capital to emerging managers frequently have significant experience investing in real estate. Unfortunately, this is often a mixed blessing. An understanding of real estate investing and a thoughtful view of the attributes of a successful real estate investment manager is undeniably a valuable perspective. However, translating that knowledge into a successful selection process when not all desired attributes are present, which typically is the case for emerging managers, is not an easy task.

The challenge for institutional investors is to efficiently access the full universe of emerging managers to ensure they have the opportunity to partner with best-in-class. In this process, investors encounter numerous hurdles when initiating an emerging manager investment program. It is often difficult to identify those emerging managers most likely to succeed in both real estate investing and investment management and, while the investment opportunity may be sufficiently alluring to start the discussion, investors find that both underwriting and ongoing management of emerging manager relationships can be time-consuming relative to the size of the initial investment opportunity. Investors generally realize that mentoring is frequently necessary to protect their investment and support the manager's organizational growth. The need to balance investors' desire for appropriate control with the emerging manager's operating flexibility needs is often an additional challenge.

Few emerging managers will meet all of an institutional investor's capability and infrastructure expectations. Frequently they operate in an opportunistic fashion, tend to lack well-documented processes and practices (or operate differently from the existing documentation) and generally have limited internal research and administrative capabilities. To attract the support of institutional capital, emerging managers must provide comfort to institutional investors that their investment objectives will be met in a fiduciary environment.

Manager Perspective

Emerging managers often believe that the merits of their investment proposal and their capabilities are self-evident and so may struggle to comprehend why a single meeting fails to result in immediate funding. Against the backdrop of our discussion of investor challenges, what's an emerging manager to do? How should an emerging manager present its opportunity to institutional investors and how should the firm organize its business to maximize the likelihood that it will attract an institutional capital allocation?

Specific steps emerging managers can take to enhance the firm's attractiveness to institutional investors include:

- Develop a clear investment thesis. It should be supported by evidence that the team has considerable experience with the strategy and the target market(s).
- Present convincing evidence that the team has sustainable access to sufficient transaction flow for future investments. Investors must be persuaded that today's (relatively) small investment opportunity can grow into a program that provides returns impactful to their portfolio.
- Produce documentation of in-place processes that demonstrates adherence to well-defined underwriting and due diligence. Emerging managers must demonstrate compliance from the beginning, as any failure in disciplined adherence to planned processes likely will be viewed as a lack of appreciation for fiduciary responsibilities.
- Demonstrate the real estate operating capabilities of the senior team. It is preferable that the emerging manager provide a verifiable track record, but investors often can underwrite a firm's capabilities based on the prior experience of the principals. Emerging managers must accept that this type of due diligence will be extensive—and time-consuming. Investors will be seeking evidence that the team is likely to produce favorable returns from real estate value creation strategies.
- Present an organizational business plan that highlights platform viability. The investor effort to determine platform stability and financial viability is an opportunity, not an intrusion, as the examination will comfort the investor that the team will remain in place during the investment cycle. Investors expect a well-defined business strategy that incorporates fiduciary understanding and commitment.
- Meet institutional investor requirements for organizational infrastructure. Ideally, the emerging manager will build internal infrastructure prior to seeking institutional capital. Entities with existing businesses are expected to do this, and investors view this investment as a demonstration of commitment. However, this may be unrealistic for start-up and early stage emerging managers, as many are undercapitalized and have insufficient ongoing revenue to support a fully staffed organization. Emerging managers unable to initially build infrastructure because of capital constraints must develop a plan for outsourcing and managing necessary infrastructure required to operate the business.
- Engage or plan to engage institutional quality service providers including audit, legal, valuation and other professionals, as appropriate. This will help the emerging manager adapt to the communication, compliance and reporting requirements of institutional investors.

MEETING THE CHALLENGE

Investor Perspective

The challenge faced by an institutional investor in selecting emerging managers is identifying those that not only can successfully source investment opportunities and execute their strategy, but also understand and are committed to acting as investment fiduciaries. To tackle that challenge and invest with emerging managers, an institutional investor has two choices: 1) align or build a staff that understands the unique issues of emerging manager investing and has the time to devote to underwriting against smaller-than-average initial allocations; or 2) delegate program management to a specialized investment advisor or the investor's consultant.

Investing with emerging managers is more time consuming than working with established managers. Many institutional investors leverage their consultants' capabilities when developing and implementing such a program.

Key differences posed by investing with emerging managers include:

- The challenges for underwriting managers who do not possess a full-cycle track record of acquiring, managing and selling properties;
- The discomfort posed by potentially allocating discretionary capital to emerging managers despite less opportunity to observe their investment and management capabilities;
- The need for the investor to provide a portfolio management overlay as many emerging managers have a limited, and undiversified, investment focus;
- The need to provide ongoing mentoring or to participate in the oversight of the emerging manager's platform to maximize return potential and minimize risks;
- The smaller allocation size that can prudently be awarded to an emerging manager without overwhelming the firm's investment and management capabilities.

The investment selection process generally is practiced by the industry from the perspective of reviewing a track record to see how well the team has executed a strategy similar to that proposed. Often emerging managers have a limited track record, making assessment of potential performance challenging. So to find the most suitable real estate emerging managers, underwriting requires an expanded approach, which needs to be exhaustive and is likely to be time-consuming. However, this lengthy underwriting process presents a side benefit. Investing the time necessary to underwrite a team without an established track record provides insight into: 1) the likelihood of successful execution of their strategy; and 2) the management and organization dynamics critical to the long-term viability of the emerging manager and the planned relationship. As emerging manager investing is as much about picking people as anything else, time spent to thoughtfully assess an emerging manager team's capabilities provides the opportunity to gauge how the manager will operate going forward.

Should the time commitment required to accomplish this type of underwriting overwhelm the internal staffing time constraints of an institutional investor, the use of an investment advisor or consultant may be preferable. Through an investment advisor, an institutional investor can access any number of emerging manager relationships with a single point of contact, providing greater diversification for a given investment of staff time and avoiding the need to manage relationships related to small capital allocations. These advisors have developed underwriting processes and procedures designed to identify those teams most likely to produce superior returns relative to their peers. An investment advisor skilled in working with emerging managers can provide ongoing strategic guidance and mentoring to emerging managers in building and developing their businesses to meet the expectations of institutional capital providers. The advisors are familiar with structuring risk management programs and controls such as retaining discretion over investment selection and instituting strict regulatory compliance and reporting standards.

An institutional capital provider, having made a decision to invest with one or more emerging managers, either directly or through an investment advisor, will need to consider the amount of investment discretion it is willing to provide to the emerging manager(s). It is logical to assume that an institutional investor would grant less discretion to an unproven investment manager than to an established manager with a proven track record. However, one of the key advantages an emerging manager can offer is a first mover advantage gained through deep involvement with a property type and/or relationships within a geography. But to use this advantage, the emerging manager must be able to react timely to opportunities uncovered. Complicating the decision regarding the correct amount of investment discretion to provide the emerging manager is the fact that many of them, as local operators, have a specific property type, geographic, property life cycle and/or risk profile focus that is inherently undiversified. While the specificity of focus is often the reason for investing with a particular emerging manager, the institutional investor or its consultant or advisor will need to add a portfolio management orientation to the construction of the investment portfolio to manage concentration risk.

To fully benefit from establishing a relationship with an emerging manager, the institutional investor should strive to structure its relationship so that constraints exist at the level of the program structure, leaving flexibility to react to specific investments by the emerging manager. In other words, define the expected investments in any way desired and then allow the emerging manager to make investment decisions as long as the investment fits predefined criteria. Should an institutional investor want to participate in decision making at time-sensitive points, sufficient internal staffing should be available to do so without impairing timely execution. If staffing is not sufficient to assure this, it may be advisable for an institutional investor to work through an advisor structured to effectively interact with emerging managers.

Most emerging managers are small firms and do not possess the full suite of underlying capabilities generally required of managers to which institutional investors allocate capital. An institutional investor applying its typical manager assessment criteria often will inadvertently screen out most emerging managers. To establish an emerging manager program, an institutional capital provider likely will need to temporarily alter or waive certain standard organizational or non-real estate-related manager underwriting requirements. The key is to define the screens in a manner that allows only those emerging managers that meet the minimum prudent requirements to pass through.

Other standard requirements, desired but not critical, can be set aside temporarily during the initial stages of the relationship or achieved through other means. For instance, generally an institutional investor will expect a manager to have adequate research capability to identify and assess investment opportunities. As long as the emerging manager can demonstrate access to the information needed to provide a broad and localized economic back-drop and information regarding local property market conditions, the institutional investor should accept that the emerging manager accesses broader market research through third parties. Similarly, accounting and investor reporting can be outsourced to third parties or provided, in part, by a specialist investment advisor as part of the advisor's mentoring and business development assistance for the emerging manager. This frees the emerging manager from allocating its scarce operating resources to non-investment functions until its revenue stream develops sufficiently to incorporate qualified research, finance and accounting functions in-house. Generally, institutional investors have not needed to relax their underwriting standards in order to do business and so doing can pose internal approval issues that investment staffs may not be willing to recommend.

Compounding the challenges of considering an emerging manager investment program are concerns regarding investment platform viability. Less developed than established managers, emerging managers pose an additional risk to institutional investors—that of enterprise viability:

- Will the newly established team work well together?
- Does the firm have a credible financial plan showing adequate resources to operate and grow its business?
- Will it achieve sufficient success to retain its key principals?
- Will it generate sufficient revenues to fund the growth of the business?

Each of these issues must be carefully evaluated as their impact on the success of the program can be as critical as the investment strategy (i.e., the best deal may be only as good as the people executing it).

To offset the challenges and risks, investors must require emerging managers to demonstrate that the investment dollars allocated have a unique opportunity they would not have in the hands of established managers.

Manager Perspective

Emerging managers seek institutional capital primarily to secure access to reliable, competitively priced equity capital which enhances the manager's ability to be competitive in securing the best investment opportunities. It is challenging for emerging managers to attract the attention of institutional investors overwhelmed with available investment program opportunities through a substantial roster of managers. To do so requires a compelling investment thesis and detailed execution plan that offers an opportunity not readily available from known, established investment managers.

As described above from the point of view of an institutional investor, investment advisors/consultants can play a role in an emerging manager's business process. Rather than directly approach and secure an allocation from an institutional investor, an emerging manager can receive an allocation through a specialist in emerging manager investing. Prior to making this choice, an emerging manager should become familiar with how an advisor can improve the manager's chances of success in the capital formation process. Largely this choice between a direct approach and working through an advisor will depend on two issues: 1) the time the emerging manager has available to source investment capital; and 2) the extent of the firm's organizational infrastructure, including understanding of and relationships with institutional investors.

The lengthy time commitment to directly access institutional capital, which can require 18–24 months or more, may be too great for an emerging manager that would prefer to focus on its investment business. The alternate method an emerging manager can choose is to seek capital through an investment advisor operating an active emerging manager/joint venture investment program. Generally, investment advisors can provide an indication of potential interest or non-interest quickly, making capital sourcing through an investment advisor potentially more efficient than attempting to source capital directly from institutional investors.

Emerging managers often start as real estate operators and investors. As they begin their interaction with institutional investors, they find themselves needing to incorporate the expected fiduciary orientation. This requires very different business skill sets from those of real estate investing. Becoming an investment management fiduciary often requires developing conflict management procedures, and includes meeting institutional capital providers' requirements for investment underwriting diligence and investor communication and reporting. This is not to suggest that all emerging managers must internalize all of the various roles and responsibilities of investment fiduciaries. Some may choose to retain a single-minded focus on investing and value creation and leave portfolio management and fiduciary oversight to the institutional investor's staff, its consultant or an independent investment advisor. In some fashion, however, emerging managers must be able to convincingly demonstrate that risk management and control processes are incorporated into all aspects of the firm's decision making and operation. An independent fiduciary, consulting firm or outside advisor can provide valuable guidance for emerging managers uncertain about institutional infrastructure requirements. These experts can guide the manager in best practices that will help build capabilities to expand the business platform, formulate investment strategy and strengthen portfolio management. Such mentoring can accelerate the maturation of an emerging manager into a self-reliant institutional capital investment manager capable of satisfying fiduciary operating expectations.

The investment selection process practiced by institutional investors is a key component of operating their investment platforms and receives substantial time and attention from their investment staffs. Faced with the challenge of underwriting emerging managers, it is understandable that an institutional investor may choose simply to direct its capital to established managers having track records to underwrite. To overcome the automatic elimination generally associated with not having a track record of prior performance, the emerging manager must present a strong case for its investment skills. A "me-too" plan will not provide a rationale for an institutional investor to choose an emerging manager over an established manager offering a similar investment strategy.

The emerging manager seeking capital from an institutional investor will need:

- a business plan that includes a clear investment thesis supported by convincing evidence that the team has sustainable access to transaction flow for future investments;
- in-place processes that demonstrate adherence to well-defined underwriting and due diligence policies and procedures;
- a successful track record in the specific strategy being pursued, either as part of the current organization or as part of a previous organization;
- evidence that the senior team has considerable operating capabilities, backed by a successful track record in the specific strategy being pursued, and evidence of an ability to maximize returns through value creation strategies; and
- an investment and organizational development plan that demonstrates fiduciary understanding and commitment in all aspects of its proposed operation.

Assuming success in garnering the interest of an institutional investor or appointed advisor in allocating capital, an emerging manager must demonstrate enterprise viability and present a credible financial plan that shows adequate resources to effectively invest and manage the capital allocated and to operate and grow its business. A component of proving overall platform viability is demonstrating financial viability. Meeting the demands placed on managers for real estate operating and investment management capabilities is an expensive proposition for an emerging manager. Often the emerging manager is undercapitalized and the revenue stream from an initial allocation of institutional capital is insufficient to cover required overhead, even if the institutional capital provider agrees to relax some typical requirements. While it would be difficult for an emerging manager to suggest it should receive higher fees than appropriate for an established manager executing a similar program, the emerging manager may seek to accelerate revenue to support the development of its institutional service platform. Receiving compensation earlier in a program than might be typically approved by an institutional capital provider may position the emerging manager to grow its internal infrastructure in a fashion supporting investor interests. The accelerated revenue need not be incremental. In exchange, the emerging manager can offer a number of benefits such as an exclusive relationship that provides certain access to the manager's unique pipeline of investment opportunities; a higher preferred return on the institutional investor's capital; forfeiture of any general partner promote catch-up; a reduced share in the investment profits generated; or any other negotiated relationship that is mutually agreed.

Those emerging managers that can meet the demands of institutional capital providers and are awarded an allocation have passed through numerous capability screens. As a result, they have demonstrated an investment thesis and operating plan that position them as best-in-class, next generation real estate investment managers. Those that can meet the stringent requirements likely will find institutional investors and their advisors/consultants willing to adjust their practices and requirements to take advantage of their skills.

CONCLUSION

Who or what is to blame for the limited capital allocation to date of institutional capital to real estate emerging manager firms? It seems apparent that both sides should consider taking steps to facilitate an increase in such allocation. Emerging managers must demonstrate something of value that cannot be obtained through established managers. Institutional investors need to modify their internal processes to accept and support allocation of capital to those that can become the next generation of real estate investment managers.

There is no question that institutional investors pose high hurdles for emerging managers, but setting a high bar is appropriate. Institutional investors may be willing to temporarily modify their rules and requirements to facilitate allocating capital to those emerging managers that make it through their screens. It is unrealistic to expect to allocate capital to emerging managers if an institutional investor does not permit flexibility in its requirements for organizational infrastructure and internal capabilities.

Institutional investors offer emerging managers access to reliable, competitively priced capital. In return, emerging managers offer institutional investors economic and non-economic benefits not available through traditional established managers. The industry as a whole benefits as a greater number of capable investment managers are funded to offer a wider array of potentially successful investment opportunities.

ACKNOWLEDGEMENTS

Many industry participants have contributed to this article through our continuing discussions of how to increase the likelihood of institutional investors' embracing emerging manager investing. This author is grateful for their insights. Particular appreciation goes to Mark Albertson, with whom this author has compared notes on the subject for several years. We appeared on a panel in early 2013 to discuss the topic and walked away believing that the question "Why can't emerging managers emerge?" was getting shortchanged. This article is largely built around our discussions that followed the panel. ■

The Valuation of Houses of Worship During Prolonged Periods of High Unemployment

BY BRADLEY R. CARTER, CRE, MAI, CCIM

INTRODUCTION

WHILE RELIGIOUS SERVICE PROPERTIES ARE NOT BUILT OR operated for a profit, they do constitute a large part of the real estate market. Some sources report there to be more than 94,000 religious service properties in the United States,[1] some of which exceed one-half million square feet.[2] Religious service properties are like most other real estate assets in that their underlying demand typically stems either from growth or shifts in population or from changes in user requirements. Also similar to most other types of real estate, they are heavily influenced by prolonged periods of significant unemployment. They are, however, distinctive in many ways, and the stress brought to the market for religious service properties by prolonged high unemployment merits attention by anyone who buys, sells or estimates the value of this unique property type. An understanding of these issues is also essential to anyone who counsels others on these activities.

WHY RELIGIOUS SERVICE PROPERTIES ARE BOUGHT AND SOLD

The first step in understanding how much someone would pay for a religious service property, economic conditions aside, is to understand why these properties are bought and sold.

Experts on the valuation of this specialized property type traditionally had contended that trades of churches and other religious service properties were rare. Perhaps it is the greater supply of information that technology has brought us, but it is now widely accepted that these properties do sell, and often. As of February 2, 2013, CoStar Group reported in its database alone 2,634 religious facilities for sale throughout the country, with asking prices as high as $49 million.

As with most other property types, particularly those that do not generate income, the reasons they are bought and sold vary.

- **Moving Up:** Historically, religious service properties were often sold as congregations grew and required more space. The seller would vacate the property in favor of something larger and sell to a smaller congregation that was also expanding, much in the way that families have traditionally begun with starter homes and "traded up."
- **Moving Out:** Unlike the housing market, though, another reason that houses of worship often sell their properties is the result of a scandal that causes a sudden drop in membership and makes meeting occupancy costs unsustainable. There are numerous examples of pastors and other key leaders found to have engaged in inappropriate or even illegal activity, and the congregation's financial resources often plummet in a way that no one had envisioned.
- **Being Asked to Leave:** Not long ago the real estate owned (REO) department at most banks was a small room that was hard to find and seldom talked about.

About the Author

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That lenders sometimes took back properties was not something they liked discussed, and foreclosing on a religious service property was something on the order of public relations suicide. Those days are gone, and are unlikely to return soon. In many markets, lenders are the most common profile of seller. And in this regard, houses of worship are no longer considered sacred. In the Atlanta-Sandy Springs-Marietta, Georgia metropolitan area, for example, CoStar Group described 26 percent (six out of the 23) religious service property transactions that closed in 2012 as "REO sales," with a more in-depth analysis of this data suggesting that an even greater number could have involved lender-sellers. By comparison, CoStar Group described just 17 percent (491 out of the 2,937) of all Atlanta MSA non-residential real estate transactions in 2012 as an "REO sale."

PROPERTY ANALYSIS

Functional utility is critical, and there are several factors unique to this type of property. The most common denominations in most U.S. markets include Catholic, Protestant, Baptist, Methodist, Mormon and Judaism. From a real property perspective, there can be denomination-specific distinctions, although there is significant overlap in needs and preferences. A sampling of relevant issues follows:

- **Size-to-Seating Ratio**: The sanctuary should be an appropriate size for the property as a whole. A ratio of one square foot of sanctuary for every 40–60 square feet of total building area is considered typical. Within this range, a higher ratio of sanctuary space is typically considered desirable, as this is the costliest area to construct; however, a sanctuary that is too large to fill typically does not command a premium.
- **Land-to-Building Ratio**: Excess or surplus land usually commands a premium so that congregations have the potential to expand (as opposed to relocate). Moreover, large sites typically can accommodate more parking, a major concern for many congregations.
- **Layout**: A religious facility often will include classrooms and a fellowship hall. For larger properties, the presence or lack of a gymnasium can be important, as integrating non-religious uses into the property has become one way that houses of worship attempt to deepen ties with parishioners. Similarly, day care centers also have become important components of many religious service properties.
- **Floor Plan/Design**: Religious facility floor plans often reflect the differences in worship. Architecture of Roman Catholic churches stresses the altar as the focus of worship. Protestant churches emphasize the congregation and are built so that everyone can see the minister. Baptist churches typically include a baptismal with a viewing panel and adjoining changing rooms.
- **Equipment**: The sale of a religious facility will typically include the organ, pews and kitchen equipment.
- **Past Uses**: Some denominations will not purchase or use a facility that has previously been used by particular groups, because of beliefs and/or ceremonies that they regard as having defiled a property.

POSSIBLE ADAPTIVE RE-USE

Given the special-use nature of religious service properties, lenders often are interested in knowing the possible alternative uses for such a property. The answer is often "few," and sometimes "none," but it depends on the property and its market. One alternative use that often works well is a school, which shares many of the physical characteristics and design features of typical religious service properties. Given that suburban houses of worship often are developed on large sites, complete redevelopment of the improvements also may be an option. Many apartment markets thrive during periods of high unemployment, and many houses of worship are on residentially zoned sites, so redevelopment for apartment use is sometimes worth considering. Well-located urban religious service properties in areas where land is scarce also can be prime redevelopment candidates even though their sites typically are much smaller than those found in suburban areas.

MARKET RESEARCH AND SPECIAL-USE PROPERTIES

A fundamental market analysis is one that forecasts demand based on segmentation of broad demographic and economic data to reflect a given submarket.[3] This type of analysis is well-suited for properties built on a speculative basis, and can guide developers in their decisions on when to deliver more product. When retail sales increase, retail developers know more shopping centers are needed, and when job growth ramps up, office developers know more offices are needed. Special use properties rarely are built on a speculative basis, though, and in the case of religious service properties, they are usually constructed in response to the need of a specific user as opposed to a broad indication of a market supply/demand imbalance. It is, however, still necessary to gauge demand in some way in order to anticipate what market response could be expected if a given property were to be offered for sale.

In the absence of reliable quantitative techniques to measure demand, a thorough qualitative analysis is needed. The best source of this information is usually attained by conducting a series of firsthand interviews with those experts who have the most knowledge to share about a given market. While relying on anecdotal evidence of market trends can be unsettling, when opinions are gathered from a variety of highly qualified sources, and those opinions prove to be consistent not only with each other but also with whatever factual market data exists, it can form a solid foundation for a credible estimate of value.

- **Step 1 – Scope of information needed**: The best first step is usually to determine, at least in a general sense, how much market knowledge is needed for the task at hand. For example, if valuing a 5,000-square-foot religious service property in an area with plenty of recent sales of similar properties, some of the steps prescribed below may not be necessary. However, if valuing a 500,000-square-foot religious service property that is not truly similar to anything recently sold anywhere in the country, the steps prescribed below may not be enough.
- **Step 2 – Questions that must be answered**: The next step is to identify and list the types of questions that must be answered to form an educated opinion on what would happen if the property in question were exposed to the market. In general, the best questions a counselor developing an opinion of value can ask are those that would be asked by (or in the minds of) prospective purchasers. The following are some questions that may be relevant:
  - Are there currently buyers in this market actively seeking property?
  - What would be the profile of the target/most likely buyer for a property such as the one being analyzed?
  - Is there financing available for such a purchase?
  - How deep is the pool of potential purchasers that have the ability to execute a transaction?
  - How would a buyer go about pricing such an asset?
  - What are the economic trends in this particular neighborhood, and where is it in the real estate cycle?
  - What are the other relevant marketability issues?
- **Step 3 – Who has the answers?** Once a list of questions is developed, a list of experts qualified to render meaningful answers must be identified. Most major metropolitan areas have brokers who specialize mostly or exclusively in the marketing of religious service properties; these people will usually be the best source of information. There also are brokers who specialize in the marketing of these properties on a national basis, and every local market area has brokers who have sold a broad variety of property types including houses of worship. Any broker who has sold a house of worship may have valuable thoughts to offer, but take care to distinguish opinions of the most qualified sources from the others. In determining whose opinions are the ones to take most seriously, keep in mind:

- How long have they been involved in the marketing of religious service properties?
- Is the bulk of their experience in the market area of the property being valued?
- Have they been involved in many transactions of properties similar in size, appeal and general category of pricing?
- Do they have any professional designations, or any other generally recognized credential that distinguishes them as experts?

Particularly during periods of economic uncertainty, one will find that brokers active in the marketing of houses of worship in lower income areas may have little insight into marketing properties in upper income areas (and vice versa).

When researching the availability of financing, be sure to speak with lenders who have actually made recent loans on this type of property, and perhaps even with those who specialize in this area. Other experts who may be worth speaking with are appraisers with significant knowledge of this market, site selectors with experience in this niche, and church congregants who have personally been involved in the purchase or sale of such a property.

Firsthand research is typically best as it is fresh, market-specific and, when done properly, most reliable. Even the best firsthand research, though, can be supplemented by timely publications and other information sources. For example, according to the National Council of Churches' 2012 *Yearbook of American & Canadian Churches*, nearly $29 billion was contributed in the most recent year by nearly 45 million church members, which is down $1.2 billion from figures reported in the previous year. Rev. Dr. Eileen Lindner, the book's editor, reported that the decline "took place in the context of ongoing high unemployment and a protracted economic downturn.[4] As will be evident further on in this article, prices for religious properties have dropped sharply; knowing that contributions are down $1.2 billion can be very helpful in understanding this trend.

ALL REAL ESTATE IS MARKET-SPECIFIC—EVEN CHURCHES

Markets can be segmented in a number of different ways: What drives the Seattle market may not be relevant in Miami; trends in low-income areas may not apply to high-income areas; and challenges specific to older properties may actually benefit the market for newer properties. While unemployment and other adverse economic influences affect virtually all properties within the afflicted areas, they do not affect them in the same way or to the same extent. For example, only a small minority of "megachurches"[5] report financial struggles. Referring to houses of worship that are very large, *A New Decade of Megachurches - 2011 Profile of Large Attendance Churches in the United States* reports: "Only 6 percent say [their] church's financial health is in some or serious difficulty."[6] This would seem to suggest that the impact of a weak economy has had less of an effect on larger houses of worship, although they are far from immune. This study goes on to note: "However, half say they felt the effects of the economic crisis adversely and presently 5 percent fewer churches report their financial health as excellent compared to 5 years ago. … Nearly all the megachurch[es] felt the recession as a result of an increase in individual needs. This was evident in the program emphasis on job training and financial counseling. Likewise requests for help increased to differing degrees for nearly all megachurches in terms of cash assistance, counseling, emergency housing and unemployment support of the membership."

Whether these broad observations translate to a specific geographic market, and if so to what extent, will depend on many factors. That macroeconomic influences have an uneven impact on different markets, and even on different segments of a given market, underscores the importance of the local, firsthand, market-specific research described previously that can be tailored to answer these (and other) questions.

THE IMPACT OF DONATIONS ON THE PURCHASE PRICE DECISION

Some brokers who specialize in the marketing of houses of worship report that pricing is a function of what has been described as a "reverse income approach" or "modified income approach." Essentially an exercise to calculate how much debt a congregation can service, this technique has limited applicability for a seller seeking to learn market pricing. The amount of donations a congregation collects, though, has a direct impact on what price it, as a buyer, can pay; therefore, general tithing trends have a strong influence on demand, pricing and ultimately market value. One broker, citing pastors with whom he had recently spoken, reported that as a result of the spike in unemployment that accompanied the recession "attendance is down 20 percent and tithing is down 57 percent" from pre-recession levels. This information is both time-sensitive and market-specific and would be inappropriate for use as a broad-based industry metric; it is, however, an example of the type of market information that can be uncovered through good research. While neither the declines in attendance nor tithing are documented, and the preciseness of both is suspect, when such information is consistent with other anecdotal reports and/or factual market trends, it is worthy of consideration. More specific to the question of how donations affect the purchase price decision, it would seem self-evident that a buyer of any given product can no longer afford to pay the same price after some event has cut its income stream by 57 percent (or whatever other large number market participants are speculating in a particular market suffering from a weak economy).

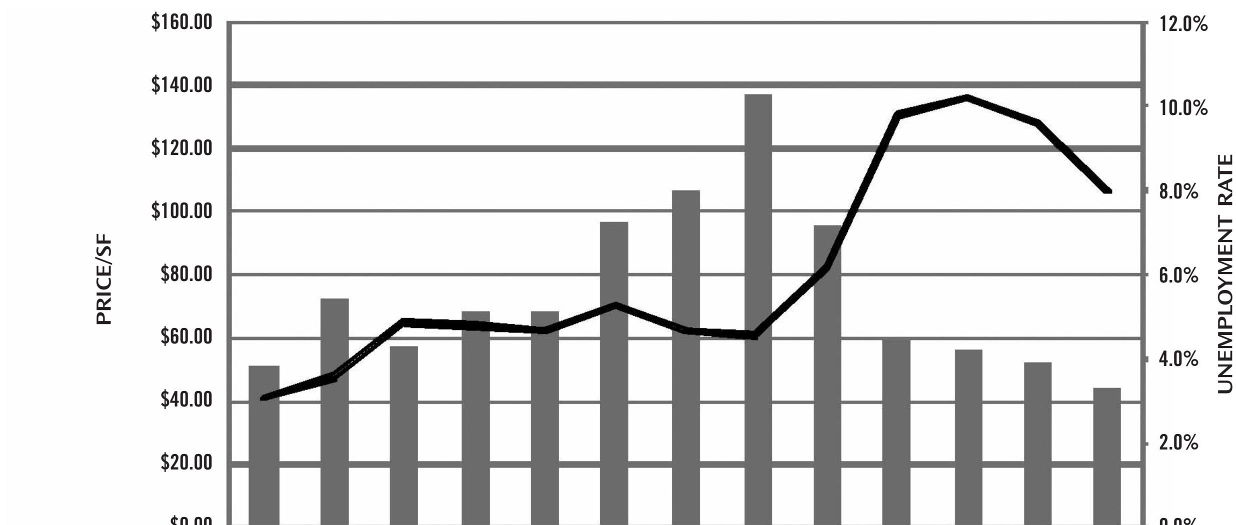
UNEMPLOYMENT TRENDS VS. TRENDS IN SALES OF RELIGIOUS SERVICE PROPERTIES

As discussed previously, buyers of church properties are often motivated by the desire to "move up" to a larger property. Since houses of worship rely on donations to fund large purchases, both through their equity contribution and ability to qualify for financing, the number of unemployed members of the congregation has an enormous impact on the ability to buy a larger property. If the congregation's financial situation is dire enough, it could even compromise the church's ability to remain in the current property. Trends in sale prices during prolonged periods of high unemployment can be seen in Figure 1.

There is a clear correlation between unemployment trends and average price per square foot, as is evidenced beginning in 2008. Although the drop in prices is attributable to economic problems greater in scope than merely unemployment, the previously described link between what congregants can donate and what buyers in this market can afford is inescapable; similarly, when congregants are unable to tithe, it also increases the level of motivation of sellers in this market as houses of worship attempt to deal with deteriorating budgets. As is

Figure 1

Religious Service Properties - Price/SF vs. Unemployment Rate



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Average Price Per SF	$51.53	$72.69	$57.67	$68.80	$69.05	$96.60	$106.87	$137.06	$95.37	$59.78	$56.58	$52.12	$43.98
Unemployment Rate	3.1%	3.6%	4.9%	4.8%	4.7%	5.3%	4.7%	4.6%	6.2%	9.8%	10.2%	9.6%	8.0%

Source: Georgia Labor Market Explorer, citing data from the Georgia Department of Labor, and CoStar Group
Geographic Area: Atlanta-Sandy Springs-Marietta (Georgia) Metro Area.
Note: Sale data excludes multiple transactions of the same property on the same day and also multi-property transactions.

evident from Figure 1, though, the price trend does not vary directly with changes in unemployment. What is also evident is that periods of extended (or chronic) unemployment have an aggregating downward influence on prices.

Many religious groups have been caught in a downward spiral. The following are some observations from data presented in Figure 1:

- **2000–2007**: During this period of generally low unemployment, prices rise precipitously; an analysis of the transactions shown in Figure 1 indicate that the average price per square foot in in 2007 is 166 percent higher than in 2000, and the compounded annual gain during this period is 15 percent.
- **2008**: As a large number of congregants lose their jobs, or begin to fear losing their jobs, tithing drops and church finances become less stable. The average price per square foot in the sample shown in Figure 1 drops 30 percent between 2007 and 2008, and brokers in this market cite unemployment as the main reason.
- **2009**: Unemployment eases, but not by enough to relieve the financial distress and fear that accompanied the financial crisis. Further, while the unemployment rate drops slightly, the length of time for those out of work grows as the economic downturn continues. The average price per square foot in this sample (see Figure 1) drops another 37 percent from the previous year, and a total of 56 percent from 2007. The main reason is still high unemployment, but is now better described as chronic high unemployment. That many of the financially weakest congregations lost their properties to foreclosure in late 2008 and throughout 2009 aggravates the market weakness and contributes to the descent in pricing.
- **2010–2011**: Unemployment continues to ease, but again, not by enough to trigger price recovery; average prices continue to soften.
- **2012**: Following four years of high unemployment, even religious groups that were once financially sound are now under pressure. Foreclosures continue, and sellers continue to be highly motivated with few qualified buyers available. The average price per square foot in this sample (see Figure 1) is now 68 percent lower than the peak of 2007.
- **Sanity Check**: A good analyst constantly checks and re-checks his or her working premise. As noted

previously, a local broker specializing in this market reported that tithing has fallen by 57 percent. The accuracy of this statement could not be verified—and it is unclear whether the accuracy of such a statement is even verifiable. While unsourced and tenuous statistics should make a conscientious analyst nervous, opinions that seem to dovetail with what factual data does exist should serve as a source of comfort. If the average price per square foot in a given market has fallen by 68 percent, doesn't it seem plausible that tithing is down by some similarly large number? Even if neither figure is precisely correct, the story behind what is driving this market and in what direction seems clear.

- **Outlook**: Until there is greater employment stability, it appears unlikely that the negative pricing trends will reverse. Lenders are becoming an increasingly large share of sellers in this market, and are demonstrating a willingness to use aggressive pricing to dispose of assets. As a corollary to this observation, the number of lender-owned properties has far surpassed the point of critical mass that requires traditional sellers to be price-competitive with these lender-sellers.

'WHAT CAN YOU SELL IT FOR?' AND THE COST APPROACH

The cost approach is based on the understanding that market participants relate value to cost.[7] A cost approach is developed using the following steps:

A. Estimate the cost of new improvements.
B. Deduct physical depreciation.
C. Deduct all forms of non-physical obsolescence.
D. Add the value of the underlying land.

The cost approach is highly relevant when supply and demand are generally in balance. However, when demand exceeds supply, the depreciated cost tends to be less than what one could sell a property for; conversely, when demand is less than supply, the depreciated cost is usually greater than a property's value. Prolonged high unemployment degrades the relationship between cost and value because the debt a congregation can service is severely compromised when congregants are out of work, causing value to fall. By comparison, the impact unemployment has on construction costs is not nearly as direct or profound.

Given that chronic high unemployment affects what properties actually can be sold for to an extent far greater than it affects replacement cost, the key using the cost approach to develop a credible estimate of value is to find a way to measure the impact of adverse economic conditions on achievable sale prices; this is often the essence of step C ("deduct all forms of non-physical obsolescence").

Property values suffering a loss due to outside or external influences is known as external obsolescence;[8] when that external influence is a weak economy, it is known as economic obsolescence. The impact of high unemployment should be reflected in each transaction of a similar property that occurred during similar economic conditions. Therefore, the impact of high unemployment on property values can be extracted from recent sales. The impact will not be identical from transaction-to-transaction, and unemployment is just one of the factors that influence sale price; however, analyzing multiple examples can yield highly meaningful, if not exactly precise, results.

In general terms, the process of extracting the impact of adverse economic influences from comparable sales can be described as follows:

A. A recent comparable is selected, and its sale price is identified.
B. The value of the property's underlying land is deducted, and the residual is the contributory value of the improvements.
C. The comparable's physical depreciation is estimated, usually by dividing its effective age by its economic life.
D. The replacement cost of the building is estimated;
E. By deducting physical depreciation from replacement cost, the depreciated cost of the building improvements is estimated (D – C = E).
F. A similar process is done to reflect site improvements. (Alternatively, a simpler method would be to combine building and site improvements, although segregating these components is recommended for properties with large paved parking areas.)
G. The sum of the replacement cost of the building less physical depreciation and the cost of the site improvements less physical depreciation yields to the total replacement cost of the improvements less physical depreciation.
H. The value of the property's underlying land is added to the depreciated cost of improvements, and the result is an estimate of what the property would have sold for absent obsolescence.
I. The difference between the actual sale price and what the property would have sold for absent obsolescence (step H) is the amount of obsolescence expressed as a dollar amount.

J. Dividing the amount of obsolescence expressed as a dollar amount by the replacement cost less physical depreciation yields an estimate of obsolescence expressed as a ratio of depreciated cost (I ÷ G = J).
K. By applying this process to multiple comparables, multiple indications of obsolescence will result; these indications can then be analyzed and reconciled.

More specifically, Figure 2 provides a demonstration of how this technique can be applied.

Some words of caution are needed regarding this technique. Perhaps the most obvious point of trepidation is that this process is very subjective. A subjective estimate is better than a guess, but it is important to recognize the limitations of any technique. At the bottom of Figure 2 is a warning that may be appropriate if one is preparing a report of valuation that will be looked at by others. Numbers have a way of coming across as very factual, so it is important not to mislead others into thinking that a numerical valuation technique is rooted in science. Also relevant is that this technique captures all non-physical depreciation, whether wanted or not, so the deductions do not simply reflect economic obsolescence—they reflect any functional obsolescence as well. Ideally, the comparables analyzed will not have a significant amount of functional obsolescence, so this will not be material. In the absence of such comparables, one must be sure to recognize that the amount of economic obsolescence is only a portion of the total obsolescence reflected.

Given the amount of data available to extract obsolescence, and its reliability, it may be advisable to attempt to confirm or refute the results of this exercise using whatever additional indications can be found. The following excerpt was taken from a recent appraisal of a religious service property whose market was severely affected by prolonged unemployment: "Multiple brokers personally involved in transactions in this market expressed the opinion that values had declined by at least 50 percent from pre-recession levels." A few words of caution are needed to make use of this type of information.

- Off-the-cuff statistics by brokers, or anyone else, are typically more anecdotal than fact-based, and should be viewed as such.
- The impact by which values have declined and the amount of economic obsolescence are related concepts—but they are not exactly the same. The biggest difference in this example is that the 50 percent drop in values reported by brokers would reflect both land and improvements, whereas economic obsolescence relates specifically to improvements (as the land is valued separately).

Anecdotal evidence such as this would be less than ideal as the basis of an analysis, but may be appropriate to help support the conclusions of a quantitative analysis. Moreover, such observations may even capture elements of a dynamic market that cannot be seen by looking at numbers. Further, if multiple sources of anecdotal evidence point in the same general direction, this data as a whole is still imperfect—but is worth contemplating. In short, if multiple brokers with significant experience in a market say values had declined by at least 50 percent from pre-recession levels, the declaration does not express the amount of economic obsolescence that would be attributable to the improvements of any given property; it does, however, suggest that the number would be fairly large.

THE SALES COMPARISON APPROACH IN A TURBULENT MARKET

The sales comparison approach involves making comparisons between the property being valued and those that have sold or are listed for sale, and is most useful when a number of similar properties have recently sold or are currently listed for sale in the market area being studied.[9]

The first step is to gather the data necessary to develop a credible analysis. Current listings are very useful in markets where fundamentals are shifting, and are an excellent supplement to closed transactions. Sales and listings of similar properties used for valuation purposes are often called comparables. Ideally, the perfect data set would include very recent transactions and listings of very similar properties in the immediate market area, with each comparable being a plausible alternative to a hypothetical purchaser of the property being valued. Realistically, the data selected will be heavily influenced by what data is available; that is true for the valuation of any property, but is a particularly salient point for special use properties. For properties that are very large or otherwise atypical for their market area, it is sometimes appropriate and necessary to expand the search for comparables to a regional or even national basis. It also may be necessary to become flexible in other search parameters as well, including analyzing dated transactions that do not fully reflect current market conditions.

Once an appropriate data set has been found, the next step is to make adjustments to the prices of the

Figure 2

Economic Obsolescence Market Extractions

	Comparable A	Comparable B	Comparable C
Sale Price	$5,850,000	$4,900,000	$3,755,000
Sale Date	May, 2012	December, 2012	September, 2012
Land Area in AC	17.02	19.42	8.24
Building Size in SF	45,000	40,000	38,700
Year Built	2004 and 2006	1991, New Roof 2008	2002
Effective Age at Sale (in Years)	7	15	10
Economic Life of Building	50	50	50
Depreciation Factor - Building	14.0%	30.0%	20.0%
Depreciation Factor - Site Improvements	25.0%	50.0%	50.0%
Building Cost New/SF	$200.00	$200.00	$170.00
Building Cost New	$9,000,000	$8,000,000	$6,579,000
Site Improvement Cost/AC	$100,000	$100,000	$125,000
Site Improvement Cost New	$1,702,000	$1,942,000	$1,030,000
Total Cost New:	$10,702,000	$9,942,000	$7,609,000
Depreciation - Building	($1,260,000)	($2,400,000)	($1,315,800)
Depreciation - Site Improvements	($425,500)	($971,000)	($515,000)
Total Physical Depreciation	-$1,685,500	-$3,371,000	-$1,830,800
Physically Depreciated Cost	$9,016,500	$6,571,000	$5,778,200
Land Value per AC	$90,000	$65,000	$90,000
Land Value	$1,531,800	$1,262,300	$741,600
Physically Depreciated Cost + Land	$10,548,300	$7,833,300	$6,519,800
Less Sale Price	$5,850,000	$4,900,000	$3,755,000
Equals Economic Obsolescence	$4,698,300	$2,933,300	$2,764,800
Economic Obsolescence as a % of Depreciated Cost	**52%**	**45%**	**48%**

The reader should be aware that while there are many subjective variables in such an exercise, its intent is to show a general indication of any obsolescence that may exist. We have tested this exercise, and found that our stated conclusion of substantial obsolescence would still be relevant even if minor changes were made to some or perhaps even several of the variables.

Source: Greystone Valuation Services Database comparables to reflect significant differences between them and the property being valued. Once the price of a comparable has been adjusted to reflect these differences, the adjusted sale price becomes an indication of value for the property being analyzed.

Following are some thoughts that may be useful in making adjustments to the comparables:

- Assuming some of the comparables are current listings, remember that asking prices usually do not reflect an amount that a buyer has agreed to pay, and they are typically higher than those that result from a negotiation. In evaluating how large an adjustment is appropriate, consider available information regarding the listing period and the market's reaction to the asking price. For example, if a religious service property has been on the market for a year with no offers and little interest from potential buyers, it seems clear that the price is not sufficiently competitive to achieve a sale; in this case, the appropriate adjustment would have to be large enough to reflect that this level of pricing has essentially been rejected by the market. However, what if the asking price had been lowered at some point during the year it was listed, and is now drawing considerable interest from qualified buyers? In that scenario, it would seem that a far more modest adjustment would be appropriate. Another common situation is to find that a listing has been available for several years. If that is the case, and there have been no price reductions, in a declining market the appropriate adjustment may be extraordinarily large to reflect that not only is the market currently rejecting this level of pricing, but it also rejected it at a time when values were generally higher. In other words, if the property was overpriced when prices were higher, it is even more overpriced after values drop. If information can be obtained regarding offers of the properties listed, this can be extremely helpful in developing meaningful adjustments. As with most segments of the real estate industry, properties are worth less than the seller is asking, but more than a buyer's initial offer.
- Assuming some of the comparables that reflect closed transactions are not extremely recent, adjustments for changes in market conditions will likely be appropriate. In the current market that would mean, among other things, that selling a property after a prolonged period of high unemployment is more challenging than it would be in a healthier economy. While the market's sensitivity to high unemployment is not unique to churches, it does merit special attention. Changes in values do not necessarily correlate directly with changes in average sale price, but the general directions will usually look pretty similar. Analyzing current listings is often helpful in developing adjustments to reflect current market conditions, as is interviewing brokers currently attempting to market similar properties.
- While developing a sales comparison approach for a religious service property is similar to that of any other non-income producing property, there are certain characteristics specific to this property type. As discussed previously, one important consideration for a religious service property is its size-to-seating ratio, as greater seating capacities typically reflect a property's capacity to accommodate a larger congregation. Also relevant is that sanctuaries often reflect high quality construction, and reflect high per-square-foot costs. Appropriate size-to-seating ratio adjustments will reflect a property's having more or fewer seats per square foot of total building area compared with the comparable being analyzed. Another important consideration for houses of worship is the need for overflow parking. Having surplus land for an office property may not do much to drive value, but larger sites typically enhance a church's marketability to an extent greater than for most other property types.

After data has been selected and analyzed, each comparable should indicate a value for the property being studied. By giving greatest consideration to the most relevant data, and less consideration to the rest, the various indications can be reconciled to a single estimate of value. During periods of prolonged unemployment, it's usually best to give greatest consideration to the most recent transactions. However, if thoughtful adjustments were made to reflect changes in market conditions, less recent transactions may be meaningful as well. Listings often reflect the high end of the range of values that may be appropriate. Unless there have been credible offers, they rarely reveal what a property can sell for—but knowing what a property *cannot* sell for is sometimes of enormous importance.

SUMMARY

Like most other real estate assets, the market for religious service properties is heavily influenced by prolonged periods of significant unemployment. An understanding of how and why chronic high unemployment affects this market is needed by anyone who buys, sells or estimates the value of these properties, as well as counselors whose guidance is sought on these matters.

Religious service properties are bought and sold for a variety of reasons, and during periods of economic duress financially distressed sellers, short sales and properties sold out of foreclosure become more prevalent. Unemployment, specifically, affects this market, as it suppresses tithing, which can degrade a congregation's ability to make large purchases and/or meet current financial obligations. Further, when the period of high unemployment is protracted, there is an aggregating affect, so that the weakening of this market compounds over time as the problem persists.

Estimating the value of a religious service property during such a period becomes somewhat complicated, but is still possible. ■

ENDNOTES

1. The United States Churches Database published by *www.data-lists.com* and updated November 12, 2012, reports there to be 94,435 religious service properties in the U.S.
2. Carter, B., personal research, February 2013.
3. Fanning, Stephen F., "Market Analysis for Real Estate," Appraisal Institute, 2005.
4. A March 20, 2012, report issued by the National Council of the Churches of Christ, *http://www.ncccusa.org/news/120209yearbook2012.html.*
5. A megachurch is a church that typically has weekly attendance of about 2,000 people or more. Source: Warren Bird and Scott Thumma, "A New Decade of Megachurches - 2011 Profile of Large Attendance Churches in the United States," Leadership Network and Hartford Institute for Religion Research, November 22, 2011.
6. Ibid.
7. *The Appraisal of Real Estate*, *Thirteenth Edition*, Appraisal Institute, p. 142.
8. External obsolescence is defined as "an element of depreciation; a diminution in value caused by negative externalities and generally incurable on the part of the owner, landlord or tenant." *The Dictionary of Real Estate Appraisal*, *Fifth Edition*, Appraisal Institute, p. 73.
9. Op.cit. at 8, p. 141.

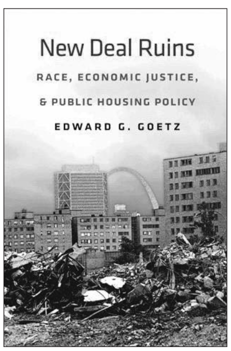
RECOMMENDED READING

New Deal Ruins: Race, Economic Justice & Public Housing Policy

©2013, *Cornell University Press*, 239 pages

REVIEWED BY PETER C. BURLEY, CRE, FRICS

"The fact is that public housing came to ruin in Chicago" ~Edward G. Goetz, *New Deal Ruins: Race, Economic Justice & Public Housing Policy*



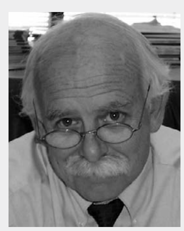
EDWARD GOETZ AUTHORS a comprehensive history and review of the public housing domain in the United States. His account is, at times, quite penetrating in his analysis of the extent of failures of public housing efforts, at times pedantic in his presentation and, at times, illuminating in his discussions of the arguments that form both sides of the public housing debate. It's a pretty good read, but like many academic studies that have been expanded into books, there were times I really wanted to go out and play instead. Despite that, it is an important topic, and Goetz handles it thoroughly and well, as one would expect of someone who has focused 15 years (according to Goetz) on the subject.

Goetz dives into his narrative with a discussion of the "dismantling of Public Housing" and the ongoing historical arguments both in favor of and opposed to the very notion of public housing. From the beginning, public housing has been "(h)ailed by progressive reformers and housing advocates, public housing was vociferously attacked by real estate interests and others who called it socialism…" And, now, he notes, "we are in a period when conflicts about public housing are resolving themselves in a nationwide effort to dismantle the program. " And, while "dismantle" means, in fact, "demolish," sometimes with redevelopment and sometimes not, it also means "conversion" to other uses.

We have moved from an approach that removes the slum and relocates it to public housing facilities, often becoming economically (and racially) concentrated high-rise war zones (in the image of St. Louis' Pruitt-Igoe housing complex, which was literally blown up in 1972) to a newer policy prescription of mixed-use, mixed-income housing that spreads poverty out into the community (in ways, perhaps that make the economically and racially disadvantaged somewhat less visible).

Goetz reviews the political debates, the policy decisions and the shifts from New Deal to New Liberalism, from government initiative to public-private partnerships and

About the Reviewer



Peter C. Burley, **CRE**, **FRICS**, *is director of the Richard J. Rosenthal Center for Real Estate Studies, REALTOR® University, in Chicago. A real estate market and economics research professional with extensive executive experience building and managing strategic investment research platforms in the real estate industry, Burley is recognized for his analyses of national and regional economic, demographic, industry and property market trends and for his development of real estate portfolio investment strategies. Prior to becoming director of the Center, he was vice president of Research at Simpson Housing LLLP, a multi-family development and management firm, and director of Research at Amstar Group LLC, a private global investment firm. Burley holds graduate and undergraduate degrees from the University of California where he also taught urban economic geography, regional geography and quantitative methods. He is a Counselor of Real Estate (CRE), A Fellow of the Royal Institution of Chartered Surveyors (FRICS), A Fellow of the Hoyt Institute, and a member of the Advisory Board of the Real Estate Research Institute (RERI).*

LIHTC programs. He also points to the many successes of the public housing programs that actually dominate the public housing landscape, despite the negative media accounts of the obvious failures in such places as Chicago, St. Louis and Atlanta. Interestingly, hidden beneath the crime, drugs and desperation evident in West Side Chicago and St. Louis are stories of community, families and homes.

The idea of public housing wasn't really such a bad one, even for those who might be politically opposed to government interventions into economic matters. Herbert Hoover recognized that housing was an important entry point for economic stimulus, but simply could not bring himself to implement such an effort. Franklin Roosevelt was able to use the Depression to justify numerous public works projects, including initiatives that were aimed at clearing the nation's slums and, at the same time, creating much needed affordable housing in their place.

Unfortunately, in the post-war economic recovery, white residents were able to quickly recover from economic adversity, to make use of new homeownership assistance programs (FHA) and to remove themselves rather easily from the urban public housing system and out into the new and growing suburbs. The African American community began to view public housing as a decent alternative for affordable housing. And, as whites continued to move out into the suburbs, the public housing projects became ever more racially identified. As with most of the book, Goetz puts data to the discussion of post-war racial and class concentration: "Though African Americans make up less than 15 percent of the population, they constituted 48 percent of the residents of public housing nationwide in 2000." In larger cities, he notes, two-thirds of public housing residents were African American; and, in Washington and Detroit, virtually all public housing residents are African American.

With political support for public housing never secure, the shift from serving "the deserving poor" to "marginalized single-parent, welfare and minority families" has led to consistently underfunded public housing entities and a "steady disinvestment … from the commitment to provide safe, decent and affordable housing through public ownership."

No spoilers here. There are times that reading through the specifics of Goetz' discourse tends to be mind-numbing. He is detailed and thorough in recounting the projects that were disastrous in St. Louis, Atlanta and, especially, in Chicago. There could have been a little more discussion of some of the public housing successes which, he reminds us, have been the norm rather than the exception. A more comprehensive discussion of public housing would require that. But, that isn't his purpose in this book, which is to look at what has become of the public housing policy debate and the changes that have ensued in the public housing domain since the New Deal.

And, also, it is about where we might go from here. To that, Goetz offers some policy prescriptions that may be of use to city planners, and to those who have interest in participating in the public housing arena. Among those policy suggestions:

- **End the Demolition of Public Housing**. The worst projects have been "dealt with." The remaining projects can be "preserved."
- **Phase in Redevelopment**. This enables residents to remain in the community while portions of a project are redeveloped.
- **The "Right to Remain."** This includes tenant-driven requirements for moving into a new unit in a redeveloped site.
- **One-for-One Replacement.** All units that have been lost to demolition should be replaced.
- **Preserve Affordable Housing in Redevelopment Areas**. A greater mix of incomes can be achieved providing lower-income households the opportunity to benefit from upgrades in a neighborhood.
- **Build More**.
- **Monitor the Racial Impact of Public Housing Policies**.
- **Expand Voluntary Mobility Programs**. Some people may simply "wish to leave." The Moving to Opportunity program was designed to provide the means necessary for people to move out of public housing projects, and Goetz suggests it should be restored.

Goetz' studious review of the history and legacy of public housing offers a solid, in-depth perspective of the successes and failures of public housing in the U.S. At times pedantic, or perhaps wonkish, he does reveal perhaps the most important aspect of the long, often contentious, policy debate on public housing:

"Often lost in these dynamics are the struggles of the very low-income families living in public housing. Their experiences in the dismantling of public housing should have more bearing on events and on the course of policy than has been the case." ■

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