

# SCOTT R. MULDAVIN, CRE, FRICS

## **The Muldavin Company, Inc.**

44 Waterside Circle  
San Rafael, CA 94903  
(415) 235-5575  
smuldavin@muldavin.com

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### **PROFESSIONAL EXPERIENCE**

The Muldavin Company, Inc., President.  
Delos, Senior Advisor  
Green Building Finance Consortium, Executive Director  
Rocky Mountain Institute, Senior Fellow, Finance and Valuation  
Guggenheim Real Estate, Co-Founding Principal  
The Roulac Group, Managing Director  
Deloitte, Partner in Charge of Real Estate Consulting, Southwest Region.  
Deloitte, Senior Manager, Real Estate Consulting Group,  
Deloitte Haskins & Sells, Manager, Real Estate Consulting Group  
Kenneth Leventhal & Company, Senior Real Estate Consultant.  
California Department of Housing and Community Development, Research Analyst  
East Bay Municipal Utilities District, Research Assistant

### **PROFESSIONAL DESIGNATIONS**

Member of The Counselors of Real Estate (CRE)  
Fellow of the Royal Institute of Chartered Surveyors (FRICS)  
Certified Management Consultant (CMC) (Past)

### **EDUCATION**

Master of City and Regional Planning (MCRP), Harvard University  
Bachelor of Arts in Environmental Studies (BA), University of California, Berkeley

## PROFESSIONAL AFFILIATIONS

### Current

- The Counselors of Real Estate, Member, 2017 Chair
- Royal Institute of Chartered Surveyors, Fellow
- Urban Land Institute, Full Member
- National Association of Realtors, Affiliate Member
- American Real Estate Society, Professional Member
- Advisory Board, *RERC Real Estate Report*
- Editorial Board, *Real Estate Finance*
- Editorial Board, *Journal of Sustainable Real Estate*
- Council Member, Nat. Institute of Bldg. Sciences, Council on Finance, Insurance & RE
- Royal Institute of Chartered Surveyors, European & US Sustainability Task Forces

### Select Prior

- Institute of Management Consultants, Certified Management Consultant
- Advisory Board, Global Real Analytics
- Pension Real Estate Association
- Mortgage Bankers Association
- National Association of Real Estate Investment Trusts
- International Real Estate Society
- Editorial Board, Real Estate Issues
- Editorial Board, Real Estate Capital Markets Report
- Advisory Panel, US Department of State's Bureau of Overseas Building Operations
- Advisory Board, Commission for Environmental Cooperation
- California Energy Commission, HERS Advisory Panel
- Advisory Board, Washington DC PACE

## **PROFESSIONAL BACKGROUND**

Scott Muldavin, CRE, FRICS, is Chair of the Counselors of Real Estate and a Senior Advisor to Delos®, founder of the WELL Building Standard®. For the last ten years, as Executive Director of the Green Building Finance Consortium and Senior Fellow with Rocky Mountain Institute (RMI), he has led the movement to scale sustainable property investment through improved financial analysis that fully integrates health, wellness, productivity, and energy benefits into sustainable property investment decisions.

The foundation of Mr. Muldavin's work in health and sustainability is his 30+ years of experience in the real estate industry. He serves as President of The Muldavin Company, Inc., a private consulting firm serving the real estate industry; was a lead real estate consulting partner at Deloitte; co-founded Guggenheim Real Estate, a multi-billion dollar private real estate company; served on the Advisory Board of Global Real Analytics, an advisor to \$2 billion of REIT and CMBS funds; and has completed over 300 consulting engagements involving real estate finance, investment, valuation, securitization, corporate real estate, and sustainability.

### **Equity Real Estate Investment**

Mr. Muldavin has extensive experience in real estate equity investment. Prior to co-founding--Guggenheim Real Estate, he served as a real estate consultant to CalPERS, OSTRS, and other pension funds, and worked with Prudential, Deutsche Wealth Management (RREEF), Metropolitan Life, GSIC Realty and other private investment managers on their investment, management, and capital raising strategies. He has also tracked, advised, and invested in the public REIT market for decades.

As a founding principal and investment committee member of Guggenheim Real Estate, a private real estate open-end investment fund, Mr. Muldavin was actively involved in investment decision-making, due diligence, joint venture structuring, project finance, securities analysis, and investment manager screening and evaluation. He has reviewed hundreds of retail, office, industrial and multi-family investment opportunities throughout the United States, as well as investments in mezzanine loans, B-piece investment, funds, preferred equity, and REITs.

Mr. Muldavin has advised numerous real estate companies considering and implementing new REIT securities offerings. He has advised institutional investors, including the State Teachers' Retirement System of Ohio and The California Public Employment Retirement System, regarding REIT investment issues. As an investment committee member of Guggenheim Real Estate, he monitored the REIT market and participated in investment decisions concerning the allocation of nearly \$300 million in REIT investments. Mr. Muldavin also served on the Board of Advisors of Global Real Analytics, which advised on the management of over \$ 2 billion of REIT and Collateralized Debt Obligation securities.

Mr. Muldavin has completed strategic research on critical investment and business questions ranging from worldwide real estate portfolio allocation strategies to special reports on new financing or investment vehicles, property markets, and business opportunities. Mr. Muldavin has published his work in numerous articles and reports on a wide range of investment, finance, and economic topics.

### **Real Estate Finance and Securitization**

Mr. Muldavin is a leading expert on real estate finance and the capital markets. In addition to his pioneering work for the Green Building Finance Consortium, Standard & Poors Corporation, Guggenheim Real Estate, and scores of other real estate finance and investment companies, he is on the Editorial Board of *Real Estate Finance*, has served as the Capital Trends Expert for the Urban Land Institute's National Program Committee, authored a quarterly "Real Estate Finance Update" in *Real Estate Finance* for 16 years; developed the industry's first Real Estate Capital Flows Index, and has authored scores of articles and reports on capital markets trends, pricing, valuation, underwriting, mezzanine financing, and related topics.

As Founder and Executive Director of the Green Building Finance Consortium, Mr. Muldavin has applied his expertise in underwriting, due diligence and property decision-making practices to develop sustainable property underwriting and valuation methods and practices. His book on underwriting and valuing sustainable properties is based on his experience and scores of interviews and meetings with lenders, rating agencies, investors, and other capital providers. He advises universities, governments, professional associations and companies about improving their underwriting and due diligence practices in light of changes in market risks and sustainability trends.

Mr. Muldavin has been involved in the commercial mortgage-backed securities industry since it's beginning in 1984. He was the lead consultant that developed the first commercial mortgage risk-rating system for Standard & Poor's Corporation that initiated the \$1 trillion+ CMBS industry. He developed models to quantify mortgage risk and rate CMBS loans and pools based on extensive loan file reviews and interviews with Metropolitan Life, Prudential, Aetna, Travelers, New York Life, Bank of America, Dime Savings, and other leading financial institutions concerning their underwriting, servicing, and historic mortgage performance.

As a national leader of the Real Estate Financial Institutions practice for Deloitte, he worked with financial institutions to improve their underwriting and servicing systems, assess risks in their mortgage portfolios, estimate loan losses and develop new organizational structures and systems to assist them in accessing the CMBS market. He was also a member of Deloitte's Resolution Trust Fund task force.

Mr. Muldavin has worked with CMBS conduit lenders like Finova Realty Capital and Nomura, insurance companies like Standard Mortgage Investors, and banks like the Silicon Valley Bank to assist them in their underwriting and understanding of the CMBS industry and their mortgage production and servicing platforms. Mr. Muldavin also served on the Advisory Board of Global Real Analytics, an advisor managing over \$1.5 billion of REIT and CMBS securities. Through his involvement with Guggenheim Real Estate, and their investment in ARCap's High Yield CMBS Fund, LLC, he is familiar with the investment opportunities, risks, due diligence, and servicing of "B-piece" buyers.

Mr. Muldavin also has experience in the mortgage business from the perspective of a borrower. At Guggenheim Real Estate, significant leverage was placed on direct property investments through the use of conduit, bank, and insurance company mortgages. Additionally, he has advised borrowers in structuring and accessing real estate capital for over 25 years, work he has continued in his role as Executive Director of the Green Building Finance Consortium.

## **Property Analysis and Valuation**

Mr. Muldavin has been involved in hundreds of real estate valuation, feasibility, or due diligence analyses for clients. As the Partner in Charge of the real estate appraisal practice at Deloitte on the West Coast, he had direct responsibility for all real estate appraisal work performed in his region.

Mr. Muldavin has conducted portfolio valuations, partnership valuations and valuations involving many unique property and business assets. Select engagements of particular interest include his creation of a methodology to value shares of limited partnerships in the secondary market; valuation of a portfolio of hotels, offices, and industrial properties in the first major bankruptcy of a Japanese syndicator; valuation of a \$3 billion diversified development company; valuation of a national mortgage banking and servicing company; valuation of a portfolio of major department stores; and valuation of an 11,000 property apartment portfolio.

Mr. Muldavin has assisted clients with environmentally impaired properties including John Mansville, Ace Insurance, and Universal Studios. He has also been involved in evaluating numerous leases in the context of acquisitions, workouts and litigation.

Mr. Muldavin's study of "Technology and the Demand for Commercial Real Estate", published by *The National Association of Realtors*, provided a framework and new insights for understanding property values in the future. His book: "*Value Beyond Cost Savings: How to Underwrite Sustainable Properties*" and "Expanded Chapters provide over 600 pages of detailed valuation and property analysis instruction which is used by many Universities. His work in "*How to Calculate and Present Deep Retrofit Value to Owner Occupants (2014) and Investors (2015)*" provide new practical ways to value non-energy cost saving benefits of sustainable property investment.

Mr. Muldavin's expertise in valuation is a central part of his industry-leading role to develop valuation methods and practices for sustainable properties. He is working closely with leading appraisal groups worldwide including the Appraisal Institute and the Royal Institute of Chartered Surveyors.

## **Transaction Structuring and Due Diligence**

Mr. Muldavin has been directly involved in the structuring, valuation and due diligence of real estate property and business transactions. He was a leader of the real estate valuation and transaction practice while at Deloitte and had similar roles in other firms. He has completed valuation and due diligence engagements involving the acquisition of office buildings, retail properties, hotels, multi-family properties, industrial properties, large land parcels, mortgage portfolios, mortgage companies, commercial banks, real estate service companies and other real estate assets.

Mr. Muldavin has specialized expertise in conducting due diligence on new business and investment opportunities. Mr. Muldavin has evaluated new real estate investment sectors for pension funds, new business-lines for investment banks, new product opportunities for financial institutions and investment managers, and new information products and services for national real estate information firms.

As an advisor and Investment Committee member of Guggenheim Real Estate, Mr. Muldavin reviewed scores of retail, office, industrial and multi-family investment opportunities throughout

the United States, as well as investments in mezzanine loans, B-piece investment, funds, preferred equity, and REITs.

Mr. Muldavin's work with the Green Building Finance Consortium builds on his expertise through the identification of current underwriting and due diligence best practices and necessary modifications in practice to accommodate assessment of sustainable properties from a "fiduciary/financial" perspective.

## **Corporate Real Estate**

Mr. Muldavin was also a leader in the corporate real estate practice at Deloitte and throughout his career has advised corporations such as Texaco, Nissan Motors, Pacific Enterprises, Phoenix American Corporation, Universal Studios, Johns Manville, House of Blues, and many others on their leasing, acquisitions, and real estate strategies. His recent collaboration with CoreNet Global, the leading corporate real estate executives professional group, on "Next Generation Energy Management" and capital investment decision-making has continued his work in this sector.

## **Business Strategy**

Mr. Muldavin has worked extensively with real estate companies and service providers to clarify and focus their business strategies, improve operations, and communicate their financial and organizational strengths to potential customers, capital sources, partners, Boards of Directors, and others. Mr. Muldavin has developed business strategies for individuals and smaller private companies; international real estate services firms, Internet companies, pension funds, insurance companies, investment managers, banks, investment banks, corporations, and developers.

## **Litigation Experience**

Mr. Muldavin has applied his business and investment experience as an expert witness or litigation consultant on behalf of scores of plaintiffs and defendants in civil, bankruptcy and criminal matters in various courts (Municipal, Superior, and Federal) and alternative dispute resolution settings including arbitrations and mediations. Mr. Muldavin has experience as an expert witness in complex real estate damages and securitization cases as well as cases involving business practices and responsibilities of general partners, lenders, developers, governments, investment managers, service providers, securities firms and other participants in the real estate and finance industries.

## **Sustainability Experience**

Mr. Muldavin formed the Green Building Finance Consortium in 2007 with the support of leading companies and real estate professional groups including the Pension Real Estate Association (PREA), Building Owners and Managers Association International (BOMA), the Urban Land Institute (ULI), the National Association of Realtors (NAR), the Mortgage Bankers Association (MBA), CoreNet Global, the Royal Institute of Chartered Surveyors (RICS) and the Counselors of Real Estate (CRE).

The Consortium's mission is to dramatically scale sustainable property investment by enabling a complete assessment of the value and risks of investment—employing financially based decision-making methods consistent with traditional private sector practices. Mr. Muldavin's 2010 book: *Value Beyond Cost Savings: How to Underwrite Sustainable Properties* was the first



to detail how investors and occupants can integrate value and risk into sustainable property decisions to help companies maximize profits while making the deep energy efficiency and renewables investments necessary to meet societal imperatives to reduce carbon emissions.

Since 2011, Mr. Muldavin has continued the work of the Consortium with the Rocky Mountain Institute's Deep Retrofit Value project, producing two new practice guides: *How to Calculate and Present Deep Retrofit Value for Owner Occupants* (2014) and a companion guide for Investors published in April 2015. These guides provide practical methods to assist companies and service providers better calculate and present sustainable property risk and value, complimenting his other work in energy management, retrofit strategies, sustainable finance, and education.

Mr. Muldavin joined Delos®, founder of the WELL Building Standard®, as a Senior Advisor in 2015 to continue his efforts to scale sustainability investments through a rigorous assessment of their financial performance. Delos's investment in measuring and codifying health and wellness provide a strong foundation for analyzing the "value beyond energy cost savings" that are key to the financial performance of sustainability.

Mr. Muldavin is a leading figure in international collaborations tackling sustainable property valuation and finance challenges. He has advised/collaborated with the Department of State, US General Services Administration, Urban Land Institute, CoreNet Global, BOMA International, the National Association of Realtors, the US Department of Energy, Strasbourg EnergieVie Cluster, Royal Institute of Chartered Surveyors, National Institute of Building Sciences, World Business Council for Sustainable Development, Washington DC (PACE), the California Energy Commission and many others.

## **Speaking, Publications and Academics**

Mr. Muldavin has lectured on real estate finance, mortgage lending, risk management, securitization, investment and sustainability at the Urban Land Institute's Development School, UC Berkeley, Wharton, Stanford University, the Massachusetts Institute of Technology, Tulane University, University of Colorado, New York Academy of Science, Lawrence Berkeley National Laboratories, the University of Georgia, Torcuato Di Tella University, the Tokyo Land Forum, and the Chinese Ministry of Land and Resources as well as in company training sessions and other venues.

He also speaks regularly at forums sponsored by the Urban Land Institute, the Mortgage Bankers Association, the Royal Institute of Chartered Surveyors, the National Council of Real Estate Investment Fiduciaries, the Pension Real Estate Association, Greenbuild, the American Real Estate Society, the National Association of Real Estate Investment Managers, the National Association of Industrial and Office Parks, the Counselors of Real Estate, the Appraisal Institute, the Building Owners and Management Association, the Canadian Life Insurance Association, and at scores of other forums.

His speaking and publications have been international in scope. He has addressed business and academic audiences in North America, South America, Europe, Asia, and Australia. He was an advisor to an international consortium involved in developing guidance for the 2015 COP21 climate negotiations in Paris and has advised the Department of State on building and sustainability issues as part of their Industry Advisory Panel on Overseas Building Operations.

Mr. Muldavin regularly consults with students and professors regarding their research projects and master and PhD theses. Select examples include sustainable finance and valuation research at UC Berkeley's Haas School of Business, the University of Pennsylvania, Clemson University, the University of Colorado, and Rutgers University. Mr. Muldavin selectively participates on PhD. dissertation committees including a student examining the "Geography of Capital Flows" at the University of Washington, a student working on "Integrating Value and Uncertainty in Sustainable Options Analysis" at Virginia Tech, and a student at Clemson University doing a dissertation examining sustainable property decision-making.

As an Executive Committee Member and Chair of the Education Committee for the Counselors of Real Estate and member of the Urban Land Institute's National Program Committee, he has taken a lead role in numerous national conferences involving hundreds of educational sessions and scores of speakers covering the topics of investment and economic trends, valuation, underwriting, capital markets, international capital flows, corporate real estate, and other key real estate topics. He has also chaired the Counselors of Real Estate's External Affairs Committee.

In addition to his 2010 650 page book: "Value Beyond Cost Savings: How to Underwrite Sustainable Properties" and Chapters contributed to "Real Estate Mathematics" and "Sustainable Real Estate Investment" in 2011, Mr. Muldavin has authored over 200 books and articles published in *Real Estate Finance*, *Bankers Magazine*, *RICS Property World*, *Urban Land*, *European Real Estate Yearbook*, *The Journal of Property Management*, *The Pension Real Estate Quarterly*, *Real Estate Issues*, *The Investment Property and Real Estate Capital Markets Reports*, *Institutional Investor*, *Builder and Developer*, *The Real Estate Accounting and Tax Journal*, and other industry publications. Mr. Muldavin has served on editorial advisory boards of *The Real Estate and Capital Markets Report* and *Real Estate Issues* and is currently an Advisory Board member of the *Journal of Sustainable Real Estate* and on the Editorial Advisory Board of *Real Estate Finance*.

## **Education**

Mr. Muldavin has a bachelor's degree in Environmental Studies from UC Berkeley and a Masters in City and Regional Planning from Harvard University. The Counselors of Real Estate and the Royal Institute of Chartered Surveyors have both awarded Mr. Muldavin their highest level of professional certification recognizing his real estate and consulting expertise. Mr. Muldavin is the 2017 Chair of the Counselors of Real Estate.



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## PARTIAL CLIENT LIST

**Scott R. Muldavin**

### **Investors**

Alaska Permanent Fund Corporation	Mitsui Trust and Banking
Amstar Group, Ltd	Prudential Real Estate Investors
CalPERS	Seligman & Associates
CalSTRS	Shamrock Holdings
GSIC Investment Corporation	State Teachers Retirement System of Ohio
Hunt Realty	

### **Investment Managers**

Birtcher Pacific	Kilroy Realty Corporation
Catellus Development Corporation	Maruko
Equitable Real Estate	McMorgan & Company
Guggenheim Real Estate	Metropolitan Life Insurance Company
Global Real Analytics	Deutsche Wealth Management(RREEF)
Principal Real Estate Investors	Seagate Properties

### **Lenders**

Admiral Insurance Company	Great West Life Assurance Company
Bank of America	Home Savings
Farmers Insurance Group	Howard Savings Bank
Federal Deposit Insurance Corporation	Merchants National Bank
First Bank Systems	Silicon Valley Bank
First Nationwide Bank	Standard Mortgage Investors
Glendale Federal Bank	Valley Federal Savings and Loan
	Wells Fargo Bank

### **Finance Companies**

Buchanan Street Partners	Merrill Lynch
Finova Realty Corporation	Nomura Securities
Freddie-Mac	Warburg Pincus
Federal Deposit Insurance Corporation	UBS

### **Corporations**

Aerojet Corporation	Nissan Motor Corporation
Best Products	Pacific Enterprises
All Nippon Airways	Phoenix American Corporation
House of Blues	Texaco
Hallmark Corporation	Universal Studios
Johns Manville	

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**PARTIAL CLIENT LIST (continued)**  
**Scott R. Muldavin**

**Developers**

Arlie Land & Cattle Company  
Brookfield Development Company  
Barrett American  
Carr Gottstein Properties  
Divco West  
Grupe Development Company  
The Keech Development Company

Marene Friedburg  
McGuire Thomas  
Metropolitan Development Company  
Parkmead Partners  
Pacific Bay Homes  
Sierra Pacific Development Company  
Summa Corporation  
Universe, LLC

**Service  
Providers**

ARUP  
CBRE  
Century 21  
COMPS, Inc.  
eReal Estate Integration  
Global Real Analytics

Multifamily Housing Institute  
National Association of Realtors  
PricewaterhouseCoopers  
Seagull Technology  
Standard & Poor's Corporation  
Property Capital.com

**Law Firms**

Alschuler, Grossman, Stein & Kahan  
Arter & Hadden  
Barg, Coffin, Lewis & Trapp  
Cahill, Gordon & Reindel  
Cooley Manion Jones  
Folger, Levin & Kahn  
Frilot, Partridge, Kohnke & Clements  
Gaims, Weil, West & Epstein  
Gardere Wynne Sewell  
Holland & Knight  
Latham & Watkins  
Lathrop & Gage  
Lewis, D'Amato, Brisbois & Bisgaard  
Loeb & Loeb

Long & Levitt  
Luce, Forward, Hamilton & Scripps  
Melrod, Redman & Gartlan  
O'Melveny & Myers  
Russ, August, Kabat & Kent  
Sedgwick, Detert, Moran & Arnold  
Sheppard, Mullin, Richter & Hampton  
Stein & Lubin  
Steptoe & Johnson  
Tarkington, O'Neill, Barrack & Chong  
U.S. Department of Justice  
Williams & Connolly  
Wasser, Cooperman & Carter

Note: Partial list of clients served by Scott Muldavin.

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## PUBLICATIONS

“Capturing the Full Value, Sustainability Investors will Prosper when they treat sustainability as an integral part of real estate asset value, IPE Real Estate, November/December 2015.

“How to Calculate and Present Deep Retrofit Value for Investors”, Rocky Mountain Institute, April 2015.

“Financing Small Commercial Building Energy Performance Upgrades, Challenge & Opportunity”, Council on Finance, Insurance, and Real Estate, National Institute of Building Sciences, Contributing author, January 2015.

“Waters Emerging Role in Real Estate Investment”, Counselors of Real Estate External Affairs Alert, January 2015.

“Next Generation Energy Management, A Roadmap to the Next Level of Performance” CoreNet Global and RMI, April 2014.

“How to Calculate and Present Deep Retrofit Value for Owner Occupants”, Rocky Mountain Institute, January 2014.

“The Missing Link: Transforming Deep Retrofit Financial Assets Into Financial Assets”, Corporate Real Estate Journal, Spring 2014.

“The New Calculus: Technology + Energy + Real Estate”, Urban Land institute, June 2013.

“Special Considerations in Sustainable Property Financial Analysis”, Sustainable Investment in Real Estate, Chapter 15, PEI, Fall 2011.

“All Aboard”, Institutional Real Estate letter, Market Perspective, November 2011

“Special Considerations in Sustainable Property Financial Analysis, Real Estate Mathematics, Chapter 7, PEI, Summer 2011.

“Learning Curve”, IP Real Estate, November/December 2010

“*Value Beyond Cost Savings: How to Underwrite Sustainable Properties*”, 300 page book, GBFC, January 2010.

“*Value Beyond Cost Savings: How to Underwrite Sustainable Properties*”, six Expanded Chapters, 650 pages, GBFC, January 2010.

“Ten Principles of Sustainable Property Valuation and Underwriting”, *Property World*, Royal Institute of Chartered Surveyors, Fall 2009.

“Consortium Building Sustainable Building Decision-Making Infrastructure”, *Investments and Pensions Europe*, April 2008.

“Financial Assessment of Sustainable Properties”, *European Real Estate Yearbook*, January 2008.

“Putting Green in Your Pocket”, *Expectations & Market Realities in Real Estate: 2008*, November 2007

“Strategic Response to Sustainable Property Investing”, *Pension Real Estate Quarterly*, Summer 2007.

“Financing Green Development”, Co-authored with Andy Fuscas, *Urban Land Green Magazine*, Spring 2007.

“Tapping into the Green Agenda”, Guest Column, *Investments & Pensions Europe*, January/February 2007.

“The Green Quotient, Q&A with Scott Muldavin”, Interview, *Urban Land Magazine*, October 2006.

“Technology and the Demand for Office Space”, *REALTORS Commercial Alliance Newsletter*, December 2003

“Technology and the Demand for Commercial Real Estate”, *National Association of Realtors Membership*, October 2003

“Capital Discipline Challenged in 2003”, *Real Estate Finance*, April 2003.

“Market Contradictions Confuse Capital Market Forecasts”, *Real Estate Finance*, December 2002

“Capital Markets Stabilize Real Estate Economy”, *Pension Real Estate Quarterly*, Summer 2002

“Breaking the Transaction Gridlock”, *Real Estate Finance*, Summer 2002

“Understanding Uncertainty and the Capital Markets”, *Real Estate Finance*, Fall 2001

“The New World of Real Estate Finance”, *Real Estate Finance*, Summer 2001

“Today’s Tech Strategy” “Integrate, Integrate, Integrate”, *Journal of Property Management*, July/Aug. 2001

“Capital Market Volatility Creates Profit Opportunities”, *Real Estate Finance*, Spring 2001

“Economic Uncertainty Clouds Capital Market Outlook”, *Real Estate Finance*, Winter 2001

“Evolution of Real Estate Finance”, Waronzof Newsletter, Winter 2000

“Technology Stimulates Capital Market Changes”, *Journal of Property Management*, November/December 2000

“Capital Markets Adapt to Equilibrium”, *Real Estate Finance*, Fall 2000

“Does Mezzanine Real Estate Investing Make Sense Today?” *Real Estate Finance*, Summer 2000

“Capital Markets Now Value Management”, *Journal of Property Management*, July/August 2000

“Internet Influences on the Real Estate Capital Markets”, *Real Estate Finance*, Spring 2000

“Common Sense Alive in the New Millennium”, *Real Estate Finance*, Winter 2000

“Think Intelligently, Act Globally”, *Real Estate Finance*, Fall 1999

“The Real Estate Industry Paradox”, *Real Estate Issues*, Summer 1999

“Mortgage Markets Robust as CMBS Market Recovers”, *Real Estate Finance*, Summer 1999

“Capital and Property Market Trends”, Weekly in *Finova Faxlink*, 43 publications, Feb. 1999 to Feb. 2000

“Risk Management in the New Millennium”, *Real Estate Finance*, Winter 1999

“Making Data and Technology Pay”, Multi Family Housing Institute, *Multifamily Trends*, Spring 1999

“Smoother Flows Ahead After Roller Coaster Ride in 1998,” *Pension Real Estate Quarterly*, January 1999

“Capital Flows, The Big Picture,” *Investment Property & Real Estate Capital Markets Report*, January 1999

“Securities Volatility Complicates Capital Outlook,” *Pension Real Estate Quarterly*, Fall 1998

“Does Size Matter? Trends in Real Estate Finance and Operations,” *Real Estate Finance*, Fall 1998

“Capital Flows, the Big Picture,” *Investment Property & Real Estate Capital Markets Report*, October 1998

“Surge in Capital Flows Continues,” *Pension Real Estate Quarterly*, Summer 1998

“Capital Flows, the Big Picture”, *Investment Property & Real Estate Capital Markets Report*, July 1998

“Due Diligence Enhancements For the 21<sup>st</sup> Century,” Annual American Real Estate Society Meeting, Spring 1998

“Records Fall in Overall Capital Flows: Securitization Shifts into High Gear,” *Pension Real Estate Quarterly*, Spring 1998

“Capital Flows: The Big Picture, Dramatic Increase in CMBS Activity,” *Investment Property and Real Estate Capital Markets Report*, May 1998

“Capital Flows: The Big Picture, Debt Flows Surge,” *Investment Property & Real Estate Capital Markets Report*, March 1998

“Fish, or Cut Bait?” *Real Estate Finance*, Spring 1998

“Capital Flows Index,” *Pension Real Estate Quarterly*, Winter 1998

“Real Estate Capital Market Trends and Applications,” *Real Estate Issues, Special Edition on Capital Formation*, January 1998

“Capital Flows Index, The Pulse of the Market,” *Pension Real Estate Quarterly*, Fall 1997

“The Old and the New Dominate Real Estate Finance Today,” *Real Estate Finance*, Winter 1998

“Public Markets Bolster Capital Flows,” *Real Estate Capital Markets Report*, Nov. 1997

“Party On, Capital Markets Show Steady Growth,” *Real Estate Capital Markets Report*, Oct. 1997

“Net Asset Value Premiums,” *Real Estate Finance*, Summer 1997

“Bring in the Heavy Artillery, REITs Bombard Property Markets,” *Real Estate Capital Markets Report*, July 1997

“Mortgage Lender Opportunity and Peril,” *Real Estate Finance*, Spring 1997

“Capital Flows Continue to Flood Market” *Real Estate Capital Markets Report*, May 1997

“New Frontiers of Capital, the Geography of Commercial Real Estate Capital Flows,” *American Real Estate Society Annual Meeting*, April 1997

“Weakening Stock Market Could Boost Real Estate,” *Real Estate Capital Markets Report*, April 1997

“Capital Markets Due Diligence,” *Real Estate Finance*, Winter 1997

“Mounting Capital Flows Push Down Yields, Tighten Spreads,” *Institutional Real Estate Universe*, Dec. 1996

“Increased Transaction Activity Stimulates Strategic Changes,” *Real Estate Finance*, Fall 1996

“More Capital Fuels Competition, Pumps Up Prices,” *Institutional Real Estate Universe*, Sept. 1996

“Moving Beyond Real Estate: Investment Picking,” *Real Estate Finance*, Summer 1996

“Size of Capital Markets Approaches 1990 Peak,” *Real Estate Capital Markets Report*, Spring 1996

“Capital Markets Continue to Heat Up: Investors Cite Need for Caution,” *Institutional Real Estate Universe*, March 1996

“Making Sense of Real Estate Capital Market Information,” *Real Estate Finance*, Spring 1996

“Demystifying the ‘Four Quadrants’ of Real Estate Investment,” *Real Estate Finance*, Winter 1996

“Capital Flows: Life Companies Increase Lending Activity,” *Real Estate Capital Markets Report*, (Fall 1995)

“Tapping the Power of Real Estate Capital Market Knowledge”, *Real Estate Finance*, Fall 1995

“Capital Flows: Investment Activity Tapers off after Year-end Push”, *Real Estate Capital Markets Report*, Summer 1995

“Real Estate Capital Markets Key to Market Timing or It’s the Capital, Stupid!” *Real Estate Finance*, Summer 1995



“Capital Flows: Improving Property Markets Spur Rising Investor Activity,” *Real Estate Capital Markets Report*, Spring 1995

“Capital Market Diversity Challenges Borrowers, Lenders, and Investors,” *Real Estate Finance*, Spring 1995

“Interest Rates Throttle Loan Origination, Real Estate Securities,” *Institutional Real Estate Universe*, March 1995

“Recent Trends in Real Estate Finance,” *Real Estate Finance*, Winter 1995

“Capital Flows: CMBS Issuance on Record Pace Despite Adversity,” *Real Estate Capital Markets Report*, Fall 1994

“Capital Flows: Pension Funds to Increase Real Estate Equity Holdings,” *Real Estate Capital Markets Report*, Summer 1994

“Recent Trends in Real Estate Finance,” *Real Estate Finance*, Summer 1994

“Market, Not Capital Constraints, Paramount in 1994,” *Real Estate Finance*, Winter 1994

“Strategic Considerations in Mortgage Servicing,” *The Bankers Magazine*, September/October 1994

“Creative Financing Abounds, But New Investors Still on the Sidelines,” *Real Estate Finance*, Fall 1993

“A Quarterly Survey of Commercial Finance,” *Real Estate Finance*, Summer 1993

“Real Estate Financing Market Takes Positive Steps Forward,” *Real Estate Strategies*, Spring 1993

“A Quarterly Survey of Trends in Commercial Financing,” *Real Estate Finance*, Spring 1993

“Toward the New Strategic Paradigm: The Conceptual Framework for the Body of Knowledge,” *ARES Annual Meeting*, Spring 1993

“New Growth in Non-Traditional Financing,” *Real Estate Strategies*, Winter 1993

“Apartment Financing Gets A Boost,” *Los Angeles Business Journal*, February 1993

“Real Estate Financing Trends,” Supplement to *Los Angeles Business Journal*, February 1993

“Down Market Makes Fertile Ground for Non-Traditional Financing,” *Builder and Developer*, December 1992

“Real Estate Finance Update: New Source of Apartment Capital,” *Builder and Developer*, November 1992

“A Quarterly Survey of Trends in Commercial Financing,” *Real Estate Finance*, Summer 1992

“Economic Forces Keep Grip on Real Estate Financing,” *Builder and Developer*, July 1992

“Solving Corporate Real Estate Problems,” *Real Estate Accounting and Taxation*, Fall 1992

“Real Estate Financing Update,” *Real Estate Strategies*, Summer 1992

“Reducing Occupancy Costs: Capitalizing on Today’s Down Market,” *Real Estate Accounting and Taxation*, Summer 1992

“A Quarterly Survey of Trends in Commercial Financing,” *Real Estate Finance*, Spring 1992

“Property Returns and REIT’s,” *Builder and Developer*, May 1992

“Outlook Brightens for Homebuilders,” *Real Estate Strategies*, Spring 1992

“Workout Negotiations: Being Prepared,” *Real Estate Accounting and Taxation*, Spring 1992

“Financial Re-Trenchment and the Development Cycle,” *Builder and Developer*, March 1992

“Real Estate Financing Update,” *Builder and Developer*, January/February 1992

“An Alternative Explanation of the Real Estate Downturn: Lessons for the Future,” *Real Estate Accounting and Taxation*, Winter 1992

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<sup>1</sup> Primary contributions were research, analysis, and editing.