Qualifications of Randall Bell, PhD, MBA, MAI

Dr. Bell specializes in real estate damage economics and valuation. This includes environmental, geotechnical, construction defects, natural disasters, eminent domain and other conditions involving a wide variety of property types. He is experienced in complex valuation and diminution-in-value studies and damage issues for government, major corporations, oil and utility companies and property owners. He is licensed in various states and has testified as an expert in multiple courts.

Education

<u>Doctoral Studies</u>: Fielding Graduate University, PhD, Human and Organizational Systems – Dissertation: *Post Traumatic Behaviors: The Socioeconomic Reasoning of Homeowners Who Voluntarily Remained in the Aftermath of Hurricane Katrina*

Graduate Studies: UCLA – MBA Degree, Real Estate Emphasis

Professional Studies: Appraisal Institute – MAI; UCLA Extension, Certificate in Real Estate

<u>Undergraduate Studies</u>: BYU – BS Degree, Finance and Accounting

License and Memberships

Certified General Real Estate Appraiser (AG1672)
Appraisal Institute – MAI Designation (M9360)
State of California – Real Estate Broker (01111436)
International Right of Way Association – Member (06746314)
Bureau of National Affairs (BNA) – Advisory Board Member
American Statistical Association – Member
Econometric Society – Member
American Economic Association (AEA) – Member
Association of Social Economics – Member

Appraisal Institute

Instructor - Continuing Education Requirements Current Appointed to the Regional Ethics and Counseling Panel Elected to the Advisory Council, 1996, 1997
Chairman of the Litigation Seminar Committee, 1994, 1995 Member – Task Force on Advanced Education Standards, 1999 Member – Committee for Statistical & Survey Standards, 1999-2002 Recipient of Year's Outstanding Article in the Appraisal Journal – Swango Award, 2002, 2008 Member of the National Strategic Planning Committee, 2013-2014

Expert Witness

United States District Court, Court Appointed Appraiser, State Superior Courts, Assessor's Boards, United States Bankruptcy Court, Arbitration & Mediation

Book Author

<u>Real Estate Damages: Applied Economics and Detrimental Conditions</u> Third Edition, Appraisal Institute - *Chicago, Illinois* - Author

Real Estate Damages: An Analysis of Detrimental Conditions Appraisal Institute - Chicago, Illinois - Author

<u>The Appraisal of Real Estate – 14th Edition</u> Appraisal Institute - *Chicago, Illinois* – Contributing Author

<u>Real Estate Investing for Dummies – 3rd Edition</u> – John Wiley & Sons – *Hoboken, New Jersey* - Technical Editor

<u>Real Estate Valuation in Global Markets</u> Second Edition, Appraisal *Institute - Chicago, Illinois -* Contributing Author

Applications in Litigation Valuation Appraisal Institute - Chicago, Illinois - Contributing Author

<u>Valuing Contaminated Properties</u> Appraisal Institute - Chicago, Illinois - Contributing Author

<u>Post-Traumatic Thriving: The Art, Science, & Stories of Resilience</u> Core IQ Press – *Laguna Beach, California* – Author

<u>Me We Do Be: The Four Cornerstones of Success</u> Owners Manual Press – *Laguna Beach, California* – Author

<u>Conversations On Success – Chapter</u> *Insight Publishing – Sevierville, Tennessee* – Contributing Author

Owners Manual Series: Quick-Ref, Home, Property, Business Owners Manual Press – Laguna Beach, California - Author

Disasters: Wasted Lives, Valuable Lessons *Tapestry Press, Irvine Texas* – Co-Author

Professional Background

Dr. Bell specializes in real estate damage economics. He is currently the CEO of Landmark Research Group, LLC. He served as the CEO of Bell Anderson and Sanders, LLC for 15 years and led the Real Estate Damages practice of Price Waterhouse, which later merged to become PricewaterhouseCoopers. He was an independent real estate appraiser, analyst and consultant from 1986 to 1997.

Dr. Bell has completed considerable research in the field of property damages and detrimental conditions. These include Chernobyl, Hiroshima, Hanford Washington Site, the 1960 Chile Earthquake, the 1964 Alaska Earthquake, the World Trade Center Bombing, the Oklahoma City

Bombing, the Jarrell Texas Tornadoes, Mt. St. Helen's Volcano, the Royal Gardens Subdivision destroyed by the Hawaii Volcanoes, Waco Texas, Oklahoma City, Weldon Springs Missouri, Times Beach Missouri, Rocky Flats Colorado, the Manoa Hawaii Landslides, Woburn Massachusetts, Hinckley, California and many others.

His career has been profiled by the *Wall Street Journal*, *Today's Realtor*, the *Los Angeles Times*, the *Associated Press*, *The San Francisco Chronicle*, *People Magazine*, and *The Chicago Tribune* and on various television broadcasts by all major networks and *CNN*. He has been quoted by *USA Today*, the *New York Times*, *Harper's Magazine*, *Time Magazine*, and *US News and World Report*, as well as the media in Europe, Australia and Japan.

Selected Assignments

<u>Bikini Atoll Nuclear Testing Sites:</u> Retained by the Nuclear Claims Tribunal to determine the damages caused by radioactive contamination and nuclear fallout as a result of nuclear testing on the Bikini Atoll in the Marshall Islands. This is the largest environmental contamination case in the history of the world. Involved radioactive, cultural resource and natural damage issues. Testified before the Nuclear Claims Tribunal on two occasions.

<u>World Trade Center Site – New York:</u> Retained by the Lower Manhattan Development Corporation (an entity created by the City and State of New York) to determine the value of the WTC site in the aftermath of the September 11th tragedies.

<u>United Flight 93 Crash Site:</u> Computed the impact on value of the coal mining fields where Flight 93 crashed on September 11th. Retained by the property owner.

<u>Hurricane Katrina</u>: Retained as a consulting expert on the Murphy Oil Spill case in the aftermath of Hurricane Katrina, which resulted in oil contamination over large portions of Saint Bernard's Parish in the aftermath of the hurricane. Retained by Murphy Oil Company.

<u>BP Oil Spill:</u> Retained as a consulting expert on the BP Oil Spill case, the largest oil spill in United States history.

<u>Caribbean Resort Hurricane Damage:</u> Retained as a consulting expert to compute the impact on value of a major Caribbean hotel resort as a result of extensive damage from Hurricane Omar.

<u>Tulum Mexico</u>: Computed the damages caused by a National Park overlay being placed by the Federal Government on a large ocean-front proposed resort site.

<u>Little Gas Shack Oil Spill - Kauai, Hawaii:</u> Computed the damages, if any, caused to multiple commercial properties as a result of a gasoline and oil spill in a resort bay. Retained by an oil company.

<u>LA Metro Mall Landfill:</u> Estimated the effect of an encapsulated landfill on present and future commercial property values. The proposed retail development was to have been constructed on top of a contaminated solid waste landfill.

<u>Honeywell New Jersey Landfill:</u> Computed the proximity damages, if any, resulting from landfill site, in the process of remediation, on adjacent property values. Retained by Honeywell.

<u>Stringfellow:</u> Determined the diminution in value on nearby properties that are in proximity to Stringfellow, which is the largest inactive liquid disposal hazardous waste facility in California.

<u>Property Tax Assessment Boards:</u> Retained both as an agent and appraiser in numerous assessment hearings, including overseeing a portfolio valued in the hundreds of millions of dollars.

<u>Tiverton Rhode Island Gas Company:</u> Measured the diminution in value, if any, of nearby residential properties with a site with 1800's historic and non-recurrent buried coal gasification waste materials which caused ground water contamination below actionable levels.

<u>Doe Run Lead Contamination, Missouri:</u> Class action suit involving Doe Run, which operated the United States' last primary lead smelter. Calculated the diminution in value, if any, caused by surface soil contamination which resulted in numerous residential properties in being razed.

<u>Straight Lane Texas House</u>: Case involving the largest house in the United States. Calculated the diminution in value resulting from a massive explosion and subsequent fire. The property is located on what is informally called, "Billionaire Row" in the Dallas Texas area. Field work included inspecting the nation's largest estate homes from coast to coast.

<u>City of Chico Landfill</u>: Measured any diminution in value from groundwater contamination from burn ash on nearby developments.

<u>Cooper Cameron, Texas</u>: Measured the impact, if any that offsite TCE groundwater contamination that had migrated underneath a high-end neighborhood in the Houston Texas area.

<u>Jack Brown Cleaners</u>, <u>Austin Texas</u>: Measured the impact of PCE and TCE groundwater that had migrated under a condominium project.

<u>Lennar LNR Bankruptcy</u>: Appraised a major portfolio of numerous subdivisions and commercial developments in California, New Jersey, Florida, Texas, Nevada and Arizona for bankruptcy purposes.

<u>Gasoline Pipeline Transfer Site – Arkansas</u>: Studied the impacts, if any, that MTBE soils contamination had on an adjoining property owner.

<u>SunCal Development - Palm Springs Area</u>: Conducted market trends related to a breach of contract case involving a large subdivision.

<u>BFI Landfill – Los Angeles Area:</u> Estimated the value of on operating landfill as if with and without permits and as of three historical dates. This is one of the largest operational landfills in the Los Angeles area.

<u>Staples Center:</u> Retained by the City of Los Angeles to appraise numerous parcels being acquired through eminent domain for the assemblage and development of the Staples Center.

<u>FBI Identified Terrorist Target:</u> Calculated the damages, if any, caused to a large landmark property in the Southern California area which had been identified by the FBI as a specific terrorist target in the aftermath of the attacks of September 11, 2001.

<u>Dole Pineapple Plantation - Hawaii:</u> Computed the diminution in value, if any, resulting from the State's largest contamination case involving pesticides.

<u>Chevron Service Station:</u> Computed the diminution in value, if any, resulting from a leaking underground storage tank (LUST) in the San Diego area. Retained by Chevron.

<u>Monsanto:</u> Retained as a consulting expert in a case where toxins were illegally disposed in a creek and spread throughout a town. Many homes, churches, businesses and schools were deserted or razed. This is considered by some to be the most notorious environmental contamination case in the history of the United States.

<u>Passaic River, New Jersey:</u> Studied the impact contaminated sediments in a major waterway on the surrounding economy. This case involved an NPL Superfund site.

Whitaker Bermite: Analyzed the effect of unexploded ordinance and perchlorate contamination on development property and proximal neighborhoods. Retained by the facility.

<u>ATK Rocket Facility:</u> Analyzed the effect of perchlorates and other chemicals on rural residential property valuations. The facility produces solid-fuel rocket bodies for the Space Shuttle. The contamination impacts the air and soils surrounding the facility. Retained by the facility.

<u>Ko Loco Hawaii Dam Failure:</u> This major dam failure caused fatalities and millions of dollars of property damage to a small village. Assigned to estimate the residual effect of the dam failure on local residential property values.

<u>Big Rock Nuclear Power Plant</u>: Analyzed the impact, if any, that a safe-storage nuclear fuel storage system had on surrounding property values at a decommissioned nuclear power generating facility. Retained by the U.S. Justice Department.

<u>GM - Delphi Plant, Michigan</u>: Involved an underground TCE plume migrating from an auto parts manufacturing facility to under a nearby home neighborhood. Analyzed historic market trends and regression data, as well as developed case studies to estimate the impacts, if any, on value. Retained by Delphi.

<u>Paducah Kentucky Radioactive Contamination:</u> Developed regression data for neighborhoods in proximity to a gaseous diffusion plant which had released radioactive contamination.

<u>Luke Walton Home</u>: Determined the damages, if any, caused to neighbors from parties hosted by NBA player Luke Walton. Retained by Luke Walton.

<u>East Chicago Hazardous Landfill</u>: Computed the value of a hazardous waste landfill in Indiana which is licensed to receive hazardous waste. Included a complete cash flow analysis of the landfill over the expected life of the operations.

Northridge Earthquake: Retained to estimate the damages to numerous properties in several cases resulting from the earthquake. One assignment included determining the diminution in value to high-rise properties in downtown Los Angeles due to weld fracturing and alleged construction defects.

<u>LA Riots:</u> Retained to compute fire damages to numerous properties in one of the worst civil uprisings in the history of the United States.

<u>Guam Landfill:</u> Computed the damages caused by the condemnation of the Tolofufu Falls and Sergeant Youki Cave site for the purpose of constructing the only operational landfill in Guam. Involved cultural resource and natural damage issues. Also involved market research in Guam and Saipan.

<u>Milwaukee Baseball Stadium</u>: Studied the impact on proposed development resulting from a superfund site associated with a baseball stadium. Field research involved visiting and documenting the surrounding uses at every major-league baseball stadium in the United States and Canada.

<u>MID Power Lines, Modesto California</u>: Appraised numerous properties on a power line corridor for eminent domain purposes. Research included issues of EMF, crop dusting impairment, agricultural impacts, conservation easements and hindrance of future development. Retained by the utility company.

<u>Estate Home Construction Defects:</u> Determined the diminution in value caused by various construction defects of large estate homes and condominiums in Beverly Hills, Bel Air, Homby Hills, Santa Monica and West Los Angeles.

<u>Ft Lauderdale Florida Condo Construction Defects:</u> Determined the diminution in value caused by fire pipe leakage and related mold allegations.

<u>Disneyland</u>: Computed the part-take damages caused to Disneyland as a result of a freeway widening project. Retained by Cal-Trans.

<u>Getty Museum</u>: Determined the diminution in value, if any, to a neighboring property nearby the newly constructed Getty Museum in Los Angeles. Retained by the Getty Museum.

<u>Avila Beach Oil Spill:</u> Computed damages caused by a 300,000-gallon spill. According to a front-page article in the Los Angeles Times, Avila Beach is one of California's largest contamination cases. Contacted by both plaintiff and defendant in the case.

<u>Via Estoril Landslides in Laguna Niguel</u>: Computed damages caused by the sudden 125- foot landslide that destroyed seven ocean-view homes.

<u>Crime Scene Stigma</u>: Consulted in calculated economic damages caused by various crime scenes, including the Jon Benet Ramsey house, the Heaven's Gate Mansion in Rancho Santa Fe and the OJ Simpson and Nicole Brown Simpson Condominium, Andrew Luster House.

Nebraska Floods: Estimated damages caused by residential construction within a flood zone.

<u>Airport Noise Diminution in Value Studies</u>: Calculated the diminution in value caused by the proposed construction of airports in Hawaii, Washington, California and Texas.

Oil Refinery: Studied the diminution in value resulting from an oil refinery leak in Long Beach. Retained by ARCO.

<u>New Jersey Durham Woods Pipeline Explosion</u>: Researched the attributes of market resistance (stigma) associated with a catastrophic pipeline explosion that destroyed eight apartment buildings.

<u>Hawaii Tank farm Leak</u>: Computed the diminution in value resulting from a tank farm leak in Maui, Hawaii. Retained by Chevron, Shell and Unocal.

Articles and Papers

Project Delay Economics The Appraisal Journal

Analysis of Environmental Case Studies The Appraisal Journal

The Impact of Detrimental Conditions on Property Values The Appraisal Journal

Diminishing Diminution: A Trend in Environmental Stigma Environmental Claims Journal

Basic Due Diligence Environmental Claims Journal

The Impact of Airport Noise on Residential Real Estate The Appraisal Journal

The Impact of Megan's Law on Real Estate Values Valuation Insights and Perspectives

Ten Standard Classifications of Detrimental Conditions Right of Way Magazine

Quantifying The Diminution In Value Due To Detrimental Conditions: The Theory and Application to Environmentally Contaminated Properties Environmental Claims Journal

Medical Office Building Appraisal The Appraisal Journal

<u>Assessing Diminution in Value – A Methodology for Categorizing Detrimental Conditions</u> *Right of Way*

<u>Detrimental Conditions: A Profile of Valuation Methodologies with Environmental Contamination, Crime Scene Stigma and Natural Disaster Case Studies</u> *Paper presented to the National Symposium of the Appraisal Institute in Washington DC.*

<u>Valuation of Contaminated Property</u> *The Bureau of National Affairs, Inc.*

Contaminated Waterways and Property Valuation The Appraisal Journal

The Impact of Asbestos on Real Estate Values The Appraisal Journal

<u>Climate Change and Real Estate Economics</u> *The Bureau of National Affairs, Inc.*

Expert Insight Panel: Strategies for Rebutting Junk Science in the Courtroom Bloomberg

Hydraulic Fracturing and Real Estate Issues The Appraisal Journal

Real Estate Research Methods The Appraisal Journal

Real Estate Statistics Valuation Strategies

The Scientific Method and the Valuation Process *The Bureau of National Affairs, Inc.*

Seminar Author

<u>Real Estate Disclosure Seminar</u>: Author and instructor of a one-day seminar published and sponsored by the Appraisal Institute that addresses the responsibility of appraisers, brokers and agents to make a full disclosure of the known conditions associated with a property.

<u>Detrimental Conditions Seminar:</u> Author and instructor of a one-day seminar published and sponsored by the Appraisal Institute. This seminar illustrates a valuation methodology for categorizing numerous Detrimental Conditions (i.e., environmental contamination, natural disasters, geotechnical issues, construction defects, market conditions, imposed conditions, etc.) and quantifying the diminution in value. It was approved in all 50 states by each appraisal licensing agency and the California State Bar for continuing education credit and has been taught nationwide and internationally.

Diminution-In-Value Issues

ADA; Absorption; Airport Noise; Asbestos; Benign Issues; Bonds; Condemnation; Construction Defects; Crime Scene Stigma; Deferred Maintenance; Easements; Earthquake; Economic Decline; EMF; Environmental Contamination; Flood Damage; Geotechnical; Landfills; Litigation; Market Conditions; Natural Disasters; Neighboring Construction; Pipeline Explosion; Riots; Sewage Treatment Plant; Soil Subsidence; Traffic Noise; Tunneling; View Diminution

Interests Appraised

Fee Simple Interest; Leased Fee Interest; Lease Hold Interest; Sandwich; Interest; Majority & Minority Fractional Interests

Functions of Appraisals

Absorption Studies; Acquisition; Assessor Disputes; Bankruptcy; Bond Financing; Construction Loans; Diminution in Value; Disposition; Divorce Settlement; Donation; Environmental Effect Studies; Estate Settlement; Excess Land; Exchanges; Fair Value Issues; Feasibility Studies; Foreclosure; Fraud; Ground Lease Renewal; Highest and Best Use Analysis; Income Tax Appeal; Investment Analysis; Judicial Foreclosure; Review Appraisal; Lease Negotiations; Lease Renewals; Litigation Support; Loan Review; Market Trend Studies; Mortgage Lending; Negotiation; Partnership Dissolution; Portfolio Evaluation; Property Tax Appeal; Redevelopment Zone Studies; Refinancing

Speeches and Symposium Presentations

Dr. Bell has spoken at numerous events throughout the United States, Canada, South America and Asia. Following are some examples of these presentations:

Analyzing the Effects of Environmental Contamination on Real Property Appraisal Institute, Dallas, Texas

Environmental Damage Economics American Bar Association, New Orleans, Louisiana

The Rebuttal of Junk Science in the Courtroom Appraisal Institute, Newport Beach, California

Exposing & Attacking Junk Science Appraisal Institute, Reno, Nevada

Airport Noise & Property Values, FAA National Conference, Ft. Lauderdale, Florida

Socio-Economics & Real Estate University of Utah, Salt Lake City, Utah

<u>Assessing the Damages: Valuing Stigmatized Properties</u> *BC Land Summit, Vancouver, BC Canada*

Property Valuation & Tax Appeals IPT Property Tax Symposium, Palm Springs, California

Real Estate Damage Economics Councilors of Real Estate National Convention, San Antonio, Texas

<u>Statistics & Real Estate Damage Economics</u> *Appraisal Institute National Meeting, Indianapolis, Indiana*

Environmental Damage Economics Princeton Real Estate Conference, Princeton, New Jersey

<u>Detrimental Conditions & The Uniform Standards of Professional Appraisal Practice</u> *Appraisal Foundation, San Francisco, California*

Project Delay Economics Environmental Bankers Association, New Orleans, Louisiana

<u>Stigma and Its Impact or Real Estate Values</u> *Keynote Speaker, The National Association of Real Estate Editors, Las Vegas, Nevada*

<u>The Valuation of Environmentally-Impacted Properties</u> *Brownfields Symposium, Irvine California*

<u>Detrimental Conditions - A Profile of Valuation Methodologies with Environmental, Crime Scene Stigma and Natural Disaster Case Studies</u> The National Symposium of the Appraisal Institute, Washington, DC

<u>Property Damage Analysis for a REO Portfolio</u> Western States Loan Servicing Conference California Mortgage Bankers Association, Las Vegas, NV

<u>The Analysis of Detrimental Conditions</u> Keynote Presentation – International Conference Union Panamericana de Asociaciones de Valuacion, Cusco, Peru

<u>High-Profile Disasters and the Impact on Real Estate Values</u> *The National Symposium of the Appraisal Institute, San Antonio, Texas*

Real Estate Damages: Analytical Tools and Their Application to High-Profile Case Studies International Real Estate Society Conference, Kuala Lumpur, Malaysia

<u>Standardized Approaches to Valuing Contaminated Properties</u> Los Angeles County Bar Association

<u>Expert Witness Testimony Involving Contaminated Properties</u> *Appraisal Institute - Southern California Chapter*

Contamination, Natural Disasters & Crime Scene Stigma Orange County Bar Association

Ethics and the Appraiser Appraisal Institute - Southern California Chapter

<u>Diminution in Value: A Focus on Environmental Contamination, Natural Disasters and Stigma Damages</u> San Diego Bar Association

Researching and Reporting Detrimental Conditions Multiple lectures to COMPS, Inc. nationwide Real Estate Investment Strategies Newport Beach Rotary Club

<u>Environmental Contamination & Natural Disasters Workshop</u> *Appraisal Institute - Southern California Chapter*

The Valuation of Environmentally Impacted Properties Block Environment & Jeffer, Mangels, Butler & Marmaro

The Impact of an International Airport on Real Estate Values El Toro Reuse Planning Authority

The Financial Analysis of Investment Grade Properties Guest Lecturer at Cal-State Fullerton

The Valuation of Asbestos-Contaminated Properties International Right of Way Association

Airports, Stigma and Property Values Trabuco Canyon Community Association

<u>Technical Aspects of the Appraisal of Medical Properties</u> *Appraisal Institute - Los Angeles Chapter*

<u>The Appraisal of Estate Homes</u> *Appraisal Institute - Southern California, San Diego and Ventura Chapters*

Market Resistance Towards Damaged Properties Appraisal Institute - Fresno Chapter

<u>Real Estate Damages Valuation Methodologies</u> Summer Seminar Spectacular – Disneyland Hotel, Southern California Chapter of the Appraisal Institute

<u>High Profile Disasters and Property Damages</u> Orange County Appraisal Society, Orange County Assessor's Office

The Appraisal: Diminution in Value Methodologies Chicago Title Company, Western Division Claims Conference

Project Delay Economics Southern California Chapter, Appraisal Institute

<u>Due Diligence</u> The Center for Advanced Property Economics Symposium on Property and Environmental Damages, Toronto, Canada

Correspondence

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