

Financing Green Buildings

by

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Submitted to the Program in Real Estate Development in Conjunction with the Center for Real Estate in Partial Fulfillment of the Requirements for the Degree of Master of Science in Real Estate Development

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ABSTRACT

An emerging trend in real estate is the development of sustainable buildings, partially due to the huge environmental impact of the design, construction and operation of commercial buildings.

This thesis provides a brief history of the green building movement and the two (2) programs that encourage the development of energy-efficient and sustainable buildings in the United States: the U. S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program and the Energy Star program, jointly sponsored by the Department of Energy and the Environmental Protection Agency.

This thesis also summarizes a study by Piet Eichholtz, Nils Kok and John Quigley titled "Doing Well by Doing Good? Green Office Buildings" published December 2010 in the *American Economic Review*. This study found a commercial building with an Energy Star rating will rent for three percent (3%) more per square foot. The addition to effective rent was approximately seven percent (7%). The increase in value for a sale of a green building was as much as sixteen percent (16%).

Then, using the same data as Eichholtz, Kok and Quigley, this thesis reports on the location and ownership of these green buildings, and calculates Loan to Value (LTV) ratios using the most recent sales price and financing amounts from the CoStar Group. In addition, the property's current LEED certification status is provided as well as a review of Federal and State incentives for sustainable buildings.

The results indicate that more green buildings are located in California, Texas and Colorado. Investment Management firms, National Developer/Owners and Real Estate Investment Trusts own the majority of green properties. The Loan to Value (LTV) ratio for green buildings is no higher than those for conventional office buildings. Not enough information is available to compare mortgage interest rates between green and conventional properties. The number of LEED buildings and level of certification has increased since 2008. The states with the largest number of LEED buildings are California, Texas, Colorado and Virginia, correlating with the top states for green buildings overall. Although a worthy goal, there is limited Federal and State assistance for financing of sustainable buildings.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

One of the emerging trends in commercial real estate development over the past decade is the design and construction of sustainable or “green” buildings. This trend is partially based on the huge impact of the design, construction and operation of commercial real estate. Buildings are one of the heaviest consumers of natural resources and account for a significant portion of the greenhouse gas emissions that affect climate change. In the United States, buildings account for seventy three percent (73%) of electricity consumption, thirty eight percent (38%) of all carbon dioxide emissions and use more than thirteen percent (13%) of all potable water.¹ With a market value estimated at approximately ten trillion dollars (\$10,000,000,000,000) the environmental impact of real estate cannot be discounted.²

Chapter 2 of this thesis will provide a brief history of the green building movement and discuss the two (2) major programs that encourage the development of energy-efficient and sustainable buildings in the United States. The first rating system is the Leadership in Energy and Environmental Design (LEED) program developed by the U.S. Green Building Council. The second is the Energy Star program, jointly sponsored by the United States Department of Energy and the United States Environmental Protection Agency. This Chapter will also briefly outline the certification process in order to obtain LEED Certification or Energy Star rating for a commercial building.

Chapter 3 will summarize an empirical study conducted by Piet Eichholtz, Nils Kok and John Quigley titled “Doing Well by Doing Good? Green Office Buildings,” published December 2010 in the *American Economic Review*. This research paper provided the first credible evidence as to the economic value of a green building using market transactions in lieu of engineering estimates. Eichholtz, Kok and Quigley used a hedonic regression analysis on six hundred ninety four (694) properties and determined that a commercial building with an Energy Star rating will rent for approximately three percent (3%) more per square foot. The addition to effective rent was even higher at approximately seven percent (7%). For the one hundred ninety nine (199) buildings with available sales data the increase in value for a green building sale was as much as sixteen percent (16%).³ This paper and a copy of the data file used for the hedonic regression analysis by Eichholtz, Kok and Quigley are available online.

Building on the knowledge that a green label adds value, this thesis will next look to answer the following questions:

- What type of ownership structure is most common for green buildings? Are they privately held, publicly owned, included in Real Estate Investment Trusts and/or included with Commercial Mortgage Backed Securities?
- Are certified buildings financed differently from non-certified commercial properties?
- Do green buildings receive better loan terms?
- Do green buildings have higher Loan to Value (LTV) ratios than conventional commercial buildings?

¹ “Green Building Facts,” U. S. Green Building Council, accessed July 15, 2013, <http://www.usgbc.org/articles/green-building-facts>.

² Geltner, David, Norman G. Miller, Jim Clayton, and Piet Eichholtz, *Commercial Real Estate: Analysis & Investments, Second Edition*, Mason, OH, South-Western: 2007: 17.

³ Piet Eichholtz, Nils Kok, and John Quigley, "Doing Well by Doing Good? Green Office Buildings," *American Economic Review* 100(5) (2010): 2492-2509, Accessed July 15, 2013, <http://topenvec.files.wordpress.com/2012/02/34-eichholtz-p-n-kok-and-j-quigley-2010-doing-well-by-doing-good-green-office-buildings.pdf>.

- Are Federal or State government loans or grants available to encourage the construction of certified buildings?

Chapter 4 will outline the sources of data as well as the methodology for obtaining the ownership, locations and financing terms for the six hundred ninety four (694) certified properties from Eichholtz, Kok and Quigley's research paper.

Chapter 5 will analyze and interpret the collected data, as well as provide answers to the questions raised regarding the financing of certified buildings from above.

Finally, Chapter 6 will discuss the conclusions that can be drawn from the completed research. In addition, this Chapter will also outline areas for future research.

CHAPTER 2

THE GREEN BUILDING MOVEMENT

2.1 A Brief History of Green Building

Contrary to popular belief, green building is not a new trend, but rather has been around since the early nineteenth (19th) century when underground air-cooling chambers and roof ventilators were used to moderate indoor air temperature. In New York City, the Flatiron Building, built in 1902, used deep-set windows to shade the sun, and Rockefeller Center, when it was completed in 1932, was known for its operable windows and roof gardens.⁴

The urban landscape changed in the 1930s and 1940s with the advent of air conditioning, structural steel, reflective glass and fluorescent lighting. These new products allowed for construction of enclosed glass and steel structures. These structures were centrally heated and cooled with large heating, ventilation and air conditioning systems utilizing inexpensive fossil fuels.⁵

The Energy Crisis caused by the first Organization of the Petroleum Exporting Countries (OPEC) oil embargo of 1973, which sent oil prices skyrocketing and resulted in long lines at gas stations, made Americans consider the wisdom of their dependency on fossil fuels for their transportation and building needs. In response, the American Institute of Architects (AIA) formed an energy task force that later became the AIA Committee on Energy that reviewed both passive systems and technological solutions to achieve energy savings. These solutions included reviewing the siting of buildings, the use of reflective roofing materials, as well as triple-glazed windows to reduce energy usage.⁶

In response to the oil embargo the Federal government created the Department of Energy (DOE) in 1977. This Cabinet level department was established to address conservation and energy usage. That same year the National Renewable Energy Laboratory (NREL) in Golden, Colorado was founded and tasked with investigating new energy technologies, including photovoltaics.⁷

Ten (10) years later, in 1987, the United Nations World Commission on Environment and Development first defined sustainable development as that which “meets the needs of the present without compromising the ability of future generations to meet their own needs.”⁸

Experiments with water-reclamation systems, prefabricated wall systems and modular construction units were developed into the early 1990s. This decade also saw the first government legislation supporting sustainable buildings when several European countries mandated minimums for access to daylight and operable windows for workers.⁹

In 1992, the AIA published its first *Environmental Resource Guide* which evaluated building products based on life cycle analysis, a research first for the United States. This research was undertaken in 1989 and was partially funded by the Environmental Protection Agency (EPA). The publication of this guide

⁴ Robert Cassidy, Editor-in-Chief, “White Paper on Sustainability,” *Building Design & Construction* (November 2003): 4.

⁵ Ibid.

⁶ Ibid.

⁷ Ibid.

⁸ Ibid: 5.

⁹ Ibid.

encouraged building product manufacturers to make more ecologically sensitive products.¹⁰

In June of that same year, the United Nations Conference on Environment and Development held an “Earth Summit” in Rio de Janeiro, Brazil. This conference was attended by one hundred seventy two (172) governmental delegations as well as by two thousand four hundred (2,400) representatives of nongovernmental organizations. At this conference Agenda 21, a non-binding voluntarily implemented action plan for global sustainable development for the twenty first (21st) century was passed. Agenda 21 includes statements regarding climate change, biodiversity and forestry management.¹¹

Sustainability was also the theme for the June 1993 UIA/AIA World Congress of Architects held in Chicago, Illinois and attended by over six thousand (6,000) architects from around the world. This “Architecture at the Crossroads” convention was sponsored jointly by the International Union of Architects (UIA) and the AIA. Building upon the definition of sustainable development established in 1987, this conference was highlighted by the signing of a Declaration of Interdependence for a Sustainable Future by the presidents of the UIA and the AIA. This conference is considered another mile marker in the history of the green building movement.¹²

The next step in demonstrating the value of sustainability was achieved by using the White House and Old Executive Office Building in Washington, DC as a laboratory to demonstrate ways to reduce waste and improve energy efficiency. Design charettes, an energy audit by the DOE and an environmental audit by the EPA devised energy conservation methods using existing technologies. Between 1993 and 1996 these improvements resulted in annual savings of three hundred thousand dollars (\$300,000) in energy, water, solid-waste and landscaping costs and annually removed eight hundred forty five (845) tons of carbon emissions.¹³

This success led to the greening of additional Federal properties including the DOE headquarters, the Pentagon and the Presidio as well as three (3) national parks: Yellowstone in Wyoming, Grand Canyon in Arizona and Denali in Alaska. The means and methods of conservation were consolidated and published in *Greening Federal Facilities* by the DOE’s Federal Energy Management Program, to serve as a guide for additional projects by Federal facility managers, designers, planners and contractors.¹⁴

In 1996, the DOE started research and development with assistance from the AIA to outline roadmaps for twenty first (21st) century buildings. These subsequent “Building Technology Roadmaps” included twenty (20) year plans for high performance commercial and residential buildings, heating, ventilation, air conditioning and refrigeration (HVAC&R), lighting and the building envelope.¹⁵

To call additional attention to successful sustainable design, on Earth Day in 1998, the AIA announced the first “Top 10 Green Projects.” This program highlighting cutting edge green buildings continues to this day.¹⁶

President Clinton also propelled the sustainability movement by signing several Executive Orders. The first, Executive Order 12852, established the President’s Council on Sustainable Development, a working

¹⁰ Robert Cassidy, Editor-in-Chief, “White Paper on Sustainability,” *Building Design & Construction* (November 2003): 5.

¹¹ Ibid.

¹² Ibid.

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ Ibid: 6.

group that issued a final report in 1999 recommending one hundred forty (140) actions to improve the nation's environment. Executive Order 13101, signed on September 14, 1998, called upon the Federal government to increase its use of recycled and environmentally safer products. Executive Order 12123, signed on June 3, 1999, encouraged better design, construction and operation of Federal buildings to reduce emissions and improve energy management. Executive Order 13148, signed on April 21, 2000, directed Federal agencies to integrate environmental accountability when making day-to-day and long-term planning decisions.¹⁷

In the mid-1990s several other Federal agencies completed greening projects including the General Services Administration (GSA) with the Federal Courthouse in Denver, Colorado; the EPA in Research Triangle Park, North Carolina; and the Navy at the Naval Facilities Engineering Command (NAVFAC) at the Navy Yard in Washington, DC. With the success of the NAVFAC project in 1997, the Navy developed the *Whole Building Design Guide*.¹⁸ This internet-based resource provides sustainable building related design guidance, criteria and technology organized in three (3) major categories: Design Guidance, Project Management, and Operations and Maintenance.¹⁹ The design guide is now managed by the National Institute of Building Sciences.²⁰

This period also saw green building developments overseas. Environmental building assessment began in the United Kingdom with the founding of the Building Research Establishment (BRE) in 1921. This former government agency, that is now a private organization, carries out research, consultancy and testing for the construction and built environment sectors in the United Kingdom. In 1990, BRE introduced the Building Research Environmental Assessment Method (BREEAM), the first international environmental assessment tool used to analyze and improve the environmental performance and management of new and existing office buildings. In this system credits are awarded in nine (9) categories: management, health and well-being, energy, transport, water consumption, materials, land use, ecology and pollution. The number of available credits ranges from two (2) for land use to fifteen (15) for health and well-being. Each credit has a weighted value between 0.83 and 1.67 with a maximum building score of one hundred (100) points. Buildings are rated as Pass (with scores between 25 and 40), Good (40 to 55), Very Good (55 to 70) and Excellent (70 to 100).²¹

Europe also uses other software and databases for building products. Eco-Quantum, released in 1999, is a program that expresses environmental performance on the basis of life cycle analysis. Eco-invent 2000 is a second life cycle analysis database covering building materials as well as energy and transport processes. Developed by five (5) European countries, Project Regener is a third database of life cycle analysis for building materials.²²

Europe also has two (2) popular product labeling programs to promote sustainability. The first is the Blue Angel program established in Germany in 1977. This program is not limited to building products with some eighty (80) categories and more than ten thousand (10,000) items. Denmark, Finland, Iceland, Norway and Sweden introduced Nordic Swan, a voluntary eco-labeling program in 1989. Nordic Swan

¹⁷ Robert Cassidy, Editor-in-Chief, "White Paper on Sustainability," *Building Design & Construction* (November 2003): 5-6.

¹⁸ Ibid: 6.

¹⁹ "Whole Building Design Guide," Wikipedia, the Free Encyclopedia, accessed July 20, 2013, http://www.en.wikipedia.org/wiki/Whole_Building_Design_Guide.

²⁰ Robert Cassidy, Editor-in-Chief, "White Paper on Sustainability," *Building Design & Construction* (November 2003): 6.

²¹ Ibid: 18.

²² Ibid: 18-19.

covers sixty seven (67) different product groups and reviews products based on environmental, quality and health arguments.²³

Sustainable efforts are also supported internationally by the World Green Building Council (WGBC), a nongovernmental organization founded in 1999, and the International Initiative for a Sustainable Built Environment (iiSBE) founded in 1998. The iiSBE is a consortium of twenty (20) countries that is developing a global standard for environmental performance known as the Green Building Challenge. The work of the consortium is to include regional and national environmental, economic and social equity conditions, otherwise known as the Triple Bottom Line, in the assessment tool.²⁴

Not to be outdone there are two (2) major programs that encourage the development of energy efficient and sustainable buildings in the United States. The first rating system was developed by the nonprofit U. S. Green Building Council (USGBC) and is known as the Leadership in Energy and Environmental Design (LEED) program. The second system is the Energy Star program, jointly sponsored by the EPA and the DOE. These programs are outlined below.

2.2 Leadership in Energy and Environmental Design Certification

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System was developed by the U. S. Green Building Council (USGBC), a private nonprofit organization, to provide standards for environmentally sustainable construction. It is the most widely recognized and widely used green building program in the world with completed projects in all fifty (50) states as well as one hundred thirty five (135) other countries. Since its inception in 1998, LEED has guided the design, construction, operations and maintenance of more than fifty thousand (50,000) projects worldwide, comprising nine billion 300 million (9,300,000,000) square feet of commercial and institutional space and more than one hundred seventeen thousand (117,000) residential units.²⁵

The technical criteria proposed by the LEED committees are publicly reviewed for approval by more than ten thousand (10,000) membership organizations within the USGBC, allowing for an open and transparent certification process.²⁶

Individuals that have passed an accreditation exam demonstrating their knowledge of the LEED rating system are permitted to use the LEED Accredited Professional (LEED AP) acronym after their name.²⁷

2.2.1 The History of LEED

The USGBC was incorporated in 1993 with the goal of creating a sustainability rating system through the American Society of Testing and Materials (ASTM). After two (2) years of work it was decided that the ASTM's rigorous consensus-based process was moving too slowly. By 1995 the ASTM effort was abandoned in favor of an independent rating system using the USGBC banner.²⁸

²³ Robert Cassidy, Editor-in-Chief, "White Paper on Sustainability," *Building Design & Construction* (November 2003): 19.

²⁴ Ibid.

²⁵ "Press," U. S. Green Building Council," accessed July 15, 2013, <http://www.usgbc.org/press>.

²⁶ Wiser.org, "Leadership in Energy and Environmental Design (LEED)," accessed July 15, 2013, <http://www.wiser.org/article/5533d8dc0e2cadba2dae55900780a0b0>.

²⁷ Ibid.

²⁸ Robert Cassidy, Editor-in-Chief, "White Paper on Sustainability," *Building Design & Construction* (November 2003): page 7.



Figure 2.1 The LEED Certification Label

Source: U. S. Green Building Council,
<http://www.usgbc.org>

and found to be insufficient for the USGBC's purposes. Instead, in August of 1998 the USGBC membership approved LEED Version 1.0, a pilot program that helped inform and refine the requirements for the rating system. After extensive modifications the LEED Green Building Rating System Version 2.0 was released in March 2000.³⁰ This rating system is now known as LEED for New Construction and Major Renovations.³¹

The LEED rating system is more complex than the Energy Star program and addresses six (6) major areas: sustainable sites, water efficiency, energy & atmosphere, materials & resources, indoor environmental quality and innovation in design. It is based on accepted energy and environmental principles and strikes a balance between established practices and emerging concepts³²

In August of 2003 Canada became the first LEED licensee country with the establishment of the Canadian Green Building Council (CGBC) and LEED Canada.³³ In 2005 LEED versions for Homes, Existing Buildings, Commercial Interiors and New Construction Version 2.0 were released. LEED Neighborhood Development and LEED New Construction Version 3.0, incorporating Smart Growth America standards, were both issued in 2008. This same year, Dubai, China and Indonesia adopted LEED certification. In 2010 the Oberlin Project in Oberlin, Ohio was certified as the first LEED Platinum neighborhood.³⁴

Robert Watson, Chair of the LEED Steering Committee and a senior scientist at the Natural Resources Defense Council, led a broad based consensus process which included nonprofit and government organizations, architects, engineers, developers, builders and product manufacturers to develop a system for sustainable construction. LEED was founded to: define "green building," promote integrated whole building design practices, recognize environmental leadership, stimulate green competition, and increase the awareness of the benefits of green buildings and to transform the building market.²⁹

After careful consideration the Green Builder program from Austin, Texas, the Building Environmental Performance Assessment Criteria (BEPAC) model from Canada, the Green Building Challenge and the United Kingdom's BREEAM system were reviewed

²⁹ Robert Cassidy, Editor-in-Chief, "White Paper on Sustainability," *Building Design & Construction* (November 2003): page 7.

³⁰ Ibid.

³¹ "U. S. Green Building Council," U. S. Green Building Council, accessed July 15, 2013, <http://www.usgbc.org>.

³² Ibid.

³³ Robert Cassidy, Editor-in-Chief, "White Paper on Sustainability," *Building Design & Construction* (November 2003): page 19.

³⁴ Jennie Richards, "Green Building: A Retrospective on the History of LEED Certification," *Sustainable Industries* (November 2012): 2-3. <http://enviroinstitute.org/wp-content/uploads/2012/09/Green-Building-A-Retrospective-History-of-LEED-Certification-November-2012.pdf>.

The LEED certification system was quickly adopted by the GSA, the Army, Navy and Air Force, major corporations and colleges and universities. In addition, over the past ten (10) years, state, municipal and



Figure 2.2 LEED Certification Versions

Source: U. S. Green Building Council, <http://www.usgbc.org>

County building codes have been updated to require LEED certification for new buildings and to incorporate energy, water and material efficiency green building practices.³⁵

Since 1998, Green Building Council members from every sector of the building industry continue to refine the LEED certification program. These updates are designed to more accurately represent and incorporate emerging green building technologies.

2.2.2 LEED Certification Versions

A total of nine (9) different versions of the LEED rating system are available depending on the specific project type. The different LEED Certification Versions are shown in Figure 2.2.

As of July 2013, there are a total of forty one thousand three hundred nine (41,309) buildings that have been certified by the USGBC. An additional one hundred seventy four (174) buildings have been registered and are awaiting final review, approval and determination of their LEED certification level by the USGBC. The breakdown of the number of LEED certified buildings by LEED Version is shown in Table 2.1.³⁶

LEED Version	Number of Certified Buildings	Percentage
New Construction and Major Renovations	20,821	50.4%
Existing Buildings	5,857	14.2%
Commercial Interiors	5,338	12.9%
Core and Shell	4,529	11.0%
Retail	1,362	3.3%
Homes	1,125	2.7%
Schools	1,806	4.4%
Healthcare	141	0.3%
Neighborhood Development	327	0.8%
Mid-Rise Apartments	3	0.0%
Totals:	41,309	100.0%

Source: U. S. Green Building Council, <http://www.usgbc.org>.

³⁵ Robert Cassidy, Editor-in-Chief, “White Paper on Sustainability,” *Building Design & Construction* (November 2003): page 7.

³⁶ “Press,” U. S. Green Building Council,” accessed July 15, 2013, <http://www.usgbc.org/press>.

2.2.3 LEED Certification

Different LEED certification versions have scoring systems based on a set of required prerequisites and various credits in the six (6) major categories. In LEED Version 2.2 for New Construction and Major Renovations for commercial buildings, there are a total of sixty nine (69) possible points: sustainable sites (14 points), water efficiency (5 points), energy & atmosphere (17 points), materials & resources (13 points), indoor environmental quality (15 points) and innovation in design (5 points).³⁷

Certification is possible at four (4) levels based on the total number of points earned: Certified (26 to 32 points), Silver (33 to 38), Gold (39 to 51) and Platinum (52 to 69). The anticipated energy and environmental savings of a LEED certified versus a conventional building also increases: from thirty percent (30%) for Certified, to forty percent (40%) for Silver, to fifty percent (50%) for Gold, to more than seventy percent (70%) for Platinum.³⁸

LEED certification is obtained after submitting an application to the USGBC documenting compliance with the requirements of the rating system. In 2007 the application process was stream lined with submission of all documentation via a set of online forms.³⁹

2.2.4 Criticisms of the LEED System

Although the LEED rating system has successfully increased the amount of sustainable construction, it is not without criticism.

One criticism is that the rating system does not adjust to and incorporate local environmental conditions. A building that is located in Maine is rated based on the same water conservation performance as a building that is located in Arizona. Obviously, the local climate and weather conditions are vastly different and water conservation is more critical in Arizona. Another complaint is that the costs for LEED certification require capital that could be used to make an existing building or new construction project even more sustainable. In addition, trade associations are currently excluded from membership in the USGBC.⁴⁰

2.2.5 The Future of the LEED System

The development of the LEED rating system has made an enormous impact on the design and construction of new buildings and on renovation of existing buildings worldwide. LEED certification has created buildings that provide healthier living and work environments, efficiently utilize resources, reduce waste, promote the use of sustainable materials, improve air and water quality, reduce carbon and greenhouse gas emissions, and lower operating costs.

³⁷ Robert Cassidy, Editor-in-Chief, "White Paper on Sustainability," *Building Design & Construction* (November 2003): page 8-9.

³⁸ Ibid: 8.

³⁹ Jennie Richards, "Green Building: A Retrospective on the History of LEED Certification," *Sustainable Industries* (November 2012): 2, <http://enviroinstitute.org/wp-content/uploads/2012/09/Green-Building-A-Retrospective-History-of-LEED-Certification-November-2012.pdf>.

⁴⁰ Wiser.org, "Leadership in Energy and Environmental Design (LEED)," Wiser.org, accessed July 15, 2013.

It is argued that the slightly higher upfront cost for a certified building is offset multiple times by the higher occupancy, higher value, higher rents, higher sales prices and lower operation costs.⁴¹

Launching in 2013 after three (3) years of critical review, LEED Version 4.0 will be a market driven, consensus based, evolving product that adapts and integrates new technologies, new ideas and input from industry professionals. LEED Version 4.0 will again increase technical stringency, incorporate new and more rigorous requirements and improve carbon reduction, yielding a healthier environment for all Americans.⁴²

2.3 The Energy Star Program

Energy Star is a program started by the EPA to help businesses and individuals save money and protect the climate through superior energy efficiency. Established in 1992 as part of the Clean Air Act, Energy Star is a voluntary labeling program to identify and promote energy efficient products and buildings with goals of reducing pollution, energy consumption and greenhouse gas emissions while improving energy security.⁴³



Figure 2.3 The Energy Star Label

Source: Energy Star, <http://www.energystar.gov>

Significant climate change mitigation exists from helping consumers and businesses save energy. Approximately sixty six percent (66%) of greenhouse gas emissions in the United States is from energy use in homes, buildings, and industry. The Energy Star program has been instrumental in reducing this energy use in order to realize significant greenhouse gas emission reductions, resulting in important health and environmental benefits while strengthening the economy.⁴⁴

Overall the Energy Star has been hugely successful. In 2012, eighteen thousand (18,000) organizations from manufacturers and trade associations, to retailers, home builders and small businesses partnered with the EPA to achieve dramatic energy savings. Since 1992, it is estimated that over two hundred thirty billion dollars (\$230,000,000,000) has been saved on utility bills while preventing one billion eight hundred million (1,800,000,000) metric tons of greenhouse gas emissions. In 2012, consumers and businesses investing in energy efficient technologies and practices reduced their energy bills by twenty four billion dollars (\$24,000,000,000) and prevented two hundred forty two million (242,000,000,000) metric tons of greenhouse gas emissions.⁴⁵

The first labeled products were computers and monitors, expanding to additional office equipment, as well as residential heating and cooling equipment by 1995. In 1996, the EPA partnered with the DOE and

⁴¹ Jennie Richards, "Green Building: A Retrospective on the History of LEED Certification," *Sustainable Industries* (November 2012): 4-5, <http://enviroinstitute.org/wp-content/uploads/2012/09/Green-Building-A-Retrospective-History-of-LEED-Certification-November-2012.pdf>.

⁴² Jennie Richards, "Green Building: A Retrospective on the History of LEED Certification," *Sustainable Industries* (November 2012): 5.

⁴³ "About Energy Star," Energy Star, accessed July 15, 2013, http://www.energystar.gov/index.cfm?c=about.ab_index.

⁴⁴ Ibid.

⁴⁵ Ibid.

together they have expanded the Energy Star program to cover four (4) major formats: Certified Products, Residential Sector, Commercial Sector and Industrial Sector.⁴⁶

State and local governments are also encouraging the commercial and industrial markets to reduce energy waste through local mandates, incentive programs and competitions.⁴⁷

2.3.1 Energy Star Certified Products

There are more than forty thousand (40,000) Energy Star Certified Products available in more than sixty five (65) product categories including: major appliances (refrigerators, freezers, air conditioners, clothes washers and dishwashers), home electronics (televisions, cable boxes, DVD players and home audio equipment), home envelope (windows, doors, skylights and roofing materials), office equipment (computers, monitors, laptops, printers and photocopiers), residential heating and cooling (ceiling fans, furnaces, boilers, central air conditioners, water heaters and programmable thermostats), lighting (fixtures and luminaires) and commercial products (dishwashers, ice makers, ovens, water coolers and exit signs).⁴⁸

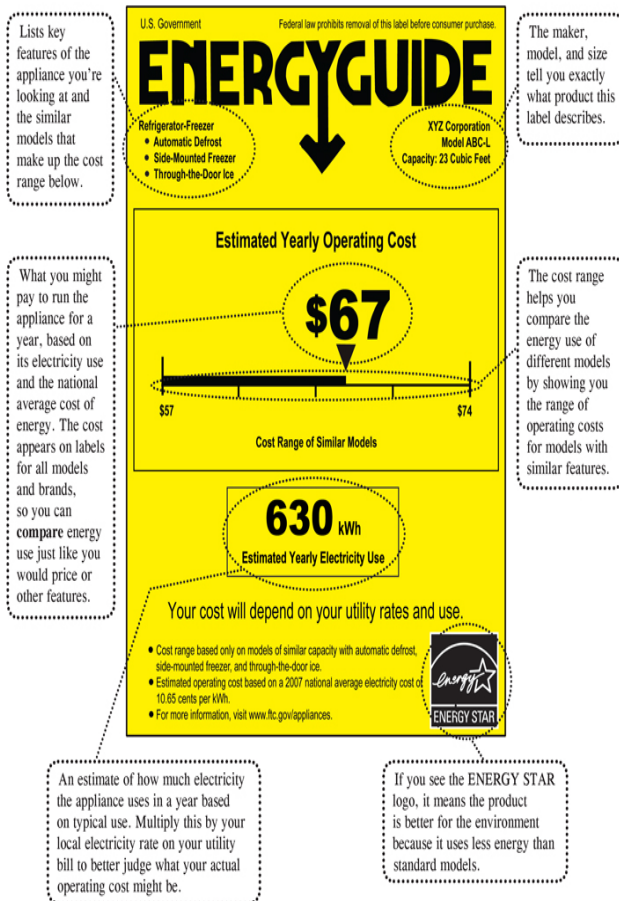


Figure 2.4 The Energy Guide Label

Source: The Federal Trade Commission, <http://www.consumer.ftc.gov>

The Energy Star label indicates that the product uses less energy than other products in that category and provides objective information to consumers and businesses so they do not have to invest time and money researching energy efficiency.⁴⁹

In order for a product to earn an Energy Star label it will be tested by a third party according to the DOE's standard procedures for awarding the yellow Energy Guide label. The Energy Guide label lists the amount of energy a product uses in comparison to its peers and the approximate annual operating costs. Based on the test results and the particular criteria for the product category the

⁴⁶ "History of Energy Star," Energy Star, accessed July 15, 2013, http://www.energystar.gov/index.cfm?c=about.ab_index.

⁴⁷ "About Energy Star," Energy Star, accessed July 15, 2013, http://www.energystar.gov/index.cfm?c=about.ab_index.

⁴⁸ "Energy Star and Other Climate Protection Partnerships. 2011 Annual Report," Energy Star, accessed July 15, 2013: 14, http://www.energystar.gov/ia/partners/publications/pubdocs/2011_AnnualReport_Finalow-res_12-13_12.pdf?c13b-cff0.

⁴⁹ "Introduction to How Energy Star Works," How Stuff Works, accessed July 15, 2013, <http://home.howstuffworks.com/home-improvement/construction/green/energy-star.htm>.

Energy Star label will be achieved if the product reaches a threshold percent reduction in energy consumption versus other products in that category.⁵⁰ A percentage of products in each category will also undergo third party verification testing annually to ensure the Energy Star certified products deliver the savings promised by the label.⁵¹

2.3.2 Energy Star for Homes

Labeling of Energy Star for Homes began in 1995 and works to increase the energy efficiency of residential building and reduce greenhouse gas emissions while lowering utility bills. It is estimated that seventeen percent (17%) of the greenhouse gas emissions in the United States can be attributed to the energy used to light, heat, cool, as well as power the electronics and appliances in homes. In simple terms, your home can be a greater source of pollution than your car.⁵²

In 2012 more rigorous requirements for homes were implemented. Certified homes are now at least fifteen percent (15%) more efficient than those built to the 2009 International Energy Conservation Code (IECC) with an energy performance advantage of up to thirty percent (30%) compared to a typical new home.⁵³ To qualify a home must meet guidelines for effective insulation, high performance windows, air sealing, labeled appliances as well as efficient heating and cooling equipment.⁵⁴ As with labeled products, verification of a home's energy efficiency by a third party is required. More than one hundred thousand (100,000) new homes earned Energy Star certification in 2012, raising the total number of certified homes to more than one million four hundred thousand (1,400,000). Overall, since 1995 homeowners have saved more than four billion dollars (\$4,000,000,000) on their energy bills and reduced greenhouse gas emissions by more than thirty nine billion (39,000,000,000) pounds with labeled homes.⁵⁵

Since 2011 new multifamily high rise buildings are also eligible for certification. These buildings must be constructed to the EPA's energy efficiency guidelines and designed to be at least fifteen percent (15%) more efficient than the building energy code. In 2012, more than nine hundred (900) high rise units in sixteen (16) buildings were certified.⁵⁶

Residential renovations may qualify for the Home Performance with Energy Star (HPwES) retrofit program. In this program, energy efficiency improvements are performed by trained contractors with third party quality control. The HPwES program is administered by the DOE, and to date has improved more than two hundred fifty thousand (250,000) homes.⁵⁷

In addition, in 2012 with funding from the Department of Housing and Urban Development (HUD), more than eight thousand five hundred (8,500) Energy Star certified affordable homes were completed. Also in

⁵⁰ "History of Energy Star," How Stuff Works, accessed July 15, 2013, <http://home.howstuffworks.com/home-improvement/construction/green/energy-star.htm>.

⁵¹ "About Energy Star," Energy Star, accessed July 15, 2013, http://www.energystar.gov/index.cfm?c=about.ab_index.

⁵² "About Energy Star," Energy Star, accessed July 15, 2013.

⁵³ "Energy Star Overview of 2012 Achievements," Energy Star, accessed July 15, 2013, <http://www.energystar.gov/ia/partners/publications/pubdocs/ES%20bifold%20031313%20FIN%20for%20print%20rev.pdf>.

⁵⁴ "New Energy Star Homes," How Stuff Works, accessed July 15, 2013, <http://home.howstuffworks.com/home-improvement/construction/green/energy-star.htm>.

⁵⁵ "Energy Star Overview of 2012 Achievements," Energy Star, accessed July 15, 2013: 2, <http://www.energystar.gov/ia/partners/publications/pubdocs/ES%20bifold%20031313%20FIN%20for%20print%20rev.pdf>.

⁵⁶ Ibid.

⁵⁷ Ibid: 3.

2012, Habitat for Humanity completed more than one thousand seven hundred (1,700) certified homes for low income families nationwide.⁵⁸

2.3.3 Energy Star in the Commercial Sector

Energy Star in the Commercial Sector works to improve energy efficiency in the places where Americans work, play and learn. These efforts are critically important as commercial buildings account for approximately twenty percent (20%) of all energy consumption in the United States.⁵⁹ At the end of 2012 more than twenty thousand (20,000) buildings were Energy Star certified. Verified by independent, registered Architects or licensed Professional Engineers, these buildings use thirty five percent (35%) less energy and thirty five percent (35%) fewer greenhouse gas emissions than average buildings. In addition two hundred seventy (270) leading companies and school districts have been recognized as Energy Star Leaders for portfolio wide energy savings.⁶⁰

Energy performance of commercial buildings can be assessed using Portfolio Manager, the Energy Star measurement and tracking software. By 2012, more than twenty eight billion (28,000,000,000) square feet of space, in more than two hundred sixty thousand (260,000) buildings has been analyzed. These assessments represent approximately forty percent (40%) of the total commercial marketplace. A study tracking thirty five thousand (35,000) buildings utilizing Portfolio Manager from 2008 to 2011 showed an average of seven percent (7%) energy savings and a six percent (6%) reduction in greenhouse gas emissions.

To encourage energy savings, Energy Star also sponsors a “Battle of the Buildings” competition, with teams from buildings nationwide working to save the most energy in one (1) year through team work, educational campaigns, operational changes and equipment replacement. Past competitions have resulted in energy savings of as much as sixty percent (60%).⁶¹

2.3.4 Energy Star in the Industrial Sector

Energy Star certification is also available in the industrial sector, an important part of the economy. Manufacturing goods are valued at nearly five and one half trillion dollars (\$5,500,000,000,000), contribute approximately eleven percent (11%) to the Gross Domestic Product (GDP) and provide more than twelve million (12,000,000,000) jobs. Industry also generates more than twenty five percent (25%) of the country’s annual greenhouse gas emissions. To date more than one hundred (100) plants have been certified by a Professional Engineer as achieving energy performance in the top twenty five percent (25%) of their industry nationally. In order to qualify, these plants must also satisfy the EPA’s environmental compliance criteria.⁶²

Energy Star also sponsors Industrial Focuses to share information on how to reduce energy use in manufacturing plants. There are currently twenty three (23) industries represented. Energy Star also develops energy guides that serve as a collective source of energy management expertise for a particular

⁵⁸ “Energy Star Overview of 2012 Achievements,” Energy Star, accessed July 15, 2013: 3, <http://www.energystar.gov/ia/partners/publications/pubdocs/ES%20bifold%20031313%20FIN%20for%20print%20rev.pdf>.

⁵⁹ “Energy Star and Other Climate Protection Partnerships. 2011 Annual Report,” Energy Star, accessed July 15, 2013: 23, http://www.energystar.gov/ia/partners/publications/pubdocs/2011_AnnualReport_Finalow-res_12-13-12.pdf?c13b-cff0.

⁶⁰ “Energy Star Overview of 2012 Achievements,” Energy Star, accessed July 15, 2013: 3.

⁶¹ Ibid.

⁶² “Energy Star and Other Climate Protection Partnerships. 2011 Annual Report,” Energy Star, accessed July 15, 2013: 27-28.

industry. Lastly, Energy Star develops industry specific plant energy performance indicators (EPIs) that enable plants to measure energy efficiency and set competitive improvement goals.⁶³

2.3.5 The Future of the Energy Star Program

The product specifications and performance requirements for Energy Star Certified Products are routinely reviewed and updated. In addition, the Certified Products program is continuing to expand into new product categories.⁶⁴

To move energy efficiency into the future, the EPA continues to increase the stringency of the Energy Star performance specifications in the housing, commercial and industrial sectors. The EPA is also updating the Portfolio Manager software for the commercial sector. In addition, the EPA is expanding the Industrial Focuses program and the plant energy performance indicators (EPIs) to additional industries.⁶⁵

⁶³ “Energy Star and Other Climate Protection Partnerships. 2011 Annual Report,” Energy Star, accessed July 15, 2013: 23, http://www.energystar.gov/ia/partners/publications/pubdocs/2011_AnnualReport_Finalow-res_12-13-12.pdf?c13b-cff0.

⁶⁴ Ibid: 27-28.

⁶⁵ “About Energy Star,” Energy Star, accessed July 15, 2013, http://www.energystar.gov/index.cfm?c=about.ab_index.

CHAPTER 3

THE VALUE ADDED FOR GREEN OFFICE BUILDINGS

3.1 Determining the Value of Green Office Buildings

In an effort to increase the number of green buildings supporters of sustainability claim that green buildings have higher occupancy rates, higher rents, higher sales prices, as well as lower operating costs. However these claims were not supported with scientific evidence until recently. In December 2010 “Doing Well by Doing Good? Green Office Buildings” by Piet Eichholtz, Nils Kok and John Quigley was published in the *American Economic Review*. This paper provided the first credible evidence as to the economic value of green building using market transactions in lieu of engineering estimates.⁶⁶

Eichholtz, Kok and Quigley reviewed commercial properties and compared the rents, effective rents (rents adjusted for building occupancy levels) and selling prices for sustainable properties as identified by independent and impartial rating systems compared to a large sample of ordinary commercial buildings.

Starting with the listings of LEED certified and Energy Star rated office properties obtained from the USGBC and Energy Star websites, Eichholtz, Kok and Quigley cross referenced property addresses with the CoStar Group property database, yielding a total of one thousand three hundred sixty (1,360) green office buildings. Of these, two hundred eighty six (286) were certified by LEED, one thousand forty five (1,045) were certified by Energy Star, and twenty nine (29) were certified by both LEED and Energy Star. This number was further refined to six hundred ninety four (694) properties within the CoStar database that contained current monthly rental rates and building characteristics to allow for a hedonic regression analysis. One hundred ninety nine (199) of these same properties were sold between 2004 and 2007.⁶⁷

The researchers utilized the extensive database of the CoStar Group, the number one provider of commercial real estate research and information services for property investors and sales professionals in the United States. The CoStar website provides access to a database consisting of approximately two million four hundred thousand (2,400,000) commercial properties with their locations, hedonic characteristics, as well as current tenancy and rental terms for the buildings.⁶⁸

The latitude and longitude of these rated buildings were used to determine all other office buildings within a radius of one quarter (1/4) mile using Geographic Information System (GIS) techniques and the CoStar Group database, creating eight hundred ninety three (893) 0.2-square-mile clusters of buildings, each containing one rated building and at least one nearby nonrated property. In total there were eight thousand one hundred five (8,105) commercial office buildings in the sample containing rental data and one thousand eight hundred thirteen (1,813) buildings in the sample of properties that sold.⁶⁹

Appendix A contains a listing of the properties, sorted by the last sale date, studied by Eichholtz, Kok and Quigley. Six hundred nine three (693) out of the total of six hundred nine four (694) possible properties could be identified as LEED Certified or Energy Star rated. Two (2) properties, CoStar ID 667619 and

⁶⁶ Piet Eichholtz, Nils Kok, and John Quigley, "Doing Well by Doing Good? Green Office Buildings," *American Economic Review* 100(5) (2010): 2495-2497, accessed July 15, 2013, <http://topenvec.files.wordpress.com/2012/02/34-eichholtz-p-n-kok-and-j-quigley-2010-doing-well-by-doing-good-green-office-buildings.pdf>

⁶⁷ Ibid: 2497.

⁶⁸ “CoStar | # 1 Commercial Real Estate Information Company,” CoStar Group, Inc., accessed July 15, 2013, <http://www.costar.com/>.

⁶⁹ Piet Eichholtz, Nils Kok, and John Quigley, "Doing Well by Doing Good? Green Office Buildings," *American Economic Review* 100(5) (2010): 2497.

CoStar ID 716836, were listed twice. In addition, a total of two hundred fourteen (214) buildings were identified as being sold between 2004 and 2007. The reason for the differences in totals between this data and the Eichholtz, Kok and Quigley data could not be determined.

3.2 The Premium for Labeled Buildings

Eichholtz, Kok and Quigley used hedonic regression to determine how certification influenced the value of commercial office buildings and the amount changed for these buildings. The above noted sample sets were used to estimate a semi log equation relating office rents (or selling prices) per square foot to the hedonic characteristics of the buildings and the location of each building per the following equations:

$$\log R_{in} = \alpha + \beta_i \mathbf{X}_i + \sum_{n=1}^N \gamma_n c_n + \delta g_i + \varepsilon_{in} \quad \text{Equation 3.1}$$

$$\log R_{in} = \alpha + \beta_i \mathbf{X}_i + \sum_{n=1}^N \gamma_n c_n + \sum_{n=1}^N \delta_n [c_n g_i] + \varepsilon_{in}^* \quad \text{Equation 3.2}$$

The dependent variable in Equation 3.1 is the logarithm of the rent per square foot R_{in} in commercial office building i in cluster n . The dependent variable is also the selling price per square foot or the logarithm of effective rent per square foot depending on the analysis. Effective rent is calculated as the rent per square foot multiplied by the occupancy rate.⁷⁰

Variables α , β_i , γ_n , and δ are estimated coefficients and ε_{in} is an error term. Variable \mathbf{X}_i is a vector of the hedonic characteristics of building i and was controlled for regional differences in demand for office space by including an adjustment for the percentage increase in employment in the service sector for each cluster.⁷¹

Locational effects were also controlled by the dummy variable c_n . The value of c_n is one (1) if building i is located in cluster n otherwise it has a value of zero (0). Green certification was controlled by the dummy variable g_i , which has a value of one (1) if building i is LEED certified or Energy Star rated otherwise it has a value of zero (0). For the sample of rental properties there are also dummy variables, one for each of the N distinct clusters, for the six hundred ninety four (694) separate locations which may affect office rent. For the sample of sold buildings there are dummy variables for the year of sale and one hundred ninety nine (199) location coefficients, again one for each cluster. $\text{Exp}[\delta]$ is the increment to rent associated with a rated building.⁷²

Equation 3.2 further generalized the locational measure by allowing the effect of a green rating on rents or selling prices to vary separately in each of the clusters of buildings. The increment to rent or market value for the green building in cluster n , relative to the rents of the other buildings in cluster n , is $\text{exp}[\delta_n]$.⁷³

3.3 Regression Results for Labeled Buildings

The regression results for the rental sample, relating the logarithm of rent per square foot in commercial office buildings to a set of hedonic and other characteristics of the buildings are shown in Table 3.1. The

⁷⁰ Piet Eichholtz, Nils Kok, and John Quigley, "Doing Well by Doing Good? Green Office Buildings," *American Economic Review* 100(5) (2010): 2497.

⁷¹ Ibid: 2497-2498.

⁷² Ibid: 2497-2498.

⁷³ Ibid: 2498.

Table 3.1 Regression Results: Commercial Office Rents and Green Ratings						
Dependent Variable: Logarithm of Rent in Dollars per Square Foot						
	Case 1	Case 2	Case 3	Case 4	Case 5	
Sample Size	8105	8105	8105	8105	8105	Notes:
R-squared	0.72	0.72	0.72	0.72	0.74	1. Adapted from Eichholtz, Kok and Quigley
Adjusted R-Squared	0.69	0.69	0.69	0.69	0.68	Table 1.
Constant	2.741	2.742	2.718	2.725	2.564	2. Each regression also includes 694 dummy
	[0.113]*	[0.114]*	[0.126]*	[0.127]*	[0.022]*	variables, one for each locational cluster.
Green rating:	0.035		0.033	0.0028		3. Regression (5) also includes an additional
	[0.009]*		[0.009]*	[0.009]*		694 dummy variables, one for each green
<i>Energy Star</i>		0.033				building in the sample.
		[0.009]*				4. Standard errors are in brackets.
<i>LEED</i>		0.052				* Significant at the one percent (1%) level.
		[0.036]				** Significant at the five percent (5%) level.
Building Size	0.113	0.113	0.102	0.111	0.111	***Significant at the ten percent (10%) level.
	[0.019]*	[0.019]*	[0.019]*	[0.021]*	[0.023]*	
Fraction Occupied	0.020	0.020	0.020	0.011	0.004	
	[0.016]	[0.016]	[0.016]	[0.016]	[0.017]	
Building Class:						
<i>Class A</i>	0.231	0.231	0.192	0.173	0.173	
	[0.012]*	[0.012]*	[0.014]*	[0.015]*	[0.017]*	
<i>Class B</i>	0.101	0.101	0.092	0.083	0.082	
	[0.011]*	[0.011]*	[0.011]*	[0.011]*	[0.012]*	
Net Contract	-0.047	-0.047	-0.050	-0.051	-0.057	
	[0.013]*	[0.013]*	[0.013]*	[0.013]*	[0.014]*	
Employment Growth	0.608	0.608	0.613	0.609	0.874	
	[0.171]*	[0.171]*	[0.187]*	[0.189]*	[0.054]*	
Age:						
< 10 years			0.118	0.131	0.132	
			[0.016]*	[0.017]*	[0.019]*	
10-20 years			0.079	0.085	0.083	
			[0.014]*	[0.014]*	[0.015]*	
20-30 years			0.047	0.049	0.049	
			[0.013]*	[0.013]*	[0.014]*	
30-40 years			0.043	0.044	0.044	
			[0.011]*	[0.011]*	[0.012]*	
Renovated			-0.008	-0.008	-0.010	
			[0.009]	[0.009]	[0.010]	
Stories:						
<i>Intermediate</i>				0.009	0.008	
				[0.009]	[0.010]	
<i>High</i>				-0.029	-0.032	
				[0.014]**	[0.016]**	
Amenities				0.047	0.054	
				[0.007]*	[0.008]*	

results are presented for ordinary least squares regression models corrected for heteroskedasticity as per Halbert White.⁷⁴

Case 1 reports a basic model relating rent to building quality, measured by size, occupancy rate and class

⁷⁴ Piet Eichholtz, Nils Kok, and John Quigley, "Doing Well by Doing Good? Green Office Buildings," *American Economic Review* 100(5) (2010): 2498.

Table 3.2 Regression Results, Commercial Office Rents and Green Ratings						
Dependent Variable: Logarithm of Effective Rent in Dollars per Square Foot						
	Case 1	Case 2	Case 3	Case 4	Case 5	
Sample Size	7920	7920	7920	7920	7920	Notes:
R-squared	0.47	0.47	0.47	0.48	0.51	1. Adapted from Eichholtz, Kok and Quigley
Adjusted R-Squared	0.42	0.42	0.42	0.43	0.41	Table 2.
Constant	2.151	2.158	2.093	2.187	2.299	2. Each regression also includes 694 dummy
	[0.029]*	[0.059]*	[0.050]*	[0.050]*	[0.060]*	variables, one for each locational cluster.
Green rating:	0.100		0.097	0.079		3. Regression (5) also includes an additional
	[0.016]*		[0.016]*	[0.016]*		694 dummy variables, one for each green
<i>Energy Star</i>		0.100				building in the sample.
		[0.016]*				4. Standard errors are in brackets.
<i>LEED</i>		0.094				* Significant at the one percent (1%) level.
		[0.052]***				** Significant at the five percent (5%) level.
Building Size	0.261	0.261	0.235	0.189	0.193	***Significant at the ten percent (10%) level.
(millions of sq. feet)	[0.028]*	[0.028]*	[0.027]*	[0.027]*	[0.030]*	
Building Class:						
<i>Class A</i>	0.408	0.408	0.340	0.229	0.226	
	[0.028]*	[0.028]*	[0.029]*	[0.030]*	[0.033]*	
<i>Class B</i>	0.226	0.226	0.203	0.152	0.149	
	[0.027]*	[0.027]*	[0.027]*	[0.026]*	[0.028]*	
Net Contract	0.015	0.014	0.010	0.009	0.016	
	[0.024]	[0.024]	[0.024]	[0.024]	[0.028]	
Employment Growth	0.765	0.756	0.773	0.682	0.468	
(fraction)	[0.312]**	[0.322]**	[0.293]**	[0.308]**	[0.421]	
Age:						
< 10 years			0.134	0.177	0.149	
			[0.045]*	[0.044]*	[0.054]*	
10-20 years			0.141	0.146	0.150	
			[0.025]*	[0.025]*	[0.028]*	
20-30 years			0.113	0.112	0.128	
			[0.023]*	[0.023]*	[0.025]*	
30-40 years			0.097	0.090	0.089	
			[0.018]*	[0.018]*	[0.0120]*	
Renovated			0.019	0.016	0.022	
			[0.018]	[0.018]	[0.019]	
Stories:						
<i>Intermediate</i>				0.145	0.156	
				[0.021]*	[0.024]*	
<i>High</i>				0.086	0.090	
				[0.025]*	[0.029]*	
Amenities				0.118	0.124	
				[0.015]*	[0.016]*	

designation. The regression explains some seventy two percent (72%) of log rent based upon eight thousand one hundred five (8,105) observations and holding other factors constant, the estimated rent premium for a green building is approximately three and one half percent (3.5%). In addition, higher quality buildings command a substantial premium, with rent in a class A building approximately thirteen percent (13%) higher than rent in a class B building and approximately twenty three percent (23%) higher than in a class C building. Gross rents are approximately five percent (5%) higher than when they are quoted net of utilities and rent is also significantly higher in larger buildings. Employment growth in the service sector also has a strong effect on rents with each percent increase in employment leading to an

increase of 0.6 percent in rent. With an F-ratio of 23.49 the coefficients for the six hundred ninety four (694) dummy variables for location are also highly significant.⁷⁵

Case 2 indicates the results of properties with Energy Star or LEED ratings. The estimated coefficient for a LEED rating building indicates a premium of 5.2% in rents, but with a large standard error implying that this value was not significant. Alternatively, an Energy Star rating translated into commercial rents that were 3.3% higher and these rents were significant at the one percent (1%) level.⁷⁶

The results in Case 3 reflect adding variables to measure the age of the building to the model, indicating that there was a substantial premium for newer buildings.⁷⁷

The results in Case 4 adjust for differences in the number of stories and for the presence of onsite building amenities. Onsite amenities are associated with higher office rents whereas very tall buildings typically have slightly lower rents.⁷⁸

Overall, Eichholtz, Kok and Quigley found that changing the hedonic variables did not affect the significance and magnitude of a green rating on rents, with rents in a green building 2.8% to 3.5% higher than in an unrated building.⁷⁹

Case 5 presents the results using Equation 3.2, including one thousand three hundred eighty eight (1,388) dummy variables, one (1) for each of the six hundred ninety four (694) clusters, and one (1) for the specific green building identified in each cluster. Expanding the model did not change the coefficients of the other variables and the explained variance is slightly larger.⁸⁰

Table 3.2 presents results of the linear regression when the dependent variable is measured by the logarithm of effective rent. In the simplest model, Case 1, the results show that a green rating is associated with a ten percent (10%) increase in effective rent. Also the results with a dummy variable representing a LEED rated building shown in Case 2 demonstrate an effective rent premium of nine percent (9%). Including other hedonic characteristics and amenities of the buildings in Case 4 also results in a seven percent (7%) premium for effective rent in green buildings.⁸¹

The results reported in Tables 3.1 and 3.2 also suggest that the occupancy rates of green certified buildings are eleven percent (11%) higher than in otherwise comparable noncertified buildings.⁸²

Table 3.3 presents the linear regression results based upon the sample of one hundred ninety nine (199) green certified office buildings sold between 2004 and 2007 and the control sample of one thousand six hundred fourteen (1,614) conventional buildings sold within a quarter mile of the green buildings. These models explain a smaller fraction of the variation in the logarithm of selling price per square foot, but the qualitative results are similar, with the transaction premiums for green buildings 15.8% to 16.8% higher than for nonrated buildings. There is no evidence that LEED certification is associated with higher

⁷⁵ Piet Eichholtz, Nils Kok, and John Quigley, "Doing Well by Doing Good? Green Office Buildings," *American Economic Review* 100(5) (2010): 2498, accessed July 15, 2013, <http://topenvec.files.wordpress.com/2012/02/34-eichholtz-p-n-kok-and-j-quigley-2010-doing-well-by-doing-good-green-office-buildings.pdf>.

⁷⁶ Ibid.

⁷⁷ Ibid.

⁷⁸ Ibid.

⁷⁹ Ibid: 2500.

⁸⁰ Ibid.

⁸¹ Ibid.

⁸² Ibid.

Table 3.3 Regression Results, Office Sales Price and Green Ratings, 2004-2007						
Dependent Variable: Logarithm of Sales Price in Dollars per Square Foot						
	Case 1	Case 2	Case 3	Case 4	Case 5	
Sample Size	1813	1813	1813	1813	1813	Notes:
R-squared	0.43	0.43	0.44	0.44	0.49	1. Adapted from Eichholtz, Kok and Quigley
Adjusted R-Squared	0.35	0.35	0.36	0.37	0.34	Table 3.
Constant	5.365	5.393	5.764	5.690	6.352	2. Each regression also includes 199 dummy
	[0.039]*	[0.337]*	[0.523]*	[0.542]*	[0.154]*	variables, one for each locational cluster.
Green rating:	0.168		0.158	0.165		3. Regression (5) also includes an additional
	[0.051]*		[0.052]*	[0.052]*		199 dummy variables, one for each green
<i>Energy Star</i>		0.191				building in the sample.
		[0.052]*				4. Standard errors are in brackets.
<i>LEED</i>		0.113				* Significant at the one percent (1%) level.
		[0.172]				** Significant at the five percent (5%) level.
Building Size	0.171	0.167	0.104	0.200	0.192	***Significant at the ten percent (10%) level.
(millions of sq. feet)	[0.090]***	[0.089]***	[0.089]	[0.108]***	[0.125]	
Building Class:						
<i>Class A</i>	0.164	0.161	0.032	0.104	0.143	
	[0.066]**	[0.066]**	[0.078]	[0.084]	[0.099]	
<i>Class B</i>	-0.188	-0.187	-0.216	-0.184	-0.183	
	[0.051]*	[0.051]*	[0.057]*	[0.058]*	[0.064]*	
Employment Growth	-0.005	-0.005	-0.004	-0.006	-0.006	
(fraction)	[0.004]	[0.004]	[0.005]	[0.005]	[0.005]	
Age:						
< 10 years			0.201	0.207	0.161	
			[0.149]	[0.147]	[0.207]	
10-20 years			0.196	0.224	0.226	
			[0.099]**	[0.100]**	[0.124]***	
20-30 years			0.248	0.276	0.288	
			[0.070]*	[0.070]*	[0.081]*	
30-40 years			0.226	0.251	0.281	
			[0.073]*	[0.075]*	[0.090]*	
Renovated			-0.096	-0.087	-0.071	
			[0.046]**	[0.046]***	[0.053]	
Stories:						
<i>Intermediate</i>				-0.183	-0.189	
				[0.057]*	[0.067]*	
<i>High</i>				-0.185	-0.232	
				[0.092]**	[0.113]**	
Amenities				-0.043	-0.048	
				[0.049]	[0.058]	
Year of Sale:						
2006	0.015	0.017	0.021	0.016	0.048	
	[0.060]	[0.060]	[0.060]	[0.060]	[0.071]	
2005	-0.040	-0.039	-0.039	-0.048	-0.034	
	[0.056]	[0.056]	[0.056]	[0.055]	[0.065]	
2004	-0.177	-0.175	-0.173	-0.200	-0.174	
	[0.067]*	[0.067]*	[0.067]**	[0.067]*	[0.078]**	

selling prices. Also there is some evidence that selling prices per square foot are higher when the properties are of higher quality or are larger. In addition, buildings with fewer stories sell for higher

prices per square foot. Buildings sold in 2004 for prices up to twenty percent (20%) lower than those that sold in 2007.⁸³

Eichholtz, Kok and Quigley also found their statistical results to be consistent across the two (2) models of rent and value determination. The estimated annual rent increment for a green building was calculated to be approximately three hundred twenty nine thousand dollars (\$329,000) based on the average effective rent and the average size of the control buildings, yielding an incremental value of five million five hundred thousand dollars (\$5,500,000) for a green building at a capitalization rate of six percent (6%). In addition the control buildings had an average selling price of thirty four million seven hundred thirty thousand dollars (\$34,730,000) for the properties sold between 2004 and 2007, yielding an incremental value of five million seven hundred thousand dollars (\$5,700,000) for a green building.⁸⁴

The data also demonstrates that green buildings were newer, slightly taller, substantially larger and of a higher quality than that of the non-green buildings in each cluster. Also the premium for a green certified building tends to be larger where location rents are lower: in smaller urban markets and in the outer parts of larger metropolitan areas.⁸⁵

The overall results found that a commercial building with an Energy Star certification will rent for approximately three percent (3%) more per square foot. The addition to effective rent for certification was also significant at about seven percent (7%). For the one hundred ninety nine (199) commercial properties within the study with available sales data the increase for a green building was as much as sixteen percent (16%).⁸⁶

3.4 The Premium for Energy Efficiency

Eichholtz, Kok and Quigley also examined the premium for energy efficiency using the Statement of Energy Performance (SEP) provided to the EPA for Energy Star certification for one hundred twenty two (122) of the one hundred ninety nine (199) buildings that were sold from 2004 to 2007. The SEP certification provides measures of both source energy use and site energy use measured in British Thermal Units (BTUs) per square foot. A buildings source energy use calculates all production, delivery and transmission losses for both primary and secondary energy used in a building. Site energy use is reflected in utility bills as the amount of electricity and heat consumed by the building. Energy Star certification is awarded to buildings which are in the top twenty five percent (25%) of comparable buildings in terms of source energy efficiency. This analysis is used to distinguish the effects of the energy saving aspect of the rating from the intangible effects such as marketing benefits, reputation or quality of a rated building.⁸⁷

The models include data on the thermal properties of the one hundred twenty two (122) rated building and the climate conditions of the clusters in which they are located. The first of the three regression equations for this analysis was:

$$\delta_n' = \alpha + \Theta_j \mathbf{Z}_{jn} + \eta_n \quad \text{Equation 3.3}$$

⁸³ Piet Eichholtz, Nils Kok, and John Quigley, "Doing Well by Doing Good? Green Office Buildings," *American Economic Review* 100(5) (2010): 2500, accessed July 15, 2013, <http://topenvec.files.wordpress.com/2012/02/34-eichholtz-p-n-kok-and-j-quigley-2010-doing-well-by-doing-good-green-office-buildings.pdf>.

⁸⁴ Ibid.

⁸⁵ Ibid: 2500-2501.

⁸⁶ Ibid: 2508.

⁸⁷ Ibid: 2504-2505.

The dependent variable δ_n' is from Equation 3.2 and represents the estimated increment to market value commanded by the green building in cluster n , relative to the control buildings in cluster n , holding the hedonic characteristics of the buildings constant. The variables α and Θ_j denote estimated coefficients, η_n is an error term and Z_{jn} measures the thermal and climatic attributes j of the green building in cluster n .⁸⁸

The second regression equation has the form:

$$\varepsilon_{in}' = \alpha + \Theta_j Z_{jn} + \eta_n^* \quad \text{Equation 3.4}$$

with the dependent variable, ε_{in}' defined as the residual from Equation 3.1. It is the increment to market value commanded by the specific green building i that is not attributable to its hedonic characteristics, or to the average premium estimated for a green building, or to its location in a specific cluster. Presumably, this increment reflects the energy efficiency of the specific building as well as random error.⁸⁹

The third regression formula used is as follows:

$$\log R_{in} - \gamma_n' = \alpha + \beta X_i + \Theta_j Z_{jn} + \eta_{in}^{**} \quad \text{Equation 3.5}$$

Here γ_n' represents the location-specific increment to value estimated for each cluster from Equation 3.1 using the entire sample of green buildings and control buildings. The dependent variable is the natural logarithm of value commanded by green building i in cluster n minus the value increment for other buildings in cluster n as estimated in Equation 3.1.⁹⁰

Appendix A contains a listing of the properties studied by Eichholtz, Kok and Quigley. Two hundred fourteen (214) buildings were identified as being sold between 2004 and 2007 and energy use data was provided for one hundred forty four (144) buildings. The reason for the differences in totals between this data and the Eichholtz, Kok and Quigley data are unknown.

3.5 Regression Results for Energy Efficiency

Table 3.4 presents the regression results in several variants. Energy usage is measured in thousands of BTUs per square foot of gross space per degree day, with separate estimates for BTU usage per cooling degree day and BTU usage per heating degree day. The increment to market value associated with variations in the total energy consumed (source energy) is shown in Panel 3.4.1 and Panel 3.4.2 reports analogous results for site energy use.⁹¹

The regression analysis shows a clear inverse relationship between market value and energy usage among buildings that have all been certified as energy efficient. This relationship holds for both source energy use and site energy use. Calculations using the coefficients from Model 3.4 yield an increase in market value of 1.1 percent and 1.2 percent above the average label premium of sixteen percent (16%) for a corresponding ten percent (10%) reduction in site or source energy use. Eichholtz, Kok and Quigley also calculate that on average a dollar of site energy savings yields eighteen dollars and thirty two cents (\$18.32) in increased market value and that a dollar of source energy savings yields twenty dollars and

⁸⁸ Piet Eichholtz, Nils Kok, and John Quigley, "Doing Well by Doing Good? Green Office Buildings," *American Economic Review* 100(5) (2010): 2505, <http://topenvec.files.wordpress.com/2012/02/34-eichholtz-p-n-kok-and-j-quigley-2010-doing-well-by-doing-good-green-office-buildings.pdf>.

⁸⁹ Ibid.

⁹⁰ Ibid: 2506.

⁹¹ Ibid.

Table 3.4 Regression Results: Increment in Market Value for More Energy Efficient Buildings						
Using Source and Site Energy						
	Model 3.3		Model 3.4		Model 3.5	
Panel 3.4.1 - Source Energy Consumption						
Sample Size	122	122	120	120	120	120
R-squared	0.07	0.08	0.08	0.08	0.32	0.34
Adjusted R-Squared	0.06	0.07	0.07	0.06	0.21	0.23
Constant	0.424	0.405	0.359	0.333	5.738	5.687
	[0.098]*	[0.087]*	[0.088]*	[0.091]*	[0.287]*	[0.243]*
Per degree day	-5.091		-4.345		-3.081	
	[1.679]*		[1.360]*		[1.564]***	
Per degree day		-0.218		-0.194		-0.240
<i>Cooling</i>		[0.105]**		[0.085]**		[0.106]**
Per degree day		-1.766		-1.447		-1.116
<i>Heating</i>		[0.581]*		[0.654]**		[0.659]***
Panel 3.4.2 - Site Energy Consumption						
Sample Size	122	122	120	120	120	120
R-squared	0.04	0.07	0.05	0.06	0.31	0.33
Adjusted R-Squared	0.03	0.05	0.04	0.04	0.2	0.22
Constant	0.350	0.387	0.302	0.309	5.600	5.653
	[0.096]*	[0.089]*	[0.086]*	[0.090]*	[0.299]*	[0.259]*
Per degree day	-11.039		-9.805		-5.712	
	[4.894]**		[3.922]**		[4.465]	
Per degree day		-0.544		-0.442		-0.551
<i>Cooling</i>		[0.304]***		[0.247]***		[0.317]***
Per degree day		-5.28		-4.189		-2.938
<i>Heating</i>		[1.917]*		[1.952]**		[1.941]

seventy three cents (\$20.73) in increased value.⁹²

Eichholtz, Kok and Quigley also reviewed the type of industries that occupied the sample of certified green office properties. Despite the higher rental rates it was found that the refining and energy sector as well as the finance, insurance and real estate sector and public administration were more likely to occupy green space than conventional office space. The retail, wholesale trade and manufacturing sectors were less likely to occupy green space. This empirical evidence suggests that intangibles as well as savings on energy bills play are considered when a firm determines the economic premium for a green building.⁹³

⁹² Piet Eichholtz, Nils Kok, and John Quigley, "Doing Well by Doing Good? Green Office Buildings," *American Economic Review* 100(5) (2010): 2507, <http://topenvec.files.wordpress.com/2012/02/34-eichholtz-p-n-kok-and-j-quigley-2010-doing-well-by-doing-good-green-office-buildings.pdf>.

⁹³ Ibid.

CHAPTER 4

SOURCES OF DATA AND RESEARCH METHODOLOGY

4.1 Sources of Data

The property data compiled by Eichholtz, Kok and Quigley for their 2010 paper “Doing Well by Doing Good? Green Office Buildings” will serve as the basis of the quantitative analysis of this thesis. The analysis is limited to the six hundred ninety four (694) buildings identified in the Eichholtz, Kok and Quigley paper as being either LEED Certified or Energy Star rated.

A Microsoft Excel file containing Eichholtz, Kok and Quigley’s data was downloaded from the *American Economic Association* website. This data file included each property’s hedonic characteristics and CoStar Property Identification number. The hedonic characteristics included the property’s square footage, number of stories, age, property class, energy use and rental rates as well as its status as a LEED or Energy Star certified building. Using the CoStar Property Identification number additional building information was gathered from the Property Information, Last Sold Information, CoStar Comps and Public Information tabs from the CoStar Group website.

The CoStar Group is the number one provider of commercial real estate research and information services for property investors and sales professionals in the United States. The CoStar website provides access to a database with the most comprehensive, independently researched property information.⁹⁴

Property information that was not available from the CoStar database was also researched using online public records from State and County Registries of Deeds.

Qualitative information on the history of the green building movement was obtained from online resources, as well as industry related journals and articles. Research material regarding LEED Certification was obtained from the U. S. Green Building Institute website as well as other online journals and articles. Research material for the Energy Star program was obtained from the Energy Star website, the Energy Star 2011 Annual Report, the Energy Star Overview of 2012 Achievements, and other online resources.

4.2 Research Methodology

Two (2) methods of research methodology were used for this thesis. The first methodology was a qualitative analysis to determine the history of the sustainable construction movement, LEED certification and the Energy Star program. The history and rating systems of the sustainable construction movement are summarized in Chapter 2.

The second methodology was a quantitative analysis of the financing of green buildings, starting with the property data from Eichholtz, Kok and Quigley’s research paper. After downloading a copy of the data file from *American Economic Association* website the CoStar Property Identification was used to search the CoStar website for additional property information. In particular, the complete property address, the current ownership type, the last sale date, transaction price and the amount financed, was obtained if available. This information allowed the Loan to Value (LTV) Ratio, the amount financed divided by the properties market value, to be calculated. In addition it was noted if the property achieved LEED

⁹⁴ “CoStar | # 1 Commercial Real Estate Information Company,” CoStar Group, Inc., accessed July 15, 2013, <http://www.costar.com/>.

certification since 2010, or if it was part of a portfolio, Deed in lieu of Foreclosure or Foreclosure sale. Properties that were subject to a ground lease, an Internal Revenue Service Section 1031 exchange, or had a change in title vesting were also identified.

The results from this quantitative analysis are reported in Chapter 5 and will attempt to answer the following questions:

- What type of ownership structure is most common for green buildings? Are they privately held, publicly owned, included in Real Estate Investment Trusts and/or included with Commercial Mortgage Backed Securities?
- Are certified buildings financed differently from non-certified commercial properties?
- Do green buildings receive better loan terms?
- Do green buildings have higher Loan to Value (LTV) ratios?
- Are Federal or State government grants available to encourage the construction of certified buildings?

CHAPTER 5

DATA ANALYSIS AND INTERPRETATION

5.1 Property Addresses

Appendix A contains a listing of the six hundred nine three (693) properties obtained from the downloaded Microsoft Excel data file from Eichholtz, Kok and Quigley's research study. The data is sorted by the last sale date, as identified by CoStar, includes the complete property address and identifies if the building is LEED Certified or Energy Star rated. One (1) property address was not provided in the data file and two (2) properties, CoStar ID 667619 and CoStar ID 716836, were determined to be listed twice. Appendix A also identifies two hundred fourteen (214) buildings as being sold between 2004 and 2007, fifteen (15) more than the one hundred ninety nine (199) studied by Eichholtz, Kok and Quigley. In addition, Appendix A identifies one hundred forty four (144) properties with energy use data, twenty two (22) more than the one hundred twenty (122) noted in the analysis by Eichholtz, Kok and Quigley. The reason for the difference in totals between the data sets is not known.

Appendix B contains these same six hundred ninety one (691) properties with additional data from the CoStar Group. The sale price and amount financed for the last property sale are noted. Appendix B also shows if the property was part of a Foreclosure, Deed in lieu of Foreclosure or part of a portfolio sale. The property's LEED Certification status is noted along with the certification level and the year if it was certified. Properties that are subject to a ground lease, were part of an Internal Revenue Service Section 1031 exchange, or had a change in title vesting are also identified.

Section 1031 of the Internal Revenue Code (IRS) tax code allows the exchange of certain types of property without incurring capital gains or losses that are due upon sale, thereby avoiding capital gains taxes that are usually owed when a property is sold.⁹⁵

5.2 Property Locations

Sorting the data from Appendix B by State yields the results shown in Table 5.1.

The states with the highest number of green properties are located in California with three hundred fourteen (314), Texas with eighty four (84) and Colorado with thirty four (34). Together these states represent approximately sixty three percent (63%) of the properties within the data sample of six hundred ninety nine (691). This result at least in part reflects the large size of the California and Texas commercial office marketplace.

Georgia, Illinois, Virginia, Washington and Florida each represent approximately three percent (3%) of the sample with one hundred five (105) properties. Ten states each represent between one percent (1%) and two percent (2%) of the sample: Arizona, Minnesota, New York, Pennsylvania, Washington DC, Hawaii, Michigan, Oregon, Maryland and Ohio. Two states represent one percent (1%) of the sample: Louisiana and New Jersey with seven (7) properties each. Fourteen (14) states represent less than one percent (1%) of the sample: Kansas, Massachusetts, Missouri, Utah, Wisconsin, Connecticut, Indiana, Nebraska, New Mexico, North Carolina, Tennessee, Iowa, Kentucky and South Carolina for a total of thirty seven (37) buildings.

⁹⁵ "Internal Revenue Code Section 1031," Wikipedia, the Free Encyclopedia, accessed July 20, 2013, http://www.en.wikipedia.org/wiki/1031_exchange.

Table 5.1 Property Locations by State

State	Number	Percent	State	Number	Percent	State	Number	Percent
California	314	45.4%	Pennsylvania	11	1.6%	Missouri	4	0.6%
Texas	84	12.2%	Washington DC	11	1.6%	Utah	4	0.6%
Colorado	34	4.9%	Hawaii	9	1.3%	Wisconsin	4	0.6%
Georgia	23	3.3%	Michigan	9	1.3%	Connecticut	2	0.3%
Illinois	23	3.3%	Oregon	9	1.3%	Indiana	2	0.3%
Virginia	20	2.9%	Maryland	8	1.2%	Nebraska	2	0.3%
Washington	20	2.9%	Ohio	8	1.2%	New Mexico	2	0.3%
Florida	19	2.7%	Louisiana	7	1.0%	North Carolina	2	0.3%
Arizona	13	1.9%	New Jersey	7	1.0%	Tennessee	2	0.3%
Minnesota	13	1.9%	Kansas	5	0.7%	Iowa	1	0.1%
New York	12	1.7%	Massachusetts	5	0.7%	Kentucky	1	0.1%
						South Carolina	1	0.1%
						Totals:	691	100.0%

Source: CoStar Group, Inc., <http://www.costar.com>

5.3 Property Ownership

The type of ownership for the six hundred ninety one (691) properties is shown in Table 5.2.

Investment Managers were the most popular type of ownership with one hundred seventy six (176) properties or approximately twenty five percent (25%) of the total, followed by National Developer/Owners with one hundred thirty seven (137) properties, approximately twenty percent (20%) of the sample. Real Estate Investment Trusts were third (3rd) with ninety five (95) properties, approximately seven (7%) of the sample data. These three (3) ownership types represent approximately fifty percent (50%) of the total buildings in the sample set.

Table 5.2 Property Ownership by Type

Ownership	Number	Percent	Ownership	Number	Percent
Investment Manager	176	25.5%	Corporate/User	15	2.2%
National Developer/Owner	137	19.8%	Private REIT	13	1.9%
Real Estate Investment Trust	95	13.7%	Government	10	1.4%
Not Available	68	9.8%	Individual	6	0.9%
Regional Developer/Owner	49	7.1%	Educational	4	0.6%
Equity Funds	35	5.1%	Non Profit Organization	3	0.4%
Pension Fund	27	3.9%	Other - Private	3	0.4%
Bank/Finance	23	3.3%	Real Estate Operating Company	2	0.3%
Insurance	23	3.3%	Sovereign Wealth Fund	1	0.1%
			Special Servicer	1	0.1%
			Totals:	691	100.0%

Source: CoStar Group, Inc., <http://www.costar.com>

Ownership by a government agency or a Private Real Estate Investment Trust each made up less than two percent (2%) of the sample.

Ownership by an individual, educational, nonprofit organization, private firm, Real Estate Operating

Company, Sovereign Wealth Fund or Special Servicer each represented less than one percent (1%) of the sample.

One building, CoStar ID 320422, located in San Francisco, California is owned by a Sovereign Wealth Fund. One property, CoStar ID 5980600, located in Roanoke, Virginia is owned by a Special Servicer.

The type of ownership for sixty eight (68) properties, approximately ten percent (10%) of the data sample was not available from the CoStar database. Some of these properties were held by limited liability companies, thereby preventing identification of the actual owner.

These results are in line with the typical overall ownership structure of large commercial office buildings in the United States.

5.4 Property Sales Information and Loan to Value Ratios

Using the last property sales information from the CoStar database, including the sales price and the amount of financing, allows Loan to Value (LTV) ratios to be calculated. The LTV ratio is simply the amount of debt financing divided by the value of the property when it was last sold. The LTV ratios calculated are shown in Table 5.3. The LTV ratio calculated for properties that were part of a portfolio sale is based on the entire portfolio in lieu of allocating a sales or amount financed to an individual property.

Table 5.3 Property Loan to Value Ratios

Sale Price Available	Debt Amount Available	LTV Ratio	Number	Percent
Yes	Yes	Greater than one	9	1.3%
Yes	Yes	Between zero and one	200	28.9%
Yes	Yes	Equal to zero	94	13.6%
Yes	No	NA	162	23.4%
No	Yes	NA	47	6.8%
No	No	NA	179	25.9%
Totals:			691	100.0%

Source: CoStar Group, Inc., <http://www.costar.com>

In one hundred sixty two (162) cases the sales price of a property was available but there was no financing amount given, approximately twenty three percent (23%) of the sample. In forty seven (47) cases, representing approximately seven percent (7%) of the total, financing information was reported but a sales price was not given. Information on both the sales price and financing terms was not available for one hundred seventy nine (179) properties, approximately twenty six percent (26%) of the total sample.

Table 5.4 shows a breakdown of the ranges of LTV ratios. Typical lending criteria for commercial office buildings specify LTV ratios of 0.80 or less. This ensures that there is some owner equity in the property, thereby reducing the chance of a loan default.

There were a total of nine (9) properties with a LTV ratio greater than 1.00, meaning that the amount of debt is greater than the property’s sales price. The property with the largest LTV ratio of 113.17, CoStar ID 445836, was a high vacancy building subject to a bank auction sale. Two (2) of the sales prices noted,

CoStar IDs 586222 and 493265, were for a partial interest transfer in ownership, thereby explaining the high LTV ratio. The sales price for one (1) property, CoStar ID 247553, was low because it was subject to a ground lease and did not reflect the cost of the land under the building. CoStar ID 703590 is also subject to a ground lease, but in this case the amount of financing includes both the cost of the building and of the land. Two (2) properties, CoStar IDs 300184 and 313881 were high vacancy buildings with planned major renovations by the new owners, partially paid for by the excess financing. The sales price for CoStar ID 234037 appears to be an estimate based on a portfolio sale, so the financed amount does not accurately reflect the amount of debt for this building. The reason for the high LTV for CoStar ID 161613 could not be determined.

Table 5.4 Ranges of Loan to Value Ratios

LTV Ratio	Number	Percent	LTV Ratio	Number	Percent
LTV Greater than 1.00	9	3.0%	LTV Ratio 0.50 - 0.59	18	5.9%
LTV Ratio equal to 1.00	6	2.0%	LTV Ratio 0.40 - 0.49	8	2.6%
LTV Ratio 0.90 - 0.99	10	3.3%	LTV Ratio 0.30 - 0.39	4	1.3%
LTV Ratio 0.80 - 0.89	48	15.8%	LTV Ratio 0.20 - 0.29	8	2.6%
LTV Ratio 0.70 - 0.79	41	13.5%	LTV Ratio 0.10 - 0.19	7	2.3%
LTV Ratio 0.60 - 0.69	43	14.2%	LTV Ratio 0.01 - 0.09	7	2.3%
			LTV Ratio equal to 0.00	94	31.0%
			Totals:	303	100.0%

Source: CoStar Group, Inc., <http://www.costar.com>

Four (4) of the six (6) properties with a LTV ratio equal to 1.00 (CoStar IDs 606663, 144365, 340570 and 279931) were sold between 2007 and 2008, before the real estate market crash in 2008 and strict lending criteria came back into vogue. CoStar ID 340570 was also a sale and leaseback situation and CoStar ID 279931 was part of a portfolio sale. The two (2) remaining properties, CoStar IDs 606663 and 249187, also were portfolio sales, in this case they were completed in 2012.

Eight (8) out of the ten (10) buildings with LTV ratios between 0.90 and 0.99 sold between 2001 and 2007 and one (1) property (CoStar ID 479467) sold in 1997. One (1) of these properties was part of a portfolio sale. This high LTV ratio can most likely be attributed to the liberal lending of the time period. The remaining property, CoStar ID 247554, was sold in 2010 and the amount financed includes both the first and second mortgage amounts.

Twenty five (25) of the forty eight (48) properties with a LTV ratio between 0.80 and 0.89 were part of partnership dissolution and recapitalization in September 2012, thereby explaining the high ratio. Two (2) of the remaining properties, CoStar IDs 246910 and 300188, are identified as part of a Commercial Mortgage Backed Security (CMBS) sale. One (1) building, CoStar ID 470527, sold in 2000, one (1) building, CoStar ID 24691, sold in 2001 and fourteen (14) buildings were sold between 2005 and 2008, three (3) of which were portfolio sales. The remaining five (5) properties sold between 2010 and 2013, one (1) of which was a portfolio sale. The limited number of CMBS sales reflects the shutdown of this marketplace following the real estate crash of 2008.

Thirteen (13) of the forty one (41) properties with a LTV ratio between 0.70 and 0.79 were involved with portfolio sales. The property with CoStar ID 313233 was a ground lease and CoStar ID 393574 was a partial ownership interest transfer. Two (2) properties were noted as being distress sales from 2012: CoStar ID 300178 and CoStar ID 247496. Another sale from 2012, CoStar ID 239770, was noted as having a lowered selling price due to hurricane damage.

Twenty two (22) of the forty three (43) properties with a LTV ratio between 0.60 and 0.69 were involved with portfolio sales, one (1) of which was noted as a bank sale (CoStar ID 313366) and two (2) that were noted as an IRS Section 1031 exchange (CoStar IDs 248145 and 248497). CoStar ID 247407 was also an IRS 1031 tax exchange. The property with CoStar ID 247587 was noted as a high vacancy building. CoStar ID 324741 was a high vacancy property subject to a sale and leaseback transaction and CoStar ID 129264 was for a ground lease building.

Five (5) buildings with LTV ratios between 0.50 and 0.59 were portfolio sales, one (1) of which, CoStar ID 437497, was a foreclosure. Of the eight (8) properties with LTV ratios between 0.40 and 0.49, one (1) property (CoStar ID 431225) was a ground lease and two (2) were portfolio sales. Two (2) of the four (4) properties with LTV ratios between 0.30 and 0.39 were also portfolio sales, as were six (6) of the eight (8) properties with LTV ratios between 0.20 and 0.29. CoStar ID 320422 was noted as a partial ownership interest transfer. All nine (9) of the properties with LTV ratios between 0.20 and 0.29 were portfolio sales as were four (4) of the five (5) buildings with LTV ratios between 0.01 and 0.09.

A total of ninety four (94) buildings were purchased without debt financing. The type of ownership for these cash sale properties is shown in Table 5.5. Twenty six (26) were portfolio sales, one (1) was a partial ownership transfer, one (1) was for a ground lease, one (1) was a distress sale of a high vacancy property and one (1) was a foreclosure sale. The ownership type for two (2) of these properties was not provided. Twenty eight (28) properties, approximately thirty percent (30%) were purchased by an Investment Manager. Approximately eleven percent (11%) was purchased by a National Developer/Owner, Real Estate Investment Trust or a Pension Fund. Less than five percent (5%) of the sample were purchased by the government, a Bank or Finance company, Equity Funds or a Private Real Estate Investment Trust. Less than two percent (2%) were purchased by a Corporate/User or Educational institution. Again, these percentages are in line with the typical ownership of large commercial office buildings.

Table 5.5 Ownership Type for Properties With No Debt Financing

Ownership	Number	Percent	Ownership	Number	Percent
Investment Manager	28	29.8%	Private REIT	3	3.2%
National Developer/Owner	11	11.7%	Corporate/User	2	2.1%
Real Estate Investment Trust	11	11.7%	Educational	2	2.1%
Pension Fund	10	10.6%	Not Available	2	2.1%
Insurance	9	9.6%	Individual	0	0.0%
Regional Developer/Owner	6	6.4%	Non Profit Organization	0	0.0%
Government	4	4.3%	Other - Private	0	0.0%
Bank/Finance	3	3.2%	Real Estate Operating Company	0	0.0%
Equity Funds	3	3.2%	Sovereign Wealth Fund	0	0.0%
			Special Servicer	0	0.0%
			Totals:	94	100.0%

Source: CoStar Group, Inc., <http://www.costar.com>

5.5 Loan Terms for Green Buildings

In addition to looking at the financing amounts for green buildings an attempt was made to determine if green buildings received lower interest rates than conventional buildings. This effort was unsuccessful. The CoStar database includes copies of deed information, when available, as well as the type of deed with

a document recording number. However, the database does not include copies of mortgage notes. The mortgage note is the document that would contain the interest rate, among other terms and conditions of the mortgage.

Using the property address and the document recording number to search online Registry of Deeds websites did not yield any results. In California, the state with the largest number of green properties, searching the Registry of Deeds using the CoStar document number in San Francisco County and San Bernardino County did not return any records. In addition, Los Angeles County, the location of a large number of these properties, does not provide online access to real estate records due to privacy concerns.

In Texas, the state with the second highest number of green properties the results were similar. Searching the records for the City of Houston either returned no results or no additional information beyond that which was provided by the CoStar website.

In Colorado, the state with the next largest number of green buildings property records were available via a pay search in Colorado Springs and Denver, or if found, as in Centennial, did not include mortgage note information in order to determine the interest rate charged.

Based on the results from the above testing sample the mortgage interest rates for these buildings cannot be obtained from online, free public sources.

5.6 Current LEED Certification Status

When Eichholtz, Kok and Quigley completed their analysis in 2010 a total of fifty six (56) properties from the sample were LEED Certified. In July 2013 this number stands at two hundred fifty five (255) with an additional four (4) properties registered with the USGBC and waiting on their final certification level. Table 5.6 shows the LEED certification by year and certification level for the properties.

						Yearly	Yearly
Year	Registered	Certified	Silver	Gold	Platinum	Total	Percent
2013	4	0	1	9	0	14	5.4%
2012	0	11	13	20	0	44	17.0%
2011	0	2	11	26	1	40	15.4%
2010	0	7	18	49	4	78	30.1%
2009	0	8	19	28	1	56	21.6%
2008	0	1	5	3	0	9	3.5%
2007	0	2	1	1	0	4	1.5%
2006	0	1	2	5	0	8	3.1%
2005	0	1	1	0	0	2	0.8%
2004	0	0	0	2	0	2	0.8%
2003	0	0	0	0	0	0	0.0%
2002	0	2	0	0	0	2	0.8%
Totals:	4	35	71	143	6		
Percent	1.5%	13.5%	27.4%	55.2%	2.3%	100.0%	
					Totals:	259	100.0%

Source: CoStar Group, Inc., <http://www.costar.com>

In total, thirty five (35) properties are Certified, seventy five (75) are Silver certified, one hundred four three (143) are Gold certified and six (6) are Platinum certified. The majority of the buildings are certified at the Gold level with approximately fifty five percent (55%) of the sample, followed by the Silver level at approximately twenty eight percent (28%), and then Certified with approximately fourteen percent (14%). The small number of buildings that achieved the Platinum level reflects the difficulty in achieving this rating in the LEED system.

In terms of yearly results, it is clear that more buildings have been applying for LEED certification since 2008. The certification level of green properties is also increasing. This speaks to the acceptance of LEED in the marketplace and reinforces the results from Eichholtz, Kok and Quigley that these properties are more valuable, and rent and sell for higher prices.

Table 5.7 shows the LEED certification levels by State. The states with the largest number of LEED certified buildings in the data sample are again California, Texas and Colorado, thereby matching the overall property locations results. This result also partially correlates with the top ten (10) states for LEED buildings overall: California, Taxes, New York, Florida, Pennsylvania, Virginia, Illinois, Maryland, Georgia, and Washington, as reported by the USGBC.⁹⁶

State	Registered	Certified	Silver	Gold	Platinum	Total	Percent
California	3	3	18	57	4	85	32.8%
Texas	0	9	11	25	0	45	17.4%
Colorado	0	0	7	11	0	18	6.9%
Virginia	0	8	7	3	0	18	6.9%
Washington	0	2	4	8	1	15	5.8%
Georgia	0	2	5	4	0	11	4.2%
Illinois	0	1	2	7	1	11	4.2%
Washington DC	0	0	1	7	0	8	3.1%
Minnesota	0	0	1	6	0	7	2.7%
Arizona	0	2	2	2	0	6	2.3%
Florida	0	1	2	2	0	5	1.9%
Maryland	0	1	4	0	0	5	1.9%
Kansas	0	1	3	0	0	4	1.5%
Oregon	0	0	1	3	0	4	1.5%
Pennsylvania	0	1	1	2	0	4	1.5%
Massachusetts	0	1	1	0	0	2	0.8%
Missouri	0	1	0	1	0	2	0.8%
North Carolina	0	0	1	1	0	2	0.8%
Michigan	0	1	0	0	0	1	0.4%
Indiana	0	0	0	1	0	1	0.4%
New Jersey	0	0	0	1	0	1	0.4%
New Mexico	1	0	0	0	0	1	0.4%
New York	0	0	0	1	0	1	0.4%
Ohio	0	0	0	1	0	1	0.4%
Wisconsin	0	1	0	0	0	1	0.4%
Totals:	4	35	71	143	6		
					Totals:	259	100.0%

Source: CoStar Group, Inc., <http://www.costar.com>

⁹⁶ “Green Building Facts,” U. S. Green Building Council, accessed July 15, 2013, <http://www.usgbc.org/articles/green-building-facts>.

5.7 Deed in lieu of Foreclosure and Foreclosure Sales

Twelve (12) properties were identified as Foreclosure sales. Seven (7) were located in California, two (2) in Georgia, and one (1) each in Arizona, Illinois and Virginia.

Nineteen (19) properties sales were identified as Deed in lieu of Foreclosures. Eleven (11) were located in California, four (4) in Texas, and one (1) each in Colorado, Florida, Massachusetts and Minnesota. Given the number of properties in the data sample from California and Texas this result is not unexpected.

These relatively low numbers are surprising considering the depth of the financial crisis and the amount of liberal lending occurring before the real estate crash in 2008.

5.8 Ground Leases

A total of thirteen (13) properties were noted as subject to ground leases in the CoStar database. Eight (8) were located in California, two (2) were located in Washington DC, and one (1) was located in each of Arizona, Maryland and the State of Washington.

This result is not unexpected since ground leases make up a small percentage of the overall commercial office building market.

5.9 Internal Revenue Service Section 1031 Exchanges

A total of three (3) properties were noted as part of IRS Section 1031 tax exchanges in the CoStar database. Two (2) were located in California and one (1) was located in Maryland. These sales allow capital gains taxes to be avoided by exchanging one property for another similar property.

Again, this result is not unexpected since IRS 1031 tax exchanges make up a small percentage of the overall sales of commercial office buildings.

5.10 Changes in Title Vesting

Twenty five (25) properties in Appendix B were noted on the CoStar database as a Change in Title Vesting and therefore are not a true property sales transaction. Fourteen (14) of these properties were in California, four (4) each were in Texas and Washington and one (1) each in Georgia, New York and Virginia. Not enough information about these properties was available to calculate LTV ratios for these buildings.

5.11 Government Incentives for Green Buildings

At the Federal level there are no grants or special financing for sustainable construction. Instead there is a corporate tax deduction, a corporate depreciation expense and a corporate tax credit for energy efficient equipment for commercial buildings.⁹⁷

There are two (2) states that offer grant programs applicable to commercial office buildings. New Jersey has a grant program for large scale combined heat and power or fuel cell installations. Pennsylvania has a program in form of loans, grants and loan guarantees for new construction and major renovation projects that achieve LEED Gold Certification.

⁹⁷ “DSIRE: Database of State Incentives for Renewables & Efficiency,” U. S. Department of Energy, accessed July 25, 2013, <http://www.dsireusa.org>.

In addition nineteen (19) states offer at least one (1) loan program that would be applicable for green commercial office buildings: Alabama, Colorado, Connecticut, Hawaii, Idaho, Illinois, Iowa, Maryland, Mississippi, Montana, Nebraska, Nevada, New Jersey, North Carolina, Ohio, Oregon, Pennsylvania, Tennessee and Vermont. Illinois also offers a state bond program for Renewable Energy and Energy Efficiency Project Financing.⁹⁸

To encourage sustainable building, Hawaii has a priority permit process for construction projects incorporating energy and environmental design building standards that will meet LEED Silver standards. North Carolina law also allows for partial building permit fees reductions for LEED certified projects.⁹⁹

The Department of Energy maintains a website with a searchable database listing the Federal, State, local and utility incentives for renewables and efficiency located at <http://www.dsireusa.org>.

⁹⁸ “DSIRE: Database of State Incentives for Renewables & Efficiency,” U. S. Department of Energy, accessed July 25, 2013, <http://www.dsireusa.org>.

⁹⁹ Ibid.

CHAPTER 6

CONCLUSIONS

6.1 Conclusions

The states with the largest number of LEED Certified and Energy Star rated buildings were California, Texas and Colorado. Given the large size of the California and Texas market this is not unexpected. This result also coincides with the findings of Eichholtz, Kok and Quigley that nine percent (9%) of office space is green in California, and more than five percent (5%) of office space in Texas, Washington and Minnesota is green. Overall three percent (3%) of office space in the United States is green labeled and states with extreme temperatures are more likely to have rated buildings.¹⁰⁰ In addition the strict emissions pollution controls in California would favor more energy efficient buildings.

The most common type of ownership for green buildings is Investment Management firms with approximately twenty five percent (25%) of the sample, followed by National Developer/Owners at approximately twenty percent (20%) and Real Estate Investment Trusts with approximately fourteen percent (14%). Only two (2) properties were noted to be part of a Commercial Mortgage Backed Security (CMBS) sale, reflecting the closure of this market after the real estate crash in 2008.

Seventy three (73) buildings, approximately twenty four percent (24%) of the sample, sold with LTV ratios equal to or greater than 0.80, typically the highest ratio allowed by lending standards. Twenty five (25) of these properties were part of partnership dissolution and recapitalization and two (2) buildings were partial ownership interest transfers, thereby partially explaining the large LTV ratio. Two (2) buildings were subject to ground leases and two (2) buildings were high vacancy properties with planned major renovations financed by debt, thereby accounting for the high LTV ratio. Five (5) of these properties were sold as part of a portfolio sale. An additional twenty eight (28) properties sold between 2000 and 2008 when liberal lending standards were common.

One hundred thirty six (136) properties were sold with LTV ratios from 0.01 to 0.80. Two (2) buildings were partial ownership transfers, three (3) were IRS 1031 tax exchanges and three (3) were ground lease transfers. Five (5) properties were noted as high vacancy, distressed properties or a foreclosure sale. Sixty (60) properties were sold as part of a real estate portfolio.

Ninety four (94) properties were purchased without debt, approximately thirty percent (30%) by investment management firms and approximately eleven percent (11%) each by National Developer/Owners, Real Estate Investment Trusts and Pension Funds.

Not enough information was available to calculate LTV ratios for three hundred eighty eight properties (388) representing fifty six (56%) of the data sample.

Based on these findings, the LTV ratio for green labeled buildings is no higher than that received by conventional, non-certified office buildings. Therefore, financing criteria should not stand in the way of the continuing expansion of sustainable buildings in the commercial office building marketplace.

¹⁰⁰ Piet Eichholtz, Nils Kok, and John Quigley, "Doing Well by Doing Good? Green Office Buildings," *American Economic Review* 100(5) (2010): 2496, accessed July 15, 2013, <http://topenvec.files.wordpress.com/2012/02/34-eichholtz-p-n-kok-and-j-quigley-2010-doing-well-by-doing-good-green-office-buildings.pdf>.

An online search of public records was unable to determine if green buildings receive better than market interest rates. Information either: could not be located by the CoStar document number, was not made available online, or was only available for a fee. The public records that were found online did not have any additional information beyond what was available on the CoStar website and did not include interest rate information. Therefore, there is no evidence that green buildings receive better financing terms than non-certified commercial office properties.

The number of LEED certified buildings increased from fifty six (56) in 2010 to two hundred fifty five (255) in 2013, approximately thirty seven percent (37%) of the data sample. The certification process is currently underway for an additional four (4) properties. The number of LEED certified buildings has increased over time. Less than one percent (1%) of the sample was certified in the years 2002, 2003 or 2004. Less than four percent (4%) was certified in 2006, 2007 or 2008. Approximately twenty one percent (21%) of the properties were certified in 2009, approximately fifteen percent (15%) in 2011 and seventeen percent (17%) in 2012. More than thirty percent (30%) of the sample was certified in 2010.

The level of LEED certification has also increased over time with more buildings certified at the Gold level than the Silver level. There are also more buildings certified at the Silver level than at the Certified level. The small number of Platinum buildings reflects the difficulty in achieving this rating within the LEED certification system.

California, Texas, Colorado and Virginia are the states with the highest number of LEED buildings in the sample. This is not unexpected considering California, Texas and Colorado had the highest number of properties in the sample and Virginia was close behind at number six (6). This is also in line with information from the USGBC that California, Texas and Virginia are among the states with the most LEED certified buildings.¹⁰¹

Twelve (12) properties were identified as foreclosure sales and nineteen (19) properties were identified as Deed in lieu of Foreclosure sales. Representing only 1.7% and 2.7% of the sample, respectively this is a small number considering the magnitude and depth of the Great Recession that was at least in part precipitated by real estate investments.

A small number of properties were subject to ground leases, IRS Section 1031 exchanges and changes in title vesting with thirteen (13), three (3) and twenty five (25) properties respectively. Again, these small numbers reflect the small percentage of property sales subject to ground leases, 1031 tax exchanges or changes in title vesting.

At this time there is limited governmental assistance for financing of sustainable buildings. Another barrier to financing sustainable buildings is that most mortgages prevent additional external financing that could be used for energy efficient upgrades. In addition, property owners are also reluctant to perform expensive equipment upgrades if they will not reap the benefits through lower utility bills. This is because commercial leases are written on a triple net basis and the tenant is responsible for paying the electric bill.

6.2 Areas for Future Research

In 2010 Eichholtz, Kok and Quigley determined that the rent premium for a building with a LEED designation was not significant. Based on large increase in the number of LEED certified buildings in

¹⁰¹ “Green Building Facts,” U. S. Green Building Council, accessed July 15, 2013, <http://www.usgbc.org/articles/green-building-facts>.

this sample set since 2010 another regression analysis could be completed to determine if a LEED label now adds value to rent, effective rent or sales transactions.

Each commercial building in the EPA's Energy Star program is recertified annually. Therefore, a study could be undertaken to determine the number of buildings from the data sample that are still Energy Star rated.

Another possible research topic would involve conducting a survey of major lending institutions to determine if there is a market for green financing of commercial office buildings.

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APPENDICES

APPENDIX A

LIST OF PROPERTIES SORTED BY LAST SALES DATE

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Star	Energy LEED Energy & ES Data	
								Star	Data
Last Sale Date Before 2004									
1	134761 5109 Leesburg Pike - Six Skyline Place	Skyline City	Falls Church	VA	12/09/1976	0	1	0	0
2	470546 600 University St	One Union Square	Seattle	WA	07/13/1979	0	1	0	0
3	134762 5113 Leesburg Pike - Four Skyline Place	Skyline City	Falls Church	VA	10/20/1980	0	1	0	0
4	306215 333 W Santa Clara St	Comerica Bank Building	San Jose	CA	05/22/1981	0	1	0	0
5	134763 5111 Leesburg Pike - Five Skyline Place	Skyline City	Falls Church	VA	02/17/1983	0	1	0	0
6	247384 1875 Century Park E	North Tower	Los Angeles	CA	07/01/1983	0	1	0	0
7	137328 201 S 12th Street	Crystal Gateway North	Arlington	VA	03/27/1984	0	1	0	0
8	137445 1215 S Clark Street	Crystal Gateway 3	Arlington	VA	05/23/1985	0	1	0	0
9	1008771 905 E Main St - Bell Hill II	Bell Hill Office Park	Spartanburg	SC	12/01/1985	1	0	0	0
10	247226 16133 Ventura Blvd	Encino Financial Center	Encino	CA	05/21/1986	0	1	0	0
11	320736 601 Montgomery St	-	San Francisco	CA	07/15/1987	0	1	0	0
12	1565462 111 S Tejon St	Plaza of the Rockies North Tower	Colorado Springs	CO	10/01/1987	0	1	0	0
13	233930 5555 San Felipe St	Marathon Oil Tower	Houston	TX	01/02/1988	0	1	0	0
14	234008 5444 Westheimer Rd	-	Houston	TX	01/02/1988	0	1	0	0
15	137411 2300 Clarendon Blvd - Courthouse Plaza 2	Arlington Courthouse Plaza	Arlington	VA	03/25/1988	0	1	0	0
16	178179 570 Taxter Rd	-	Elmsford	NY	05/19/1988	0	1	0	0
17	42051 110 Union St	Harold Poll Building	Seattle	WA	07/01/1988	1	0	0	0
18	482091 255 E Fifth St	First Financial Center	Cincinnati	OH	12/02/1988	0	1	0	0
19	233896 600 Travis St	Chase Tower	Houston	TX	12/17/1988	0	1	0	0
20	139833 228 W Lexington St	Stewart's Building	Baltimore	MD	06/13/1989	1	0	0	0
21	379105 1 Alhambra Plz	Columbus Center	Coral Gables	FL	07/01/1989	0	1	0	0
22	239693 2801 Post Oak Blvd	-	Houston	TX	12/29/1989	0	1	0	0
23	247337 1800 Century Park E - The Plaza	Century Park Center	Los Angeles	CA	02/20/1990	0	1	0	0
24	247365 1840 Century Park E - The Plaza	Century Park Center	Los Angeles	CA	02/20/1990	0	1	0	0
25	248091 300 N Lake Ave	Gateway Plaza	Pasadena	CA	04/17/1990	0	1	0	0
26	248701 550 N Brand Blvd	-	Glendale	CA	07/17/1990	0	1	0	0
27	234016 5599 San Felipe St	-	Houston	TX	02/21/1991	0	1	0	0
28	134764 5201 Leesburg Pike - Three Skyline Place	Skyline City	Falls Church	VA	04/25/1991	0	1	0	0
29	393862 370 17th St	Republic Plaza	Denver	CO	12/31/1991	0	1	0	0
30	130717 6701 Democracy Blvd	Democracy Plaza 1	Bethesda	MD	01/23/1992	0	1	0	0
31	280571 6 Centrepoint Dr - Bldg B	Centrepointe La Palma	La Palma	CA	09/11/1992	0	1	0	0
32	529470 30 Corporate Dr	300 Burlington Centre	Burlington	MA	06/02/1993	0	1	0	0
33	334366 1 Lagoon Dr	Paragon Point I	Redwood City	CA	08/18/1993	0	1	0	0
34	333402 3 Lagoon Dr	Paragon Point III	Redwood City	CA	08/18/1993	0	1	0	0
35	249446 9229 W Sunset Blvd	Sunset Doheny East	West Hollywood	CA	09/16/1993	0	1	0	0
36	249453 9225 W Sunset Blvd	Sunset Doheny West	West Hollywood	CA	09/16/1993	0	1	0	0
37	247553 21021 Ventura Blvd	Woodland Hills Corporate Center	Woodland Hills	CA	12/28/1993	0	1	0	0

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Star	Energy LEED & ES Data
38	137350 1601 N Kent St - Building C	Rosslyn Plaza	Arlington	VA	03/22/1994	0	1	0 0 0
39	235868 2925 Briarpark Cr	-	Houston	TX	03/23/1994	0	1	0 0 0
40	393580 1670 Broadway	-	Denver	CO	03/31/1994	0	1	0 0 0
41	235693 13430 Northwest Fwy	Granite Tower @ 290	Houston	TX	09/26/1994	0	1	0 0 0
42	249355 865 S Figueroa St	-	Los Angeles	CA	10/17/1994	0	1	0 0 0
43	441135 3424 Peachtree Rd NE - Monarch Tower	Monarch Centre	Atlanta	GA	05/31/1995	0	1	0 0 0
44	247754 2425 Olympic Blvd - Phase I	The Water Garden	Santa Monica	CA	06/30/1995	0	1	0 0 0
45	247477 200 N Sepulveda Blvd	Pacific Corporate Towers Building B	El Segundo	CA	09/29/1995	0	1	0 0 0
46	247658 222 N Sepulveda Blvd	Pacific Corporate Towers Building C	El Segundo	CA	09/29/1995	0	1	0 0 0
47	246750 100 N Sepulveda Blvd	Pacific Corporate Towers Building A	El Segundo	CA	09/29/1995	0	1	0 0 0
48	239926 1811 Bering Dr	-	Houston	TX	01/02/1996	0	1	0 0 0
49	129218 1301 K St NW	One Franklin Square	Washington	DC	04/24/1996	0	1	0 0 0
50	246786 10100 Santa Monica Blvd	-	Los Angeles	CA	10/31/1996	0	1	0 0 0
51	1440283 119 Merchant St	Stangenwald Building	Honolulu	HI	12/10/1996	1	0	0 0 0
52	249437 9171 Wilshire Blvd	Palm Wilshire Building	Beverly Hills	CA	12/23/1996	0	1	0 0 0
53	233980 16945 Northchase Dr	Four Greenspoint Place	Houston	TX	01/02/1997	0	1	0 0 0
54	178712 1 Executive Blvd	South Westchester Executive Park	Yonkers	NY	01/31/1997	0	1	0 0 0
55	178713 3 Executive Blvd	South Westchester Executive Park	Yonkers	NY	01/31/1997	0	1	0 0 0
56	178507 200 White Plains Rd - Talleyrand 1	Talleyrand Office Park	Tarrytown	NY	04/01/1997	0	1	0 0 0
57	482175 221 E 4th Street	Atrium Two	Cincinnati	OH	04/02/1997	0	1	0 0 0
58	320717 44 Montgomery St	-	San Francisco	CA	05/28/1997	0	1	0 0 0
59	479467 100 N Tryon St - Founders Halls	Bank of America Corporate Center	Charlotte	NC	06/02/1997	1	0	0 0 0
60	340421 925 L St	-	Sacramento	CA	07/01/1997	0	1	0 0 0
61	248624 515 S Figueroa St	Manulife Plaza	Los Angeles	CA	08/29/1997	0	1	0 0 0
62	1466308 400 Poydras St	-	New Orleans	LA	09/02/1997	0	1	0 0 0
63	279603 16795 Von Karman Ave - Building 5	Von Karman Corporate Center	Irvine	CA	09/09/1997	0	1	0 0 0
64	279599 16735 Von Karman Ave - Building 8	Von Karman Corporate Center	Irvine	CA	09/09/1997	0	1	0 0 0
65	305962 2025 Gateway Place	Gateway Office Park I	San Jose	CA	09/26/1997	0	1	0 0 0
66	144535 10 N Dearborn St	-	Chicago	IL	12/08/1997	1	0	0 0 0
67	224599 Tower	Biltmore Financial Center	Phoenix	AZ	01/08/1998	0	1	0 0 0
68	197382 685 E Carnegie Dr - Two Carnegie Plaza	Tri-City Corporate Center	San Bernardino	CA	01/21/1998	0	1	0 0 0
69	279612 16969 Von Karman Ave - Building 2	Von Karman Corporate Center	Irvine	CA	03/05/1998	0	1	0 0 0
70	279598 16715 Von Karman Ave - Building 9	Von Karman Corporate Center	Irvine	CA	03/05/1998	0	1	0 0 0
71	279601 16755 Von Karman Ave - Building 7	Von Karman Corporate Center	Irvine	CA	03/05/1998	0	1	0 0 0
72	280589 625 The City Dr S - City Centre I	The City	Orange	CA	03/05/1998	0	1	0 0 0
73	313678 9325 Sky Park Ct	Sky Park Office Plaza	San Diego	CA	03/05/1998	0	1	0 0 0
74	314156 6333 Greenwich Dr	Governor Park Plaza	San Diego	CA	03/05/1998	0	1	0 0 0
75	314157 6363 Greenwich Dr	Governor Park Plaza	San Diego	CA	03/05/1998	0	1	0 0 0

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Star	Energy LEED Energy	
								& ES	Data
76	249344 8550 Balboa Blvd	Northridge Business Center	Northridge	CA	04/02/1998	0	1	0	0
77	339295 1646 N California Rd	Growers Square	Walnut Creek	CA	04/23/1998	0	1	0	0
78	810508 333 Commerce St	-	Nashville	TN	07/02/1998	0	1	0	0
79	279838 2030 Main St	Wells Fargo	Irvine	CA	10/15/1998	0	1	0	0
80	380262 1715 N Westshore Blvd	West Shore Center	Tampa	FL	11/05/1998	0	1	0	0
81	378962 200 E Broward Blvd	200 East Broward	Fort Lauderdale	FL	11/06/1998	0	1	0	0
82	224643 3290 E Camelback Rd	Biltmore Financial Center I	Phoenix	AZ	12/29/1998	0	1	0	0
83	137593 2345 Crystal Drive	Crystal Park Four	Arlington	VA	03/03/1999	0	1	0	0
84	137434 2451 Crystal Drive	Crystal Park Five	Arlington	VA	03/03/1999	0	1	0	0
85	137499 2121 Crystal Dr	Crystal Park Two	Arlington	VA	03/03/1999	0	1	0	0
86	137477 2231 Crystal Dr - Crystal Park Three	Crystal Park	Arlington	VA	03/03/1999	0	1	0	0
87	137591 2011 Crystal Dr - Crystal Park One	Crystal Park	Arlington	VA	03/03/1999	0	1	0	0
88	246824 10866 Wilshire Blvd.	Westgate Place	Los Angeles	CA	04/16/1999	0	1	0	0
89	810431 2525 West End Ave	-	Nashville	TN	07/20/1999	0	1	0	0
90	333865 601 Gateway Blvd	Gateway Commons	South San Francisco	CA	08/31/1999	0	1	0	0
91	494335 9200 Worthington Rd	United Healthcare	Westerville	OH	10/21/1999	0	1	0	0
92	157118 1155 Avenue of the Americas	-	New York	NY	12/01/1999	0	1	0	0
93	157384 733 Third Av	-	New York	NY	12/01/1999	0	1	0	0
94	157236 675 Third Ave	-	New York	NY	12/01/1999	0	1	0	0
95	171708 100 Eagle Rock Ave	Eagle Rock	East Hanover	NJ	12/07/1999	0	1	0	0
96	306006 1737 N 1st St	First American Plaza	San Jose	CA	12/16/1999	0	1	0	0
97	1035178 333 S 7th St	Accenture Tower	Minneapolis	MN	12/20/1999	0	1	0	0
98	409359 500 N Akard St	Lincoln Plaza	Dallas	TX	12/20/1999	0	1	0	0
99	437197 4170 Ashford Dunwoody Rd NE	Ashford Green I	Atlanta	GA	03/01/2000	0	1	0	0
100	470527 601 Union St	Two Union Square	Seattle	WA	04/11/2000	0	1	0	0
101	279764 19100 Von Karman Ave	The Atrium	Irvine	CA	08/31/2000	0	1	0	0
102	1500455 925 Bethel St	McCandless Building	Honolulu	HI	11/14/2000	1	0	0	0
103	470747 201 S Jackson St	King Street Center	Seattle	WA	01/17/2001	1	0	0	0
104	245295 210 Lake Dr E	Woodland Falls Corporate Center	Cherry Hill	NJ	04/01/2001	0	1	0	0
105	256383 1601 Cloverfield Blvd - Phase II	The Water Garden	Santa Monica	CA	04/02/2001	1	1	1	0
106	256048 2450 Colorado Ave - Phase II	The Water Garden	Santa Monica	CA	04/02/2001	0	1	0	0
107	92160 3353 Peachtree Rd NE	Atlanta Financial Center - North Tower	Atlanta	GA	04/12/2001	0	1	0	0
108	1377546 737 Bishop St - Mauka Tower	Pacific Guardian Center	Honolulu	HI	05/01/2001	0	1	0	0
109	324766 475 14th St	475 City Center	Oakland	CA	06/28/2001	0	1	0	0
110	401267 4600 S Syracuse St	-	Denver	CO	07/12/2001	0	1	0	0
111	246910 11500 W Olympic Blvd	Olympic Plaza	Los Angeles	CA	07/17/2001	0	1	0	0
112	340499 1130 K St	-	Sacramento	CA	11/16/2001	0	1	0	0
113	320974 500 Washington St	Public Policy Institute of California	San Francisco	CA	12/03/2001	0	1	0	0
114	91917 27555 Ynez Rd	Tower Office Plaza	Temecula	CA	12/21/2001	0	1	0	0

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Energy LEED Energy	
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115	288807 8105 Irvine Center Dr	8105 Tower	Irvine	CA	02/06/2002	0	1	0
116	247396 1900 Avenue of the Stars 21900 Burbank Blvd - Woodland-Burbank	-	Los Angeles	CA	03/07/2002	0	1	0
117	247636 Building	Warner Center	Woodland Hills	CA	04/15/2002	0	1	0
118	300182 1835 Market St	-	Philadelphia	PA	05/09/2002	0	1	0
119	338035 1340 Treat Blvd	Pacific Plaza	Walnut Creek	CA	06/25/2002	0	1	0
120	416455 5950 Sherry Ln	-	Dallas	TX	06/28/2002	0	1	0
121	320912 240 Stockton St	-	San Francisco	CA	07/09/2002	0	1	0
122	313580 6165 Greenwich Dr 31365 Oak Crest Dr - Westlake Spectrum II	Governor Executive Center I	San Diego	CA	08/19/2002	0	1	0
123	248145 Building B 4373 Park Terrace Dr - Westlake Spectrum	Spectrum Corporate Center	Westlake Village	CA	09/27/2002	0	1	0
124	248497 Building C	Spectrum Corporate Centre	Westlake Village	CA	09/27/2002	0	1	0
125	280523 5000 Birch St - West Tower	Koll Center Newport	Newport Beach	CA	11/01/2002	0	1	0
126	205700 700 Commerce Dr	Oak Brook Pointe	Oak Brook	IL	02/28/2003	0	1	0
127	765896 800 Nicolet Mall	US Bancorp Center	Minneapolis	MN	04/25/2003	0	1	0
128	1516981 650 Poydras St	Poydras Center	New Orleans	LA	05/24/2003	0	1	0
129	215552 92 Montvale Ave	The Interchange	Stoneham	MA	06/05/2003	0	1	0
130	42095 2000 Bering Dr	Bering Office Tower	Houston	TX	07/02/2003	0	1	0
131	353981 1055 E Colorado Blvd	-	Pasadena	CA	08/25/2003	0	1	0
132	313252 7676 Hazard Center Dr	Hazard Center Office Tower	San Diego	CA	09/04/2003	0	1	0
133	1057670 440 W 200 S	Three Gateway Office Center	Salt Lake City	UT	09/19/2003	1	0	0
134	649398 2002 Summit Blvd	Perimeter Summit	Atlanta	GA	09/22/2003	0	1	0
135	129172 1015 18th St NW	-	Washington	DC	12/16/2003	1	0	0
136	248200 330 N Brand Blvd	-	Glendale	CA	12/31/2003	0	1	0
137	280197 3 Hutton Centre Dr	Hutton Center III	Santa Ana	CA	12/31/2003	0	1	0
138	445264 1170 Peachtree Street	The Proscenium	Atlanta	GA	12/31/2003	0	1	0
Last Sale Date Between 2004 and 2007 With Energy Data								
1	320631 455 Market St	Central Plaza	San Francisco	CA	01/07/2004	0	1	0
2	364698 400 N Brand Blvd	-	Glendale	CA	01/23/2004	0	1	0
3	364904 450 N Brand Blvd	-	Glendale	CA	01/26/2004	0	1	0
4	249263 800 N Brand Blvd	-	Glendale	CA	03/04/2004	0	1	0
5	247971 251 S Lake Ave	Corporate Center Pasadena	Pasadena	CA	03/26/2004	0	1	0
6	551268 400 W Market St	AEGON Center	Louisville	KY	03/31/2004	0	1	0
7	1516146 999 Bishop St	First Hawaiian Center	Honolulu	HI	05/06/2004	0	1	0
8	348678 80 M St SE	Navy Yard Metro Center	Washington	DC	06/29/2004	0	1	0
9	246935 11766 Wilshire Blvd	Landmark II	Los Angeles	CA	07/01/2004	0	1	0
10	246993 12400 Wilshire Blvd	-	Los Angeles	CA	07/01/2004	0	1	0

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Star	Energy LEED & ES Data
11	71664 10 W Market St	Market Tower	Indianapolis	IN	07/09/2004	0	1	0 1
12	234013 24 Greenway Plz	Weslayan Tower	Houston	TX	09/02/2004	0	1	0 1
13	224577 2929 N Central Ave - Tower II	Phoenix Plaza	Phoenix	AZ	09/10/2004	0	1	0 1
14	224576 2901 N Central Ave - Tower I	Phoenix Plaza	Phoenix	AZ	09/10/2004	0	1	0 1
15	455702 27777 Franklin Rd	American Center	Southfield	MI	09/10/2004	0	1	0 1
16	147323 191 N Wacker Dr	-	Chicago	IL	09/15/2004	0	1	0 1
17	249392 888 W 6th St	Chase Plaza	Los Angeles	CA	10/01/2004	0	1	0 1
18	279779 2040 Main St	Knobble Martens Olson & Bear	Irvine	CA	10/06/2004	0	1	0 1
19	197452 560 E Hospitality Ln - One Parkside	Tri-City Corporate Center	San Bernardino	CA	10/20/2004	0	1	0 1
20	313237 401 B St	Wells Fargo Plaza	San Diego	CA	11/01/2004	0	1	0 1
21	247481 200 S Los Robles Ave	-	Pasadena	CA	11/18/2004	0	1	0 1
22	1384639 1132 Bishop St	Bishop Place	Honolulu	HI	12/02/2004	0	1	0 1
23	131393 6710 Rockledge Drive	Capital Gateway Building II	Bethesda	MD	12/28/2004	0	1	0 1
24	132145 6700 Rockledge Drive	Capital Gateway Building I	Bethesda	MD	12/29/2004	0	1	0 1
25	53694 1 Main Street	Riverfront Office Park II	Cambridge	MA	01/04/2005	0	1	0 1
26	320732 505 Montgomery St	-	San Francisco	CA	01/10/2005	0	1	0 1
27	113385 7300 College Blvd	Ligton Plaza I	Overland Park	KS	01/14/2005	0	1	0 1
28	113468 7400 College Blvd	Ligton Plaza II	Overland Park	KS	01/14/2005	0	1	0 1
29	113421 7500 College Blvd - Lighton Tower	Ligton Plaza	Overland Park	KS	01/14/2005	0	1	0 1
30	1325644 745 Fort Street Mall - Fort Street Tower	Topa Financial Center	Honolulu	HI	02/22/2005	0	1	0 1
31	237959 1500 Citywest Blvd	1500 City West	Houston	TX	03/08/2005	0	1	0 1
32	249248 777 S Figueroa St	777 Tower	Los Angeles	CA	03/17/2005	0	1	0 1
33	320724 235 Montgomery St	The Russ Building	San Francisco	CA	04/07/2005	0	1	0 1
34	71650 101-115 W Washington St	PNC Center	Indianapolis	IN	05/01/2005	0	1	0 1
35	1268975 411 E Wisconsin Ave	411 East Wisconsin Center	Milwaukee	WI	06/03/2005	0	1	0 1
36	445519 12600 Deerfield Parkway	Deerfield Commons I	Alpharetta	GA	06/21/2005	0	1	0 1
37	486669 200 Public Sq	-	Cleveland	OH	06/27/2005	0	1	0 1
38	247229 1620 26th St - Phase I	The Water Garden	Santa Monica	CA	06/30/2005	0	1	0 1
39	54387 100 Pine St	Pine Street Center	San Francisco	CA	07/08/2005	0	1	0 1
40	313244 101 W Broadway	-	San Diego	CA	07/15/2005	0	1	0 1
41	313240 225 Broadway	-	San Diego	CA	07/15/2005	0	1	0 1
42	1152718 90 S Cascade Ave	Wells Fargo Bank Tower	Colorado Springs	CO	07/21/2005	0	1	0 1
43	1376269 2 N Cascade Av	Holly Sugar Building	Colorado Springs	CO	07/21/2005	0	1	0 1
44	334382 333 Twin Dolphin Dr	Twin Dolphin Center	Redwood City	CA	07/29/2005	0	1	0 1
45	246758 100 W Broadway	-	Long Beach	CA	08/04/2005	0	1	0 1
46	233926 5847 San Felipe St	San Felipe Plaza	Houston	TX	08/05/2005	0	1	0 1
47	248122 30401 Agoura Rd - Building 1	Agoura Hills Business Park	Agoura Hills	CA	08/08/2005	0	1	0 1
48	280260 333 S Anita Dr	TriCentre	Orange	CA	08/12/2005	0	1	0 1
49	247198 15821 Ventura Blvd	Encino Terrace Center	Encino	CA	08/26/2005	0	1	0 1

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Energy LEED Energy		
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50	247197 15760 Ventura Blvd	Wells Fargo Bank Building	Encino	CA	08/26/2005	0	1	0	1
51	247201 15910 Ventura Blvd	Encino Plaza	Encino	CA	08/26/2005	0	1	0	1
52	247001 12424 Wilshire Blvd	Gateway Los Angeles	Los Angeles	CA	08/26/2005	0	1	0	1
53	246880 11150 W Olympic Blvd	Olympic Center	Los Angeles	CA	08/26/2005	0	1	0	1
54	246942 11845 W Olympic Blvd	Westside Towers West Building	Los Angeles	CA	08/26/2005	0	1	0	1
55	92540 15260 Ventura Blvd	Valley Executive Tower	Sherman Oaks	CA	08/26/2005	0	1	0	1
56	144489 150 N Martingale Rd	Woodfield Corporate Center	Schaumburg	IL	09/09/2005	0	1	0	1
57	144527 200 N Martingale Rd	Woodfield Corporate Center	Schaumburg	IL	09/09/2005	0	1	0	1
58	1031396 222 S 9th St	Campbell Mithun Tower	Minneapolis	MN	09/14/2005	0	1	0	1
59	224598 Esplanade IV	Camelback Esplanade	Phoenix	AZ	09/27/2005	0	1	0	1
60	246751 100 Oceangate St	Legacy Oceangate Tower	Long Beach	CA	09/28/2005	0	1	0	1
61	1063368 Corporate 10	Cottonwood Corporate Center	Salt Lake City	UT	11/17/2005	0	1	0	1
62	1063374 Corporate 9	Cottonwood Corporate Center	Salt Lake City	UT	11/17/2005	0	1	0	1
63	717007 650 NE Holladay St	Liberty Center	Portland	OR	11/21/2005	0	1	0	1
64	96061 34 Peachtree Street NW		Atlanta	GA	12/01/2005	0	1	0	1
65	197915 650 E Hospitality Ln - Lakeside Tower	Tri-City Corporate Center	San Bernardino	CA	12/06/2005	0	1	0	1
66	197345 Bldg B	Tri-City Corporate Center	San Bernardino	CA	12/06/2005	0	1	0	1
67	482090 201 E Fifth St	PNC Center	Cincinnati	OH	12/19/2005	0	1	0	1
68	380537 201 E Kennedy Blvd	Fifth Third Center	Tampa	FL	12/20/2005	0	1	0	1
69	524220 1401 McKinney St	5 Houston Center	Houston	TX	12/20/2005	0	1	0	1
70	238972 11011 Richmond Ave	Columbia Centre	Houston	TX	12/21/2005	0	1	0	1
71	224803 3200 E Camelback Rd	Biltmore Commerce Center	Phoenix	AZ	12/30/2005	0	1	0	1
72	470539 800 5th Ave	Bank of America Fifth Avenue Plaza	Seattle	WA	01/04/2006	0	1	0	1
73	224607 Esplanade III	Camelback Esplanade	Phoenix	AZ	01/12/2006	0	1	0	1
74	279726 18500 Von Karman Ave - PacTrust Bank	Irvine Towers	Irvine	CA	01/19/2006	0	1	0	1
75	279791 19900 MacArthur Blvd - Tower II	Newport Gateway	Irvine	CA	01/26/2006	0	1	0	1
76	313233 1010 2nd Ave	The Executive Complex	San Diego	CA	01/30/2006	0	1	0	1
77	586222 10801 6th St	The Atrium at Empire Lakes	Rancho Cucamonga	CA	02/21/2006	0	1	0	1
78	379520 701 Brickell Ave		Miami	FL	02/28/2006	0	1	0	1
79	224711 3131 E Camelback Rd	3131 Camelback	Phoenix	AZ	03/09/2006	0	1	0	1
80	320632 525 Market St	First Market Tower	San Francisco	CA	04/26/2006	0	1	0	1
81	402556 10771 E Easter Ave	Building II	Centennial	CO	05/05/2006	0	1	0	1
82	393846 555 17th St		Denver	CO	06/20/2006	0	1	0	1
83	1029705 225 S 6th St	Capella Tower	Minneapolis	MN	08/16/2006	0	1	0	1
84	717050 220 NW Second Ave	One Pacific Square	Portland	OR	08/24/2006	0	1	0	1
85	409036 5800 Granite Pky	Granite Park One	Plano	TX	08/25/2006	0	1	0	1
86	409037 5700 Granite Pky	Granite Park Two	Plano	TX	08/25/2006	0	1	0	1

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Energy LEED Energy	
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87	420025 6333 N State Highway 161	Las Colinas Corporate Center I	Irving	TX	08/31/2006	0	1	0
88	420373 6363 N State Highway 161	Las Colinas Corporate Center II	Irving	TX	08/31/2006	0	1	0
89	252501 655 N Central Ave	Glendale Plaza	Glendale	CA	09/01/2006	0	1	0
90	1020954 7900 International Drive	International Plaza	Bloomington	MN	09/05/2006	0	1	0
91	144406 120 S LaSalle St	-	Chicago	IL	09/14/2006	0	1	0
92	50689 172-190 Carondelet Plz	The Plaza in Clayton	Clayton	MO	09/28/2006	0	1	0
93	52655 5820 Canoga Ave - Building A	Hines Warner Center	Woodland Hills	CA	10/03/2006	0	1	0
94	279934 222 S Harbor Blvd	Anaheim City Centre	Anaheim	CA	10/04/2006	0	1	0
95	280255 3300 Irvine Ave	Newport Irvine Center	Newport Beach	CA	10/04/2006	0	1	0
96	249511 9665 Wilshire Blvd	-	Beverly Hills	CA	10/05/2006	0	1	0
97	246919 11601 Wilshire Blvd	Wells Fargo Center	Los Angeles	CA	10/05/2006	0	1	0
98	248956 6601 Center Dr W - Northpoint	Howard Hughes Center	Los Angeles	CA	10/05/2006	0	1	0
99	248965 6701 Center Dr W - Howard Hughes Tower	Howard Hughes Center	Los Angeles	CA	10/05/2006	0	1	0
100	248215 333 S Hope St	Bank of America Plaza	Los Angeles	CA	10/05/2006	0	1	0
101	313236 701 B St	-	San Diego	CA	10/05/2006	0	1	0
102	479412 101 S Tryon Street	Bank of America Center	Charlotte	NC	10/10/2006	0	1	0
103	248795 600 Wilshire Blvd	Wilshire Grand	Los Angeles	CA	10/18/2006	0	1	0
104	131255 401 N Washington St	Gateway Office Building	Rockville	MD	11/01/2006	0	1	0
105	731586 835 W Hamilton Street	The Plaza at PPL Center	Allentown	PA	11/27/2006	1	1	1
106	333792 101 S Ellsworth Ave	-	San Mateo	CA	11/29/2006	0	1	0
107	409869 5525 N MacArthur Blvd	MacArthur Plaza	Irving	TX	11/30/2006	0	1	0
108	248088 300 N Continental Blvd	Continental Grand Plaza I	El Segundo	CA	12/01/2006	0	1	0
109	234891 757 N Eldridge Pky	Two Eldridge Place	Houston	TX	12/13/2006	0	1	0
110	455857 300 E Big Beaver Rd - Building A	Troy Officentre	Troy	MI	12/20/2006	0	1	0
111	458651 2800 Livernois Rd - Bldg D&E	Troy Officentre	Troy	MI	12/20/2006	0	1	0
112	87060 160 Spear St	-	San Francisco	CA	12/22/2006	0	1	0
113	248803 601-607 S Glenoaks Blvd	601 South Glenoaks Bldg	Burbank	CA	12/26/2006	0	1	0
114	393791 1125 17th St	-	Denver	CO	12/27/2006	0	1	0
115	248647 5200 W Century Blvd	-	Los Angeles	CA	12/29/2006	0	1	0
116	82421 180 Montgomery St	Bank of the West Building SEC	San Francisco	CA	01/07/2007	0	1	0
117	144365 303 E Wacker Dr	-	Chicago	IL	01/08/2007	0	1	0
118	1212036 10 State House Sq	Mariner Center	Hartford	CT	03/07/2007	0	1	0
119	248318 3625 Del Amo Blvd	Overlook III	Torrance	CA	03/16/2007	0	1	0
120	434737 2859 Paces Ferry Rd SE	Executive Square	Atlanta	GA	03/27/2007	0	1	0
121	313250 4225 Executive Sq	Executive Square	La Jolla	CA	04/02/2007	0	1	0
122	393017 7730 E Bellevue Ave	Financial Plaza Building A	Greenwood Village	CO	04/17/2007	0	1	0
123	393016 7720 E Bellevue Ave	Financial Plaza Building B	Greenwood Village	CO	04/17/2007	0	1	0
124	470587 701 5th Ave	Columbia Center	Seattle	WA	04/24/2007	0	1	0
125	279382 1100 W Town And Country Rd	Orange Executive Tower	Orange	CA	05/21/2007	0	1	0

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Star	Energy LEED	ES	Data
18	224597 2555 E Camelback Rd	Camelback Esplanade V	Phoenix	AZ	09/27/2005	0	1	0	0	0
19	1393348 1099 Alakea St	Alibis Place	Honolulu	HI	10/25/2005	0	1	0	0	0
20	1376516 2310 N Fancher Rd	Mountain Gear Headquarters	Spokane Valley	WA	11/25/2005	1	0	0	0	0
21	247998 2600 W Olive Ave	Legacy Media Tower	Burbank	CA	12/02/2005	0	1	0	0	0
22	129029 370 L'Enfant Promenade SW	-	Washington	DC	12/21/2005	0	1	0	0	0
23	239601 450 Gears Rd	Paragon Center One	Houston	TX	12/27/2005	0	1	0	0	0
24	68543 875 Greentree Rd	Nine Parkway Center	Pittsburgh	PA	01/11/2006	0	1	0	0	0
25	313497 701 Palomar Airport Rd	Carlsbad Pacific Center One	Carlsbad	CA	01/18/2006	0	1	0	0	0
26	313501 703 Palomar Airport Rd	Carlsbad Pacific Center	Carlsbad	CA	01/18/2006	0	1	0	0	0
27	393097 6200 S Syracuse Way	Carrara Place	Englewood	CO	01/18/2006	0	1	0	0	0
28	703590 1121 14th St NW	-	Washington	DC	02/01/2006	1	0	0	0	0
29	755727 1 S Dearborn St	One South Dearborn	Chicago	IL	05/05/2006	1	0	0	0	0
30	248895 6300 Wilshire Blvd	6300 Wilshire	Los Angeles	CA	07/25/2006	0	1	0	0	0
31	409977 8144 Walnut Hill Ln	Walnut Glen Tower	Dallas	TX	08/28/2006	0	1	0	0	0
32	776282 1180 Peachtree St NE	1180 Peachtree	Atlanta	GA	09/22/2006	1	0	0	0	0
33	248802 601 S Figueroa St	Figueroa at Wilshire	Los Angeles	CA	10/05/2006	0	1	0	0	0
34	250091 6060 Center Dr	Howard Hughes Center	Los Angeles	CA	10/05/2006	0	1	0	0	0
35	41969 1801 Broadway	Trinity Place	Denver	CO	10/05/2006	0	1	0	0	0
36	300184 1801 Market St - 10 Penn Center	Ten Penn Center	Philadelphia	PA	10/27/2006	0	1	0	0	0
37	246952 11980 San Vicente Blvd	Brentwood Medical Plaza	Los Angeles	CA	11/27/2006	0	1	0	0	0
38	246843 11 Golden Shore St	-	Long Beach	CA	01/26/2007	0	1	0	0	0
39	441800 1100 Peachtree St NE	-	Atlanta	GA	02/06/2007	0	1	0	0	0
40	249431 915 Wilshire Blvd	-	Los Angeles	CA	02/08/2007	0	1	0	0	0
41	717026 322-338 NW Fifth Ave	Minnesota Hotel	Portland	OR	02/15/2007	1	0	0	0	0
42	332462 1350 Bayshore Hwy	One Bay Plaza	Burlingame	CA	02/22/2007	0	1	0	0	0
43	246826 10880 Wilshire Blvd	Oppenheimer Tower	Los Angeles	CA	02/22/2007	0	1	0	0	0
44	333453 1100 Grundy Ln - Bayhill VI	Bayhill Office Center	San Bruno	CA	02/22/2007	0	1	0	0	0
45	333430 1111 Bayhill Dr - Bayhill IV	Bayhill Office Center	San Bruno	CA	02/22/2007	0	1	0	0	0
46	333428 999 Bayhill Dr - Bayhill VII	Bayhill Office Center	San Bruno	CA	02/22/2007	0	1	0	0	0
47	333638 2800 Campus Dr	Peninsula Office Park 3	San Mateo	CA	02/22/2007	0	1	0	0	0
48	247743 2400 Broadway - Building D	Colorado Center	Santa Monica	CA	02/22/2007	0	1	0	0	0
49	247753 2425 Colorado Ave - Building B	-	Santa Monica	CA	02/22/2007	0	1	0	0	0
50	247956 2500 Broadway - Building F	Colorado Center	Santa Monica	CA	02/22/2007	0	1	0	0	0
51	469962 777 108th Ave NE	Symetra Financial Center	Bellevue	WA	02/22/2007	0	1	0	0	0
52	469981 411 108th Ave NE	One Bellevue Center	Bellevue	WA	02/22/2007	0	1	0	0	0
53	234037 1111 Fannin St	-	Houston	TX	02/23/2007	0	1	0	0	0
54	716820 1001 SW 5th Ave	Congress Center	Portland	OR	03/27/2007	0	1	0	0	0
55	313251 3131 Camino Del Rio N	Centerside II	San Diego	CA	04/02/2007	0	1	0	0	0
56	313269 Tower	The Plaza	San Diego	CA	04/02/2007	0	1	0	0	0

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Star	Energy LEED	Energy & ES Data
57	313249 4365 Executive Dr - Pacifica Tower	The Plaza	San Diego	CA	04/02/2007	0	1	0	0
58	161613 500 N Franklin Tpkc	Ramsey Office Centre	Ramsey	NJ	04/16/2007	0	1	0	0
59	320684 201 Mission St	-	San Francisco	CA	04/26/2007	0	1	0	0
60	340409 400 Capital Mall	Wells Fargo Center	Sacramento	CA	05/01/2007	0	1	0	0
61	410114 2711 N Haskell Ave	The Tower at Cityplace	Dallas	TX	05/04/2007	0	1	0	0
62	43996 155 Grand Ave	Lake Merritt Tower	Oakland	CA	05/11/2007	0	1	0	0
63	320727 315 Montgomery St	Annex Building	San Francisco	CA	05/24/2007	1	0	0	0
64	393908 999 18th St	Denver Place	Denver	CO	06/06/2007	1	1	1	0
65	247997 2700 Colorado Ave	-	Santa Monica	CA	06/25/2007	0	1	0	0
66	441220 7000 Central Pky NE	Central Park	Atlanta	GA	06/27/2007	0	1	0	0
67	75878 2345 Grand Blvd 3200 Windy Hill Rd SE - The Towers at	Crown Center Shopping Center	Kansas City	MO	08/10/2007	1	1	1	0
68	435385 Wildwood Plaza	Wildwood Office Park	Atlanta	GA	08/14/2007	0	1	0	0
69	129190 1129 20th St NW	The Liberty Building	Washington	DC	10/04/2007	1	0	0	0
70	23533 15915 Katy Fwy	Ten Plaza West	Houston	TX	12/07/2007	0	1	0	0
Last Sale Date After 2007									
1	178485 700-720 White Plains Rd	Vernon Hills Shopping Center	Scarsdale	NY	01/25/2008	0	1	0	0
2	378510 6750 N Andrews Ave	Cypress Park West II	Fort Lauderdale	FL	01/31/2008	0	1	0	0
3	379067 6700 N Andrews Ave	Cypress Park West I	Fort Lauderdale	FL	01/31/2008	0	1	0	0
4	197763 3401 Centrelake Dr	Centrelake Plaza	Ontario	CA	02/29/2008	0	1	0	0
5	431225 1 N Central Ave	One North Central	Phoenix	AZ	03/20/2008	0	1	0	0
6	42214 9100 Wilshire Blvd	-	Beverly Hills	CA	03/27/2008	0	1	0	0
7	249318 8383 Wilshire Blvd	-	Beverly Hills	CA	03/27/2008	0	1	0	0
8	247206 16000 Ventura Blvd	-	Encino	CA	03/27/2008	0	1	0	0
9	247486 2001 Wilshire Blvd	2001 Wilshire	Santa Monica	CA	03/27/2008	0	1	0	0
10	247166 15250 Ventura Blvd	-	Sherman Oaks	CA	03/27/2008	0	1	0	0
11	248118 303 N Glenoaks Blvd	Glenoaks Plaza	Burbank	CA	03/28/2008	0	1	0	0
12	248090 300 E Magnolia Blvd	Burbank Executive Plaza	Burbank	CA	03/28/2008	0	1	0	0
13	130984 5515 Security Ln	Rockwall II	Rockville	MD	04/09/2008	0	1	0	0
14	249184 70 S Lake Ave	Union Bank Building	Pasadena	CA	05/01/2008	0	1	0	0
15	461419 200 Renaissance Center	Renaissance Center - Tower 200	Detroit	MI	05/01/2008	0	1	0	0
16	234014 3 Riverway	Three Riverway	Houston	TX	05/22/2008	0	1	0	0
17	284094 2020 Main St - Phase I	Opus Center Irvine	Irvine	CA	06/06/2008	0	1	0	0
18	144328 120 N LaSalle St	-	Chicago	IL	06/06/2008	0	1	0	0
19	248407 400 Corporate Pointe	-	Culver City	CA	06/27/2008	0	1	0	0
20	248785 600 Corporate Pointe	Corporate Pointe	Culver City	CA	06/27/2008	0	1	0	0
21	248849 6100 Wilshire Blvd	The New Wilshire	Los Angeles	CA	06/27/2008	0	1	0	0
22	248594 5000 E spring St - Bldg H	Long Beach Airport Business Park	Long Beach	CA	06/30/2008	0	1	0	0

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Star	Energy LEED Energy & ES Data	
								Star	Data
23	247256 1640 S Sepulveda Blvd	Westwood Terrace Building	Los Angeles	CA	06/30/2008	0	1	0	0
24	279931 2201 Dupont Dr - California United Bank	Dupont Center	Irvine	CA	07/02/2008	0	1	0	0
25	380299 5100 W Lemon St	Centrepointe	Tampa	FL	07/28/2008	0	1	0	0
26	655762 1400 S Douglass Road	Arena Corporate Center 1	Anaheim	CA	08/25/2008	0	1	0	0
27	247407 1919 Santa Monica Blvd	The 1919 Building	Santa Monica	CA	09/02/2008	0	1	0	0
28	675870 16105 W 113th St - EcoWorks II	Southlake Technology Park	Lenexa	KS	09/02/2008	1	0	0	0
29	248516 444 S Flower St	Citigroup Center	Los Angeles	CA	09/19/2008	0	1	0	0
30	280605 681 S Parker St - Building 1	Orange Financial Center	Orange	CA	09/25/2008	0	1	0	0
31	280611 701 S Parker St - Building 2	Orange Financial Center	Orange	CA	09/25/2008	0	1	0	0
32	279336 1 Centrepoint Dr - Bldg C	Centrepointe La Palma	La Palma	CA	09/26/2008	0	1	0	0
33	246985 12301 Wilshire Blvd	-	Los Angeles	CA	09/29/2008	0	1	0	0
34	409380 4144 N Central Expy	Uptown Tower	Dallas	TX	10/01/2008	0	1	0	0
35	387315 225 Water St	One Enterprise Center	Jacksonville	FL	11/24/2008	0	1	0	0
36	379382 200 S Biscayne Blvd	Southeast Financial Center	Miami	FL	12/10/2008	0	1	0	0
37	340414 1325 J St	-	Sacramento	CA	12/11/2008	0	1	0	0
38	313267 Tower	The Plaza	San Diego	CA	12/31/2008	0	1	0	0
39	1253132 555 St. Charles Dr	Younan Corporate Center	Thousand Oaks	CA	12/31/2008	0	1	0	0
40	409597 5001 Spring Valley Rd	Providence Towers	Dallas	TX	03/31/2009	0	1	0	0
41	455840 1301 W Long Lake Rd	Long Lake Crossings	Troy	MI	04/28/2009	0	1	0	0
42	248899 6310 San Vicente Blvd	-	Los Angeles	CA	05/26/2009	0	1	0	0
43	246934 11755 Wilshire Blvd	Wilshire Landmark I	Los Angeles	CA	06/01/2009	0	1	0	0
44	1025692 200-220 S 6th St - South Tower	US Bank Tower	Minneapolis	MN	06/01/2009	0	1	0	0
45	393802 1225 17th St	Seventeenth Street Plaza	Denver	CO	06/23/2009	0	1	0	0
46	246799 10350 Santa Monica Blvd	-	Los Angeles	CA	09/01/2009	0	1	0	0
47	247469 2 N Lake Ave	-	Pasadena	CA	09/10/2009	0	1	0	0
48	461333 500 Woodward Ave	One Detroit Center	Detroit	MI	09/10/2009	0	1	0	0
49	204326 901 Warrenville Rd	Arboretum Lakes II	Lisle	IL	09/22/2009	0	1	0	0
50	439850 3003 Summit Blvd	3003 Perimeter Summit	Atlanta	GA	10/16/2009	0	1	0	0
51	5329242 1440 Kapiolani Blvd	Pacific Guardian Tower	Honolulu	HI	10/26/2009	0	1	0	0
52	279464 130 S State College Blvd	130 Brea Campus	Brea	CA	10/30/2009	0	1	0	0
53	1025708 200-220 S 6th St - North Tower	US Bank Tower	Minneapolis	MN	11/06/2009	0	1	0	0
54	393836 717 17th St	Johns Manville Plaza	Denver	CO	11/23/2009	0	1	0	0
55	422543 777 Main St	-	Fort Worth	TX	11/23/2009	0	1	0	0
56	236739 1 Greenway Plaza	Greenway Plaza	Houston	TX	11/23/2009	0	1	0	0
57	42094 2 Greenway Plaza	Greenway Plaza	Houston	TX	11/23/2009	0	1	0	0
58	239871 3800 Buffalo Speedway	Greenway Plaza	Houston	TX	11/23/2009	0	1	0	0
59	340411 980 9th St	Park Tower	Sacramento	CA	12/11/2009	0	1	0	0
60	234032 820 Gessner Rd	Two Memorial City Plaza	Houston	TX	12/15/2009	0	1	0	0
61	340423 915 L St	Capital Place	Sacramento	CA	12/18/2009	0	1	0	0

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62	320906 49 Stevenson St	-	San Francisco	CA	01/06/2010	0	1	0	0	0
63	313881 5962 La Place Ct - The Campus	Carlsbad Research Center	Carlsbad	CA	02/01/2010	0	1	0	0	0
64	144458 53 W Jackson Blvd	The Monadnock Building	Chicago	IL	02/02/2010	1	0	0	0	0
65	717047 101 SW Main St	One Main Place	Portland	OR	02/05/2010	0	1	0	0	0
66	247554 21031 Ventura Blvd	Woodland Hills Corporate Center	Woodland Hills	CA	02/20/2010	0	1	0	0	0
67	279685 17901 Von Karman Ave	Oracle	Irvine	CA	03/08/2010	0	1	0	0	0
68	279708 18101 Von Karman Ave	Epicor	Irvine	CA	04/28/2010	0	1	0	0	0
69	392260 18111 Von Karman Ave	Lakeshore Tower III	Irvine	CA	04/28/2010	0	1	0	0	0
70	249822 11600 Wilshire Blvd	West Wilshire Medical Building	Los Angeles	CA	05/04/2010	0	1	0	0	0
71	394040 165 S Union Blvd	Union Tower	Lakewood	CO	05/24/2010	0	1	0	0	0
72	320734 555 Montgomery St	-	San Francisco	CA	05/25/2010	0	1	0	0	0
73	246921 11620 Wilshire Blvd	West Wilshire Center	Los Angeles	CA	06/17/2010	0	1	0	0	0
74	320838 1 Sansome St	-	San Francisco	CA	06/24/2010	0	1	0	0	0
75	247279 16830 Ventura Blvd	Hudson First Financial Plaza	Encino	CA	06/29/2010	0	1	0	0	0
76	324738 1000 Broadway	Trans Pacific Center	Oakland	CA	06/29/2010	0	1	0	0	0
77	1384613 1003 Bishop St	Pauahi Tower	Honolulu	HI	06/29/2010	0	1	0	0	0
78	799407 171 17th St NW	171 17th Street	Atlanta	GA	07/28/2010	1	0	0	0	0
79	132142 10401 Fernwood Road	The atrium at Rock Spring Park	Bethesda	MD	07/29/2010	0	1	0	0	0
80	247430 1960 E Grand Ave	Grand Avenue Courtyard	El Segundo	CA	09/08/2010	0	1	0	0	0
81	248520 445 S Figueroa St	Union Bank Plaza	Los Angeles	CA	09/16/2010	0	1	0	0	0
82	249503 9601 Wilshire Blvd	-	Beverly Hills	CA	10/01/2010	0	1	0	0	0
83	693241 2733 Crystal Dr - Two Potomac Yard	North Tower	Arlington	VA	10/01/2010	1	0	0	0	0
84	246975 12121 Wilshire Blvd	Wilshire Bundy Plaza	Los Angeles	CA	10/22/2010	0	1	0	0	0
85	102132 1375 Euclid Ave	Idea Center	Cleveland	OH	11/04/2010	1	0	0	0	0
86	148523 325 N Wells St	-	Chicago	IL	11/11/2010	1	0	0	0	0
87	48101 100 First St	-	San Francisco	CA	11/12/2010	0	1	0	0	0
88	106570 7878 N 16th St	Catalina Terraces	Phoenix	AZ	11/19/2010	0	1	0	0	0
89	248946 6500 Wilshire Blvd	-	Los Angeles	CA	11/23/2010	0	1	0	0	0
90	333656 1500 Fashion Island Blvd	BridgePointe Office Park	San Mateo	CA	12/06/2010	0	1	0	0	0
91	333657 1510 Fashion Island Blvd	BridgePointe Office Park	San Mateo	CA	12/06/2010	0	1	0	0	0
92	23218 1111 Bagby St	Heritage Plaza	Houston	TX	12/09/2010	0	1	0	0	0
93	455398 32255 Northwestern Hwy	Triatria Office Building	Farmington Hills	MI	12/10/2010	0	1	0	0	0
94	144530 1750 E Golf Rd	One Century Center	Schaumburg	IL	12/13/2010	0	1	0	0	0
95	393800 1099 18th St	Granite Tower	Denver	CO	12/16/2010	0	1	0	0	0
96	408425 17950 Preston Rd	Preston Place	Dallas	TX	12/16/2010	0	1	0	0	0
97	728654 71 S Wacker Dr	Hyatt Center	Chicago	IL	12/20/2010	1	0	0	0	0
98	137336 2001 Jefferson Davis Hwy	Crystal Plaza 1	Arlington	VA	01/18/2011	0	1	0	0	0
99	248663 530 Wilshire Blvd	The Verona	Santa Monica	CA	02/01/2011	0	1	0	0	0
100	1037295 601 Carlson Pky	601 Tower at Carlson Center	Minnetonka	MN	02/03/2011	0	1	0	0	0

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Energy LEED Energy & ES Data	
							Star	Data
101	246899 11400 W Olympic Blvd	Executive Tower	Los Angeles	CA	02/11/2011	0	1	0
102	409817 8750 N Central Expy	Northpark Central	Dallas	TX	02/25/2011	0	1	0
103	409481 8080 N Central Expy	Eighty-Eighty Central	Dallas	TX	04/04/2011	0	1	0
104	409600 9400 N Central Expy	9400 NCX	Dallas	TX	04/04/2011	0	1	0
105	1029695 90 S 7th St	Wells Fargo Center	Minneapolis	MN	04/29/2011	0	1	0
106	393243 6312 S Fiddlers Green Cir	Tuscany Plaza	Greenwood Village	CO	05/03/2011	0	1	0
107	297250 3701 Corporate Pky	Stabler Corporate Center	Center Valley	PA	05/11/2011	1	0	0
108	470118 601 108th Ave NE	Key Center	Bellevue	WA	06/06/2011	0	1	0
109	157078 1133 Avenue of the Americas	-	New York	NY	06/29/2011	0	1	0
110	717010 700 NE Multnomah St	Lloyd 700 Building	Portland	OR	07/01/2011	0	1	0
111	247130 14724 Ventura Blvd	Tower at Sherman Oaks	Sherman Oaks	CA	07/29/2011	0	1	0
112	559366 5901 College Blvd	-	Overland Park	KS	08/09/2011	0	1	0
113	136882 1881 Campus Commons Dr - Phase 4	Campus Commons	Reston	VA	08/11/2011	0	1	0
114	238727 15600 John F Kennedy Blvd	Intercontinental Center	Houston	TX	08/26/2011	0	1	0
115	144287 70 W Madison St	Three First National Plaza	Chicago	IL	09/01/2011	1	0	0
116	300188 1700 Market St	-	Philadelphia	PA	09/22/2011	1	0	0
117	521942 8310 S Valley Hwy	The Point at Inverness	Englewood	CO	09/23/2011	0	1	0
118	469466 611 Woodward Ave	Chase Tower	Detroit	MI	09/23/2011	0	1	0
119	233899 1000 Louisiana St	Wells Fargo Plaza	Houston	TX	09/27/2011	0	1	0
120	409631 1445 Ross Ave	Fountain Place	Dallas	TX	09/28/2011	0	1	0
121	233925 1221 McKinney St	Lyondell Basell Tower	Houston	TX	09/28/2011	0	1	0
122	233932 909 Fannin St	2 Houston Center	Houston	TX	09/28/2011	0	1	0
123	409856 3710 Rawlings St	Regency Place	Dallas	TX	09/30/2011	0	1	0
124	313284 404 Camino Del Rio S - Crossroads	-	San Diego	CA	10/05/2011	0	1	0
125	313366 9333 Genesee Ave	Genesee Plaza	San Diego	CA	10/17/2011	0	1	0
126	92017 5150 E Pacific Coast Hwy	Park Tower	Long Beach	CA	10/31/2011	0	1	0
127	204298 500 Park Blvd	Hamilton Lakes	Itasca	IL	11/02/2011	0	1	0
128	204299 1 Pierce Place	Hamilton Lakes	Itasca	IL	11/02/2011	0	1	0
129	409450 4925 Greenville Ave	One Energy Square	Dallas	TX	11/21/2011	0	1	0
130	409676 4849 Greenville Ave	Two Energy Square	Dallas	TX	11/21/2011	0	1	0
131	410041 6688 N Central Expy	Three Energy Square	Dallas	TX	11/21/2011	0	1	0
132	409842 545 E John Carpenter Fwy	The Summit at Las Colinas	Irving	TX	11/22/2011	0	1	0
133	291230 895 Dove St	Newport Plaza	Newport Beach	CA	12/09/2011	0	1	0
134	313245 610 W Ash St	-	San Diego	CA	12/09/2011	0	1	0
135	313265 8910 University Center Ln	The Aventine	San Diego	CA	12/09/2011	0	1	0
136	333647 400 S El Camino Real	-	San Diego	CA	12/09/2011	0	1	0
137	382109 311 Park Place Blvd	Park Place	San Mateo	CA	12/09/2011	0	1	0
138	378642 600 Corporate Drive	Radice Corporate Center I	Clearwater	FL	12/09/2011	0	1	0
139	354171 1250 6th Ave	World Trade Center	Fort Lauderdale	FL	12/13/2011	0	1	0
			San Diego	CA	12/15/2011	0	1	0

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140	246800 10351 Santa Monica Blvd	-	Los Angeles	CA	01/06/2012	0	1	0	1	0	0	0	0	0
141	129264 601 13th St NW	Homer Building	Washington	DC	01/09/2012	1	1	1	1	1	0	0	0	0
142	606663 5465 Legacy Dr	The Plaza at Legacy	Plano	TX	01/13/2012	0	1	0	1	0	0	0	0	0
143	667619 1111 Franklin St	UC Office of the President	Oakland	CA	01/26/2012	1	1	1	1	1	0	0	0	0
144	442458 600 Peachtree St NE	Bank of America Plaza	Atlanta	GA	02/07/2012	0	1	0	1	0	0	0	0	0
145	440930 50 Hurt Plaza SE	The Hurt Building	Atlanta	GA	02/15/2012	0	1	0	1	0	0	0	0	0
146	334595 1600 Seaport Blvd - Building 6	Pacific Shores Center	Redwood City	CA	02/24/2012	1	0	0	0	0	0	0	0	0
147	55446 1942 Broadway	The Broadway Building	Boulder	CO	02/29/2012	0	1	0	1	0	0	0	0	0
148	441199 3399 Peachtree Rd NE	Buckhead Tower at Lenox Square	Atlanta	GA	03/06/2012	0	1	0	1	0	0	0	0	0
149	393245 6400 S Fiddlers Green Cir	Plaza Tower One	Greenwood Village	CO	03/13/2012	0	1	0	1	0	0	0	0	0
150	1533602 6565 Americas Pky NE	Two Park Square	Albuquerque	NM	03/19/2012	0	1	0	1	0	0	0	0	0
151	393578 1560 Broadway - Civic Center Plaza	One Civic Center	Denver	CO	03/29/2012	0	1	0	1	0	0	0	0	0
152	393859 410 17th St	-	Denver	CO	03/29/2012	0	1	0	1	0	0	0	0	0
153	393555 1700 Lincoln St	Wells Fargo Center	Denver	CO	03/30/2012	0	1	0	1	0	0	0	0	0
154	380795 200 S Orange Ave - Main Tower	SunTrust Center	Orlando	FL	03/30/2012	0	1	0	1	0	0	0	0	0
155	5980600 111 Franklin Rd SE	Franklin Plaza	Roanoke	VA	03/30/2012	0	1	0	1	0	0	0	0	0
156	144366 200 N LaSalle St	NWC LaSalle & Lake St	Chicago	IL	04/13/2012	0	1	0	1	0	0	0	0	0
157	248652 523 W 6th St - PacMutual	-	Los Angeles	CA	04/16/2012	1	0	0	0	0	0	0	0	0
158	1029816 100 S 5th St	Fifth Street Towers	Minneapolis	MN	04/19/2012	0	1	0	1	0	0	0	0	0
159	1029806 150 S 5th St	Fifth Street Towers	Minneapolis	MN	04/19/2012	0	1	0	1	0	0	0	0	0
160	246769 1000 Wilshire Blvd	The Wedbush Center	Los Angeles	CA	04/27/2012	0	1	0	1	0	0	0	0	0
161	1041305 444 Cedar St	UBS Plaza	Saint Paul	MN	05/17/2012	0	1	0	1	0	0	0	0	0
162	409892 12222 Merit Dr	Four Forest Plaza	Dallas	TX	05/17/2012	0	1	0	1	0	0	0	0	0
163	279694 1800 E Lambert Rd	Lambert Office Plaza	Brea	CA	05/29/2012	0	1	0	1	0	0	0	0	0
164	248584 500 N Central Ave	-	Glendale	CA	06/08/2012	0	1	0	1	0	0	0	0	0
165	493265 41 S High St	Huntington Center	Columbus	OH	06/08/2012	0	1	0	1	0	0	0	0	0
166	306086 2590 N 1st St	Building A	San Jose	CA	06/22/2012	0	1	0	1	0	0	0	0	0
167	234403 11757 Katy Fwy	Kirkwood 3	Houston	TX	06/27/2012	0	1	0	1	0	0	0	0	0
168	997808 2211 Michelson Dr	-	Irvine	CA	06/28/2012	1	0	0	0	0	0	0	0	0
169	249451 900-940 Westwood Blvd	Westwood Plaza	Los Angeles	CA	06/29/2012	0	1	0	1	0	0	0	0	0
170	410050 12801 N Central Expy	NCP III	Dallas	TX	06/29/2012	0	1	0	1	0	0	0	0	0
171	209831 4 Parkway Blvd N - Four Parkway North	Parkway North Center	Deerfield	IL	07/02/2012	0	1	0	1	0	0	0	0	0
172	249187 700 N Central Ave	-	Glendale	CA	07/05/2012	0	1	0	1	0	0	0	0	0
173	249277 801 N Brand Blvd	-	Glendale	CA	07/05/2012	0	1	0	1	0	0	0	0	0
174	248412 400 A Hope St	LA Tower	Los Angeles	CA	07/05/2012	0	1	0	1	0	0	0	0	0
175	247587 21250 Hawthorne Blvd	Pacific Center	Torrance	CA	07/05/2012	0	1	0	1	0	0	0	0	0
176	378536 Plaza	Sawgrass Corporate Park	Sunrise	FL	07/27/2012	0	1	0	1	0	0	0	0	0
177	378551 Centre I	1551 Sawgrass Corporate Pky - Corporate	Sunrise	FL	07/27/2012	0	1	0	1	0	0	0	0	0

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Star	LEED	Star	LEED	Star	ES	Data
178	469956 500 108th Ave NE	City Center Bellevue	Bellevue	WA	07/30/2012	0	1	0	0	0	0	0	0
179	437486 1 Ravinia Drive	-	Atlanta	GA	07/31/2012	0	1	0	0	0	0	0	0
180	171764 240 Cedar Knolls Rd	Cedar Knolls Corporate Center	Cedar Knolls	NJ	07/31/2012	0	1	0	0	0	0	0	0
181	221347 114 Turnpike Rd	Westboro Executive Park	Westborough	MA	08/03/2012	0	1	0	0	0	0	0	0
182	233960 777 Walker St	Two Shell Plaza	Houston	TX	08/10/2012	0	1	0	0	0	0	0	0
183	233920 910 Louisiana St	One Shell Plaza	Houston	TX	08/10/2012	0	1	0	0	0	0	0	0
184	247417 19300-19400 S Hamilton Ave	Hamilton Corporate Center	Gardena	CA	08/14/2012	0	1	0	0	0	0	0	0
185	313957 16875 W Bernardo Dr	Bernardo Executive Center	San Diego	CA	08/14/2012	0	1	0	0	0	0	0	0
186	403241 6465 S Greenwood Plaza	Peakview Tower	Englewood	CO	08/24/2012	0	1	0	0	0	0	0	0
187	248474 425 E Colorado St	Glendale Corporate Center	Glendale	CA	09/06/2012	0	1	0	0	0	0	0	0
188	248391 3901 Via Oro Ave	Freeway Business Center	Long Beach	CA	09/06/2012	0	1	0	0	0	0	0	0
189	247149 1501 Hughes Way	Freeway Business Center	Long Beach	CA	09/06/2012	0	1	0	0	0	0	0	0
190	280515 500 N State College Bldg	500 Orange Tower	Orange	CA	09/06/2012	0	1	0	0	0	0	0	0
191	249168 680 Knox St - Building 1	South Bay Technology Center	Torrance	CA	09/06/2012	0	1	0	0	0	0	0	0
192	249176 690 Knox St - Building 2	South Bay Technology Center	Torrance	CA	09/06/2012	0	1	0	0	0	0	0	0
193	470568 1225 2nd Ave	The Galland Building	Seattle	WA	09/10/2012	1	0	0	0	0	0	0	0
194	1258500 10150 W National Ave	Lincoln Center III	West Allis	WI	09/13/2012	0	1	0	0	0	0	0	0
195	591221 111 Congress Ave	One Congress Plaza	Austin	TX	09/18/2012	0	1	0	0	0	0	0	0
196	591333 98 San Jacinto Blvd	San Jacinto Center	Austin	TX	09/18/2012	0	1	0	0	0	0	0	0
197	591693 300 W 6th St	300 West Sixth	Austin	TX	09/18/2012	1	0	0	0	0	0	0	0
198	350715 751 E Daily Dr	Camarillo Business Center III	Camarillo	CA	09/26/2012	0	1	0	0	0	0	0	0
199	403856 760 Paseo Camarillo	Camarillo Business Center IV	Camarillo	CA	09/26/2012	0	1	0	0	0	0	0	0
200	248861 6167 Bristol Pky - Bristol Plaza	Fox Hills Business Park	Culver City	CA	09/26/2012	0	1	0	0	0	0	0	0
201	279368 10540 Talbert Ave	Fountain Valley Plaza West	Fountain Valley	CA	09/26/2012	0	1	0	0	0	0	0	0
202	279638 17330 Brookhurst St	Fountain Valley City Centre 2	Fountain Valley	CA	09/26/2012	0	1	0	0	0	0	0	0
203	253466 6053 W Century Blvd	Skyview Center II	Los Angeles	CA	09/26/2012	0	1	0	0	0	0	0	0
204	248814 6033 W Century Blvd	Skyview Center I	Los Angeles	CA	09/26/2012	0	1	0	0	0	0	0	0
205	246858 11075 Santa Monica Blvd	The Bentley Building	Los Angeles	CA	09/26/2012	0	1	0	0	0	0	0	0
206	247427 1950 Sawtelle Blvd	-	Los Angeles	CA	09/26/2012	0	1	0	0	0	0	0	0
207	247011 1255 Corporate Center Dr	LA Corporate Center	Monterey Park	CA	09/26/2012	0	1	0	0	0	0	0	0
208	246763 1000 Corporate Center Dr	LA Corporate Center	Monterey Park	CA	09/26/2012	0	1	0	0	0	0	0	0
209	246960 1200 Corporate Center Dr	LA Corporate Center	Monterey Park	CA	09/26/2012	0	1	0	0	0	0	0	0
210	194931 2051 Solar Dr	Solar Business Center	Oxnard	CA	09/26/2012	0	1	0	0	0	0	0	0
211	195027 1901 Solar Dr	Solar Business Center	Oxnard	CA	09/26/2012	0	1	0	0	0	0	0	0
212	247134 150 E Colorado Blvd	Plaza Center	Pasadena	CA	09/26/2012	0	1	0	0	0	0	0	0
213	313430 11975 El Camino Real	Carmel Valley Centre I	San Diego	CA	09/26/2012	0	1	0	0	0	0	0	0
214	313431 11995 El Camino Real	Carmel Valley Centre II	San Diego	CA	09/26/2012	0	1	0	0	0	0	0	0
215	248034 2730 Wilshire Blvd	-	Santa Monica	CA	09/26/2012	0	1	0	0	0	0	0	0
216	248043 2800 28th St	Carlsberg Corporate Center	Santa Monica	CA	09/26/2012	0	1	0	0	0	0	0	0

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Energy LEED Energy	
							Star	Data
217	247152 15060 Ventura Blvd	Noble Professional Center	Sherman Oaks	CA	09/26/2012	0	1	0
218	195006 6401 Telephone Rd	The Center Promenade	Ventura	CA	09/26/2012	0	1	0
219	194868 6555 Telephone Rd	The Center Promenade	Ventura	CA	09/26/2012	0	1	0
220	195000 6633 Telephone Rd	The Center Promenade	Ventura	CA	09/26/2012	0	1	0
221	195053 6477 Telephone Rd	The Center Promenade	Ventura	CA	09/26/2012	0	1	0
222	247655 22144 Clarendon St	Clarendon Crest	Woodland Hills	CA	09/26/2012	0	1	0
223	300178 1500 John F Kennedy Blvd	Two Penn Center	Philadelphia	PA	10/12/2012	0	1	0
224	433020 525 W Van Buren St	Congress Center	Chicago	IL	10/23/2012	0	1	0
225	234717 10370 Richmond Ave	Towers at Westchase I	Houston	TX	11/01/2012	0	1	0
226	445836 3675 Crestwood Pky NW	Crestwood Building	Duluth	GA	11/02/2012	0	1	0
227	437497 115 Perimeter Center Pkwy NE - South Terraces	Perimeter Center	Atlanta	GA	11/06/2012	0	1	0
228	248644 5200 Lankershim Blvd	The Academy Tower	North Hollywood	CA	11/14/2012	0	1	0
229	313232 401 W A St	Columbia Center	San Diego	CA	11/16/2012	0	1	0
230	280625 770 The City Dr S - Orange City Square 1	Orange City Square	Orange	CA	11/30/2012	0	1	0
231	280632 790 The City Dr S -Orange City Square 2	Orange City Square	Orange	CA	11/30/2012	0	1	0
232	280621 750 The City Dr S -Orange City Square 3	Orange City Square	Orange	CA	11/30/2012	0	1	0
233	324832 6150 Stoneridge Mall Road - Building 2	Stoneridge Corporate Plaza	Pleasanton	CA	11/30/2012	0	1	0
234	324831 6140 Stoneridge Mall Road - Building 1	Stoneridge Corporate Plaza	Pleasanton	CA	11/30/2012	0	1	0
235	324830 6130 Stoneridge Mall Road - Building 3	Stoneridge Corporate Plaza	Pleasanton	CA	11/30/2012	0	1	0
236	324833 6160 Stoneridge Mall Road - Building 4	Stoneridge Corporate Plaza	Pleasanton	CA	11/30/2012	0	1	0
237	247496 20101 Hamilton Ave	Hamilton Place	Torrance	CA	11/30/2012	0	1	0
238	233973 1300 Post Oak Blvd	Wells Fargo Bank Tower	Houston	TX	11/30/2012	0	1	0
239	233944 1330 Post Oak Blvd	Four Oaks Place	Houston	TX	11/30/2012	0	1	0
240	236007 1400 Post Oak Blvd	Interfin Tower	Houston	TX	11/30/2012	0	1	0
241	320422 101 California St	-	San Francisco	CA	12/10/2012	0	1	0
242	324741 1221 Broadway	1221 City Center	Oakland	CA	12/11/2012	0	1	0
243	320853 475 Sansome St	-	San Francisco	CA	12/11/2012	0	1	0
244	196638 268 W Hospitality Ln	Mysis Plaza	San Bernardino	CA	12/12/2012	0	1	0
245	380386 1 N Dale Mabry Hwy	Tampa Commons	Tampa	FL	12/12/2012	0	1	0
246	320849 343 Sansome St	-	San Francisco	CA	12/19/2012	0	1	0
247	233453 2375 E Camelback Rd	24th At Camelback	Phoenix	AZ	12/20/2012	0	1	0
248	248729 5700 Wilshire Blvd	Wilshire Courtyard East	Los Angeles	CA	12/20/2012	0	1	0
249	239770 2929 Briarpark Dr	-	Houston	TX	12/20/2012	0	1	0
250	119729 3200 Southwest Fwy	Phoenix Tower	Houston	TX	12/20/2012	0	1	0
251	86081 100 S Ashley Dr	Wells Fargo Center	Tampa	FL	12/21/2012	0	1	0
252	409599 909 Lake Carolyn Pky	Tower 909	Irving	TX	12/21/2012	0	1	0
253	306236 Tower	Silicon Valley Financial Center	San Jose	CA	12/28/2012	0	1	0
254	248780 5990 Sepulveda Blvd	Tri-Center Plaza	Van Nuys	CA	12/28/2012	0	1	0
255	948222 10001 Reunion Pl	Union Square I	San Antonio	TX	12/31/2012	0	1	0

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Energy LEED Energy & ES Data	
							Star	Data
256	469978 10900 NE 4th Street	Skyline Tower	Bellevue	WA	01/04/2013	0	1	0
257	434919 2727 Paces Ferry Road SE	Two Paces West	Atlanta	GA	01/08/2013	0	1	0
258	360730 8407 Fallbrook Ave - Bldg C	Corporate Pointe at West Hills	West Hills	CA	01/17/2013	0	1	0
259	364930 8413 Fallbrook Ave	Corporate Pointe at West Hills	West Hills	CA	01/17/2013	0	1	0
260	279520 1503 S Coast Dr	South Coast Executive Centre	Costa Mesa	CA	01/18/2013	0	1	0
261	247088 1370 Valley Vista Dr	Gateway Corporate Center	Diamond Bar	CA	01/18/2013	0	1	0
262	455667 28411 Northwestern Hwy	One Northwestern Plaza	Southfield	MI	02/05/2013	0	1	0
263	129210 1300 Eye St NW	Franklin Square	Washington	DC	02/08/2013	0	1	0
264	591697 10801 MoPac Expressway N	Braker Point I	Austin	TX	02/08/2013	0	1	0
265	144521 2800 W Higgins Rd	Greenpoint I	Hoffman Estates	IL	02/28/2013	0	1	0
266	717039 601 SW 2nd Ave	ODS Tower	Portland	OR	02/28/2013	0	1	0
267	233903 2800 Post Oak Blvd	Williams Tower	Houston	TX	03/05/2013	0	1	0
268	280566 5762 Bolsa Ave - Building 1	Huntington Beach Plaza	Huntington Beach	CA	03/06/2013	0	1	0
269	280567 5772 Bolsa Ave - Building 2	Huntington Beach Plaza	Huntington Beach	CA	03/06/2013	0	1	0
270	393807 1331 17th St	Guaranty Bank Building	Denver	CO	03/28/2013	0	1	0
271	247577 2121 Avenue of the Stars	Fox Plaza	Los Angeles	CA	04/01/2013	0	1	0
272	246879 11150 Santa Monica Blvd	Westwood Gatewood II North	Los Angeles	CA	04/01/2013	0	1	0
273	419750 15305 Dallas Pky - Colonnade III	The Colonnade	Addison	TX	04/01/2013	0	1	0
274	246817 10780 Santa Monica Blvd	-	Los Angeles	CA	04/04/2013	0	1	0
275	470591 1191 2nd Ave	Second & Seneca Building	Seattle	WA	04/16/2013	0	1	0
276	393566 1625 Broadway - Tower II	World Trade Center	Denver	CO	04/17/2013	0	1	0
277	591276 515 Congress Ave	Bank of America Center	Austin	TX	04/22/2013	0	1	0
278	445225 1180 W Peachtree St	Atlantic Center Plaza	Atlanta	GA	04/25/2013	1	0	0
279	591210 816 Congress Ave	816 Congress	Austin	TX	04/25/2013	0	1	0
280	249274 800 Wilshire Blvd	800 Wilshire Building	Los Angeles	CA	05/10/2013	0	1	0
281	470752 925 4th Ave	The Tower at Fourth & Madison	Seattle	WA	05/13/2013	0	1	0
282	470586 999 3rd Ave	Wells Fargo Center	Seattle	WA	05/13/2013	0	1	0
283	247564 21051 Warner Center Ln - Building F5	Warner Center Corporate Park	Woodland Hills	CA	05/14/2013	0	1	0
284	248716 Premier	Warner Center Corporate Park	Woodland Hills	CA	05/14/2013	0	1	0
285	247537 20931 Burbank Blvd - Building G1	Warner Center Corporate Park	Woodland Hills	CA	05/14/2013	0	1	0
286	410034 5910 N Central Expy	Warner Center Corporate Park	Woodland Hills	CA	05/15/2013	0	1	0
287	144358 225 W Wacker Dr	Premier Place	Dallas	TX	05/15/2013	0	1	0
288	41354 205 E 42nd St	SEC	Chicago	IL	05/16/2013	0	1	0
289	948388 7550 W IH-10	Northwest Center	New York	NY	05/21/2013	0	1	0
290	393574 1700 Broadway	1700 Broadway Office	San Antonio	TX	05/21/2013	0	1	0
291	393606 1999 Broadway	-	Denver	CO	05/22/2013	0	1	0
292	437488 3 Ravinia Dr	Three Ravinia Drive	Denver	CO	05/23/2013	0	1	0
293	249170 6800 Owensmouth Ave	Owensmouth Corporate Center	Atlanta	GA	05/23/2013	0	1	0
294	1558630 3900 N Causeway Blvd - Lakeway I	Lakeway Center	Canoga Park	CA	05/31/2013	0	1	0
			Metairie	LA	06/12/2013	0	1	0

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Star	Energy LEED Data
295	248583 500 N Brand Blvd	-	Glendale	CA	06/13/2013	0	1	0 0
296	248904 633 W 5th St	U.S. Bank Tower	Los Angeles	CA	06/18/2013	0	1	0 0
297	410038 8117 Preston Rd - West Tower	Preston Commons	Dallas	TX	06/19/2013	0	1	0 0
Last Sale Date Not Available								
1	334497 555 Airport Blvd	Bay Park Plaza 2	Burlingame	CA	Not available	0	1	0 0
2	246876 11111 Santa Monica Blvd - Phase I	-	Los Angeles	CA	Not available	0	1	0 0
3	607950 10250 Constellation Blvd	Constellation Place	Los Angeles	CA	Not available	0	1	0 0
4	280500 4685 MacArthur Ct	-	Newport Beach	CA	Not available	0	1	0 0
5	280498 4675 MacArthur Ct	-	Newport Beach	CA	Not available	0	1	0 0
6	340732 2729 Prospect Park Dr	Rancho Cordova City Hall	Rancho Cordova	CA	Not available	1	0	0 0
7	201862 3712-3737 Main St	California Tower	Riverside	CA	Not available	0	1	0 0
8	666344 400 Q St	CalPERS	Sacramento	CA	Not available	1	0	0 0
9	320731 456 Montgomery St	-	San Francisco	CA	Not available	0	1	0 0
10	42183 2811 Wilshire Blvd	Wilshire Tower Building	Santa Monica	CA	Not available	0	1	0 0
11	1587608 121 S Tejon St	Plaza of the Rockies South Tower	Colorado Springs	CO	Not available	0	1	0 0
12	1211824 One State St	-	Hartford	CT	Not available	0	1	0 0
13	129694 1100 New York Ave NW	-	Washington	DC	Not available	0	1	0 0
14	817883 1101 New York Ave NW	-	Washington	DC	Not available	1	0	0 0
15	129467 1919 M St NW	-	Washington	DC	Not available	0	1	0 0
16	763630 500 E Court Ave	Capital Center II	Des Moines	IA	Not available	0	1	0 0
17	6174162 1 Galleria Blvd	Galleria	Metairie	LA	Not available	0	1	0 0
18	1449685 365 Canal St - One Canal Place	The Shops at Canal Place	New Orleans	LA	Not available	0	1	0 0
19	222127 260 Franklin Street	-	Boston	MA	Not available	0	1	0 0
20	1036838 10900 Wayzata Blvd	Crescent Ridge 2	Minnetonka	MN	Not available	0	1	0 0
21	903915 4300-4348 Forest Park Ave	Cortex I Building	Saint Louis	MO	Not available	1	0	0 0
22	1337949 11414 W Center Rd	Terrace Plaza	Omaha	NE	Not available	0	1	0 0
23	1330697 7171 Mercy Rd - Plaza of the Americas	-	Omaha	NE	Not available	0	1	0 0
24	888455 200 Federal St	Waterfront Technology Center	Camden	NJ	Not available	1	0	0 0
25	175170 20 Commerce Dr	Cranford Business Park	Cranford	NJ	Not available	0	1	0 0
26	5048023 3 Normanskill Blvd	-	Delmar	NY	Not available	1	0	0 0
27	759788 7 World Trade Center	250 Greenwich St	New York	NY	Not available	1	0	0 0
28	716836 200 SW Market St	200 Market Building	Portland	OR	Not available	1	1	0 0
29	717562 1120 NW Couch St	Block 2	Portland	OR	Not available	1	0	0 0
30	297384 630 Freedom Dr	Freedom Business Center	King of Prussia	PA	Not available	0	1	0 0
31	694938 2929 Arch St	Cira Centre North	Philadelphia	PA	Not available	1	0	0 0
32	68512 2 Penn Center West - Penn Center West Two	Penn Center West	Pittsburgh	PA	Not available	0	1	0 0
33	837098 424 S 7th St	Southside Works Building 3	Pittsburgh	PA	Not available	1	0	0 0
34	591371 11044 Research Blvd	Stratum Executive Center Building A	Austin	TX	Not available	0	1	0 0

CoStar ID	Address 1	Address 2	City	State	Sale Date	LEED	Star	Energy	LEED	Energy
							& ES	Star	& ES	Data
35	420595 2828 N Harwood St - Phase IV	International Center	Dallas	TX	Not available	0	1	0	0	0
36	1319294 3701 Regent Blvd	Intellicenter - Dallas	Irving	TX	Not available	0	1	0	0	0
37	1057671 136 S Main St - Kearns	-	Salt Lake City	UT	Not available	0	1	0	0	0
38	649276 2300 Wilson Blvd	Navy League Building	Arlington	VA	Not available	1	0	0	0	0
39	135821 8484 Westpark Dr	Westpark Corporate Center Building I	McLean	VA	Not available	0	1	0	0	0
40	136178 8444 Westpark Dr	Westpark Corporate Center Building II	McLean	VA	Not available	0	1	0	0	0
41	5592128 104 W Magnolia St	Bellingham Federal Building	Bellingham	WA	Not available	0	1	0	0	0
42	1269712 222 W Washington Ave	Network222	Madison	WI	Not available	1	0	0	0	0
Duplicate Listings										
1	667619 1111 Franklin St	UC Office of the President	Oakland	CA	01/26/2012					
2	716836 200 SW Market St	200 Market Building	Portland	OR	Not available					
						Totals:	56	642	7	144

Notes:

1. Sources: Adapted from Eichholtz, Kok, and Quigley data file with additional information from the CoStar Group.
2. LEED: 1 = Yes, 0 = No
3. Energy Star: 1 = Yes, 0 = No
4. LEED & ES = Both LEED and Energy Star: 1 = Yes, 0 = No
5. Energy Data: 1 = Yes, 0 = No

APPENDIX B

LIST OF PROPERTIES INCLUDING RESEARCH INFORMATION

CoStar ID	State	Sale Date	Owner in 2013	PS	Sales Price	Debt	LTV Ratio	LEED 2013 Level	Year	Deed ilo Foreclosure	Foreclosure	Ground Lease	IRS Section 1031	Change in Title Vesting
Last Sale Date Before 2004														
1	134761	VA	12/09/1976 REIT	-	Not available	Not available	NA	1 Certified	2012	0	0	0	0	0
2	470546	WA	07/13/1979 Not available	-	\$8,000,000	Not available	NA	1 Certified	2009	0	0	0	0	0
3	134762	VA	10/20/1980 REIT	-	\$600,000	Not available	NA	1 Certified	2012	0	0	0	0	0
4	306215	CA	05/22/1981 DORGNL	-	Not available	Not available	NA	0	-	0	0	0	0	0
5	134763	VA	02/17/1983 REIT	-	\$750,000	Not available	NA	1 Certified	2012	0	0	0	0	0
6	247384	CA	07/01/1983 Investment Manager	-	\$50,000	Not available	NA	1 Gold	2009	0	0	0	0	0
7	137328	VA	03/27/1984 REIT	-	\$2,876,000	Not available	NA	1 Certified	2012	0	0	0	0	0
8	137445	VA	05/23/1985 REIT	-	Not available	Not available	NA	1 Certified	2012	0	0	0	0	0
9	1008771	SC	12/01/1985 Not available	-	\$249,900	Not available	NA	0	-	0	0	0	0	0
10	247226	CA	05/21/1986 D/O NTL	-	Not available	Not available	NA	1 Registered	-	0	0	0	0	0
11	320736	CA	07/15/1987 Not available	-	Not available	Not available	NA	0	-	0	0	0	0	0
12	1565462	CO	10/01/1987 DORGNL	-	Not available	Not available	NA	0	-	0	0	0	0	0
13	233930	TX	01/02/1988 D/O NTL	-	Not available	Not available	NA	1 Silver	2012	0	0	0	0	0
14	234008	TX	01/02/1988 Not available	-	Not available	Not available	NA	1 Certified	2011	0	0	0	0	0
15	137411	VA	03/25/1988 REIT	-	\$2,072,332	Not available	NA	1 Silver	2012	0	0	0	0	0
16	178179	NY	05/19/1988 REIT	-	\$73,000,000	Not available	NA	0	-	0	0	0	0	0
17	42051	WA	07/01/1988 Corporate/User	-	\$1,413,000	Not available	NA	0	-	0	0	0	0	0
18	482091	OH	12/02/1988 D/O NTL	-	Not available	Not available	NA	0	-	0	0	0	0	0
19	233896	TX	12/17/1988 Not available	-	Not available	Not available	NA	1 Gold	2009	0	0	0	0	0
20	139833	MD	06/13/1989 Not available	-	Not available	Not available	NA	1 Certified	2005	0	0	0	0	0
21	379105	FL	07/01/1989 Investment Manager	-	Not available	Not available	NA	1 Gold	2010	0	0	0	0	0
22	239693	TX	12/29/1989 Not available	-	Not available	Not available	NA	0	-	0	0	0	0	0
23	247337	CA	02/20/1990 Pension Fund	1 of 2	\$232,000,000	\$0	0.00	1 Silver	2009	0	0	0	0	0
24	247365	CA	02/20/1990 Pension Fund	2 of 2	\$232,000,000	\$0	0.00	1 Silver	2009	0	0	0	0	0
25	248091	CA	04/17/1990 Pension Fund	-	\$55,000,000	\$0	0.00	1 Gold	2010	0	0	0	0	0
26	248701	CA	07/17/1990 Investment Manager	-	\$75,000,000	\$0	0.00	1 Gold	2010	0	0	0	0	0
27	234016	TX	02/21/1991 Not available	-	Not available	Not available	NA	0	-	0	0	0	0	0
28	134764	VA	04/25/1991 REIT	-	\$74,175	Not available	NA	1 Certified	2012	0	0	0	0	0
29	393862	CO	12/31/1991 REIT	-	Not available	Not available	NA	1 Gold	2009	0	0	0	0	0
30	130717	MD	01/23/1992 REIT	-	Not available	Not available	NA	1 Silver	2012	0	0	0	0	0
31	280571	CA	09/11/1992 Not available	-	\$650,000	Not available	NA	0	-	0	0	0	0	0
32	529470	MA	06/02/1993 Equity Funds	-	Not available	Not available	NA	1 Certified	2010	0	0	0	0	0
33	334366	CA	08/18/1993 Insurance	-	Not available	Not available	NA	1 Gold	2009	0	0	0	0	0
34	333402	CA	08/18/1993 Insurance	-	Not available	Not available	NA	1 Gold	2009	0	0	0	0	0
35	249446	CA	09/16/1993 DORGNL	1 of 2	\$16,000,000	\$0	0.00	0	-	0	0	0	0	0
36	249453	CA	09/16/1993 DORGNL	2 of 2	\$16,000,000	\$0	0.00	0	-	0	0	0	0	0
37	247553	CA	12/28/1993 Not available	1 of 2	\$5,500,000	\$23,000,000	4.18	0	-	0	0	1	0	0
38	137350	VA	03/22/1994 REIT	-	Not available	Not available	NA	0	-	0	0	0	0	0
39	235868	TX	03/23/1994 D/O NTL	-	Not available	Not available	NA	0	-	0	0	0	0	0
40	393580	CO	03/31/1994 Investment Manager	-	Not available	Not available	NA	0	-	0	0	0	0	0
41	235693	TX	09/26/1994 D/O NTL	-	Not available	Not available	NA	1 Silver	2009	0	0	0	0	0
42	249355	CA	10/17/1994 Corporate/User	-	Not available	Not available	NA	0	-	0	0	0	0	0
43	441135	GA	05/31/1995 Not available	-	\$200,000	Not available	NA	0	-	0	0	0	0	0
44	247754	CA	06/30/1995 Bank/Finance	-	Not available	Not available	NA	1 Silver	2011	0	0	0	0	0
45	247477	CA	09/29/1995 Pension Fund	-	Not available	Not available	NA	1 Gold	2010	0	0	0	0	0

CoStar ID	State	Sale Date	Owner in 2013	PS	Sales Price	Debt	LTV Ratio	LEED 2013		Year	Deed ilo	Foreclosure	Foreclosure	Ground Lease	IRS Section 1031	Change in Title Vesting
								Level	Level							
46	CA	09/29/1995	Pension Fund	-	Not available	Not available	NA	1	Gold	2010	0	0	0	0	0	0
47	CA	09/29/1995	Pension Fund	-	Not available	Not available	NA	1	Gold	2010	0	0	0	0	0	0
48	TX	01/02/1996	Not available	-	Not available	Not available	NA	0	-	2010	0	0	0	0	0	0
49	DC	04/24/1996	D/O NTL	-	\$181,000,000	\$139,957,500	0.77	1	Gold	2010	0	0	0	0	0	0
50	CA	10/31/1996	Investment Manager	-	\$121,000,000	\$0	0.00	1	Gold	2010	0	0	0	0	0	0
51	HI	12/10/1996	Not available	-	\$2,800,000	Not available	NA	0	-	-	0	0	0	0	0	0
52	CA	12/23/1996	Insurance	-	Not available	Not available	NA	0	-	-	0	0	0	0	0	0
53	TX	01/02/1997	D/O NTL	-	Not available	Not available	NA	1	Gold	2010	0	0	0	0	0	0
54	NY	01/31/1997	REIT	-	\$6,084,000	Not available	NA	0	-	-	0	0	0	0	0	0
55	NY	01/31/1997	REIT	-	\$3,164,750	Not available	NA	0	-	-	0	0	0	0	0	0
56	NY	04/01/1997	REIT	-	Not available	Not available	NA	0	-	-	0	0	0	0	0	0
57	OH	04/02/1997	Pension Fund	-	Not available	Not available	NA	1	Gold	2011	0	0	0	0	0	0
58	CA	05/28/1997	Pension Fund	-	\$111,000,000	\$0	0.00	1	Gold	2010	0	0	0	0	0	0
59	NC	06/02/1997	Bank/Finance	-	\$265,000	\$251,750	0.95	1	Silver	2010	0	0	0	0	0	0
60	CA	07/01/1997	Investment Manager	-	\$25,000,000	\$0	0.00	1	Gold	2010	0	0	0	0	0	0
61	CA	08/29/1997	Corporate/User	-	Not available	Not available	NA	0	-	-	0	0	0	0	0	0
62	LA	09/02/1997	Not available	-	Not available	Not available	NA	0	-	-	0	0	0	0	0	0
63	CA	09/09/1997	D/O NTL	1 of 9	\$38,000,000	\$0	0.00	0	-	-	0	0	0	0	0	0
64	CA	09/09/1997	Investment Manager	2 of 9	\$38,000,000	\$0	0.00	0	-	-	0	0	0	0	0	0
65	CA	09/26/1997	Investment Manager	-	\$18,400,000	\$12,500,000	0.68	0	-	-	0	0	0	0	0	0
66	IL	12/08/1997	Investment Manager	-	\$7,385,000	\$5,550,000	0.75	0	-	-	0	0	0	0	0	0
67	AZ	01/08/1998	Pension Fund	1 of 2	\$86,400,000	\$0	0.00	1	Certified	2012	0	0	0	0	0	0
68	CA	01/21/1998	Equity Funds	-	Not available	Not available	NA	0	-	-	0	0	0	0	0	0
69	CA	03/05/1998	Investment Manager	1 of 4	Not available	Not available	NA	0	-	-	0	0	0	0	0	0
70	CA	03/05/1998	D/O NTL	2 of 4	Not available	Not available	NA	0	-	-	0	0	0	0	0	0
71	CA	03/05/1998	Investment Manager	3 of 4	Not available	Not available	NA	0	-	-	0	0	0	0	0	0
72	CA	03/05/1998	Investment Manager	-	Not available	Not available	NA	0	-	-	0	0	0	0	0	0
73	CA	03/05/1998	Investment Manager	1 of 2	Not available	Not available	NA	0	-	-	0	0	0	0	0	0
74	CA	03/05/1998	Investment Manager	1 of 2	Not available	Not available	NA	0	-	-	0	0	0	0	0	0
75	CA	03/05/1998	Investment Manager	2 of 2	Not available	Not available	NA	0	-	-	0	0	0	0	0	0
76	CA	04/02/1998	Equity Funds	-	Not available	Not available	NA	1	Silver	2010	0	0	0	0	0	0
77	CA	04/23/1998	Investment Manager	1 of 3	\$41,000,000	\$0	0.00	0	-	-	0	0	0	0	0	0
78	TN	07/02/1998	Not available	-	Not available	Not available	NA	0	-	-	0	0	0	0	0	0
79	CA	10/15/1998	Pension Fund	-	\$88,500,000	\$0	0.00	1	Gold	2010	0	0	0	0	0	0
80	FL	11/05/1998	Investment Manager	-	\$23,076,000	\$0	0.00	0	-	-	0	0	0	0	0	0
81	FL	11/06/1998	Investment Manager	-	\$42,650,000	\$0	0.00	0	-	-	0	0	0	0	0	0
82	AZ	12/29/1998	Pension Fund	-	\$36,984,500	\$0	0.00	1	Certified	2012	0	1	0	0	0	0
83	VA	03/03/1999	REIT	-	Not available	\$3,351,865	NA	1	Certified	2012	0	0	0	0	0	0
84	VA	03/03/1999	REIT	-	Not available	\$125,334,100	NA	1	Silver	2012	0	0	0	0	0	0
85	VA	03/03/1999	REIT	-	\$500	Not available	NA	1	Silver	2012	0	0	0	0	0	0
86	VA	03/03/1999	REIT	-	Not available	\$125,334,100	NA	1	Certified	2012	0	0	0	0	0	0
87	VA	03/03/1999	REIT	-	\$500	Not available	NA	1	Silver	2012	0	0	0	0	0	0
88	CA	04/16/1999	REIT	-	\$55,000,000	\$31,900,000	0.58	0	-	-	0	0	0	0	0	0
89	TN	07/20/1999	Educational	-	\$870,000	Not available	NA	0	-	-	0	0	0	0	0	0
90	CA	08/31/1999	REIT	1 of 2	\$112,000,000	Not available	NA	0	-	-	0	0	0	0	0	0
91	OH	10/21/1999	Not available	-	Not available	Not available	NA	0	-	-	0	0	0	0	0	0
92	NY	12/01/1999	Not available	-	Not available	Not available	NA	0	-	-	0	0	0	0	0	0

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93	157384	NY	12/01/1999	DORGNL	-	\$4,611,000	Not available	0	-	0	0	0	0	0
94	157236	NY	12/01/1999	Not available	-	\$553,000,000	Not available	0	-	0	0	0	0	0
95	171708	NJ	12/01/1999	Investment Manager	1 of 7	\$57,500,000	\$44,000,000	0.77	-	0	0	0	0	0
96	306006	CA	12/16/1999	Government	-	\$15,750,000	\$0	0.00	-	0	0	0	0	0
97	1035178	MIN	12/20/1999	Investment Manager	-	\$94,750,000	Not available	NA	1 Silver	2008	0	0	0	0
98	409359	TX	12/20/1999	Pension Fund	-	\$110,000,000	\$0	0.00	1 Silver	2009	0	0	0	0
99	437197	GA	03/01/2000	Insurance	-	\$37,059,400	\$0	0.00	-	0	0	0	0	0
100	470527	WA	04/11/2000	Government	-	\$213,500,000	\$170,800,000	0.80	1 Certified	2009	0	0	0	0
101	279764	CA	08/31/2000	Insurance	1 of 2	\$60,000,000	\$0	0.00	-	0	0	0	0	0
102	1500455	HI	11/14/2000	Not available	-	\$112,000	Not available	NA	0	0	0	0	0	0
103	470747	WA	01/17/2001	Government	-	\$15,000	Not available	NA	1 Gold	2004	0	0	0	0
104	245295	NJ	04/01/2001	REIT	-	\$5,887,108	\$5,686,400	0.97	0	0	0	0	0	0
105	256383	CA	04/02/2001	Bank/Finance	1 of 2	\$240,000,000	\$0	0.00	1 Gold	2010	0	0	0	0
106	256048	CA	04/02/2001	Bank/Finance	2 of 2	\$240,000,000	\$0	0.00	1 Gold	2010	0	0	0	0
107	92160	GA	04/12/2001	D/O NTL	1 of 3	\$154,000,000	Not available	NA	1 Silver	2012	0	0	0	0
108	1377546	HI	05/01/2001	Insurance	-	\$155,900,000	Not available	NA	0	0	0	0	0	0
109	324766	CA	06/28/2001	Investment Manager	-	\$36,648,000	\$0	0.00	1 Gold	2012	0	0	0	0
110	401267	CO	07/12/2001	Insurance	-	\$60,815,000	\$15,000,000	0.88	0	0	0	0	0	0
111	246910	CA	07/17/2001	Not available	-	\$17,000,000	\$0	0.00	0	0	0	0	0	0
112	340499	CA	11/16/2001	Educational	-	\$18,500,000	\$0	0.00	0	0	0	0	0	0
113	320974	CA	12/03/2001	Corporate/User	-	\$30,390,000	Not available	NA	1 Gold	2010	0	0	0	0
114	91917	CA	12/21/2001	Not available	1 of 5	\$18,500,000	Not available	NA	0	0	0	0	0	0
115	288807	CA	02/06/2002	D/O NTL	-	Not available	Not available	NA	0	0	0	0	0	0
116	247396	CA	03/07/2002	D/O NTL	-	\$182,166,000	\$120,000,000	0.66	0	0	0	0	0	0
117	247636	CA	04/15/2002	Investment Manager	-	\$14,500,000	\$0	0.00	0	0	0	0	0	0
118	300182	PA	05/09/2002	REIT	-	\$83,000,000	Not available	NA	1 Silver	2011	0	0	0	0
119	338035	CA	06/25/2002	Pension Fund	-	\$57,000,000	Not available	NA	1 Silver	2009	0	0	0	0
120	416455	TX	06/28/2002	Investment Manager	-	\$38,400,000	\$0	0.00	0	0	0	0	0	0
121	320912	CA	07/09/2002	Investment Manager	-	\$25,500,000	Not available	NA	0	0	0	0	0	0
122	313580	CA	08/19/2002	Investment Manager	1 of 4	\$69,000,000	Not available	NA	0	0	0	0	0	0
123	248145	CA	09/27/2002	Not available	1 of 5	\$18,600,000	\$11,100,000	0.60	0	0	0	1	0	0
124	248497	CA	09/27/2002	DORGNL	2 of 5	\$18,600,000	\$11,100,000	0.60	0	0	0	1	0	0
125	280523	CA	11/01/2002	Investment Manager	1 of 3	Not available	\$32,500,000	NA	0	0	0	0	0	0
126	205700	IL	02/28/2003	Investment Manager	1 of 2	\$55,250,000	\$0	0.00	1 Silver	2009	0	0	0	0
127	765896	MIN	04/25/2003	REIT	-	\$174,000,000	Not available	NA	0	0	0	0	0	0
128	1516981	LA	05/24/2003	D/O NTL	-	\$34,200,000	Not available	NA	0	0	0	0	0	0
129	215552	MA	06/05/2003	Not available	-	Not available	Not available	NA	0	0	0	0	0	0
130	42095	TX	07/02/2003	Not available	-	Not available	Not available	NA	0	0	0	0	0	0
131	353981	CA	08/25/2003	REIT	-	\$3,789,455	\$0	0.00	0	0	0	0	0	0
132	313252	CA	09/04/2003	Investment Manager	1 of 3	\$100,050,000	\$50,710,000	0.51	1 Silver	2011	0	0	0	0
133	1057670	UT	09/19/2003	DORGNL	-	Not available	Not available	NA	0	0	0	0	0	0
134	649398	GA	09/22/2003	Investment Manager	-	Not available	Not available	NA	1 Gold	2012	0	0	0	0
135	129172	DC	12/16/2003	DORGNL	-	\$27,600,000	\$18,200,000	0.66	0	0	0	0	0	0
136	248200	CA	12/31/2003	Investment Manager	-	Not available	Not available	NA	1 Gold	2012	0	0	0	1
137	280197	CA	12/31/2003	Pension Fund	-	\$40,000,000	Not available	NA	0	0	0	0	0	0
138	445264	GA	12/31/2003	Insurance	-	\$118,000,000	\$0	0.00	0	0	0	0	0	0

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1	320631	CA	01/07/2004	Investment Manager	-	\$6,500,000	Not available	NA	1	Silver	2009	0	0	0	0
2	364698	CA	01/23/2004	Insurance	-	Not available	Not available	NA	1	Gold	2010	0	0	0	0
3	364904	CA	01/26/2004	Insurance	-	\$117,000,000	\$0	0.00	1	Gold	2010	0	0	0	0
4	249263	CA	03/04/2004	REIT	-	Not available	Not available	NA	0	-	2009	0	0	0	0
5	247971	CA	03/26/2004	Investment Manager	-	Not available	Not available	NA	1	Gold	2009	0	0	0	0
6	551268	KY	03/31/2004	D/O NTL	-	\$128,500,000	\$118,500,000	0.92	0	-	2009	0	0	0	0
7	1516146	HI	05/06/2004	Bank/Finance	-	Not available	Not available	NA	0	-	2011	0	0	0	0
8	348678	DC	06/29/2004	Private REIT	-	\$105,000,000	Not available	NA	0	-	2011	0	0	0	0
9	246935	CA	07/01/2004	REIT	-	Not available	Not available	NA	0	-	2011	0	0	0	0
10	246993	CA	07/01/2004	REIT	-	Not available	Not available	NA	0	-	2011	0	0	0	0
11	71664	IN	07/09/2004	Investment Manager	-	Not available	Not available	NA	0	-	2011	0	0	0	0
12	234013	TX	09/02/2004	D/O NTL	-	Not available	\$52,500,000	NA	0	-	2011	0	0	0	0
13	224577	AZ	09/10/2004	Investment Manager	1 of 3	\$41,455,000	\$0	0.00	1	Certified	2012	0	0	0	0
14	224576	AZ	09/10/2004	Investment Manager	2 of 3	\$118,000,000	\$77,000,000	0.65	1	Silver	2009	0	0	0	0
15	455702	MI	09/10/2004	DORGNL	-	Not available	\$77,000,000	0.65	1	Silver	2009	0	0	0	0
16	147323	IL	09/15/2004	Insurance	-	\$222,000,000	Not available	NA	0	-	2010	0	0	0	0
17	249392	CA	10/01/2004	D/O NTL	-	\$25,200,000	Not available	NA	1	Gold	2010	0	0	0	0
18	279779	CA	10/06/2004	Not available	-	Not available	\$88,000,000	NA	1	Gold	2009	0	0	0	0
19	197452	CA	10/20/2004	Equity Funds	-	Not available	\$10,336,000	NA	0	-	2009	0	0	0	0
20	313237	CA	11/01/2004	D/O NTL	-	\$148,271,000	Not available	NA	0	-	2009	0	0	0	0
21	247481	CA	11/18/2004	Investment Manager	-	\$34,250,000	Not available	NA	0	-	2010	0	0	0	0
22	1384639	HI	12/02/2004	REIT	-	\$112,744,600	Not available	NA	0	-	2010	0	0	0	0
23	131393	MD	12/28/2004	Pension Fund	1 of 2	\$90,371,773	Not available	NA	1	Silver	2009	0	0	0	0
24	132145	MD	12/29/2004	Pension Fund	2 of 2	\$89,628,227	Not available	NA	1	Silver	2009	0	0	0	0
25	53694	MA	01/04/2005	Investment Manager	1 of 2	\$175,000,000	Not available	NA	1	Silver	2011	0	0	0	0
26	320732	CA	01/10/2005	Investment Manager	1 of 3	\$118,500,000	Not available	NA	1	Silver	2011	0	0	0	0
27	113385	KS	01/14/2005	Equity Funds	1 of 3	\$65,750,000	Not available	NA	1	Gold	2010	0	0	0	0
28	113468	KS	01/14/2005	Equity Funds	2 of 3	\$65,750,000	Not available	NA	1	Silver	2010	0	0	0	0
29	113421	KS	01/14/2005	Equity Funds	3 of 3	\$65,750,000	Not available	NA	1	Silver	2010	0	0	0	0
30	1325644	HI	02/22/2005	D/O NTL	-	Not available	Not available	NA	0	-	2010	0	0	0	0
31	237959	TX	03/08/2005	DORGNL	-	\$24,000,000	Not available	NA	0	-	2010	0	0	0	0
32	249248	CA	03/17/2005	D/O NTL	1 of 13	\$1,510,000,000	\$155,000,000	0.10	1	Gold	2012	0	0	0	0
33	320724	CA	04/07/2005	D/O NTL	-	Not available	\$60,000,000	NA	1	Gold	2011	0	0	0	0
34	71650	IN	05/01/2005	REIT	-	\$74,750,000	\$0	0.00	1	Gold	2012	0	0	0	0
35	1268975	WI	06/03/2005	D/O NTL	-	Not available	Not available	NA	0	-	2012	0	0	0	0
36	445519	GA	06/21/2005	Private REIT	-	\$19,450,000	Not available	NA	0	-	2012	0	0	0	0
37	486669	OH	06/27/2005	Investment Manager	-	\$141,250,000	\$115,000,000	0.81	0	-	2012	0	0	0	0
38	247229	CA	06/30/2005	Bank/Finance	-	Not available	Not available	NA	0	-	2012	0	0	0	0
39	54387	CA	07/08/2005	Equity Funds	-	\$149,000,000	Not available	NA	1	Certified	2008	0	0	0	0
40	313244	CA	07/15/2005	D/O NTL	1 of 2	\$265,000,000	\$92,800,000	0.35	1	Platinum	2011	0	0	0	0
41	313240	CA	07/15/2005	D/O NTL	2 of 2	\$265,000,000	\$63,840,000	0.24	0	-	2011	0	0	0	0
42	1152718	CO	07/21/2005	Investment Manager	-	Not available	\$79,580,000	NA	0	-	2011	0	0	0	0
43	1376269	CO	07/21/2005	Investment Manager	-	Not available	\$79,580,000	NA	0	-	2011	0	0	0	0
44	334382	CA	07/29/2005	Equity Funds	-	\$52,700,000	\$52,404,223	0.99	0	-	2011	0	0	0	0
45	246758	CA	08/04/2005	D/O NTL	1 of 4	\$31,000,000	\$30,500,000	0.98	0	-	2011	0	0	0	0
46	233926	TX	08/05/2005	REIT	1 of 6	\$280,500,000	\$117,700,000	0.42	1	Gold	2011	0	0	0	0

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47	248122	CA	08/08/2005	Investment Manager	1 of 2	\$23,175,000	\$0	0.00	-	-	0	0	0	0
48	280260	CA	08/12/2005	Investment Manager	-	\$41,000,000	Not available	NA	-	-	0	0	0	0
49	247198	CA	08/26/2005	REIT	-	Not available	\$425,000,000	NA	-	-	0	0	0	0
50	247197	CA	08/26/2005	REIT	-	Not available	\$150,000,000	NA	-	-	0	0	0	0
51	247201	CA	08/26/2005	REIT	-	Not available	\$150,000,000	NA	-	-	0	0	0	0
52	247001	CA	08/26/2005	REIT	-	Not available	\$170,000,000	NA	-	-	0	0	0	0
53	246880	CA	08/26/2005	REIT	-	Not available	\$425,000,000	NA	-	-	0	0	0	0
54	246942	CA	08/26/2005	REIT	-	Not available	\$425,000,000	NA	-	-	0	0	0	0
55	92540	CA	08/26/2005	REIT	-	Not available	\$425,000,000	NA	-	-	0	0	0	0
56	144489	IL	09/09/2005	Investment Manager	1 of 2	\$91,500,000	\$91,500,000	0.25	-	-	0	0	0	0
57	144527	IL	09/09/2005	Investment Manager	2 of 2	\$91,500,000	\$91,500,000	0.25	-	-	0	0	0	0
58	1031396	MIN	09/14/2005	Investment Manager	-	\$96,500,000	Not available	NA	1 Gold	2009	0	0	0	0
59	224598	AZ	09/27/2005	Insurance	1 of 2	\$155,000,000	\$0	0.00	-	-	0	0	0	0
60	246751	CA	09/28/2005	Investment Manager	-	\$38,000,000	\$26,811,866	0.71	-	-	0	0	0	0
61	1063368	UT	11/17/2005	D/O NTL	1 of 4	\$108,500,000	Not available	NA	-	-	0	0	0	0
62	1063374	UT	11/17/2005	D/O NTL	2 of 4	\$108,500,000	Not available	NA	-	-	0	0	0	0
63	717007	OR	11/21/2005	D/O NTL	-	Not available	Not available	NA	1 Silver	2008	0	0	0	0
64	96061	GA	12/01/2005	Investment Manager	-	\$28,250,000	\$2,320,000	0.08	-	-	0	0	0	0
65	197915	CA	12/06/2005	Equity Funds	-	Not available	Not available	NA	-	-	0	0	0	0
66	197345	CA	12/06/2005	Equity Funds	-	Not available	Not available	NA	-	-	0	0	0	0
67	482090	OH	12/19/2005	D/O NTL	-	\$60,855,800	Not available	NA	-	-	0	0	0	0
68	380537	FL	12/20/2005	Individual	-	\$52,000,000	\$35,000,000	0.67	-	-	0	0	0	0
69	524220	TX	12/20/2005	Private REIT	-	\$166,000,000	\$90,000,000	0.54	1 Gold	2010	0	0	0	0
70	238972	TX	12/21/2005	Investment Manager	-	\$18,400,000	\$0	0.00	-	-	0	0	0	0
71	224803	AZ	12/30/2005	Investment Manager	-	\$58,800,000	\$0	0.00	-	-	0	0	0	0
72	470539	WA	01/04/2006	D/O NTL	-	Not available	Not available	NA	1 Gold	2010	0	0	0	0
73	224607	AZ	01/12/2006	Investment Manager	-	\$77,000,000	\$0	0.00	1 Gold	2010	0	0	0	0
74	279726	CA	01/19/2006	D/O NTL	1 of 5	\$325,000,000	Not available	NA	-	-	0	0	0	0
75	279791	CA	01/26/2006	D/O NTL	1 of 2	\$215,000,000	Not available	NA	-	-	0	0	0	0
76	313233	CA	01/30/2006	Investment Manager	-	\$50,400,000	Not available	NA	-	-	0	0	0	0
77	586222	CA	02/21/2006	Investment Manager	-	\$1,500,000	\$50,895,000	33.93	-	-	0	0	0	0
78	379520	FL	02/28/2006	Pension Fund	1 of 2	Not available	\$126,000,000	NA	1 Certified	2010	0	0	0	0
79	224711	AZ	03/09/2006	Investment Manager	1 of 2	\$94,500,000	\$48,140,000	0.51	-	-	0	0	0	0
80	320632	CA	04/26/2006	Investment Manager	-	Not available	Not available	NA	1 Gold	2009	0	0	0	0
81	402536	CO	05/05/2006	Investment Manager	-	Not available	Not available	NA	-	-	0	0	0	0
82	393846	CO	06/20/2006	Investment Manager	-	\$125,400,000	Not available	NA	1 Silver	2009	0	0	0	0
83	1029705	MIN	08/16/2006	Investment Manager	-	\$245,000,000	Not available	NA	1 Gold	2011	0	0	0	0
84	717050	OR	08/24/2006	D/O NTL	-	\$47,900,000	\$31,000,000	0.65	-	-	0	0	0	0
85	409036	TX	08/25/2006	D/O NTL	-	Not available	\$33,450,000	NA	1 Gold	2010	0	0	0	0
86	409037	TX	08/25/2006	D/O NTL	-	Not available	\$32,200,000	NA	1 Gold	2010	0	0	0	0
87	420025	TX	08/31/2006	REIT	1 of 2	\$60,800,000	\$0	0.00	-	-	0	0	0	0
88	420373	TX	08/31/2006	REIT	2 of 2	\$60,800,000	\$0	0.00	-	-	0	0	0	0
89	252501	CA	09/01/2006	Investment Manager	-	\$215,000,000	Not available	NA	1 Silver	2010	0	0	0	0
90	1020954	MIN	09/05/2006	DORGNL	-	\$42,600,000	Not available	NA	-	-	0	0	0	0
91	144406	IL	09/14/2006	Pension Fund	-	\$141,500,000	\$77,250,000	0.55	1 Gold	2011	0	0	0	0
92	50689	MO	09/28/2006	Investment Manager	-	\$93,280,000	Not available	NA	-	-	0	0	0	0
93	52655	CA	10/03/2006	D/O NTL	1 of 5	\$311,000,000	Not available	NA	1 Gold	2011	0	0	0	0

CoStar ID	State	Sale Date	Owner in 2013	PS	Sales Price	Debt	LTV Ratio	LEED 2013 Level	Year	Deed ilo Foreclosure	Foreclosure	Ground Lease	IRS Section 1031	Change in Title Vesting
94	279934	CA	10/04/2006	Investment Manager	-	Not available	NA	0	-	0	0	0	0	0
95	280255	CA	10/04/2006	Investment Manager	-	Not available	NA	0	-	0	0	0	0	0
96	249511	CA	10/05/2006	Equity Funds	1 of 41	\$7,200,000,000	Not available	NA	0	0	0	0	0	0
97	246919	CA	10/05/2006	REIT	2 of 41	\$7,200,000,000	Not available	NA	0	0	0	0	0	0
98	248956	CA	10/05/2006	Equity Funds	3 of 41	\$7,200,000,000	Not available	NA	0	0	0	0	0	0
99	248965	CA	10/05/2006	Equity Funds	4 of 41	\$7,200,000,000	Not available	NA	0	0	0	0	0	0
100	248215	CA	10/05/2006	REIT	5 of 41	\$7,200,000,000	\$242,000,000	0.03	1	Gold	2010	0	0	0
101	313236	CA	10/05/2006	Equity Funds	6 of 41	\$7,200,000,000	Not available	NA	0	0	0	0	0	0
102	479412	NC	10/10/2006	Private REIT	-	\$153,900,000	\$150,000,000	0.97	1	Gold	2009	0	0	0
103	248795	CA	10/18/2006	Investment Manager	1 of 3	\$67,000,000	\$58,000,000	0.87	1	Gold	2011	0	0	0
104	131255	MD	11/01/2006	DORGNL	-	\$70,000,000	Not available	NA	0	0	0	1	0	0
105	731586	PA	11/27/2006	Corporate/User	-	\$84,000,000	Not available	NA	1	Gold	2004	0	0	0
106	333792	CA	11/29/2006	Bank/Finance	1 of 66	Not available	Not available	NA	0	0	0	0	0	0
107	409869	TX	11/30/2006	Investment Manager	-	\$19,025,000	\$15,350,000	0.81	1	Silver	2009	0	0	0
108	248088	CA	12/01/2006	D/O NTL	-	\$70,894,000	\$35,000,000	0.49	0	0	0	0	0	0
109	234891	TX	12/13/2006	Private REIT	1 of 2	\$96,111,000	\$74,966,580	0.78	1	Gold	2010	0	0	0
110	455857	MI	12/20/2006	DORGNL	1 of 4	Not available	Not available	NA	0	0	0	0	0	0
111	458651	MI	12/20/2006	DORGNL	2 of 4	Not available	Not available	NA	0	0	0	0	0	0
112	87060	CA	12/22/2006	D/O NTL	-	\$86,500,000	\$75,100,000	0.87	0	0	0	1	0	0
113	248803	CA	12/26/2006	Investment Manager	-	\$17,930,000	\$13,096,790	0.73	0	0	0	0	0	0
114	393791	CO	12/27/2006	D/O NTL	1 of 3	\$3,300,000,000	\$100,000,000	0.03	1	Silver	2009	0	0	0
115	248647	CA	12/29/2006	Corporate/User	-	\$62,411,712	\$40,000,000	0.64	0	0	0	0	0	0
116	82421	CA	01/07/2007	D/O NTL	-	\$128,000,000	Not available	NA	1	Gold	2010	0	0	0
117	144365	IL	01/08/2007	REIT	-	\$167,000,000	\$167,000,000	1.00	0	0	0	0	0	0
118	1212036	CT	03/07/2007	D/O NTL	1 of 3	\$97,750,000	Not available	NA	0	0	0	0	0	0
119	248318	CA	03/16/2007	Investment Manager	-	\$20,600,000	Not available	NA	0	0	0	0	0	0
120	434737	GA	03/27/2007	Investment Manager	-	\$20,600,000	\$17,620,000	0.86	0	0	0	0	0	0
121	313250	CA	04/02/2007	D/O NTL	1 of 15	\$81,600,000	\$0	0.00	1	Silver	2010	0	0	0
122	393016	CO	04/17/2007	Investment Manager	1 of 2	\$1,046,881,000	\$101,600,000	0.10	0	0	0	0	0	0
123	393016	CO	04/17/2007	Investment Manager	2 of 2	\$11,938,310	Not available	NA	0	0	0	0	0	0
124	470587	WA	04/24/2007	Investment Manager	1 of 38	\$5,061,690	Not available	NA	0	0	0	0	0	0
125	279382	CA	05/21/2007	Investment Manager	1 of 3	\$6,350,000,000	\$480,000,000	0.08	1	Silver	2009	0	0	0
126	340416	CA	06/19/2007	D/O NTL	-	\$310,000,000	\$57,000,000	0.18	0	0	0	0	0	0
127	340570	CA	07/19/2007	Educational	-	\$130,000,000	\$104,330,000	0.80	1	Gold	2010	0	0	0
128	732474	CA	07/20/2007	Investment Manager	1 of 3	\$35,300,000	Not available	NA	0	0	0	0	0	0
129	247408	CA	07/31/2007	D/O NTL	1 of 55	\$92,926,230	Not available	NA	1	Silver	2011	0	0	0
130	788161	LA	08/14/2007	Private REIT	1 of 50	\$1,400,000,000	\$500,000,000	0.36	0	0	0	0	0	0
131	234022	TX	08/20/2007	Investment Manager	-	\$44,500,000	\$0	0.00	1	Gold	2012	0	0	0
132	233905	TX	08/24/2007	Private REIT	-	\$370,000,000	\$232,000,000	0.63	1	Gold	2009	0	0	0
133	393100	CO	09/04/2007	Equity Funds	-	\$60,082,000	\$56,400,000	0.94	0	0	0	0	0	0
134	493366	OH	09/09/2007	D/O NTL	-	\$42,500,000	\$18,500,000	0.44	0	0	0	0	0	0
135	338053	CA	09/13/2007	Investment Manager	-	\$88,000,000	\$0	0.00	0	0	0	0	0	0
136	409896	TX	09/20/2007	Investment Manager	-	\$32,000,000	\$22,500,000	0.70	1	Certified	2010	0	0	0
137	378542	FL	09/27/2007	Pension Fund	-	\$23,550,000	Not available	NA	0	0	0	0	0	0
138	393822	CO	09/28/2007	Equity Funds	-	\$115,300,000	Not available	NA	0	0	0	0	0	0
139	144357	IL	09/28/2007	Investment Manager	-	\$56,500,000	\$0	0.00	1	Certified	2010	0	0	0
140	279815	CA	10/31/2007	Investment Manager	-	\$37,000,000	Not available	NA	0	0	0	0	0	0

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141	WI	11/05/2007	D/O NTL	1 of 2	\$3,608,000	Not available	NA	0	-	0	0	0	0	0	
142	TX	11/15/2007	DORGNL	-	\$56,000,000	\$42,100,000	0.75	1	Gold	2011	0	0	0	0	
143	WA	11/29/2007	Investment Manager	-	\$116,000,000	\$69,250,000	0.60	1	Platinum	2009	0	0	0	0	
144	CO	12/03/2007	Government	-	\$144,500,000	\$0	0.00	1	Gold	2012	0	0	0	0	
Last Sale Date Between 2004 and 2007 Without Energy Data															
1	CA	03/18/2004	Investment Manager	-	Not available	Not available	NA	0	-	0	0	0	0	0	
2	TX	04/30/2004	REIT	1 of 22	\$256,000,000	Not available	NA	0	-	0	0	0	0	0	
3	AZ	05/27/2004	Investment Manager	1 of 5	\$16,600,000	\$12,200,000	0.73	0	-	0	0	0	0	0	
4	WA	07/30/2004	DORGNL	-	Not available	\$31,100,000	NA	1	Silver	2005	0	0	0	0	
5	WA	12/17/2004	REIT	1 of 5	\$58,879,628	Not available	NA	1	Silver	2010	0	0	0	0	
6	FL	01/18/2005	Investment Manager	-	\$38,600,000	\$19,820,000	0.51	1	Silver	2012	0	0	0	0	
7	CA	02/11/2005	Investment Manager	1 of 2	Not available	Not available	NA	0	-	0	0	0	0	0	
8	CA	04/07/2005	Investment Manager	1 of 2	\$129,000,000	\$110,730,000	0.86	1	Gold	2008	0	0	0	0	
9	LA	05/04/2005	D/O NTL	-	\$45,000,000	Not available	NA	0	-	0	0	0	0	0	
10	CA	05/26/2005	Investment Manager	-	\$167,000,000	\$0	0.00	1	Gold	2012	0	0	0	0	
11	NJ	06/14/2005	Investment Manager	-	\$19,975,000	Not available	NA	0	-	0	0	0	0	0	
12	MO	07/29/2005	D/O NTL	-	\$165,750,000	\$151,000,000	0.91	0	-	0	0	0	0	0	
13	MD	08/02/2005	Not available	-	\$2,571,000	Not available	NA	1	Silver	2008	0	0	0	0	
14	CA	08/17/2005	REIT	-	Not available	\$425,000,000	NA	0	-	0	0	0	0	0	
15	CA	08/26/2005	REIT	-	Not available	\$425,000,000	NA	0	-	0	0	0	0	0	
16	CA	08/26/2005	REIT	-	Not available	\$150,000,000	NA	0	-	0	0	0	0	0	
17	NM	09/21/2005	DORGNL	-	\$798,000	\$600,000	0.75	1	Registered	-	0	0	0	0	
18	AZ	09/27/2005	Insurance	2 of 2	\$155,000,000	\$0	0.00	0	-	0	0	0	0	0	
19	HI	10/25/2005	D/O NTL	-	\$414,000	Not available	NA	0	-	0	0	0	0	0	
20	WA	11/25/2005	Not available	-	\$2,337,500	Not available	NA	1	Gold	2008	0	0	0	0	
21	CA	12/02/2005	Investment Manager	-	\$43,000,000	\$38,660,000	0.90	0	-	0	0	0	0	0	
22	DC	12/21/2005	Investment Manager	-	\$178,000,000	\$36,719,614	0.21	0	-	0	0	0	0	0	
23	TX	12/27/2005	Not available	-	\$20,000,000	\$15,800,000	0.79	0	-	0	0	0	0	0	
24	PA	01/11/2006	Corporate/User	1 of 3	\$24,000,000	Not available	NA	0	-	0	0	0	0	0	
25	CA	01/18/2006	Investment Manager	1 of 3	\$30,774,000	Not available	NA	0	-	0	0	0	0	0	
26	CA	01/18/2006	Investment Manager	2 of 3	\$30,774,000	Not available	NA	0	-	0	0	0	0	0	
27	CO	01/18/2006	Investment Manager	1 of 6	\$62,332,000	Not available	NA	1	Gold	2012	0	0	0	0	
28	DC	02/01/2006	Not Profit	-	\$28,655,250	\$32,000,000	1.12	1	Gold	2010	0	0	0	0	
29	IL	05/05/2006	D/O NTL	-	\$350,000,000	\$230,000,000	0.66	1	Silver	2006	0	0	0	0	
30	CA	07/25/2006	Investment Manager	-	\$132,000,000	\$75,000,000	0.57	0	-	0	0	0	0	0	
31	TX	08/28/2006	D/O NTL	-	\$63,300,000	\$0	0.00	0	-	0	0	0	0	0	
32	GA	09/22/2006	Investment Manager	-	\$234,745,000	\$193,850,000	0.83	1	Gold	2011	0	0	0	0	
33	CA	10/05/2006	REIT	7 of 41	\$7,200,000,000	Not available	NA	1	Gold	2011	0	0	0	0	
34	CA	10/05/2006	Equity Funds	8 of 41	\$7,200,000,000	Not available	NA	0	-	0	0	0	0	0	
35	CO	10/05/2006	Equity Funds	-	\$29,386,800	\$17,300,000	0.59	0	-	0	0	0	0	0	
36	PA	10/27/2006	Corporate/User	-	\$75,000,000	\$87,500,000	1.17	1	Gold	2011	0	0	0	0	
37	CA	11/27/2006	REIT	-	Not available	Not available	NA	0	-	0	0	0	0	0	
38	CA	01/26/2007	Not available	-	Not available	Not available	NA	0	-	0	0	0	0	0	
39	GA	02/06/2007	Insurance	-	\$153,860,000	Not available	NA	0	-	0	0	0	0	0	
40	CA	02/08/2007	D/O NTL	-	\$117,000,000	\$85,000,000	0.73	0	-	0	0	0	0	0	
41	OR	02/15/2007	Not available	-	Not available	\$2,850,000	NA	0	-	0	0	0	0	0	

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42	332462	CA	02/22/2007	Equity Funds	1 of 515	\$39,205,645,000	Not available	NA	-	0	0	0	0	0	0
43	246826	CA	02/22/2007	Not available	2 of 515	\$39,205,645,000	Not available	NA	-	0	0	0	0	0	0
44	333453	CA	02/22/2007	Not available	3 of 515	\$39,205,645,000	Not available	NA	-	0	0	0	0	0	0
45	333430	CA	02/22/2007	D/O NTL	4 of 515	\$39,205,645,000	Not available	NA	-	0	0	0	0	0	0
46	333428	CA	02/22/2007	Not available	5 of 515	\$39,205,645,000	Not available	NA	-	0	0	0	0	0	0
47	333638	CA	02/22/2007	Not available	6 of 515	\$39,205,645,000	Not available	NA	-	0	0	0	0	0	0
48	247743	CA	02/22/2007	Equity Funds	7 of 515	\$39,205,645,000	Not available	NA	-	0	0	0	0	0	0
49	247753	CA	02/22/2007	Equity Funds	8 of 515	\$39,205,645,000	Not available	NA	-	0	0	0	0	0	0
50	247956	CA	02/22/2007	Equity Funds	9 of 515	\$39,205,645,000	Not available	NA	-	0	0	0	0	0	0
51	469962	WA	02/22/2007	Bank/Finance	10 of 515	\$39,205,645,000	Not available	NA	-	0	0	0	0	0	0
52	469981	WA	02/22/2007	Bank/Finance	11 of 515	\$39,205,645,000	Not available	NA	-	0	0	0	0	0	0
53	234037	TX	02/23/2007	REIT	-	\$67,070,000	\$198,500,000	2.96	-	0	0	0	0	0	0
54	716820	OR	03/27/2007	Not available	1 of 50	\$1,125,000,000	\$697,500,000	0.62	1 Gold	2011	0	0	0	0	0
55	313251	CA	04/02/2007	D/O NTL	2 of 15	\$1,046,881,000	\$119,300,000	0.11	-	0	0	0	0	0	0
56	313269	CA	04/02/2007	D/O NTL	3 of 15	\$1,046,881,000	\$94,400,000	0.09	-	0	0	0	0	0	0
57	313249	CA	04/02/2007	D/O NTL	4 of 15	\$1,046,881,000	\$158,400,000	0.15	-	0	0	0	0	0	0
58	161613	NJ	04/16/2007	Not available	-	\$29,800,000	\$400,000,000	13.42	-	0	0	0	0	0	0
59	320684	CA	04/26/2007	D/O NTL	1 of 11	\$2,430,000,000	Not available	NA	1 Silver	2010	0	0	0	0	0
60	340409	CA	05/01/2007	D/O NTL	1 of 31	\$760,000,000	Not available	NA	1 Gold	2010	0	0	0	0	0
61	410114	TX	05/04/2007	D/O NTL	-	\$125,000,000	\$125,300,000	1.00	-	0	0	0	0	0	0
62	43996	CA	05/11/2007	REIT	-	\$72,000,000	Not available	NA	1 Gold	2011	0	0	0	0	0
63	320727	CA	05/24/2007	REIT	1 of 3	\$720,000,000	Not available	NA	-	0	0	0	0	0	0
64	393908	CO	06/06/2007	Investment Manager	-	\$200,000,000	\$144,600,000	0.72	1 Gold	2011	0	0	0	0	0
65	247997	CA	06/25/2007	Investment Manager	-	\$217,000,000	\$152,750,000	0.70	1 Silver	2010	0	0	0	0	0
66	441220	GA	06/27/2007	Investment Manager	-	\$79,500,000	\$65,000,000	0.82	-	0	0	0	0	0	0
67	75878	MO	08/10/2007	REIT	1 of 2	\$75,000,000	\$31,600,000	0.42	1 Gold	2012	0	0	0	0	0
68	435385	GA	08/14/2007	Investment Manager	-	\$130,600,000	\$0	0.00	1 Certified	2010	0	0	0	0	0
69	129190	DC	10/04/2007	REIT	1 of 25	\$4,346,000,000	\$0	0.00	1 Gold	2010	0	0	0	0	0
70	23533	TX	12/07/2007	Not available	-	Not available	Not available	NA	-	0	0	0	0	0	0
Last Sale Date After 2007															
1	178485	NY	01/25/2008	Not available	-	Not available	Not available	NA	-	0	0	0	0	0	0
2	378510	FL	01/31/2008	Pension Fund	-	Not available	\$27,500,000	NA	-	0	0	0	0	0	0
3	379067	FL	01/31/2008	Pension Fund	-	Not available	\$27,500,000	NA	-	0	0	0	0	0	0
4	197763	CA	02/29/2008	Investment Manager	-	\$26,920,000	\$12,750,000	0.47	-	0	0	0	0	0	0
5	431225	AZ	03/20/2008	REOC	-	\$127,000,000	\$54,500,000	0.43	-	0	0	0	1	0	0
6	42214	CA	03/27/2008	REIT	1 of 6	\$610,000,000	\$410,400,000	0.67	-	0	0	0	0	0	0
7	249318	CA	03/27/2008	REIT	2 of 6	\$610,000,000	\$410,400,000	0.67	-	0	0	0	0	0	0
8	247206	CA	03/27/2008	REIT	3 of 6	\$610,000,000	\$410,400,000	0.67	-	0	0	0	0	0	0
9	247486	CA	03/27/2008	REIT	4 of 6	\$610,000,000	\$410,400,000	0.67	-	0	0	0	0	0	0
10	247166	CA	03/27/2008	REIT	5 of 6	\$610,000,000	\$410,400,000	0.67	-	0	0	0	0	0	0
11	248118	CA	03/28/2008	Investment Manager	1 of 3	\$95,100,000	\$71,325,000	0.75	-	0	0	0	0	0	0
12	248090	CA	03/28/2008	Investment Manager	2 of 3	\$95,100,000	\$71,325,000	0.75	-	0	0	0	0	0	0
13	130984	MD	04/09/2008	DORGNL	1 of 2	\$98,750,000	\$34,500,000	0.25	-	0	0	0	0	0	0
14	249184	CA	05/01/2008	Investment Manager	-	\$36,450,000	\$20,400,000	0.83	-	0	0	0	0	0	0
15	461419	MI	05/01/2008	Corporate/User	1 of 4	\$626,000,000	Not available	NA	-	0	0	0	0	0	0
16	234014	TX	05/22/2008	Investment Manager	-	\$75,000,000	Not available	NA	-	0	0	0	0	0	0

CoStar ID	State	Sale Date	Owner in 2013	PS	Sales Price	Debt	LTV Ratio	LEED 2013 Level	Year	Deed ilo Foreclosure	Foreclosure	Ground Lease	IRS Section 1031	Change in Title Vesting
17	284094	CA	06/06/2008	Investment Manager	-	Not available	Not available	NA	1 Silver	2010	0	0	0	1
18	144328	IL	06/06/2008	Investment Manager	-	Not available	Not available	NA	1 Gold	2009	0	0	0	0
19	248407	CA	06/27/2008	D/O NTL	1 of 2	\$121,000,000	\$95,625,000	0.79	0	0	0	0	0	0
20	248785	CA	06/27/2008	D/O NTL	2 of 2	\$121,000,000	\$95,625,000	0.79	0	0	0	0	0	0
21	248849	CA	06/27/2008	Investment Manager	-	\$71,900,000	\$62,389,500	0.87	0	0	0	0	0	0
22	248594	CA	06/30/2008	Investment Manager	-	\$34,000,000	Not available	NA	0	0	0	1	0	0
23	247256	CA	06/30/2008	Investment Manager	-	\$53,000,000	\$42,465,000	0.80	0	0	0	0	0	0
24	279931	CA	07/02/2008	Private REIT	1 of 2	\$47,210,814	\$47,200,000	1.00	0	0	0	0	0	0
25	380299	FL	07/28/2008	Investment Manager	1 of 4	\$47,300,000	Not available	NA	0	0	0	0	0	0
26	655762	CA	08/25/2008	Equity Funds	-	Not available	Not available	NA	1 Silver	2010	0	0	0	0
27	247407	CA	09/02/2008	Not available	-	\$21,000,000	\$12,750,000	0.61	0	0	0	1	0	0
28	675870	KS	09/02/2008	REIT	1 of 43	\$112,000,000	Not available	NA	1 Certified	2002	0	0	0	0
29	248516	CA	09/19/2008	D/O NTL	-	\$275,000,000	\$175,000,000	0.64	1 Gold	2010	0	0	0	0
30	280605	CA	09/25/2008	Not available	1 of 3	\$70,000,000	\$41,800,000	0.60	0	0	0	0	0	0
31	280611	CA	09/25/2008	Not available	2 of 3	\$70,000,000	\$41,800,000	0.60	0	0	0	0	0	0
32	279336	CA	09/26/2008	Investment Manager	1 of 10	\$100,000,000	Not available	NA	0	0	0	0	0	0
33	246985	CA	09/29/2008	Corporate/User	-	Not available	\$27,375,000	NA	0	0	0	0	0	0
34	409380	TX	10/01/2008	REIT	-	Not available	\$24,500,000	NA	0	0	0	0	0	1
35	387315	FL	11/24/2008	REIT	-	\$51,400,000	\$41,600,000	0.81	0	0	0	0	0	0
36	379382	FL	12/10/2008	Bank/Finance	-	\$182,500,000	Not available	NA	1 Gold	2009	0	0	0	0
37	340414	CA	12/11/2008	Investment Manager	1 of 15	\$485,000,000	\$389,000,000	0.80	0	0	0	0	0	0
38	313267	CA	12/31/2008	D/O NTL	-	Not available	Not available	NA	0	0	0	0	0	0
39	125312	CA	12/31/2008	D/O NTL	-	\$12,800,000	\$4,700,000	0.37	0	0	0	0	0	0
40	409597	TX	03/31/2009	Investment Manager	-	\$61,500,000	Not available	NA	1 Certified	2009	0	0	0	0
41	455840	MI	04/28/2009	D/O NTL	-	\$12,300,000	\$7,035,000	0.57	1 Certified	2009	0	0	0	0
42	248899	CA	05/26/2009	DORGNL	1 of 2	\$44,000,000	\$34,000,000	0.77	0	0	0	0	0	0
43	246934	CA	06/01/2009	Pension Fund	-	Not available	\$75,000,000	NA	1 Silver	2009	0	0	0	1
44	1025692	MN	06/01/2009	Bank/Finance	-	Not available	Not available	NA	0	0	0	0	0	0
45	393802	CO	06/23/2009	REIT	-	\$134,250,000	\$0	0.00	1 Gold	2009	0	0	0	0
46	246799	CA	09/01/2009	Not available	-	\$300,000	Not available	NA	0	0	0	0	0	0
47	247469	CA	09/10/2009	DORGNL	1 of 3	\$52,000,000	\$30,000,000	0.58	0	0	0	0	0	0
48	461333	MI	09/10/2009	REIT	-	Not available	Not available	NA	0	0	0	0	0	0
49	204326	IL	09/22/2009	DORGNL	1 of 3	\$25,000,000	\$0	0.00	0	0	0	0	0	0
50	439850	GA	10/16/2009	Investment Manager	-	Not available	Not available	NA	1 Silver	2010	0	0	0	0
51	5329242	HI	10/26/2009	Not available	-	\$38,000,000	\$0	0.00	0	0	0	0	0	0
52	279464	CA	10/30/2009	DORGNL	-	\$6,500,000	\$0	0.00	0	0	0	0	0	0
53	1025708	MN	11/06/2009	Bank/Finance	-	Not available	Not available	NA	0	0	0	0	0	0
54	393836	CO	11/23/2009	Bank/Finance	1 of 38	Not available	Not available	NA	1 Gold	2011	1	0	0	0
55	422543	TX	11/23/2009	Investment Manager	2 of 38	Not available	Not available	NA	1 Silver	2012	1	0	0	0
56	236739	TX	11/23/2009	Investment Manager	3 of 38	Not available	Not available	NA	1 Gold	2011	1	0	0	0
57	42094	TX	11/23/2009	Investment Manager	4 of 38	Not available	Not available	NA	1 Silver	2011	1	0	0	0
58	239871	TX	11/23/2009	Investment Manager	5 of 38	Not available	Not available	NA	1 Silver	2012	1	0	0	0
59	340411	CA	12/11/2009	Investment Manager	1 of 2	\$93,059,600	Not available	NA	1 Gold	2010	0	0	0	0
60	234032	TX	12/15/2009	DORGNL	-	Not available	Not available	NA	0	0	0	0	0	1
61	340423	CA	12/18/2009	REIT	-	\$40,000,000	\$0	0.00	0	0	0	0	0	0
62	320906	CA	01/06/2010	Individual	-	\$24,200,000	\$20,000,000	0.83	0	0	0	0	0	0
63	313881	CA	02/01/2010	DORGNL	1 of 3	\$10,925,000	\$12,000,000	1.10	0	0	0	0	0	0

CoStar ID	State	Sale Date	Owner in 2013	PS	Sales Price	Debt	LTV Ratio	LEED 2013		Year	Deed ilo	Foreclosure	Foreclosure	Ground Lease	IRS Section 1031	Change in Title Vesting
								Level	Level							
64	144458	IL	02/02/2010	Not available	-	Not available	NA	0	-	-	0	0	0	0	0	0
65	717047	OR	02/05/2010	Investment Manager	-	\$57,000,000	\$0	0.00	0	-	0	0	0	0	0	0
66	247554	CA	02/20/2010	Investment Manager	-	\$256,000	\$232,000	0.91	0	-	0	0	0	0	0	0
67	279685	CA	03/08/2010	Investment Manager	-	Not available	Not available	NA	1	Gold	2009	1	0	0	0	0
68	279708	CA	04/28/2010	Other - Private	-	Not available	\$95,000,000	NA	1	Gold	2009	0	0	0	0	0
69	392260	CA	04/28/2010	Other - Private	-	Not available	\$95,000,000	NA	1	Gold	2009	0	0	0	0	0
70	249822	CA	05/04/2010	Investment Manager	1 of 2	\$39,438,116	Not available	NA	0	-	0	0	0	0	0	0
71	394040	CO	05/24/2010	Investment Manager	-	\$20,250,000	\$0	0.00	0	-	0	0	0	0	0	0
72	320734	CA	05/25/2010	Bank/Finance	-	\$36,000,000	Not available	NA	0	-	0	0	0	0	0	0
73	246921	CA	06/17/2010	Investment Manager	-	Not available	Not available	NA	0	-	0	0	0	0	0	0
74	320838	CA	06/24/2010	D/O NTL	-	Not available	Not available	NA	1	Gold	2010	0	0	0	0	0
75	247279	CA	06/29/2010	REIT	-	\$65,819,663	\$43,000,000	0.65	0	-	0	0	0	0	0	0
76	324738	CA	06/29/2010	D/O NTL	-	Not available	Not available	NA	0	-	0	0	0	0	0	1
77	1384613	HI	06/29/2010	REIT	1 of 2	\$230,000,000	Not available	NA	0	-	0	0	0	0	0	0
78	799407	GA	07/28/2010	Bank/Finance	-	Not available	Not available	NA	1	Silver	2011	0	0	0	0	1
79	132142	MD	07/29/2010	DORGNL	-	Not available	Not available	NA	0	-	0	0	0	0	0	0
80	247430	CA	09/08/2010	Investment Manager	-	\$50,650,000	Not available	NA	0	-	0	0	0	0	0	0
81	248520	CA	09/16/2010	Investment Manager	-	\$208,000,000	\$119,300,000	0.57	0	-	0	0	0	0	0	0
82	249503	CA	10/01/2010	REIT	-	Not available	Not available	NA	0	-	0	0	0	0	0	1
83	693241	VA	10/01/2010	Investment Manager	1 of 2	\$241,912,936	\$0	0.00	1	Gold	2006	0	0	0	0	0
84	246975	CA	10/22/2010	REIT	-	\$111,000,000	\$56,400,000	0.51	0	-	0	0	0	0	0	0
85	102132	OH	11/04/2010	Non Profit	-	\$1,350,000	Not available	NA	0	-	0	0	0	0	0	0
86	148523	IL	11/11/2010	Not available	-	\$5,800,000	\$3,050,000	0.53	0	-	0	0	0	0	0	0
87	48101	CA	11/12/2010	REIT	-	\$191,500,000	Not available	NA	1	Gold	2009	0	0	0	0	0
88	106570	AZ	11/19/2010	Investment Manager	-	\$20,750,000	\$15,562,000	0.75	0	-	0	0	0	0	0	0
89	248946	CA	11/23/2010	Bank/Finance	-	\$174,015,600	\$0	0.00	0	-	0	0	0	0	0	0
90	333656	CA	12/06/2010	DORGNL	-	Not available	Not available	NA	0	-	0	0	0	0	0	1
91	333657	CA	12/06/2010	DORGNL	-	Not available	Not available	NA	0	-	0	0	0	0	0	1
92	23218	TX	12/09/2010	REIT	1 of 2	\$321,500,000	\$200,000,000	0.62	0	-	0	0	0	0	0	0
93	455398	MI	12/10/2010	Investment Manager	-	Not available	\$69,000,000	NA	0	-	0	0	0	0	0	0
94	144530	IL	12/13/2010	D/O NTL	-	Not available	Not available	NA	0	-	0	0	1	0	0	0
95	393800	CO	12/16/2010	Investment Manager	-	\$149,000,000	\$0	0.00	1	Gold	2010	0	0	0	0	0
96	408425	TX	12/16/2010	D/O NTL	-	Not available	\$58,047,763	NA	0	-	0	0	0	0	0	1
97	728654	IL	12/20/2010	D/O NTL	-	\$625,000,000	Not available	NA	1	Platinum	2010	0	0	0	0	0
98	137336	VA	01/18/2011	REIT	1 of 3	Not available	Not available	NA	1	Silver	2012	0	0	0	0	1
99	248663	CA	02/01/2011	REIT	-	Not available	Not available	NA	0	-	0	0	0	0	0	1
100	1037295	MN	02/03/2011	Private REIT	-	\$54,400,000	\$0	0.00	0	-	0	0	0	0	0	0
101	246899	CA	02/11/2011	REIT	-	Not available	Not available	NA	0	-	0	0	0	0	0	1
102	409817	TX	02/25/2011	Insurance	-	\$64,400,000	\$0	0.00	0	-	0	0	0	0	0	0
103	409481	TX	04/04/2011	Investment Manager	1 of 2	\$60,000,000	Not available	NA	0	-	0	0	0	0	0	0
104	409600	TX	04/04/2011	Investment Manager	2 of 2	\$60,000,000	Not available	NA	0	-	0	0	0	0	0	0
105	1029695	MN	04/29/2011	D/O NTL	-	Not available	\$110,000,000	NA	1	Gold	2010	0	0	0	0	0
106	393243	CO	05/03/2011	Investment Manager	-	\$47,085,000	\$0	0.00	0	-	0	0	0	0	0	0
107	297250	PA	05/11/2011	D/O NTL	1 of 32	\$124,000,000	Not available	NA	1	Certified	2007	0	0	0	0	0
108	470118	WA	06/06/2011	REIT	-	\$217,227,320	\$0	0.00	1	Gold	2009	0	0	1	0	0
109	157078	NY	06/29/2011	DORGNL	-	Not available	\$163,356,640	NA	0	-	0	0	0	0	0	1
110	717010	OR	07/01/2011	Not available	1 of 6	\$92,000,000	\$0	0.00	0	-	0	0	0	0	0	0

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111	247130	CA	07/29/2011	REIT	-	Not available	NA	0	-	0	0	0	0	1
112	559366	KS	08/09/2011	Investment Manager	-	\$14,500,000	Not available	0	-	0	0	0	0	0
113	136882	VA	08/11/2011	D/O NTL	-	\$64,400,000	\$0	0.80	-	0	0	0	0	0
114	238727	TX	08/26/2011	D/O NTL	-	\$23,400,000	\$20,500,000	0.88	Silver	2010	0	0	0	0
115	144287	IL	09/01/2011	Bank/Finance	-	\$343,995,500	\$220,000,000	0.64	-	0	0	0	0	0
116	300188	PA	09/22/2011	D/O NTL	-	\$143,500,000	\$123,200,000	0.86	-	0	0	0	0	0
117	521942	CO	09/23/2011	Investment Manager	-	\$27,265,000	\$20,776,660	0.76	-	0	0	0	0	0
118	469466	MI	09/23/2011	Bank/Finance	-	Not available	Not available	NA	-	0	0	0	0	0
119	233899	TX	09/27/2011	Pension Fund	-	\$246,565,306	\$0	0.00	Certified	2011	0	0	0	0
120	409631	TX	09/28/2011	Bank/Finance	1 of 14	Not available	Not available	NA	Silver	2012	0	0	0	0
121	233925	TX	09/28/2011	Bank/Finance	2 of 14	Not available	Not available	NA	Gold	2010	0	0	0	0
122	233932	TX	09/28/2011	Bank/Finance	3 of 14	Not available	Not available	NA	Gold	2011	0	0	0	0
123	409856	TX	09/30/2011	Investment Manager	-	Not available	Not available	NA	Silver	2013	0	0	0	0
124	313284	CA	10/05/2011	Investment Manager	-	\$27,900,000	\$20,300,000	0.73	-	0	0	0	0	0
125	313366	CA	10/17/2011	Investment Manager	1 of 2	\$46,800,000	\$28,000,000	0.60	-	0	0	0	0	0
126	92017	CA	10/31/2011	Investment Manager	-	\$21,500,215	\$15,379,819	0.72	-	0	0	0	0	0
127	204298	IL	11/02/2011	DORGNL	1 of 2	\$73,750,000	\$49,875,000	0.68	Gold	2010	0	0	0	0
128	204299	IL	11/02/2011	DORGNL	2 of 2	\$73,750,000	\$49,875,000	0.68	Gold	2011	0	0	0	0
129	409450	TX	11/21/2011	D/O NTL	1 of 3	\$95,000,000	\$57,000,000	0.60	Gold	2013	0	0	0	0
130	409676	TX	11/21/2011	D/O NTL	2 of 3	\$95,000,000	\$57,000,000	0.60	Gold	2013	0	0	0	0
131	410041	TX	11/21/2011	D/O NTL	3 of 3	\$95,000,000	\$57,000,000	0.60	Gold	2013	0	0	0	0
132	409842	TX	11/22/2011	Investment Manager	-	\$48,600,000	Not available	NA	Certified	2010	0	0	0	0
133	291230	CA	12/09/2011	Equity Funds	1 of 28	Not available	Not available	NA	-	1	0	0	0	0
134	313245	CA	12/09/2011	Equity Funds	2 of 28	Not available	Not available	NA	-	1	0	0	0	0
135	313265	CA	12/09/2011	Equity Funds	3 of 28	Not available	Not available	NA	Platinum	2010	0	0	0	0
136	333647	CA	12/09/2011	Equity Funds	4 of 28	Not available	Not available	NA	-	1	0	0	0	0
137	382109	FL	12/09/2011	Equity Funds	5 of 28	Not available	Not available	NA	-	1	0	0	0	0
138	378642	FL	12/13/2011	Government	-	Not available	Not available	NA	-	0	0	0	0	0
139	354171	CA	12/15/2011	Government	-	\$8,200,000	\$0	0.00	-	0	0	0	0	0
140	246800	CA	01/06/2012	Insurance	-	\$39,500,000	\$0	0.00	-	0	0	0	0	0
141	129264	DC	01/09/2012	REOC	-	\$252,000,000	\$158,000,000	0.63	Gold	2011	0	1	0	0
142	606663	TX	01/13/2012	D/O NTL	1 of 2	\$31,800,000	\$31,836,350	1.00	-	0	0	0	0	0
143	667619	CA	01/26/2012	Government	-	Not available	Not available	NA	Silver	2007	0	0	0	0
144	442458	GA	02/07/2012	Not available	-	\$235,000,000	Not available	NA	-	0	1	0	0	0
145	440930	GA	02/15/2012	D/O NTL	-	\$17,500,000	\$0	0.00	Gold	2009	0	0	0	0
146	334595	CA	02/24/2012	Investment Manager	1 of 7	Not available	Not available	NA	-	0	0	0	0	0
147	55446	CO	02/29/2012	Corporate/User	-	Not available	Not available	NA	-	0	0	0	0	0
148	441199	GA	03/06/2012	Investment Manager	-	\$59,300,000	\$41,500,000	0.70	-	0	0	0	0	0
149	393245	CO	03/13/2012	D/O NTL	-	\$82,500,000	Not available	NA	Gold	2009	0	0	0	0
150	1533602	NM	03/19/2012	Other - Private	1 of 2	Not available	Not available	NA	-	0	0	0	0	0
151	393578	CO	03/29/2012	Investment Manager	1 of 3	\$262,640,000	\$53,525,000	0.20	Silver	2010	0	0	0	0
152	393859	CO	03/29/2012	Investment Manager	2 of 3	\$262,640,000	\$53,525,000	0.20	Gold	2010	0	0	0	0
153	393555	CO	03/30/2012	Investment Manager	-	\$387,500,000	\$276,000,000	0.71	Gold	2010	0	0	0	0
154	380795	FL	03/30/2012	DORGNL	-	\$131,500,000	Not available	NA	Silver	2011	0	0	0	0
155	5980600	VA	03/30/2012	Special Servicer	-	\$11,600,000	Not available	NA	-	0	1	0	0	0
156	144366	IL	04/13/2012	D/O NTL	-	\$101,000,000	\$70,000,000	0.69	-	0	0	0	0	0
157	248652	CA	04/16/2012	Investment Manager	-	\$60,000,000	\$52,250,000	0.87	-	0	0	0	0	0

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158	1029816	MN	04/19/2012	D/O NTL	1 of 2	\$110,700,198	Not available	NA	1	Gold	2013	0	0	0
159	1029806	MN	04/19/2012	D/O NTL	2 of 2	\$110,700,198	Not available	NA	1	Gold	2013	0	0	0
160	246769	CA	04/27/2012	D/O NTL	-	\$132,000,000	\$0	0.00	1	Silver	2011	0	0	0
161	1041305	MN	05/17/2012	REIT	-	\$500	Not available	NA	0	-	-	0	0	0
162	409892	TX	05/17/2012	D/O NTL	-	\$23,000,000	\$0	0.00	0	-	-	0	0	0
163	279694	CA	05/29/2012	Corporate/User	-	\$3,806,500	\$0	0.00	0	-	-	0	0	0
164	248584	CA	06/08/2012	Investment Manager	1 of 2	\$28,000,000	\$19,300,000	0.69	0	-	-	0	0	0
165	493265	OH	06/08/2012	D/O NTL	-	\$106,200,000	\$115,000,000	1.08	0	-	-	0	0	0
166	306086	CA	06/22/2012	D/O NTL	1 of 6	\$120,000,000	\$0	0.00	1	Silver	2010	0	0	0
167	234403	TX	06/27/2012	Investment Manager	-	\$32,000,000	\$24,265,000	0.76	0	-	-	0	0	0
168	997808	CA	06/28/2012	REIT	-	Not available	\$97,000,000	NA	1	Silver	2006	0	0	0
169	249451	CA	06/29/2012	Educational	-	Not available	\$72,000,000	NA	0	Registered	-	0	0	0
170	410050	TX	06/29/2012	DORGNL	-	Not available	\$14,000,000	NA	0	-	-	0	0	0
171	209831	IL	07/02/2012	Private REIT	-	\$40,900,000	\$0	0.00	0	-	-	0	0	0
172	249187	CA	07/05/2012	Equity Funds	1 of 3	\$69,750,000	\$69,750,000	1.00	0	-	-	0	0	0
173	249277	CA	07/05/2012	Equity Funds	2 of 3	\$96,750,000	\$69,750,000	0.72	0	-	-	0	0	0
174	248412	CA	07/05/2012	Investment Manager	-	\$238,000,000	\$150,000,000	0.63	0	-	-	0	0	0
175	247587	CA	07/24/2012	Private REIT	-	\$52,000,000	\$34,370,000	0.66	1	Certified	2009	0	0	0
176	378536	FL	07/27/2012	DORGNL	1 of 4	\$51,500,000	Not available	NA	0	-	-	0	0	0
177	378551	FL	07/27/2012	DORGNL	2 of 4	\$51,500,000	Not available	NA	0	-	-	0	0	0
178	469956	WA	07/30/2012	REIT	-	\$228,765,000	\$111,000,000	0.49	1	Gold	2009	0	0	0
179	437486	GA	07/31/2012	REIT	-	\$52,750,000	\$0	0.00	0	-	-	0	0	0
180	171764	NJ	07/31/2012	Investment Manager	-	\$6,700,000	Not available	NA	0	-	-	0	0	0
181	221347	MA	08/03/2012	Insurance	1 of 3	\$16,840,000	Not available	NA	0	-	-	0	0	0
182	233960	TX	08/10/2012	D/O NTL	1 of 2	\$550,000,000	Not available	NA	1	Gold	2009	0	0	0
183	233920	TX	08/10/2012	D/O NTL	2 of 2	\$550,000,000	Not available	NA	1	Gold	2009	0	0	0
184	247417	CA	08/14/2012	DORGNL	-	\$9,100,000	Not available	NA	0	-	-	0	0	0
185	313957	CA	08/14/2012	Investment Manager	1 of 3	\$21,550,000	\$17,000,000	0.79	0	-	-	0	0	0
186	403241	CO	08/24/2012	Investment Manager	-	\$54,000,000	\$31,300,000	0.58	1	Silver	2011	0	0	0
187	248474	CA	09/06/2012	Investment Manager	4 of 15	Not available	Not available	NA	0	-	-	0	0	0
188	248391	CA	09/06/2012	Investment Manager	1 of 15	Not available	Not available	NA	0	-	-	0	0	0
189	247149	CA	09/06/2012	Investment Manager	2 of 15	Not available	Not available	NA	0	-	-	0	0	0
190	280515	CA	09/06/2012	Investment Manager	1 of 3	Not available	Not available	NA	0	-	-	0	0	0
191	249168	CA	09/06/2012	Investment Manager	3 of 15	Not available	Not available	NA	0	-	-	0	0	0
192	249176	CA	09/06/2012	Investment Manager	4 of 15	Not available	Not available	NA	0	-	-	0	0	0
193	470568	WA	09/10/2012	Corporate/User	-	Not available	Not available	NA	0	-	-	0	0	0
194	1258500	WI	09/13/2012	D/O NTL	1 of 7	\$17,500,000	\$14,804,000	0.85	1	Certified	2009	0	0	0
195	591221	TX	09/18/2012	REIT	1 of 13	\$859,000,000	\$626,000,000	0.73	1	Gold	2011	0	0	0
196	591333	TX	09/18/2012	REIT	2 of 13	\$859,000,000	\$859,000,000	NA	1	Gold	2011	0	0	0
197	591693	TX	09/18/2012	REIT	3 of 13	\$859,000,000	\$127,000,000	0.15	1	Gold	2011	0	0	0
198	350715	CA	09/26/2012	Investment Manager	1 of 52	\$856,100,000	\$746,800,000	0.87	0	-	-	0	0	0
199	403856	CA	09/26/2012	D/O NTL	2 of 52	\$856,100,000	\$746,800,000	0.87	0	-	-	0	0	0
200	248861	CA	09/26/2012	D/O NTL	3 of 52	\$856,100,000	\$746,800,000	0.87	0	-	-	0	0	0
201	279368	CA	09/26/2012	D/O NTL	4 of 52	\$856,100,000	\$746,800,000	0.87	0	-	-	0	0	0
202	279638	CA	09/26/2012	D/O NTL	5 of 52	\$856,100,000	\$746,800,000	0.87	0	-	-	0	0	0
203	253466	CA	09/26/2012	REIT	6 of 52	\$856,100,000	\$746,800,000	0.87	0	-	-	0	0	0
204	248814	CA	09/26/2012	REIT	7 of 52	\$856,100,000	\$746,800,000	0.87	0	-	-	0	0	0

CoStar ID	State	Sale Date	Owner in 2013	PS	Sales Price	Debt	LTV Ratio	LEED 2013 Level	Year	Deed ilo Foreclosure	Foreclosure	Ground Lease	IRS Section 1031	Change in Title Vesting
205	246858	CA	09/26/2012	D/O NTL	8 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
206	247427	CA	09/26/2012	D/O NTL	9 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
207	247011	CA	09/26/2012	Not available	10 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
208	246763	CA	09/26/2012	Not available	11 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
209	246960	CA	09/26/2012	Not available	12 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
210	194931	CA	09/26/2012	Not available	13 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
211	195027	CA	09/26/2012	Not available	14 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
212	247134	CA	09/26/2012	D/O NTL	15 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
213	313430	CA	09/26/2012	D/O NTL	16 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
214	313431	CA	09/26/2012	D/O NTL	17 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
215	248034	CA	09/26/2012	D/O NTL	18 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
216	248043	CA	09/26/2012	D/O NTL	19 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
217	247152	CA	09/26/2012	D/O NTL	20 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
218	195006	CA	09/26/2012	Not available	21 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
219	194868	CA	09/26/2012	Not available	22 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
220	195000	CA	09/26/2012	D/O NTL	23 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
221	195053	CA	09/26/2012	Not available	24 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
222	247655	CA	09/26/2012	D/O NTL	25 of 52	\$856,100,000	\$746,800,000	0.87	0	0	0	0	0	0
223	300178	PA	10/12/2012	Individual	-	\$66,500,000	\$51,000,000	0.77	0	0	0	0	0	0
224	433020	IL	10/23/2012	Investment Manager	-	\$95,000,000	Not available	NA	0	0	0	0	0	0
225	234717	TX	11/01/2012	REIT	1 of 2	\$154,750,000	\$0	0.00	1 Silver	2010	0	0	0	0
226	445836	GA	11/02/2012	D/O NTL	-	\$4,100,000	\$464,000,000	113.17	1 Certified	2007	0	0	0	0
227	437497	GA	11/06/2012	Bank/Finance	1 of 2	\$140,000,000	\$80,000,000	0.57	0	0	1	0	0	0
228	248644	CA	11/14/2012	Investment Manager	-	\$48,000,000	\$29,000,000	0.60	0	0	0	0	0	0
229	313232	CA	11/16/2012	D/O NTL	-	\$135,000,000	\$98,000,000	0.73	1 Gold	2009	0	0	0	0
230	280625	CA	11/30/2012	D/O NTL	1 of 4	Not available	\$47,437,500	NA	1 Gold	2012	0	0	0	0
231	280632	CA	11/30/2012	D/O NTL	2 of 4	Not available	\$47,437,500	NA	1 Gold	2012	0	0	0	0
232	280621	CA	11/30/2012	D/O NTL	3 of 4	Not available	\$47,437,500	NA	1 Gold	2012	0	0	0	0
233	324832	CA	11/30/2012	DORGNL	1 of 6	\$104,500,000	Not available	NA	1 Gold	2013	0	0	0	0
234	324831	CA	11/30/2012	DORGNL	2 of 6	\$104,500,000	Not available	NA	1 Gold	2013	0	0	0	0
235	324830	CA	11/30/2012	DORGNL	3 of 6	\$104,500,000	Not available	NA	1 Gold	2013	0	0	0	0
236	324833	CA	11/30/2012	DORGNL	4 of 6	\$104,500,000	Not available	NA	1 Gold	2013	0	0	0	0
237	247496	CA	11/30/2012	Investment Manager	-	\$34,000,000	\$25,750,000	0.76	0	0	0	0	0	0
238	233973	TX	11/30/2012	Insurance	1 of 4	\$226,625,000	Not available	NA	1 Gold	2012	0	0	0	0
239	233944	TX	11/30/2012	Insurance	2 of 4	\$226,625,000	Not available	NA	1 Gold	2012	0	0	0	0
240	236007	TX	11/30/2012	Insurance	3 of 4	\$226,625,000	Not available	NA	1 Gold	2012	0	0	0	0
241	320422	CA	12/10/2012	Sovereign Wealth Fund	-	\$864,500,000	\$252,500,000	0.29	1 Certified	2010	0	0	0	0
242	324741	CA	12/11/2012	Investment Manager	-	\$110,000,000	\$72,500,000	0.66	1 Platinum	2010	0	0	0	0
243	320853	CA	12/11/2012	Equity Funds	-	\$163,000,000	\$0	0.00	1 Gold	2010	0	0	0	0
244	196638	CA	12/12/2012	Government	-	\$11,950,000	\$0	0.00	0	0	0	0	0	0
245	380386	FL	12/12/2012	Investment Manager	1 of 9	\$260,500,000	\$178,000,000	0.68	0	0	0	0	0	0
246	320849	CA	12/19/2012	Investment Manager	-	\$109,225,000	Not available	NA	1 Platinum	2010	0	0	0	0
247	233453	AZ	12/20/2012	D/O NTL	-	\$81,000,000	\$0	0.00	1 Gold	2010	0	0	0	0
248	248729	CA	12/20/2012	D/O NTL	1 of 2	\$422,500,000	\$210,000,000	0.50	1 Silver	2009	0	0	0	0
249	239770	TX	12/20/2012	Investment Manager	-	\$18,500,000	\$13,275,000	0.72	0	0	0	0	0	0
250	119729	TX	12/20/2012	REIT	-	\$123,800,000	\$80,470,000	0.65	0	0	0	0	0	0
251	86081	FL	12/21/2012	Investment Manager	-	\$44,800,000	\$17,300,000	0.39	0	0	0	0	0	0

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252	409599	TX	12/21/2012	Private REIT	-	\$46,250,000	\$0	0.00	1	Certified	0	0	0	0
253	306236	CA	12/28/2012	Investment Manager	-	\$93,100,000	Not available	NA	0	-	0	0	0	0
254	248780	CA	12/28/2012	Investment Manager	-	\$32,000,000	\$24,000,000	0.75	0	-	0	0	0	0
255	948222	TX	12/31/2012	DORGNL	1 of 2	Not available	Not available	NA	0	-	0	0	0	0
256	469978	WA	01/04/2013	REIT	-	Not available	Not available	NA	1	Silver	2009	0	0	1
257	434919	GA	01/08/2013	Investment Manager	1 of 2	Not available	Not available	NA	0	-	0	0	0	0
258	360730	CA	01/17/2013	Equity Funds	1 of 10	\$91,300,000	\$0	0.00	0	-	0	0	0	0
259	364930	CA	01/17/2013	Equity Funds	2 of 10	\$91,300,000	\$0	0.00	0	-	0	0	0	0
260	279520	CA	01/18/2013	Not available	-	\$4,200,000	Not available	NA	0	-	0	0	0	0
261	247088	CA	01/18/2013	Not available	-	\$7,070,000	Not available	NA	0	-	1	0	0	0
262	455667	MI	02/05/2013	DORGNL	-	\$19,300,000	Not available	NA	0	-	0	0	0	0
263	129210	DC	02/08/2013	Pension Fund	1 of 6	\$598,800,000	\$12,350,000	0.64	0	-	0	0	0	0
264	591697	TX	02/08/2013	D/O NTL	1 of 2	Not available	Not available	NA	0	-	0	0	0	0
265	144521	IL	02/28/2013	Pension Fund	1 of 3	\$23,500,000	Not available	NA	1	Gold	2010	0	0	1
266	717039	OR	02/28/2013	Not available	-	\$129,000,000	Not available	NA	0	-	0	0	0	0
267	233903	TX	03/05/2013	Investment Manager	-	\$412,000,000	\$185,400,000	0.45	1	Gold	2009	0	0	0
268	280566	CA	03/06/2013	Individual	1 of 4	\$13,000,000	Not available	NA	0	-	0	0	0	0
269	280567	CA	03/06/2013	Individual	2 of 4	\$13,000,000	Not available	NA	0	-	0	0	0	0
270	393807	CO	03/28/2013	D/O NTL	-	\$70,000,000	\$62,000,000	0.89	0	-	0	0	0	0
271	247577	CA	04/01/2013	Not available	-	Not available	Not available	NA	1	Gold	2011	0	0	1
272	246879	CA	04/01/2013	D/O NTL	-	Not available	Not available	NA	0	-	0	0	0	0
273	419750	TX	04/01/2013	D/O NTL	1 of 3	\$205,000,000	\$160,000,000	0.78	1	Silver	2010	0	0	0
274	246817	CA	04/04/2013	Corporate/User	-	\$27,000,000	\$0	0.00	0	-	0	0	0	0
275	470591	WA	04/16/2013	Investment Manager	-	Not available	Not available	NA	1	Gold	2012	0	0	1
276	393566	CO	04/17/2013	Investment Manager	1 of 2	\$176,000,000	\$132,000,000	0.75	1	Gold	2010	0	0	0
277	591276	TX	04/22/2013	D/O NTL	1 of 7	Not available	Not available	NA	0	-	0	0	0	0
278	445225	GA	04/25/2013	D/O NTL	-	Not available	Not available	NA	1	Gold	2010	0	0	0
279	591210	TX	04/25/2013	REIT	-	\$102,400,000	\$0	0.00	0	-	0	0	0	0
280	249274	CA	05/10/2013	D/O NTL	-	\$48,200,000	\$34,000,000	0.71	0	-	0	0	0	0
281	470752	WA	05/13/2013	Pension Fund	-	Not available	\$200,000,000	NA	1	Gold	2010	0	0	1
282	470586	WA	05/13/2013	D/O NTL	-	\$389,900,000	\$0	0.00	1	Gold	2009	0	0	0
283	247564	CA	05/14/2013	D/O NTL	1 of 13	\$80,000,000	\$9,180,000	0.11	0	-	0	0	0	0
284	248716	CA	05/14/2013	D/O NTL	2 of 13	\$80,000,000	\$9,180,000	0.11	0	-	0	0	0	0
285	247537	CA	05/14/2013	D/O NTL	3 of 13	\$80,000,000	\$9,180,000	0.11	0	-	0	0	0	0
286	410034	TX	05/15/2013	Investment Manager	-	\$87,920,000	\$43,960,000	0.50	0	-	0	0	0	0
287	144358	IL	05/16/2013	Investment Manager	-	\$218,000,000	\$113,360,000	0.52	1	Gold	2009	0	0	0
288	41354	NY	05/21/2013	DORGNL	-	\$25,493,894	\$0	0.00	0	-	0	0	0	0
289	948388	TX	05/21/2013	D/O NTL	-	\$27,500,000	\$21,300,000	0.77	0	-	0	0	0	0
290	393574	CO	05/22/2013	REIT	-	\$66,000,000	\$49,000,000	0.74	0	-	0	0	0	0
291	393606	CO	05/23/2013	REIT	1 of 2	\$183,000,000	Not available	NA	1	Silver	2009	0	0	0
292	437488	GA	05/23/2013	Investment Manager	-	\$144,300,000	\$0	0.00	0	-	0	0	0	0
293	249170	CA	05/31/2013	Individual	-	Not available	\$5,200,000	NA	0	-	0	0	0	0
294	1558630	LA	06/12/2013	D/O NTL	1 of 3	\$150,000,000	Not available	NA	0	-	0	0	0	0
295	248583	CA	06/13/2013	D/O NTL	-	\$95,000,000	Not available	NA	1	Gold	2010	0	0	0
296	248904	CA	06/18/2013	Bank/Finance	1 of 2	\$367,500,000	Not available	NA	0	-	0	0	0	0
297	410038	TX	06/19/2013	Private REIT	1 of 5	\$268,800,000	\$170,800,000	0.64	1	Silver	2012	0	0	0

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1	334497	CA	Not available	D/O NTL	-	Not available	Not available	NA	0	-	0	0	0	0	0
2	246876	CA	Not available	D/O NTL	-	Not available	Not available	NA	0	-	0	0	0	0	0
3	607950	CA	Not available	D/O NTL	-	Not available	Not available	NA	1	Gold	2010	0	0	0	0
4	280500	CA	Not available	D/O NTL	-	Not available	Not available	NA	0	-	0	0	0	0	0
5	280498	CA	Not available	D/O NTL	-	Not available	Not available	NA	0	-	0	0	0	0	0
6	340732	CA	Not available	Government	-	Not available	Not available	NA	0	-	0	0	0	0	0
7	201862	CA	Not available	Not available	-	Not available	Not available	NA	1	Registered	2006	0	0	0	0
8	666344	CA	Not available	Pension Fund	-	Not available	Not available	NA	1	Gold	2006	0	0	0	0
9	320731	CA	Not available	DORGNL	-	Not available	Not available	NA	0	-	0	0	0	0	0
10	42183	CA	Not available	Not available	-	Not available	Not available	NA	0	-	0	0	0	0	0
11	1587608	CO	Not available	DORGNL	-	Not available	Not available	NA	0	-	0	0	0	0	0
12	1211824	CT	Not available	D/O NTL	-	Not available	Not available	NA	0	-	0	0	0	0	0
13	129694	DC	Not available	Insurance	-	Not available	Not available	NA	0	-	0	0	0	0	0
14	817883	DC	Not available	DORGNL	-	Not available	Not available	NA	1	Gold	2008	0	0	0	0
15	129467	DC	Not available	Not available	-	Not available	Not available	NA	1	Gold	2012	0	0	0	0
16	763630	IA	Not available	Not available	-	Not available	Not available	NA	0	-	0	0	0	0	0
17	6174162	LA	Not available	D/O NTL	-	Not available	Not available	NA	0	-	0	0	0	0	0
18	1449685	LA	Not available	D/O NTL	-	Not available	Not available	NA	0	-	0	0	0	0	0
19	222127	MA	Not available	Investment Manager	-	Not available	Not available	NA	0	-	0	0	0	0	0
20	1036838	MN	Not available	Not available	-	Not available	Not available	NA	1	Gold	2011	0	0	0	0
21	903915	MO	Not available	Not available	-	Not available	Not available	NA	1	Certified	2006	0	0	0	0
22	1337949	NE	Not available	Not available	-	Not available	Not available	NA	0	-	0	0	0	0	0
23	1330697	NE	Not available	DORGNL	-	Not available	Not available	NA	0	-	0	0	0	0	0
24	888455	NJ	Not available	Not available	-	Not available	Not available	NA	1	Gold	2006	0	0	0	0
25	175170	NJ	Not available	REIT	-	Not available	Not available	NA	0	-	0	0	0	0	0
26	5048023	NY	Not available	Not available	-	Not available	Not available	NA	0	-	0	0	0	0	0
27	759788	NY	Not available	D/O NTL	-	Not available	Not available	NA	1	Gold	2006	0	0	0	0
28	716836	OR	Not available	DORGNL	-	Not available	Not available	NA	1	Gold	2006	0	0	0	0
29	717562	OR	Not available	Equity Funds	-	Not available	Not available	NA	1	Gold	2007	0	0	0	0
30	297384	PA	Not available	REIT	-	Not available	Not available	NA	0	-	0	0	0	0	0
31	694938	PA	Not available	REIT	-	Not available	Not available	NA	0	-	0	0	0	0	0
32	68512	PA	Not available	D/O NTL	-	Not available	Not available	NA	0	-	0	0	0	0	0
33	837098	PA	Not available	DORGNL	-	Not available	Not available	NA	0	-	0	0	0	0	0
34	591371	TX	Not available	Investment Manager	-	Not available	Not available	NA	1	Certified	2010	0	0	0	0
35	420595	TX	Not available	Corporate/User	-	Not available	Not available	NA	0	-	0	0	0	0	0
36	1319294	TX	Not available	D/O NTL	-	Not available	Not available	NA	1	Certified	2009	0	0	0	0
37	1057671	UT	Not available	D/O NTL	-	Not available	Not available	NA	0	-	0	0	0	0	0
38	649276	VA	Not available	Non Profit	-	Not available	Not available	NA	1	Silver	2008	0	0	0	0
39	135821	VA	Not available	Insurance	-	Not available	Not available	NA	1	Gold	2012	0	0	0	0
40	136178	VA	Not available	Insurance	-	Not available	Not available	NA	1	Gold	2012	0	0	0	0
41	5592128	WA	Not available	Government	-	Not available	Not available	NA	0	-	0	0	0	0	0
42	1269712	WI	Not available	DORGNL	-	Not available	Not available	NA	0	-	0	0	0	0	0

CoStar ID	State	Sale Date	Owner in 2013	PS	Sales Price	Debt	LTV Ratio	LEED 2013 Level	Year	Deed ilo Foreclosure	Foreclosure	Ground Lease	IRS Section 1031	Change in Title Vesting
1	667619	CA	01/26/2012	Government										
2	716836	OR	Not available	DORGNL										
Totals: 259														
19														
12														
13														
3														
25														

Notes

- Sources: Adapted from Eichholtz, Kok, and Quigley data file with additional information from the CoStar Group.
- Owner in 2013: D/O NTL = National Developer/Owner
DORGNL = Regional Developer/Owner
REIT = Real Estate Investment Trust
REOC = Real Estate Operating Company
- PS = Portfolio Sale: 0 = No
- LTV Ratio = Loan to Value Ratio
- LEED 2013 = LEED Certified: 1= Yes, 0 = No
- Deed ilo Foreclosure = Deed in lieu of Foreclosure: 1 = Yes, 0 = No
- Foreclosure = Foreclosure Sale: 1 = Yes, 0 = No
- Ground Lease: 1 = Yes, 0 = No
- IRS Section 1031: 1 = Yes, 0 = No
- Change in Title Vesting: 1 = Yes, 0 = No