TRENDING TOWARD ZERO:

CHANGING HOME SALES DYNAMICS IN A LOW-INVENTORY MARKET

WHITE PAPER





TRENDING TOWARD ZERO: CHANGING HOME SALES DYNAMICS IN A LOW-INVENTORY MARKET

By Michael Sklarz, Managing Director

SUMMARY

For-sale home inventories are hovering near historic lows. Collateral Analytics, a division of Black Knight, analyzed property-level data from the top 100 metros in the United States to see just how tight inventories have become.

The results of this study, based on data from our HomePriceTrends analytics platform, show severe and accelerating chronic shortages in every market, in every price range. This paper presents the results of that analysis and offers insights into the sales supply/demand dynamics in an effort to explain why home inventories are so low, trending toward zero.

"Inventory," in this case, refers to single-family homes available for sale. Days on Market has historically been a leading indicator of the housing market, but this measure also has been bouncing along near historically low levels, often just a few days. For a single measure, we prefer to use Months of Remaining Inventory (MRI), which is based upon how many months it would take to sell all the homes currently listed for sale in a given market, based on prevailing sales rates, if no new listings are added.

Each month, Collateral Analytics, a division of Black Knight, runs market condition ratings (MCR) for every corebased statistical area (CBSA) in the United States, using the most recent property-level sales and active listing data. These ratings are based on 10 quantitative market indicators, including:

- Number of Sales
- Absorption Rate
- Number of Active Listings
- Months of Remaining Inventory (MRI)
- Median Sold Price
- Median Sold Market Time

- Median Active Listing Price
- Median Listing Active Market Time
- Median Sold-To-List Price Ratio
- Number of Foreclosure Sales as a Percentage of Regular and REO Sales

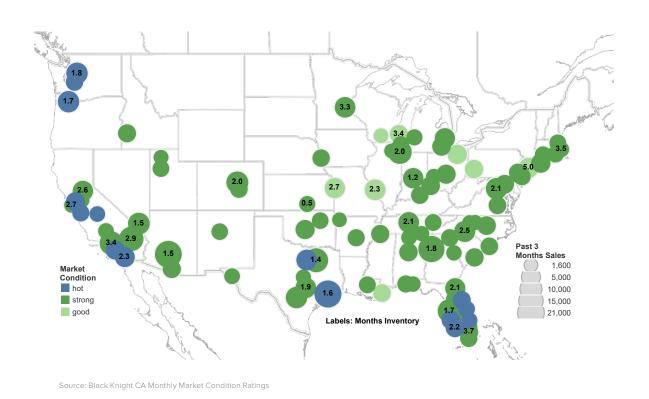
We combine the magnitudes and trends of these 10 indicators into a qualitative market assessment ranging from "Distressed" to "Hot."



Historically, about two-thirds to four-fifths of all markets tend to fall into one of the middle three categories: "good," "normal," or "soft." Only a modest number, typically less than 10%, show up as "hot" or "distressed," even at the top or bottom of normal cycles. This, however, is not a normal cycle. Our categories are based on norms, but what was once normal needs to be redefined. Also, it's unclear whether this is a temporary cycle or a linear trend toward a new normal.

As shown in Exhibit 1 as of May 2022, of the top 100 CBSAs currently, 16% show hot, 80% strong, and 4% good. There were no normal, soft, weak or distressed CBSAs, even looking down into the next 100 markets. This trend bears watching. If it persists, it may soon be time to recalibrate the MCR to reflect the new market dynamics.

Exhibit 1: Market Conditions in the Top 100 CBSAs

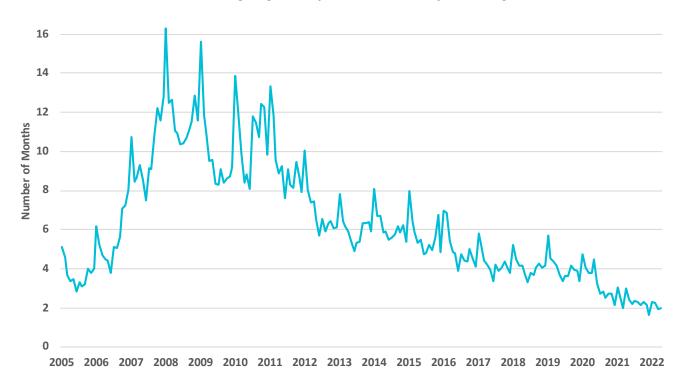


Market strength helps explain the findings of the <u>April Mortgage Monitor Report</u> from Black Knight, which showed home prices up more than 10% in all of the top 100 markets, a trend that began in <u>February</u>, despite a significant rise in interest rates since the beginning of this year.

MCR criteria are interrelated, but one factor stands out from the rest as a driver in this current cycle: Months of Remaining Inventory (MRI). As shown in Exhibit 2, since the real estate crash of the late 2000s, MRI nationally has hovered around five months. Inventories were on a gradual downward trend heading into the COVID-19 pandemic but dropped sharply in 2020 as quarantines shut down the U.S. and global economy, halting construction and creating widespread shortages of construction supplies. And with levels so low nationally, it only stands to reason inventories would be trending toward zero in some individual markets, and in some price ranges.

Exhibit 2: National MRI





Source: Black Knight CA HomePriceTrends

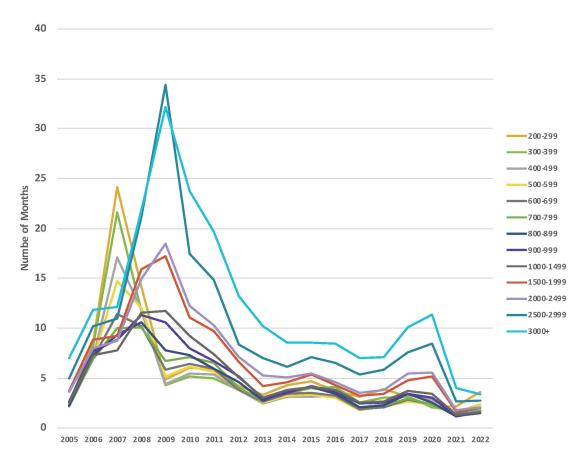
TRENDING TOWARD ZERO

Los Angeles, Palm Beach, Fla., and Phoenix are three markets that typify this trend. (Data for the top 200 CBSAs is available in the Appendix.) We have broken out inventory levels by price range at the local level to show how inventories have dwindled at all price points. We provide this specificity only at the local level because home prices can vary significantly from market to market, making national pricing bands irrelevant.

In all three instances, it's clear that not only have MRI figures converged toward less than two months in recent years, but that higher-priced homes, which have historically required substantially more time to sell, are also increasingly in short supply.

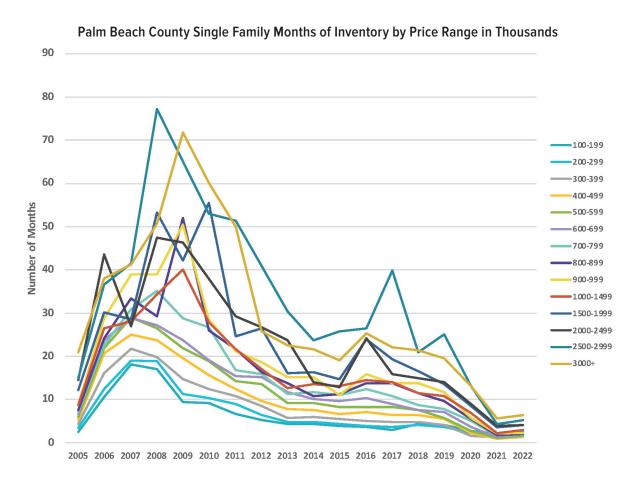
Exhibit 3A: Months of Remaining Inventory in Los Angeles Since 2005 by Price Range

Los Angeles County Single Family Months of Inventory Remaining by Price Range in Thousands



Source: HomePriceTrends

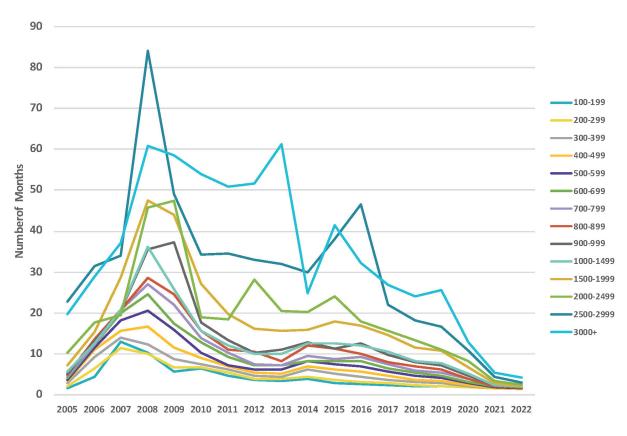
Exhibit 3B: Months of Remaining Inventory in Palm Beach Since 2005 by Price Range



Source: HomePriceTrends

Exhibit 3C: Months of Remaining Inventory in Phoenix Since 2005 by Price Range





Source: HomePriceTrends

FACTORS CONTRIBUTING TO THESE CONDITIONS:

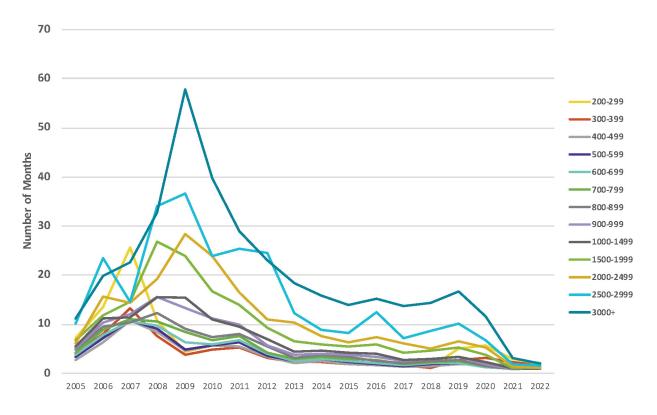
1. **Increased informational efficiency** – Recent advances in information technology have dramatically reduced the time it takes to find and buy a home. Whereas real estate agents once had to drive buyers around, showing them houses to learn their tastes, narrow their search to more suitable properties, and suggest even more properties to consider, today most buyers do most of their research online, and often tour homes virtually before even contacting an agent. Buyers today are also aware of the history of a property in terms of prior sale prices, the quality of the school districts and other neighborhood amenities. This efficiency has served to accelerate the prospect-to-purchase cycle.

- 2. **Accommodating fiscal policy** The Federal Reserve kept Interest rates near historic lows in 2020 and 2021 to help stimulate the U.S. economy after a pandemic-induced quarantine. Low rates touched off a refinance frenzy that has left many homeowners with interest rates much lower than they could expect to get in today's market. Owners that secured financing in 2020 and 2021 are now paying less than the current rate of inflation, and are the beneficiaries of negative real rates. Going forward, these owners will have no incentive to sell and give up this cheap or free money. Low locked-in rates reduce the supply of homes on the market.
- 3. **Remote work** Home sales increased as workers, untethered from urban centers by remote working arrangements during the pandemic, looked for bigger and more work-friendly living spaces. At the expense of dense urban markets like San Francisco and New York City, suburban and coastal markets experienced increased demand as owners made lifestyle moves, taking advantage of low interest rates to purchase homes with monthly payments at or below what they were previously paying in rent.
- 4. **Institutional investors** In the wake of the Great Recession, when home values crashed, institutional investors picked up the slack, buying single-family properties at a discount and converting them to rentals. This has become a new asset class and a number of publicly traded single family rental REITs. This proved to be a profitable business model but served to reduce home inventory. The addition of iBuyers in recent years has only increased investor demand. In 2022 to date, a significant percentage of the homes in the bottom half of the price range, especially in the less-dense suburbs, are being purchased by individual single-family rental investors.
- 5. **Restrictive zoning** As home prices have risen in recent years, existing homeowners in some communities have pushed for zoning restrictions to prohibit condominiums and other higher-density residential multifamily ownership opportunities. The power of NIMBYs (not in my back yard) has accelerated with the ability to quickly form opposition groups online using social media platforms.
- 6. **Supply chain** The National Association of Home Builders has reported severe shortages of land, labor and lumber, three cornerstones of new home construction. New home production has increased in recent months, but not fast enough to keep up with demand, especially in more affordable price ranges.
- 7. **Rooted sellers** With inventories so low, it may be easy to sell a home, but it may be hard to buy a home and that, in turn, results in some sellers not wanting to risk selling a home and being stuck without a home. San Diego, Exhibit 3D, is a good example of a market beset with rooted sellers.

With inventories so low, some potential sellers may choose to remain on the sidelines rather than risk selling and being stuck without a home.

Exhibit 3D: Months of Remaining Inventory in San Diego Since 2005 by Price Range

San Diego County Single Family Months of Inventory Remaining by Price Range in Thousands



Source: HomePriceTrends

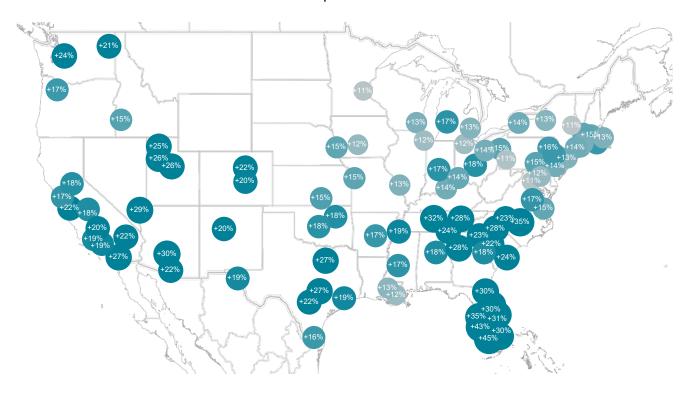
UP, UP AND AWAY

According to the law of supply and demand, when a product is in short supply, its price is likely to increase. As inventories have dwindled, home prices have soared.

As mentioned in the introduction, home prices in April were up more than 10% year-over-year in all of the nation's top 100 markets. Exhibit 4 shows what that looks like on a map:

Exhibit 4: Annual Home Price Growth Rate for the Top 100 Home Markets

Annual Home Price Growth Rate April 2022

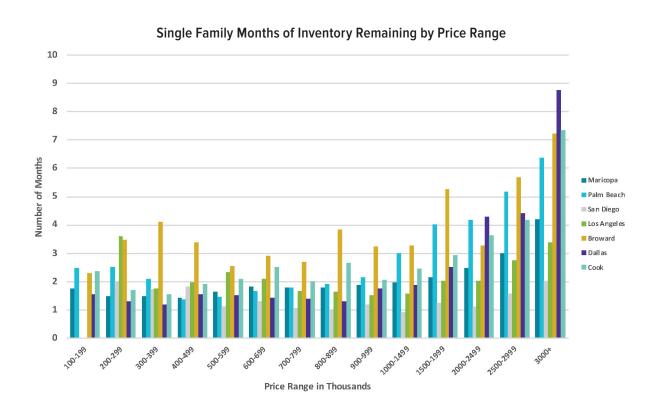


Source: Black Knight Home Price Index



What may be less obvious is how much the term "high priced" has changed as a relative term. Prior to 2020, high priced was generally considered to be anything over \$1 million USD. Homes in the range of \$1 million to 3 million took much longer to sell than those in the middle market ranges. As inventories have decreased, so has the time it typically takes to sell a so-called high-priced listing. As shown in Exhibit 5, in markets like San Diego and Los Angeles, any listing under \$3 million has less than three months of inventory. In Dallas, any listing under \$2 million has less than three months of inventory. Historically, these have been thin markets where six to 12 months of inventory was considered normal.

Exhibit 5: MRI by Price Range in March 2022 for Seven Major Markets



While San Diego and Los Angeles have significant inventories of homes worth over \$3 million, this is not typical for the country as a whole. In fact, as a percentage of all U.S. single family homes sold in 2021, only 6.4% were sold for \$1 million or more, 3.0% were sold for \$1.5 million or more, 1.6% were sold for \$2 million or more and only 0.6% were sold for \$3 million or more. This suggests that over 93% of the market is selling very briskly and that any reasonably priced listing is finding an abundance of buyers ready to pounce.

See the distribution of prices sold in 2021 in Exhibit 6 on the next page.

Exhibit 6: Distribution of Sold Prices in 2021 for the Entire U.S.

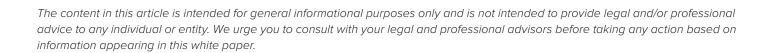


CONCLUSIONS

We don't know how long the housing market will be in a state of seller paralysis with such low inventories. Historically, seller's markets would be negated by prices rising until demand and supply balanced out. That may occur again soon, as significant increases in interest-rates help cut demand. For now, however, we have what appears to be a somewhat paralyzed market with lower-than-normal active listings available in the market. To the extent that low inventories become the norm in the intermediate to longer term, buyers will need to enhance their search and purchase-offer strategies. Few will have time to drive around and learn a market the old-fashioned way. Agents and brokers will need to become adept at using technology (on both sides of the purchase transaction). This is essential to ensure that they are providing buyers and sellers with current and accurate information. Proper pricing and the ability to bring transactions to close at the accelerating speed of the market will be a key differentiator as inventories continue "trending toward zero."

LEARN MORE:

Contact us at 866-964-8343 | AskBlackKnight@bkfs.com



APPENDIX A

CBSA Name	Market Condition	Months of Inventory
Abilene, TX	strong	1.87
Akron, OH	good	1.78
Albany-Schenectady-Troy, NY	good	3.56
Albuquerque, NM	strong	1.95
Amarillo, TX	hot	2.38
Anaheim-Santa Ana-Irvine, CA	hot	2.79
Ann Arbor, MI	strong	2.48
Appleton, WI	normal	5.46
Asheville, NC	strong	3.36
Atlanta-Sandy Springs-Roswell, GA	strong	1.77
Atlantic City-Hammonton, NJ	strong	2.84
Auburn-Opelika, AL	good	0.54
Augusta-Richmond County, GA-SC	strong	2.24
Austin-Round Rock, TX	strong	1.93
Bakersfield, CA	strong	2.58
Baltimore-Columbia-Towson, MD	strong	1.81
Barnstable Town, MA	strong	2.94
Baton Rouge, LA	strong	1.92
Beaumont-Port Arthur, TX	strong	2.93
Bellingham, WA	strong	2.09
Bend-Redmond, OR	hot	2.5
Birmingham-Hoover, AL	strong	1.82
Boise City, ID	strong	0.96
Boston, MA	strong	3.49
Boulder, CO	strong	3.33
Bowling Green, KY	hot	2.12
Bremerton-Silverdale, WA	strong	1.75
Bridgeport-Stamford-Norwalk, CT	strong	3.47
Buffalo-Cheektowaga-Niagara Falls, NY	strong	3.07
Cambridge-Newton-Framingham, MA	strong	3.45
Camden, NJ	strong	2.51
Canton-Massillon, OH	strong	1.51
Cape Coral-Fort Myers, FL	hot	2.15
Cedar Rapids, IA	strong	1.59
Charleston-North Charleston, SC	strong	1.92
Charleston, WV		

CBSA Name	Market Condition	Months of Inventory
Charlotte-Concord-Gastonia, NC-SC	strong	2.45
Charlottesville, VA	strong	3.21
Chattanooga, TN-GA	strong	2.04
Chicago-Naperville-Arlington Heights, IL	strong	2.03
Chico, CA	strong	3.22
Cincinnati, OH-KY-IN	strong	2.68
Clarksville, TN-KY	strong	2.15
Cleveland-Elyria, OH	good	1.97
Coeur d'Alene, ID	strong	2.34
College Station-Bryan, TX	hot	2.87
Colorado Springs, CO	strong	1.17
Columbia, MO	hot	2.53
Columbus, GA-AL	good	2.97
Columbus, OH	strong	1.37
Corpus Christi, TX	strong	2.37
Crestview-Fort Walton Beach-Destin, FL	strong	2.32
Dallas-Plano-Irving, TX	strong	1.38
Daphne-Fairhope-Foley, AL	strong	1.31
Davenport-Moline-Rock Island, IA-IL	strong	2.05
Dayton-Kettering, OH	strong	2.32
Deltona-Daytona Beach-Ormond Beach, FL	hot	2.12
Denver-Aurora-Lakewood, CO	strong	1.95
Detroit-Dearborn-Livonia, MI	strong	3.33
Dover, DE	strong	1.96
Duluth, MN-WI	strong	2.09
Durham-Chapel Hill, NC	hot	1.26
El Paso, TX	strong	1.93
Elgin, IL	strong	1.79
Elizabethtown-Fort Knox, KY	strong	1.74
Erie, PA	strong	2.12
Eugene, OR	hot	1.91
Evansville, IN-KY	strong	0.72
Fayetteville-Springdale-Rogers, AR-MO	strong	1.53
Flint, MI	good	2.52
Florence-Muscle Shoals, AL	strong	2.03
Florence, SC	strong	2.25
Fort Collins, CO	strong	3.37

APPENDIX A CONTINUED

CBSA Name	Market Condition	Months of Inventory
Fort Lauderdale-Pompano Beach- Deerfield Beach, FL	strong	3.71
Fort Smith, AR-OK	strong	2.23
Fort Wayne, IN	strong	0.88
Fort Worth-Arlington, TX	hot	1.38
Frederick-Gaithersburg-Rockville, MD	strong	1.94
Fresno, CA	hot	2.15
Gainesville, FL	strong	2.42
Gainesville, GA	strong	2.23
Gary, IN	strong	2.45
Grand Junction, CO	strong	2.23
Grand Rapids-Wyoming, MI	strong	1.43
Greeley, CO	strong	2.95
Green Bay, WI	good	5.52
Greensboro-High Point, NC	strong	1.93
Greenville-Anderson-Mauldin, SC	strong	1.63
Gulfport-Biloxi-Pascagoula, MS	strong	3.04
Hagerstown-Martinsburg, MD-WV	strong	1.95
Harrisburg-Carlisle, PA	strong	1.57
Hartford-West Hartford-East Hartford, CT	strong	2.53
Hickory-Lenoir-Morganton, NC	strong	2.65
Hilo, HI	strong	4.02
Hilton Head Island-Bluffton-Beaufort, SC	hot	0.06
Homosassa Springs, FL	hot	1.73
Houston-The Woodlands-Sugar Land, TX	hot	1.57
Huntington-Ashland, WV-KY-OH	strong	2.52
Huntsville, AL	strong	1.71
Indianapolis-Carmel-Anderson, IN	strong	1.21
Jackson, MI	strong	3.34
Jackson, MS	strong	3.09
Jacksonville, FL	strong	2.09
Jacksonville, NC	strong	1.99
Johnson City, TN	strong	1.97
Joplin, MO	hot	2.53
Kalamazoo-Portage, MI	strong	1.72
Kansas City, MO-KS	good	2.66
Killeen-Temple, TX	strong	1.53

CBSA Name	Market Condition	Months of Inventory
Kingsport-Bristol-Bristol, TN-VA	strong	1.98
Knoxville, TN	strong	1.96
Lafayette-West Lafayette, IN	strong	1.27
Lafayette, LA	hot	2.42
Lake Charles, LA	strong	3
Lake County-Kenosha County, IL-WI	strong	2.13
Lake Havasu City-Kingman, AZ	good	2.22
Lakeland-Winter Haven, FL	strong	1.86
Lancaster, PA	strong	1.8
Lansing-East Lansing, MI	strong	2.14
Las Cruces, NM	hot	2.4
Las Vegas-Henderson-Paradise, NV	strong	1.46
Lexington-Fayette, KY	strong	2.21
Lincoln, NE	strong	1.23
Little Rock-North Little Rock-Conway, AR	strong	1.41
Longview, TX	hot	2.97
Los Angeles-Long Beach-Glendale, CA	strong	3.35
Louisville/Jefferson County, KY-IN	strong	2.12
Lubbock, TX	strong	2.76
Macon-Bibb County, GA	strong	2.34
Madera, CA	strong	2.7
Madison, WI	good	4.49
Manchester-Nashua, NH	strong	3.01
McAllen-Edinburg-Mission, TX	strong	3.29
Medford, OR	hot	2.74
Memphis, TN-MS-AR	strong	1.9
Merced, CA	strong	3.1
Miami-Miami Beach-Kendall, FL	strong	4.57
Midland, TX	good	2.12
Milwaukee-Waukesha-West Allis, WI	good	3.36
Minneapolis-St. Paul-Bloomington, MN-WI	strong	3.28
Mobile, AL	strong	2.04
Modesto, CA	strong	2.65
Montgomery County-Bucks County- Chester County, PA	strong	2.2
Montgomery, AL	strong	2.44
Muskegon, MI	strong	1.82

APPENDIX A CONTINUED

CBSA Name	Market Condition	Months of Inventory
Myrtle Beach-Conway-North Myrtle Beach, SC-NC	strong	3.19
Naples-Immokalee-Marco Island, FL	hot	2.82
Nashville-Davidson-Murfreesboro- Franklin, TN	strong	2.06
Nassau County-Suffolk County, NY	strong	4.71
New Bern, NC	strong	2.11
New Brunswick-Lakewood, NJ	strong	3.73
New Haven-Milford, CT	strong	2.99
New Orleans-Metairie, LA	good	3.84
New York-Jersey City-White Plains, NY-NJ	good	5.03
Newark, NJ-PA	good	5.37
North Port-Sarasota-Bradenton, FL	hot	1.79
Norwich-New London, CT	strong	2.82
Oakland-Hayward-Berkeley, CA	hot	2.52
Ocala, FL	strong	2.32
Ogden-Clearfield, UT	strong	2.13
Oklahoma City, OK	strong	1.36
Olympia-Tumwater, WA	strong	1.65
Omaha-Council Bluffs, NE-IA	strong	1.31
Orlando-Kissimmee-Sanford, FL	strong	1.68
Oxnard-Thousand Oaks-Ventura, CA	strong	2.36
Palm Bay-Melbourne-Titusville, FL	hot	1.87
Panama City, FL	hot	2.62
Pensacola-Ferry Pass-Brent, FL	strong	1.29
Peoria, IL	strong	2.33
Philadelphia, PA	strong	2.37
Phoenix-Mesa-Scottsdale, AZ	strong	1.46
Pittsburgh, PA	good	3.00
Port St. Lucie, FL	hot	3.05
Portland-South Portland, ME	strong	2.86
Portland-Vancouver-Hillsboro, OR-WA	hot	1.73
Poughkeepsie-Newburgh-Middletown, NY	good	4.5
Providence-Warwick, RI-MA	strong	2.21
Provo-Orem, UT	strong	2.59
Pueblo, CO	strong	2.5
Punta Gorda, FL	strong	3.18

CBSA Name	Market Condition	Months of Inventory
Racine, WI	strong	2.82
Raleigh, NC	strong	1.14
Reading, PA	hot	1.49
Redding, CA	strong	3.3
Reno, NV	strong	2.38
Richmond, VA	strong	1.26
Riverside-San Bernardino-Ontario, CA	strong	2.92
Roanoke, VA	strong	2.46
Rochester, MN	strong	2.78
Rochester, NY	good	2.96
Rockford, IL	strong	1.41
Rockingham County-Strafford County, NH	strong	2.89
Sacramento-Roseville-Arden-Arcade, CA	strong	2.58
Saginaw, MI	good	1.98
Salem, OR	strong	2.38
Salinas, CA	strong	3.49
Salisbury, MD-DE	strong	2.43
Salt Lake City, UT	strong	2.21
San Antonio-New Braunfels, TX	strong	1.73
San Diego-Carlsbad, CA	hot	2.27
San Francisco-Redwood City-South San Francisco, CA	strong	2.68
San Jose-Sunnyvale-Santa Clara, CA	hot	2.65
San Luis Obispo-Paso Robles-Arroyo Grande, CA	strong	2.49
San Rafael, CA	strong	2.07
Santa Maria-Santa Barbara, CA	strong	2.18
Santa Rosa, CA	hot	3.25
Savannah, GA	strong	1.96
Scranton-Wilkes-Barre-Hazleton, PA	strong	2.51
Seattle-Bellevue-Everett, WA	hot	1.8
Sherman-Denison, TX	hot	1.83
Shreveport-Bossier City, LA	strong	2.09
Sierra Vista-Douglas, AZ	strong	2.57
Sioux Falls, SD	strong	3.35
South Bend-Mishawaka, IN-MI	good	1.58
Spartanburg, SC	strong	1.45

APPENDIX A CONTINUED

CBSA Name	Market Condition	Months of Inventory
Spokane-Spokane Valley, WA	strong	1.57
Springfield, IL	strong	1.98
Springfield, MA	strong	2.89
Springfield, MO	hot	2.03
St. Louis, MO-IL	good	2.28
Stockton-Lodi, CA	strong	2.75
Syracuse, NY	strong	3.08
Tacoma-Lakewood, WA	hot	1.78
Tallahassee, FL	strong	3.06
Tampa-St. Petersburg-Clearwater, FL	strong	1.65
Toledo, OH	good	2.36
Topeka, KS	strong	0.84
Torrington, CT	good	3.52
Trenton, NJ	strong	3.59
Tucson, AZ	strong	2.14
Tulsa, OK	strong	2.72
Tuscaloosa, AL	strong	1.94
Tyler, TX	strong	2.1
Urban Honolulu, HI	hot	2.66
Valdosta, GA	strong	1.42

CBSA Name	Market Condition	Months of Inventory
Vallejo-Fairfield, CA	strong	2.99
Virginia Beach-Norfolk-Newport News, VA-NC	strong	1.62
Visalia-Porterville, CA	strong	2.4
Waco, TX	strong	1.88
Warner Robins, GA	strong	1.95
Warren-Troy-Farmington Hills, MI	strong	2.38
Washington-Arlington-Alexandria, DC-VA-MD-WV	strong	2.09
West Palm Beach-Boca Raton-Delray Beach, FL	strong	3.76
Wichita Falls, TX	strong	1.42
Wichita, KS	strong	0.53
Wilmington, DE-MD-NJ	strong	1.92
Wilmington, NC	strong	2.03
Winston-Salem, NC	strong	2.16
Worcester, MA-CT	strong	3.08
York-Hanover, PA	strong	1.41
Youngstown-Warren-Boardman, OH-PA	strong	1.96
Yuba City, CA	hot	2.92
Yuma, AZ	strong	1.9