On THE MONEY

A Hannah News Service Publication

Vol. 130, No. 11

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June 14, 2013

Ohio's Residential Real Estate Markets

Residential real estate markets have deservedly drawn a great deal of attention over the past half-dozen years. The overheating and subsequent collapse in home prices was a major cause of the Great Recession, while the recent recovery in these prices is widely heralded as a sure sign that happy days are here again. This may or may not be true, but it certainly suggests that the trend in residential prices and sales in Ohio bears a close look.

Statewide Trends

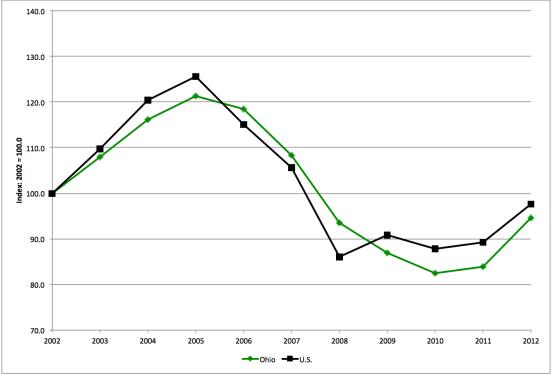
Exhibit 1 on page 2 compares trends over the past decade in the annual number of homes sold in Ohio compared to the number sold nationally. This and all the following charts are plotted on an index basis so that they can compare state and national trends directly. As the graph shows, the sales peak both nationally and in Ohio was in 2005, four years before the recession. During that year, the Ohio Association of Realtors reports that 146,820 homes with an aggregate value of \$23 billion changed hands. The number of sales was up 21.3 percent from 2002, somewhat less than the national gain of 25.6 percent during the same period. Ohio's sales then declined 32.1 percent to a low of 99,741 transactions in 2010. The absolute trough in U.S sales was two years earlier – in 2008 – but the total decline was comparable to that in Ohio, at 31.5 percent. However, Ohio's recovery over the last two years was stronger than average – 14.8 percent versus 11.2 percent.

Although the sales trend in Exhibit 1 is broadly comparable to the national average, the trend in prices is not. This is shown in Exhibit 2, also on page 2. Ohio prices peaked in 2006, up only 11.5 percent from 2002. U.S. prices peaked a year later, up 40.3 percent from 2002. Because Ohio prices did not inflate as much, they didn't fall as much in the collapse. The Ohio price decline from 2006 through 2012 was 10.5 percent, versus a nationwide decline of 15.3 percent. The fact remains, however, that U.S. prices were still 17.3 percent higher in 2012 than they were in 2002; Ohio prices were 0.3 percent lower.

Measuring Real Estate Price Changes

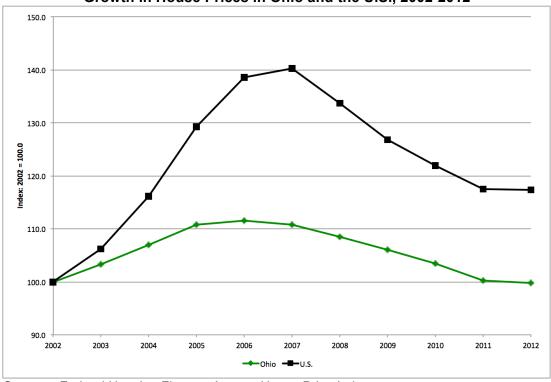
It is worth pausing to discuss how these price changes are measured. Analysts often compute price changes using median home sale prices from the National Association of Realtors, but this analysis uses the Federal Housing Finance Agency's House Price Index (FHFA Index). House price changes in general are difficult to measure because size, features, access, location, and

Exhibit 1
Growth in Home Sales in Ohio and the U.S., 2002-2012



Source: Ohio Association of Realtors; National Association of Realtors.

Exhibit 2
Growth in House Prices in Ohio and the U.S., 2002-2012



Source: Federal Housing Finance Agency House Price Index.

neighborhood conditions make each house unique. Further, different markets can move in different ways. Performance can vary not only from region to region but from neighborhood to neighborhood, and different market segments – such as the luxury market and the starter market – can behave differently as well. The difficulty in using market prices to measure house price changes from month to month is that these prices can be impacted by who happens to be in the market. If activity in the starter market picks up – perhaps because of a new credit for first-time homebuyers – the median sale price will decline. But this decline does not imply that prices generally have fallen, which is how such a decline would be interpreted. This problem is especially likely when and where markets are thin, such as in the winter and in smaller areas. The FHFA Index overcomes this problem by matching purchases, sales, and appraised values from refinancing transactions on the same population of houses and uses these transaction prices to determine price changes for the U.S., regions, states, and all 384 Metropolitan Statistical Areas (MSAs) and metropolitan divisions nationwide.

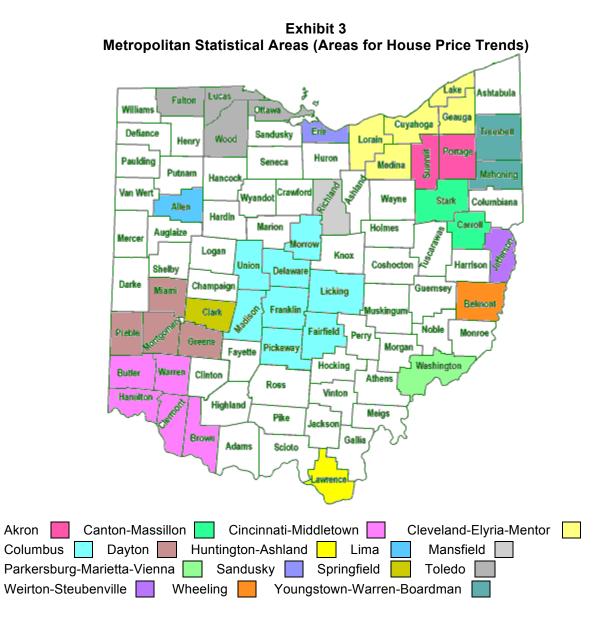
This index is not without its problems, however. The FHFA's job is oversight of the government-sponsored enterprises that buy mortgages from originators and sell them in the secondary market – the Federal National Mortgage Association (Fannie Mae) and the Federal Home Loan Mortgage Corporation (Freddie Mac). These enterprises are prohibited from buying mortgages on single-unit properties with values greater than \$417,000 – except in a relatively small number of high-cost areas – and the FHFA Index does not include properties with mortgages above this limit. Thus, the index cuts off the high end of the market. Second, it is an index, so it does not provide house price levels. Finally, it implicitly assumes that the quality of the houses in the sample is constant. But generally, houses deteriorate over time both physically and functionally, which causes them to decline in value and causes the index to underestimate price growth. But as houses are remodeled their value rises, causing the index to overestimate growth. Which of these competing forces dominates depends on the market. Overall, though, this poses less of a problem for the FHFA index than shifts in submarket activity pose for the median sale price.

A different house price index, Standard & Poor's Case-Schiller Home Price Index, is much better known than the FHFA Index, but is computed using the same general method. The Case-Schiller Index has been routinely featured in recent news reports about the ongoing recovery of the housing market. However, while the FHFA Index is available for all MSAs and metropolitan divisions, the Case-Schiller Index is available only for 20 large MSAs. (Cleveland is the only Ohio MSA featured.) Further, the behavior of this index over the past decade raises questions regarding the degree to which it represents the U.S. housing market as a whole. The earliest Case-Schiller data available are from 1987. (The FHFA Index is available beginning in 1975 for the U.S. and Ohio; its availability for MSAs varies.) The two indices tracked each other closely from 1987 through 2000, but from the first quarter of 2000 through its peak in the second quarter of 2006, the Case-Schiller Index increased 90 percent. The FHFA Index peaked three quarters later, and measured a gain of only 65 percent. The Case-Schiller Index then fell 35 percent to a bottom in the first quarter of 2012, almost twice the 18 percent decline measured by the FHFA Index to its trough one quarter later.

Several of the Case-Schiller MSAs were among those with the largest house price gains in the boom followed by the largest declines in the bust – Las Vegas, Los Angeles, Miami, Phoenix, and Tampa. Because the FHFA Index is computed for all MSAs, it is clearly broadly representative. Although Case-Schiller claims to be representative as well, its behavior over the past decade and the limited number of regions available suggests that it *may* primarily or exclusively sample these regions, making it unrepresentative of conditions in Ohio beyond Cleveland. Further, it may be overstating house price gains currently because the regions most seriously impacted in the bust are among those enjoying the most robust price gains now.

Regional Housing Markets

A recurring theme in this series of articles is the diversity of the Ohio economy. Ohio housing markets are similarly diverse. Thus, it is important to examine price and sale trends at the regional level. In doing so, we have to consider two different geographies. The FHFA Index is available for the state as a whole (as shown in Exhibit 2) and MSAs. Ohio's MSAs and the changes to these areas made in February 2013 were discussed in detail in the April 5, 2013, edition of *On the Money* (Vol. 130, No. 7). The FHFA index is still based on the former (2003) MSA definitions; a map of these areas is shown in Exhibit 3. Home sales, however, are available from the Ohio Association of Realtors only for Multiple Listing Service (MLS) areas. Some of these areas consist only of a single county, and area groupings have in some cases changed, so they must be aggregated to be meaningful over time. Exhibit 4 presents these areas.



Laker Ashtabula **Fulton** Williams Ottaw Geauga Cuyahoga Trumbull Defiance Sandusky Lorain Henry Portage Huron Paulding Seneca Medina Mahoning Wyandot Crawford Van Wert Wayne Columbiana Allen Hardin Carroll Marion Holmes Auglaize Mercer Logan Knox Coshocton Union Shelby Delaware Darke Champaigr Guernsey Licking Belmont Franklin Clark Noble Preble Fairfield Монгое Pickaway Morgan Fayette Hocking Warren Butler Clinton Athens Ross Vinton Hamilton Highland Pike Adams Scioto West Central North Central Northeast Central Southwest-Dayton Southeast [Southwest-Cincinnati Information not available

Exhibit 3
Aggregated Multiple Listing Service Areas (Areas for Home Sales Trends)

The following sections will discuss house price and sale trends in each of the areas shown above. The price trend graphs for most of the 16 MSAs will not be shown; with a few exceptions, these are broadly similar to the state average shown in Exhibit 2. Instead, Exhibit 4 on the next page identifies for each MSA the increase from 2002 to the peak, the year of the peak, the decline from the peak to 2012, and the 2002-2012 and 2011-2012 net changes. Exhibit 4 also shows these statistics for Ohio's non-metro counties as a whole. It is worth noting that although rural counties in different parts of the state likely performed differently, these counties as a whole increased more in the expansion than the state overall, they declined less in the contraction, and unlike the state, their price levels were higher in 2012 than in 2002. Thus, prices in Ohio's rural markets performed better over the last decade than those in urban and suburban markets.

Exhibit 4
Ohio MSA Annual Average House Price Trends, 2002-2012

Area	Peak year	Percentage changes			
		2002-peak	Peak-2012	2011-2012	2002-2012
Northwest					
Toledo	2005	10.8%	-17.8%	-1.5%	-8.9%
North Central					
Mansfield	2005	9.7%	-17.6%	-1.2%	-9.6%
Sandusky	2005	9.9%	-10.5%	-0.3%	-1.6%
Northeast					
Akron	2006	9.6%	-14.0%	-2.4%	-5.8%
Canton	2005	8.9%	-13.2%	-0.7%	-5.5%
Cleveland	2005	10.6%	-16.6%	-1.7%	-7.7%
Youngstown	2006	9.8%	-9.4%	-0.9%	-0.5%
West Central					
Lima	2008	17.3%	-3.3%	1.6%	10.0%
Springfield	2007	10.0%	-10.0%	-0.2%	-1.0%
Central					
Columbus	2006	13.4%	-7.9%	-0.2%	4.4%
Southwest					
Cincinnati	2007	14.4%	-8.5%	-0.1%	4.7%
Dayton	2006	9.8%	-10.6%	-1.0%	-1.8%
Southeast					
Huntington	n/a	n/a	n/a	1.3%	31.0%
Parkersburg	2009	23.8%	4.6%	1.8%	19.6%
Weirton	2008	20.7%	-5.7%	-2.4%	9.1%
Wheeling	2008	27.7%	-1.3%	1.4%	24.2%
Non-metro Ohio	2006	12.3%	-5.7%	0.7%	5.9%
Ohio	2006	11.5%	-10.5%	-0.5%	-0.3%
U.S.	2007	40.3%	-15.3%	-0.2%	17.3%

Source: Calculated from FHFA House Price Index, Federal Housing Finance Agency.

The sales trends in the individual regions follow the same general pattern as the state and national averages shown in Exhibit 2, but some peaked and/or reached a trough earlier or later than average. The following paragraphs and charts will bring to light these differences, along with the price trends in the MSAs in each region. It should be noted that there is an interplay between the price and the sale trends. If buying activity in a market declines, sellers will likely drop their asking price. This may remedy the sales decline, at least for a time.

Northwest Region

Exhibit 5 charts home sales in the Northwest region compared to the state and national averages. Sales variability over the past decade was less than average. The increase in home sales of 17.1 percent between 2002 and the peak in 2005 was less than Ohio's increase of 21.3 percent and the 25.3 percent national average. But the decline in sales from the peak to the 2010 trough was also milder than average: 27.5 percent, versus 32.1 percent statewide and 31.5 percent for the U.S. to the national sales trough in 2008. Similarly, the recovery from the

trough in the Northwest has been milder than average: 10.7 percent versus 14.8 percent in Ohio and 13.4 percent nationwide. Sales in 2012 were six percent lower than in 2002. Ohio sales were 5.4 lower; U.S. sales were 2.4 percent lower.

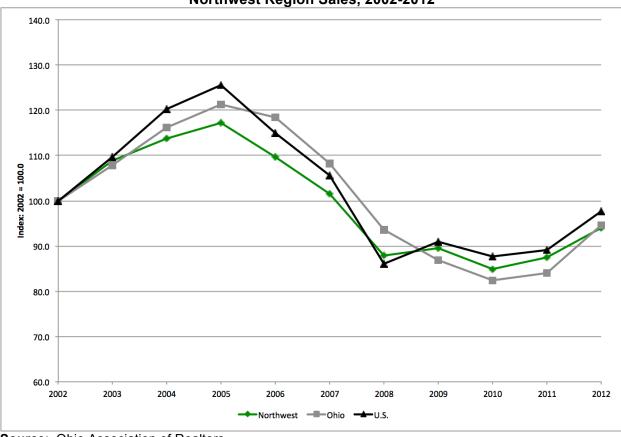


Exhibit 5
Northwest Region Sales, 2002-2012

Source: Ohio Association of Realtors.

Prices in the region's one MSA, Toledo, suffered both from a gain less than the state average in the first half of the last decade and a decline that was greater than average – including worse-than-average performance over the past year. As shown in Exhibit 4, Toledo prices on average were 8.9 percent lower in 2012 than in 2002. Meanwhile, Ohio prices were 0.3 percent lower at the end of the ten-year period and U.S. prices were 17.3 percent higher.

North Central Region

The sales trend in the North Central region is shown in Exhibit 6. The growth in the early years of the decade was slightly less than the Ohio average at 20.2 percent. But the decline thereafter was only 22.2 percent, about ten percentage points less than the national and state averages. Although the gain since 2010 has been slightly less than average at 11.6 percent, the net change for the decade was a positive 4.3 percent – contrary to the small net national and state losses.

140.0 130.0 120.0 110.0 Index: 2002 = 100.0 90.0 80.0 70.0 60.0 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 North Central ——Ohio ——U.S.

Exhibit 6
North Central Region Sales, 2002-2012

Source: Ohio Association of Realtors.

The price trends in the region's two MSAs, Mansfield and Sandusky, were considerably different. Although the gains to the mid-decade peak were very similar (but far less than average) Sandusky performed much better than Mansfield in the downturn. Sandusky's net change over the decade was somewhat less than average, but Mansfield's decline was the worst of all the MSAs.

Northeast Region

The Northeast region is larger than ideal, including four very different MSAs – Akron, Canton, Cleveland, and Youngstown – and a number of rural areas. But the size of the MLS areas did not permit the region to be divided further. Exhibit 7 charts the home sales trend in the region. Sales increased 17.1 percent between 2002 and their peak in 2005, less than average. The decline in sales from the peak to the 2010 trough was more severe than average: 37.2 percent. However, the recovery from the trough in the Northwest has been the best of all regions, at 22 percent. But because of their weakness earlier in the decade, home sales in the Northeast were still 9.4 percent lower in 2012 than in 2002.

140.0 130.0 120.0 110.0 Index: 2002 = 100.0 90.0 80.0 70.0 60.0 2002 2004 2010 2003 2005 2006 2007 2008 2009 2011 2012 Northeast — Ohio — U.S.

Exhibit 7
Northeast Region Sales, 2002-2012

Source: Ohio Association of Realtors.

House price trends in Akron and Canton have been fairly similar. Akron delivered slightly larger gains in the expansion (but still below the state average) and slightly larger losses in the contraction. The net effect was a ten-year decline of 5.8 percent in Akron and 5.5 percent in Canton. Cleveland prices rose slightly more in the expansion, but declined severely afterward, generating a 10-year net loss of 7.7 percent. In contrast, the net loss in Youngstown was much milder, and as a result prices in 2012 were only 0.5 percent lower in 2012 than in 2002.

West Central Region

Home sales growth in the largely rural West Central region has handily exceeded both state and national averages, as shown in Exhibit 8. After an increase of 25.7 percent – nearly identical to the national average, sales fell by exactly the same percentage – less than average. The recovery has generated robust growth of 19.2 percent, and as a result sales in 2012 were 11.4 percent higher than in 2002.

140.0 130.0 120.0 110.0 Index: 2002 = 100.0 90.0 80.0 70.0 60.0 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012

Exhibit 8 West Central Region Sales, 2002-2012

Source: Ohio Association of Realtors.

Of the region's two MSAs, the house price trend has been much stronger in Lima than in Springfield. Lima's price decline in the collapse was a miniscule 3.3 percent, followed by a much better-than-average 1.6 percent gain last year. As a result, prices saw a net increase of 10 percent over the decade. Springfield, on the other hand, rose less than average in the expansion, fell less than average in the contraction, and netted a 10-year loss of 1.0 percent, somewhat worse than the state average.

Central Region

Previous editions of *On the Money* have commented on the outstanding strength of Central Ohio in terms of both economic and population growth. It might be expected that the Central Ohio housing market would have similarly performed better than average, but this has not been the case. Part of the explanation lies in the fact that the region's economic strength is a relatively recent phenomenon. Although employment growth exceeded the state average between 2003 and 2007, it was still 40 percent less than the national average, and as a result, Columbus MSA per-capita income fell below the national average for the first time since the early 1980s. But even though the Central region's job losses in the recession were far less than average, the decline in sales was not.

Exhibit 9 shows that home sales in the Central region have very closely tracked the state average, with a nearly identical gain of 22.4 percent followed by a nearly identical loss of 32 percent.

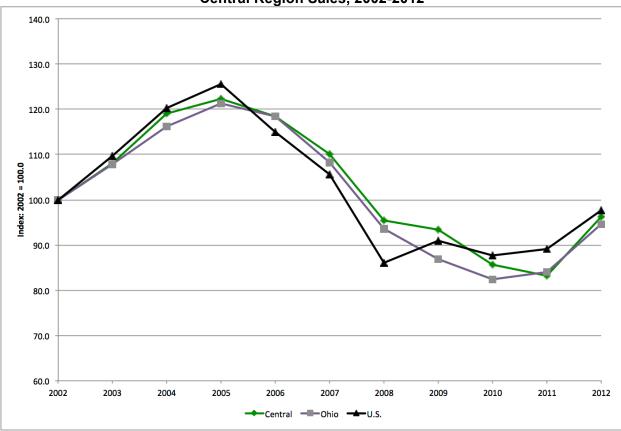


Exhibit 9
Central Region Sales, 2002-2012

Source: Ohio Association of Realtors.

The price trend in the Columbus MSA has been somewhat better than the state average. As shown in Exhibit 4, the growth was greater and the decline was less, generating an average price in 2012 that was 4.4 percent higher than its level a decade earlier. Because the area of the MSA is very similar to the MLS area, a possible conclusion is that Columbus area home sellers held relatively firm on price and accepted a lower volume of sales as a result.

Southwest Region

The fact that the Cincinnati and Dayton MLS areas are separate allows sales in these two areas to be analyzed individually. As Exhibits 10 and 11 make clear, the sales trend in Dayton has been far better than in Cincinnati, thanks to a gain in Dayton home sales of 35 percent between 2002 and 2006 and a loss of 32.1 percent in the collapse – identical to the national average. Cincinnati home sales suffered a decline of 36.4 percent between 2005 and 2011, second only to the Northeast in severity. Dayton sales in 2012 were 1.6 percent higher than they were in 2002, while Cincinnati sales were 13.9 percent lower.

140.0 130.0 120.0 110.0 Index: 2002 = 100.0 90.0 80.0 70.0 60.0 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 Southwest-Cincinnati Southwest-Dayton

Exhibit 10 Southwest Region Sales, 2002-2012

Source: Ohio Association of Realtors.

Contrary to the sales trend, the price trend in the Dayton MSA has been far weaker than that in the Cincinnati MSA. (The Cincinnati MSA includes seven counties in Kentucky and three in Indiana in addition to the five Ohio counties indicated in Exhibit 3.) As shown in Exhibit 4, the Cincinnati MSA performed better than the state average both in the expansion, the contraction, and over the past year; as a result, the average price in Cincinnati was 4.7 percent higher in 2012 than in 2002. The price in Dayton was 1.0 percent lower, but the comparison to the state average was unfavorable primarily because of slower-than-average growth early in the decade. In contrast to the home sellers in Columbus, those in Dayton may have been more willing early in the decade to accept lower prices in return for the stronger growth in sales shown in Exhibit 10. The significant geographical difference between the Cincinnati MSA and the Cincinnati MLS makes it impossible to draw any comparable conclusions regarding this market.

Southeast Region

The housing market in Southeastern Ohio has outperformed every other region of the state and the national average during the past decade, both in terms of sales and (as far as is discernable) price over the past decade, especially during the contraction. However, this is a small, volatile market; 2,543 properties changed hands in 2012, little more than two percent of the state total. Further, many of these markets have been historically very weak, minimizing their downside potential.

In any case, Exhibit 11 charts the outstanding sales trend over the past decade. Sales rose 50.1 percent between 2002 and 2006, followed by a slightly worse-than-average decline of 33.7 percent and a 2010-2012 increase of 14.1 percent, slightly less than the state average but more than the national average.

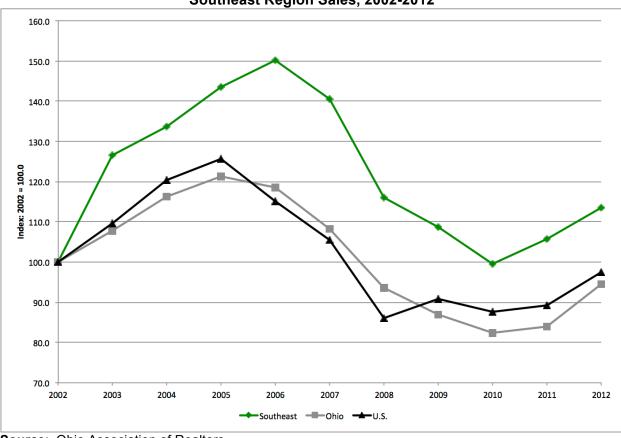


Exhibit 11
Southeast Region Sales, 2002-2012

Source: Ohio Association of Realtors.

The four MSAs in this region – Huntington, Parkersburg, Weirton, and Wheeling – are all partly or primarily in West Virginia. The price trends in these four MSAs are all similar – and markedly different from state and national averages. As an example, Exhibit 12 shows the trend in Huntington. The housing market collapse slowed house price growth but never reversed it. Prices rose 31 percent over the decade. Prices in the other three MSAs followed the same pattern, but did have one or two-year declines allowing a "peak" to be declared. The largest of these was in Weirton-Steubenville, but that was a tiny 5.7 percent decline. This pattern is similar to those in a number of larger MSAs, including Austin, Buffalo, Houston, Oklahoma City, and Pittsburgh, where prices remained largely unaffected by the housing bust. (This thought is explored further in my December 6, 2011, blog post at regionomicsllc.com, "No Housing Bust Here!")

160.0 150.0 140.0 130.0 Index: 2002 = 100.0 110.0 100.0 90.0 80.0 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 ■Huntington ■■Ohio ■■U.S.

Exhibit 12 Huntington-Ashland MSA House Price, 2002-2012

Source: Federal Housing Finance Agency.

Housing Market Outlook

Economists surveyed by the *Wall Street Journal* expect a gradual strengthening of the economy over the coming 12 months, with continuing increases in employment comparable to those seen recently and only moderate increases in long-term interest rates. This would suggest continuing improvement in housing markets. Low market inventories will lead to continuing increases in home prices. (The average increase forecast for the FHFA Index was 5.75 percent in 2013 and 4.8 percent in 2014.)

One factor tempering the prospects for the housing market in Ohio is slow population growth. This will impact all areas except Central Ohio – and possibly the shale gas-impacted areas of Southeastern Ohio. However, a separate factor that could be positive for many areas of the state is the fact that house prices have risen so much less than average. This likely implies that relatively few homeowners owe more on their mortgages than their house is worth. This remains one factor holding back many housing markets – probably less so here in Ohio.

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