This report reflects an important milestone in the recent housing cycle with preliminary March data showing the first year over year increase in house prices for lower priced homes and the foreclosure segment of the market. It has been almost three years since there has been an increase in the ASU-RSI. While increases in house prices are occurring only in certain portions of the market, steady improvement continues in the rest of the market. The data for January 2010 reveals that overall house prices declined by 9 percent in the Phoenix metro area, which is less than the 13 percent decline for December and 17 percent in November (Table 1). Preliminary estimates for February and March have prices declining at progressively slower rates of 7 and 3 percent respectively. The rate of decline has been slowing dramatically for several months and it appears that prices measured by the overall RSI will level off later this spring. In contrast to the overall 9 percent annual decline, the January to January decline for lower priced homes was 8 percent but this swings to a 4 percent increase by March. Higher priced houses have not shown a significant slowdown in their rate of decline until the past several months but the preliminary decline for March is down to 6 percent. The total decline in prices from the mid-2006 peak is now 47 percent, which breaks down to 57 and 39 percent declines for lower and higher priced houses, respectively. The overall median price for sales that were included in the January index was $125,000 but the preliminary figure for March is $132,000, almost back to the December 2009 level.

| TABLE 1  |
| CHANGE IN RESIDENTIAL PRICES |
| (Percent) |

<table>
<thead>
<tr>
<th>OVERALL</th>
<th>LOWER PRICED</th>
<th>HIGHER PRICED</th>
<th>TOWNHOUSE / CONDO</th>
<th>FORECLOSURES</th>
<th>NON-FORECLOSURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 2009 - Jan. 2010</td>
<td>0.1</td>
<td>-0.3</td>
<td>0.2</td>
<td>-9.6</td>
<td>-2.3</td>
</tr>
<tr>
<td>1989–1992</td>
<td>-7.7</td>
<td>-3.9</td>
<td>-12.8</td>
<td>-3.9</td>
<td>na</td>
</tr>
<tr>
<td>2006–Jan. 2010</td>
<td>-47.3</td>
<td>-57.1</td>
<td>-39.2</td>
<td>-49.8</td>
<td>-54.6</td>
</tr>
<tr>
<td>Median Price - Jan. 2010</td>
<td>$125,000</td>
<td>$94,000</td>
<td>$275,000</td>
<td>$80,000</td>
<td>$115,200</td>
</tr>
</tbody>
</table>
The prices of foreclosed houses declined at a 3 percent rate from January 2009 to January 2010 but the preliminary decline for February is 2 percent followed by a 5 percent increase in March. This turnaround in the foreclosure RSI reflects both the substantial price declines that have occurred over the past two years and the increase in demand from first-time buyers and investors. Market fundamentals probably don’t support continuing strong increases in foreclosure house prices but there appears to be at least a measure of price stability in that segment of the market.

In contrast, non-foreclosed house prices declined at an annual rate of 17 percent in January with the preliminary rate of decline at 19 percent by February and 14 percent for March. While the foreclosure segment of the market is turning around, non-foreclosure house prices had been declining at approximately a 20 percent annual rate from October 2008 through November 2009. The most recent four months of data finally have declines below 20 percent and perhaps the March figure is the start of a trend toward price stability in the segment of the housing market that is of greatest interest to most homeowners. The decline in foreclosure house prices was driven initially by mortgage related issues but the continuing decline of non-foreclosure prices has more to do with weak economic conditions, especially in the Phoenix area, and the difficulty buyers’ face in qualifying for mortgage loans.

The median price for foreclosed houses in January was $115,200 up substantially from a low of $97,000 last May. The preliminary median in March is up only slightly from January and prices since October 2009 have been in the range of $115,000 to $120,000. For non-foreclosed houses the median price was $155,000 in January with a preliminary median of $158,500 by March. The March figure will be the first monthly increase in non-foreclosure prices since the end of 2007 and may signal the start of price stability throughout much of the housing market.

The median price of townhouse / condo units was $80,000 in January with forecasted medians the next two months of $86,400 and $83,500.

Regions

Continuing the trend, price declines slowed in January and they are less than 12 percent in all regions. Prices are down by single digit amounts in the Central and Southwest regions and it is likely that all declines will be in the single digit range within a few months (Table 2). In terms of total declines from the 2006 peak, the Southwest is down the most, 58 percent, but even in the Northeast prices
have dropped 37 percent. The RSI for the Northeast may finally have hit bottom in December. That is a necessary first step before price appreciation is even possible, since the annual change in prices is based on the year-to-year change in the index. For the other four regions price changes could turn positive later this spring or summer but for the Northeast that change is not likely until much later in the year.

<table>
<thead>
<tr>
<th>TABLE 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHANGE IN HOUSE PRICES BY REGION</td>
</tr>
<tr>
<td>(Percent)</td>
</tr>
<tr>
<td>CENTRAL</td>
</tr>
<tr>
<td>-9.3</td>
</tr>
</tbody>
</table>

| Dec. 2009 - Jan. 2010 |
| 0.0 | 0.3 | -1.5 | -0.7 | 2.0 |

| 1989 – 1992 |
| -3.2 | -9.7 | -7.0 | -15.3 | -21.2 |

| 2006 – Jan. 2010 |
| -52.5 | -36.6 | -45.9 | -52.4 | -57.8 |

Cities

The decline in house prices from January 2009 to January 2010 slowed compared to the December data for all cities. The annual rates are now all below 20 percent and Gilbert and Sun City / Sun City West have single digit declines. Interestingly, the rate of decline in Tempe, which had been among the least affected cities, is essentially unchanged since last fall. In terms of total declines from the peak, only Glendale and Peoria are still over 50 percent. As with the Northeast region, the RSI for Scottsdale / Paradise Valley and Sun City / Sun City West may have bottomed out in December. While prices in most cities may stop declining by this summer, it is likely to be later in the year before price stability is achieved in those cities.
### TABLE 3

**CHANGE IN HOUSE PRICES BY CITY**

(Percent)

<table>
<thead>
<tr>
<th></th>
<th>CHANDLER</th>
<th>GILBERT</th>
<th>GLENDALE</th>
<th>MESA</th>
<th>PEORIA</th>
<th>SCOTTSDALE/</th>
<th>SUN CITY/</th>
<th>TEMPE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PARADISE</td>
<td>SUN CITY/</td>
<td>WEST</td>
</tr>
<tr>
<td>Dec. 2009 Jan. 2010</td>
<td>-1.4</td>
<td>-1.7</td>
<td>-1.7</td>
<td>-0.8</td>
<td>-1.8</td>
<td>0.3</td>
<td>1.3</td>
<td>-0.1</td>
</tr>
<tr>
<td>1989 – 1992</td>
<td>-7.6</td>
<td>na</td>
<td>-19.6</td>
<td>-10.9</td>
<td>-7.3</td>
<td>-9.7</td>
<td>-10.5</td>
<td>-1.9</td>
</tr>
<tr>
<td>2006 – Jan. 2010</td>
<td>-43.1</td>
<td>-45.6</td>
<td>-55.3</td>
<td>-49.3</td>
<td>-52.3</td>
<td>-36.0</td>
<td>-37.7</td>
<td>-38.0</td>
</tr>
</tbody>
</table>

**Methodology**

The use of repeat sales is the most reliable way to estimate price changes in the housing market because the repeat sales approach eliminates the need to deal with the many issues associated with the heterogeneous nature of housing. Repeat sales can be used to measure the price change of the same housing unit over time. A large number of repeat sales over many years can be analyzed to develop a repeat sales index. In contrast, indices developed using regression analysis provide estimates of price changes over time while simultaneously attempting to control for differences in house characteristics, location, demographics and market conditions, etc. within the model. Regression analysis can and does produce meaningful estimates of price changes but the results are not as reliable as those produced using repeat sales data. An even less rigorous approach would be to simply average sale prices by zip code or some other geographic area where the mix of housing sizes and ages, etc. would be different each month. The percent changes based on medians or averages would reflect not only price changes but also differences in the sizes, ages and other characteristics of the houses sold each month.

The W.P. Carey School of Business – Repeat Sales Index (RSI) tracks very closely to the S&P/Case - Shiller index for Phoenix since the same methodology is employed for calculating both indices. The S&P/ Case-Shiller index has been developed for 20 metropolitan areas and is being used as a basis for trading housing futures contracts in 10 of those markets. Any differences that exist
between the two indices are probably due to the way the data has been cleaned prior to the calculation process. The S&P/Case-Shiller index is proprietary so the cleaning procedure used in connection with that index could not be completely duplicated. However, following S&P/Case-Shiller, the cleaning process used with the ASU - RSI excludes pairs where the first sale involved new construction and pairs where sales occurred within six months of each other. Sale pairs with extremely high or low annual rates of price change are excluded since at least one of the transactions may involve a data error. The same justification is used to drop sales with extremely high or low prices or prices per square foot prior to matching the sale pairs. A more detailed explanation of the data cleaning and calculation process is contained in the ASU-RSI Methodology Report.

The house price data used in the S&P/Case-Shiller index starts in January 1989. Beginning with January 1990, the percent change from the same month in the previous year is reported. The ASU – RSI also begins with January 1989 data so the same percent change calculation also begins in January 1990 and is reported for each month since then. There is seasonality in house price data so month to month changes may not accurately reflect changes in market conditions and would cover a very short time period. Calculating a percent change from the same month last year controls for whatever seasonality may be present in the data. Annual rates of change typically are thought of applying to a calendar year but in this report the annual rates that are reported would be measuring change over the preceding twelve months. To smooth the index the rate of return calculated from each sale pair is included in calculations for a total of three months before it is published. Results using data for the two newest months are labeled as preliminary.

The S&P/Case-Shiller index is published only for the entire Phoenix metro area. One major advantage to the ASU-RSI is that in addition to the overall index, indices have been calculated for higher and lower priced houses, smaller geographic areas (regions and selected cities) and for the housing market segmented in various ways. Price changes for the attached portion of the housing market (townhouse / condominiums) are presented as a repeat sales index using the same methodology and indices are also estimated for higher and lower priced single-family detached houses and for foreclosure and non-foreclosure sales. The monthly data are divided into two groups based on the median price of all single-family houses sold. Sales are then paired within each of the two data sets and a repeat sales index is calculated for each. The foreclosure sale pairs are formed using two foreclosure sales or with a foreclosure sale paired with an earlier non-foreclosure sale of the house. The metro area has also been divided into five regions and an index has been calculated for each. All repeat sales used in the metro index are included in one of the five regional indices. Indices have also been calculated for eight individual cities where there are a sufficient number of repeat sales a reliable index to be estimated. A list of the cities included in each region is in Table 4.
The graphs contained in this report show the annual rate of change in house prices for the Phoenix metropolitan area on a monthly basis as well as median house prices. Figures 1 and 2 compare the change in the overall, lower and higher priced indices to the overall trend in the index, where the trend was estimated using data from January 1989 through December 2003. Figure 3 makes the same type of comparison using the median price of single-family sales that were used to form sale pairs for the current month, not the median price of all sales that occurred during the month. Since each index is a moving three month average, preliminary estimates of the index and future median prices for the entire market are included for the next two months (February and March) in Figures 1-6. Figures 4 and 5 include the townhouse / condominium RSI compared to the single-family RSI presented earlier in Figures 1 and 2. The foreclosure and non-foreclosure RSIs are in Figure 6 while Figure 7 has median prices for foreclosure and non-foreclosure houses and townhouse / condo units. Figures 8-15 contain graphs for the regions and cities for two different time periods. Four of the graphs present the price changes from January 1990 through September 2009 while the other four graphs cover the current housing cycle beginning in January 2004. Due to data limitations, a reliable index for Gilbert could not be calculated until January 1999 so the annual changes for Gilbert in Figures 10 and 11 start in January 2000.

TABLE 4

CITIES INCLUDED IN REGIONS

<table>
<thead>
<tr>
<th>REGION</th>
<th>CITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTHEAST</td>
<td>CAREFREE</td>
</tr>
<tr>
<td></td>
<td>CAVE CREEK</td>
</tr>
<tr>
<td></td>
<td>FOUNTAIN HILLS</td>
</tr>
<tr>
<td></td>
<td>PARADISE VALLEY</td>
</tr>
<tr>
<td></td>
<td>SCOTTSDALE</td>
</tr>
<tr>
<td>NORTHEAST</td>
<td>EL MIRAGE</td>
</tr>
<tr>
<td></td>
<td>GLENDALE</td>
</tr>
<tr>
<td></td>
<td>PEORIA</td>
</tr>
<tr>
<td></td>
<td>SUN CITY /</td>
</tr>
<tr>
<td></td>
<td>SUN CITY WEST</td>
</tr>
<tr>
<td></td>
<td>SURPRISE</td>
</tr>
<tr>
<td></td>
<td>YOUNGTOWN</td>
</tr>
</tbody>
</table>

6
CENTRAL

PHOENIX

SOUTHEAST

APACHE JUNCTION
CHANDLER
GILBERT
HIGLEY
MESA
QUEEN CREEK
SUN LAKES
TEMPE

SOUTHWEST

AVONDALE
BUCKEYE
GOODYEAR
LITCHFIELD PARK
Figure 1
Phoenix Single-Family Repeat Sales Index (RSI)
Percent Change Same Month, Previous Year
January 1990 - March 2010

Source: ASU W.P. Carey School of Business; Center for Real Estate Theory and Practice
Data Provided by Ion Data
January Median Prices: 1, Upper $275,000  2, Lower $94,000
Figure 2
Phoenix Single-Family Repeat Sales Index (RSI)
Percent Change Same Month, Previous Year
January 2004 - March 2010

Metro Area
Upper Range¹
Lower Range²

February and March are Preliminary

Source: ASU W.P. Carey School of Business; Center for Real Estate Theory and Practice
Data Provided by Ion Data
January Median Prices: 1, Upper $275,000  2, Lower $94,000
Figure 3
Phoenix Median Single-Family House Prices
January 1989 - March 2010

Trend
Metro Area
Upper Range¹
Lower Range²

February and March are Preliminary

Source: ASU W.P. Carey School of Business; Center for Real Estate Theory and Practice
Data Provided by Ion Data

January Median Prices: 1, Upper $275,000  2, Lower $94,000
Figure 4
Phoenix Single-Family and Townhouse/Condominium Repeat Sales Index (RSI)
Percent Change Same Month, Previous Year
January 1990 - March 2010

Source: ASU W.P. Carey School of Business; Center for Real Estate Theory and Practice
Data Provided by Ion Data
Figure 5
Phoenix Single-Family & Townhouse/Condominium Repeat Sales Index (RSI)
Percentage Change Same Month, Previous Year
January 2004 - March 2010

February and March are Preliminary

Source: ASU W.P. Carey School of Business; Center for Real Estate Theory and Practice
Data Provided by Ion Data
Phoenix Single-Family Foreclosure Repeat Sales Index (RSI)
Percentage Change Same Month, Previous Year
January 2001 - March 2010

Trend
Foreclosures¹
Non-Foreclosures²

February and March are Preliminary

Source: ASU W.P. Carey School of Business; Center for Real Estate Theory and Practice
Data Provided by Ion Data

January Median Prices: 1, Foreclosures $115,200  2, Non-Foreclosures $155,000
Figure 7
Phoenix Foreclosures, Non-Foreclosures and Townhouse/Condominium Median Prices
January 1989 - March 2010

Source: ASU W.P. Carey School of Business; Center for Real Estate Theory and Practice
Data Provided by Ion Data

January Median prices: 1, TH/Condo $80,000  2, Foreclosures $115,200  3, Non-Foreclosures $155,000
Regional Single-Family Repeat Sales Index (RSI) Annual Change
January 1990 - January 2010

Central
Northeast
Southeast
Northwest
Southwest
Metro Area

Source: ASU W.P. Carey School of Business; Center for Real Estate Theory and Practice
Data Provided by Ion Data
Figure 9
Regional Single-Family Repeat Sales Index (RSI)
Percent Change Same Month, Previous Year
January 2004 - January 2010

Source: ASU W.P. Carey School of Business; Center for Real Estate Theory and Practice
Data Provided by Ion Data
Figure 10
Chandler, Gilbert, Mesa, & Tempe Single-Family Repeat Sales Index (RSI)
Percent Change Same Month, Previous Year
January 1990 - January 2010

Source: ASU W.P. Carey School of Business; Center for Real Estate Theory and Practice
Data Provided by Ion Data
Figure 11
Chandler, Gilbert, Mesa & Tempe Single-Family Repeat Sales Index (RSI)
Percent Change Same Month, Previous Year
January 2004 - January 2010

Chandler
Gilbert
Mesa
Tempe
Metro Area

Source: ASU W.P. Carey School of Business; Center for Real Estate Theory and Practice
Data Provided by Ion Data
Figure 12
Glendale, Peoria, & Sun City/Sun City West Repeat Sales Index (RSI)
Percent Change Same Month, Previous Year
January 1990 - January 2010

Source: ASU W.P. Carey School of Business; Center for Real Estate Theory and Practice
Data Provided by Ion Data
Figure 13
Glendale, Peoria, & Sun City/Sun City West Single-Family Repeat Sales Index (RSI)
Percent Change Same Month, Previous Year
January 2004 - January 2010

Source: ASU W.P. Carey School of Business; Center for Real Estate Theory and Practice
Data Provided by Ion Data
Figure 14
Scottsdale/Paradise Valley & Phoenix Single-Family Repeat Sales Index (RSI)
Percent Change Same Month, Previous Year
January 1990 - January 2010

Source: ASU W.P. Carey School of Business; Center for Real Estate Theory and Practice
Data Provided by Ion Data
Figure 15
Scottsdale/Paradise Valley & Phoenix Single-Family Repeat Sales Index (RSI)
Percent Change Same Month, Previous Year
January 2004 - January 2010

Source: ASU W.P. Carey School of Business; Center for Real Estate Theory and Practice
Data Provided by Ion Data