PHILADELPHIA REGIONAL HOUSE PRICE INDICES

June 17, 2019

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Philadelphia Regional House Price Indices 1980-2019
1980Q1=100

*Empirically estimated by Kevin C. Gillen, PhD
**Courtesy Federal Housing Finance Agency (FHFA)
House Price Appreciation 1987-2019:
Philadelphia Region v. 10-City U.S. Composite

% Change 10-City Philadelphia Region
1998 to Peak: +172% +106%
From Peak: +0.8% -4.5%

*Source: Case-Shiller MacroMarkets LLC. The 10-City Composite Index includes Boston, Chicago, Denver, Las Vegas, Los Angeles, Miami, New York, San Diego, San Francisco and Washington DC. It does not include Philadelphia.
Philadelphia Regional House Price Indices 1980-2019
by Philadelphia Region and State: 1980Q1=100

*Empirically estimated by Kevin C. Gillen, Ph.D.
**Courtesy Federal Housing Finance Agency (FHFA)
Philadelphia Regional House Price Indices 1980-2019
City v. Suburb v. U.S. Average.: 1980Q1=100

Philadelphia*
Phila. Suburbs*
U.S. Avg.**

*Empirically estimated by Kevin C. Gillen, PhD
**Courtesy Federal Housing Finance Agency (FHFA)

Note: The suburban index includes all the counties that are in the regional index, except for Philadelphia county.
YoY Change in Average House Prices: 1980-2019
Philadelphia County v. Philadelphia Suburbs v. 10-City Composite

*Empirically estimated by Kevin C. Gillen, Ph.D.

**Empirically estimated by Case-Shiller. The 10-City Composite reflects average annual house price changes in ten large US cities, including: Boston, Chicago, Denver, Las Vegas, Los Angeles, Miami, New York, San Diego, San Francisco and Washington DC. It does not include Philadelphia.
Philadelphia Regional House Price Indices 1980-2019, by County
1980Q1=100

*All indices empirically estimated by Kevin C. Gillen, PhD
# Total House Price Appreciation Rates by Philadelphia Area Submarket and U.S.

<table>
<thead>
<tr>
<th>Period</th>
<th>Philadelphia County*</th>
<th>Philadelphia Suburbs*</th>
<th>U.S.A.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>39-Year</td>
<td>430.6%</td>
<td>328.6%</td>
<td>350.0%</td>
</tr>
<tr>
<td>10-Year</td>
<td>25.6%</td>
<td>1.0%</td>
<td>38.6%</td>
</tr>
<tr>
<td>1-Year</td>
<td>-1.2%</td>
<td>2.8%</td>
<td>5.1%</td>
</tr>
<tr>
<td>1-Quarter</td>
<td>-5.7%</td>
<td>1.1%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

*Empirically estimated by Kevin C. Gillen Ph.D.

**Source: U.S. Federal Housing Finance Agency (FHFA). These numbers are through 2019Q1 only. “MSA” = “Metropolitan Statistical Area”, which is the entire 10-county region.
# Philadelphia Region House Price Appreciation Rates by County

<table>
<thead>
<tr>
<th>Period</th>
<th>Philadelphia</th>
<th>Bucks</th>
<th>Chester</th>
<th>Delaware</th>
<th>Montgomery</th>
<th>New Castle</th>
<th>Mercer</th>
<th>Burlington</th>
<th>Camden</th>
<th>Gloucester</th>
<th>Salem</th>
</tr>
</thead>
<tbody>
<tr>
<td>39-Year</td>
<td>431%</td>
<td>429%</td>
<td>388%</td>
<td>313%</td>
<td>354%</td>
<td>305%</td>
<td>408%</td>
<td>247%</td>
<td>234%</td>
<td>272%</td>
<td>186%</td>
</tr>
<tr>
<td>10-Year</td>
<td>25.6%</td>
<td>8.3%</td>
<td>5.8%</td>
<td>-0.3%</td>
<td>3.2%</td>
<td>1.8%</td>
<td>-1.3%</td>
<td>-9.0%</td>
<td>-11.2%</td>
<td>-12.1%</td>
<td>-28.7%</td>
</tr>
<tr>
<td>1-Year</td>
<td>-1.2%</td>
<td>0.2%</td>
<td>-2.0%</td>
<td>1.8%</td>
<td>0.4%</td>
<td>3.2%</td>
<td>0.7%</td>
<td>4.2%</td>
<td>3.8%</td>
<td>-2.4%</td>
<td>6.7%</td>
</tr>
<tr>
<td>1-Quarter</td>
<td>-5.7%</td>
<td>2.2%</td>
<td>-0.2%</td>
<td>1.3%</td>
<td>1.2%</td>
<td>1.7%</td>
<td>-1.0%</td>
<td>1.1%</td>
<td>3.2%</td>
<td>0.7%</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

All county-level indices and appreciation rates estimated by Kevin C. Gillen, Ph.D.
Note: Each county is extruded by its average change in house values during 2019 Q1 in order to reflect its growth (or depreciation) rate relative to other counties.
Median Regional House Price v. Indexed Regional House Price:
1980-2019

*Empirically estimated by Kevin C. Gillen, Ph.D.
Median House Price by County, Smoothed*: 1980-2019

*The price data was smoothed by applying a 3-period moving average, in order to eliminate seasonal noise.
Number of Regional House Sales 2005-2019
with Price>=$1m

Q1
Q2
Q3
Q4
Qtly. Average

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Philadelphia Region House Sales in 2019 Q1

Note: the categories for $price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.
Philadelphia County House Sales in 2019 Q1

Note: the categories for $price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.
Bucks County House Sales in 2019 Q1

Note: the categories for $price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.
Montgomery County House Sales in 2019 Q1

Note: the categories for $price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.
Chester County House Sales in 2019 Q1

Note: the categories for $price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.
Delaware County House Sales in 2019 Q1

Note: the categories for $price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.
New Castle County House Sales in 2019 Q1

Note: the categories for $price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.
Mercer County House Sales in 2019 Q1

Note: the categories for $price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.
Burlington County House Sales in 2019 Q1

Note: the categories for $price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.
Camden County House Sales in 2019 Q1

$Price/SqFt
- >$175
- $140-175
- $110-140
- $70-110
- <$70

Note: the categories for $price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.
Gloucester County House Sales in 2019 Q1

Note: the categories for $price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.
Salem County House Sales in 2019 Q1

Note: the categories for $price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.
+$1 Million Dollar House Sales in 2019 Q1
Philadelphia Houses Listed For Sale: Inventory v. Sales Rate

# Houses Listed "For Sale"

% Absorbed

# Houses Listed "For Sale"

% Absorbed = \( \frac{\text{#Sales}}{\text{#Listings}} \)
Philadelphia Suburb's Houses Listed For Sale: Inventory v. Sales Rate

Source: TrendMLS

- # Houses Listed For Sale
- % Absorbed

\[ \text{% Sold} = \frac{\text{#Sales}}{\text{#Listings}} \]
DOM is the average "days-on-market": the average number of days it takes for a listed home to sell. In a market that is evenly balanced between buyers and sellers, 50-70 days is considered the typical norm (source: Redfin). This number is not available separately for Philadelphia's suburbs, but the regional DOM can be considered more representative of the suburbs.
Months Supply of Inventory measures how many months it would take to completely burn off the existing inventory of homes currently listed for sale, given their current pace of sales. 5-7 months is considered a normal, balanced market. More than 7 months indicates a Buyer's market, and less than 5 months indicates a Seller's market.
Months Supply of Inventory in Philadelphia Suburbs

Months Supply of Inventory measures how many months it would take to completely burn off the existing inventory of homes currently listed for sale, given their current pace of sales. 5-7 months is considered a normal, balanced market. More than 7 months indicates a Buyer’s market, and less than 5 months indicates a Seller’s market.
Pennsylvania Foreclosure Rates

1 out of every 1,422 homes in Philadelphia is currently in the process of foreclosure, which down substantially from 1 out of every 899 homes in the previous quarter.

This is a greater than 50% decline in the City’s foreclosure rate. As a consequence, Philadelphia is no longer listed as one of the top 5 counties for foreclosures in PA for the first time in this report’s history.

Source: http://www.realtytrac.com/statsandtrends/foreclosureratestrends/pa
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South Jersey’s foreclosure rate continues to remain the highest in the region. After showing some improvement in late 2018, foreclosures increased moderately in the first quarter of 2019.

Previously, the Burlington, Camden, Gloucester and Salem counties had a collective foreclosure rate of 1 in every 641 homes. In the current quarter, the foreclosure rate was 1 in every 556 homes.

South Jersey’s foreclosure rate still remains significantly higher than the foreclosure rate of the entire state, which currently stands at 1 in every 980 homes.
Delaware’s foreclosure rate continues to show improvement this quarter.

After declining from 1 in every 902 homes to 1 in every 1,008 homes last quarter, it has now declined to 1 in every 1,249 homes.
Zillow.com has been steadily downgrading its outlook for Philadelphia house prices. It is currently forecasting this region’s house prices to rise an average of 0.8% over the course of the next twelve months. In the previous quarter, Zillow was projecting a 3.5% increase, and in the quarter before that, a 7.03% increase.

Source: [https://www.zillow.com/philadelphia-camden-wilmington-metro-pa_r394974/home-values/](https://www.zillow.com/philadelphia-camden-wilmington-metro-pa_r394974/home-values/)