

# *PHILADELPHIA HOUSE PRICE INDICES*

**August 2, 2018**



DREXEL UNIVERSITY  
**Lindy Institute**  
for Urban Innovation

**KEVIN C. GILLEN, Ph.D.**

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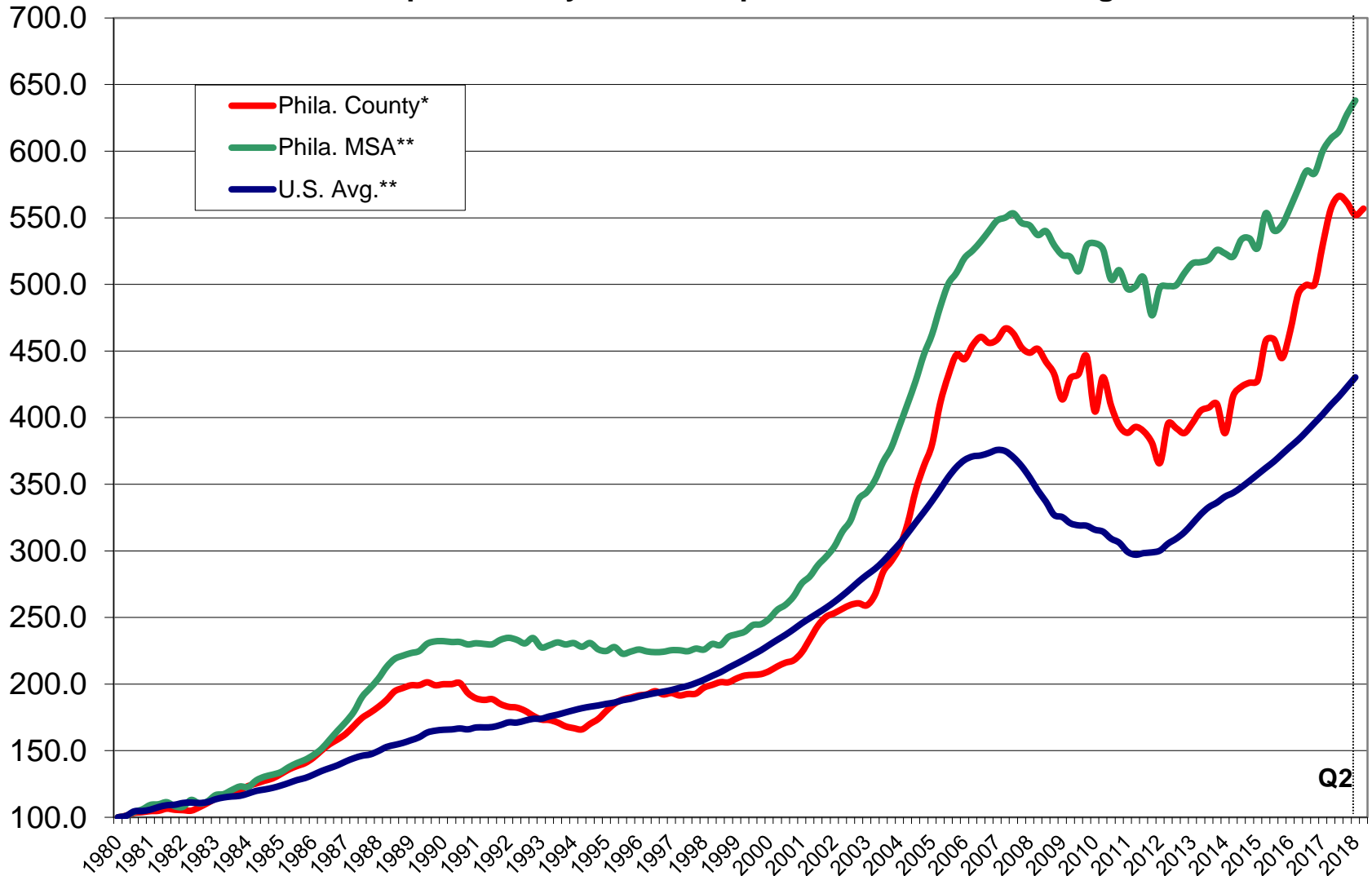
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***Disclaimers and Acknowledgments:** The Lindy Institute for Urban Innovation at Drexel University provides this report free of charge to the public. The report is produced by Kevin C. Gillen Ph.D.. The author thanks Azavea.com, the Philadelphia Office of Property Assessment, the Federal Housing Finance Agency, Case-Shiller MacroMarkets LLC, RealtyTrac, Zillow.com, Trulia.com and the NAHB for making their data publicly available. © 2016, Drexel University, All Rights Reserved.*



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## House Price Indices 1980-2018: 1980Q1=100 Philadelphia County v. Philadelphia MSA and U.S. Average



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

\*\*Courtesy of the Federal Housing Finance Agency (FHFA).

These HPIs are current through 2016Q4 only.

“MSA”=Metropolitan Statistical Area, which is the entire 10-county region.

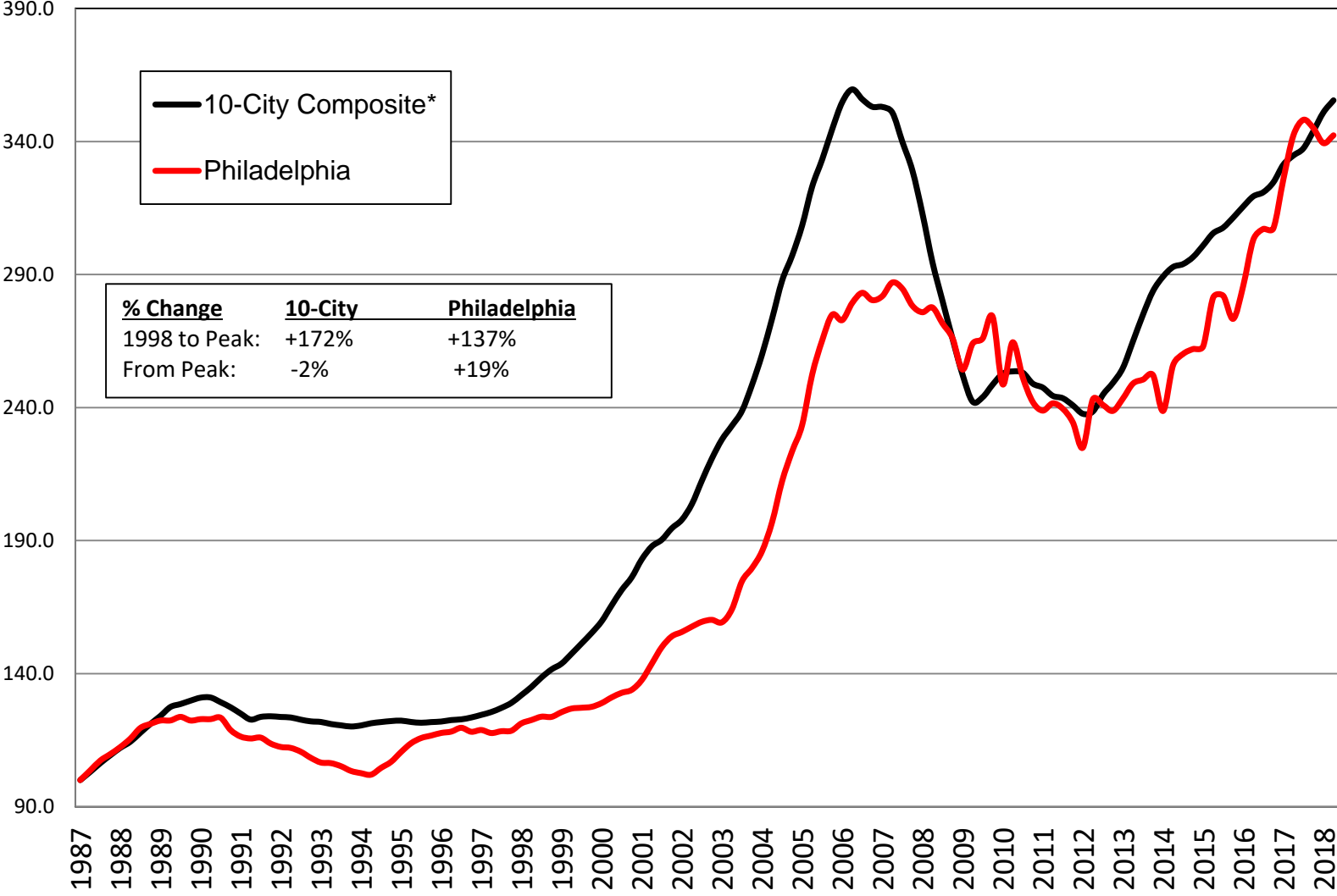
## Total House Price Appreciation Rates by Geographic Market

| Period           | Philadelphia County* | Philadelphia MSA** | U.S.A.**      |
|------------------|----------------------|--------------------|---------------|
| <b>38-Year</b>   | <b>171.7%</b>        | <b>183.7%</b>      | <b>144.2%</b> |
| <b>10-Year</b>   | <b>21.0%</b>         | <b>13.9%</b>       | <b>15.1%</b>  |
| <b>1-Year</b>    | <b>0.0%</b>          | <b>7.4%</b>        | <b>6.6%</b>   |
| <b>1-Quarter</b> | <b>0.9%</b>          | <b>2.1%</b>        | <b>1.7%</b>   |

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

\*\*Source: U.S. Federal Housing Finance Agency (FHFA). These numbers are through 2018Q1 only. “MSA”=“Metropolitan Statistical Area”, which is the entire 10-county region.

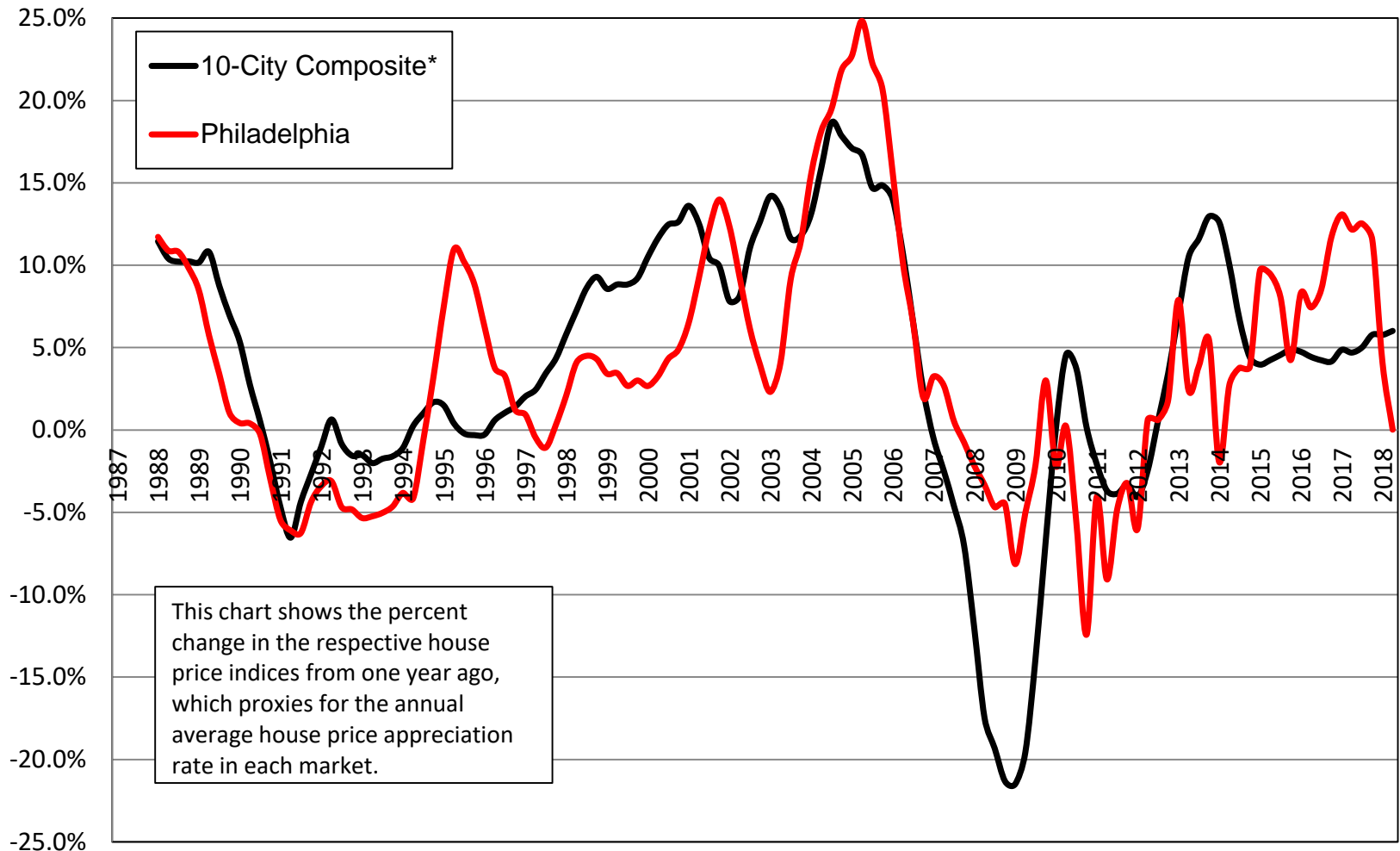
# House Price Appreciation 1987-2018: Philadelphia v. 10-City Composite



\*Source: S&P/Case-Shiller. 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.



## YoY House Price Change (%) 1987-2018: Philadelphia v. 10-City Composite

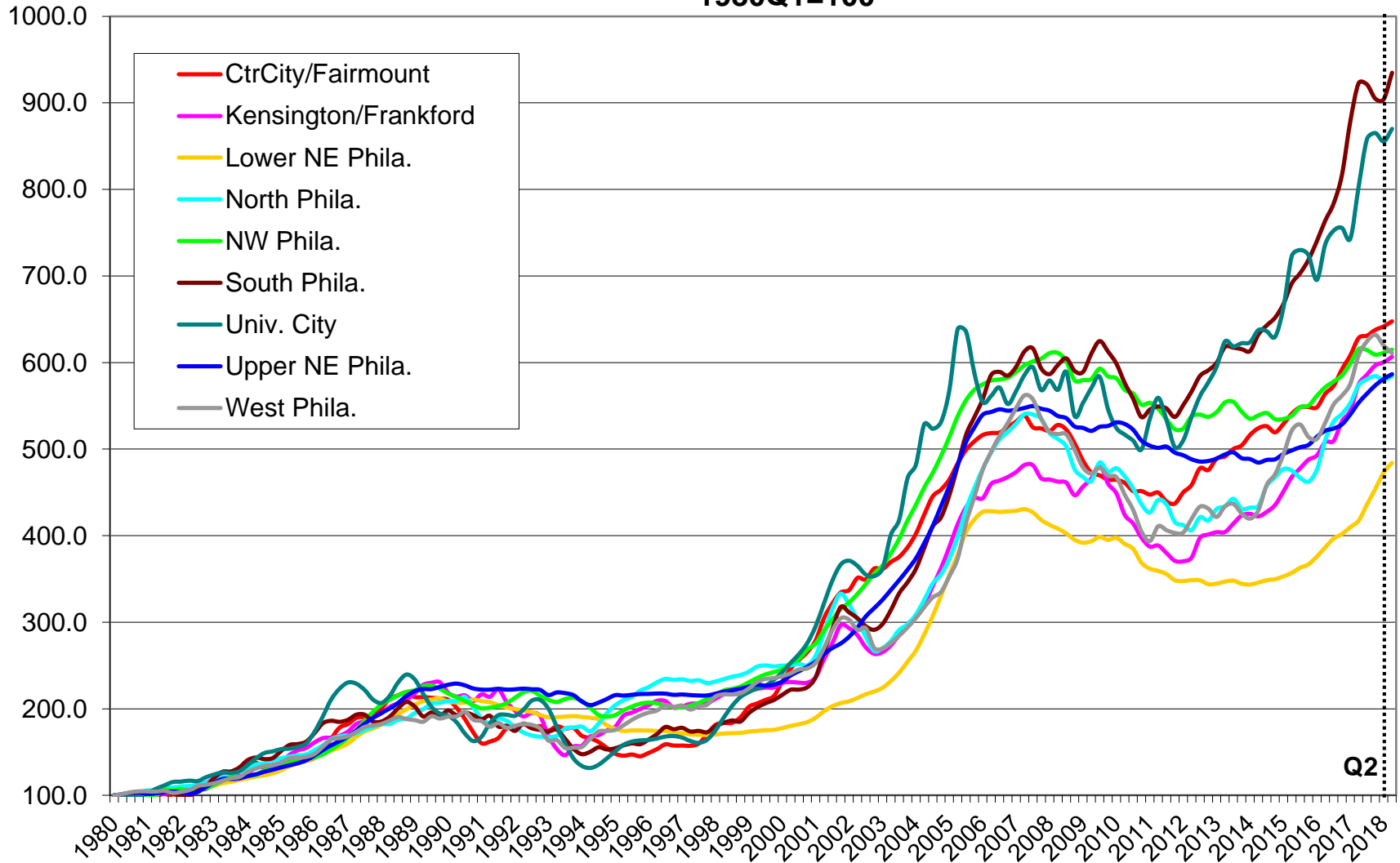


This chart shows the percent change in the respective house price indices from one year ago, which proxies for the annual average house price appreciation rate in each market.

\*Source: S&P/Case-Shiller. 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 House Price Indices by Neighborhood: 1980-2018

1980Q1=100



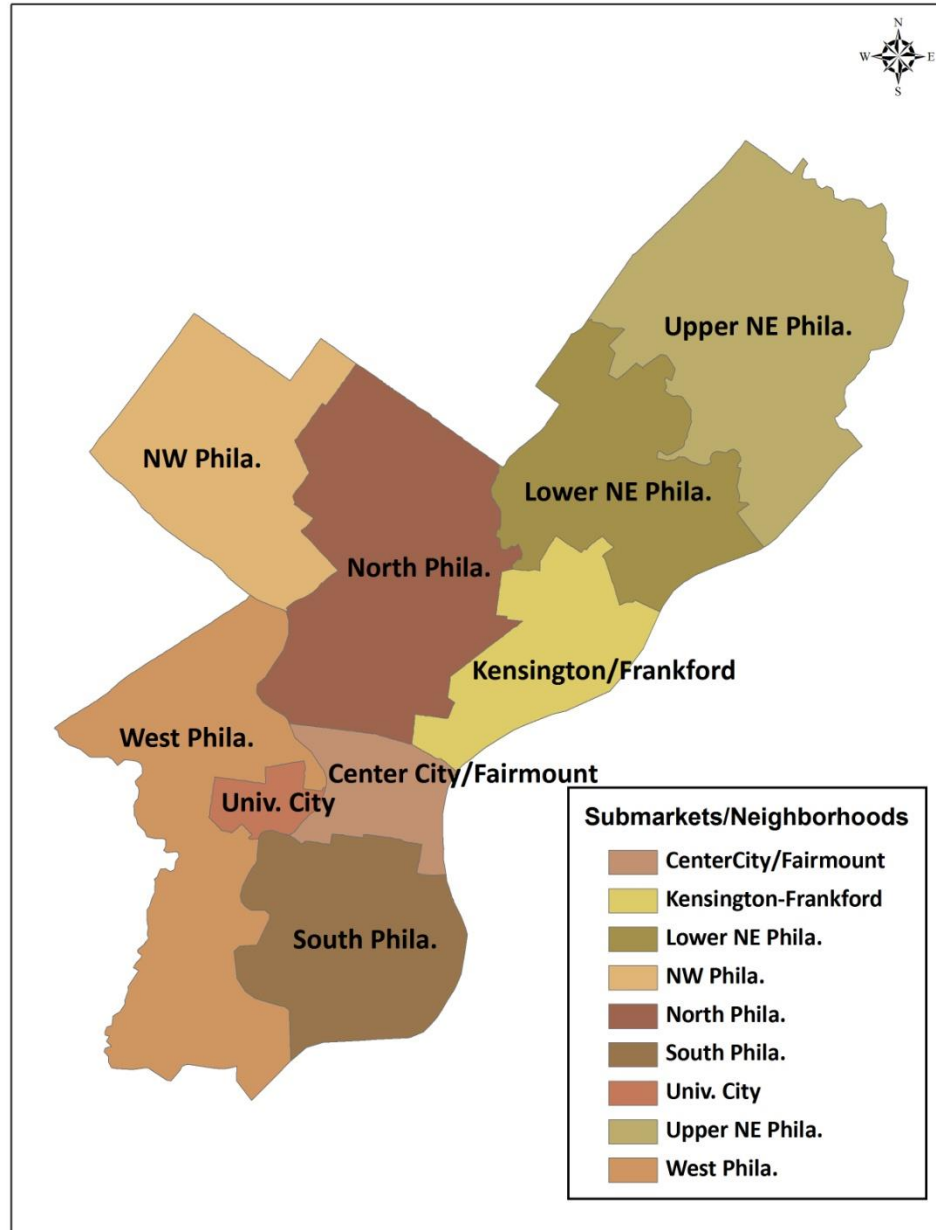
\* All indices empirically estimated by Kevin C. Gillen, Ph.D.

## Philadelphia House Price Appreciation Rates by Submarket

| Period           | Center City/<br>Fairmount | Kensington<br>/Frankford | Lower<br>NE<br>Phila. | North<br>Phila. | NW<br>Phila.  | South<br>Phila. | Univ.<br>City | Upper<br>NE<br>Phila. | West<br>Phila. |
|------------------|---------------------------|--------------------------|-----------------------|-----------------|---------------|-----------------|---------------|-----------------------|----------------|
| <b>38-year</b>   | <b>186.8%</b>             | <b>180.3%</b>            | <b>157.7%</b>         | <b>176.6%</b>   | <b>181.6%</b> | <b>223.5%</b>   | <b>216.3%</b> | <b>176.9%</b>         | <b>181.0%</b>  |
| <b>10-year</b>   | <b>20.5%</b>              | <b>27.2%</b>             | <b>17.1%</b>          | <b>13.3%</b>    | <b>0.6%</b>   | <b>44.8%</b>    | <b>42.5%</b>  | <b>8.6%</b>           | <b>16.6%</b>   |
| <b>1-Year</b>    | <b>3.0%</b>               | <b>5.4%</b>              | <b>14.8%</b>          | <b>1.9%</b>     | <b>-0.1%</b>  | <b>1.3%</b>     | <b>8.0%</b>   | <b>5.8%</b>           | <b>0.4%</b>    |
| <b>1-Quarter</b> | <b>0.9%</b>               | <b>1.0%</b>              | <b>2.3%</b>           | <b>0.8%</b>     | <b>0.6%</b>   | <b>3.3%</b>     | <b>1.7%</b>   | <b>0.9%</b>           | <b>-1.5%</b>   |

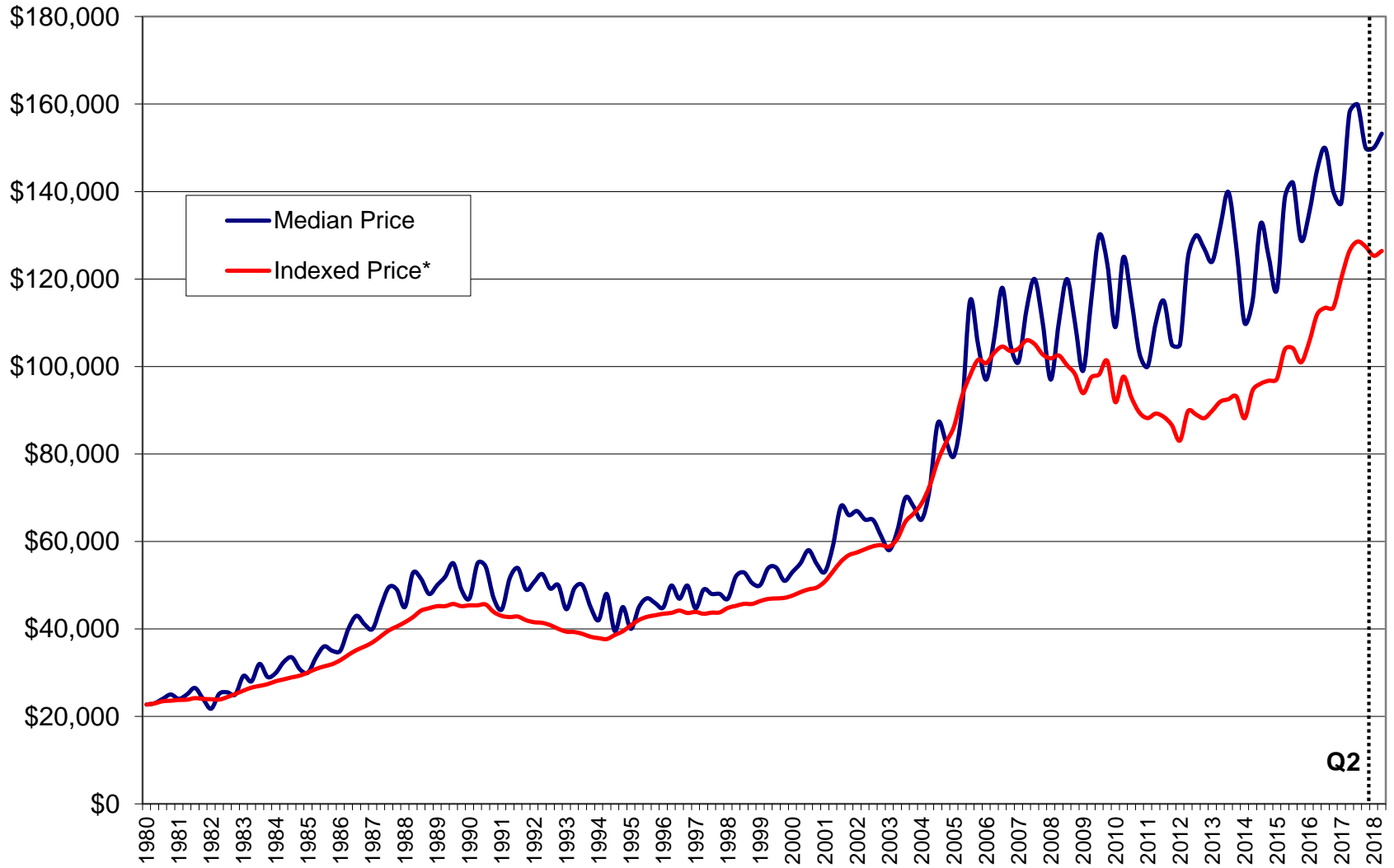
This table gives the total % change in average house values by submarket, through 2018 Q2, from different starting points in time.

# Philadelphia Submarket Boundaries



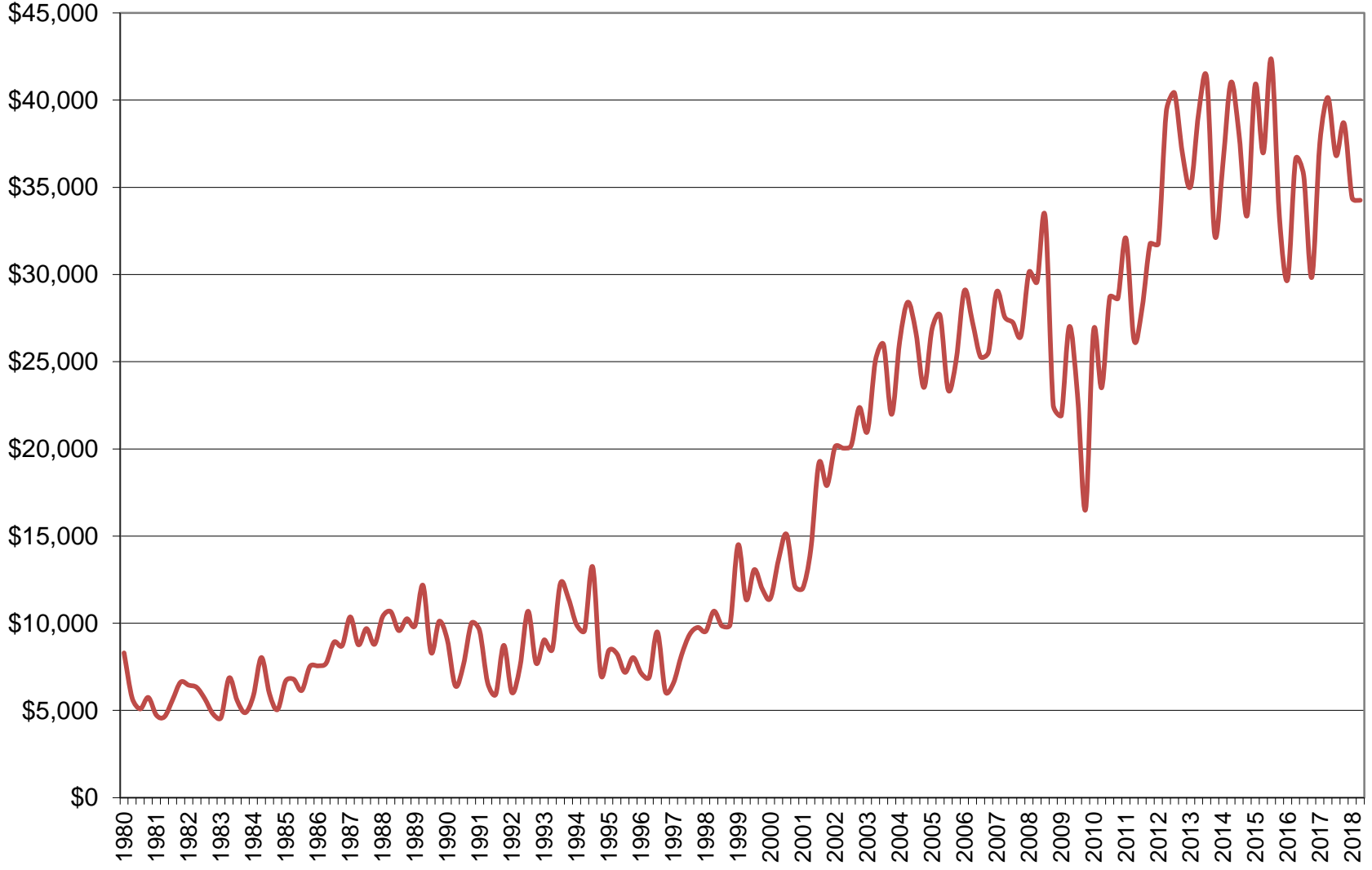


## Median Philadelphia House Price v. Indexed Philadelphia House Price 1980-2018

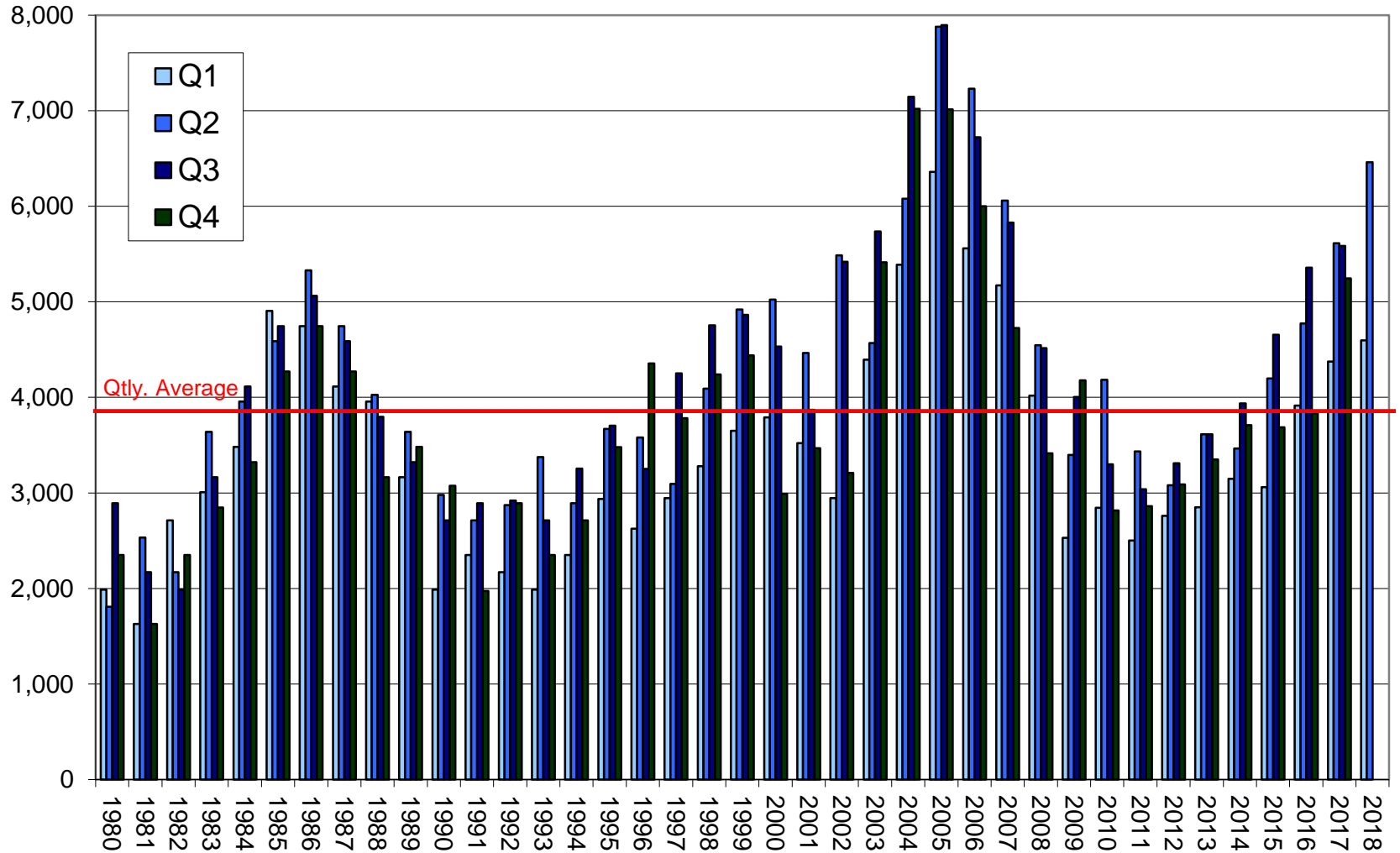


\* Empirically estimated by Kevin C. Gillen, PhD

# Average House Price Minus Median House Price: 1980-2018

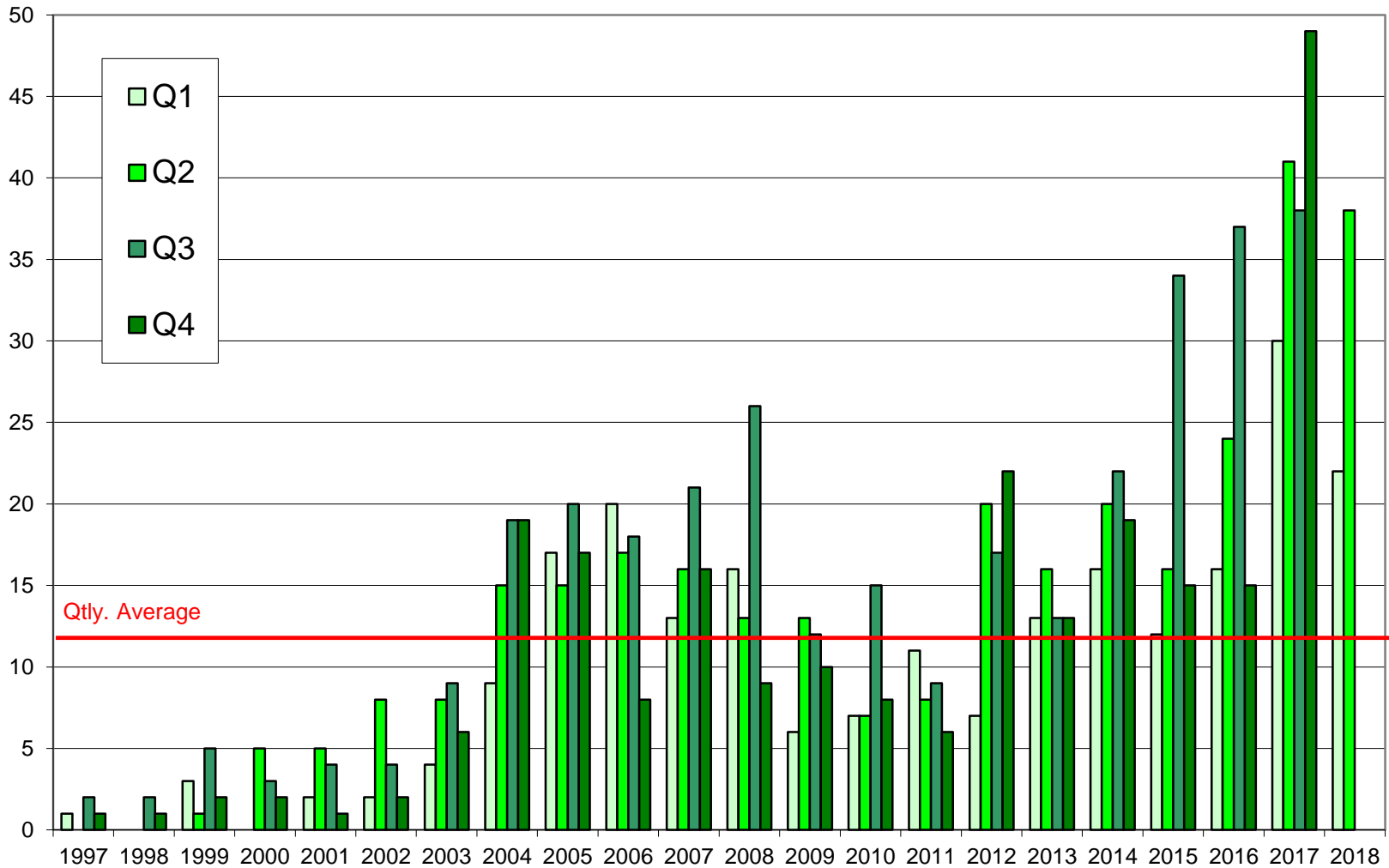


## Number of Philadelphia House Sales\* per Quarter: 1980-2018



\*Only arms-length transactions between private sector entities were included in these numbers.

## Number of Philadelphia Home Sales\* per Quarter with Price ≥ \$1 Million: 1997-2018

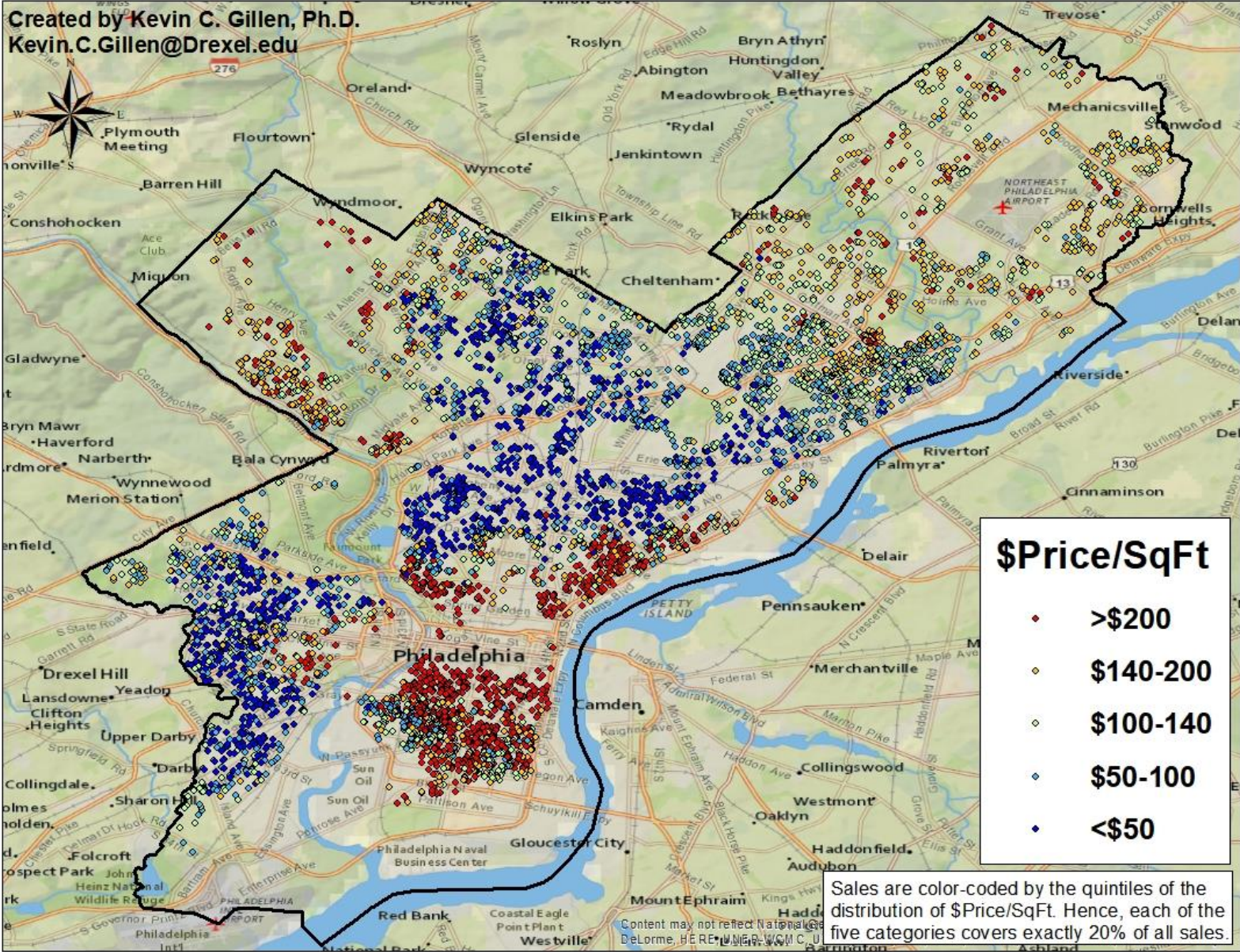


\*Only arms-length transactions between private sector entities were included in these numbers.



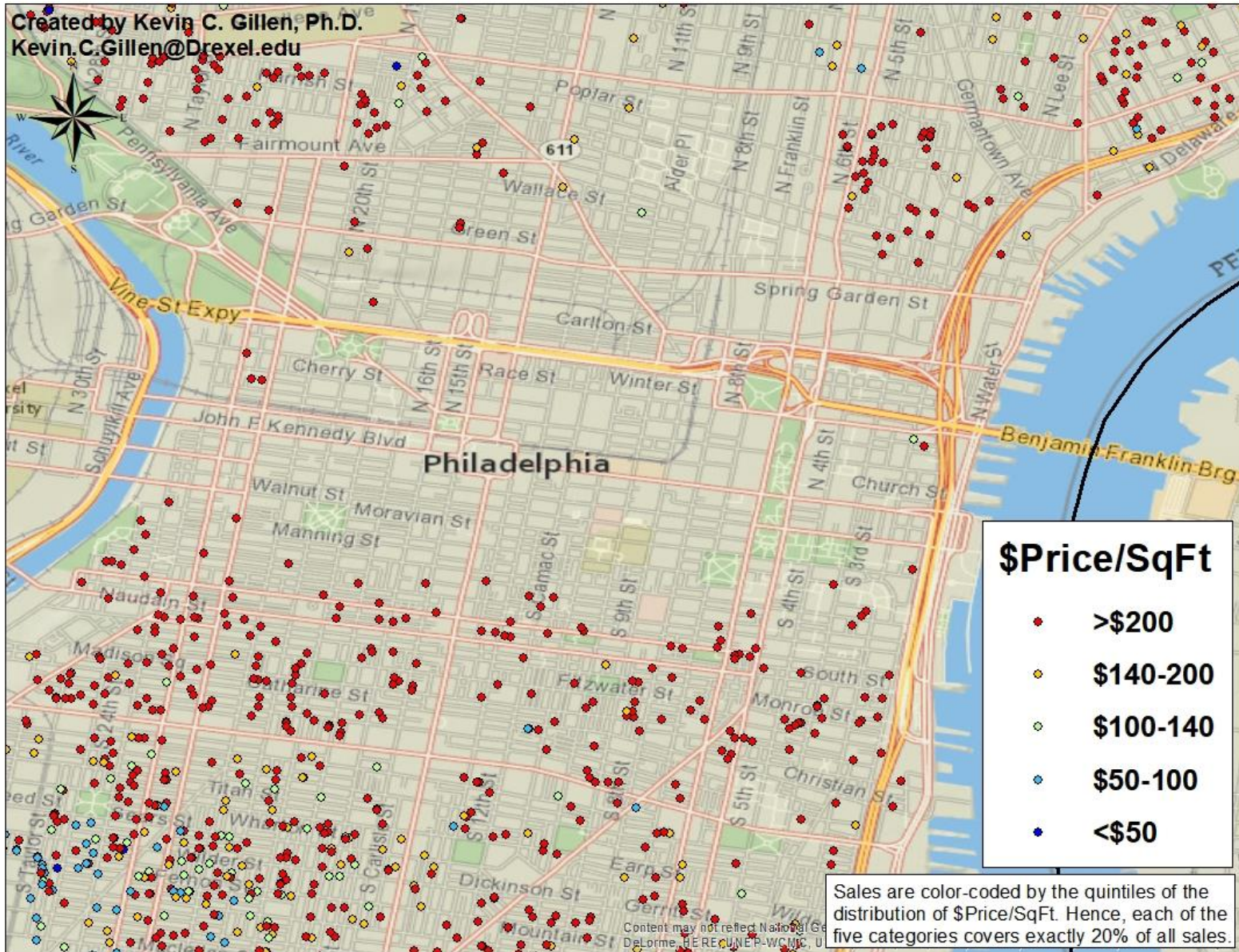
# Philadelphia House Sales in 2018 Q2

Created by Kevin C. Gillen, Ph.D.  
Kevin.C.Gillen@Drexel.edu



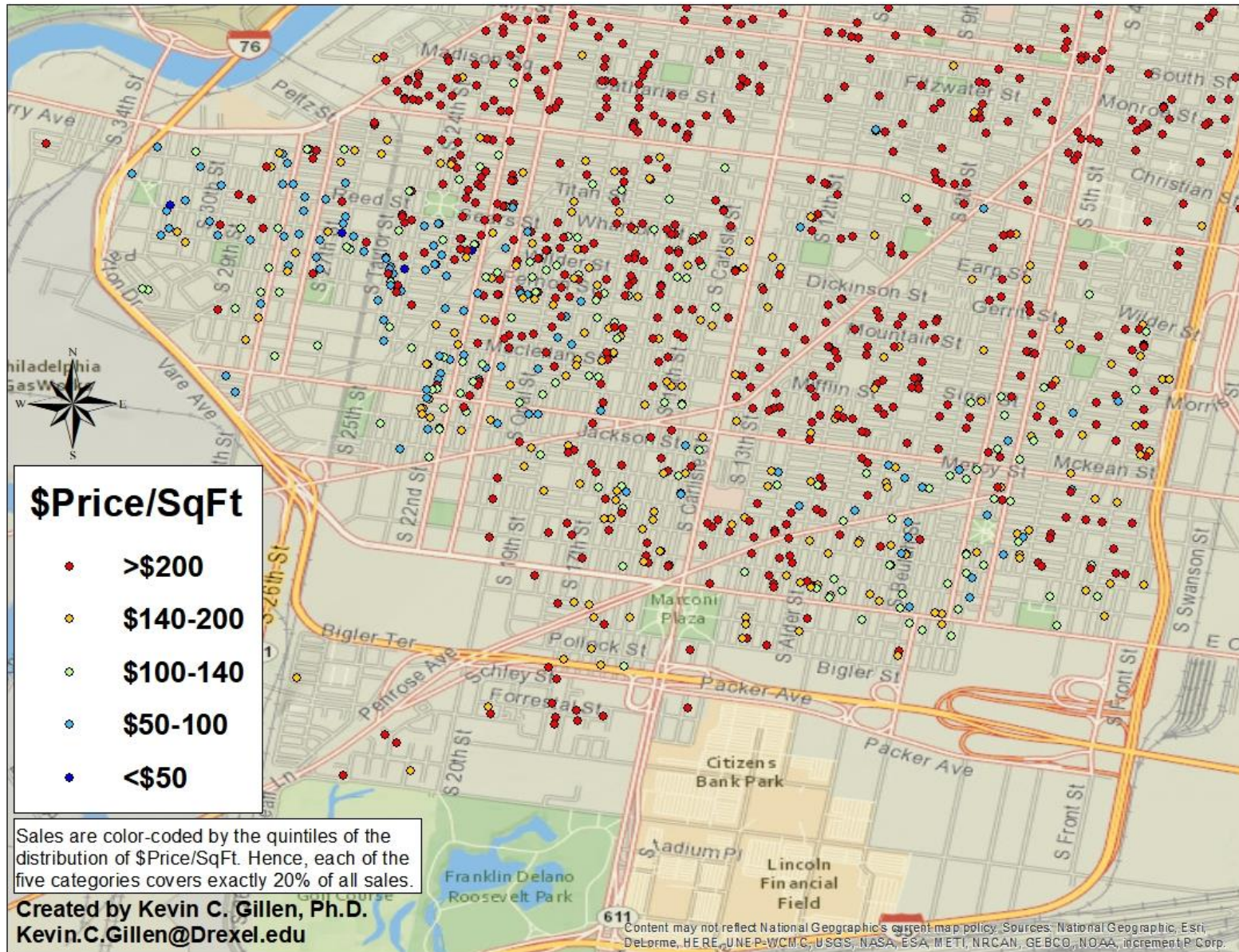


# Center City House Sales in 2018 Q2



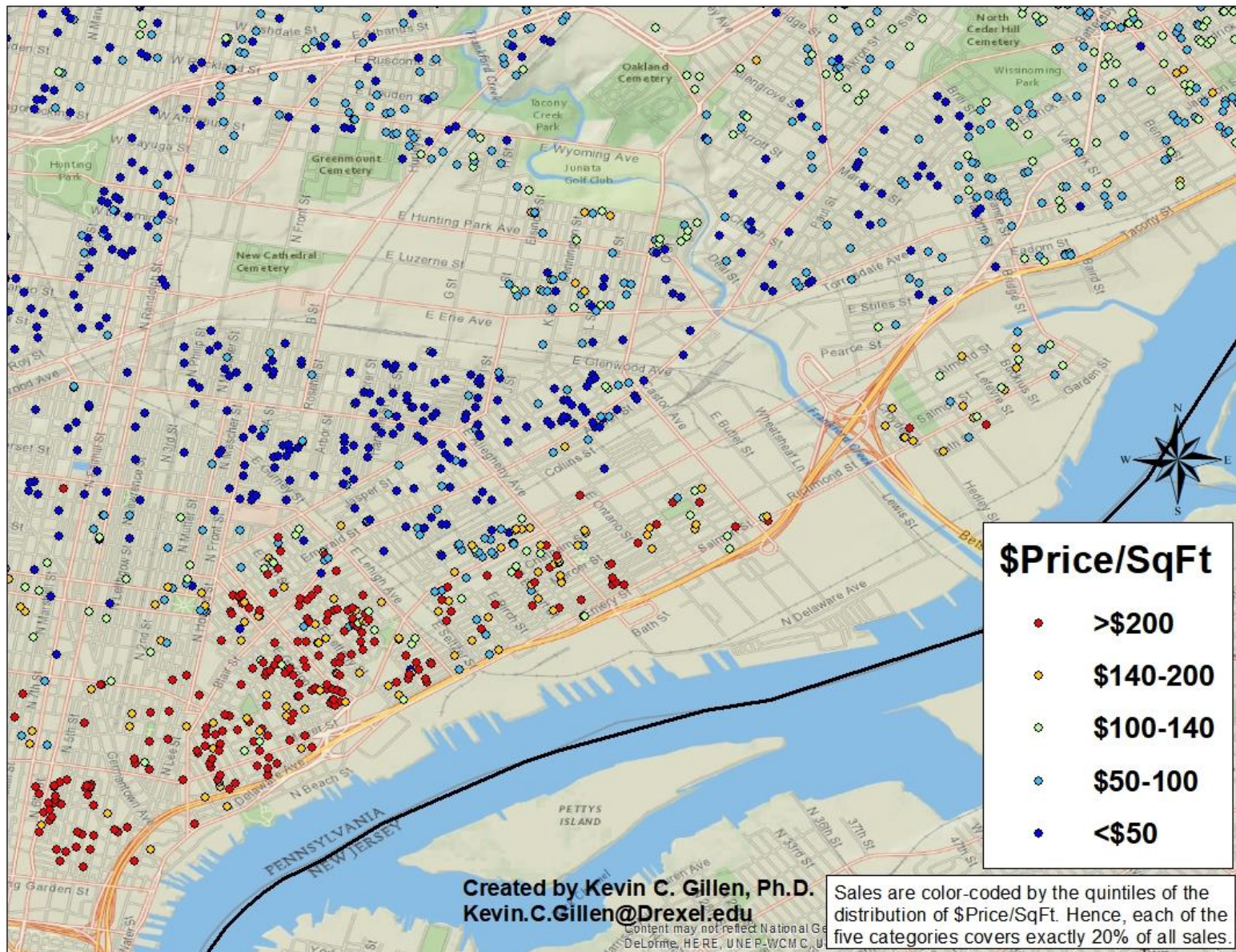


# South Philadelphia House Sales in 2018 Q2



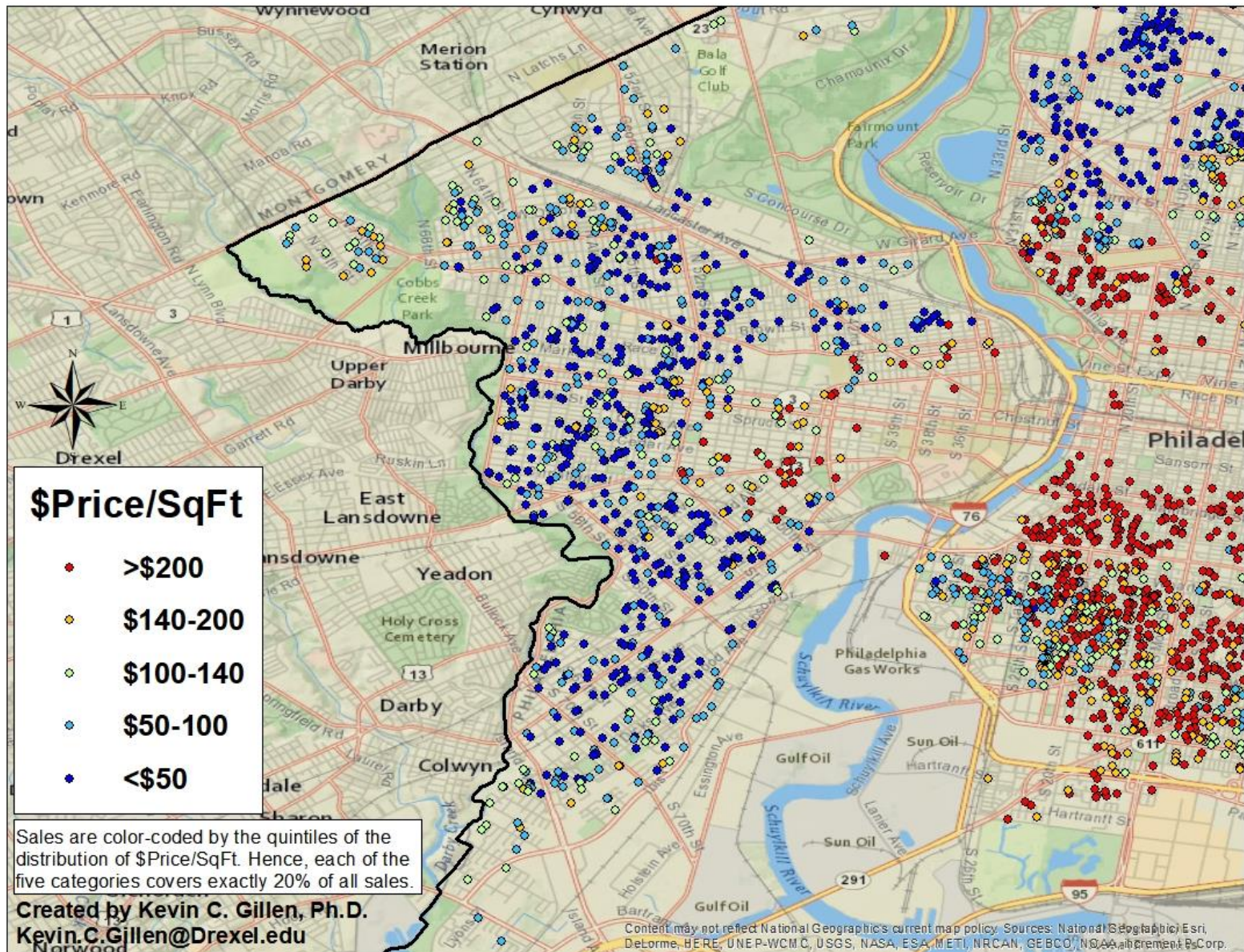


# Kensington/Frankford House Sales in 2018 Q2



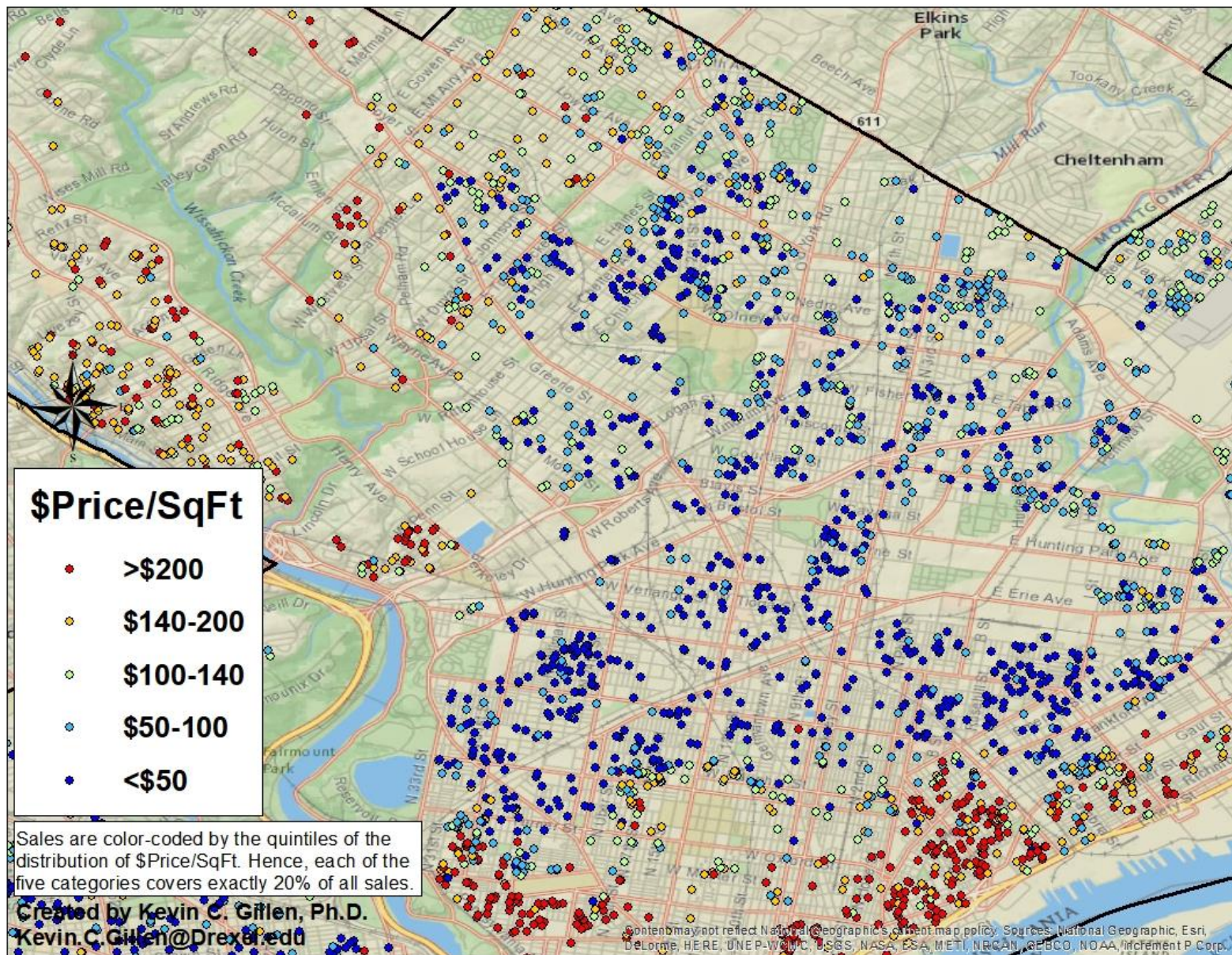


# West Philadelphia House Sales in 2018 Q2



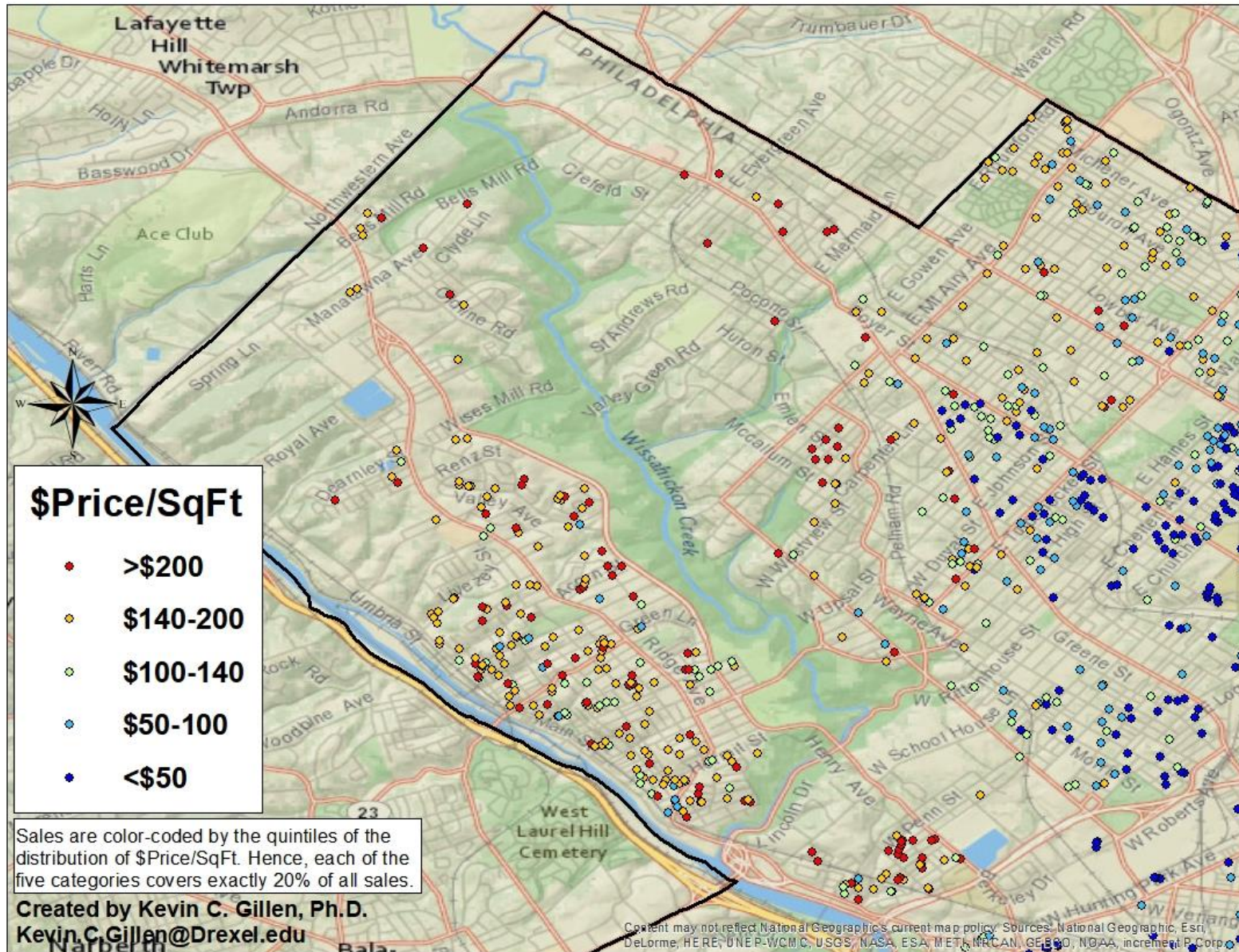


# North Philadelphia House Sales in 2018 Q2



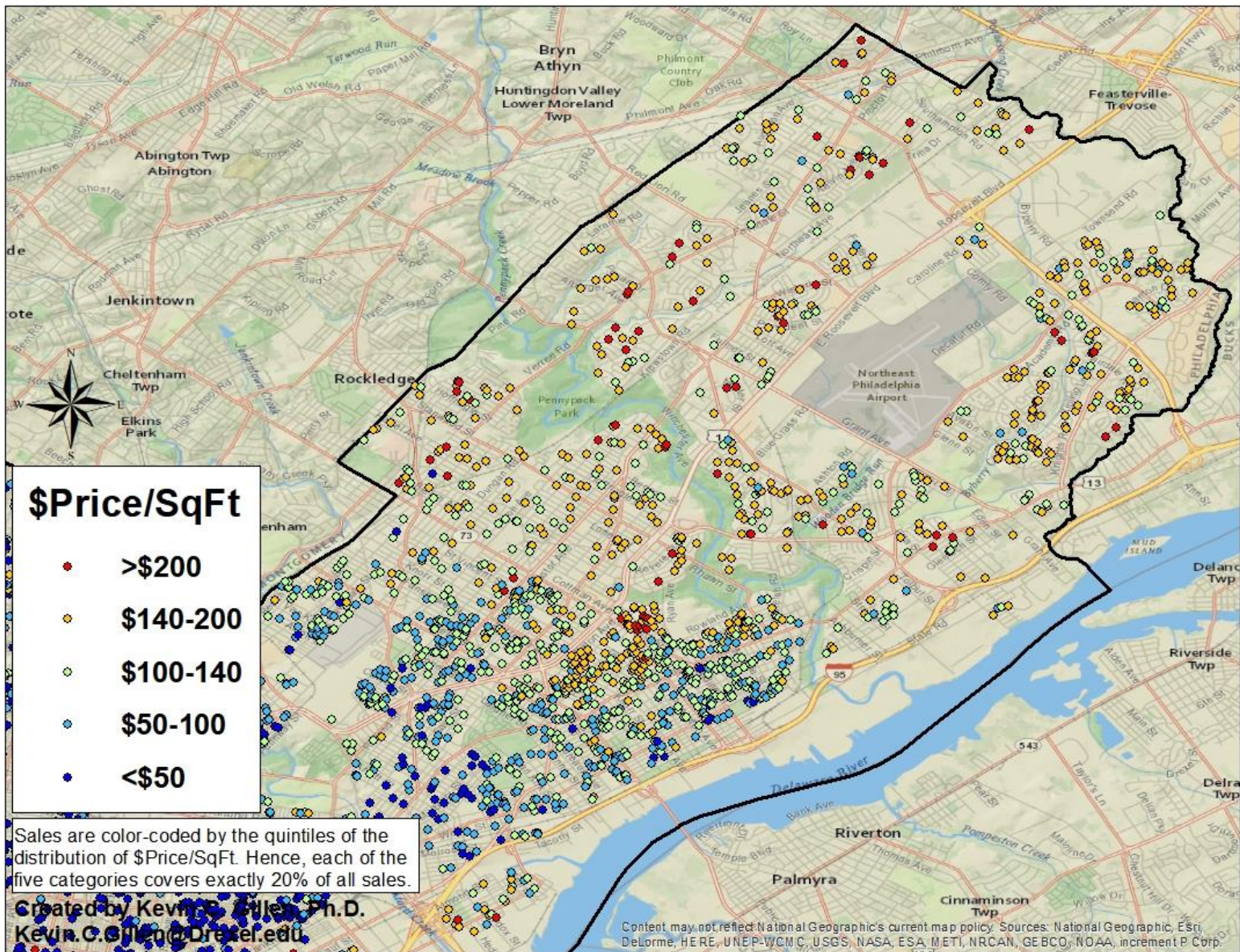


# Northwest Philadelphia House Sales in 2018 Q2

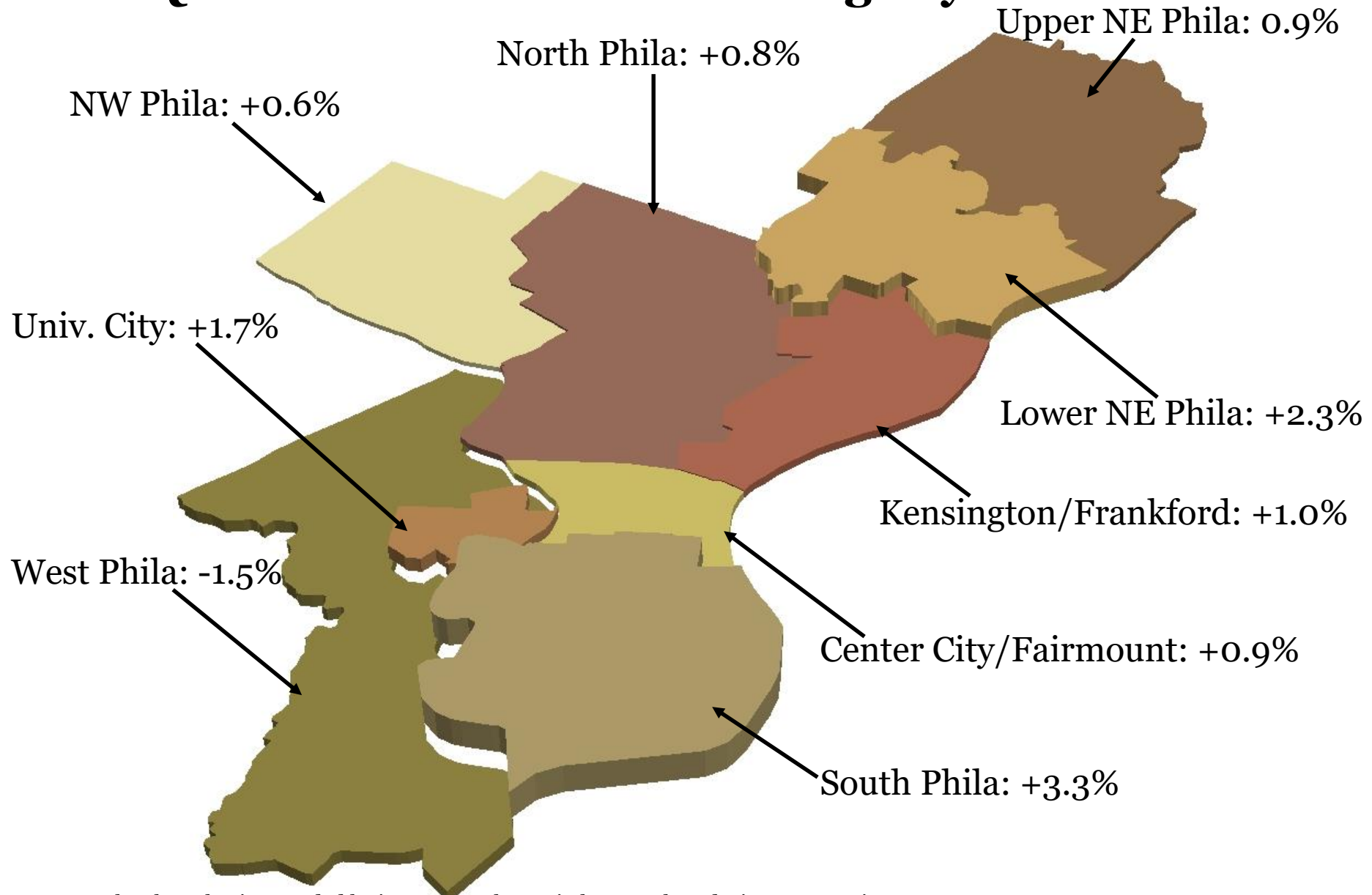




# Northeast Philadelphia House Sales in 2018 Q2



# 2018 Q2 House Price Rate of Change by Submarket



Note: Each submarket is extruded by its average change in house values during 2018 Q2 in order to reflect its growth (or depreciation) rate relative to other neighborhoods.

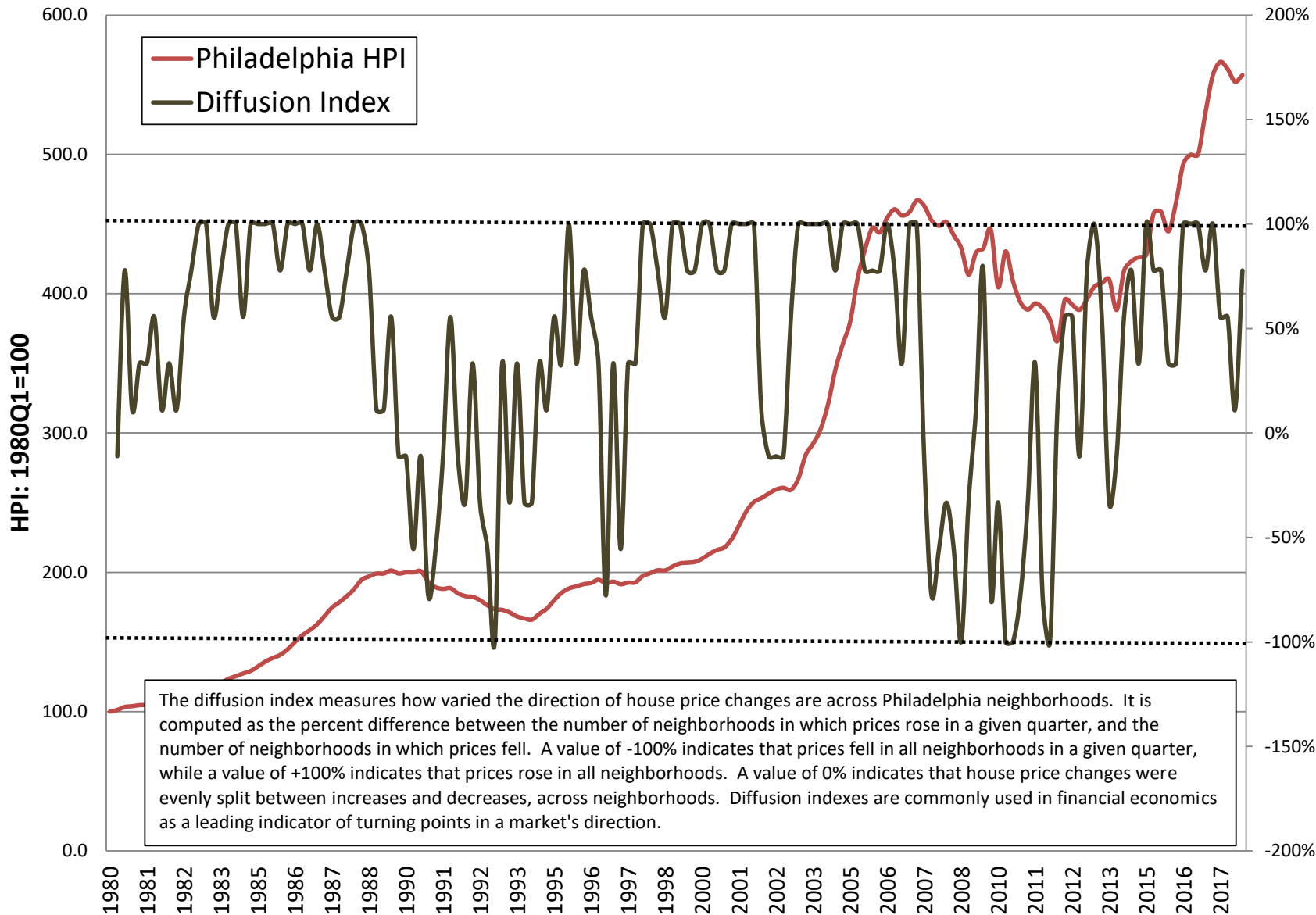


# + \$1 Million Dollar House Sales in 2018 Q2

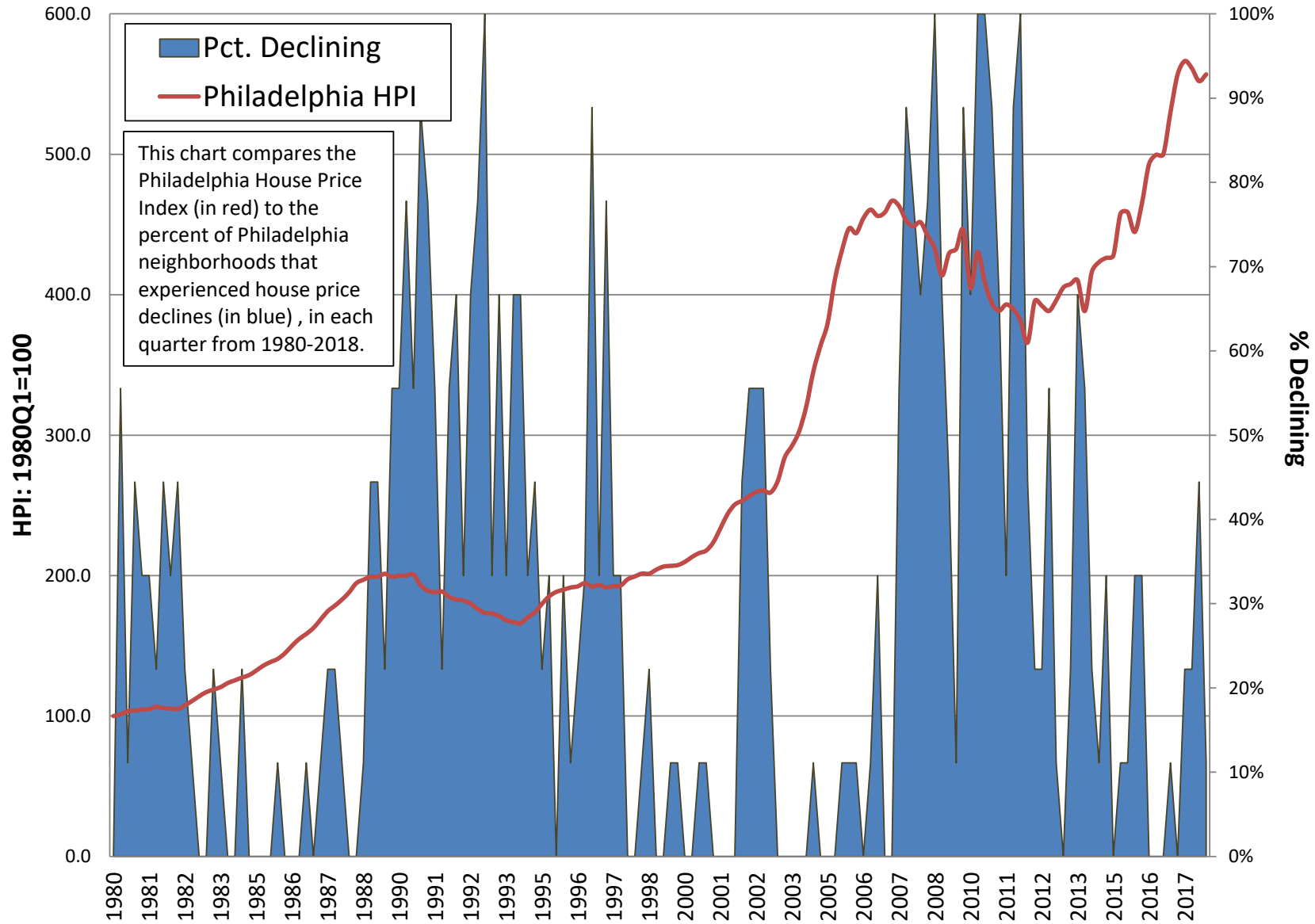


| PRICE       | ADDRESS               |
|-------------|-----------------------|
| \$1,025,000 | 237 MONROE ST         |
| \$1,025,000 | 332 S 15TH ST         |
| \$1,062,500 | 1920 DELANCEY PL      |
| \$1,100,000 | 212 CATHARINE ST      |
| \$1,100,000 | 615 S 20TH ST         |
| \$1,111,800 | 1009 N ORIANNA ST     |
| \$1,128,500 | 751 S 09TH ST         |
| \$1,145,000 | 818 S SWANSON ST      |
| \$1,145,000 | 8031 SEMINOLE AVE     |
| \$1,150,000 | 8205 SEMINOLE AVE     |
| \$1,170,000 | 3709 BARING ST        |
| \$1,182,500 | 2039 NAUDAIN ST       |
| \$1,189,000 | 606 S 08TH ST         |
| \$1,195,000 | 307 PEMBERTON ST      |
| \$1,200,000 | 745 S 07TH ST         |
| \$1,210,000 | 2414 SPRUCE ST        |
| \$1,225,000 | 2056 WAVERLY ST       |
| \$1,250,000 | 612 S HANCOCK ST      |
| \$1,271,300 | 1616 GREEN ST         |
| \$1,275,000 | 7737 SAINT MARTINS LN |
| \$1,285,000 | 226 S 03RD ST         |
| \$1,294,000 | 211 SPRUCE ST         |
| \$1,300,000 | 607 W GRAVERS LN      |
| \$1,325,000 | 322 QUINCE ST         |
| \$1,330,000 | 223 S 24TH ST         |
| \$1,340,000 | 318 W HIGHLAND AVE    |
| \$1,490,000 | 2129 DELANCEY PL      |
| \$1,550,000 | 617 PINE ST           |
| \$1,595,000 | 224 LOCUST ST         |
| \$1,625,000 | 9427 MEADOWBROOK AVE  |
| \$1,650,000 | 237 BAINBRIDGE ST     |
| \$1,900,000 | 2138 RACE ST          |
| \$1,927,300 | 253 S 25TH ST         |
| \$2,000,000 | 8703 SEMINOLE AVE     |
| \$2,045,000 | 156 CONARROE ST       |
| \$2,225,000 | 318 RACE ST           |
| \$2,500,000 | 138 S FRONT ST        |
| \$2,597,000 | 2100 LOCUST ST        |

# Philadelphia House Price Diffusion Index 1980-2018

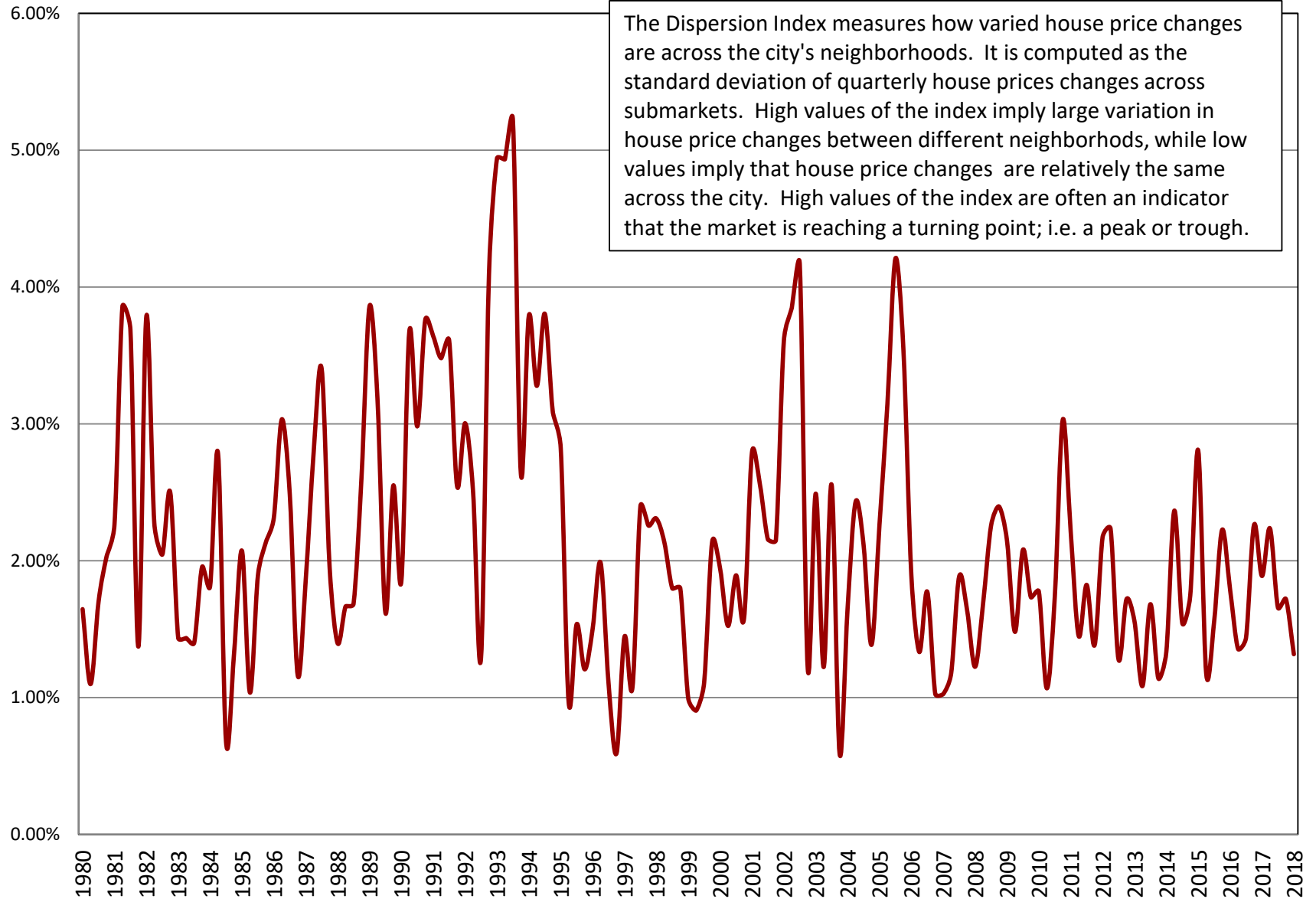


# Philadelphia House Prices 1980-2018: Declines v. House Price Index

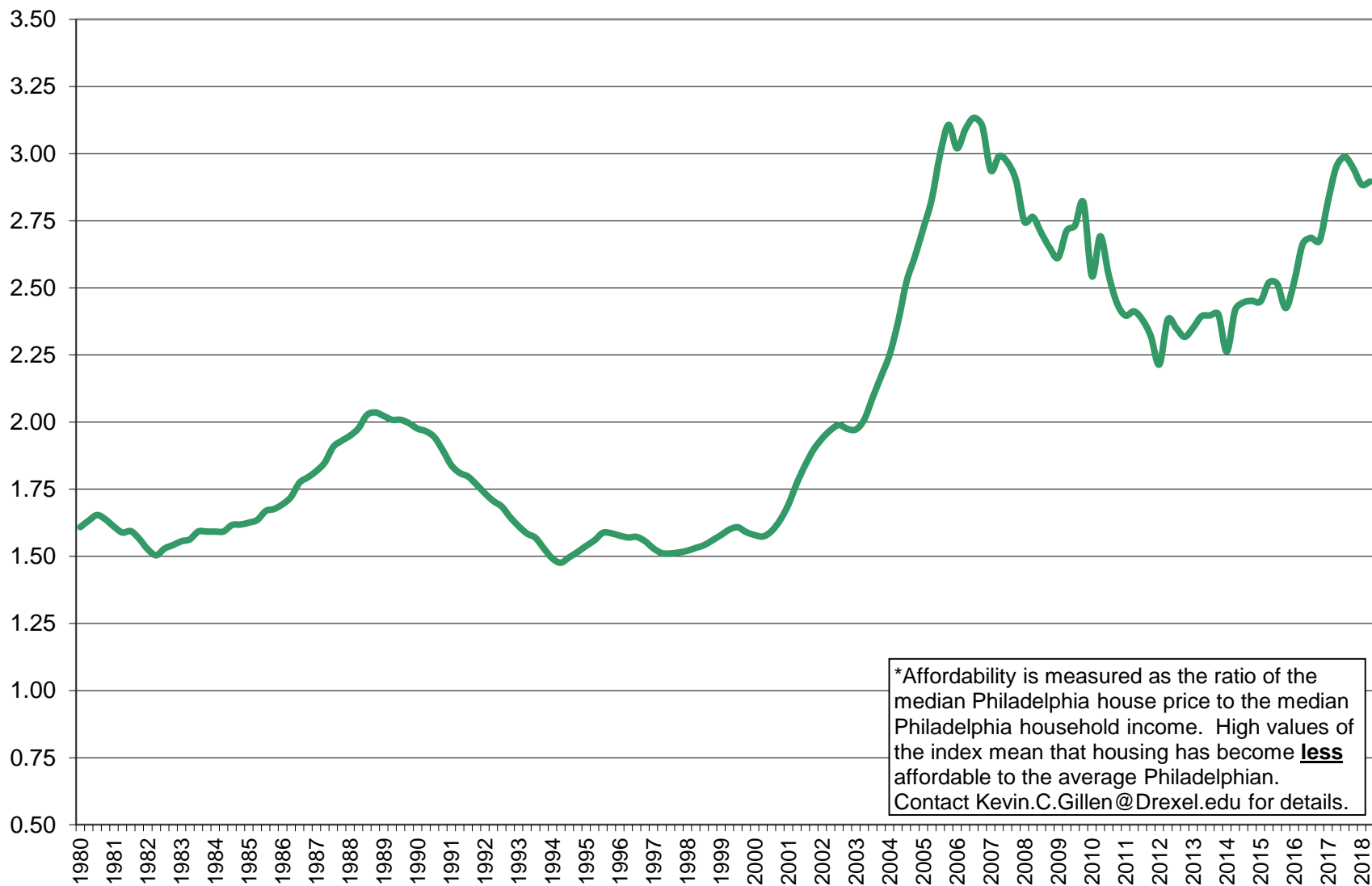




# Dispersion Index of Philadelphia Housing

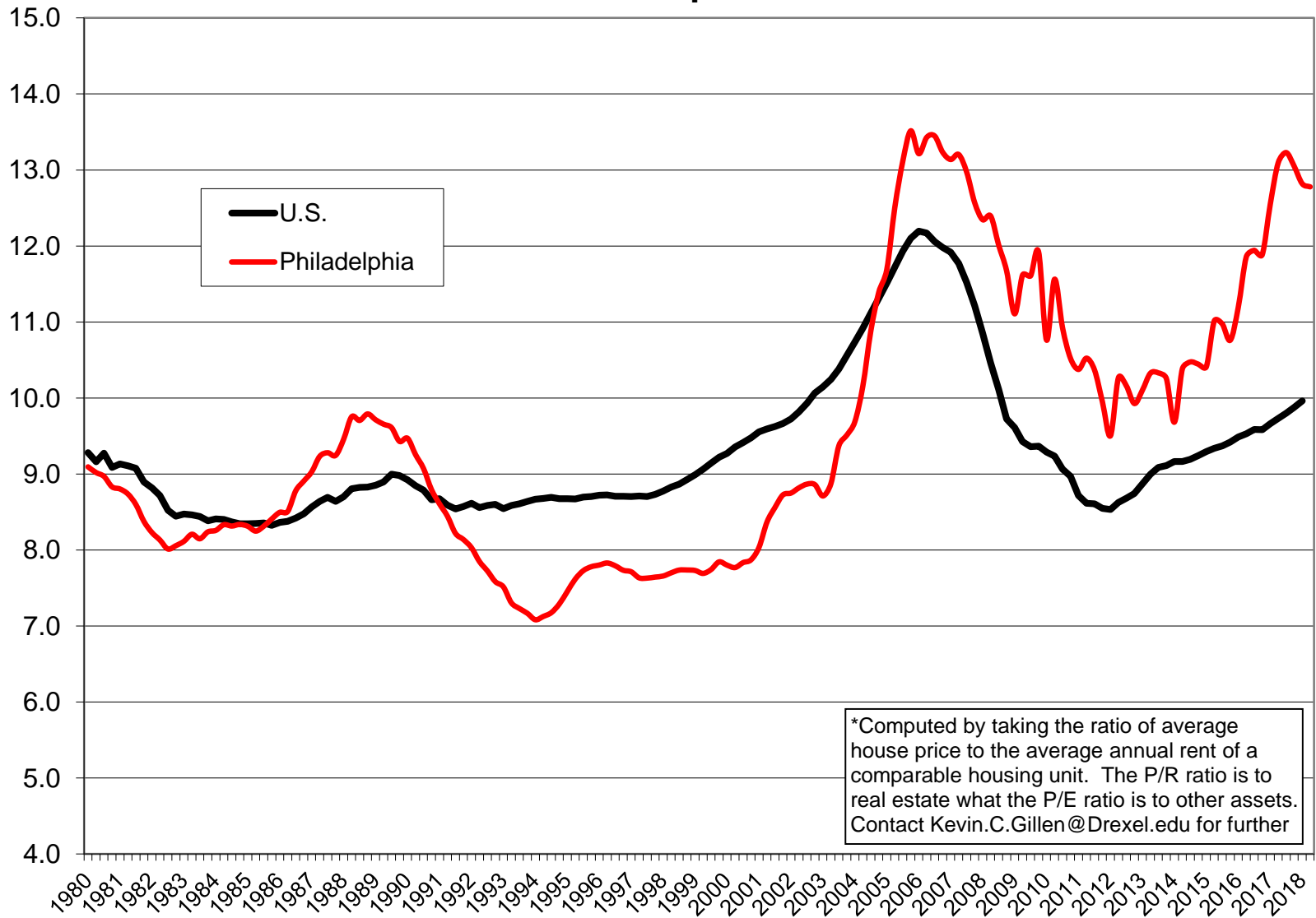


# Philadelphia Housing Affordability\* Index: 1980-2018



\*Affordability is measured as the ratio of the median Philadelphia house price to the median Philadelphia household income. High values of the index mean that housing has become **less** affordable to the average Philadelphian. Contact [Kevin.C.Gillen@Drexel.edu](mailto:Kevin.C.Gillen@Drexel.edu) for details.

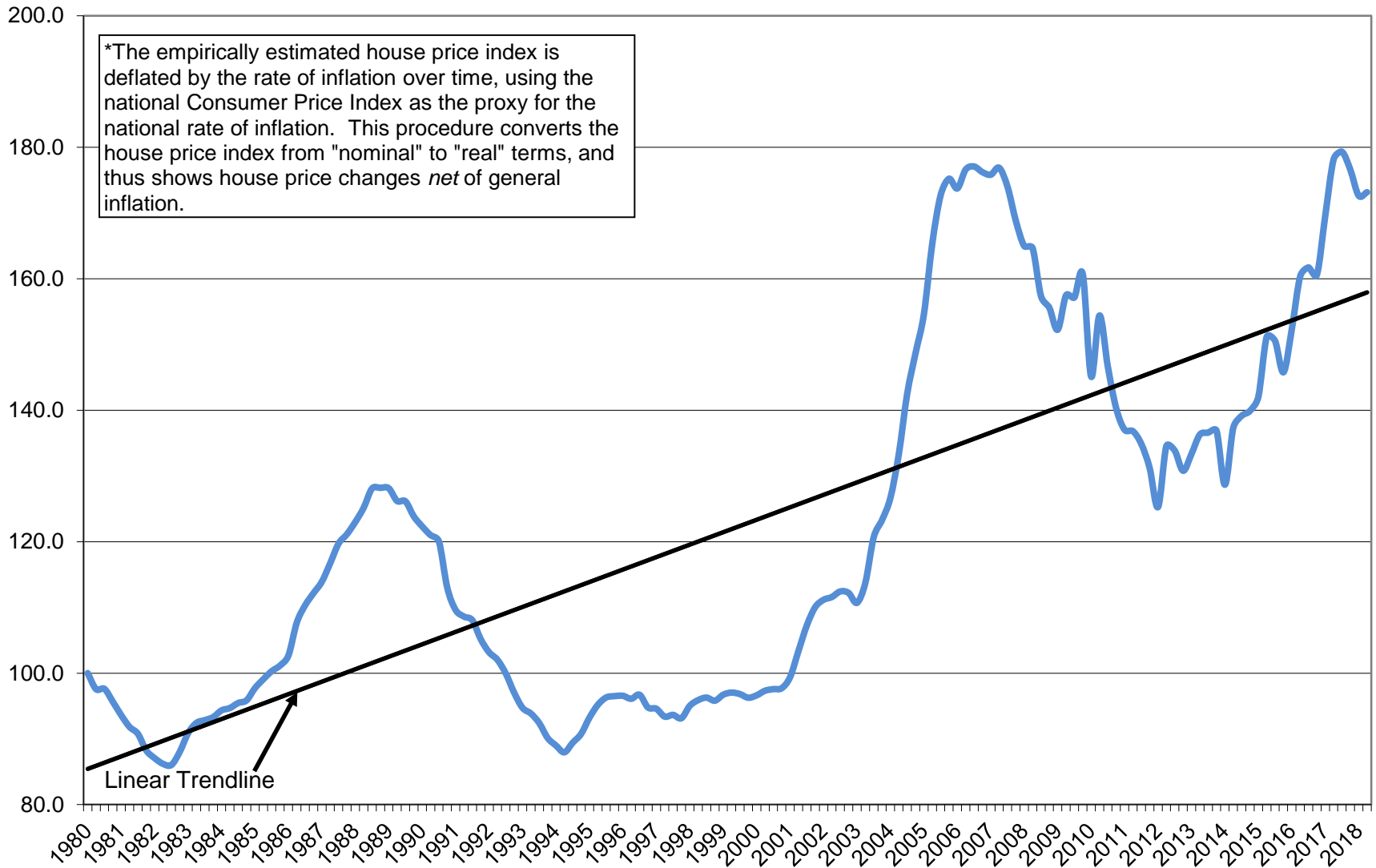
# Average House Price-to-Rent Ratios\*: 1980-2018 Philadelphia v. U.S.



\*Computed by taking the ratio of average house price to the average annual rent of a comparable housing unit. The P/R ratio is to real estate what the P/E ratio is to other assets. Contact Kevin.C.Gillen@Drexel.edu for further

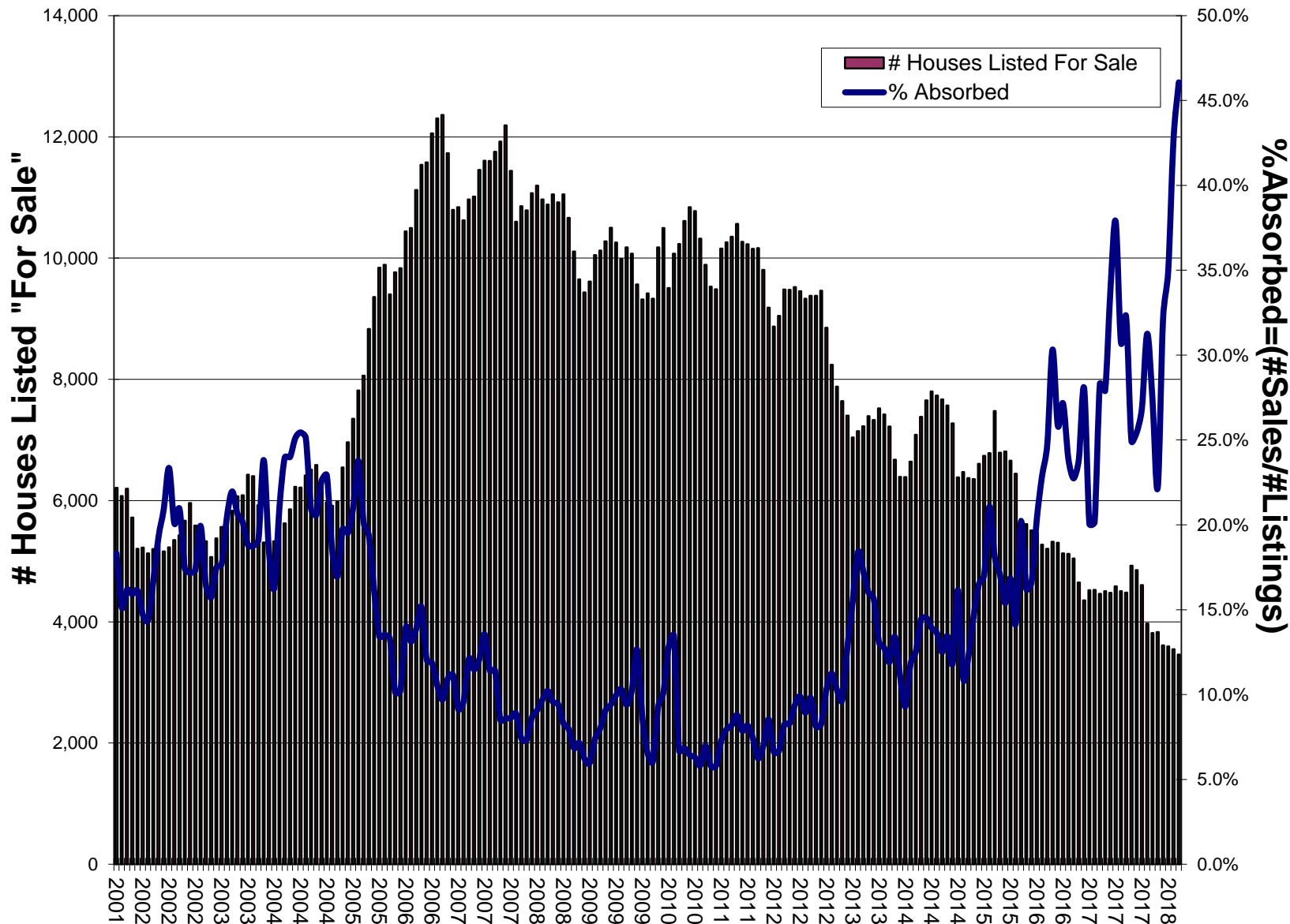
# Inflation-Adjusted\* Philadelphia House Price Index 1980-2018

## 1980Q1=100



Source: US Bureau of Labor Statistics

# Philadelphia Houses Listed For Sale: Inventory v. Sales Rate

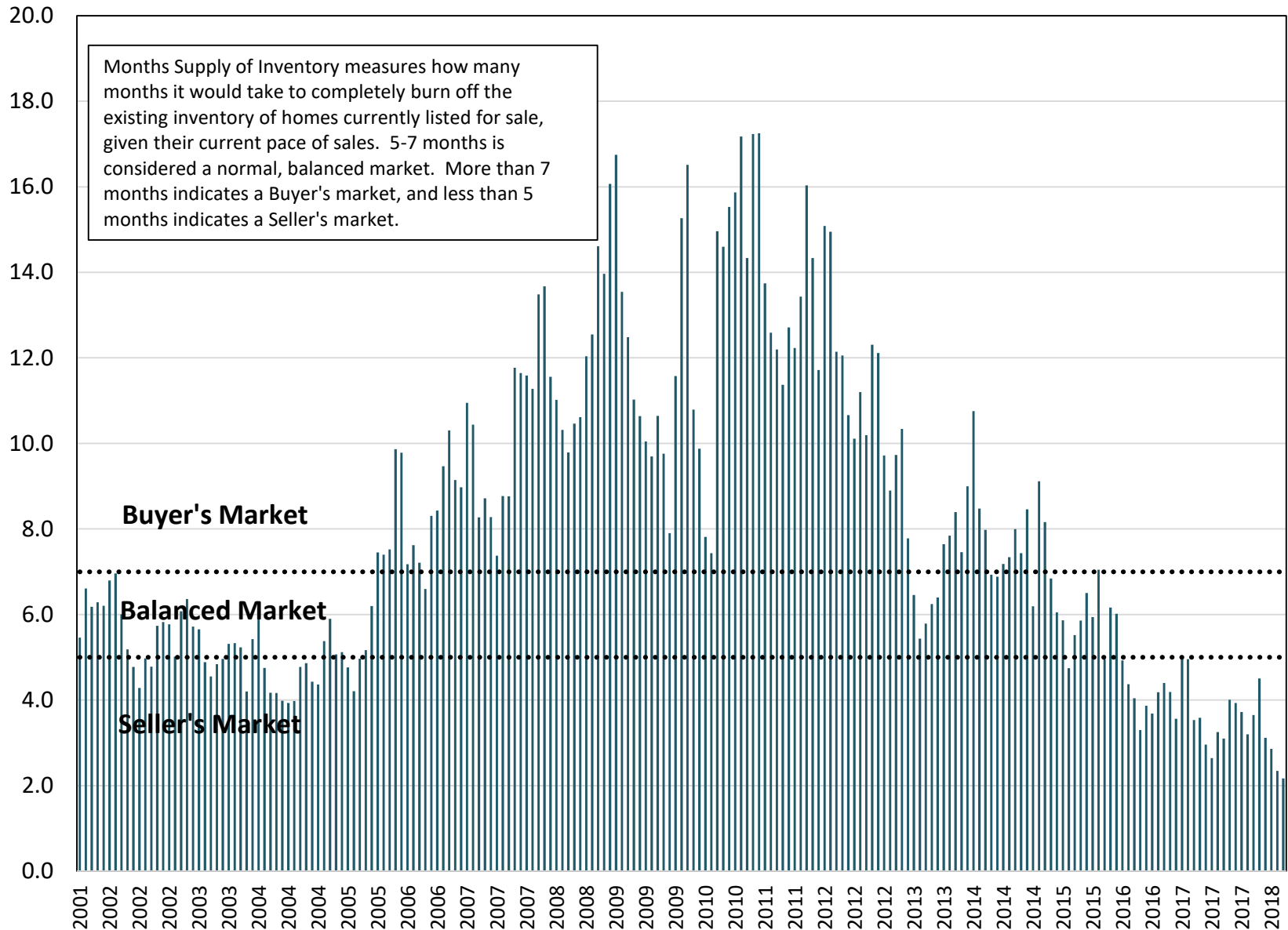


“%Absorbed” is defined as the percent of homes listed for sale in a given month that also sold in that same month.

Source: Trend MLS

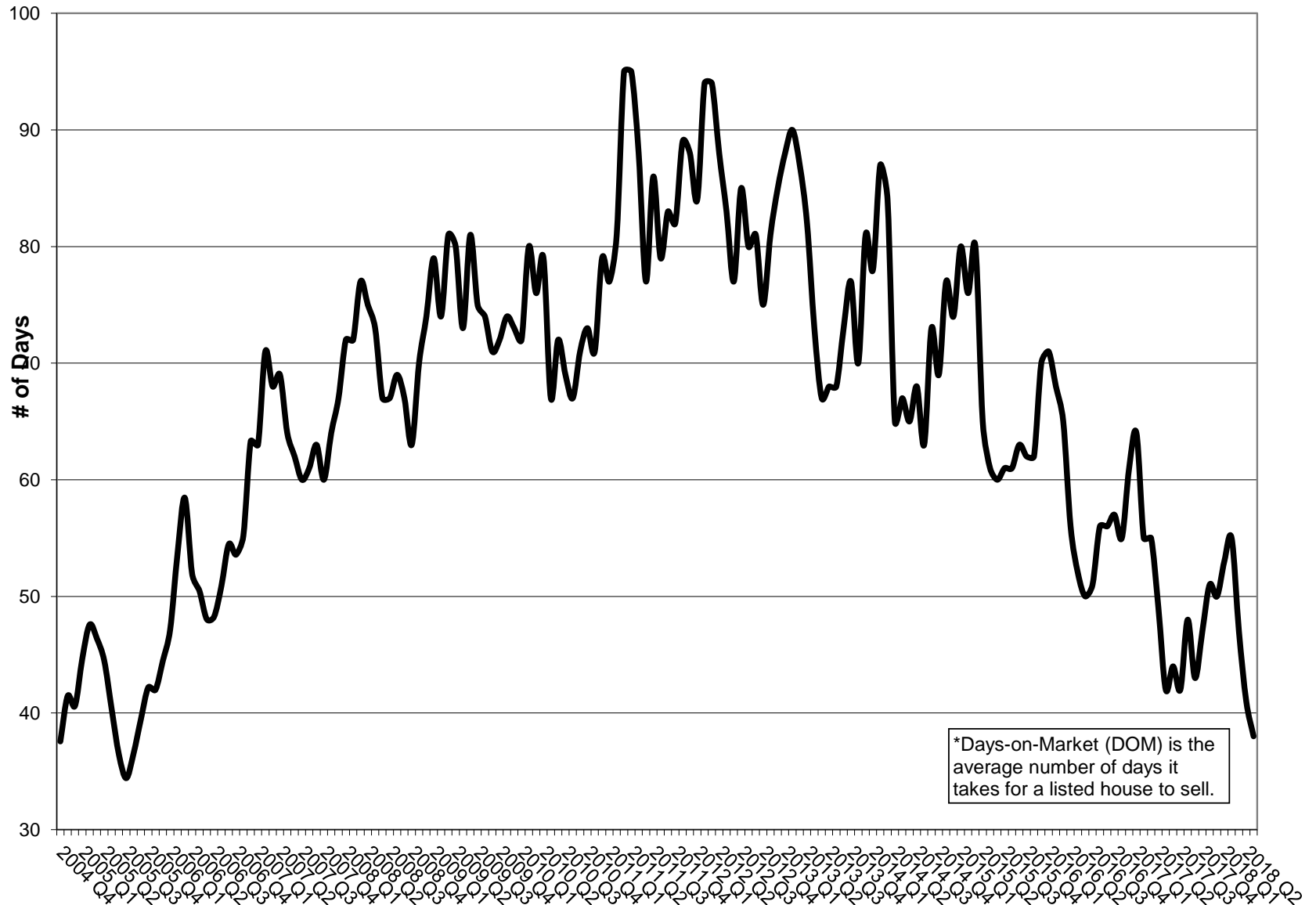


# Months Supply of Inventory in Philadelphia



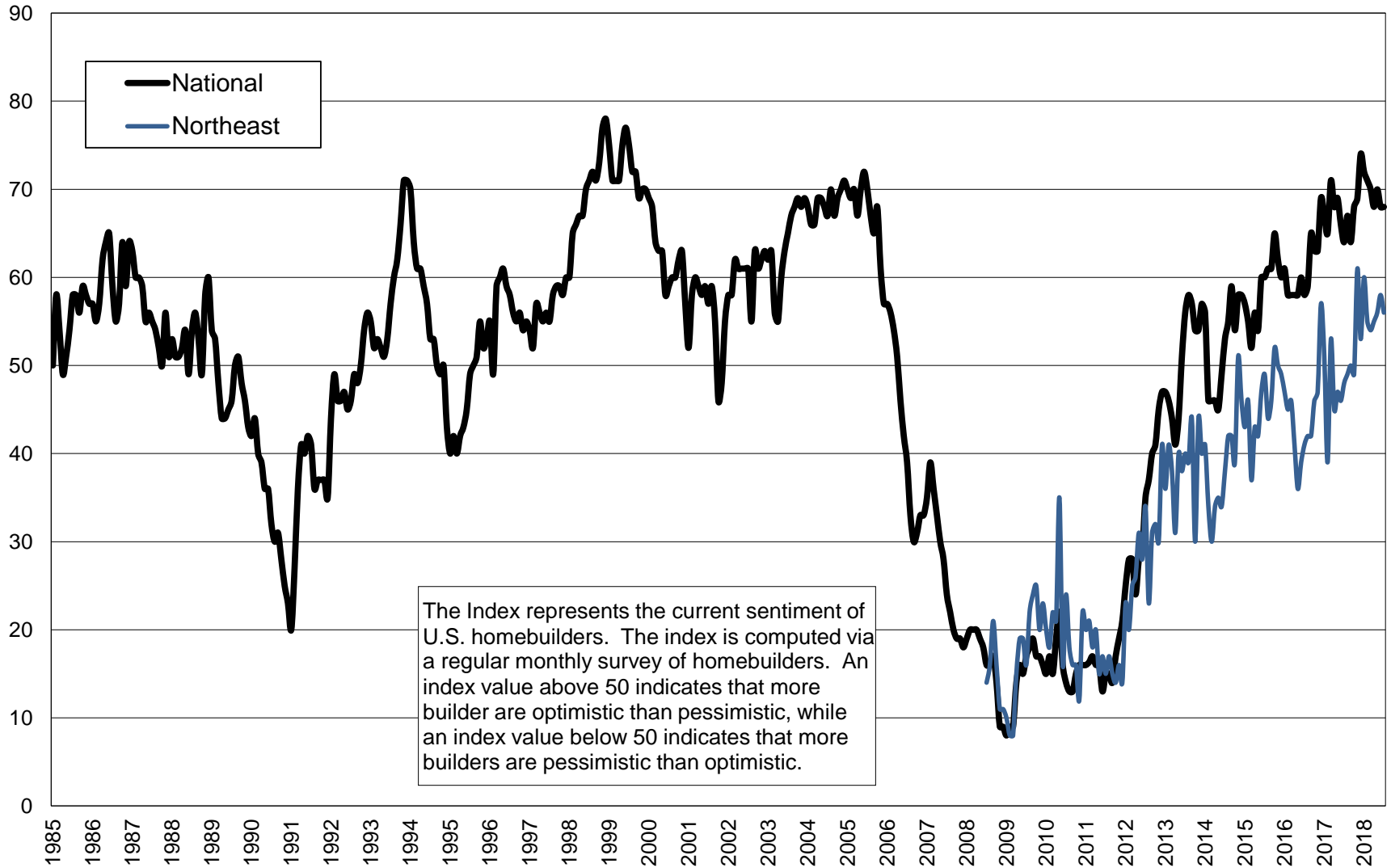
Source: Trend MLS

# Average Days-on-Market\* for Philadelphia Homes



Source: Trend MLS

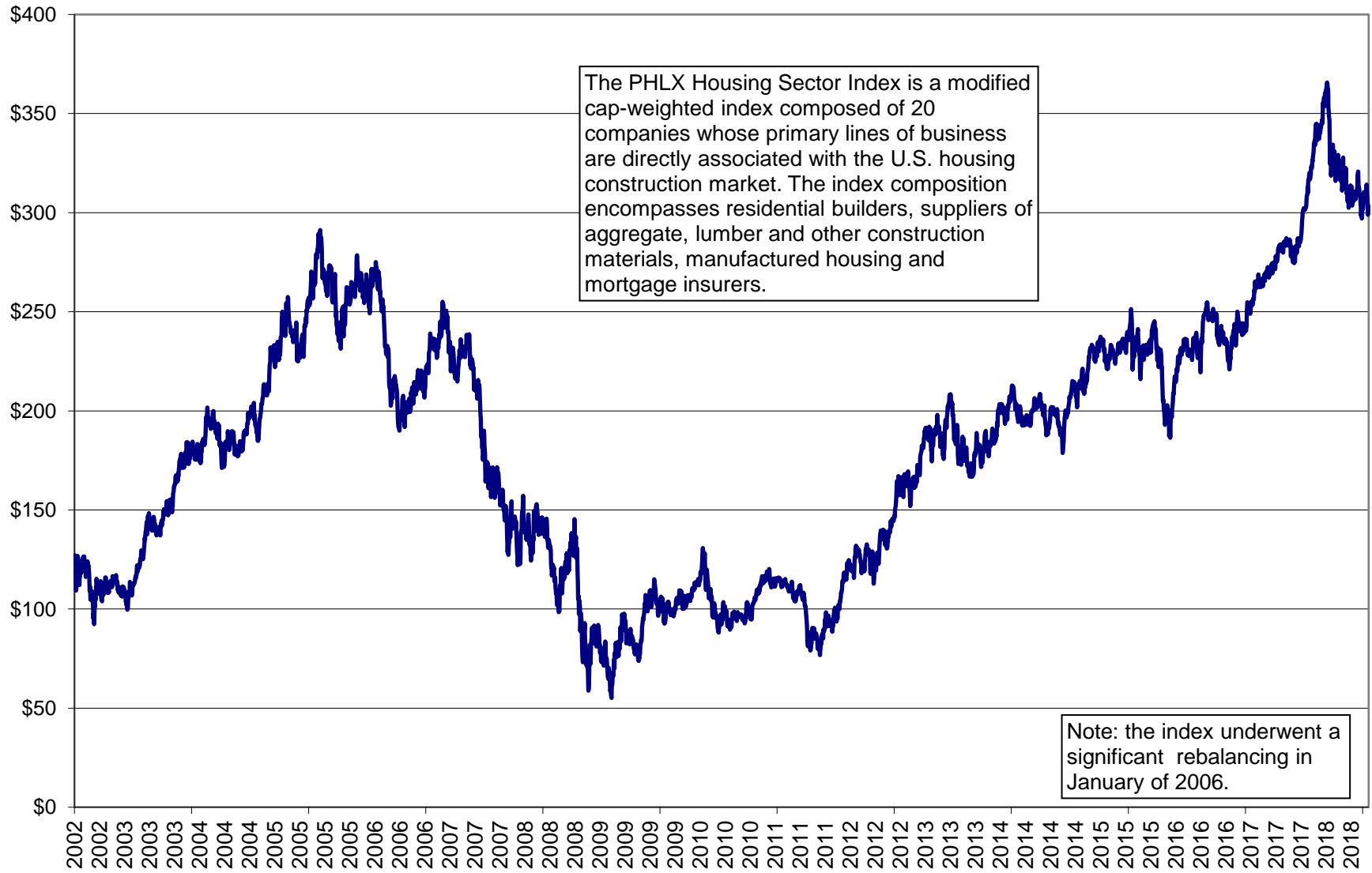
## Index of Homebuilder Sentiment: 1985-2018 (Seasonally Adjusted)



Source: National Assoc. of Homebuilders (NAHB)/Wells Fargo

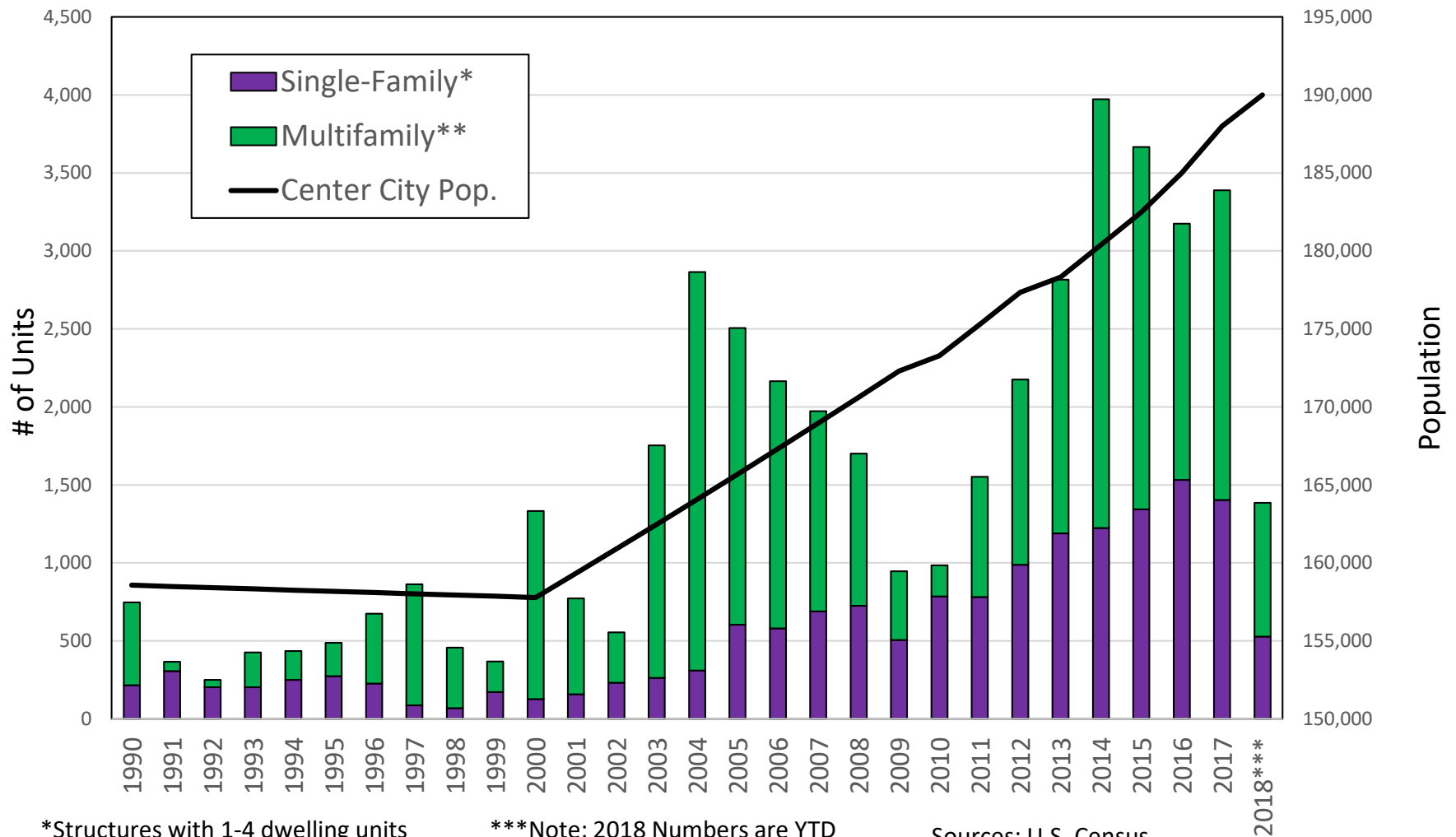


# Philadelphia Stock Exchange Housing Sector Index: 2002-2018



Source: finance.yahoo.com

## Building Permits Issued for Construction of Residential Units in Philadelphia: Single-Family v. Multifamily



\*Structures with 1-4 dwelling units

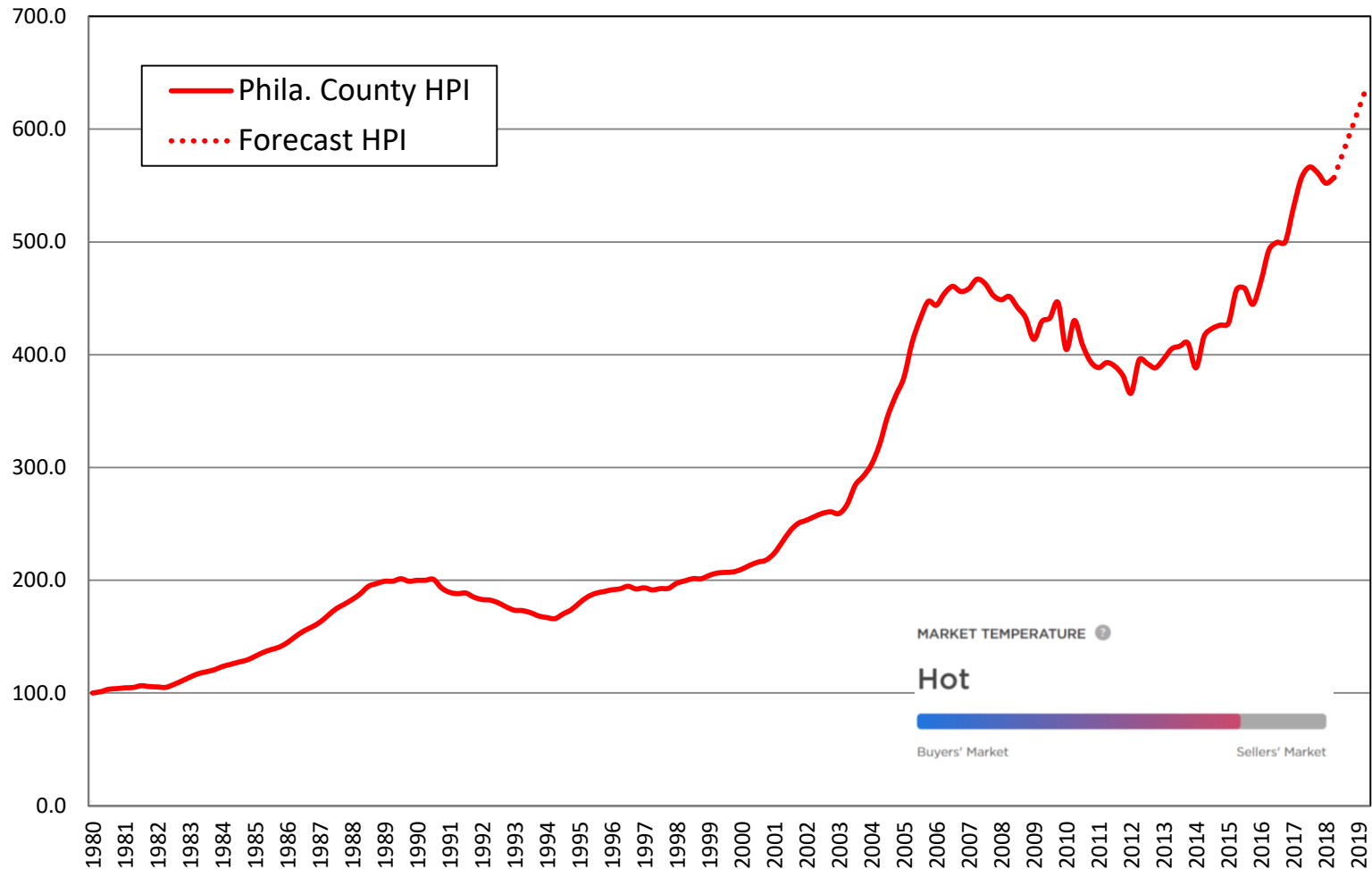
\*\*Structures with >=5 dwelling units

\*\*\*Note: 2018 Numbers are YTD numbers through May 2018.

Sources: U.S. Census, Center City District

# Philadelphia House Price Index and 1-Year Forecast

## Philadelphia House Price Index: Actual v. Forecast



Zillow.com is currently forecasting Philadelphia house prices to rise an average of 13.4% over the course of the next twelve months. This is a significant upgrade from its previous forecast of 3.7% made just three months ago. Zillow also currently rates the temperature of Philadelphia's housing market as "Hot", but its level of hotness is (confusingly) less than its level of three months' ago. Source: <http://www.zillow.com/philadelphia-pa/home-values/>