

PHILADELPHIA HOUSE PRICE INDICES

January 22, 2018



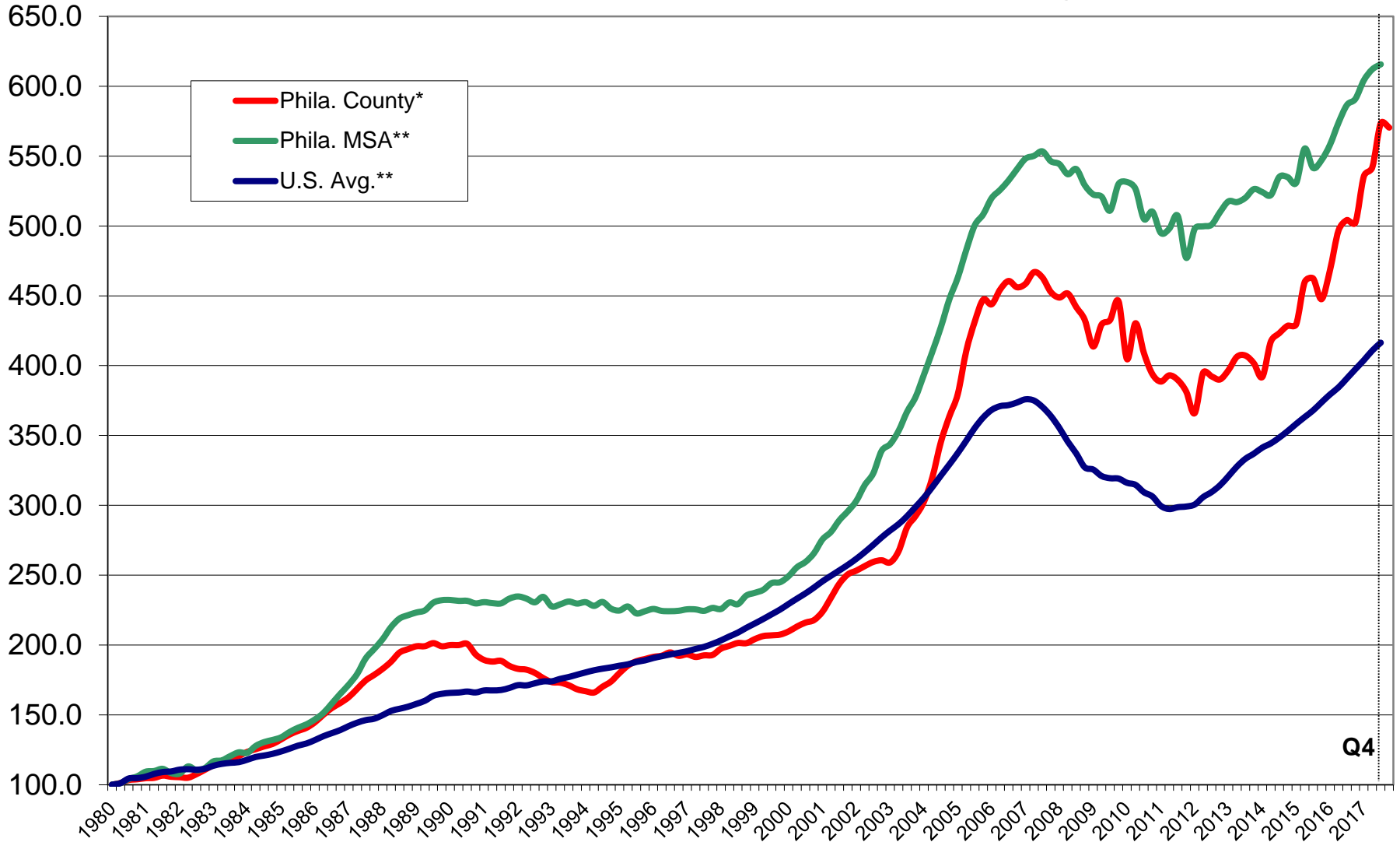
DREXEL UNIVERSITY
Lindy Institute
for Urban Innovation

KEVIN C. GILLEN, Ph.D.

Kevin.C.Gillen@Drexel.edu

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.

House Price Indices 1980-2017: 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.

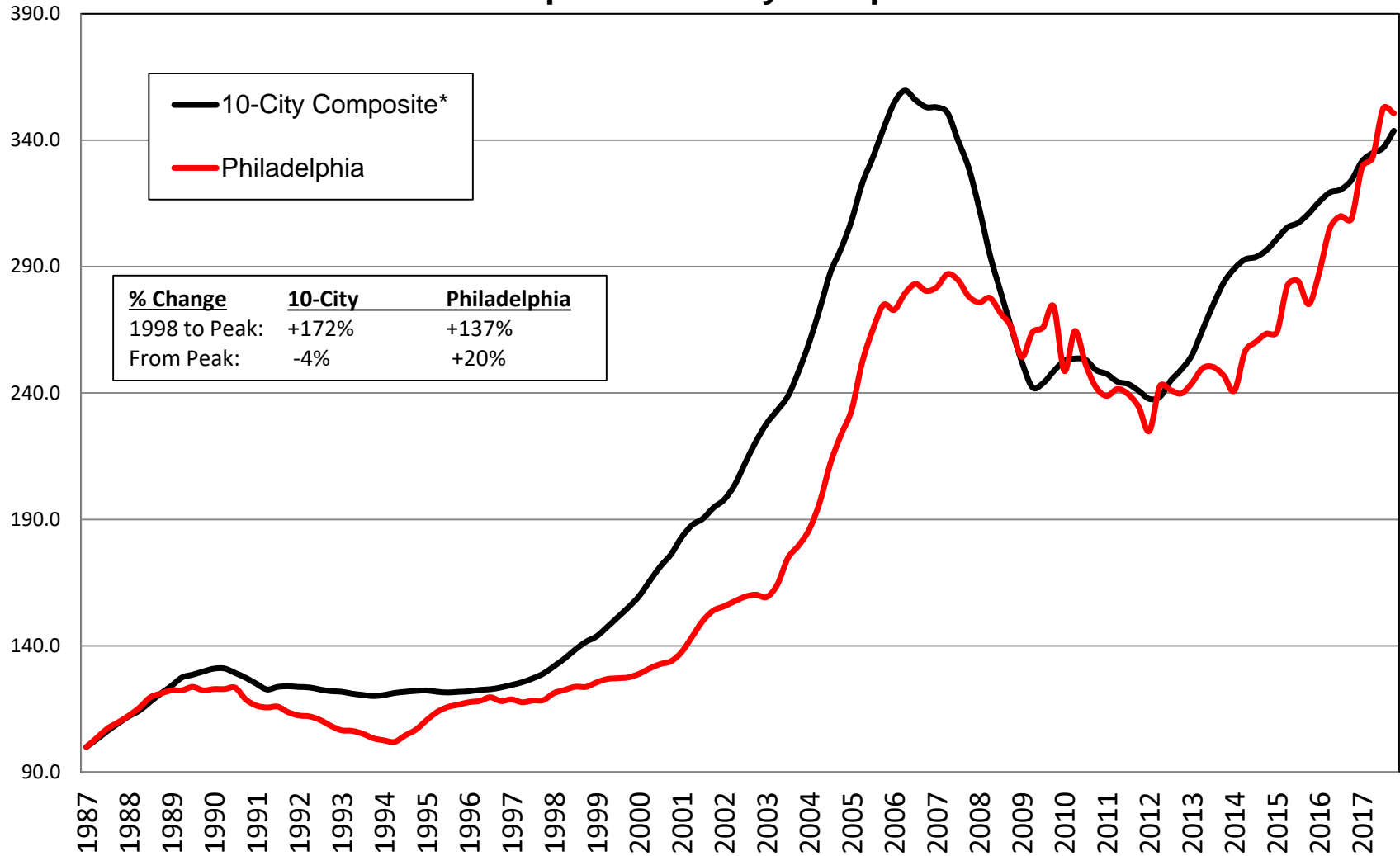
Total House Price Appreciation Rates by Geographic Market

Period	Philadelphia County*	Philadelphia MSA**	U.S.A.**
38-Year	174.1%	181.8%	142.7%
10-Year	23.1%	10.7%	11.7%
1-Year	12.7%	4.8%	6.3%
1-Quarter	-0.5%	0.6%	1.4%

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

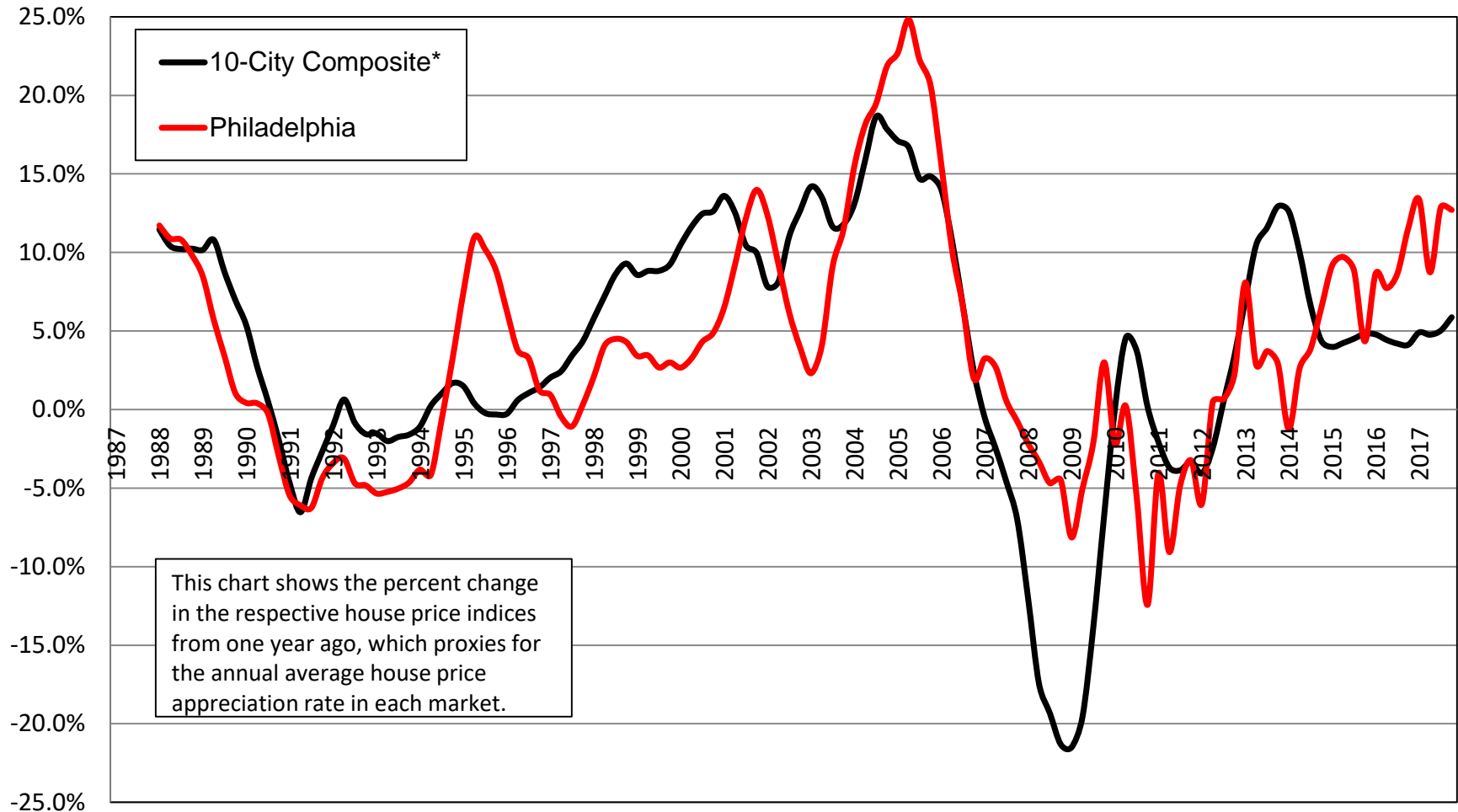
**Source: U.S. Federal Housing Finance Agency (FHFA). These numbers are through 2017Q3 only. “MSA”=“Metropolitan Statistical Area”, which is the entire 10-county region.

House Price Appreciation 1987-2017: 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.

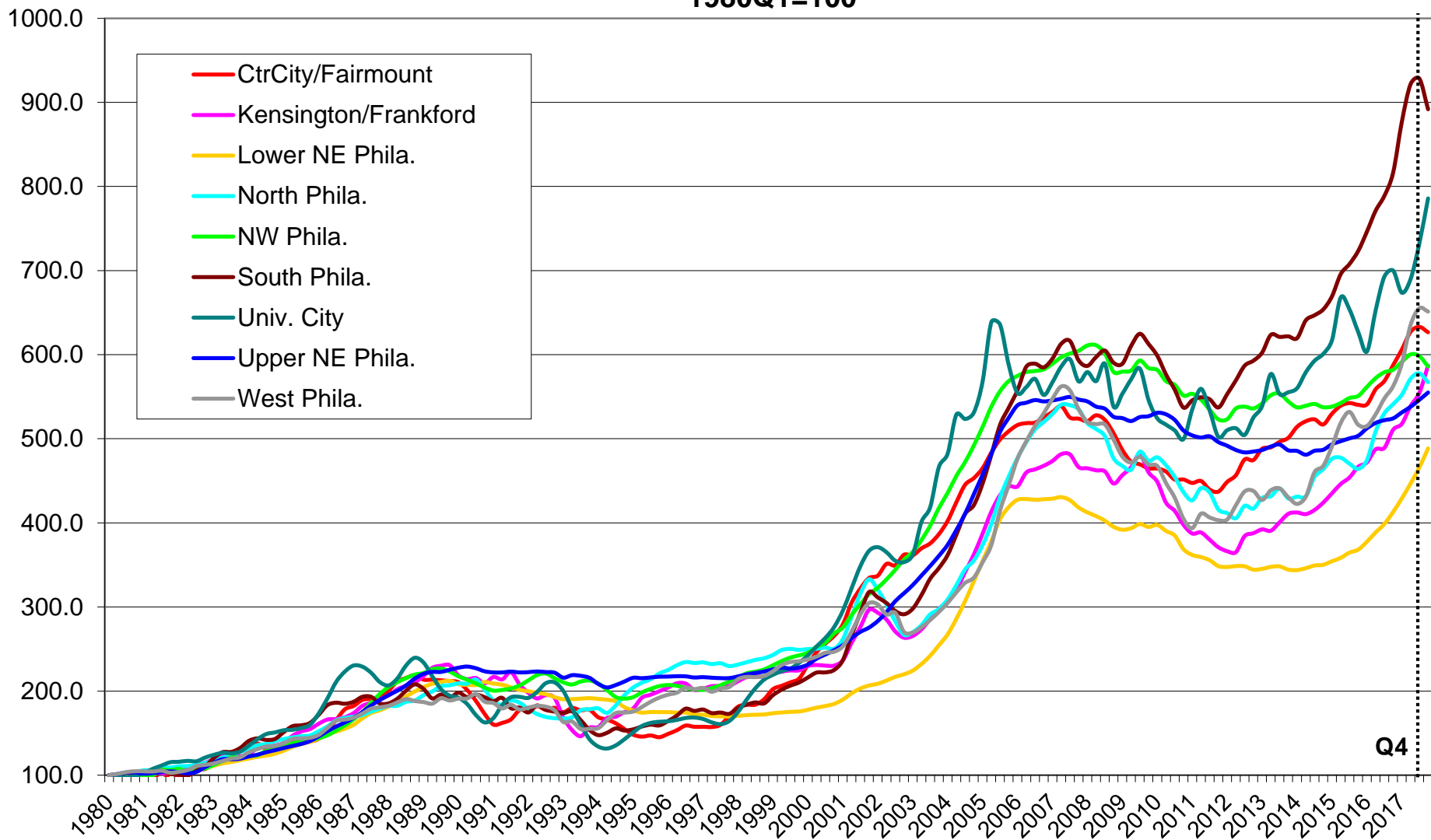
YoY House Price Change (%) 1987-2017: Philadelphia v. 10-City Composite



*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.

Philadelphia House Price Indices by Neighborhood: 1980-2017

1980Q1=100



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

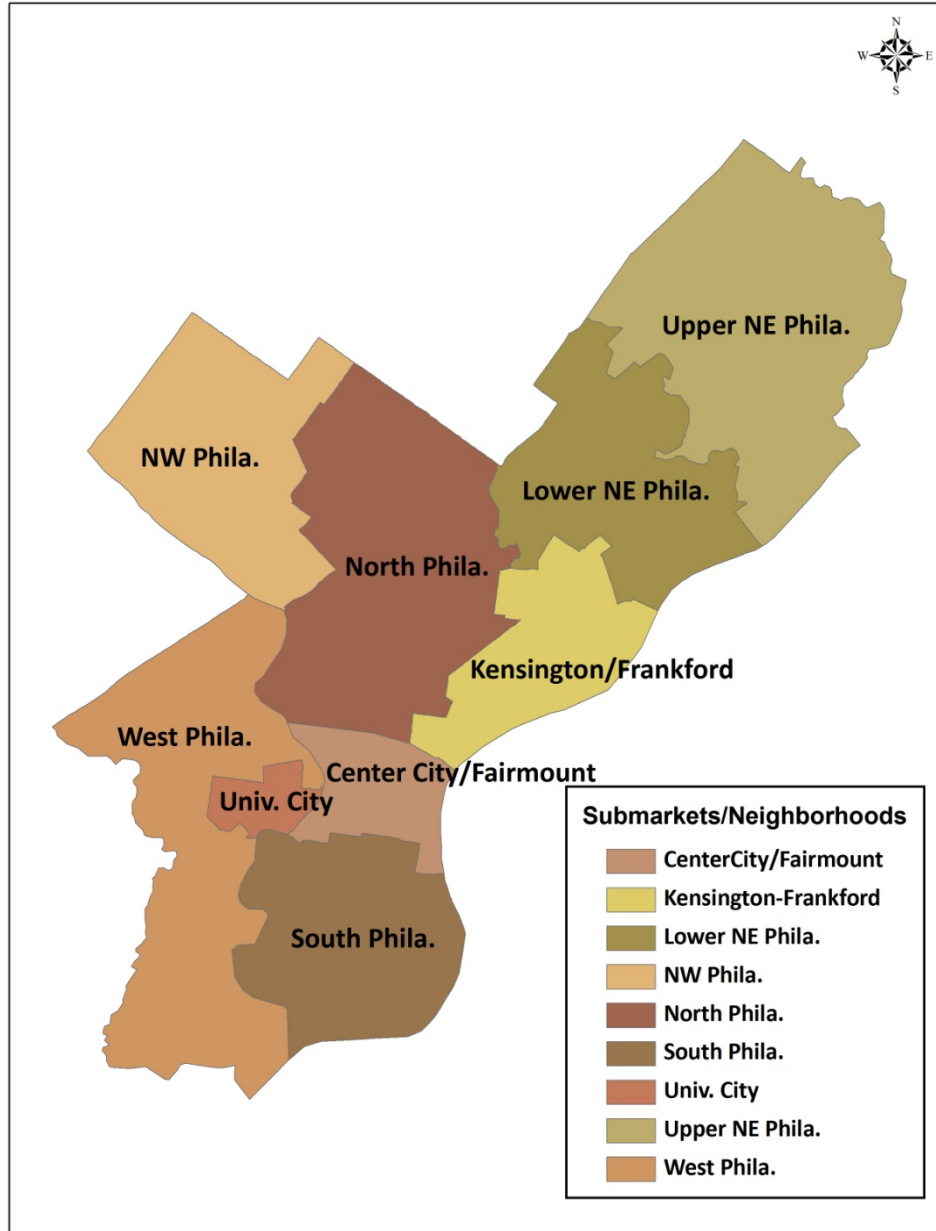
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Philadelphia House Price Appreciation Rates by Neighborhood

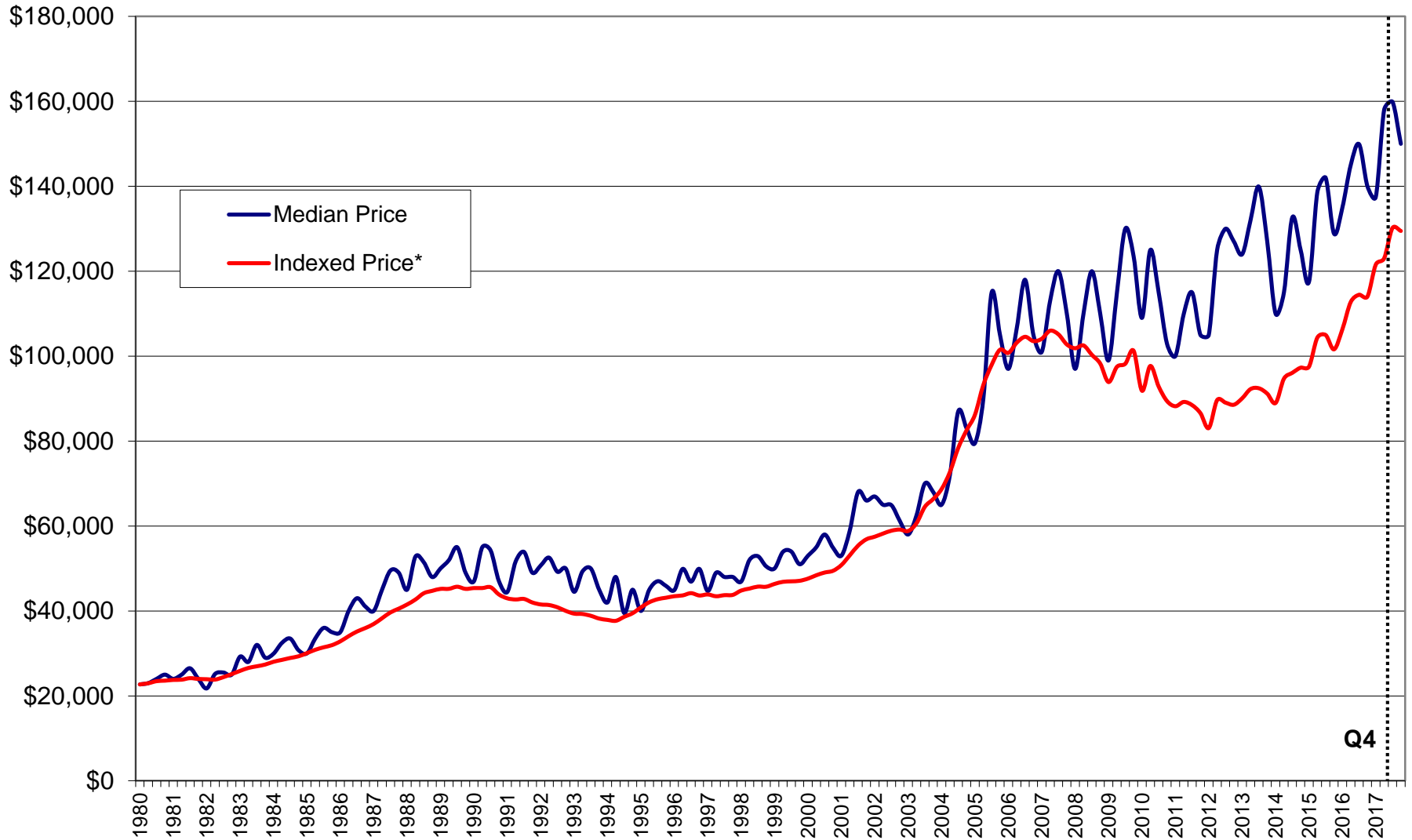
Period	Center City/ Fairmount	Kensington /Frankford	Lower NE Phila.	North Phila.	NW Phila.	South Phila.	Univ. City	Upper NE Phila.	West Phila.
38-year	183.5%	177.0%	158.6%	173.6%	176.8%	218.8%	206.2%	171.4%	187.4%
10-year	17.9%	23.0%	15.6%	5.8%	-3.1%	40.8%	32.4%	1.5%	19.7%
1-Year	6.4%	13.9%	16.8%	4.7%	0.6%	8.8%	11.6%	5.7%	14.6%
1-Quarter	-1.0%	5.7%	4.8%	-1.8%	-2.1%	-4.0%	7.1%	1.6%	-0.6%

This table gives the total % change in average house values by neighborhood, through 2017 Q4, from different starting points in time.

Philadelphia Submarket Boundaries



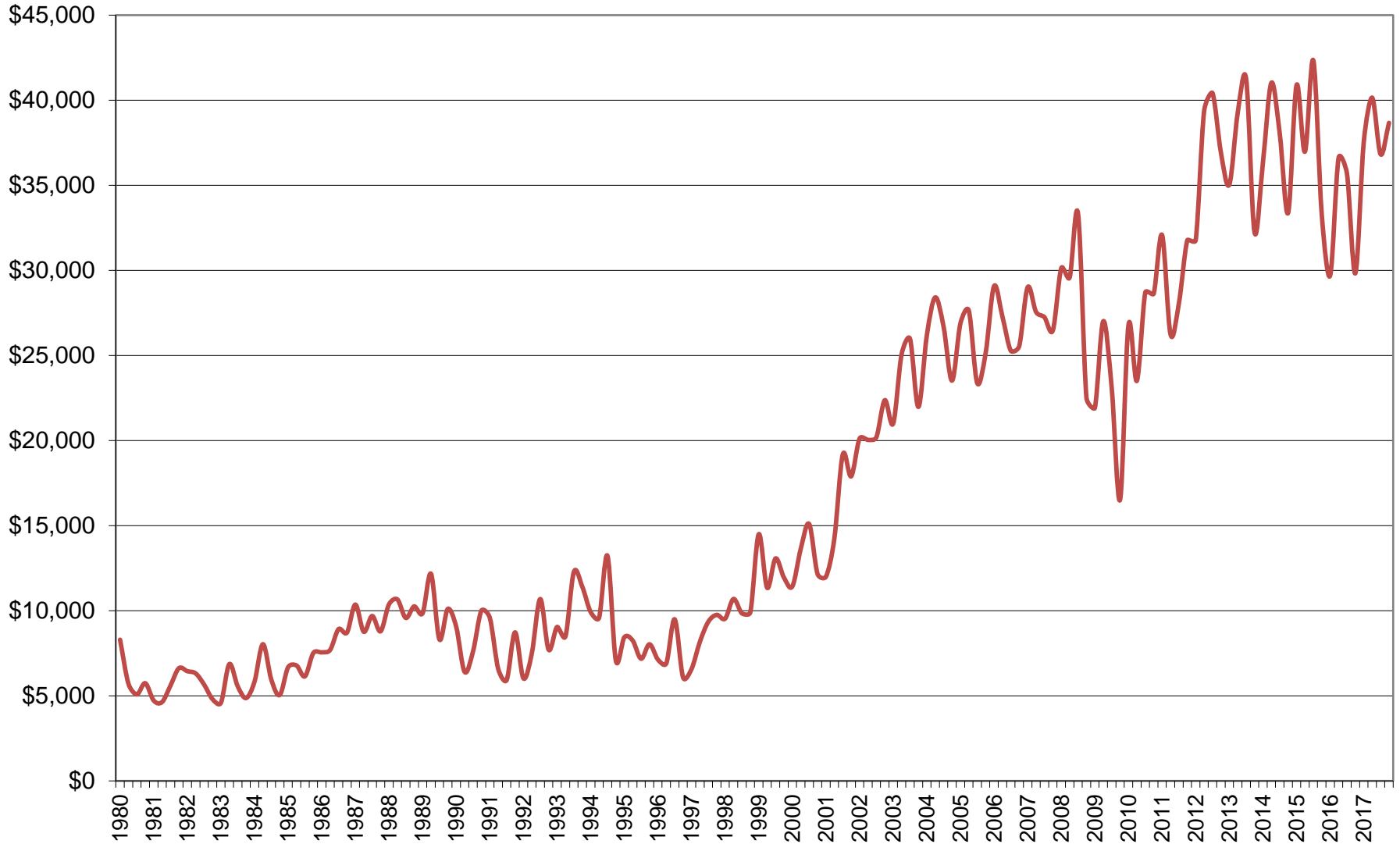
Median Philadelphia House Price v. Indexed Philadelphia House Price 1980-2017



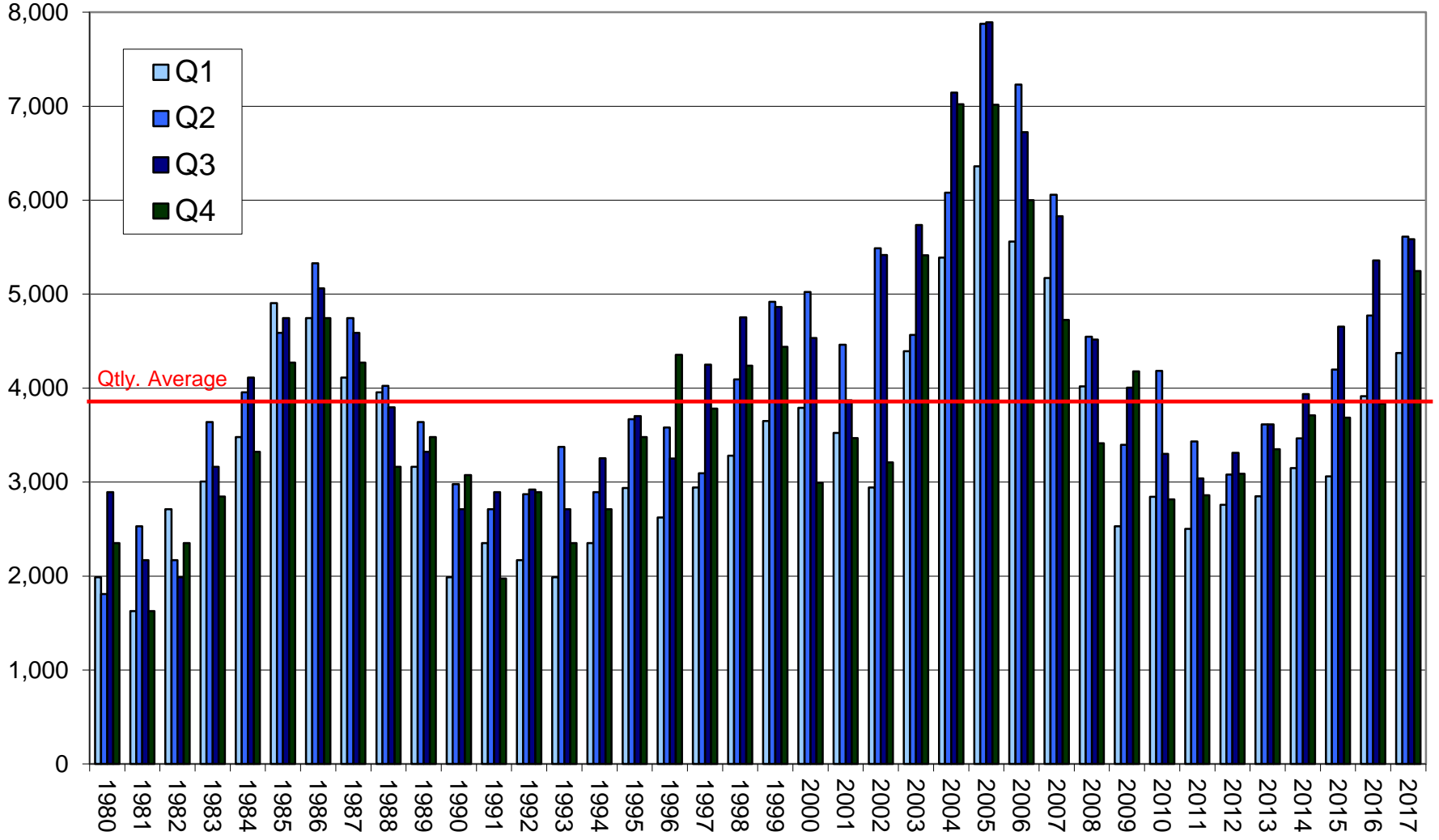
* Empirically estimated by Kevin C. Gillen, PhD

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Average House Price Minus Median House Price: 1980-2017

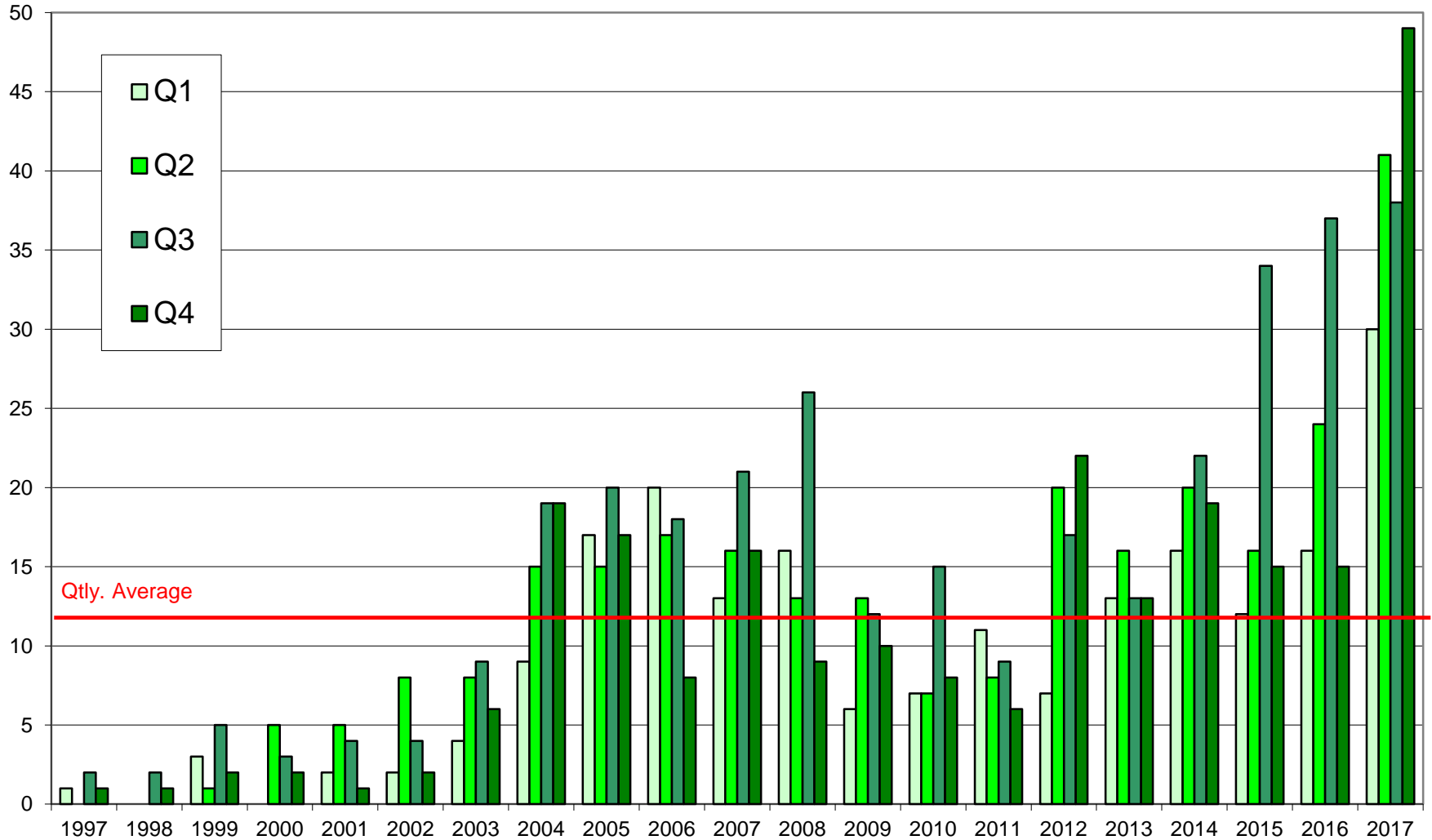


Number of Philadelphia House Sales* per Quarter: 1980-2017



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

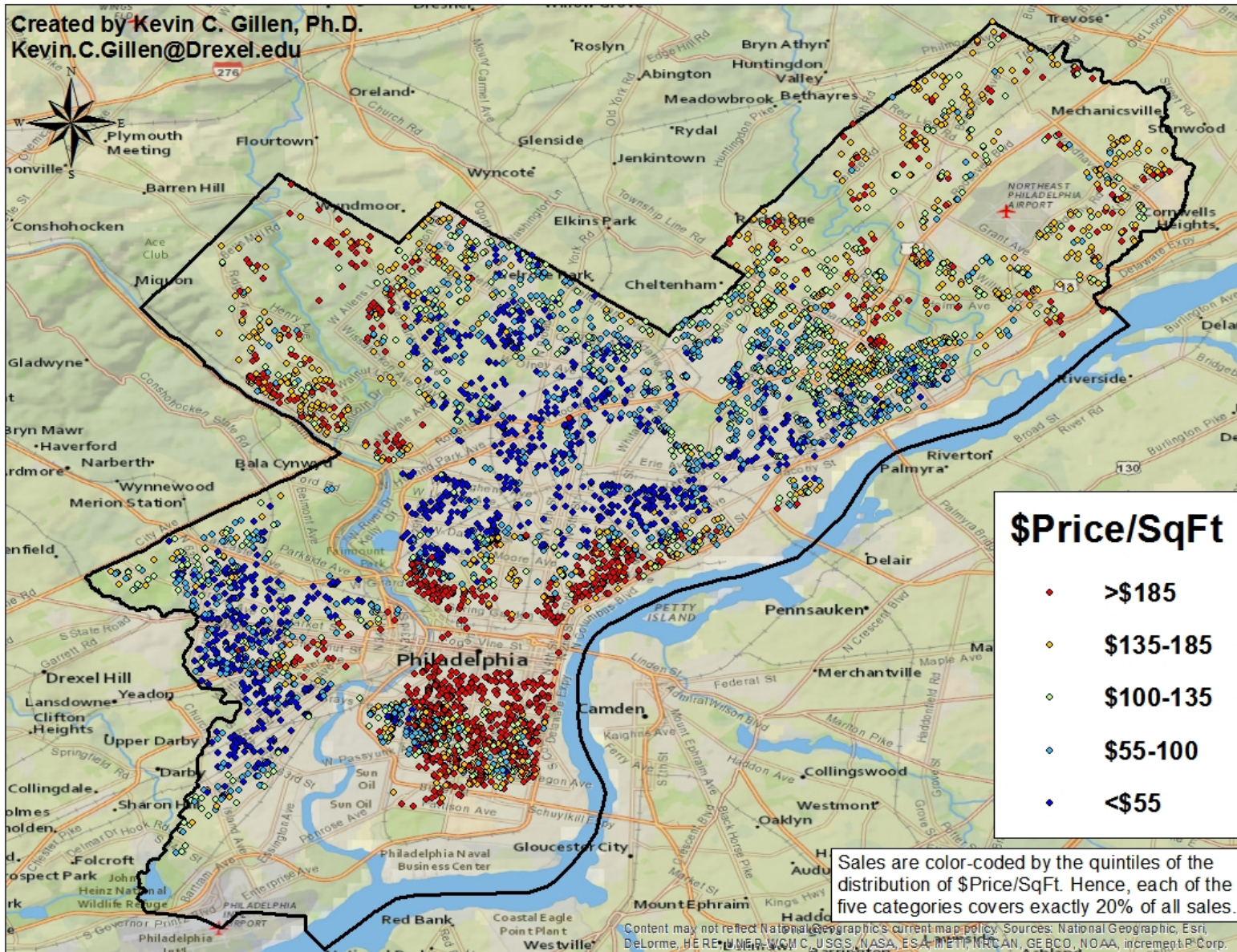
Number of Philadelphia Home Sales* per Quarter with Price >=\$1 Million: 1997-2017



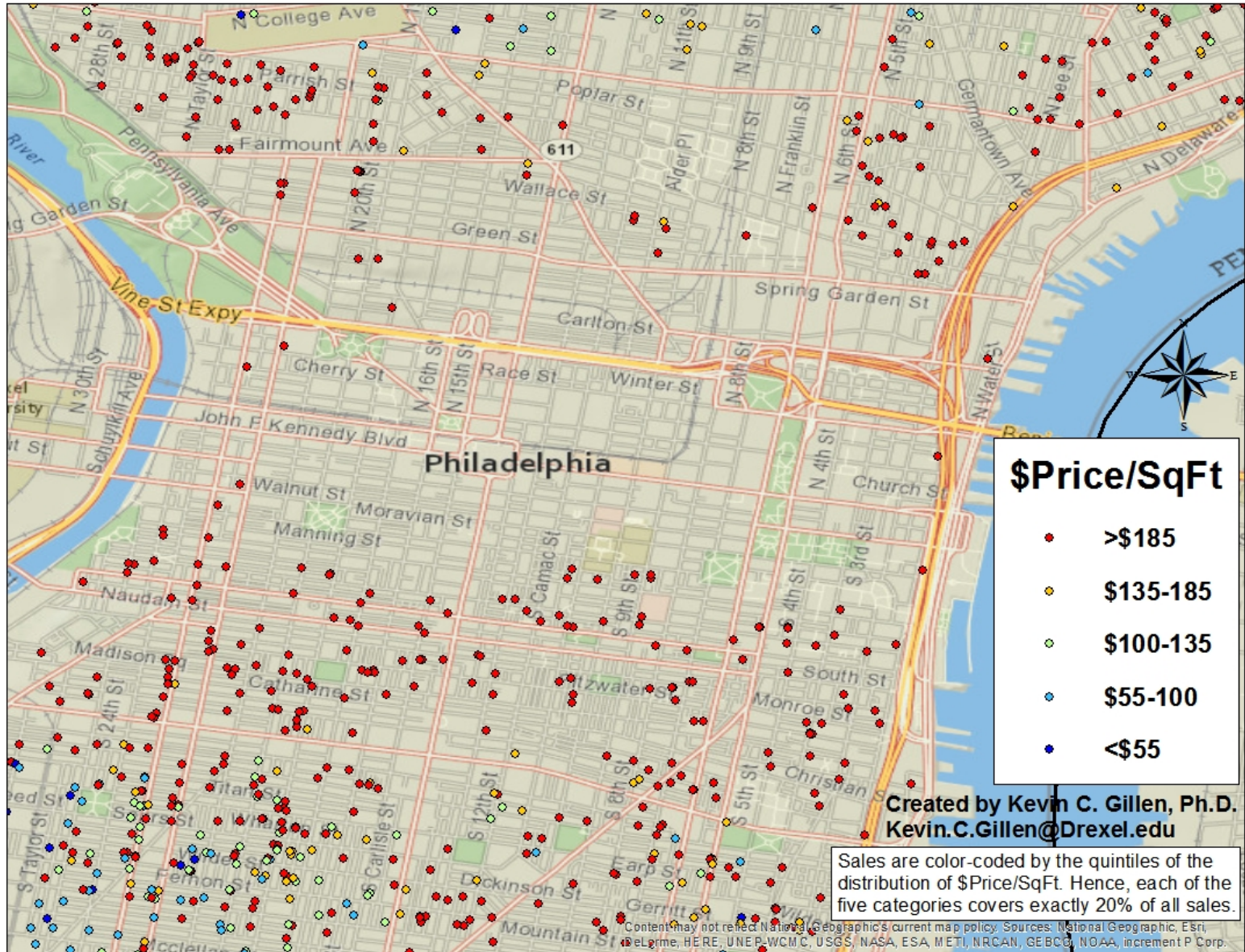
*Only arms-length transactions between private sector entities were included in these numbers.

Philadelphia House Sales in 2017 Q4

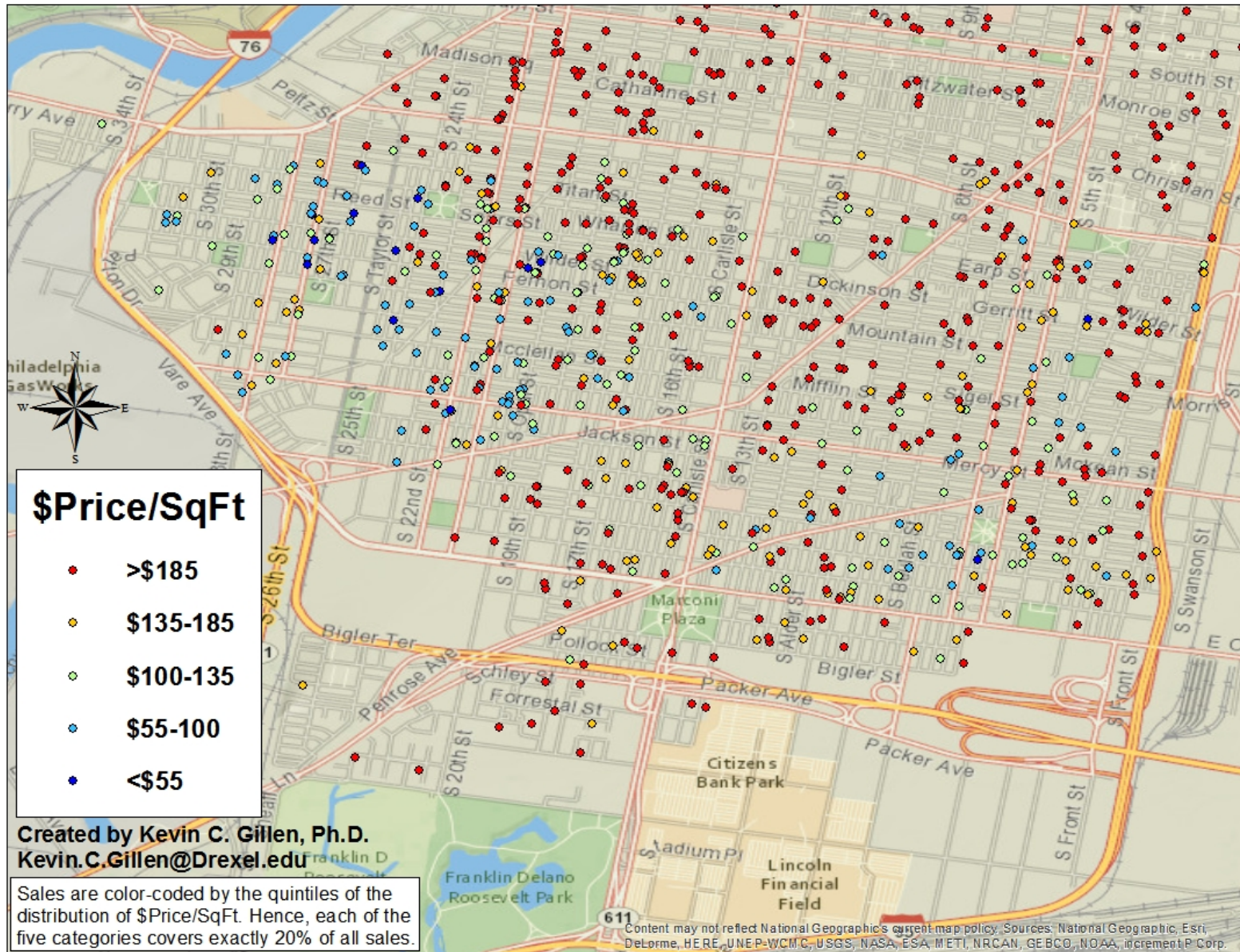
Created by Kevin C. Gillen, Ph.D.
Kevin.C.Gillen@Drexel.edu



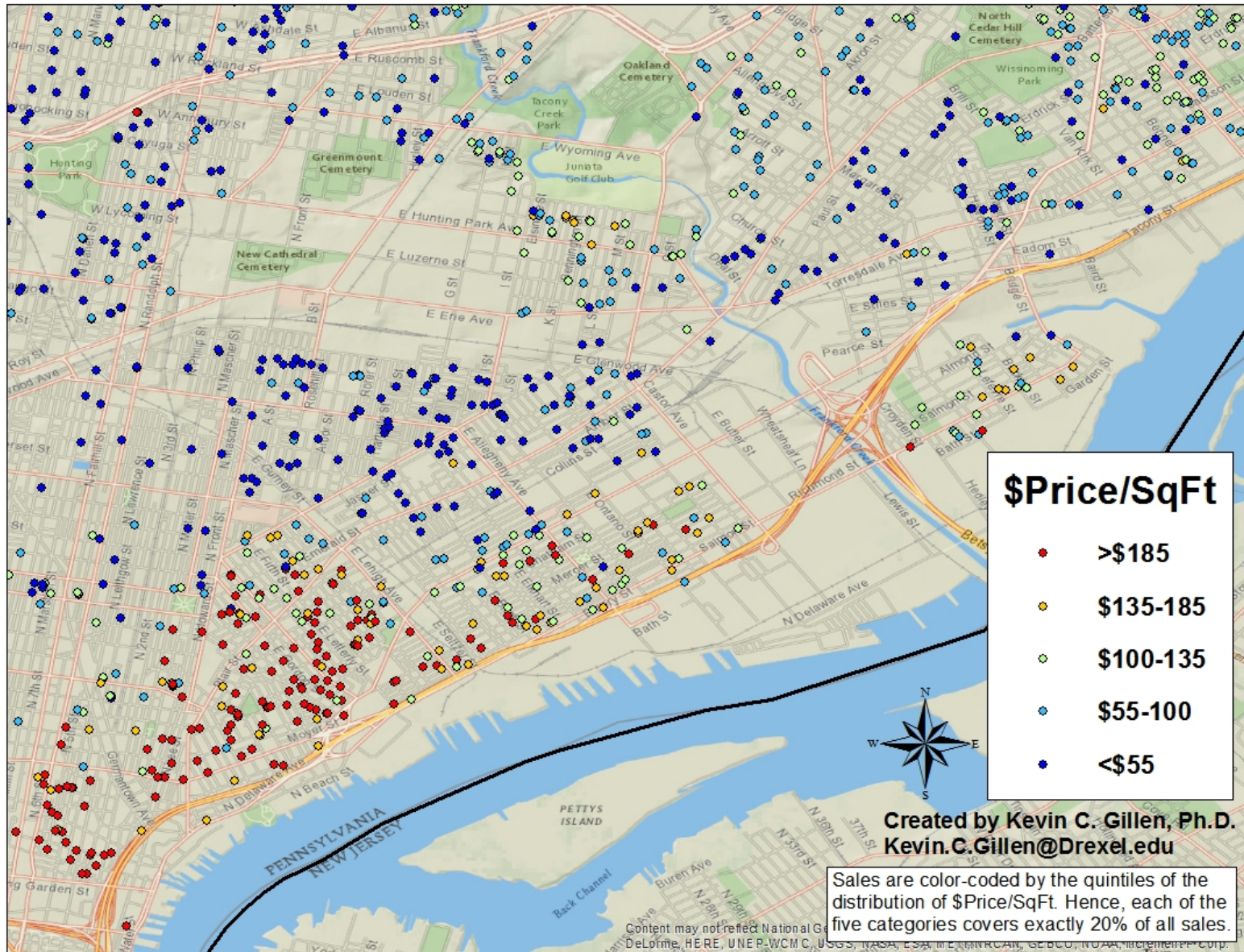
Center City House Sales in 2017 Q4



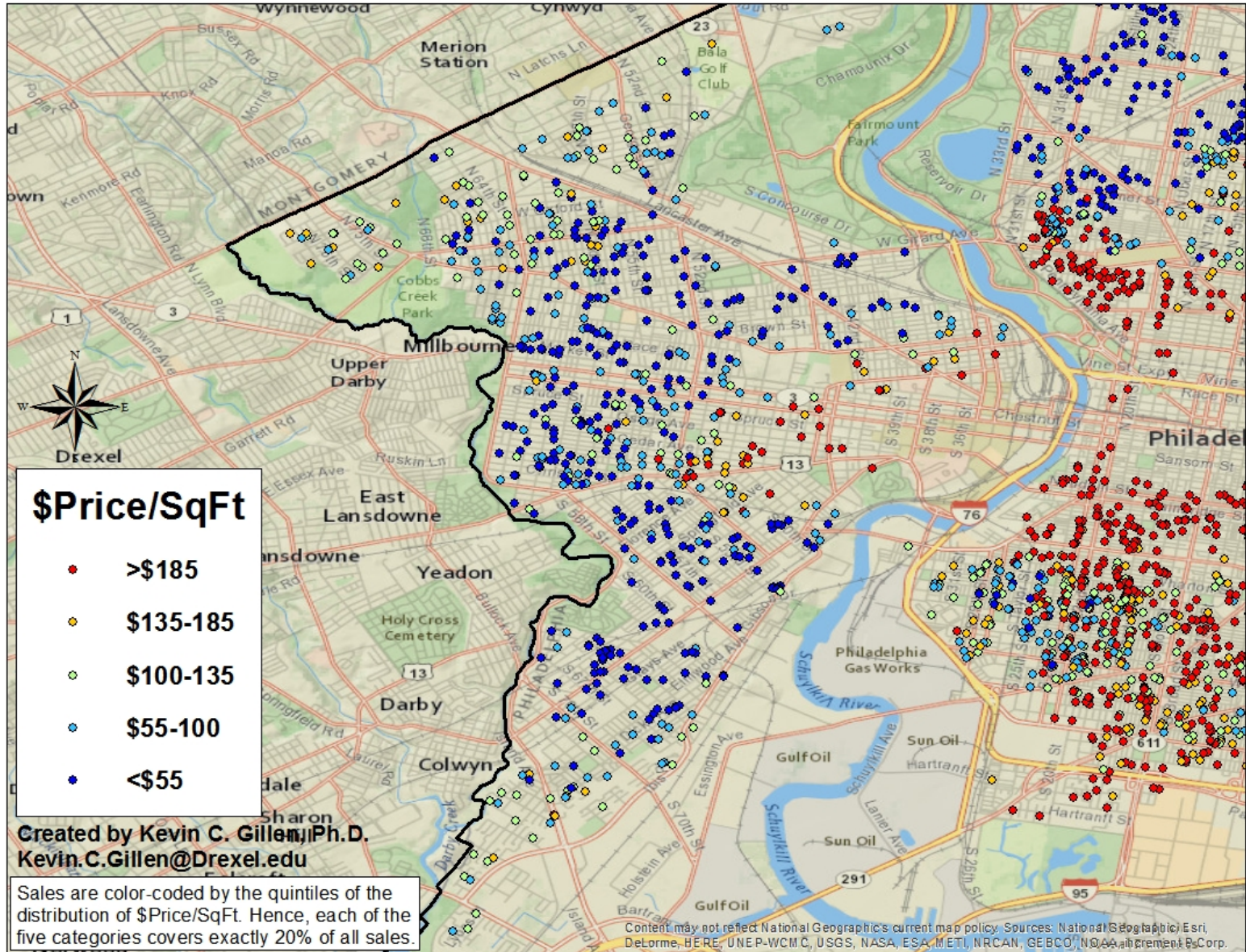
South Philadelphia House Sales in 2017 Q4



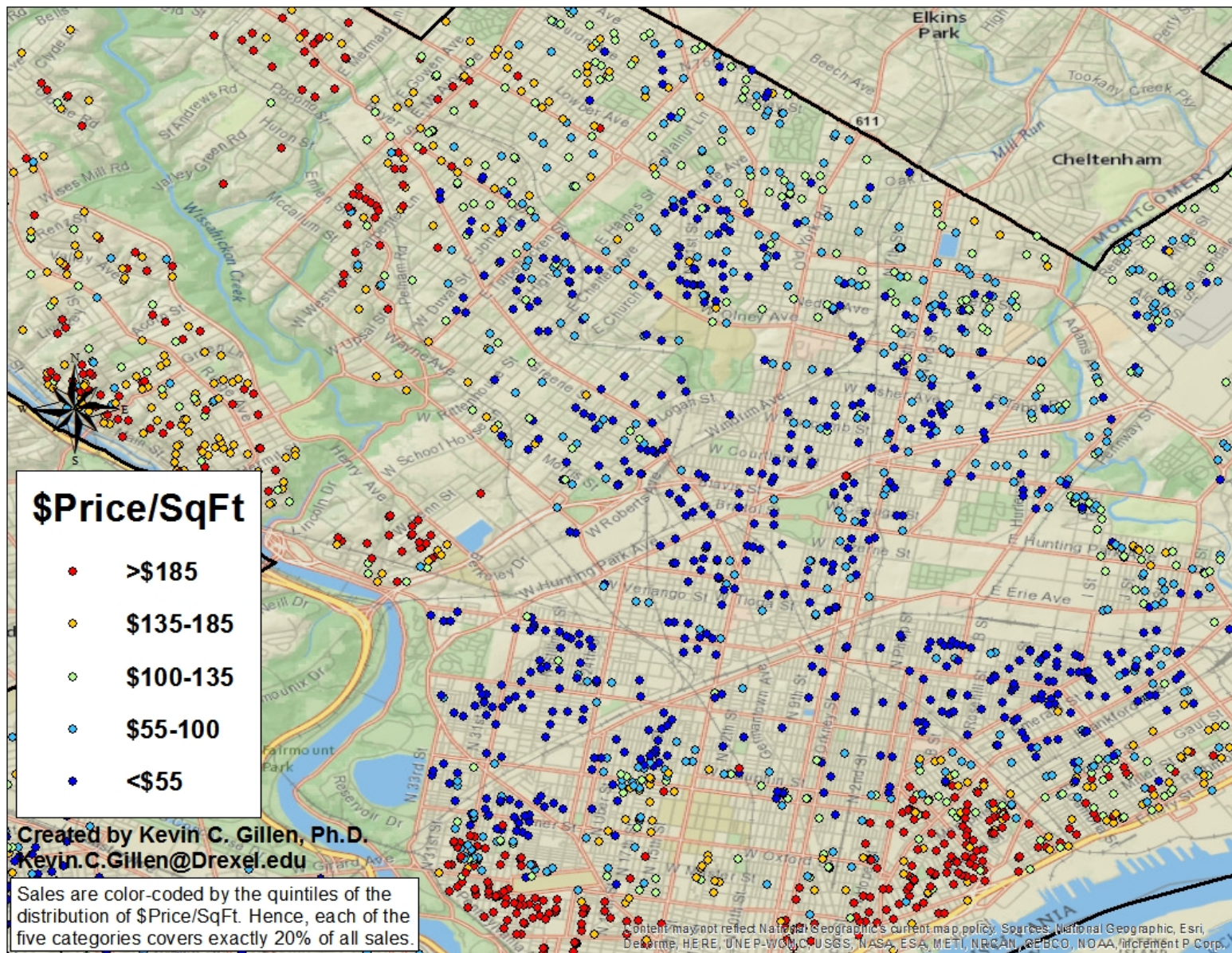
Kensington/Frankford House Sales in 2017 Q4



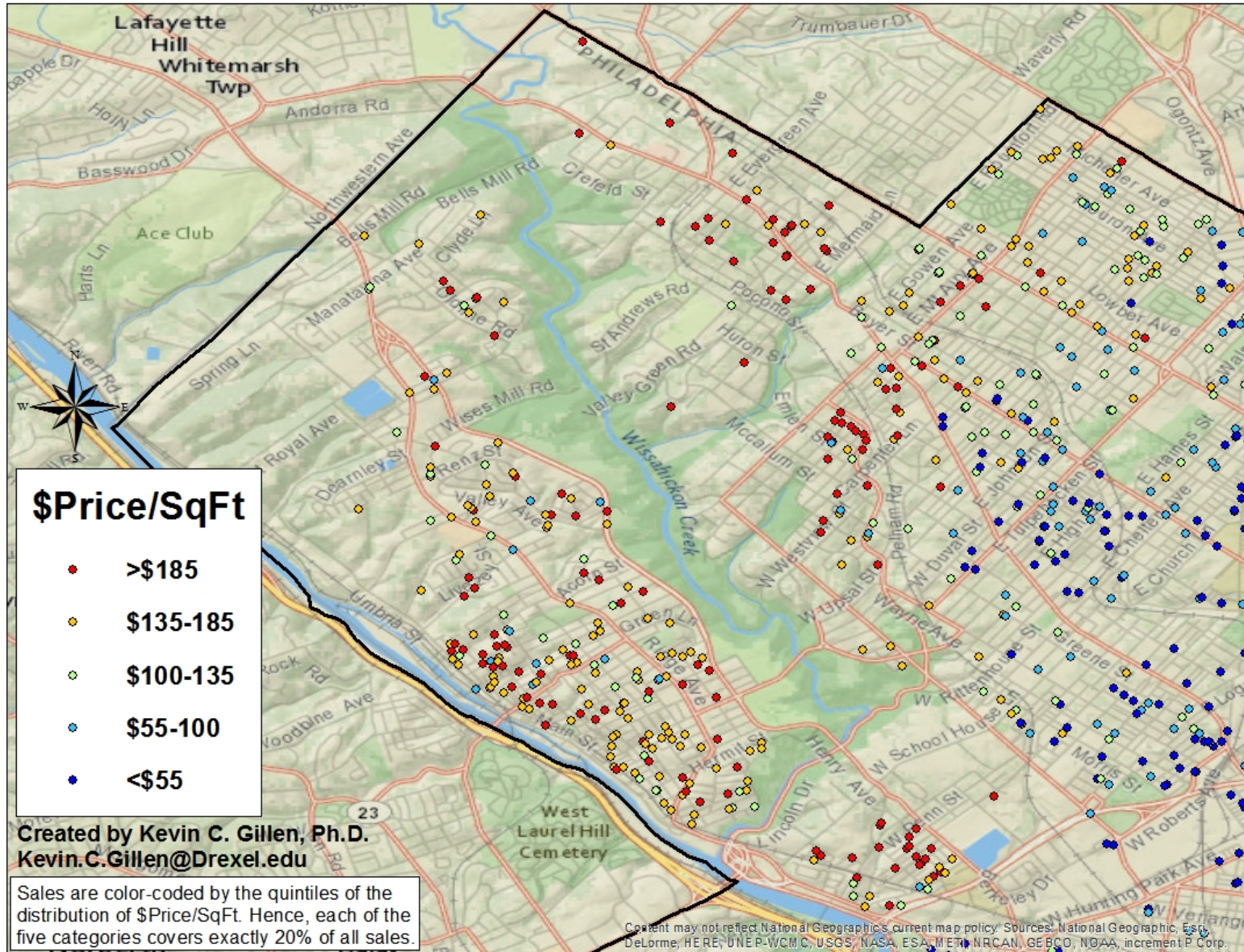
West Philadelphia House Sales in 2017 Q4



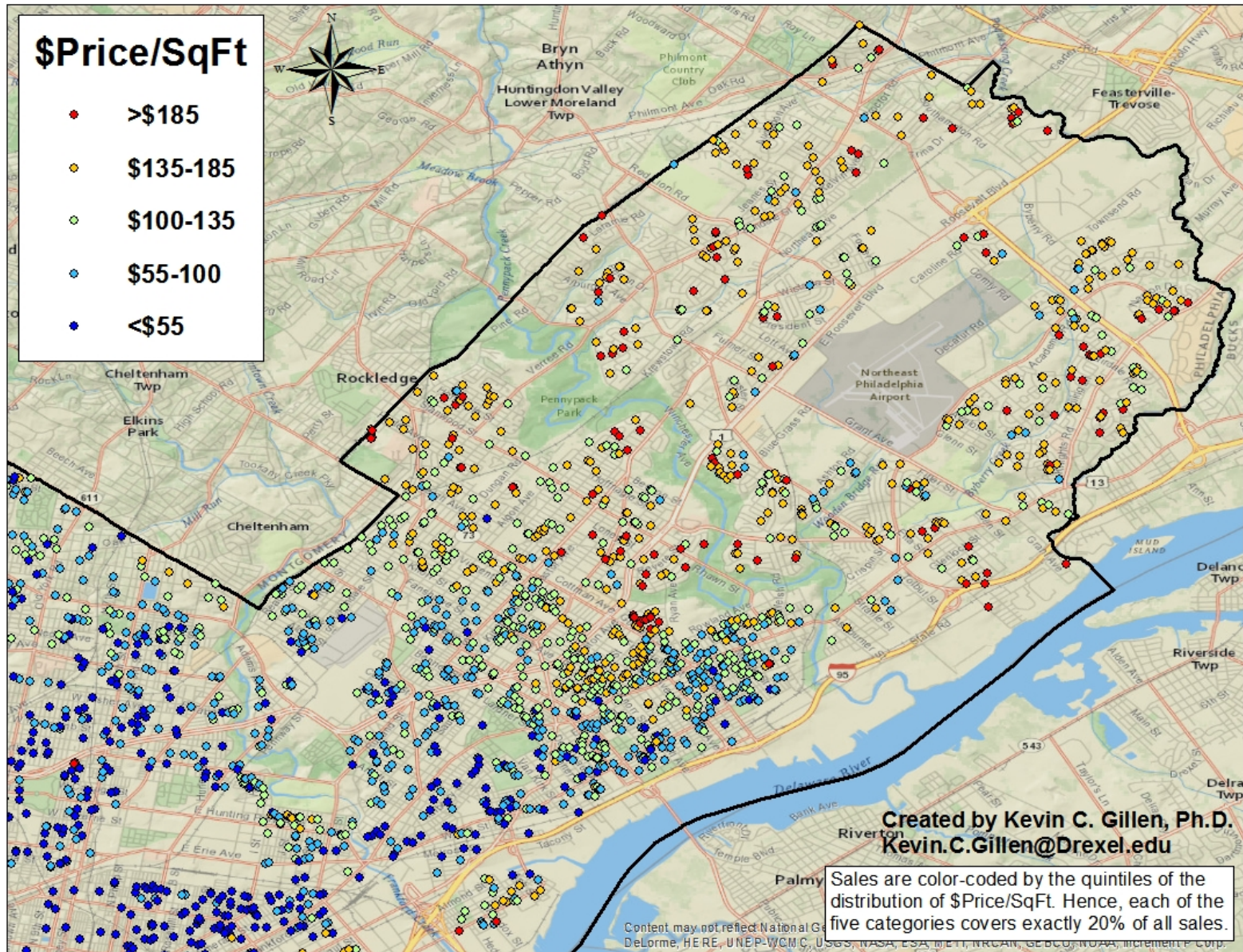
North Philadelphia House Sales in 2017 Q4



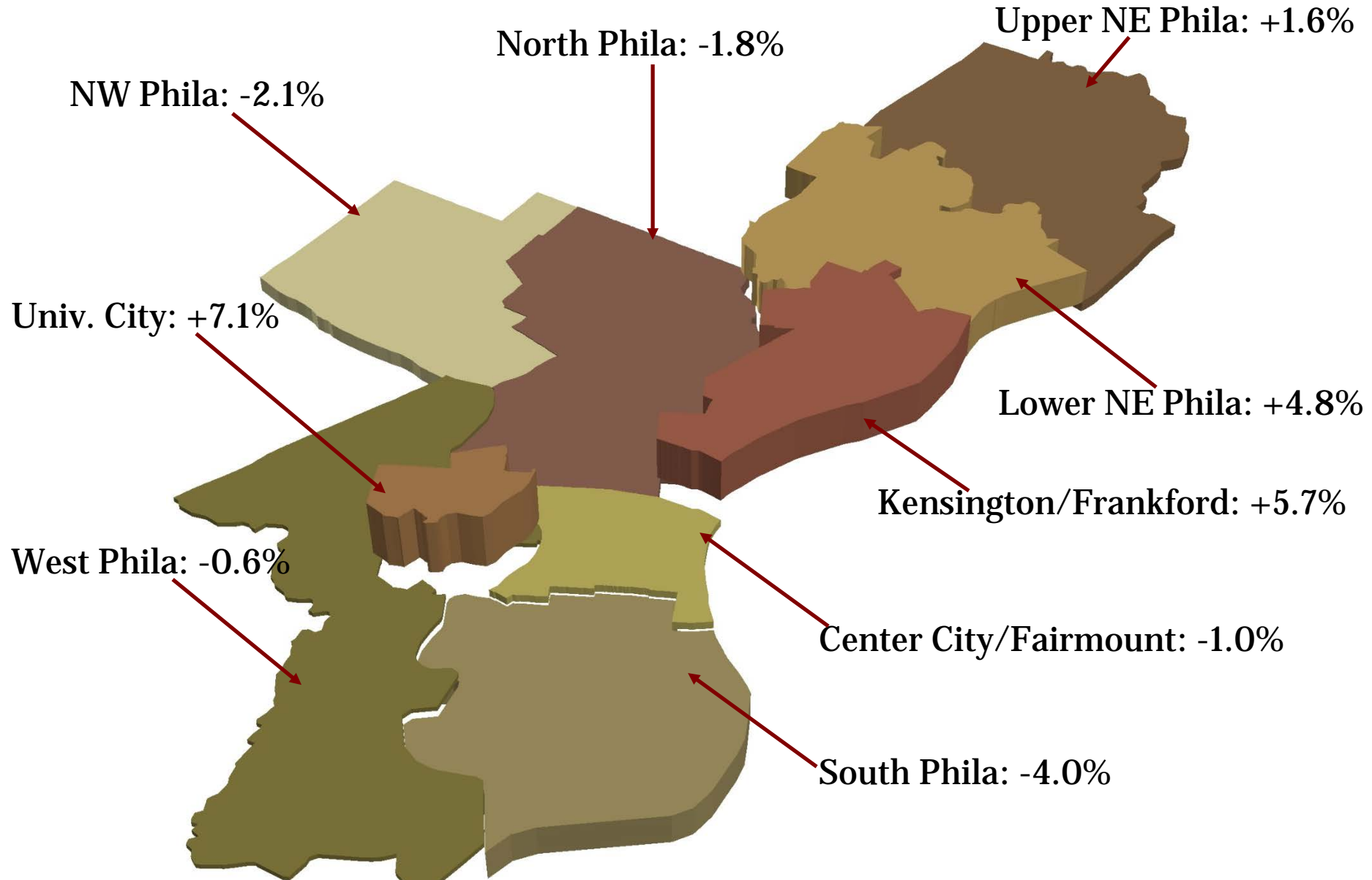
Northwest Philadelphia House Sales in 2017 Q4



Northeast Philadelphia House Sales in 2017 Q4



2017 Q4 House Price Rate of Change by Neighborhood

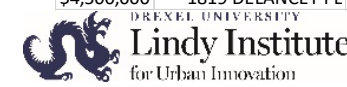


Note: Each neighborhood is extruded by its average change in house values during 2017 Q4 in order to reflect its growth (or depreciation) rate relative to other neighborhoods.

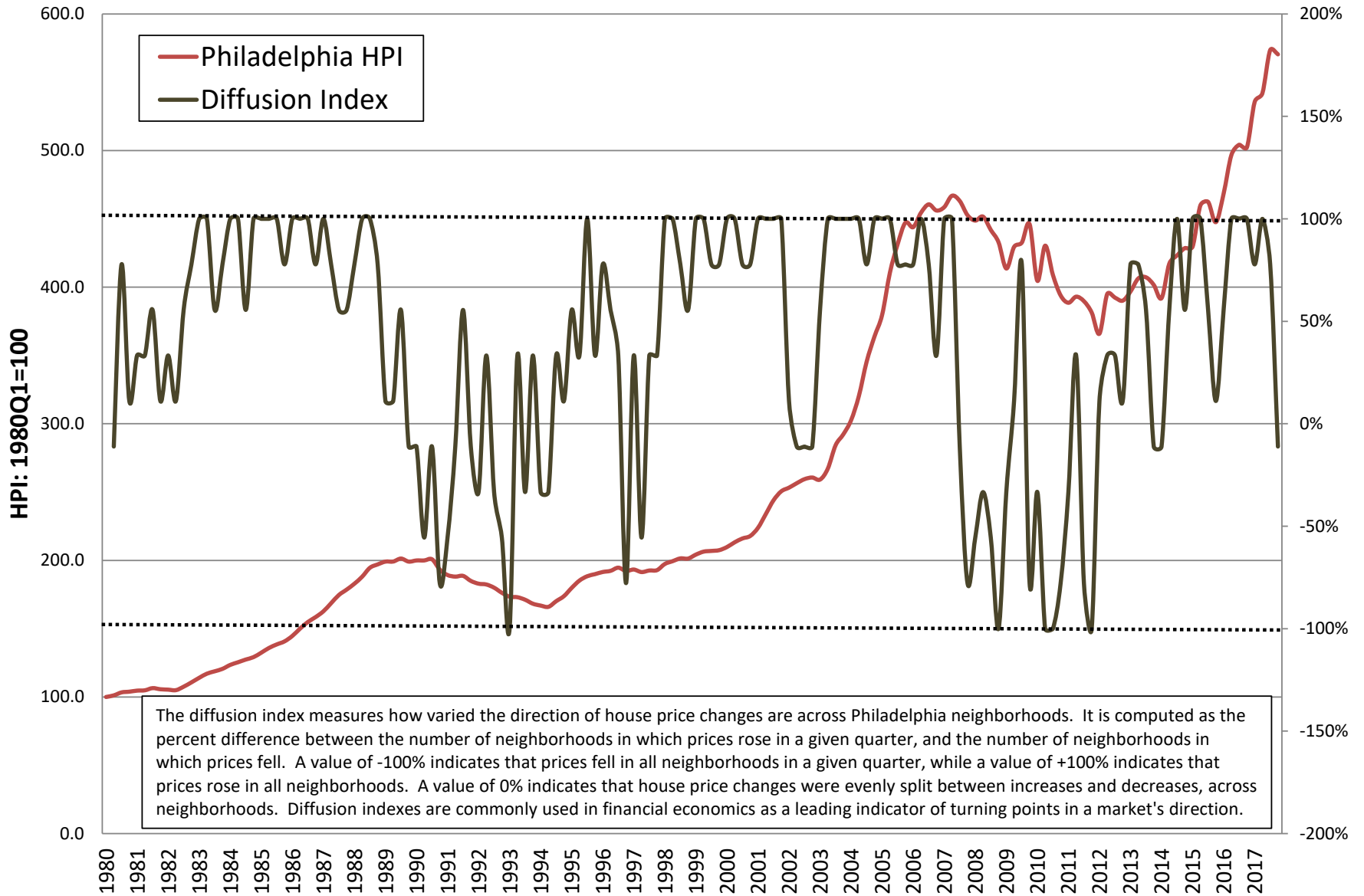
+ \$1 Million Dollar House Sales in 2017 Q4



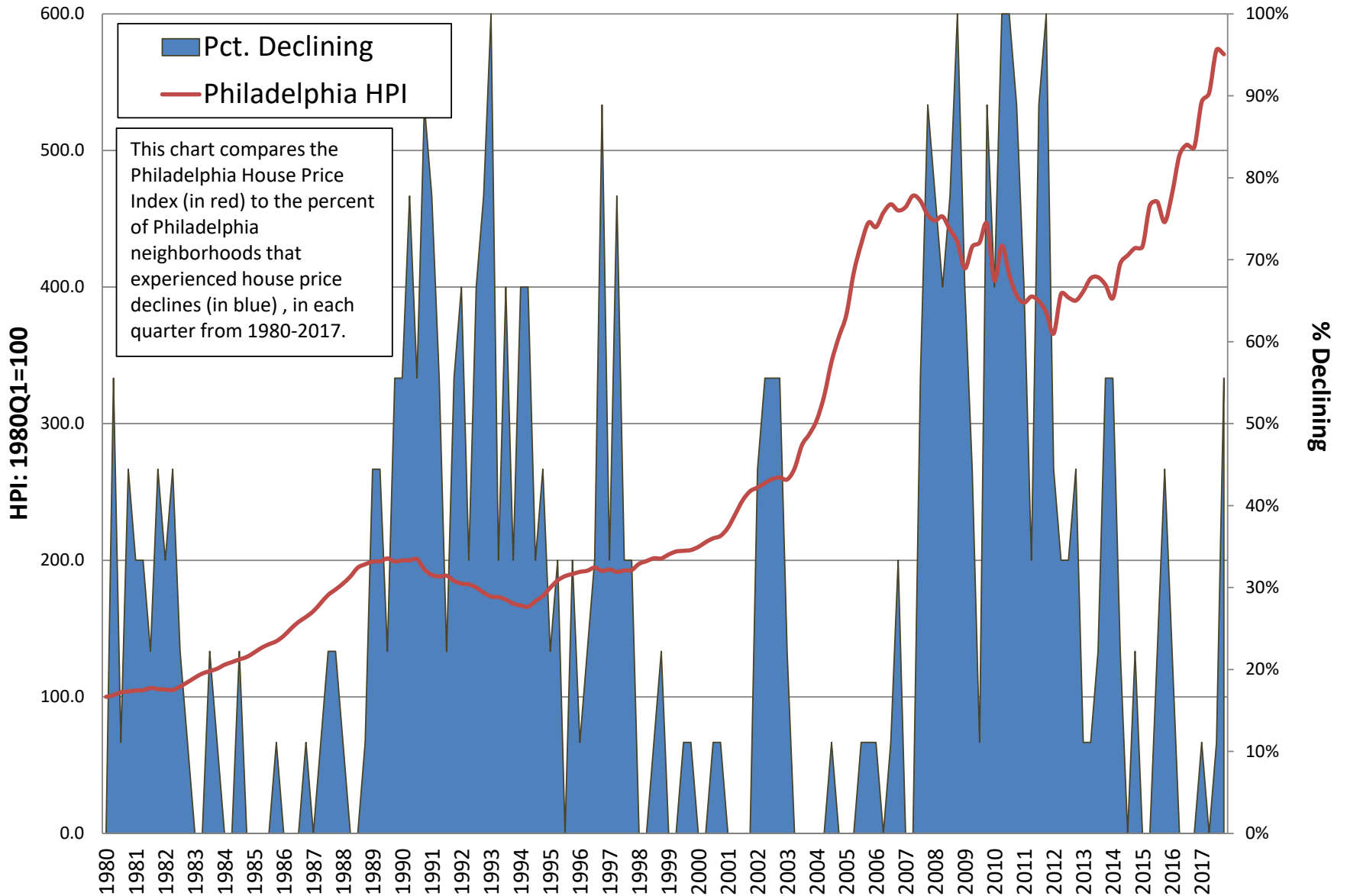
PRICE	ADDRESS
\$1,025,000	313 PEMBERTON ST
\$1,040,000	1431 POPLAR ST
\$1,050,000	861 N LEITHGOW ST
\$1,050,000	2013 NORTH ST
\$1,075,000	322 LAWRENCE CT
\$1,100,000	826 S FRONT ST
\$1,100,000	321 PINE ST
\$1,100,000	2011 NORTH ST
\$1,125,000	1738 NAUDAIN ST
\$1,155,000	408 S 22ND ST
\$1,155,000	3602 POWELTON AVE
\$1,160,000	1223 N 07TH ST
\$1,165,000	2403 SPRUCE ST
\$1,175,000	2203 SAINT JAMES PL
\$1,200,000	222 FITZWATER ST
\$1,200,000	301 DELANCEY ST
\$1,215,000	2530 PINE ST
\$1,223,094	200 WHITEMARSH ST
\$1,280,000	523 DELANCEY ST
\$1,300,000	310 REX AVE
\$1,360,000	426 PINE ST
\$1,367,000	16 W BELLS MILL RD
\$1,375,000	7800 NAVAJO ST
\$1,400,000	262 S 03RD ST
\$1,400,000	529 DELANCEY ST
\$1,406,500	1334 KATER ST
\$1,440,000	736 BAINBRIDGE ST
\$1,470,000	619 N 03RD ST
\$1,475,000	738 BAINBRIDGE ST
\$1,490,000	703 S 15TH ST
\$1,500,000	712 KATER ST
\$1,500,000	616 S 07TH ST
\$1,500,000	1427 BAINBRIDGE ST
\$1,500,000	1631 CHRISTIAN ST
\$1,500,000	2600 TASKER ST
\$1,550,000	517 W MERMAID LN
\$1,550,000	250 W HARTWELL LN
\$1,575,000	201 W GRAVERS LN
\$1,580,000	904 CLINTON ST
\$1,710,000	2128 DELANCEY PL
\$1,800,000	1522 PINE ST
\$1,903,000	115 BAINBRIDGE ST
\$2,000,000	907 PINE ST
\$2,000,000	138 N 22ND ST
\$2,168,000	130 DELANCEY ST
\$2,300,000	1834 DELANCEY PL
\$2,500,000	132 S FRONT ST
\$2,525,000	1833 DELANCEY PL
\$4,500,000	1819 DELANCEY PL



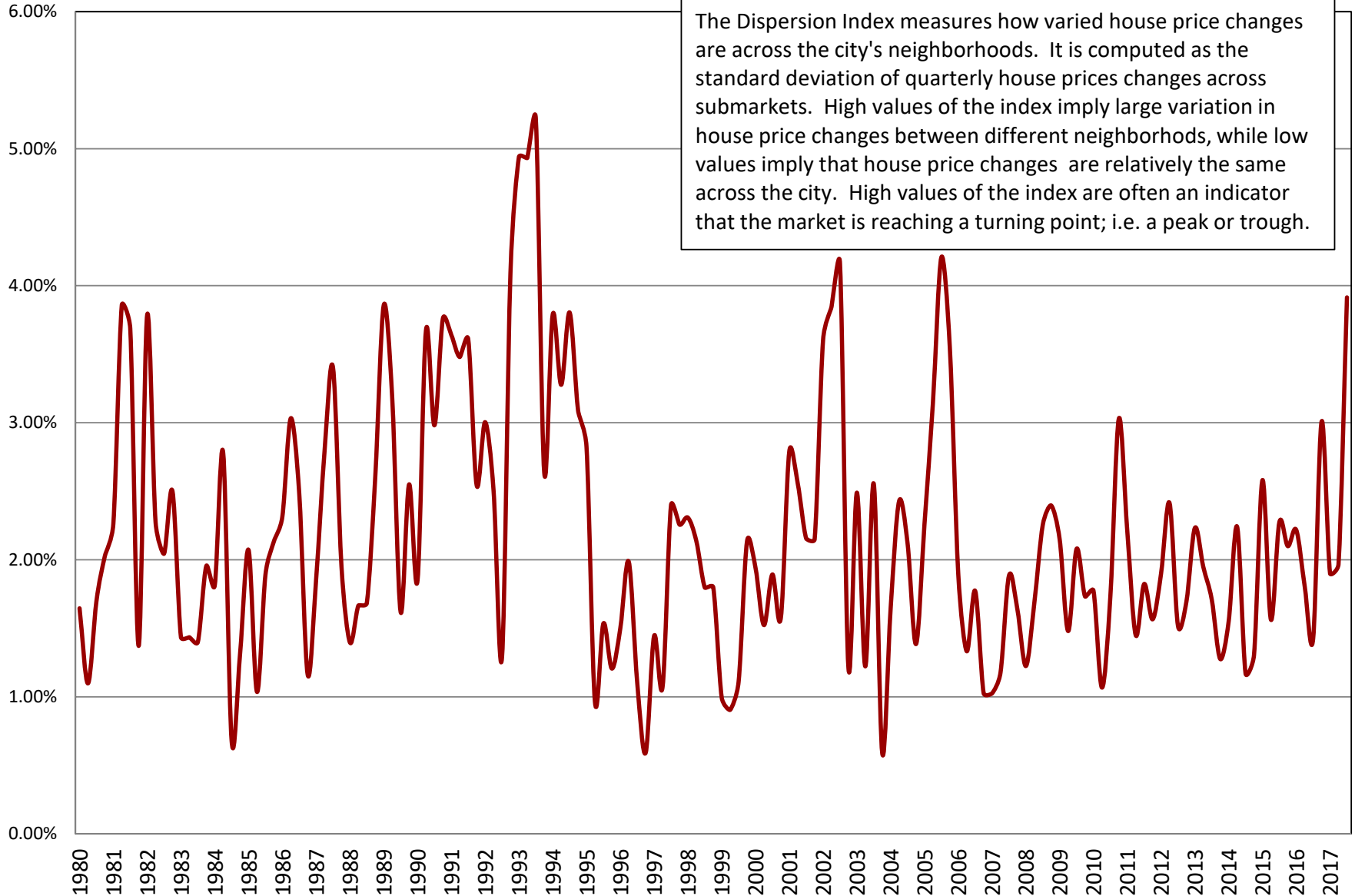
Philadelphia House Price Diffusion Index



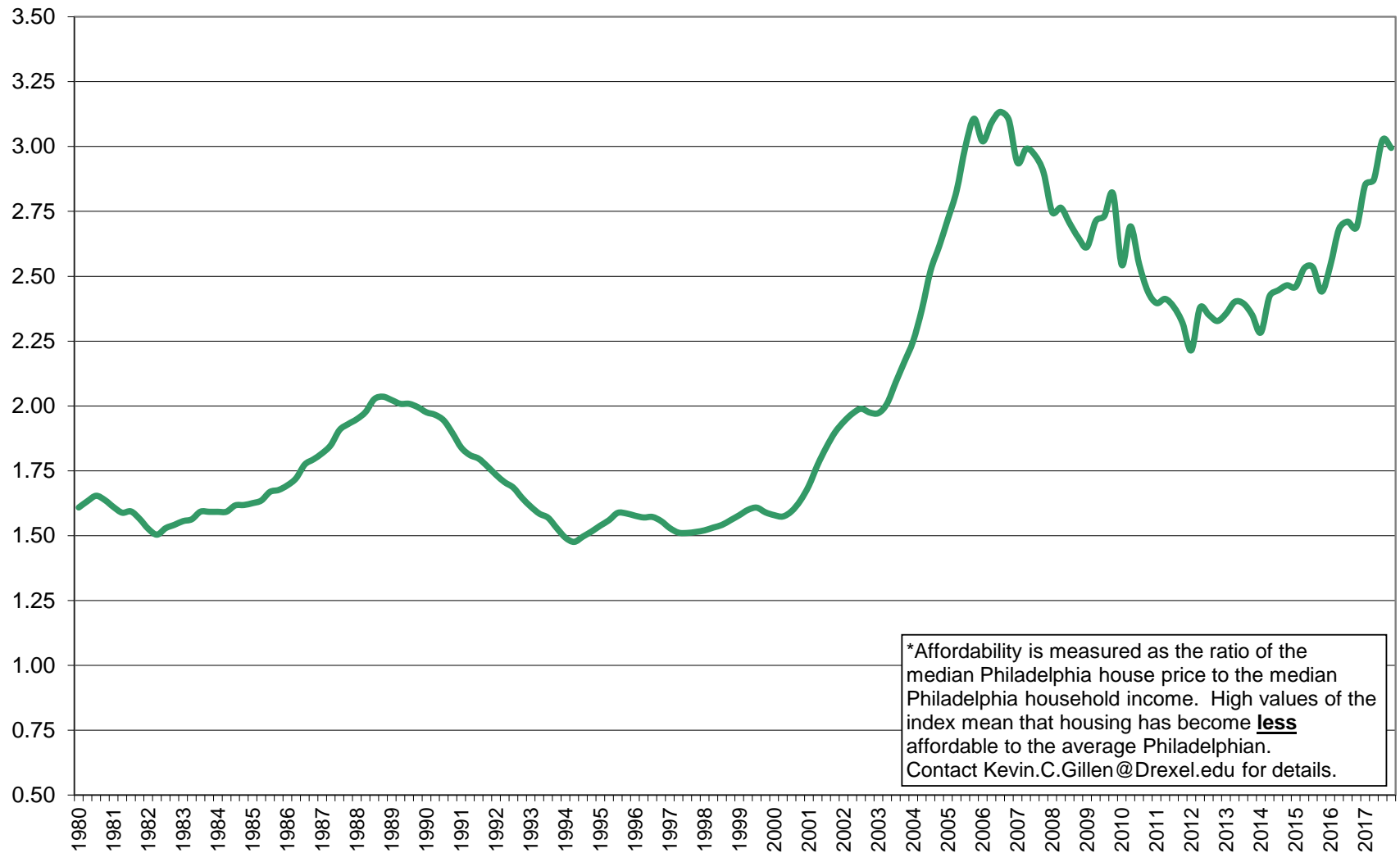
Philadelphia House Prices: Declines v. House Price Index



Dispersion Index of Philadelphia Housing

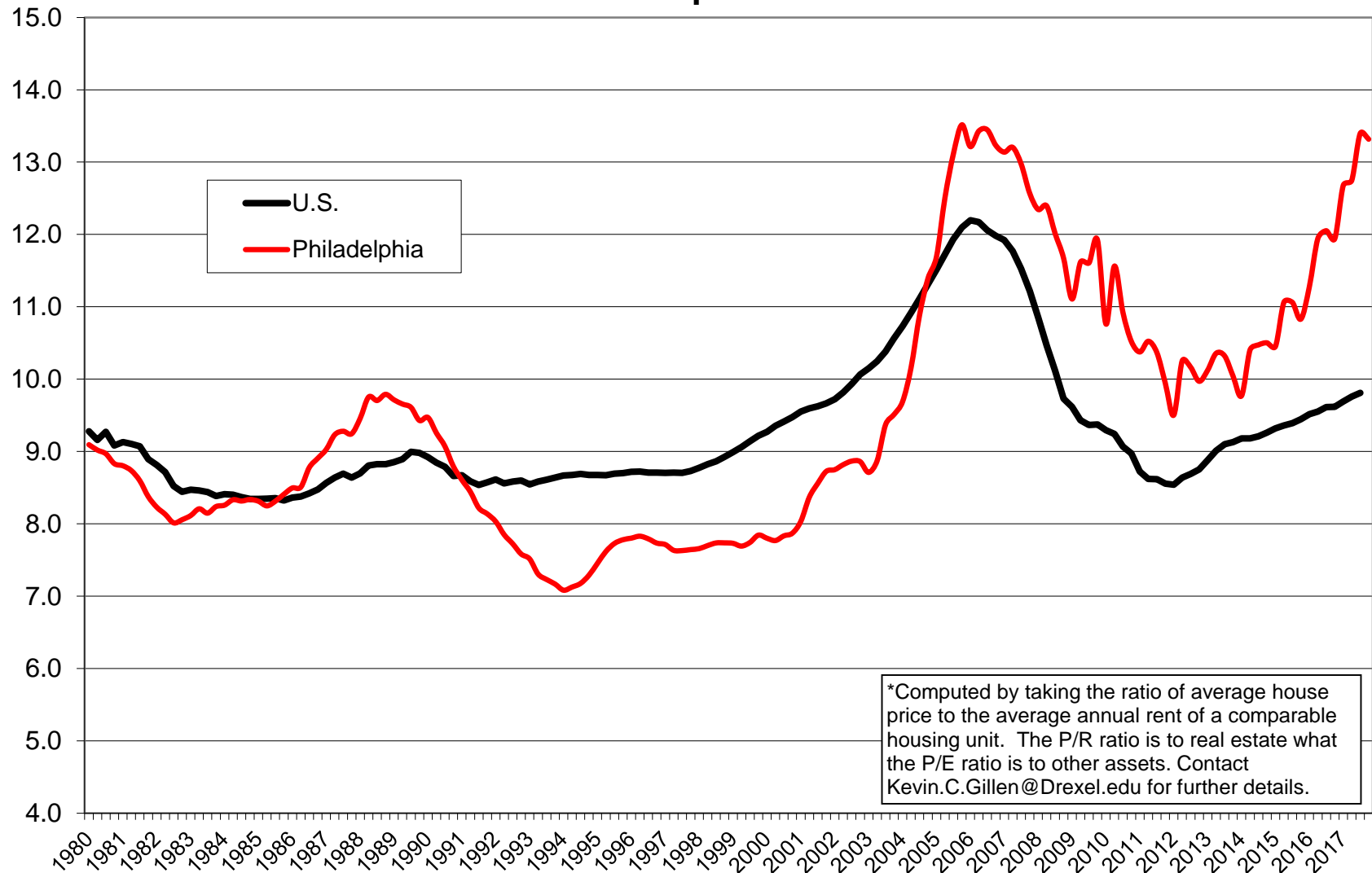


Philadelphia Housing Affordability* Index: 1980-2017



*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 for details.

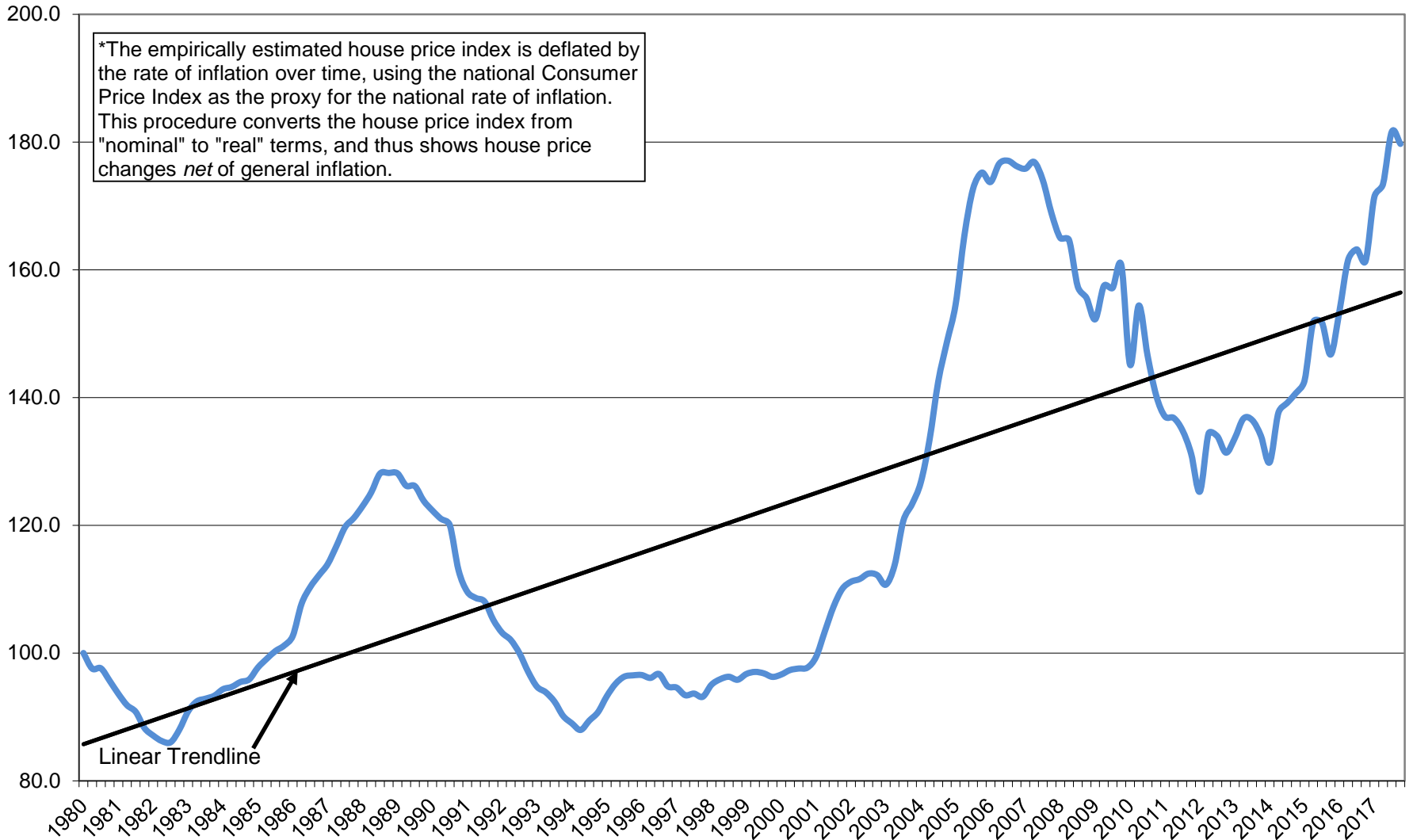
Average House Price-to-Rent Ratios*: 1980-2017 Philadelphia v. U.S.



*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 details.

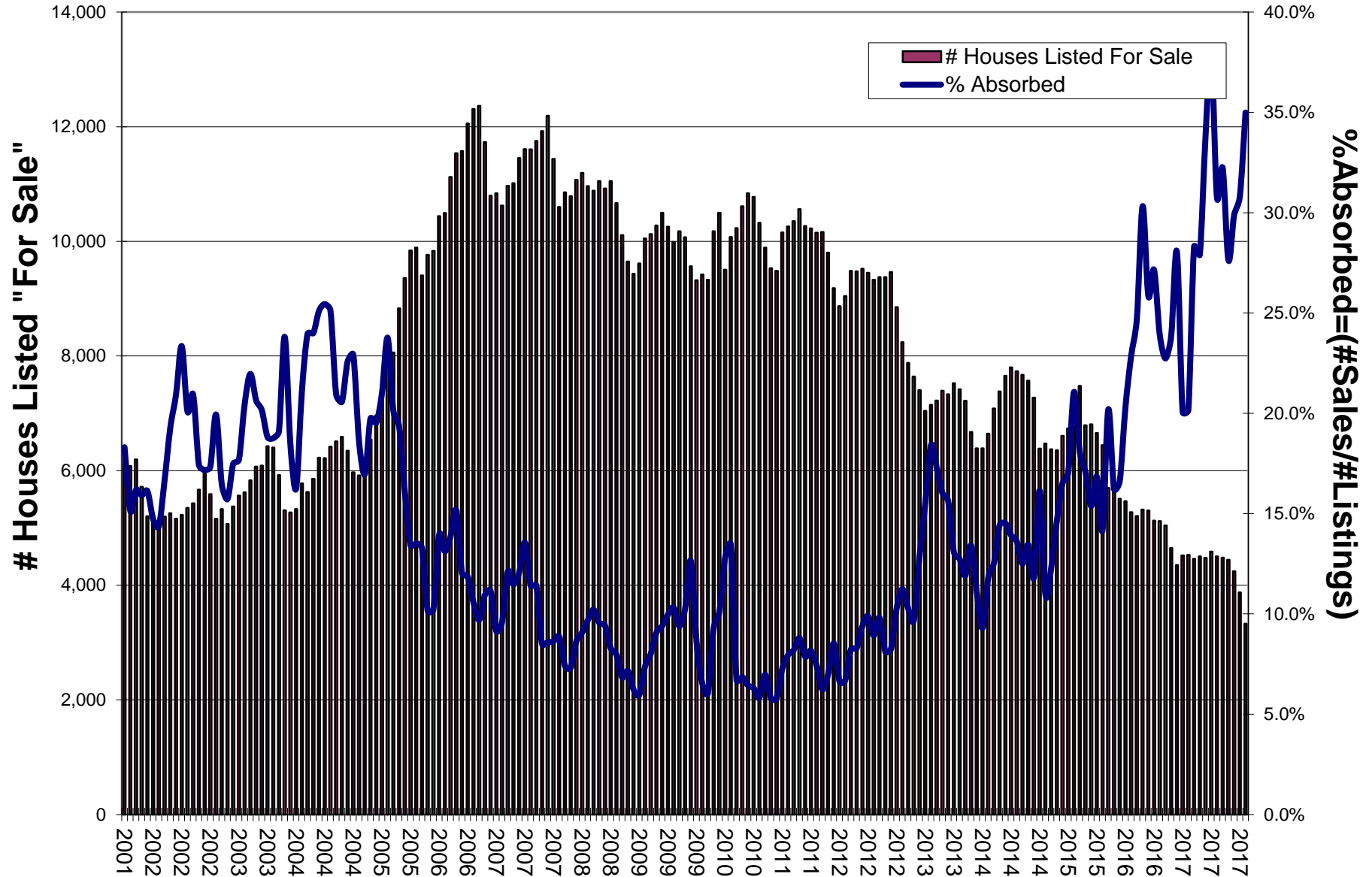
Inflation-Adjusted* Philadelphia House Price Index 1980-2017

1980Q1=100



Source: US Bureau of Labor Statistics

Philadelphia Houses Listed For Sale: Inventory v. Sales Rate



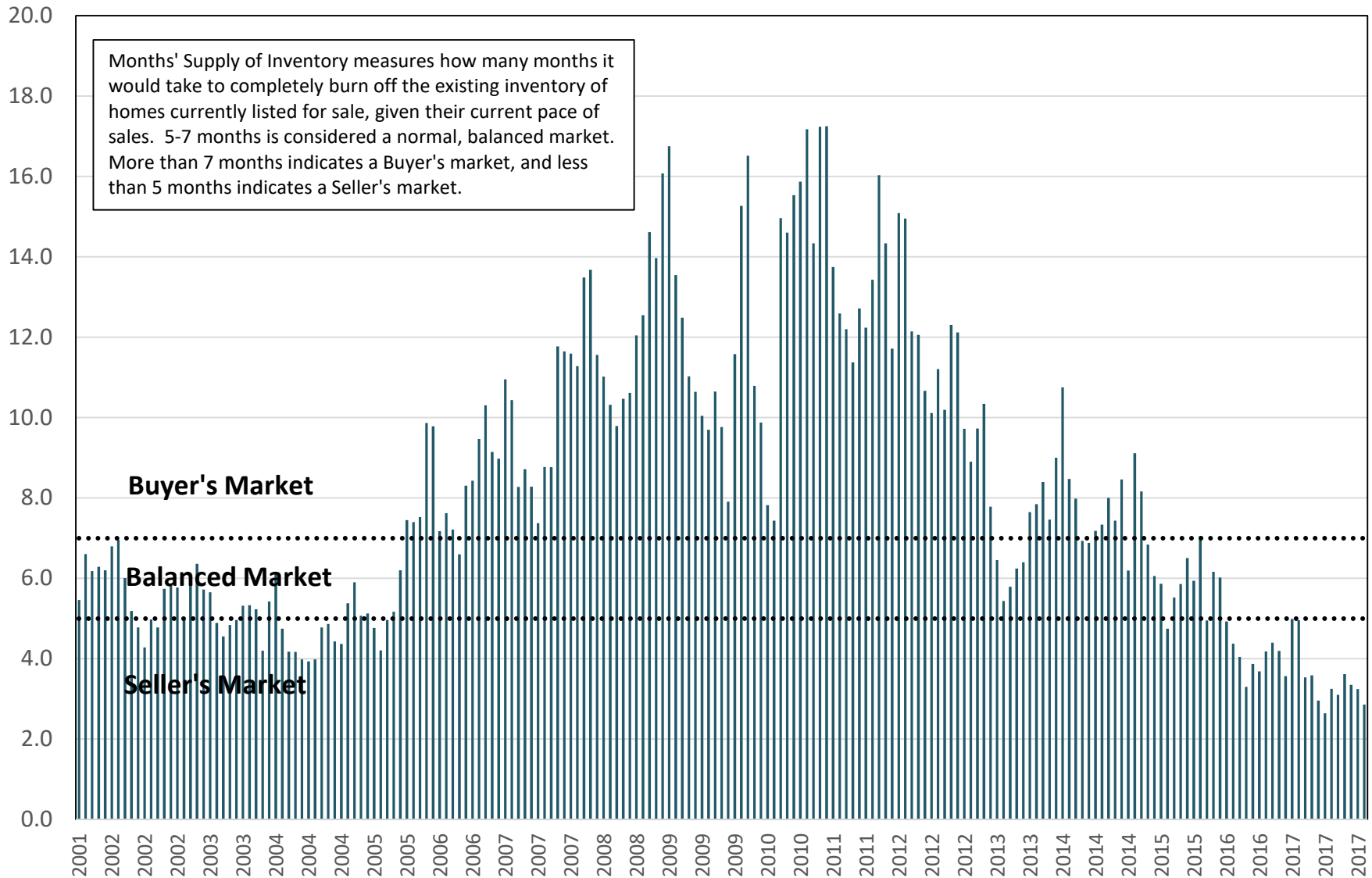
“%Absorbed” is defined as the percent of homes listed for sale in a given month that also sold in that same month.

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Source: Trend MLS



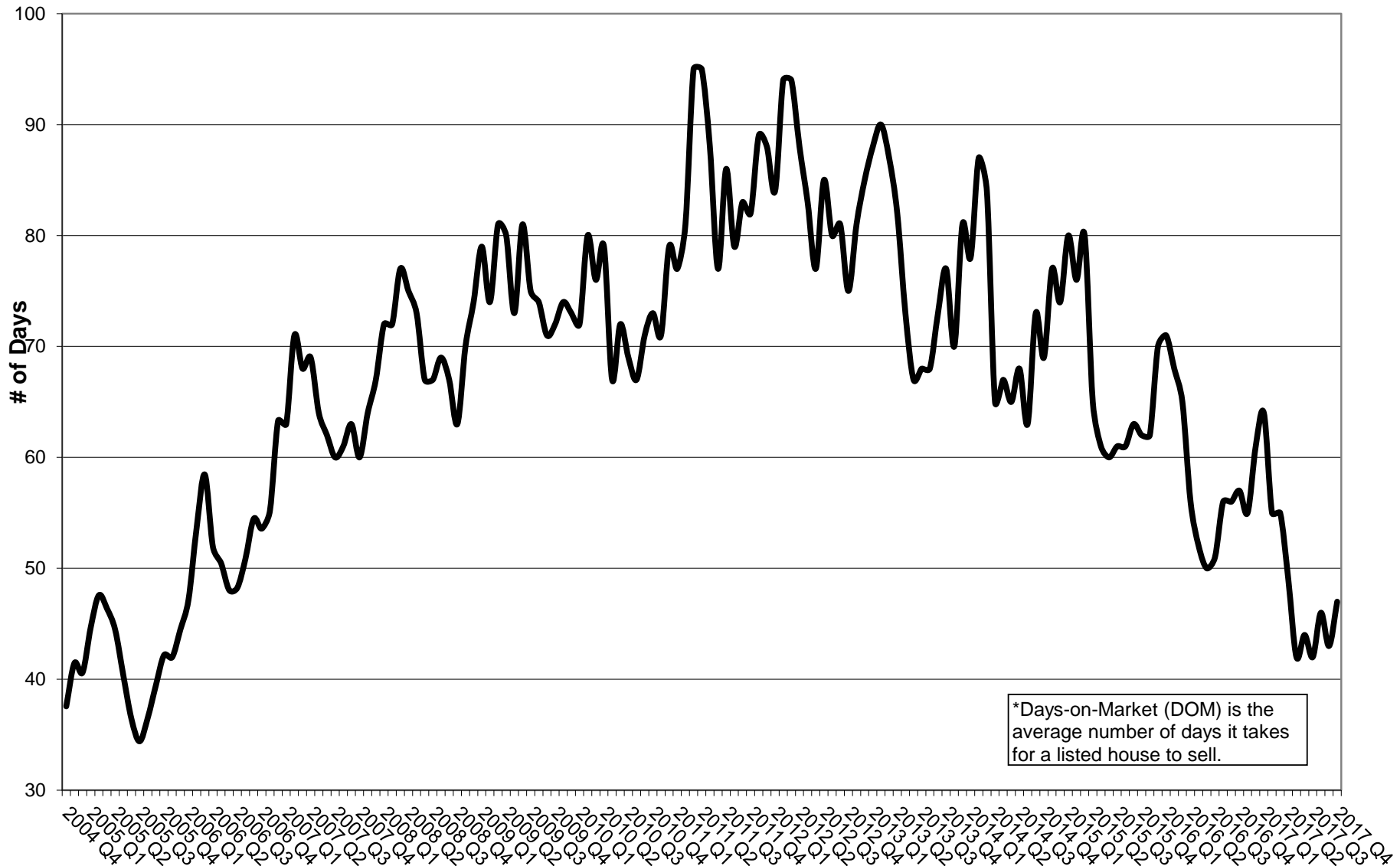
Months' Supply of Inventory in Philadelphia



Source: Trend MLS



Average Days-on-Market* for Philadelphia Homes

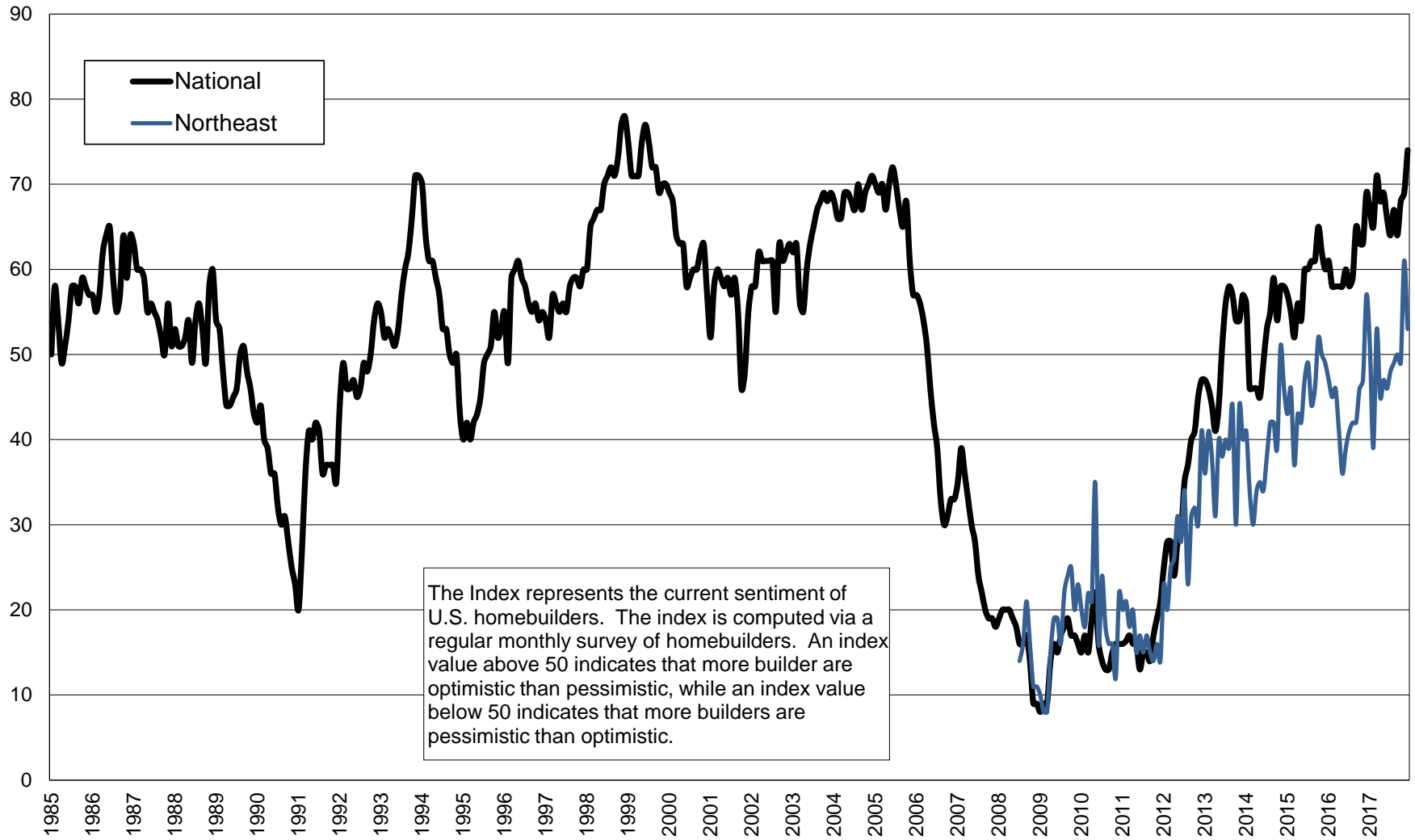


*Days-on-Market (DOM) is the average number of days it takes for a listed house to sell.

Source: Trend MLS

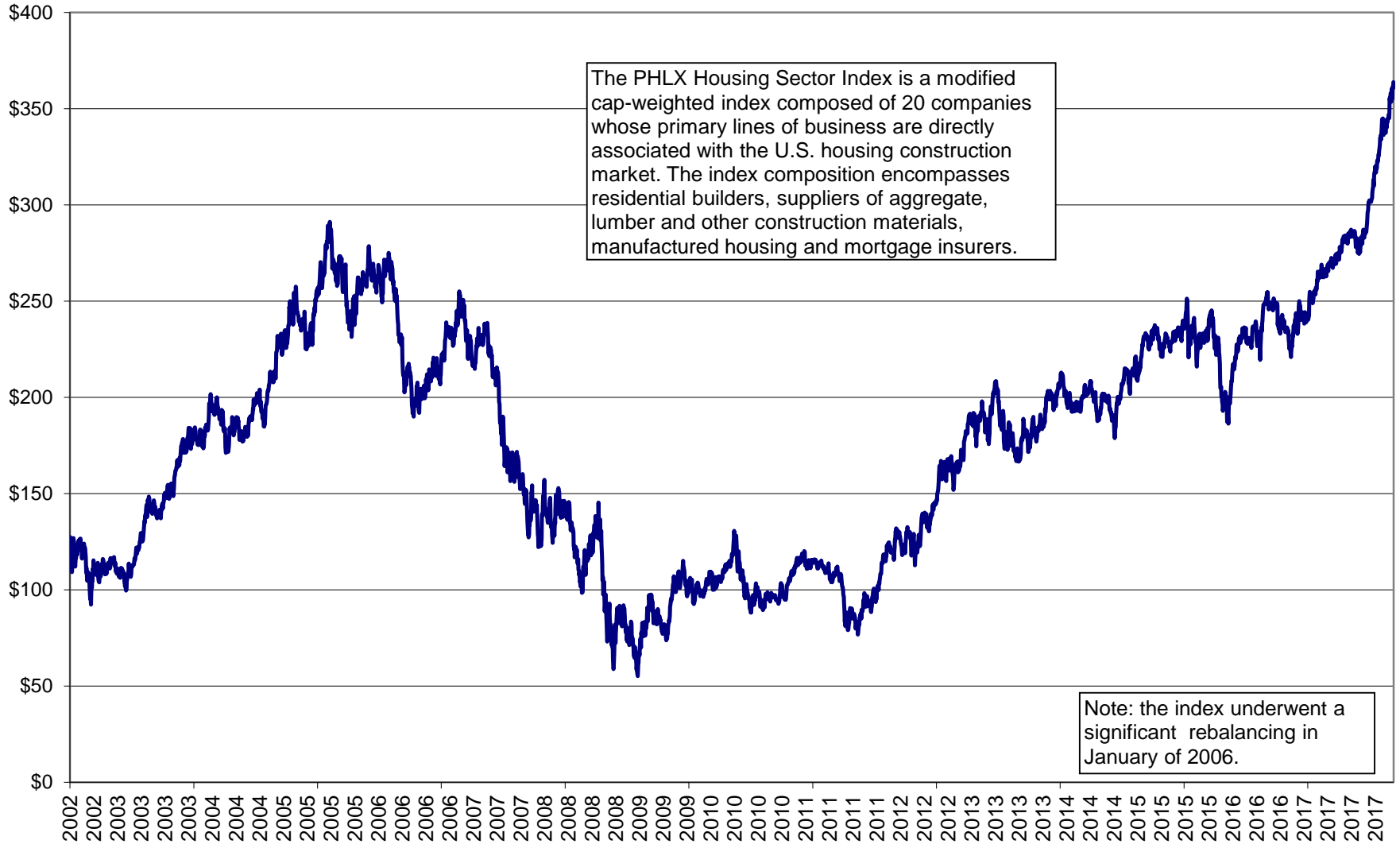


Index of Homebuilder Sentiment: 1985-2017 (Seasonally Adjusted)



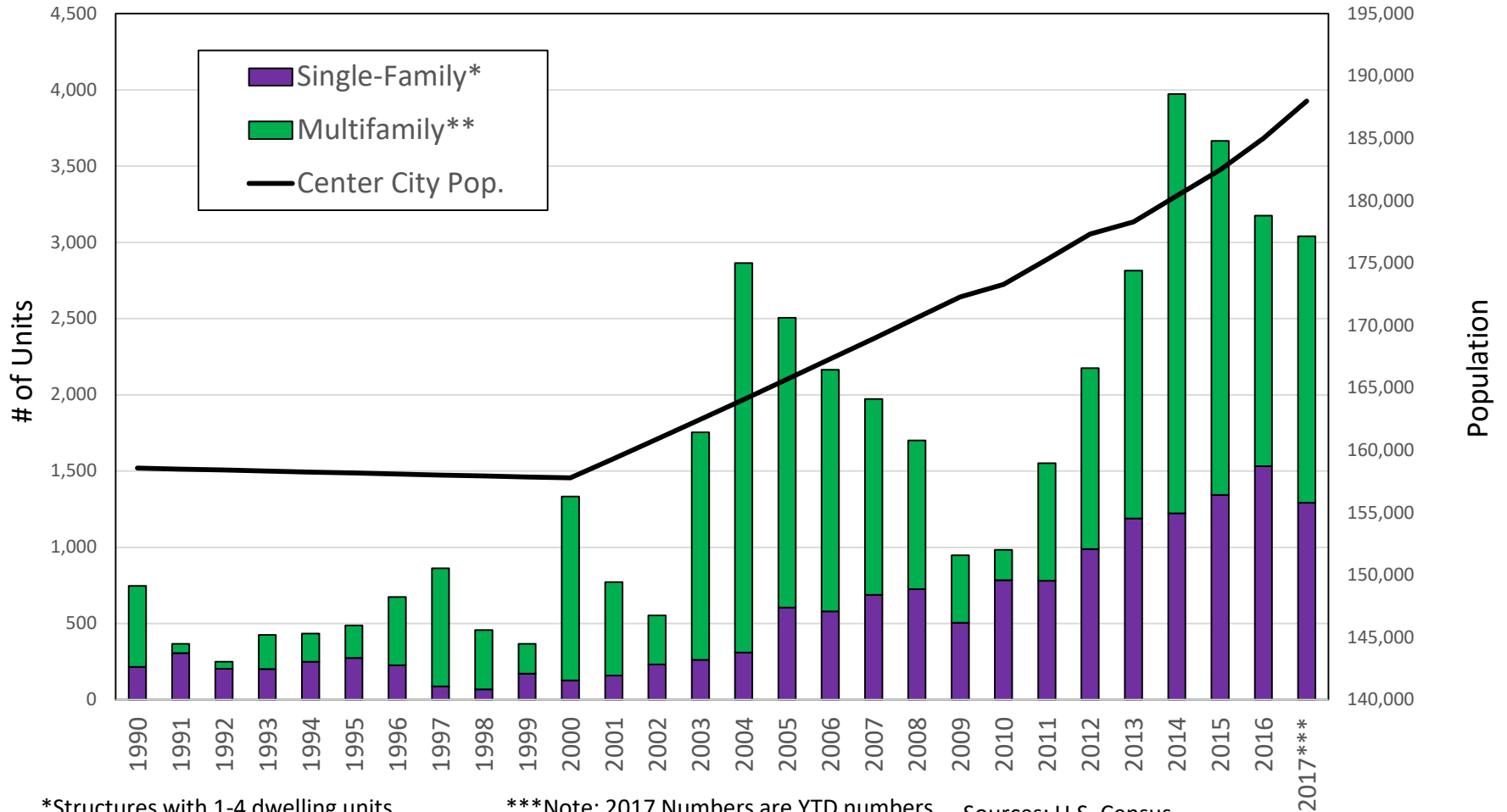
Source: National Assoc. of Homebuilders (NAHB)/Wells Fargo

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

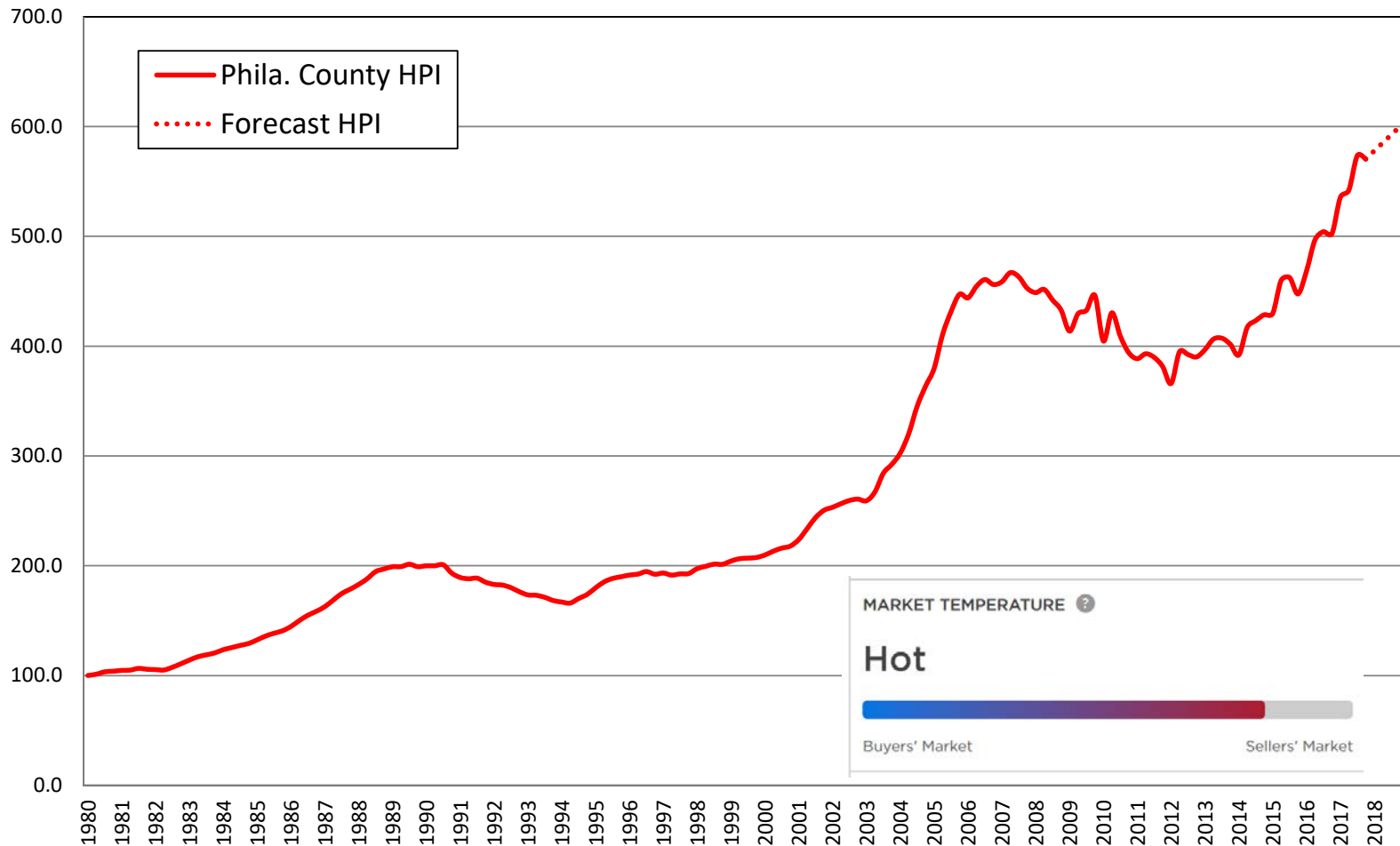
**Structures with >=5 dwelling units

***Note: 2017 Numbers are YTD numbers through November 2017.

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 5.0% over the next year, which is an upgrade from its previous forecast of 3.1% made three months ago. Zillow also currently rates the temperature of Philadelphia's housing market as "Hot", which is unchanged from its previous rating three months ago.

Source: <http://www.zillow.com/philadelphia-pa/home-values/>