

PHILADELPHIA HOUSE PRICE INDICES

October 21, 2020



DREXEL UNIVERSITY
Lindy Institute
for Urban Innovation

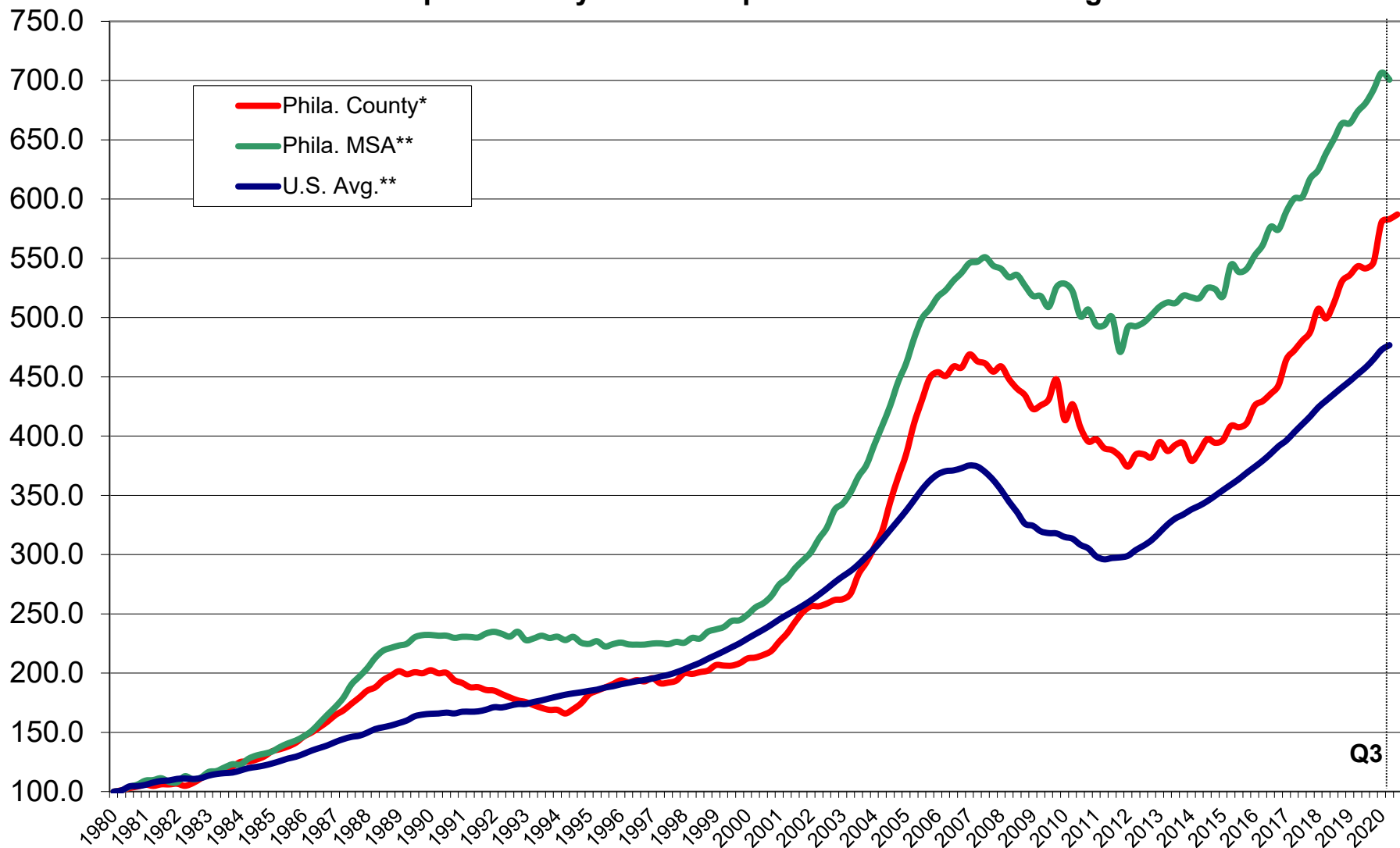
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***Disclaimers and Acknowledgments:** The Lindy Institute for Urban Innovation at Drexel University provides this report free of charge to the public. The report is produced by Kevin C. Gillen Ph.D.. The author thanks Azavea.com, the Philadelphia Office 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. © 2019, Drexel University, All Rights Reserved.*



House Price Indices 1980-2020: 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 2020Q2 only.

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



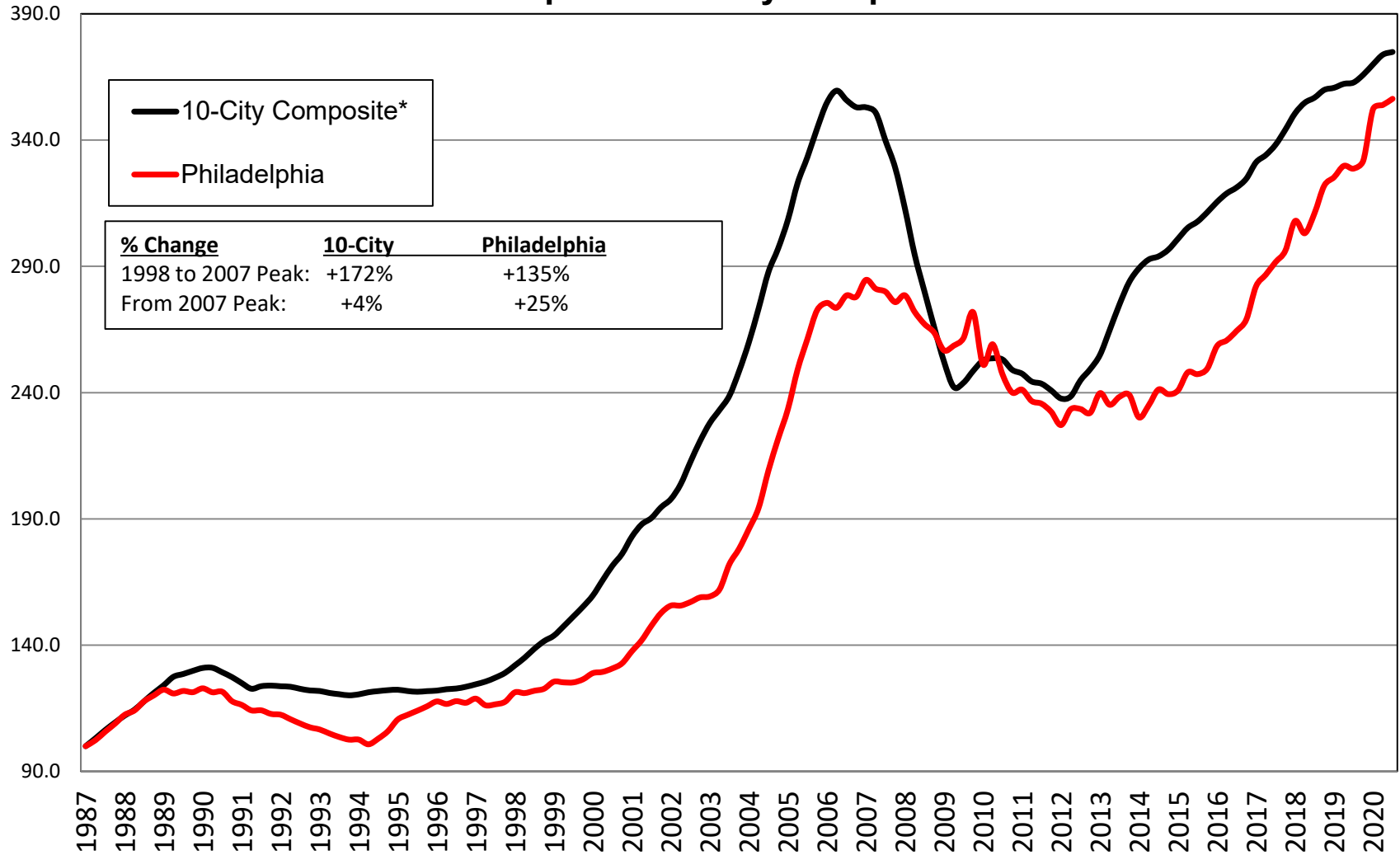
Total House Price Appreciation Rates by Geographic Market

Period	Philadelphia County*	Philadelphia MSA**	U.S.A.**
40-Year	487.0%	600.7%	376.7%
10-Year	44.1%	34.2%	52.1%
1-Year	8.4%	4.0%	5.4%
1-Quarter	0.7%	-0.8%	0.8%

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

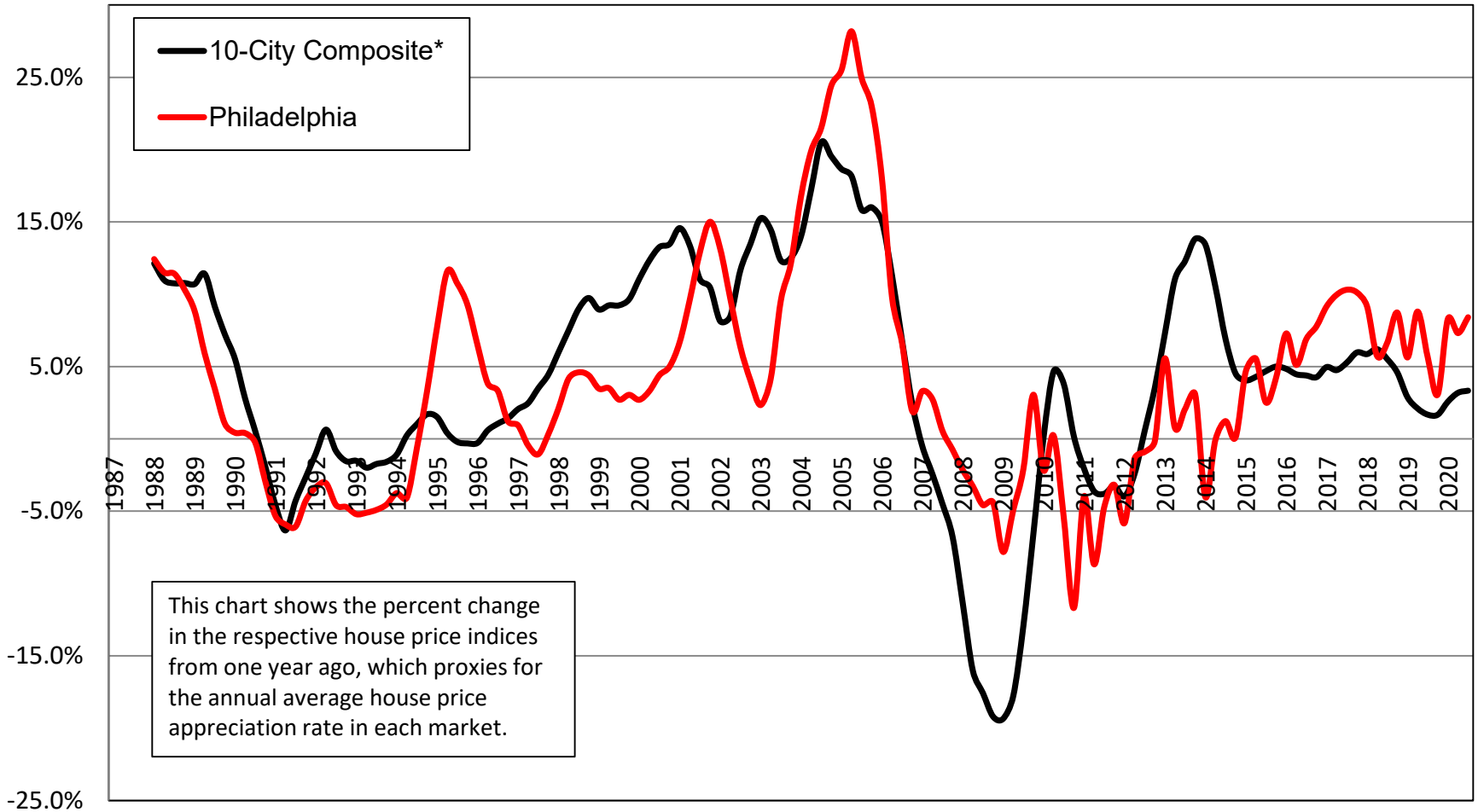
**Source: U.S. Federal Housing Finance Agency (FHFA). These numbers are through 2020Q2 only. “MSA”=“Metropolitan Statistical Area”, which is the entire 10-county region.

House Price Appreciation 1987-2020: 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.

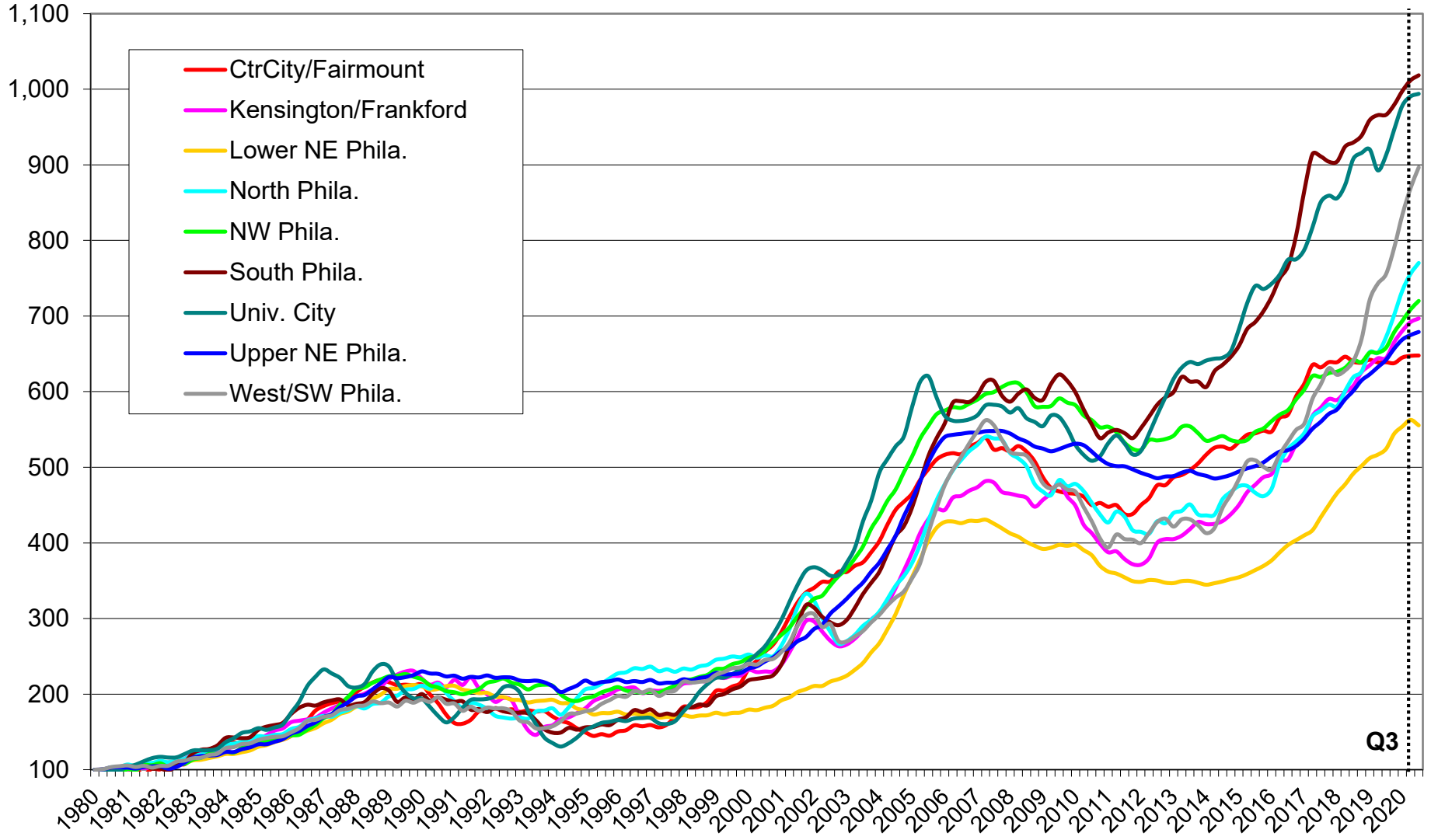
YoY House Price Change (%) 1987-2020: Philadelphia v. 10-City Composite



*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: 1980-2020

1980Q1=100



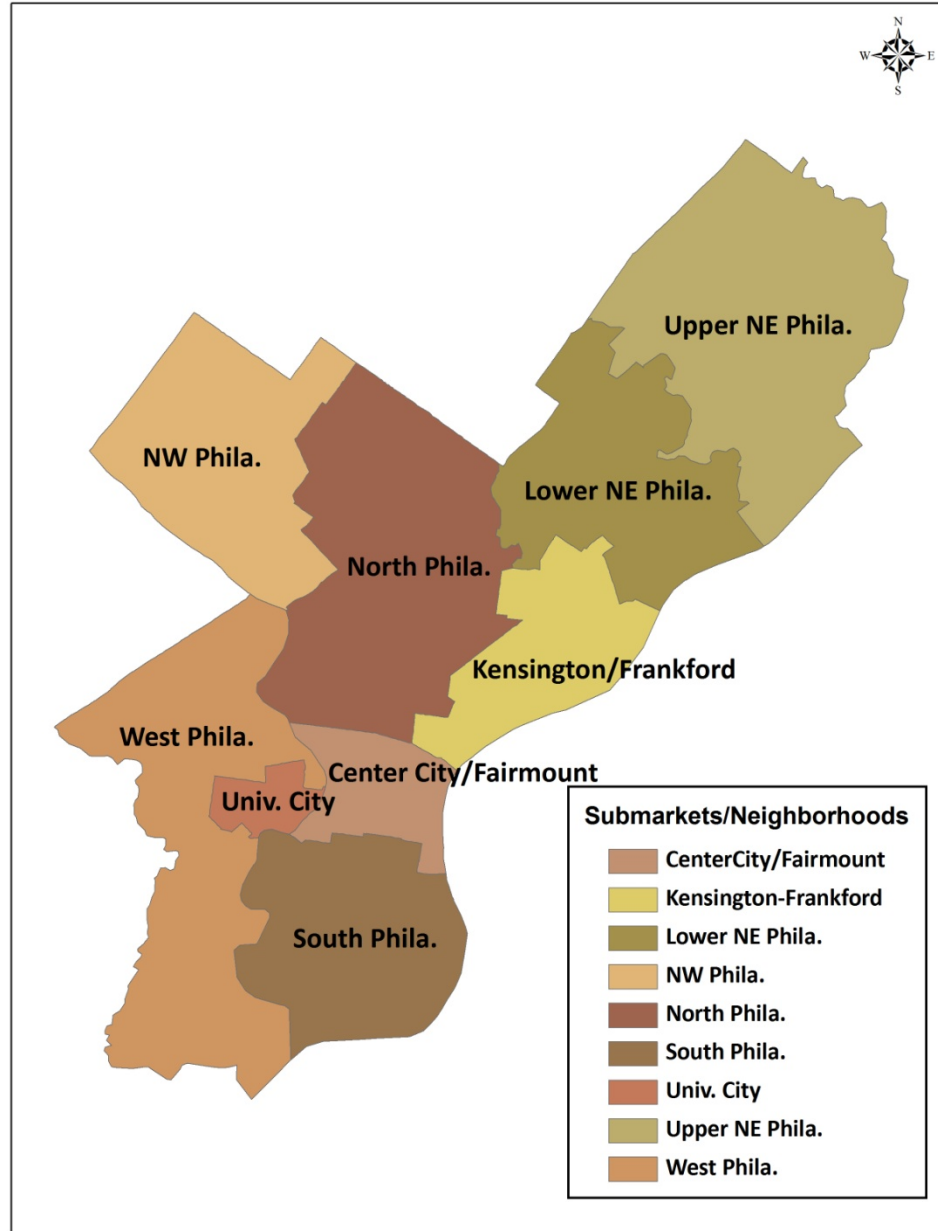
* All indices empirically estimated by Kevin C. Gillen, Ph.D.

Philadelphia House Price Appreciation Rates by Submarket

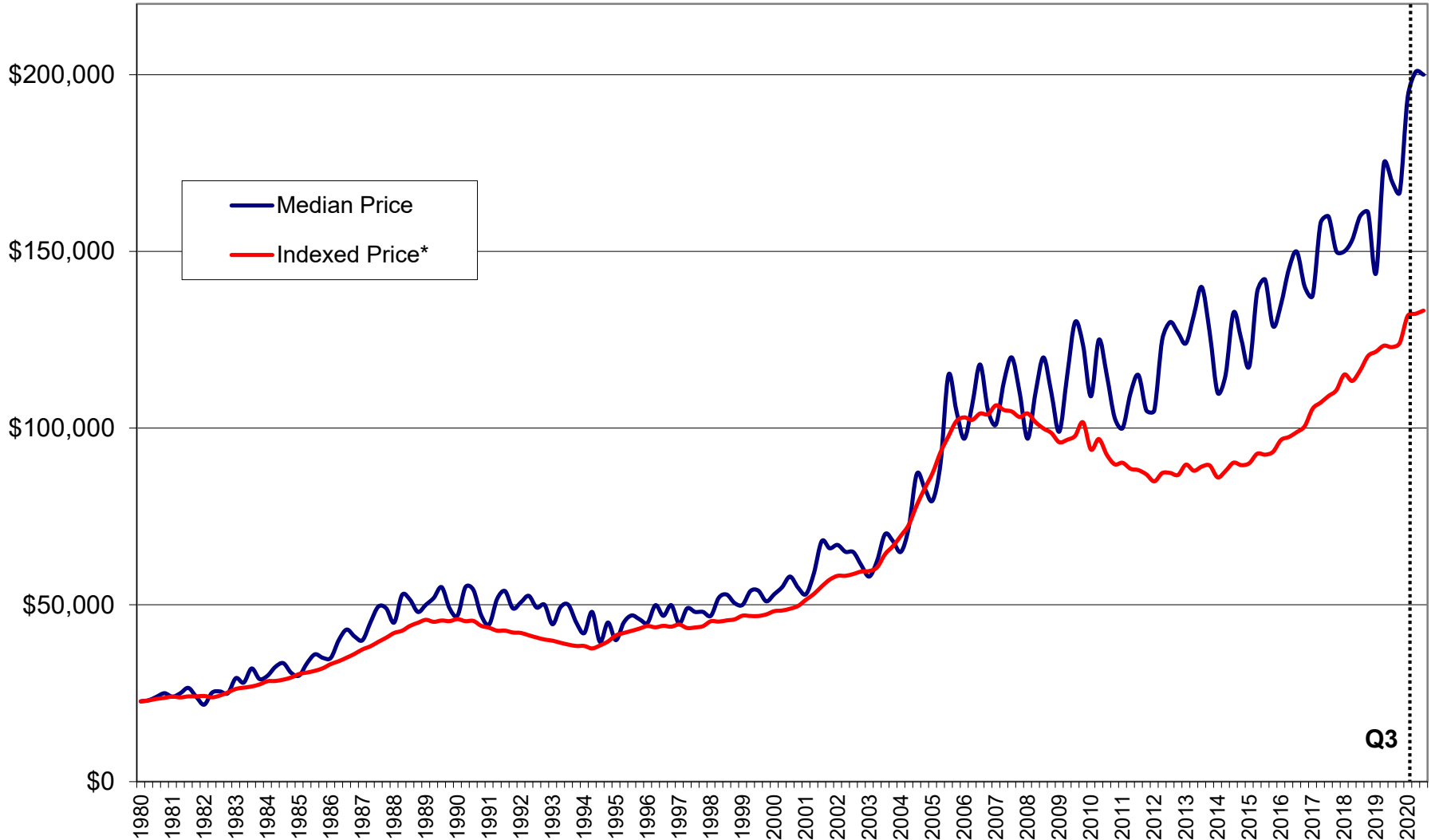
Period	Center City/ Fairmount	Kensington /Frankford	Lower NE Phila.	North Phila.	NW Phila.	South Phila.	Univ. City	Upper NE Phila.	West/ SW Phila.
40-year	547.8%	596.9%	455.5%	670.2%	620.0%	918.4%	893.9%	579.0%	796.6%
10-year	44.0%	68.8%	44.8%	70.0%	28.1%	83.0%	95.4%	30.4%	109.3%
1-Year	1.4%	8.1%	5.9%	14.6%	9.4%	5.4%	8.9%	5.7%	18.7%
1-Quarter	0.1%	0.7%	-1.3%	1.9%	1.6%	0.7%	0.4%	0.6%	3.2%

This table gives the total % change in average house values by submarket, through 2020 Q3, from different starting points in time.

Philadelphia Submarket Boundaries



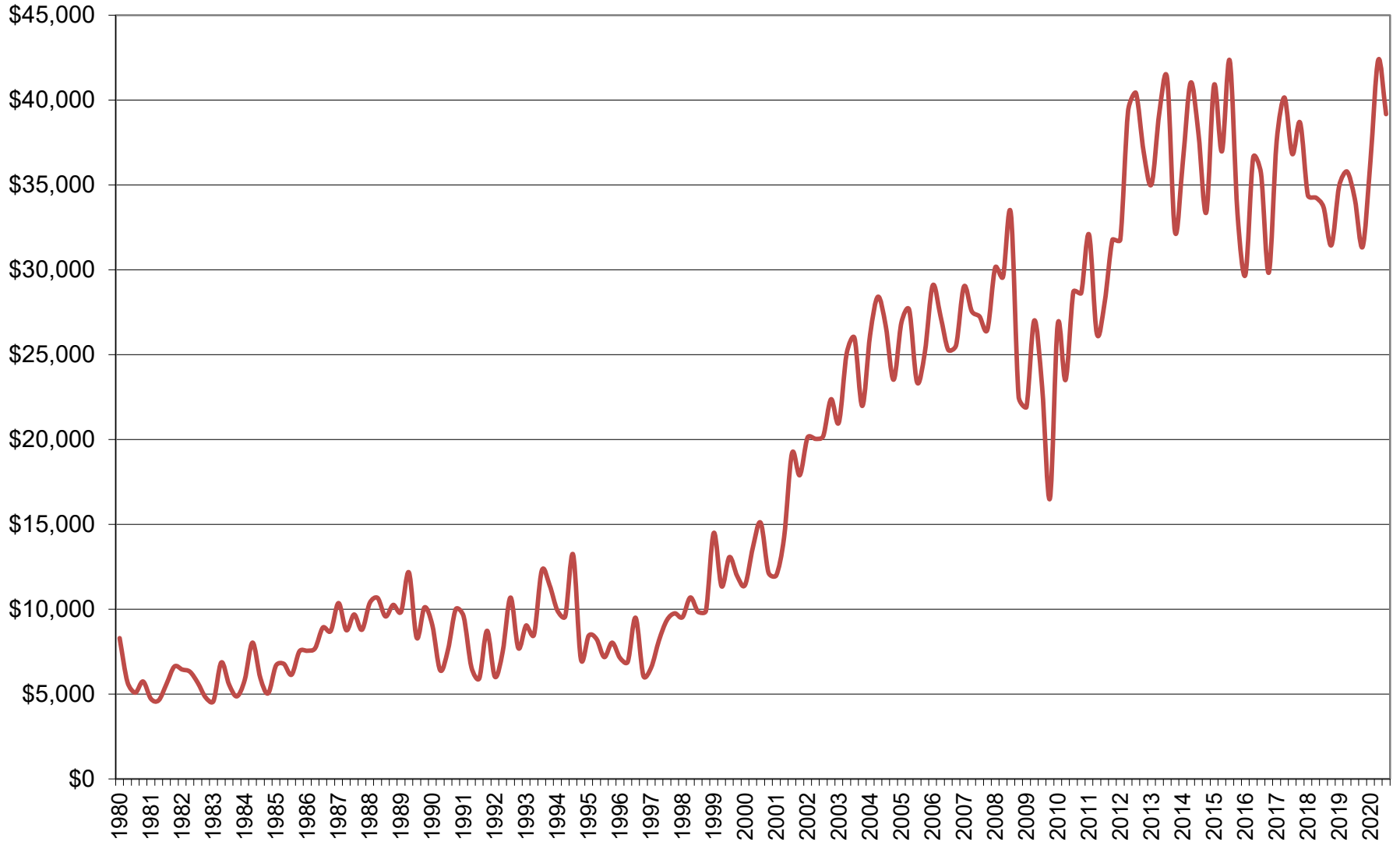
Median Philadelphia House Price v. Indexed Philadelphia House Price 1980-2020



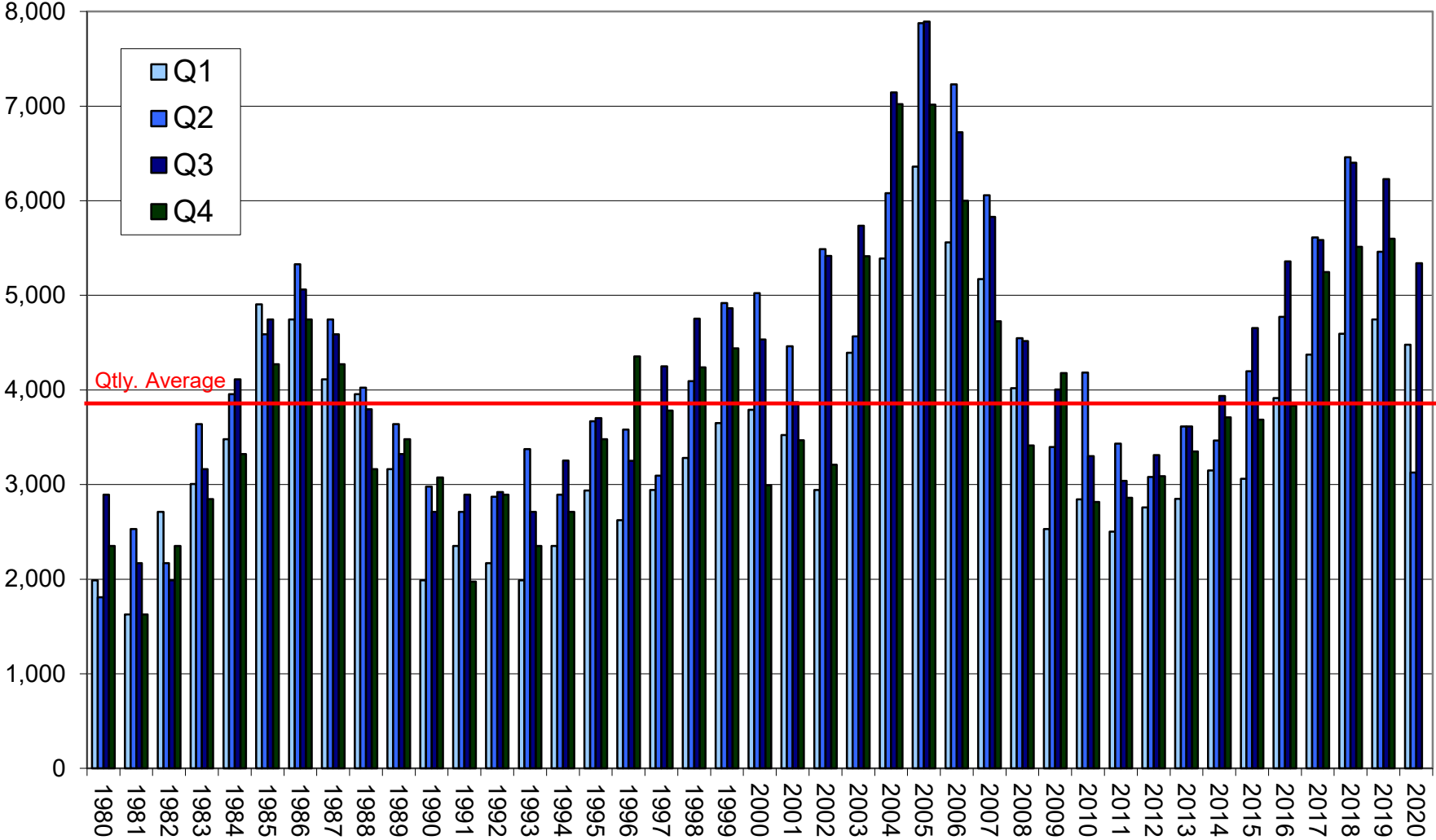
* Empirically estimated by Kevin C. Gillen, PhD

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Average House Price Minus Median House Price: 1980-2020



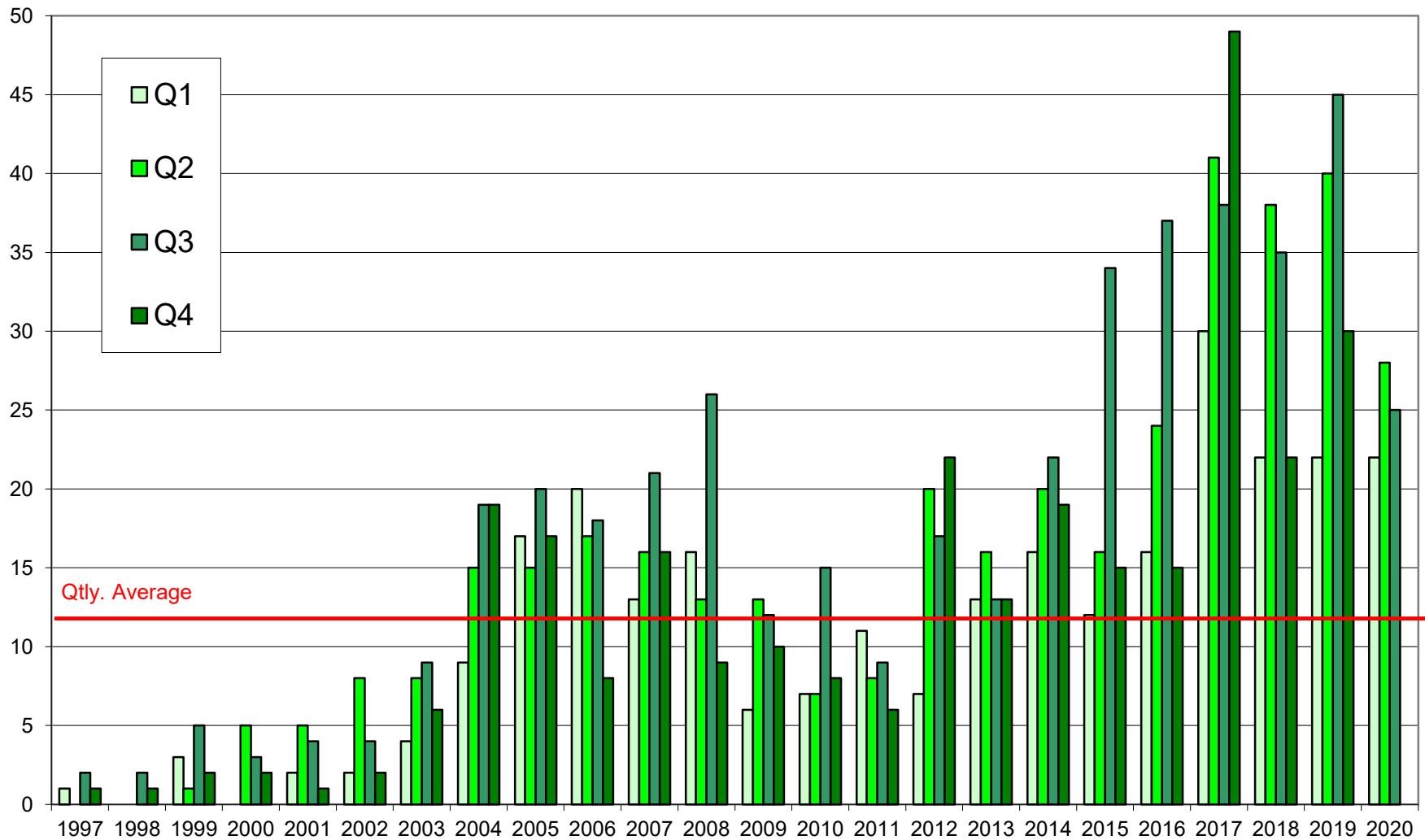
Number of Philadelphia House Sales* per Quarter: 1980-2020



Qtly. Average

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

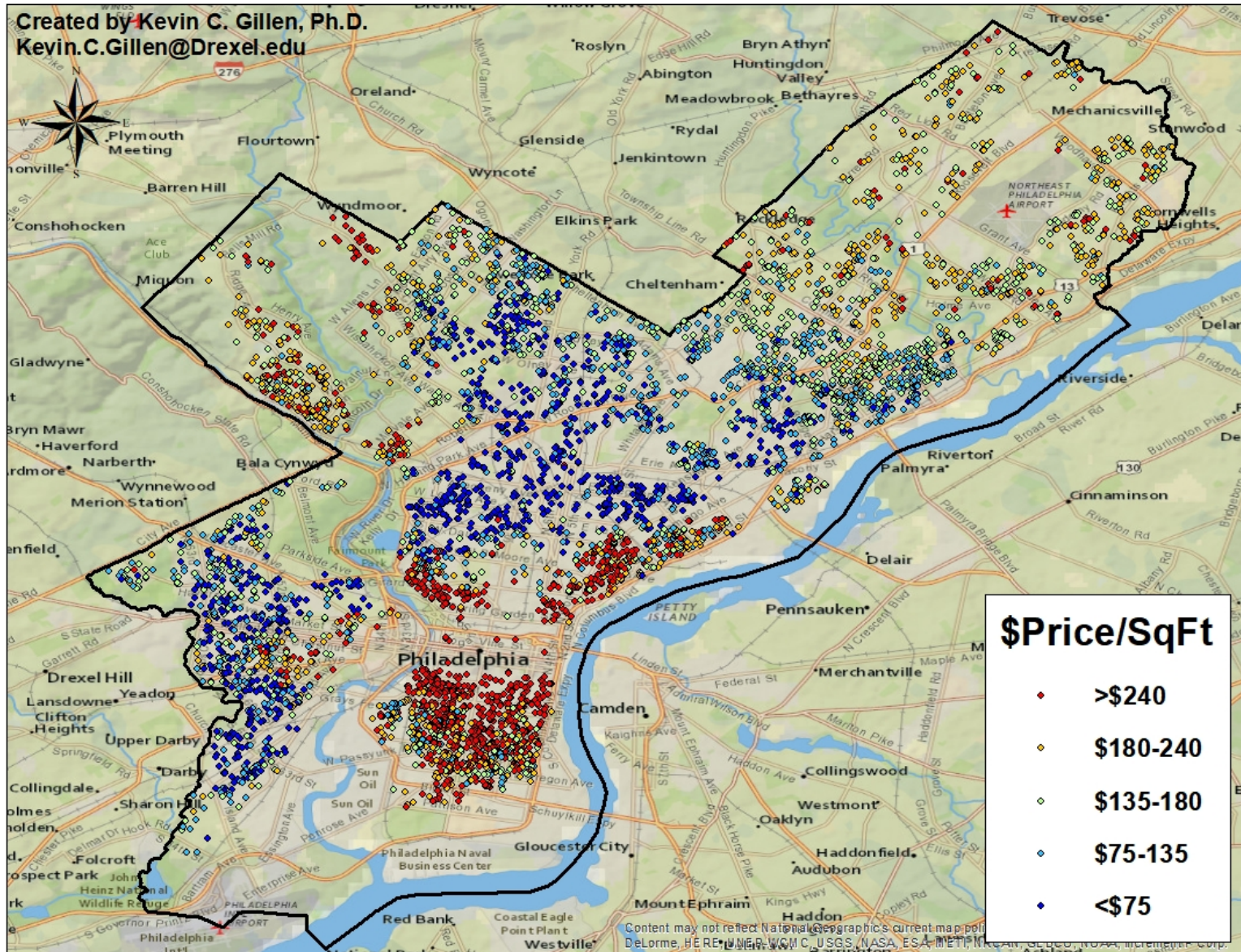
Number of Philadelphia House Sales* per Quarter with Price >= \$1 Million: 1997-2020



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

Philadelphia House Sales in 2020 Q3

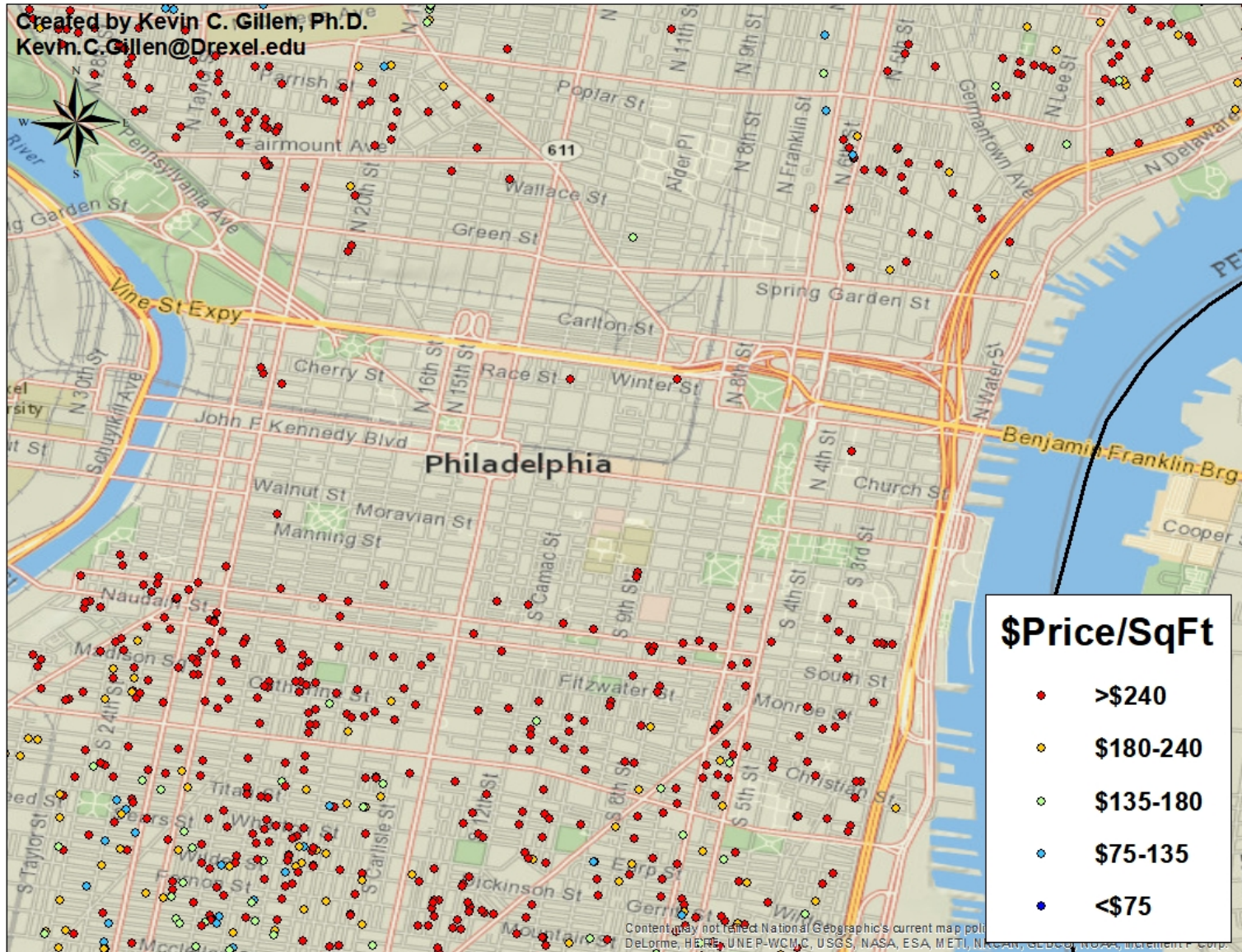
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Note: Sales are color-coded by the quintiles of the distribution of \$Price/SqFt. Hence, each of the five categories covers exactly 20% of all sales.

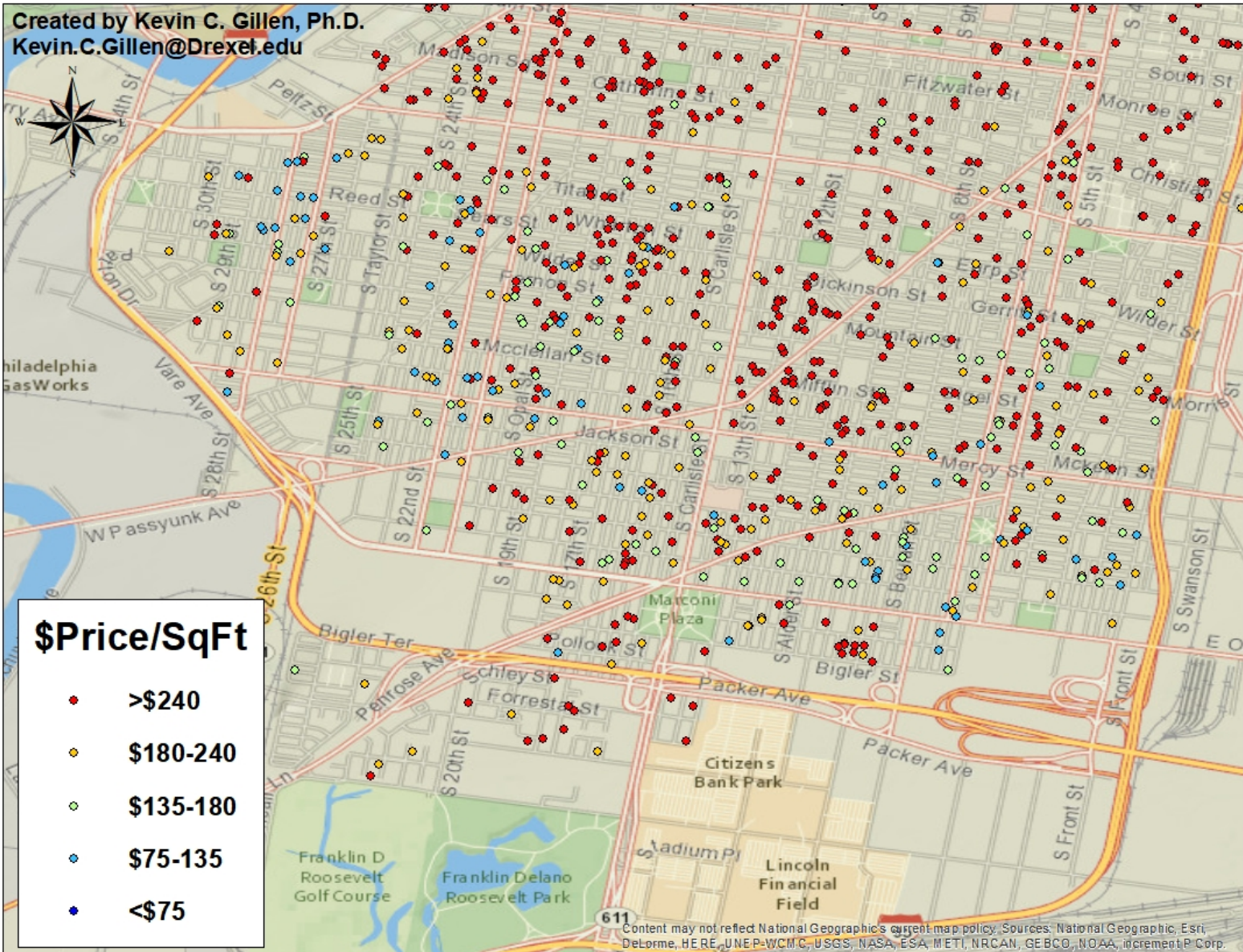
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Center City House Sales in 2020 Q3



South Philadelphia House Sales in 2020 Q3

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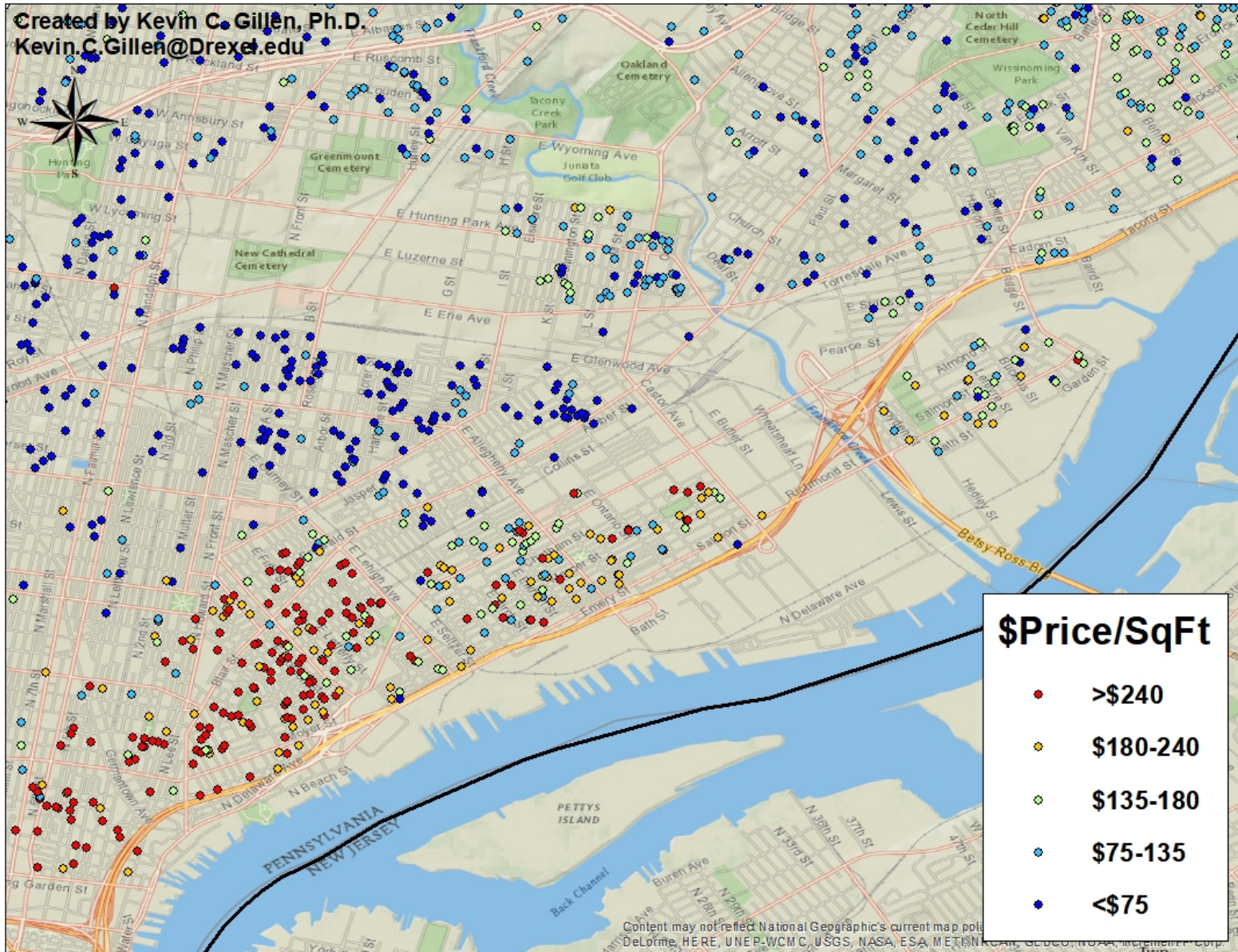
\$/SqFt

- >\$240
- \$180-240
- \$135-180
- \$75-135
- <\$75

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Kensington/Frankford House Sales in 2020 Q3

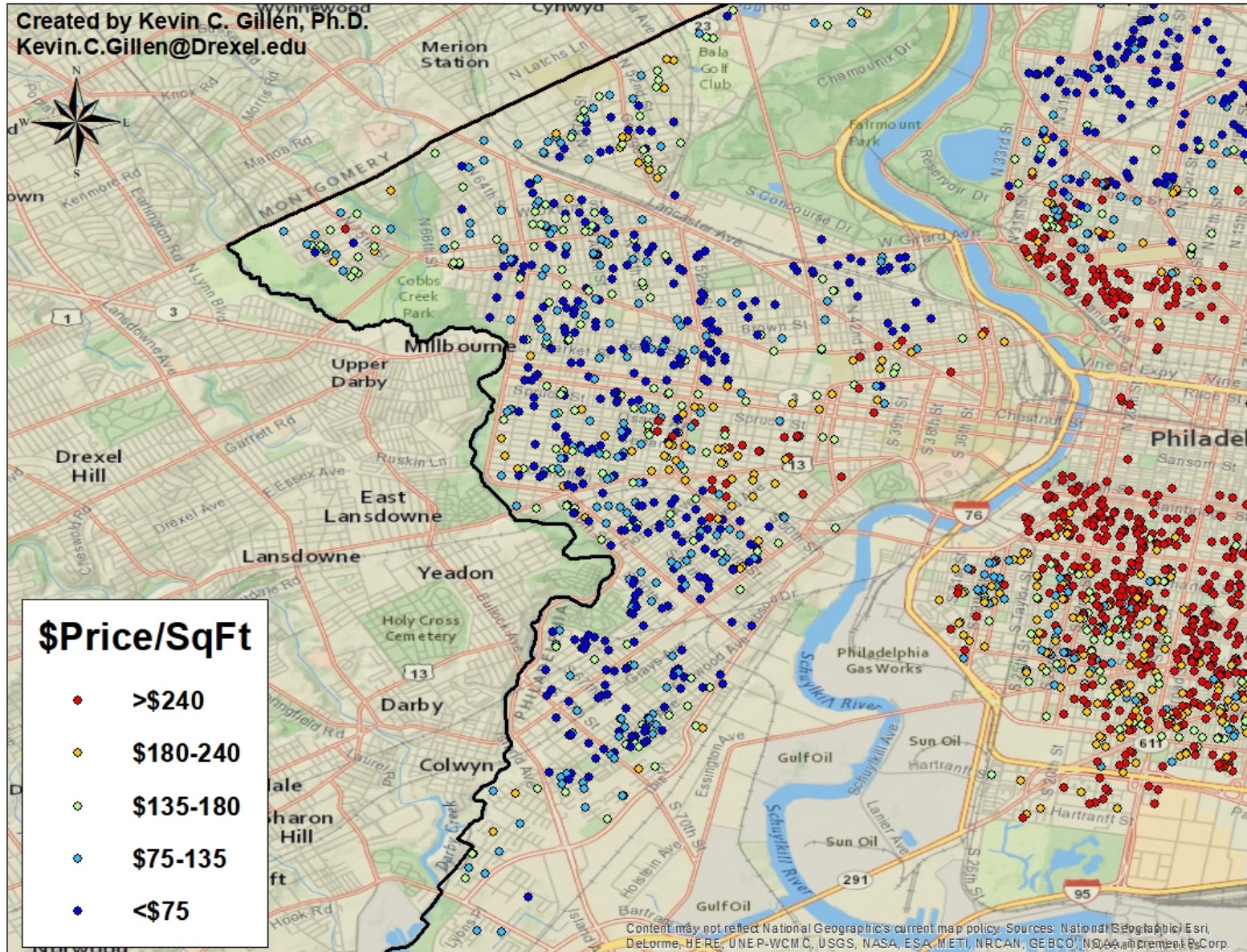
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West/Southwest Philadelphia House Sales in 2020 Q3

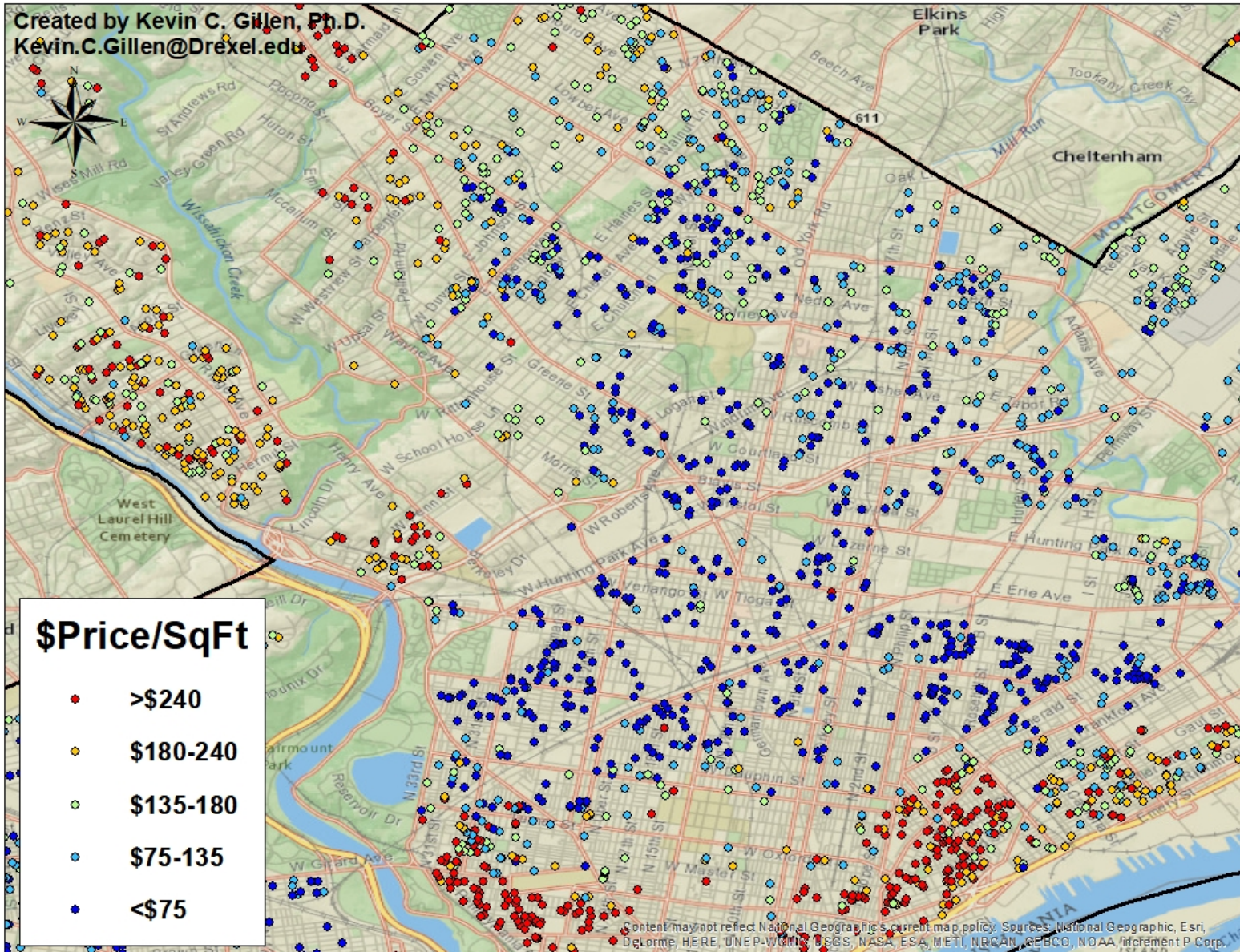
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North Philadelphia House Sales in 2020 Q3

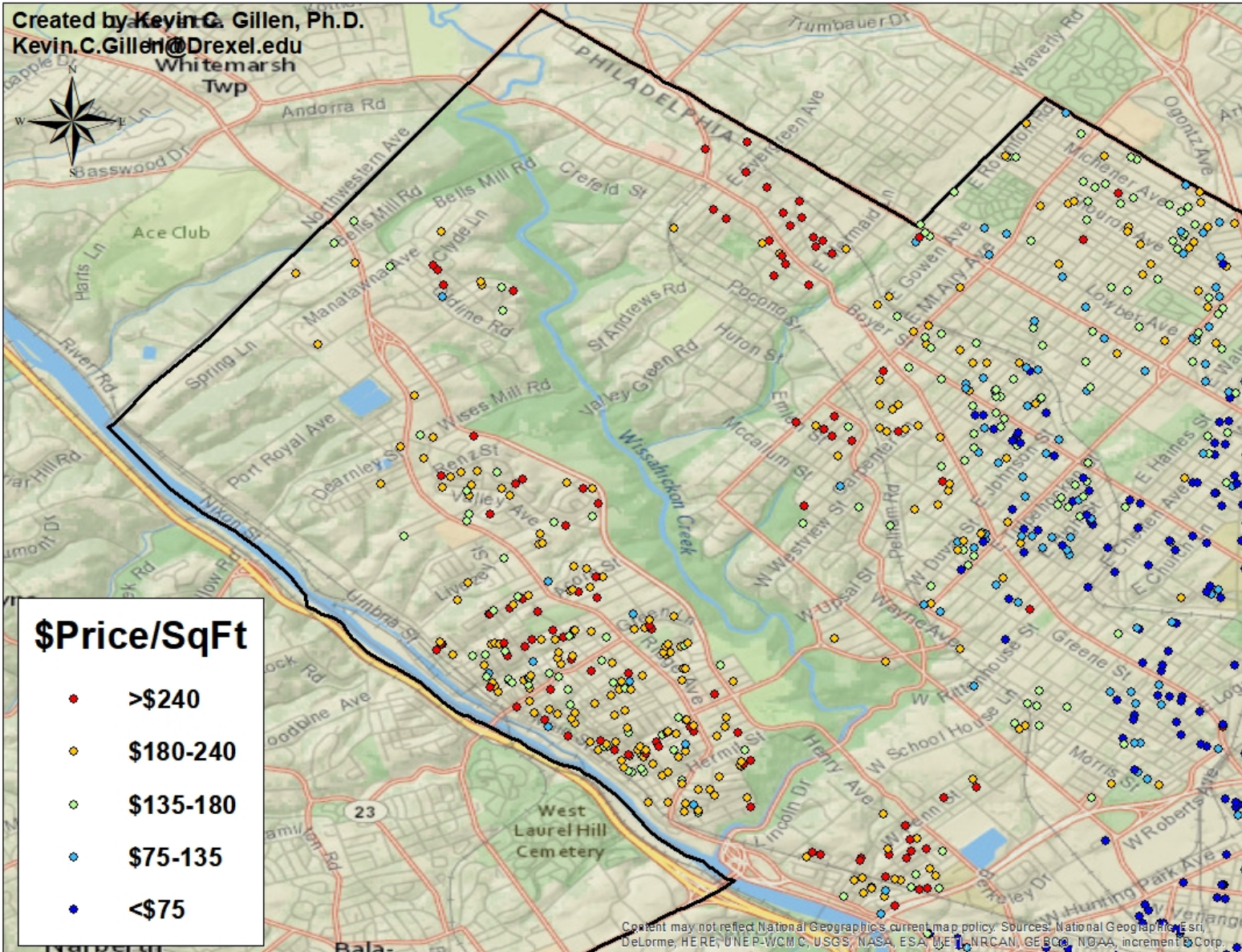
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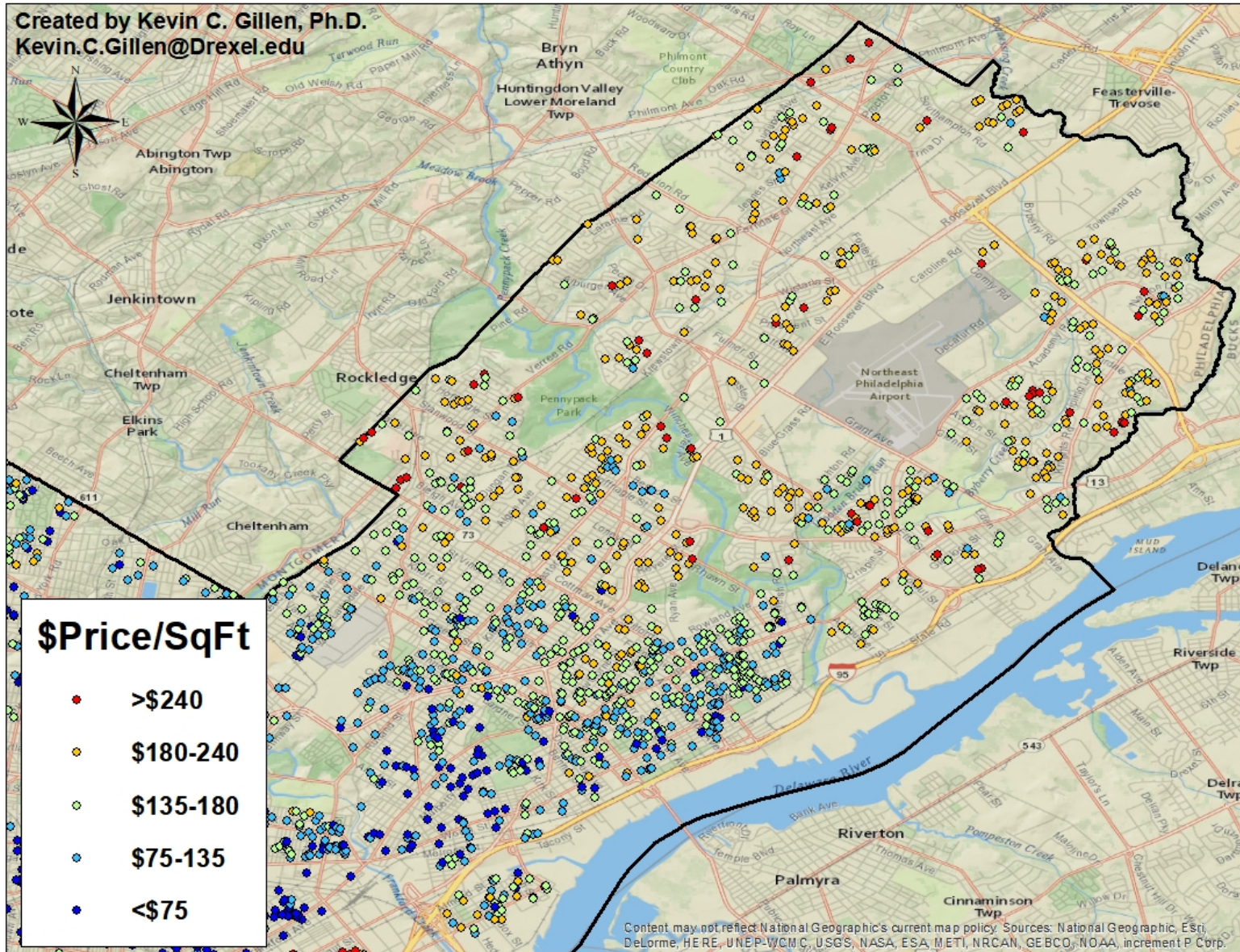
Northwest Philadelphia House Sales in 2020 Q3

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Kevin.C.Gillen@Drexel.edu

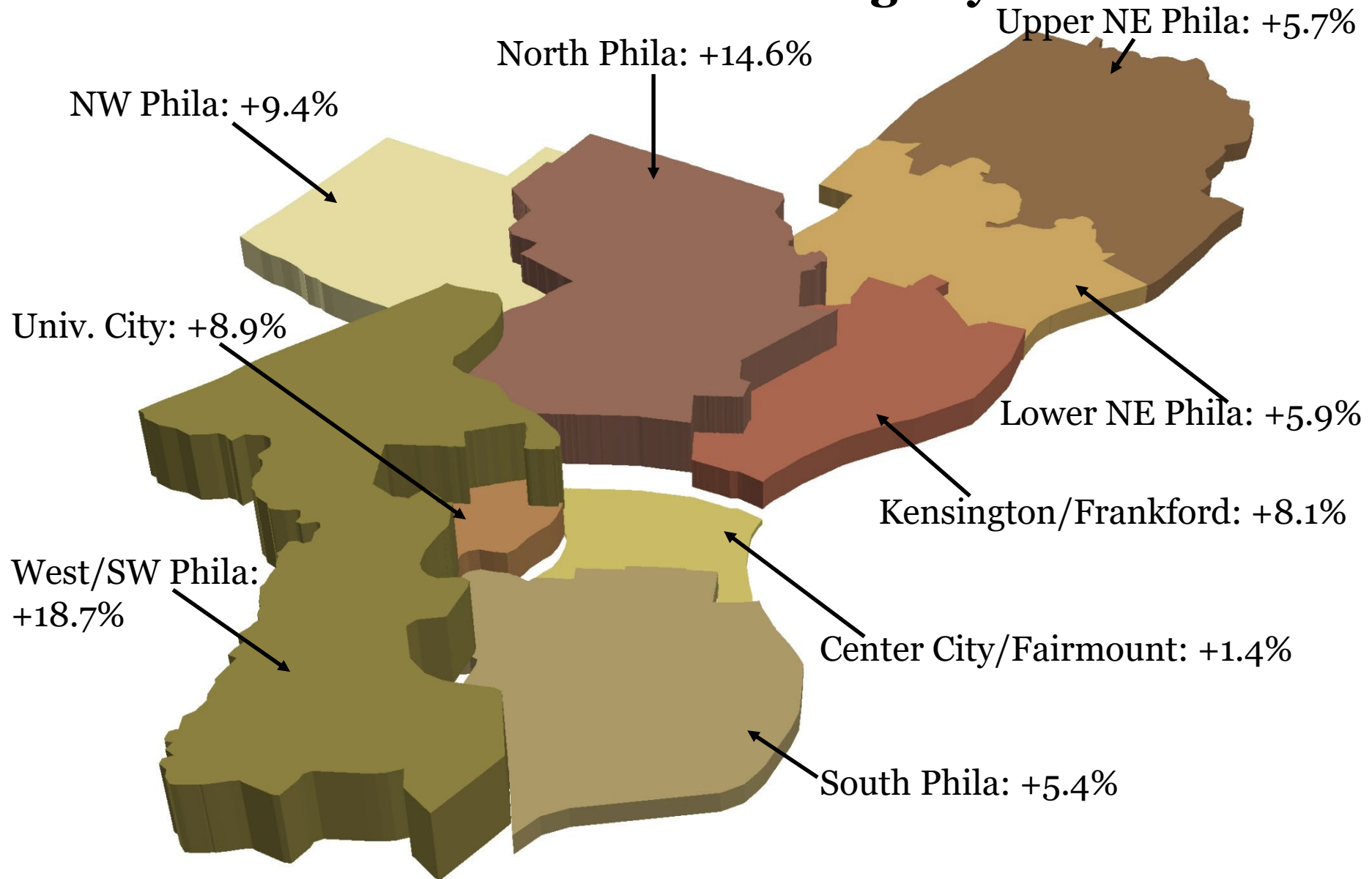


Northeast Philadelphia House Sales in 2020 Q3

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Annual House Price Rate of Change by Submarket



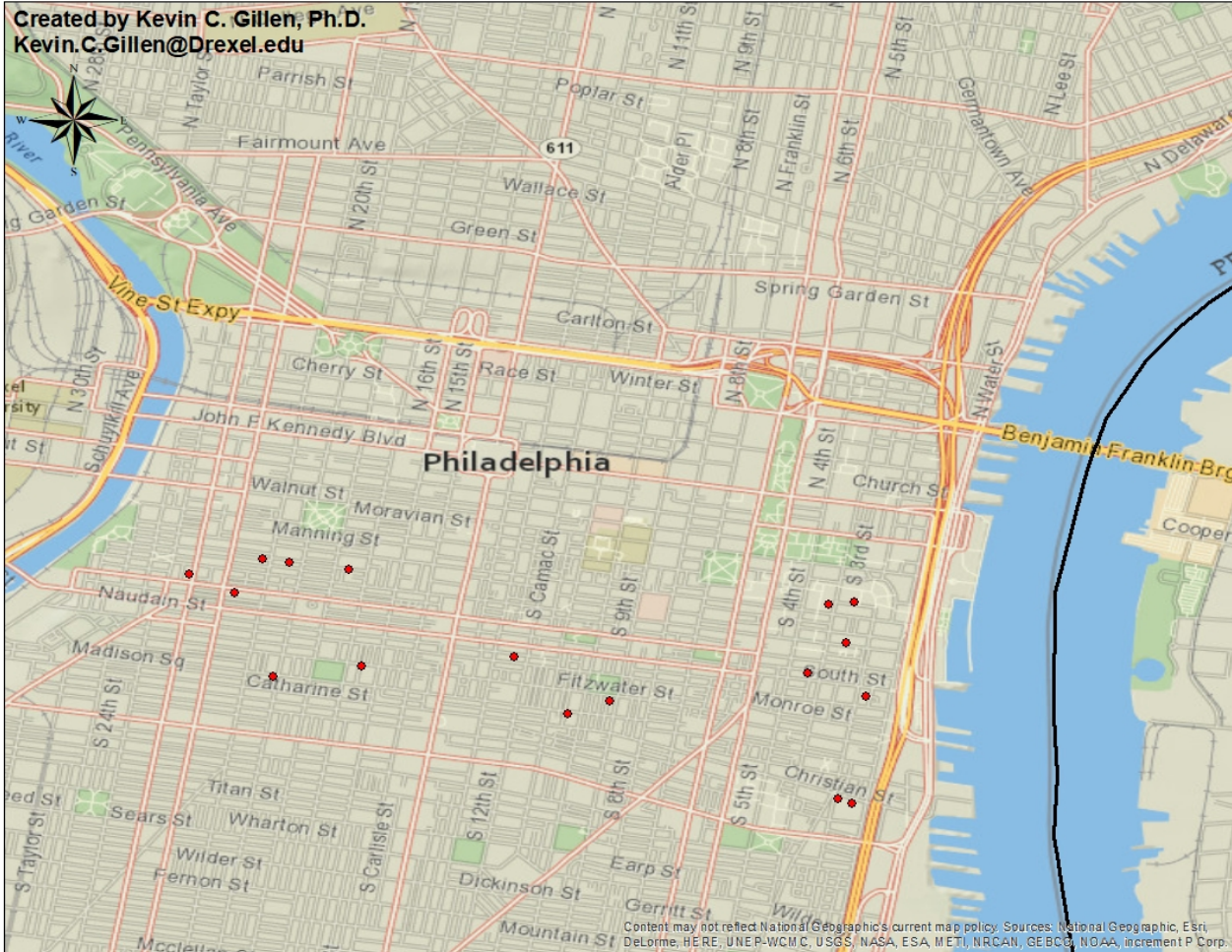
Note: Each submarket is extruded by its average change in house values over the course of the past year (from 2019 Q3 to 2020 Q3) in order to reflect its growth (or depreciation) rate relative to other neighborhoods.

+ \$1 Million Dollar House Sales in 2020 Q3



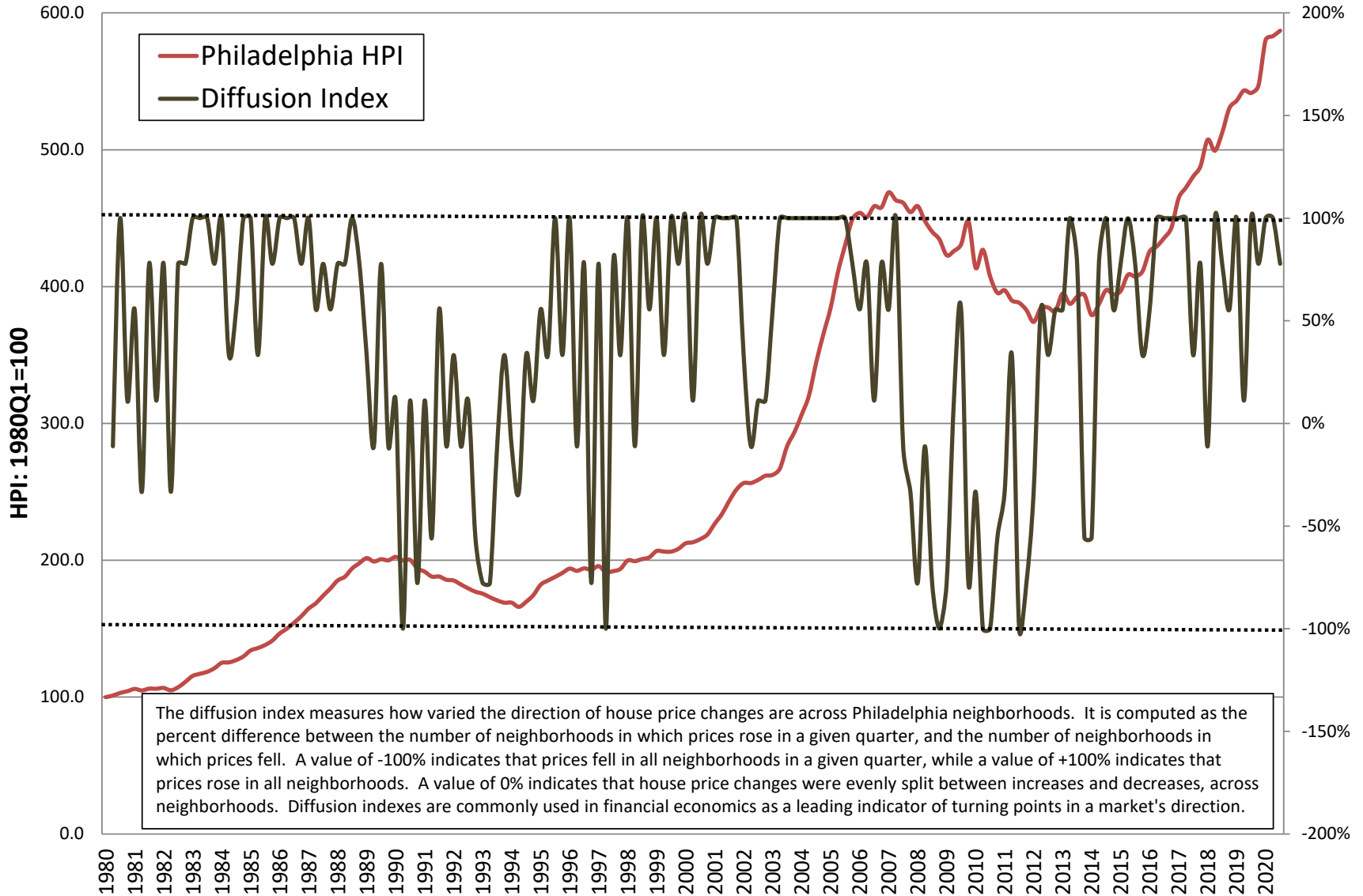
Price	Address
\$1,056,379	1 LEVERINGTON AVE #105 E
\$1,064,725	1 LEVERINGTON AVE #105A
\$1,070,500	1724 DELANCEY ST
\$1,075,000	4726 CROSS ST
\$1,079,688	1 LEVERINGTON AVE #103 F
\$1,120,000	1220 KATER ST
\$1,128,000	802 S 19TH ST
\$1,130,000	614 S HANCOCK ST
\$1,135,000	233 PINE ST
\$1,139,000	1918 DELANCEY PL
\$1,200,000	905 S 2ND ST
\$1,201,000	281 LOCUST ST
\$1,210,000	2046 LOMBARD ST
\$1,240,000	739 S CHADWICK ST
\$1,250,000	709 S PERCY ST
\$1,275,000	112 CHRISTIAN ST #F
\$1,300,000	801A WARNOCK
\$1,300,000	312-14 GASKILL ST
\$1,314,747	406 S 22ND ST
\$2,100,000	260 S 3RD ST
\$2,150,000	8219 SAINT MARTINS LN
\$2,282,020	1717 S 29TH ST
\$2,295,000	30 W SUNSET AVE
\$2,712,500	2022 DELANCEY ST

+ \$1 Million Dollar House Sales in 2020 Q3

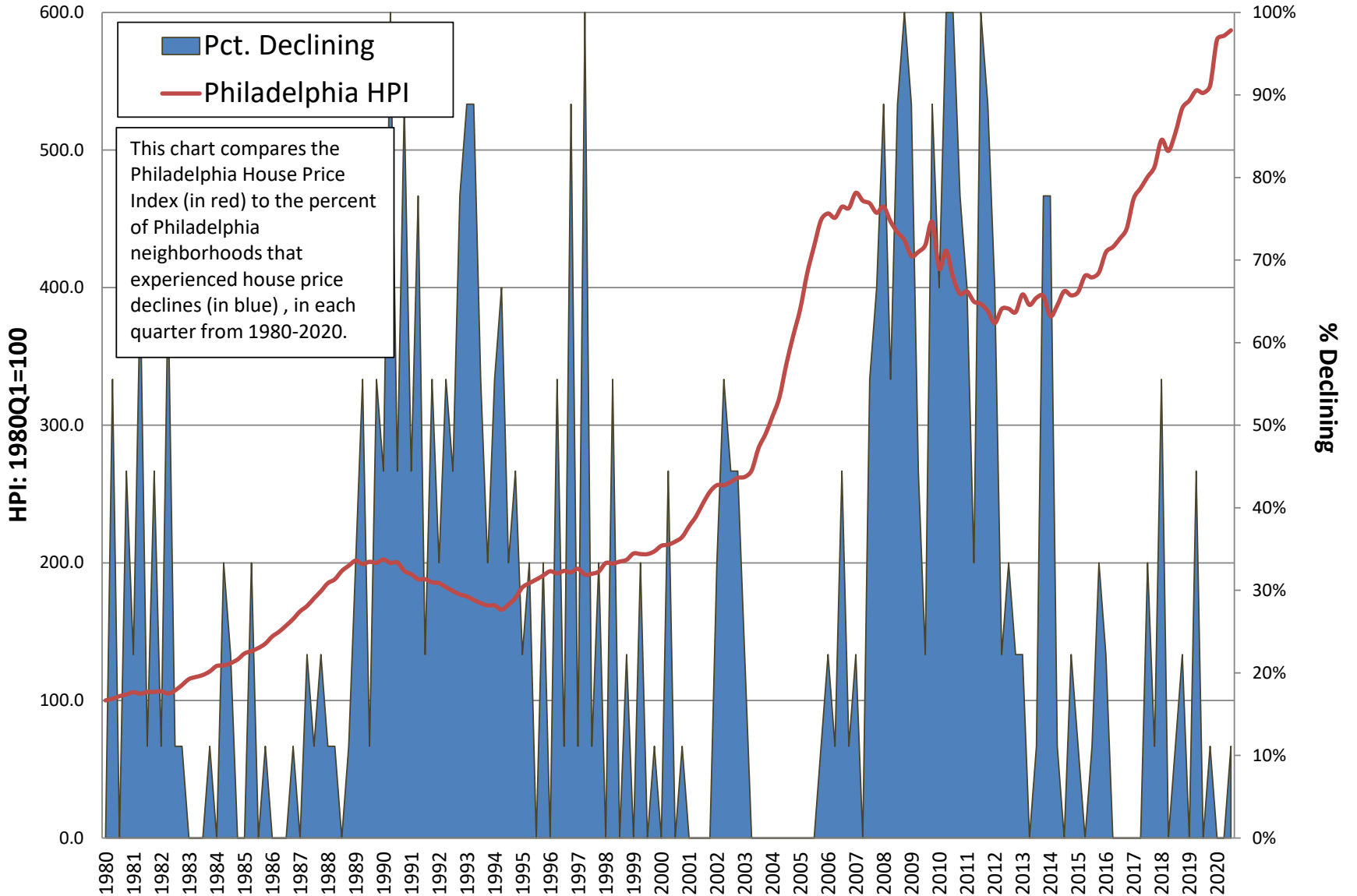


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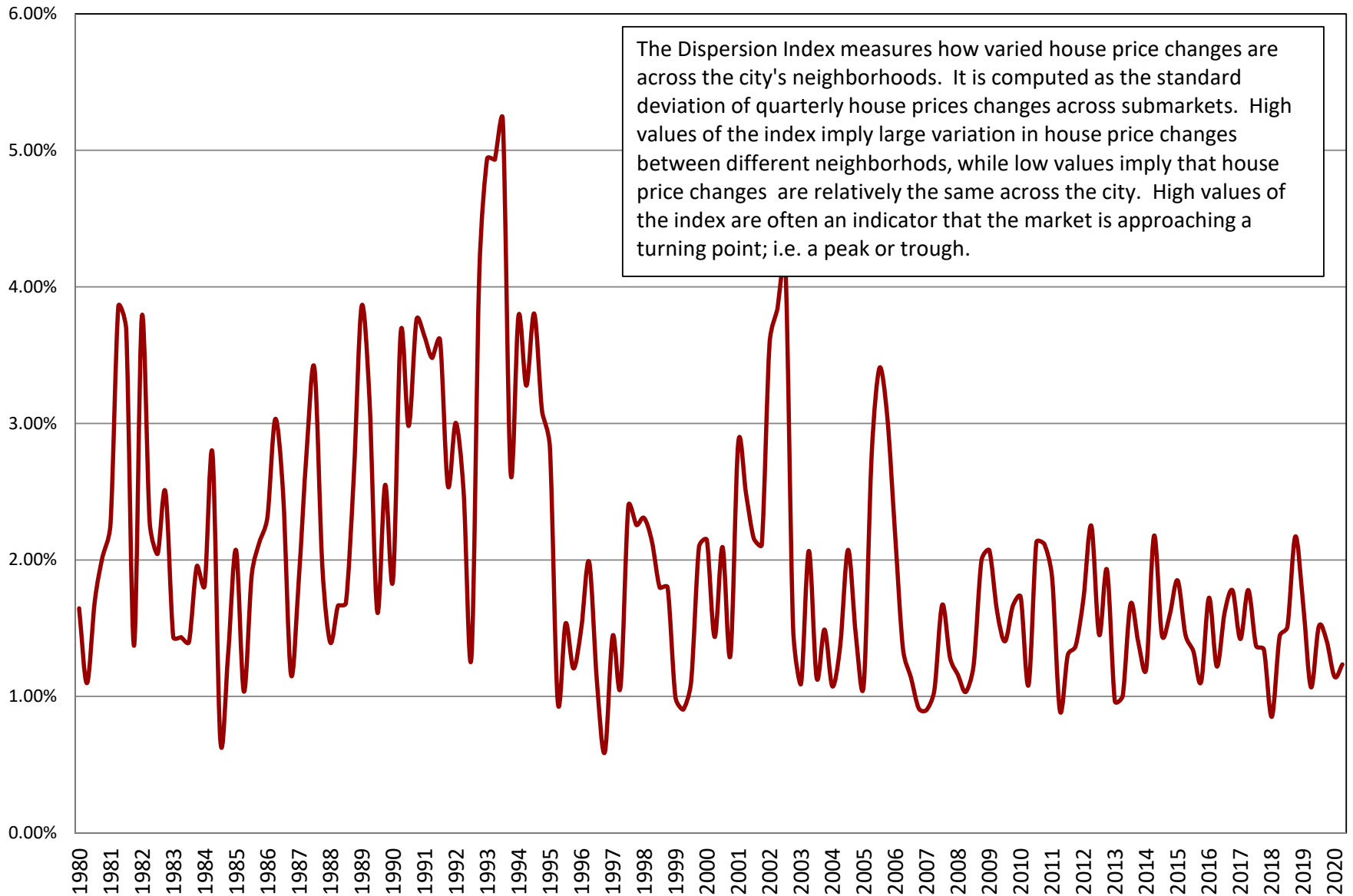
Philadelphia House Price Diffusion Index 1980-2020



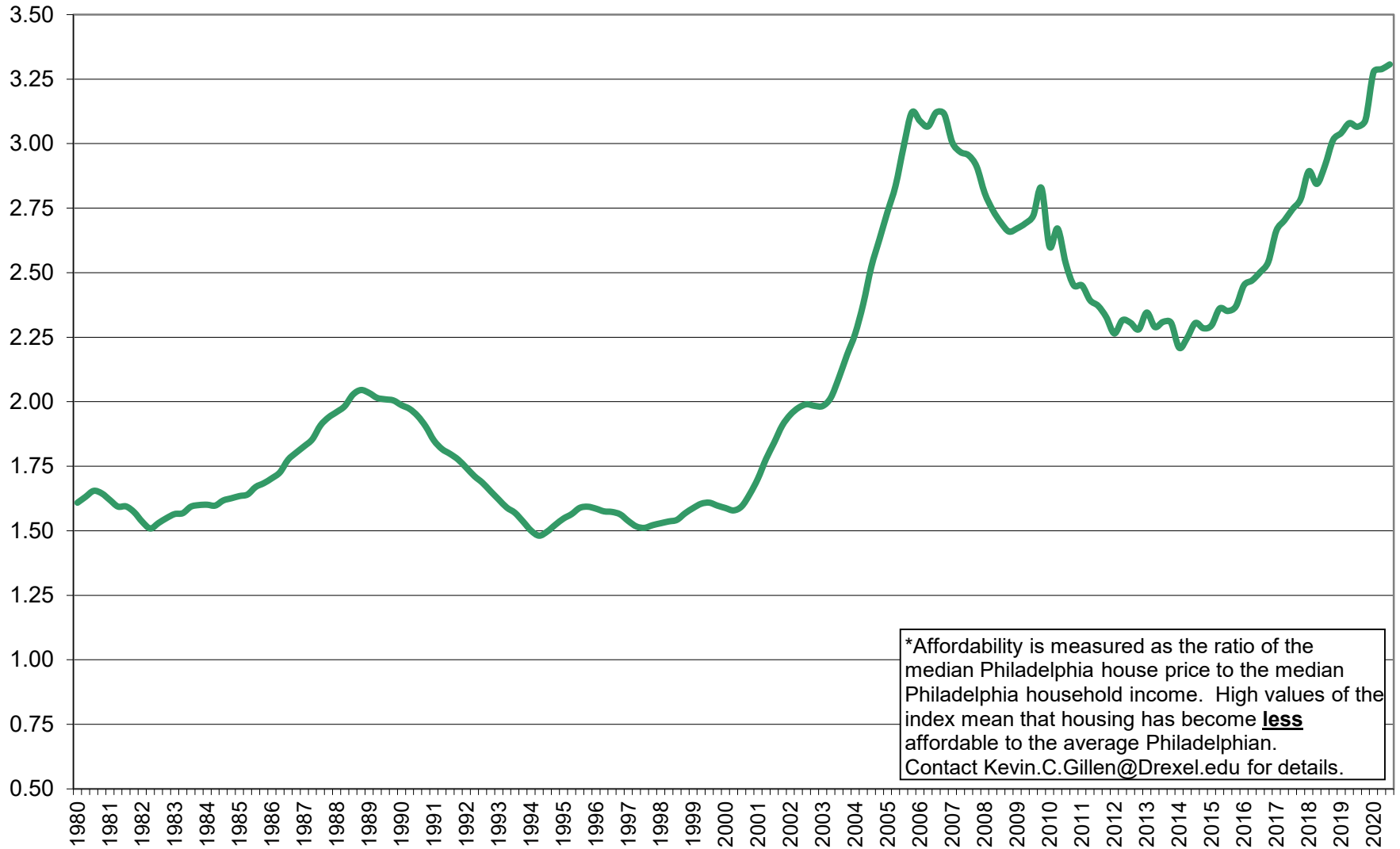
Philadelphia House Prices 1980-2020: Declines v. House Price Index



Dispersion Index of Philadelphia Housing

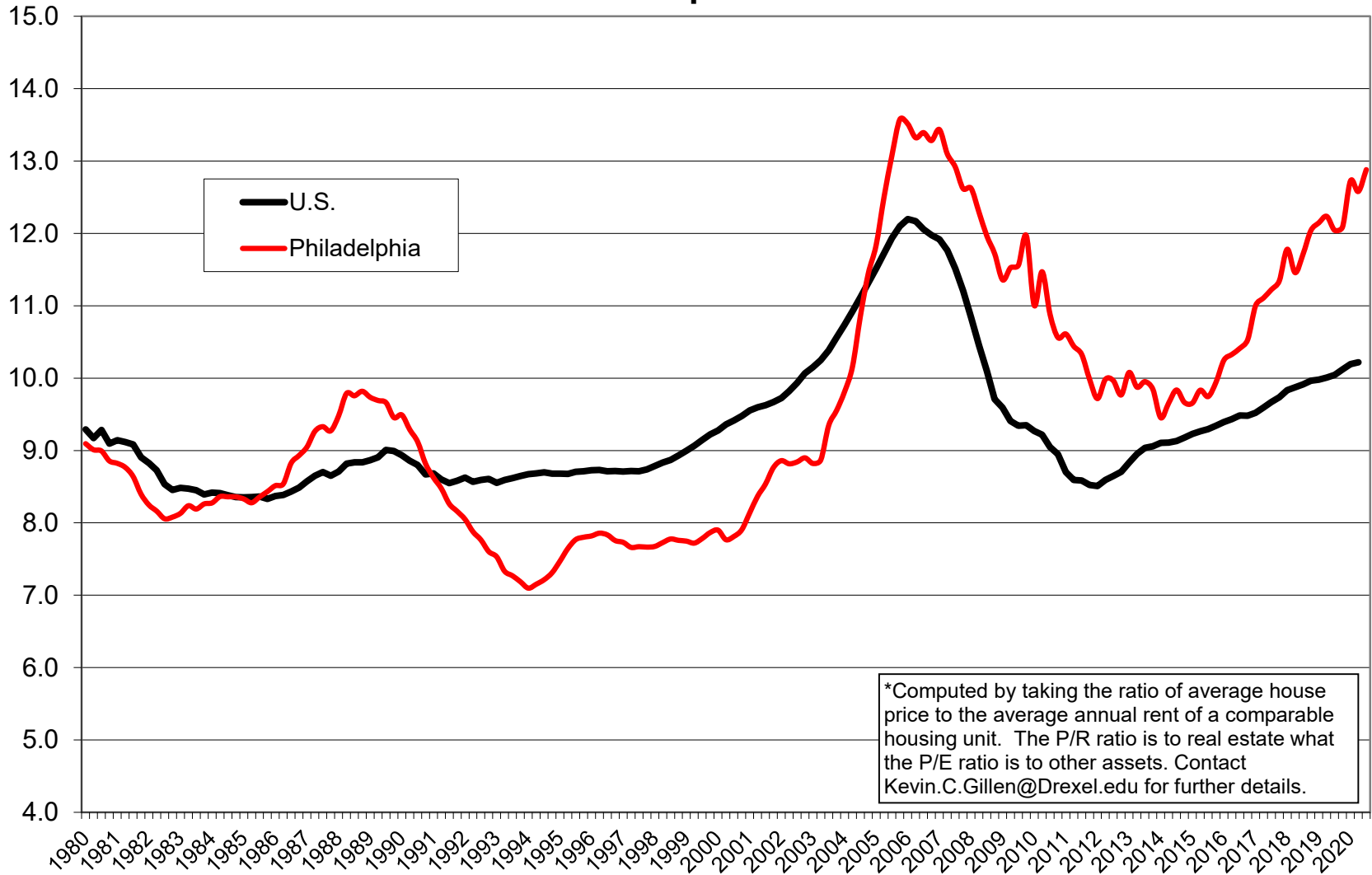


Philadelphia Housing Affordability* Index: 1980-2020



*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.

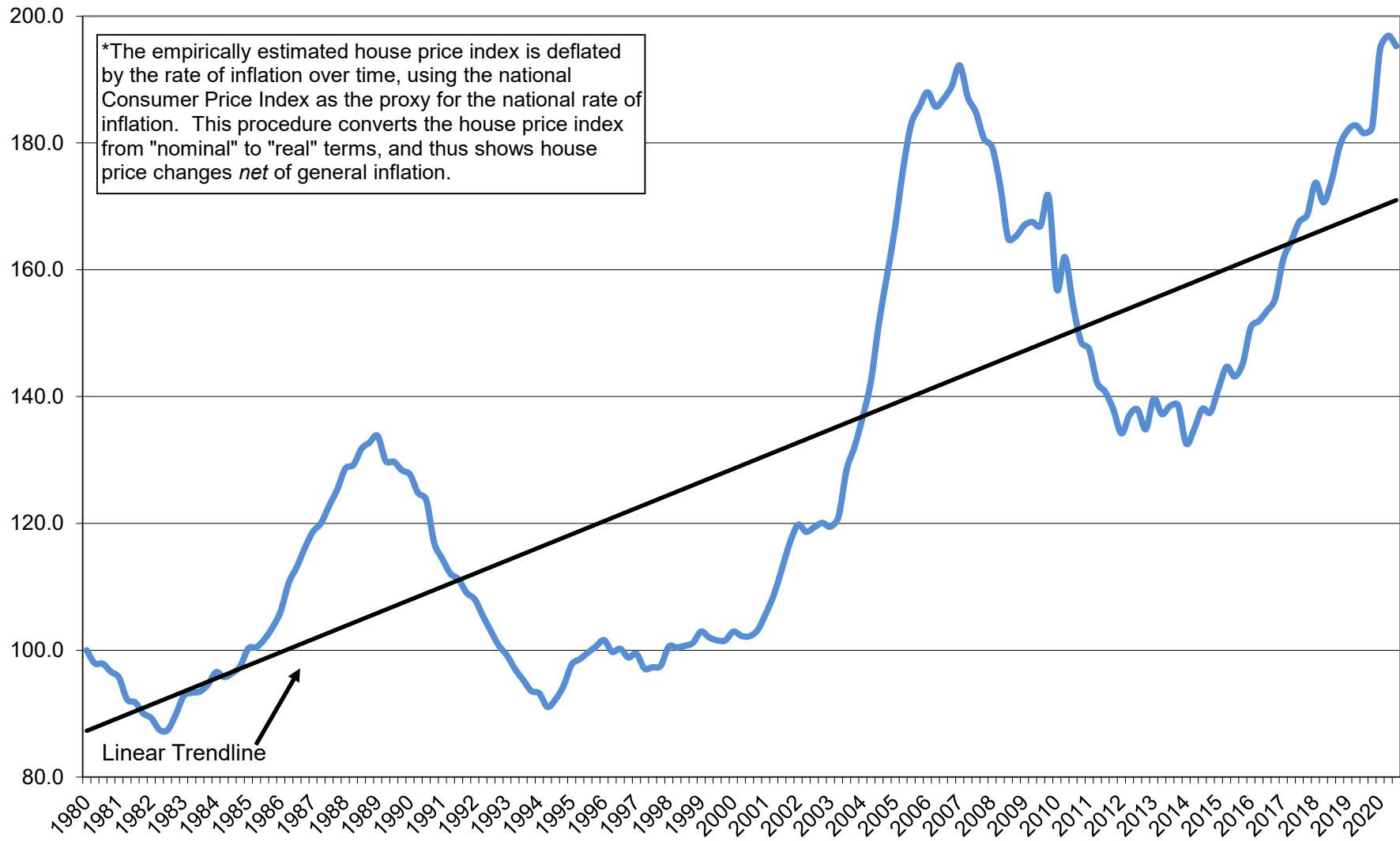
Average House Price-to-Rent Ratios*: 1980-2020 Philadelphia v. U.S.



*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.

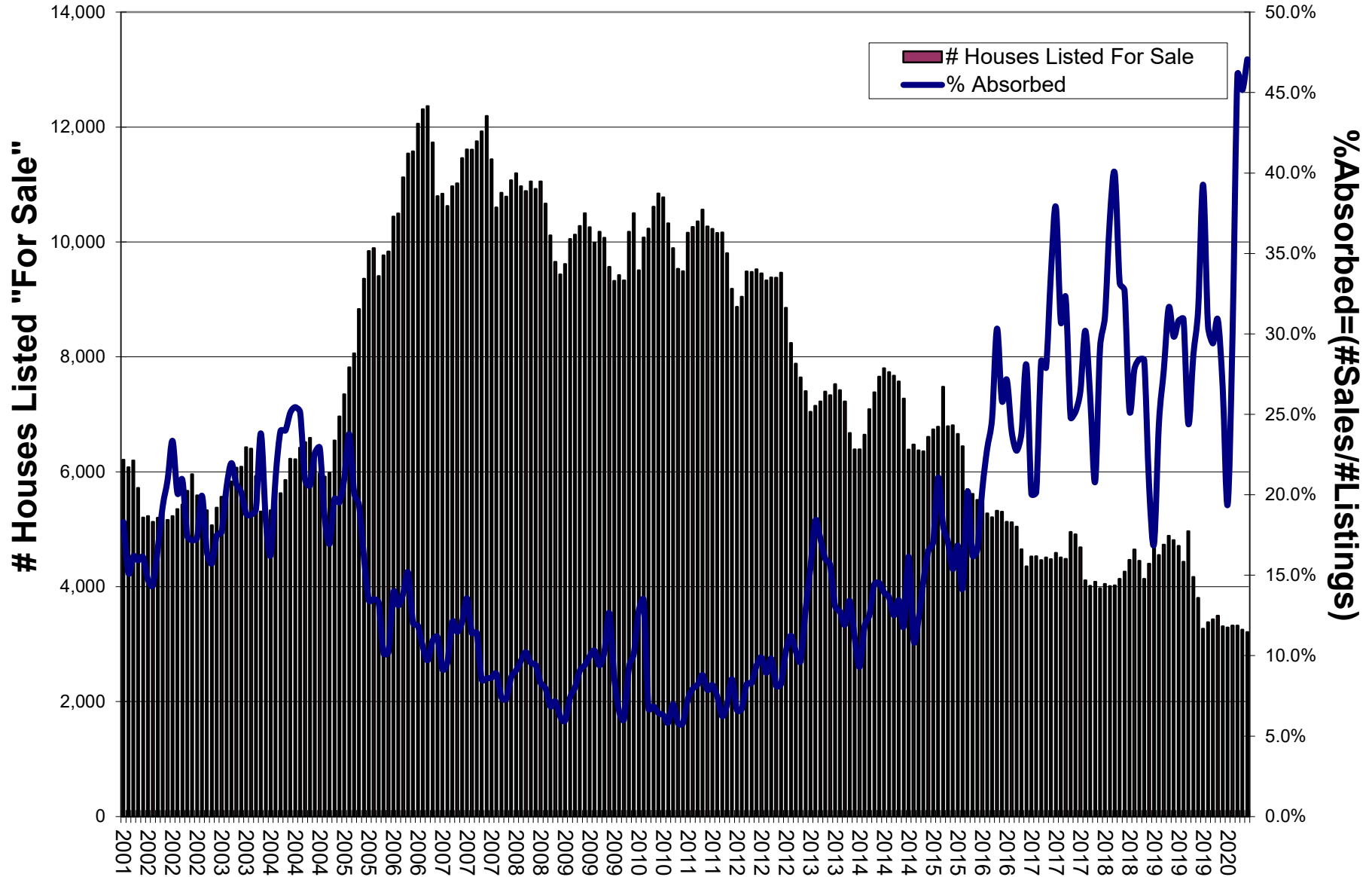
Inflation-Adjusted* Philadelphia House Price Index 1980-2020

1980Q1=100



Source: US Bureau of Labor Statistics

Philadelphia Houses Listed For Sale: Inventory v. Sales Rate

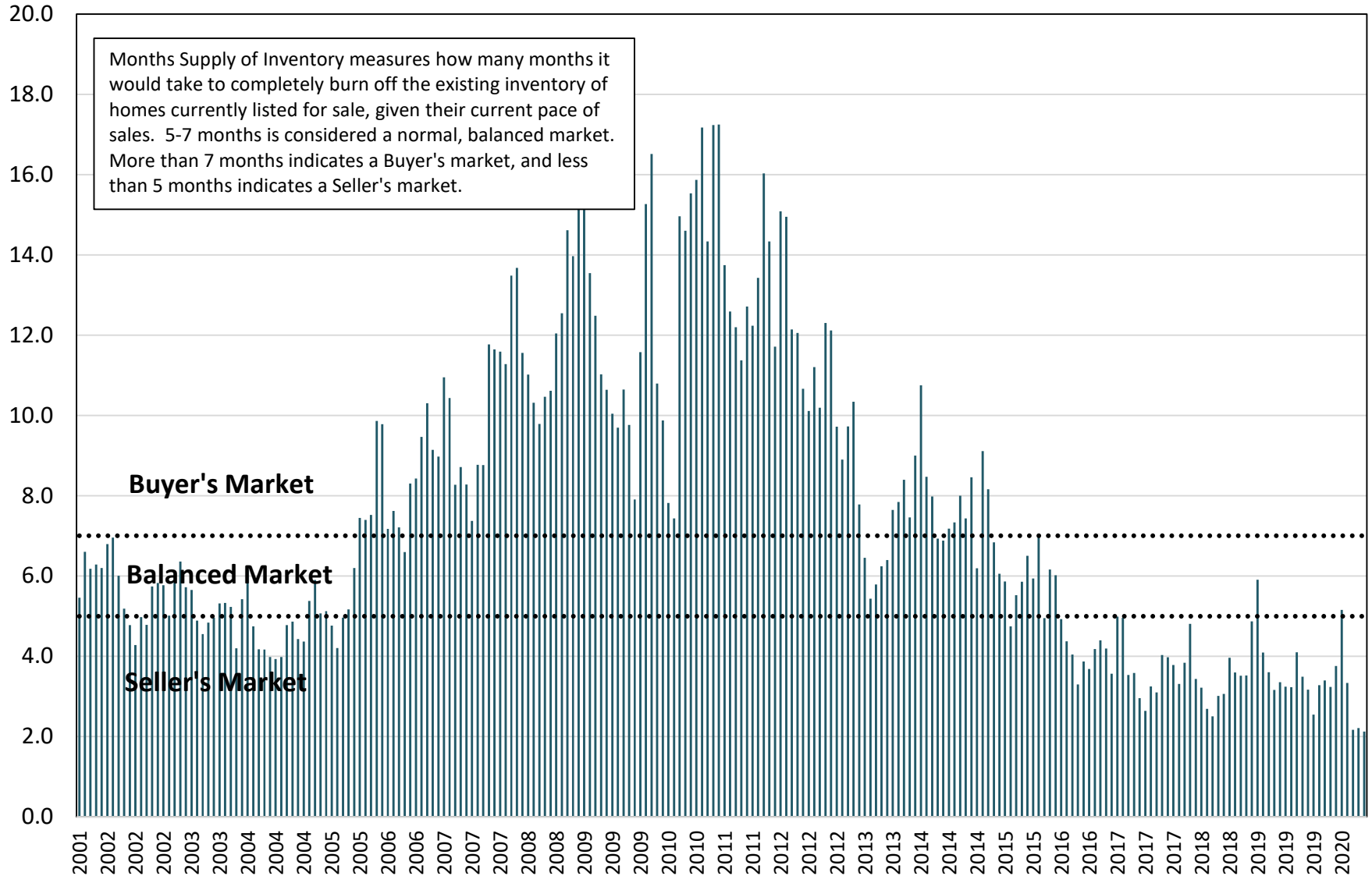


“%Absorbed” is defined as the percent of homes listed for sale in a given month that also sold in that same month.

Source: Trend MLS

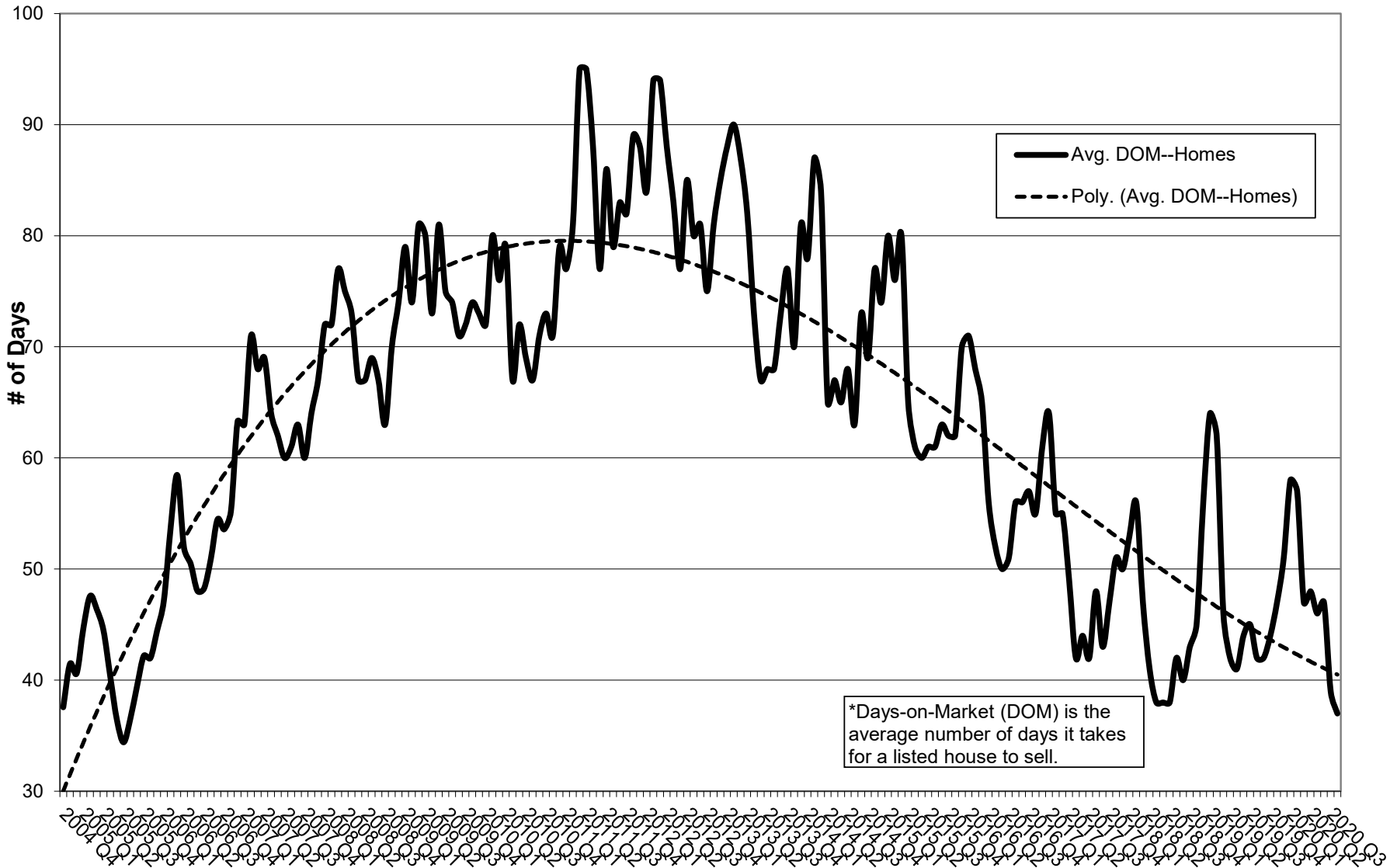


Months Supply of Inventory in Philadelphia



Source: Trend MLS

Average Days-on-Market* for Philadelphia Homes

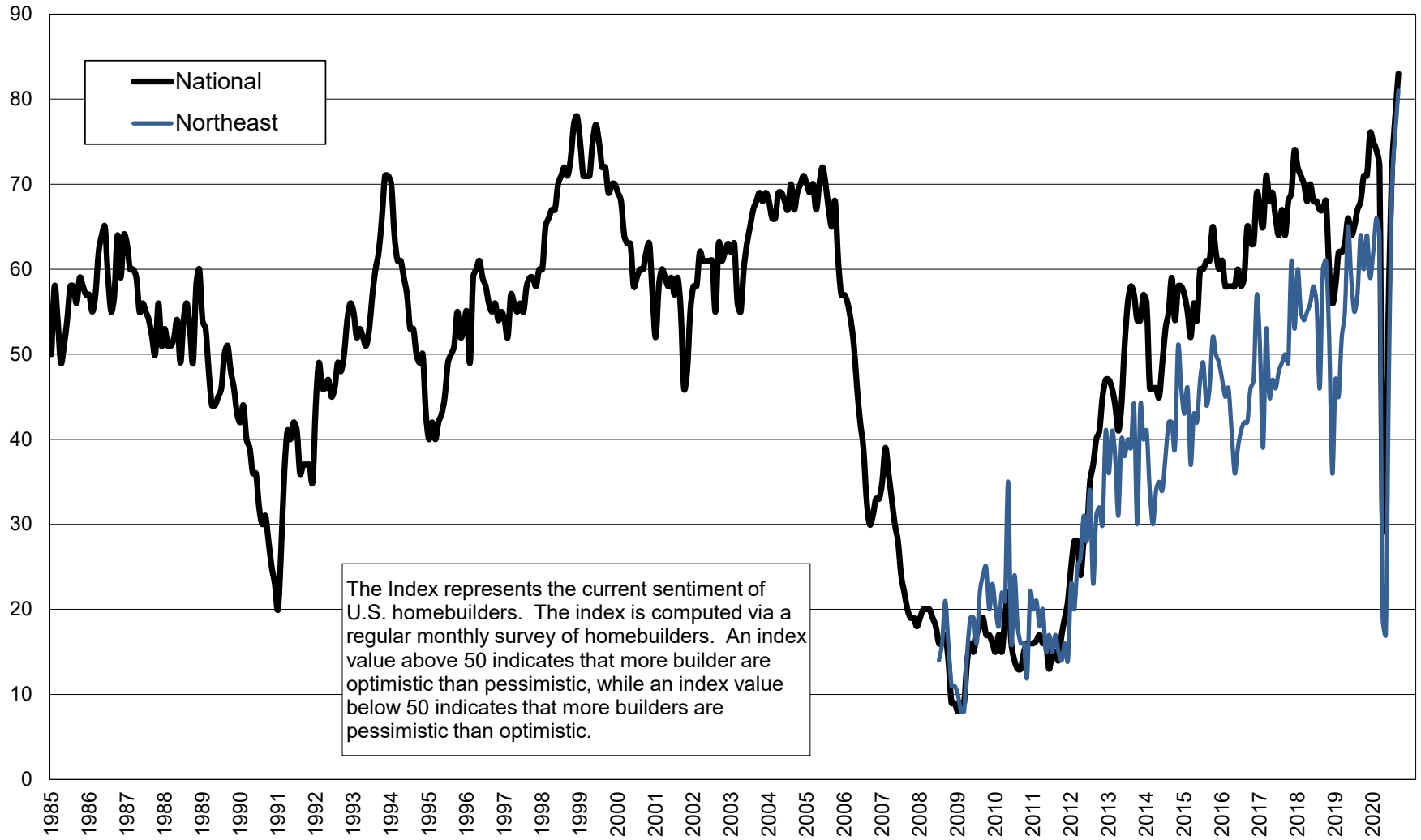


*Days-on-Market (DOM) is the average number of days it takes for a listed house to sell.

Source: Trend MLS

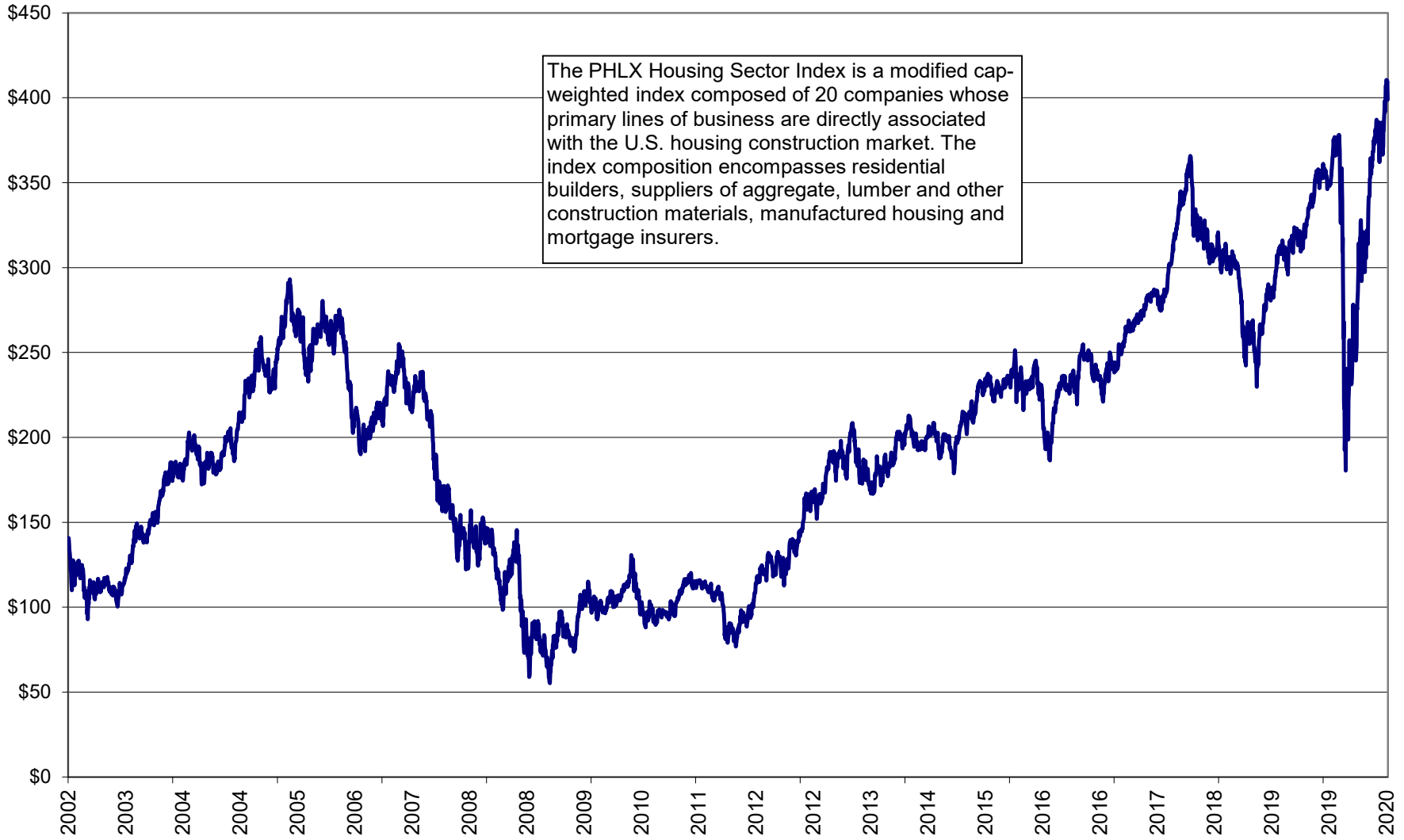


Index of Homebuilder Sentiment: 1985-2020 (Seasonally Adjusted)



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

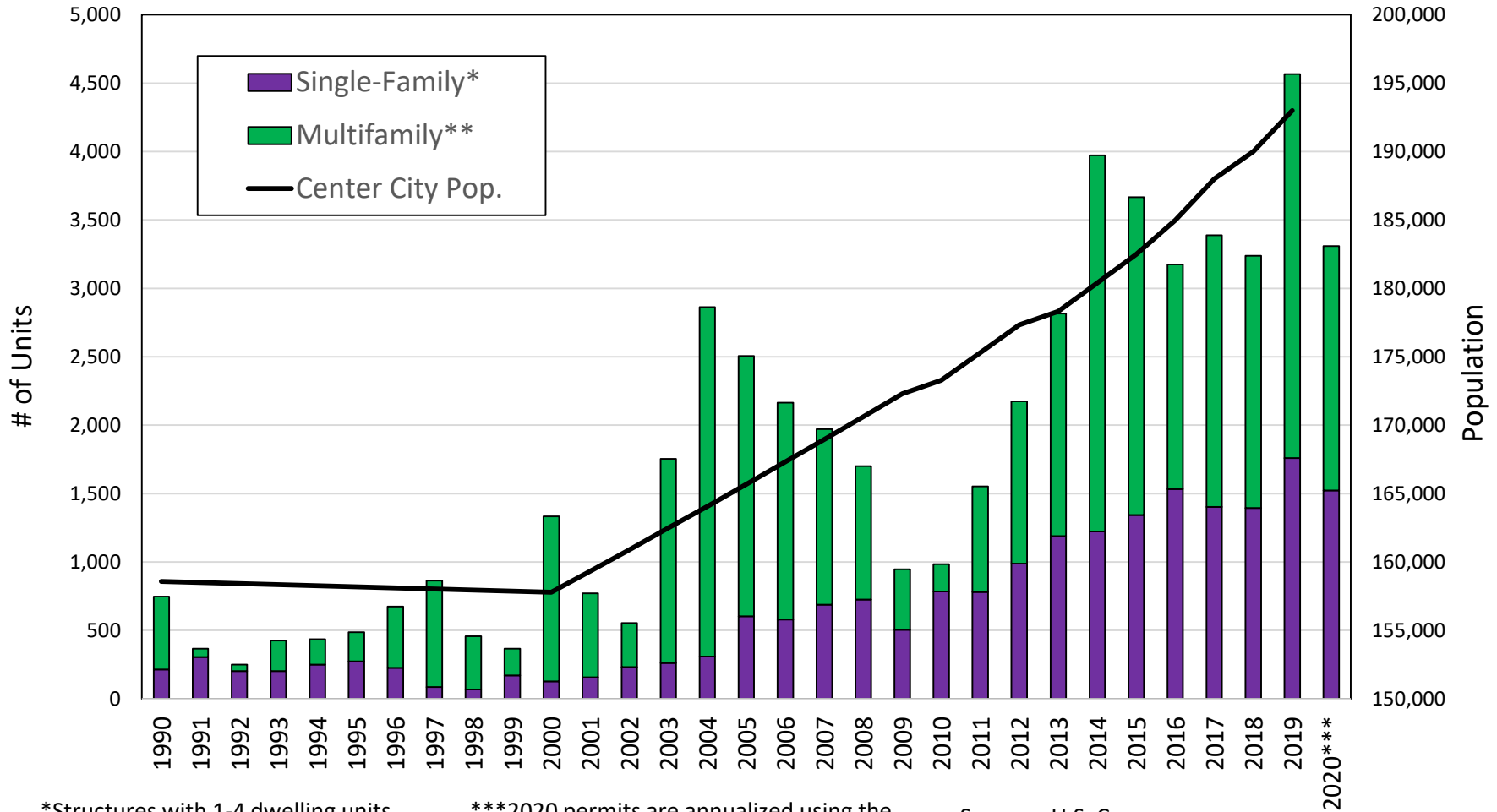
Philadelphia Stock Exchange Housing Sector Index: 2002-2020



The PHLX Housing Sector Index is a modified cap-weighted index composed of 20 companies whose primary lines of business are directly associated with the U.S. housing construction market. The index composition encompasses residential builders, suppliers of aggregate, lumber and other construction materials, manufactured housing and mortgage insurers.

Source: finance.yahoo.com

Building Permits Issued for Construction of Residential Units in Philadelphia 1990-2020: Single-Family v. Multifamily



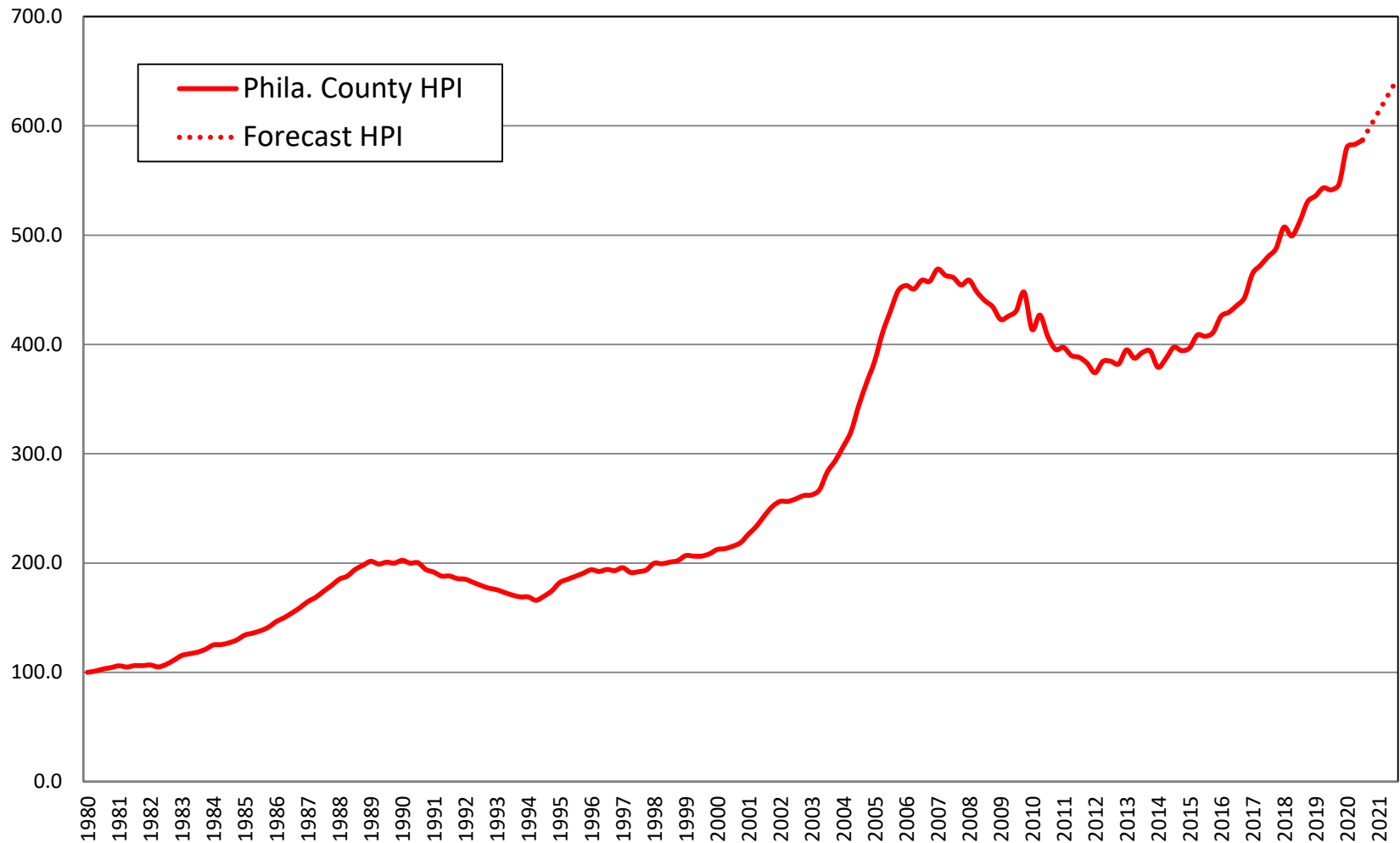
*Structures with 1-4 dwelling units
 **Structures with >=5 dwelling units

***2020 permits are annualized using the number of permits filed YTD.

Sources: U.S. Census, Center City District

Philadelphia House Price Index and 1-Year Forecast

Philadelphia House Price Index: Actual v. Forecast



Zillow's most recent forecast of Philadelphia house prices has undergone a significant revision. After several quarters of predicting negative house price appreciation, Zillow is currently projecting an increase of 8.3% in Philadelphia's general level of house prices over the next 12 months.

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