

PHILADELPHIA HOUSE PRICE INDICES

February 24, 2021



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KEVIN C. GILLEN, Ph.D.

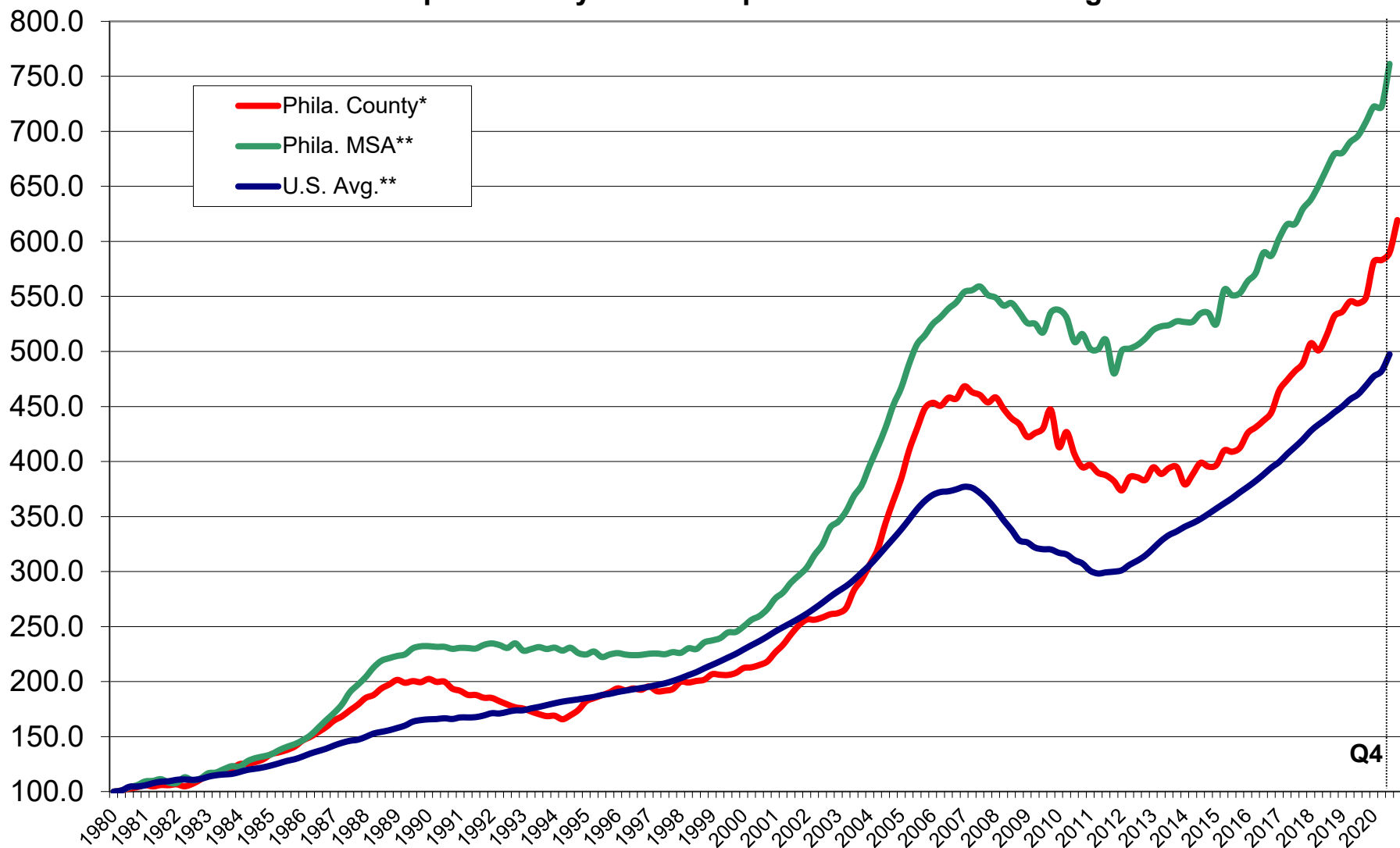
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***Disclaimers and Acknowledgments:** The Lindy Institute for Urban Innovation at Drexel University provides this report free of charge to the public. The report is produced by Kevin C. Gillen Ph.D.. The author thanks Azavea.com, the Philadelphia Office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



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House Price Indices 1980-2020: 1980Q1=100 Philadelphia County v. Philadelphia MSA and U.S. Average



Q4

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

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

These HPIs are current through 2020Q3 only.

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



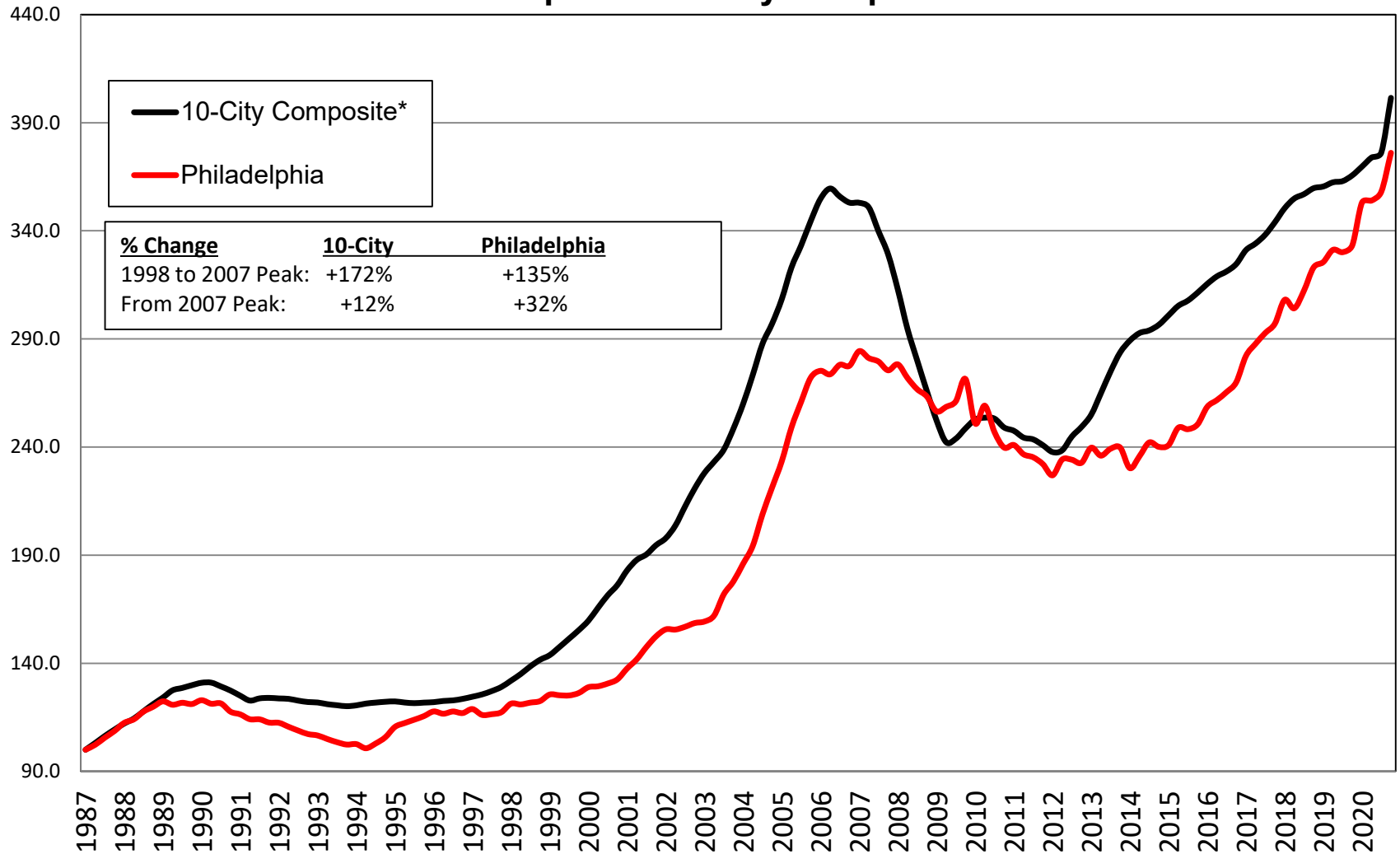
Total House Price Appreciation Rates by Geographic Market

Period	Philadelphia County*	Philadelphia MSA**	U.S.A.**
40-Year	519.4%	661.3%	397.4%
10-Year	56.9%	49.7%	60.2%
1-Year	12.8%	9.4%	7.9%
1-Quarter	5.0%	5.4%	3.1%

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

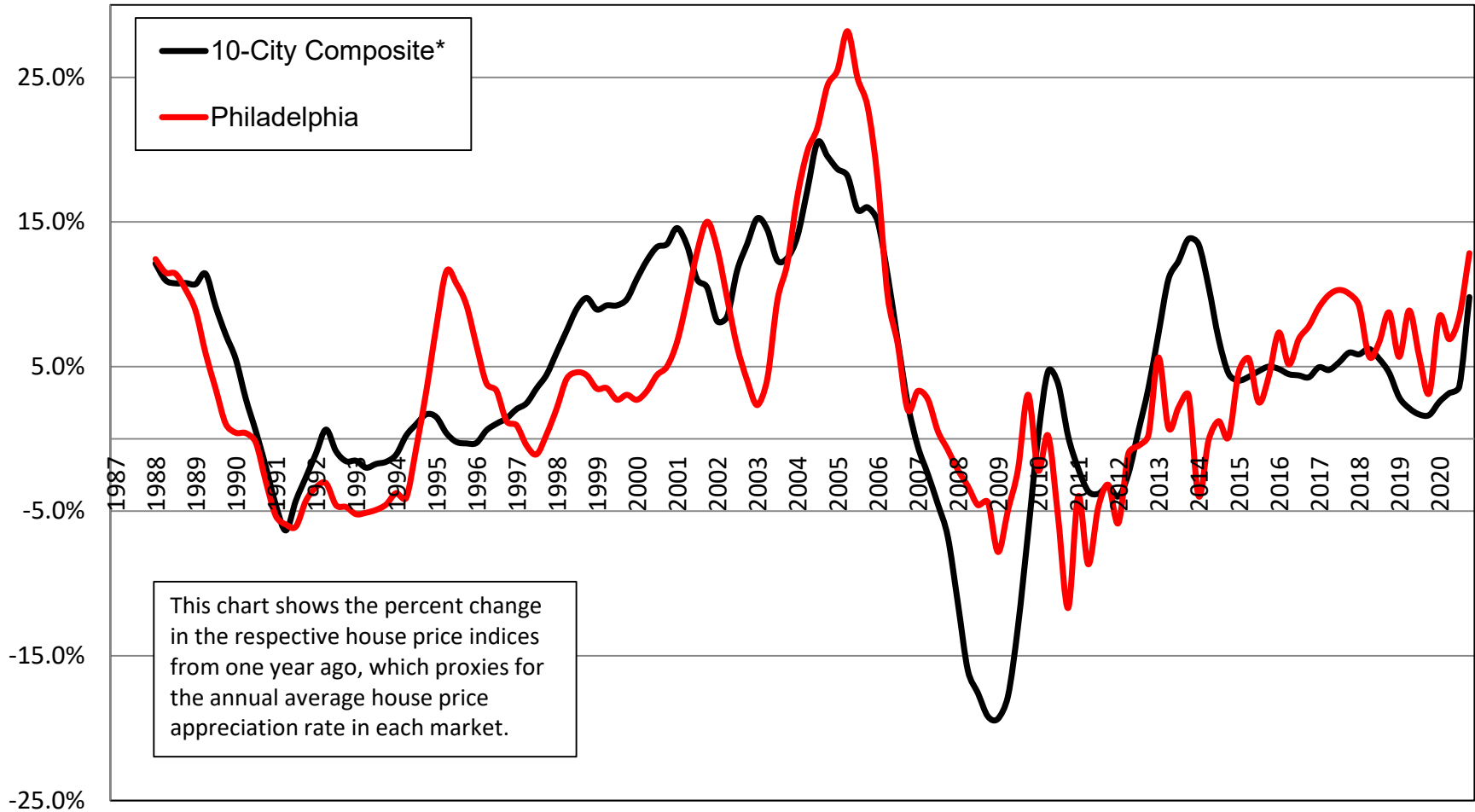
**Source: U.S. Federal Housing Finance Agency (FHFA). These numbers are through 2020Q3 only. “MSA”=“Metropolitan Statistical Area”, which is the entire 10-county region.

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.

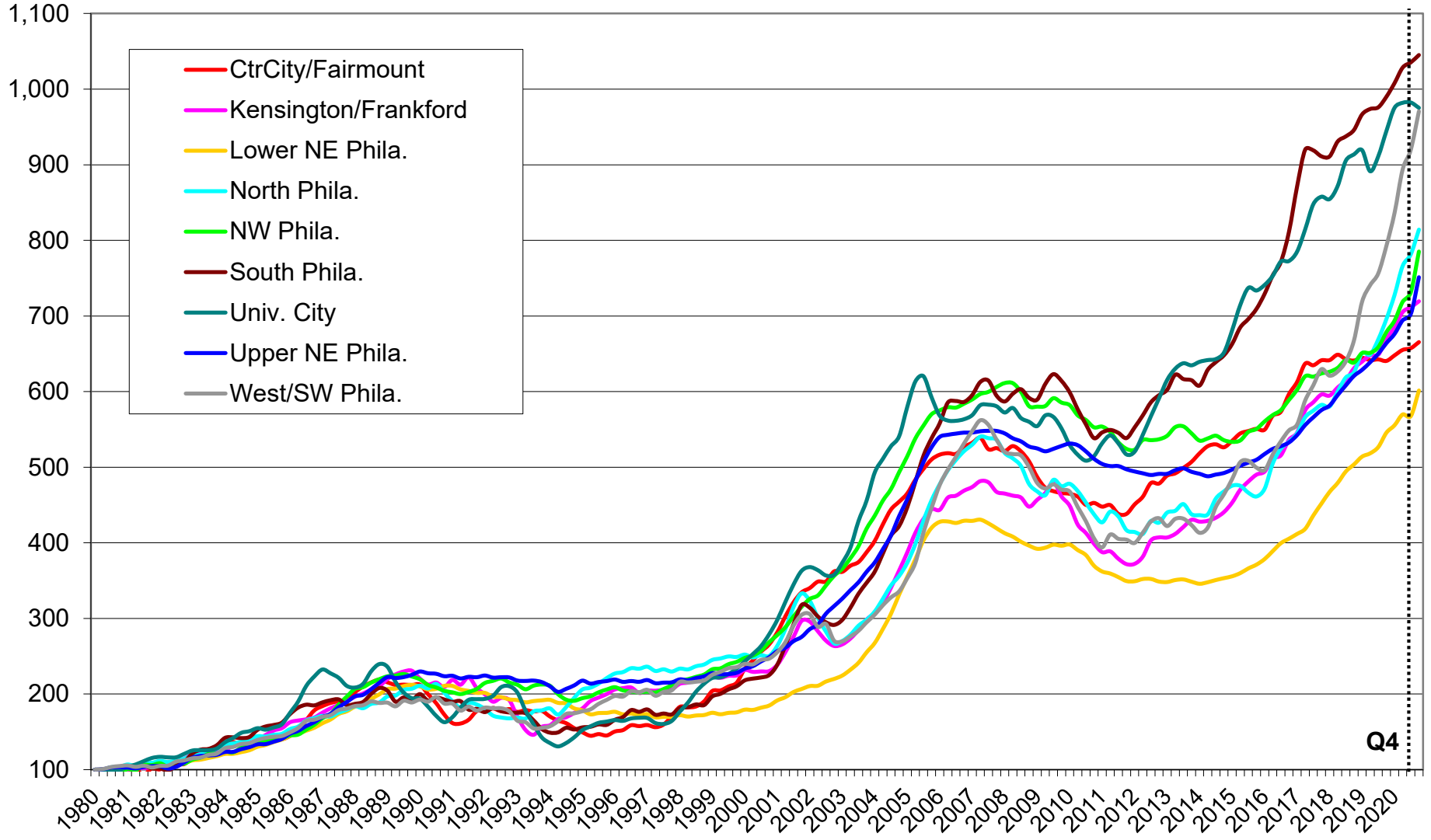
YoY House Price Change (%) 1987-2020: Philadelphia v. 10-City Composite



*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.

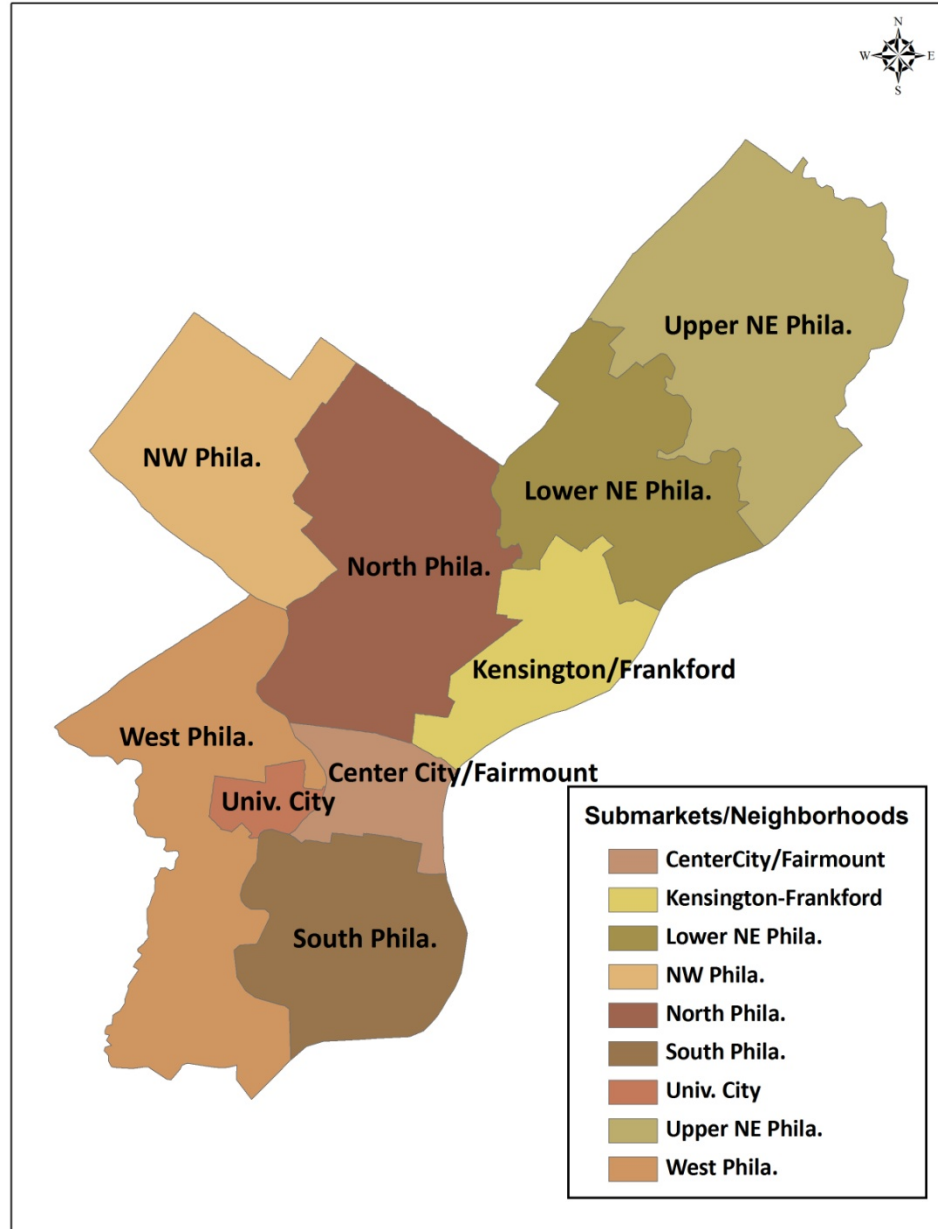
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Philadelphia House Price Appreciation Rates by Submarket

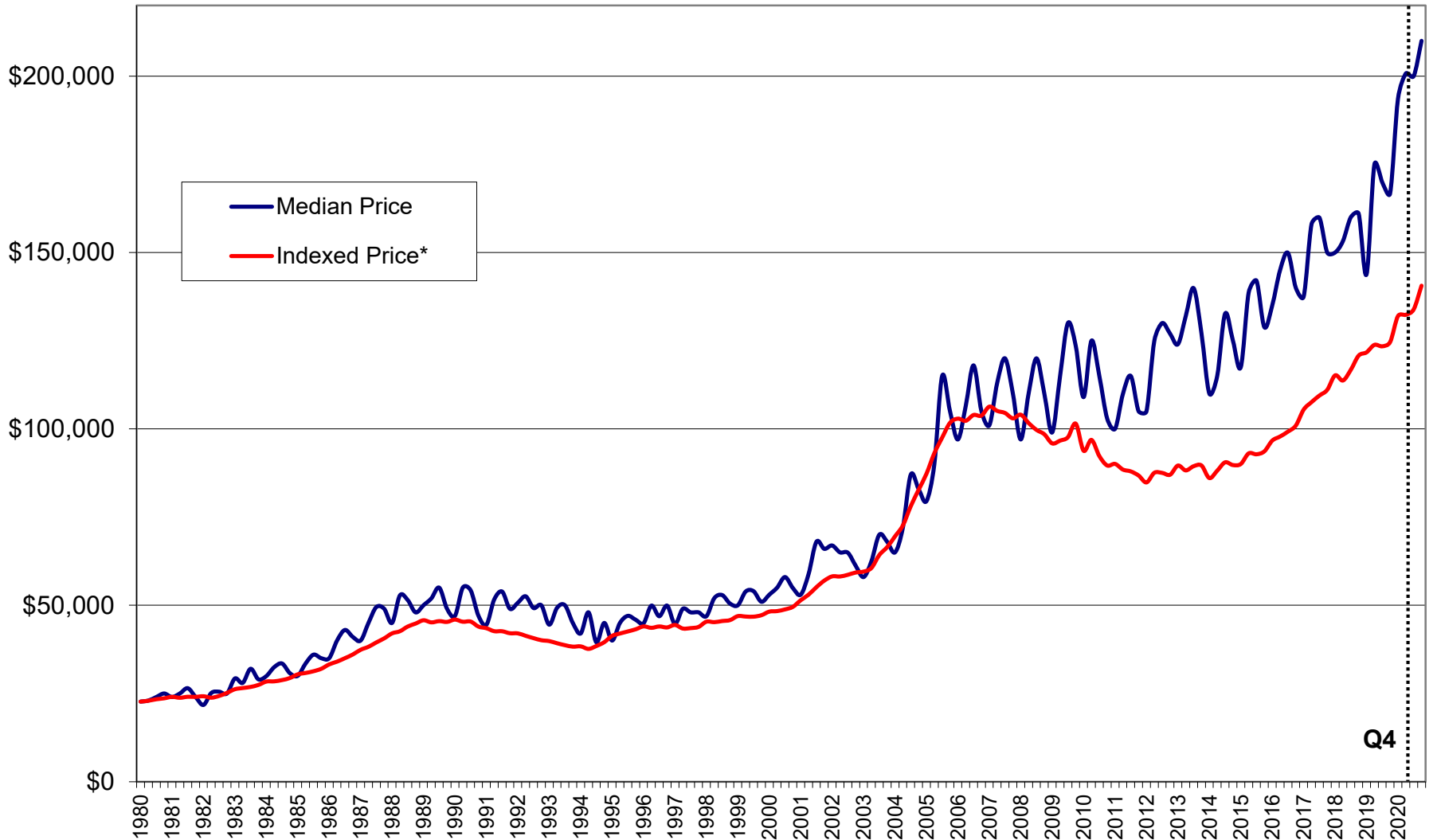
Period	Center City/ Fairmount	Kensington /Frankford	Lower NE Phila.	North Phila.	NW Phila.	South Phila.	Univ. City	Upper NE Phila.	West/ SW Phila.
40-year	565.4%	619.4%	501.4%	714.2%	685.2%	945.1%	875.3%	651.2%	870.7%
10-year	47.0%	80.5%	62.7%	86.1%	42.1%	94.1%	89.5%	47.0%	139.2%
1-Year	3.9%	7.4%	10.2%	17.0%	15.7%	5.6%	3.2%	13.1%	22.4%
1-Quarter	1.2%	1.1%	6.0%	4.2%	7.4%	0.9%	-0.7%	6.9%	5.5%

This table gives the total % change in average house values by submarket, through 2020 Q4, from different starting points in time.

Philadelphia Submarket Boundaries

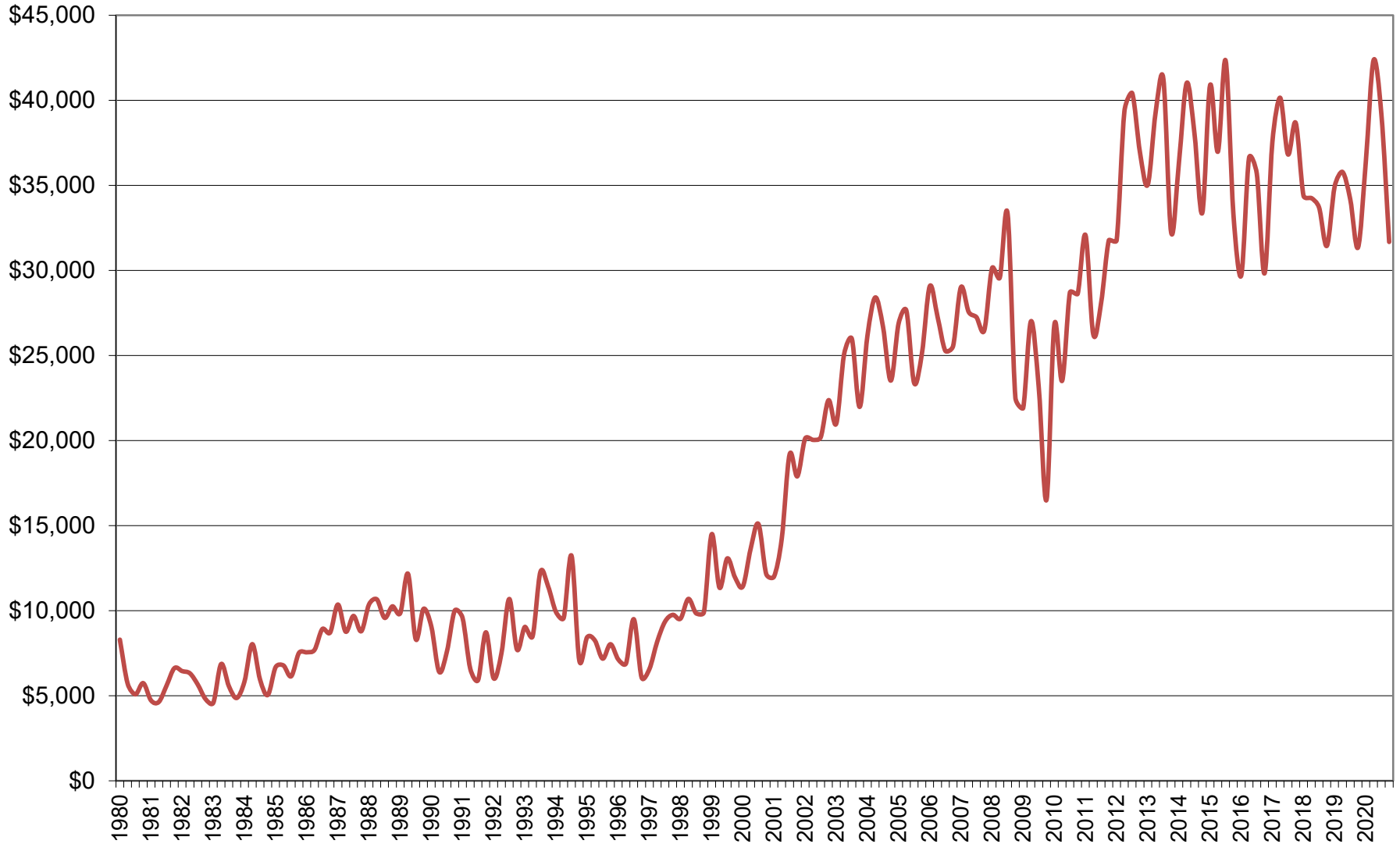


Median Philadelphia House Price v. Indexed Philadelphia House Price 1980-2020

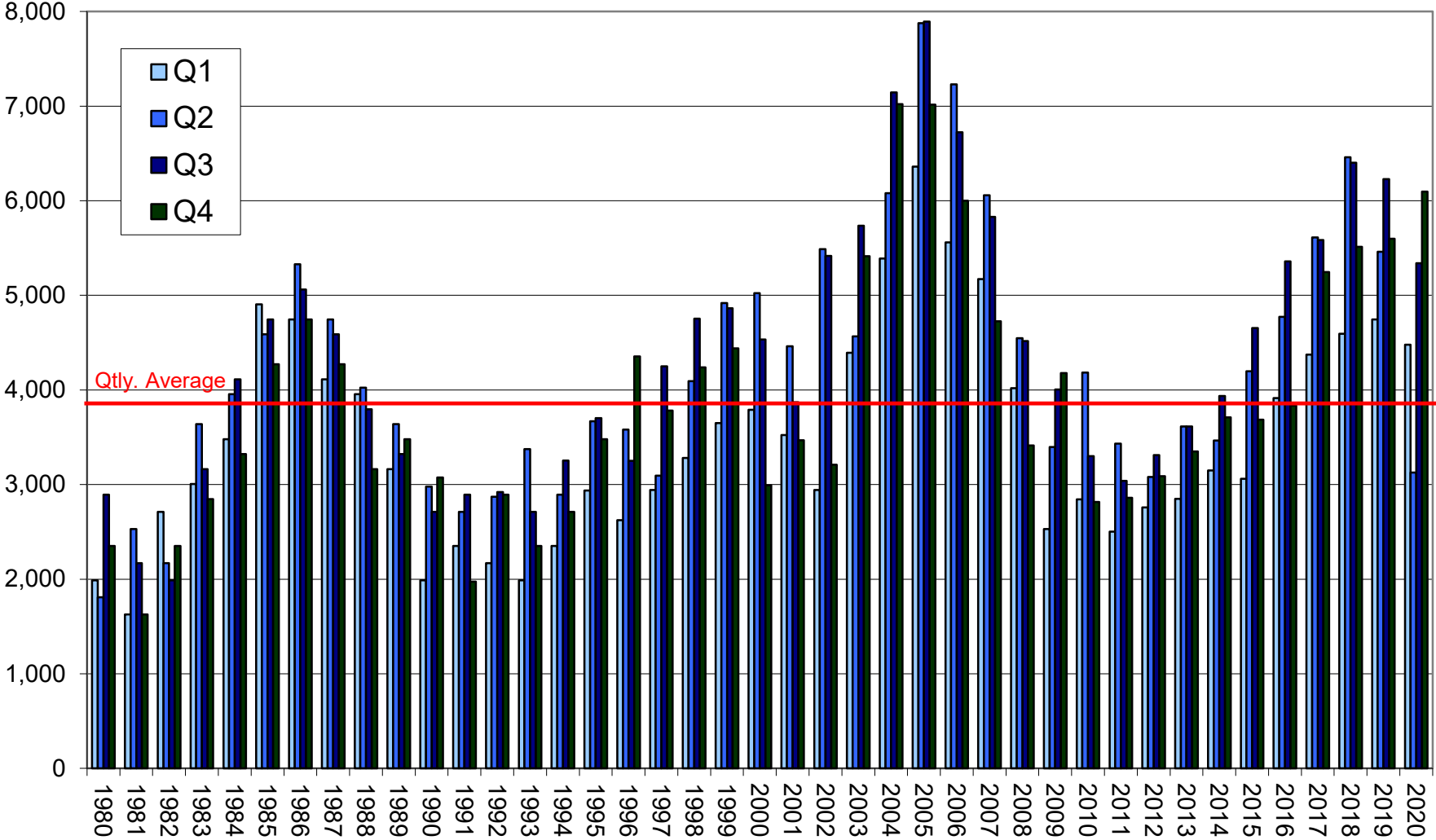


* Empirically estimated by Kevin C. Gillen, PhD

Average House Price Minus Median House Price: 1980-2020



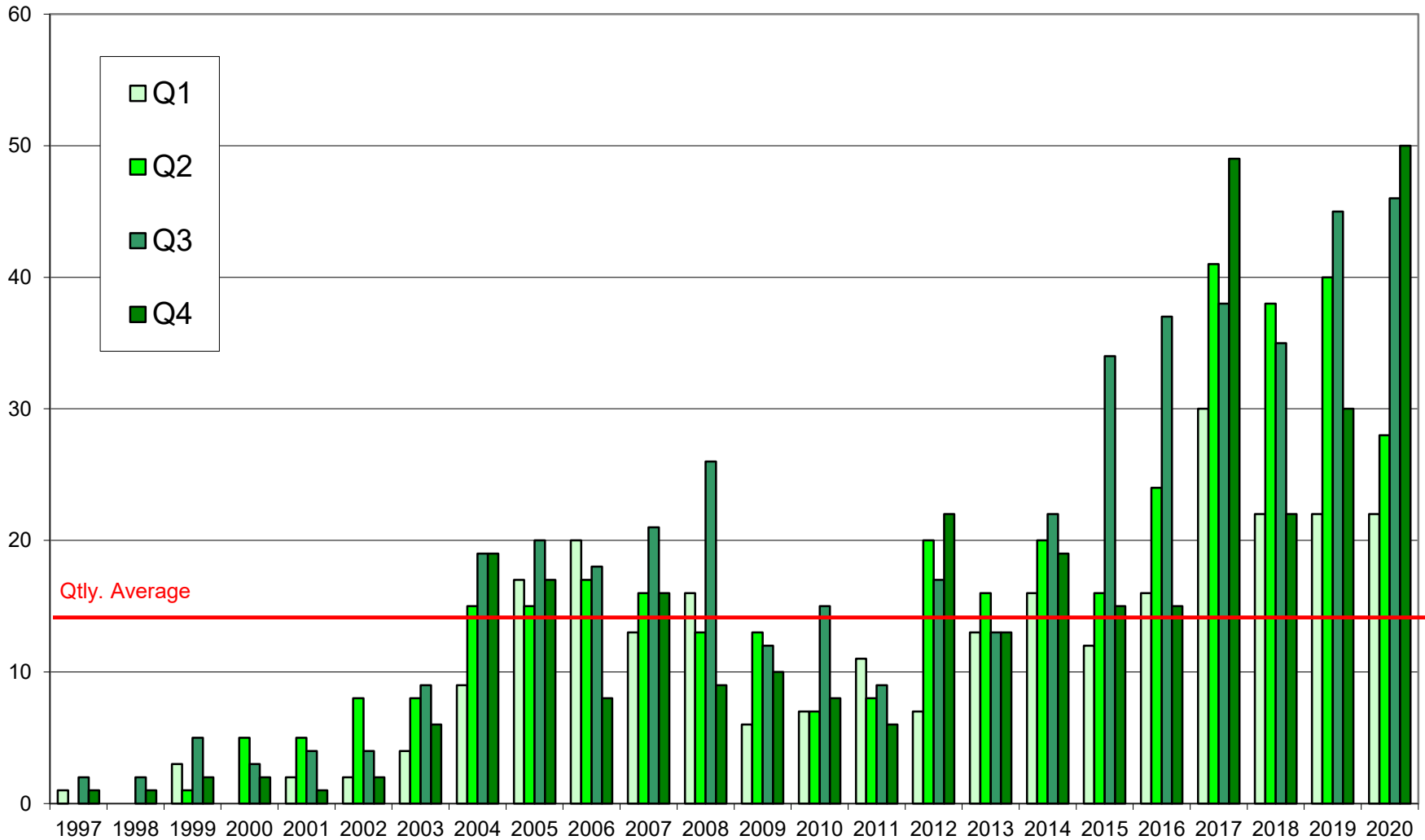
Number of Philadelphia House Sales* per Quarter: 1980-2020



Qtly. Average

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

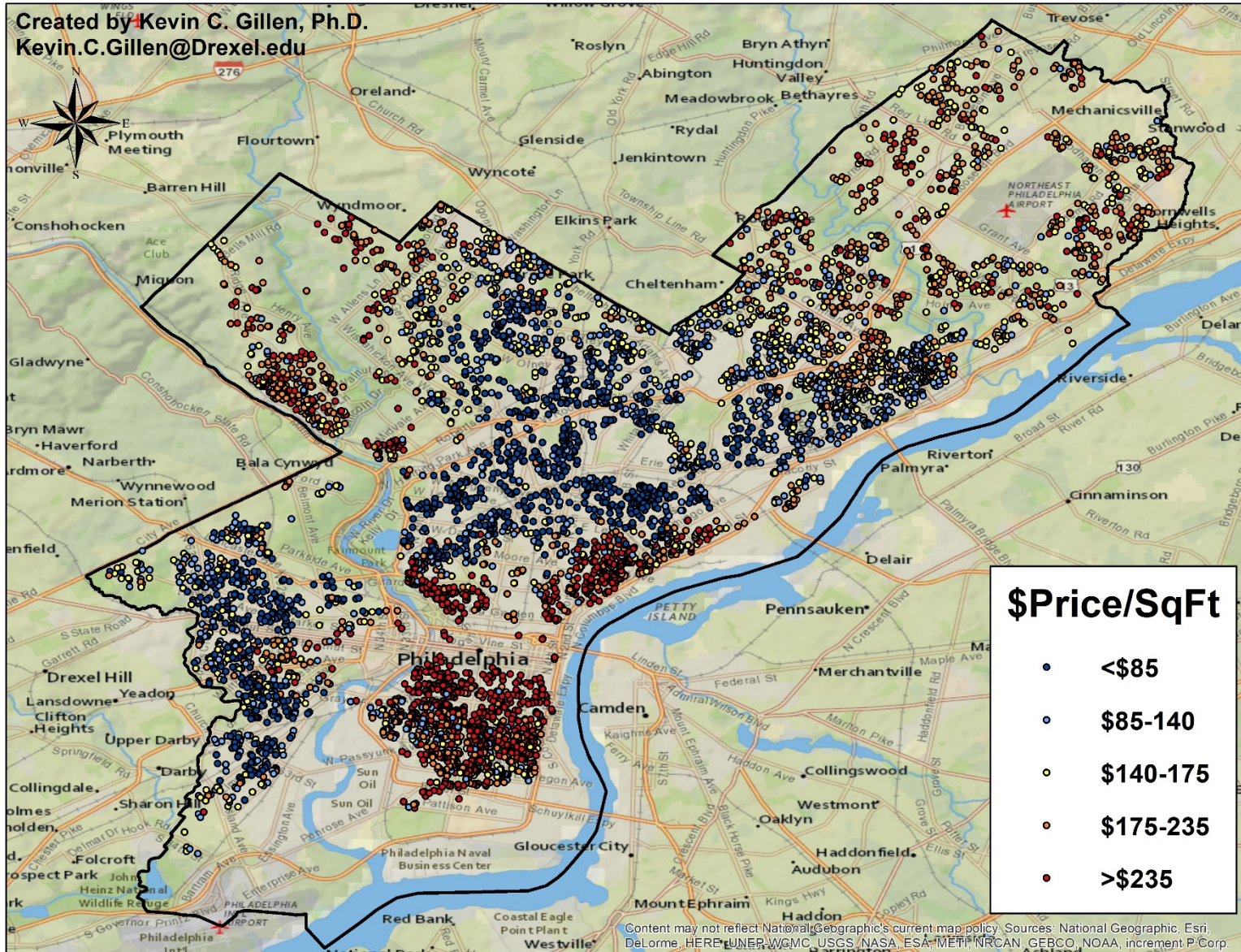
Number of Philadelphia House Sales* per Quarter with Price >= \$1 Million: 1997-2020



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

Philadelphia House Sales in 2020 Q4

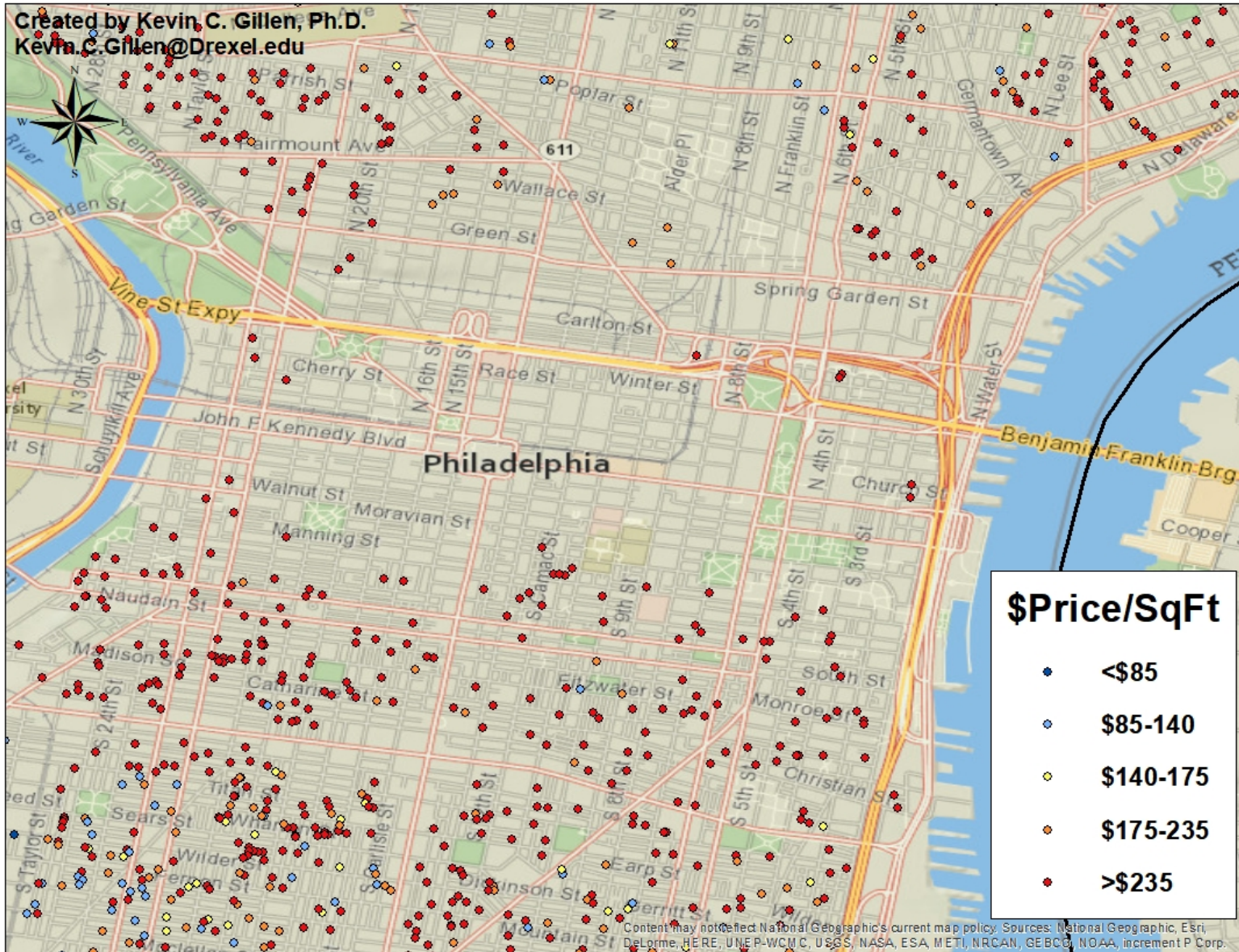
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Note: Sales are color-coded by the quintiles of the distribution of \$Price/SqFt. Hence, each of the five categories covers exactly 20% of all sales.

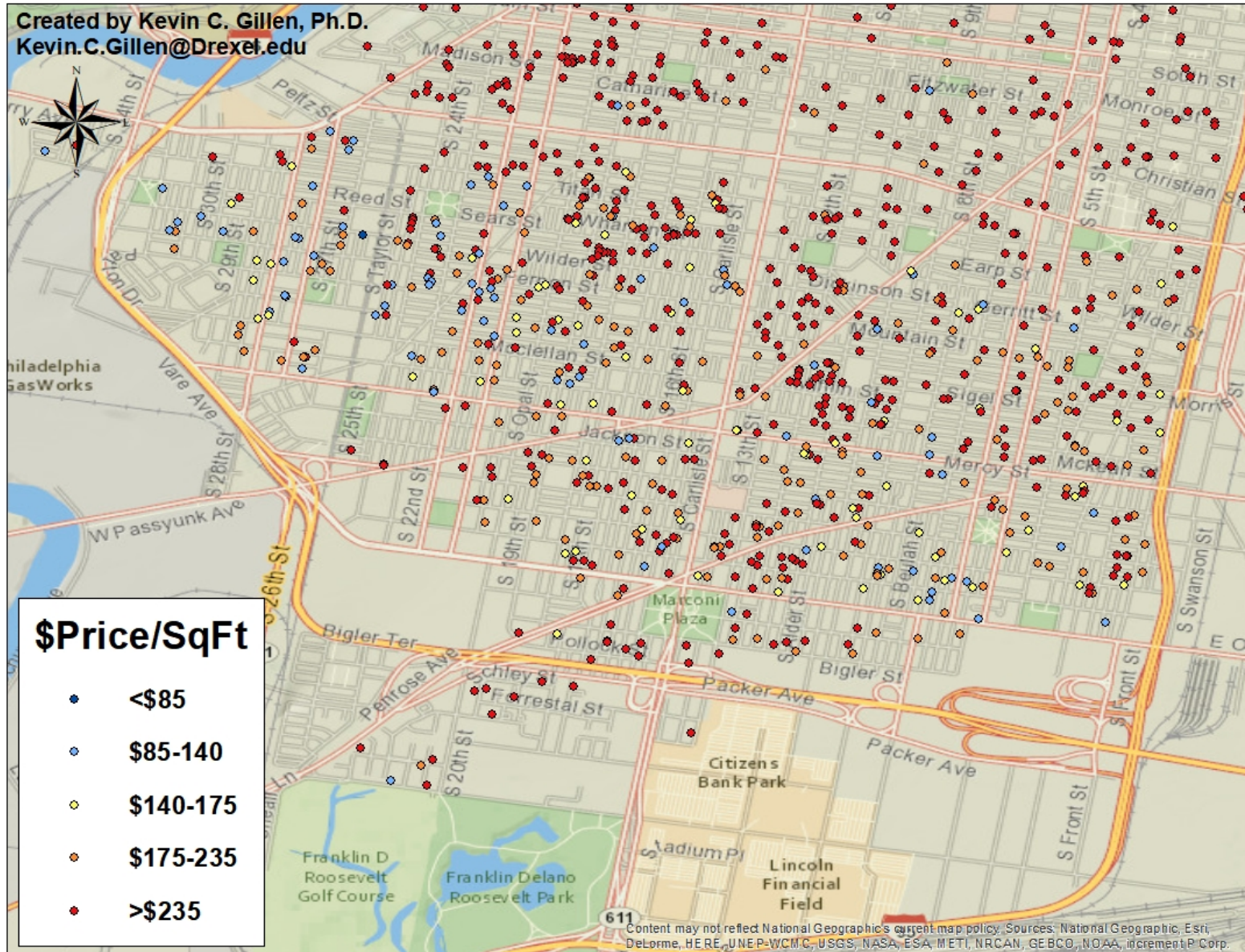
Center City House Sales in 2020 Q4

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South Philadelphia House Sales in 2020 Q4

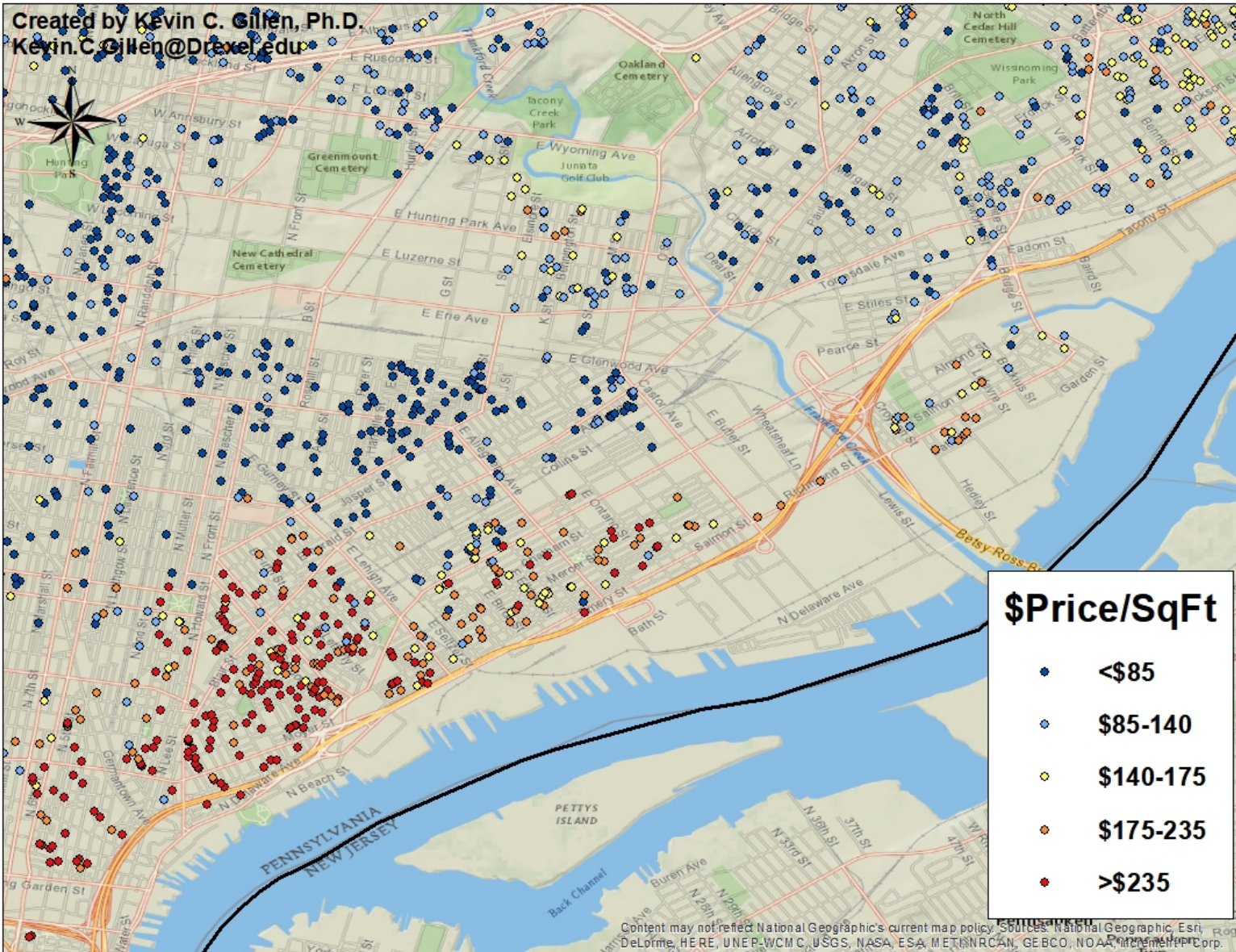
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Kensington/Frankford House Sales in 2020 Q4

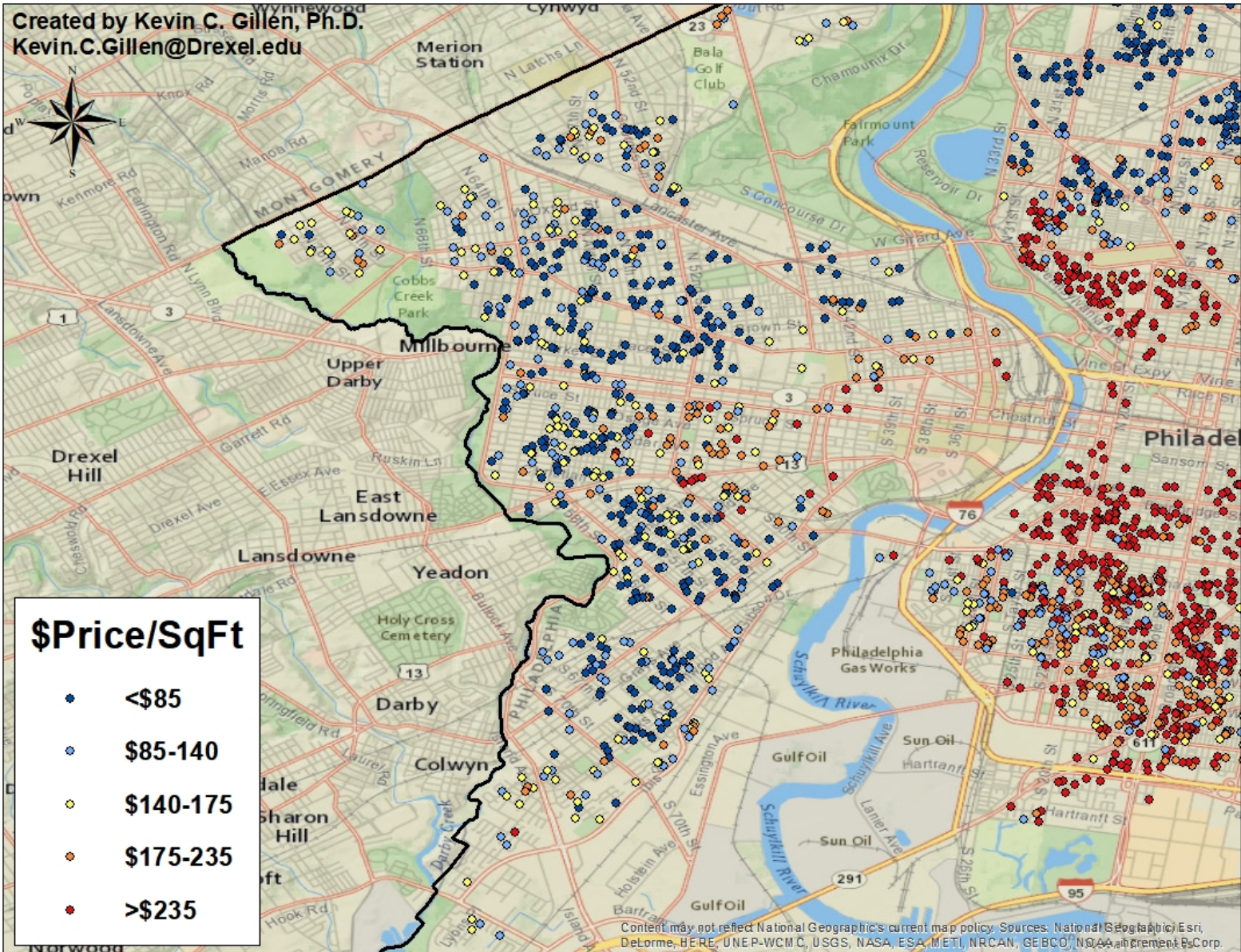
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West/Southwest Philadelphia House Sales in 2020 Q4

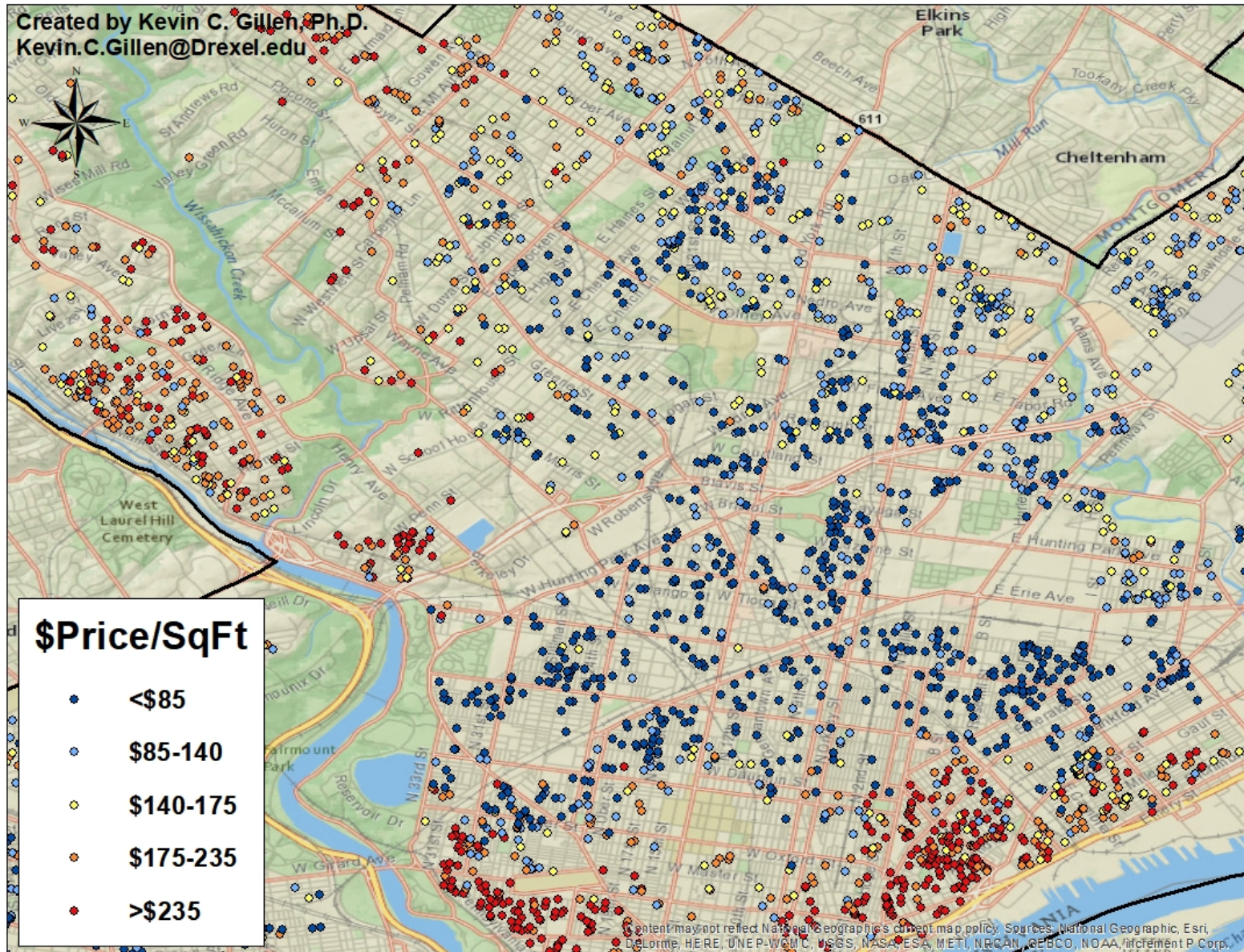
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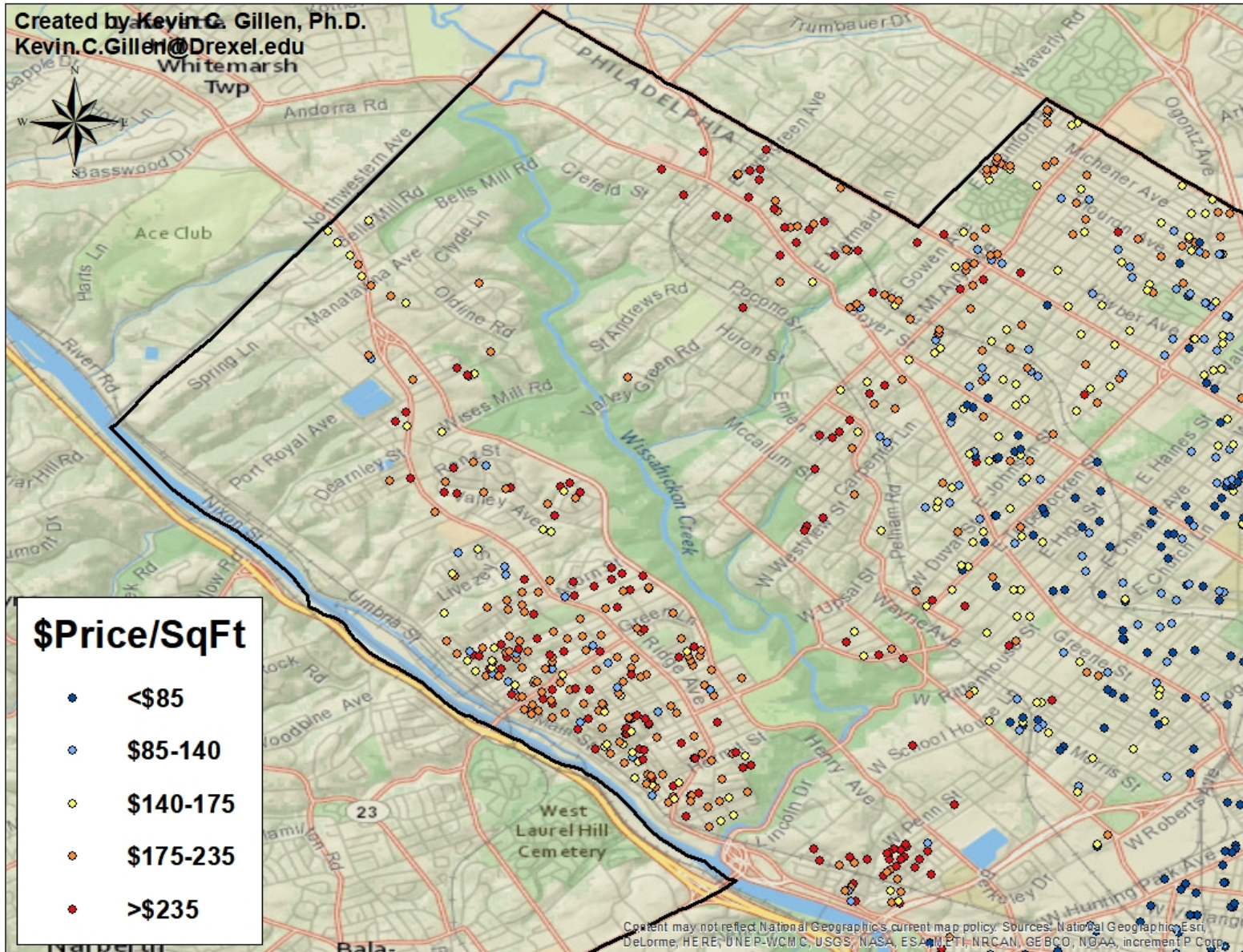
North Philadelphia House Sales in 2020 Q4

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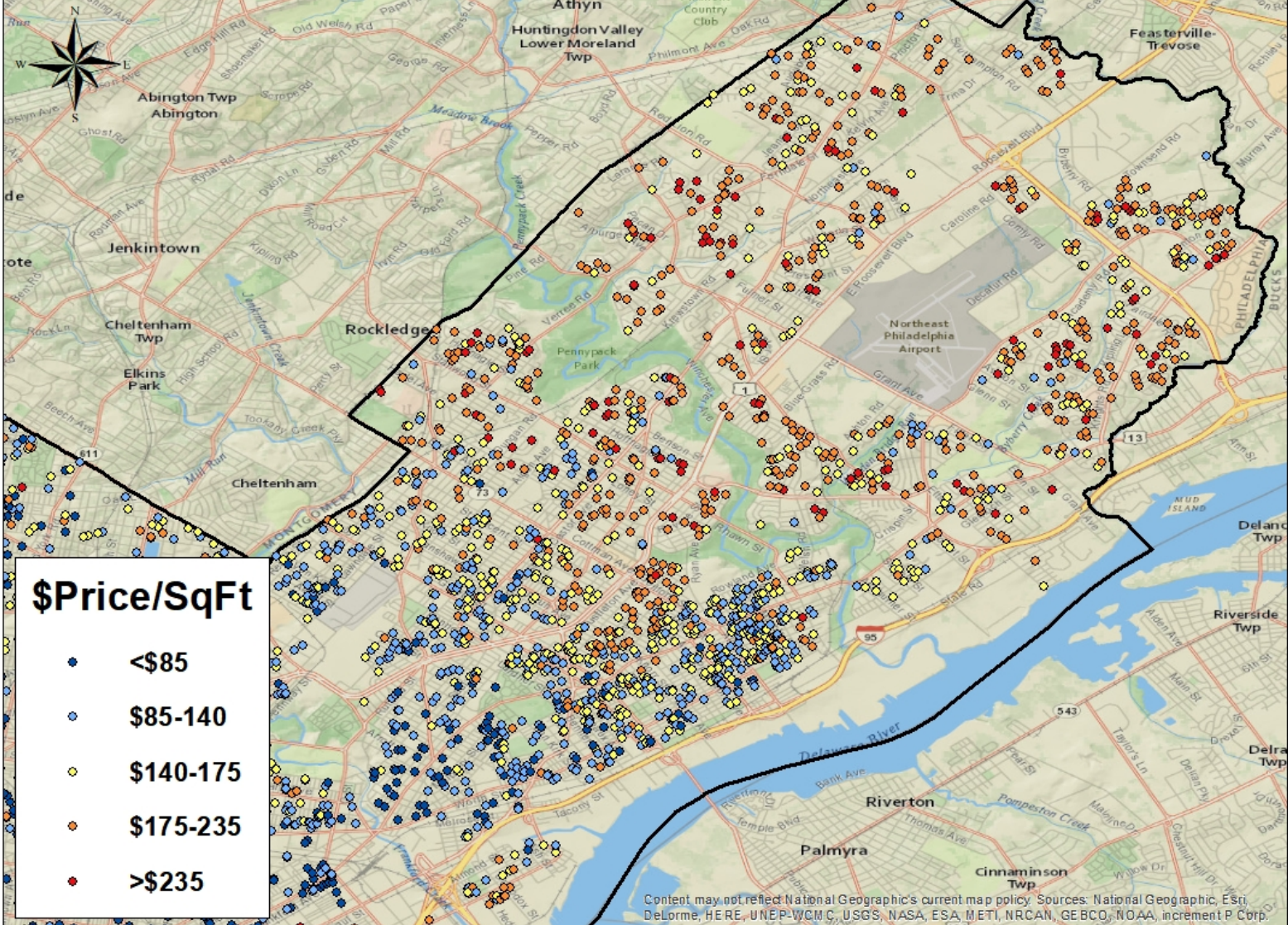
Northwest Philadelphia House Sales in 2020 Q4

Created by **Kevin C. Gillen, Ph.D.**
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Whitemarsh
Twp

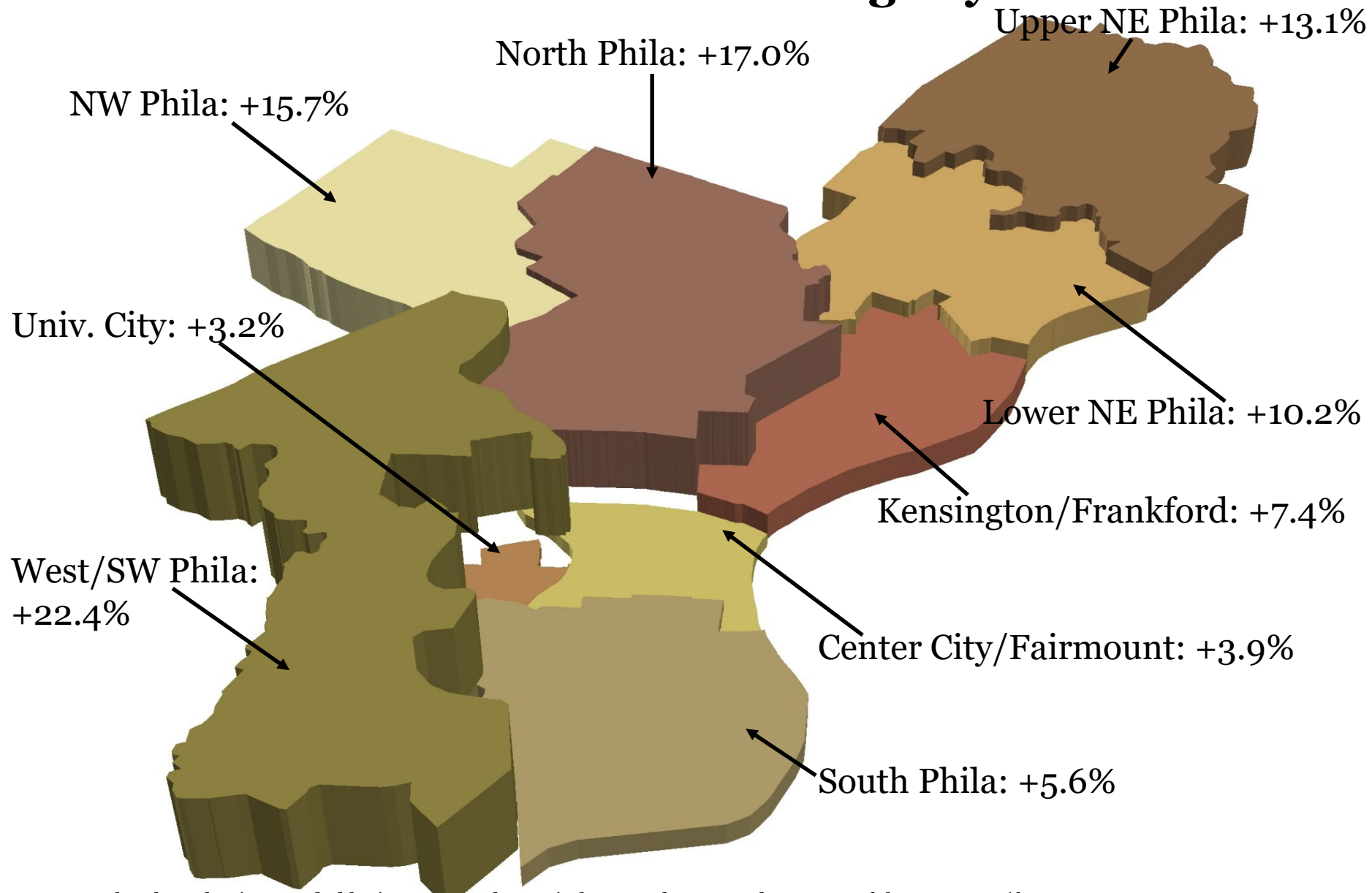


Northeast Philadelphia House Sales in 2020 Q4

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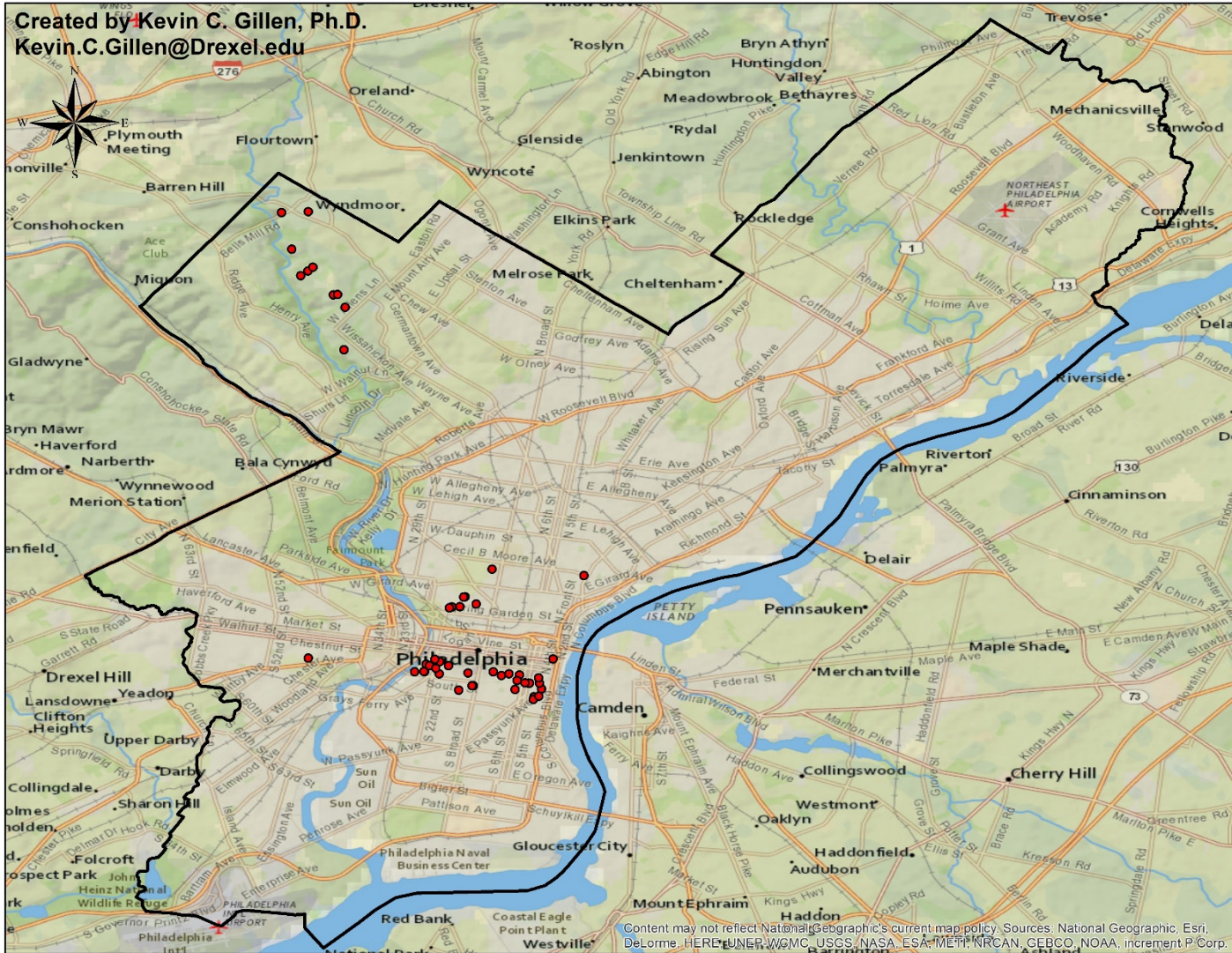


Annual House Price Rate of Change by Submarket



Note: Each submarket is extruded by its average change in house values over the course of the past year (from 2019 Q4 to 2020 Q4) in order to reflect its growth (or depreciation) rate relative to other neighborhoods.

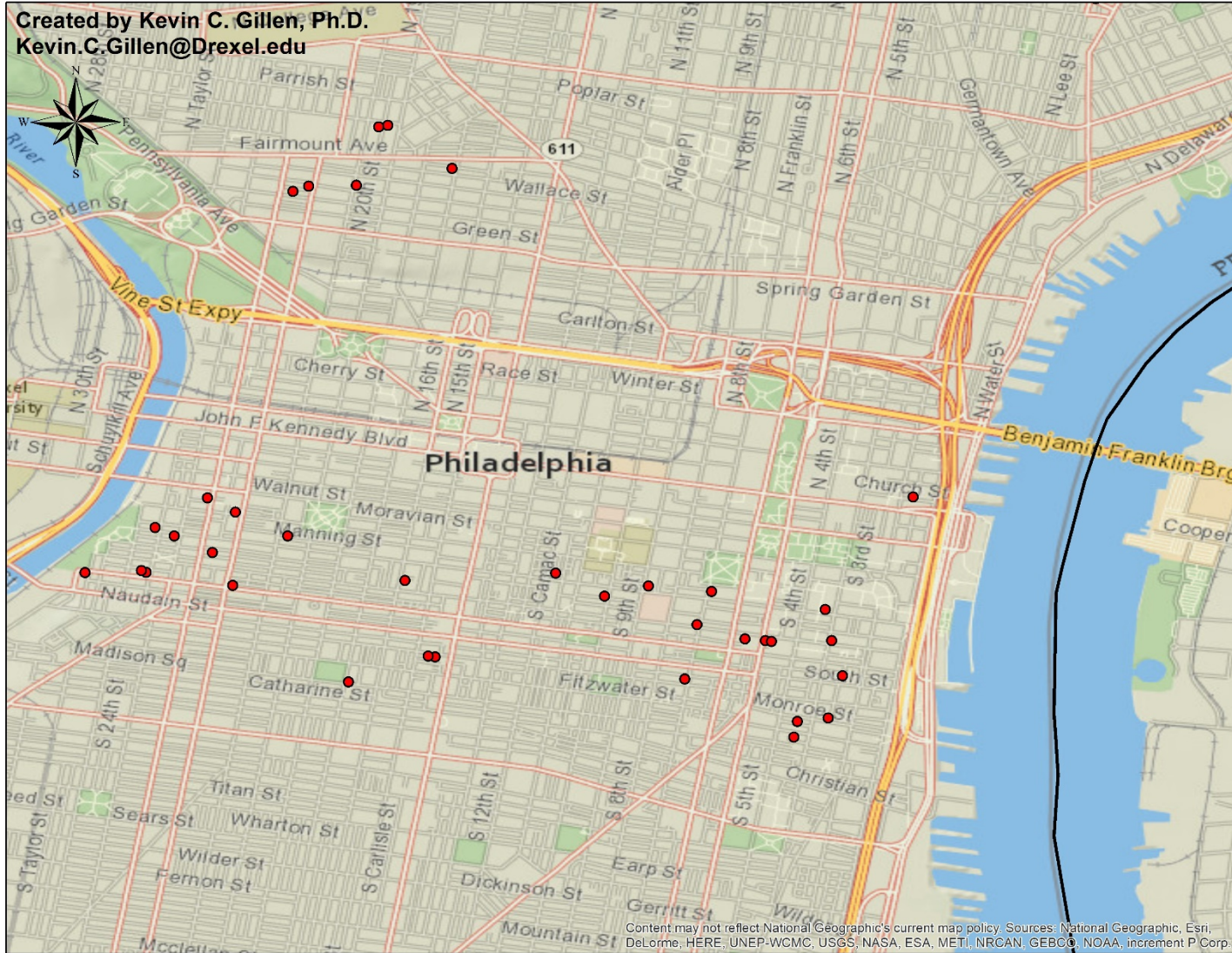
+ \$1 Million Dollar House Sales in 2020 Q4



PRICE	ADDRESS
\$1,000,000	1939 MOUNT VERN ST
\$1,000,000	769 S 17TH ST
\$1,007,000	416 S 24TH ST
\$1,015,000	430 S 46TH ST
\$1,025,000	434 PINE ST
\$1,050,000	327 S 16TH ST
\$1,100,000	2104 MOUNT VERN ST
\$1,100,000	500 S TANEY ST
\$1,137,500	300 S 10TH ST
\$1,150,000	767 N UBER ST
\$1,175,000	31 E COLUMBIA AVE
\$1,205,000	210 GASKILL ST
\$1,207,500	606 W MERMAID LN
\$1,249,000	7614 CHEROKEE ST
\$1,250,000	251 S 7TH ST
\$1,285,000	1420 BAINBRIDGE ST
\$1,300,000	267 S 9TH ST
\$1,302,500	766 N UBER ST
\$1,325,000	313 PEMBERTON ST
\$1,325,000	644 N 17TH ST
\$1,325,000	2125 GREEN ST
\$1,360,000	2406 WAVERLY ST
\$1,375,000	1430 BAINBRIDGE ST
\$1,400,000	1108 MANNING ST
\$1,439,000	2405 SPRUCE ST
\$1,450,000	618 S 7TH ST
\$1,500,000	318 FITZWATER ST
\$1,500,000	2109 LOCUST ST
\$1,520,000	7 CARYL LN
\$1,548,400	1520 N SYDENHAM ST
\$1,559,000	2203 SAINT JAME PL
\$1,600,000	701 PINE ST
\$1,642,500	2057 LOMBARD ST
\$1,695,000	2304 SPRUCE ST
\$1,760,000	601 SAINT GEOR RD
\$1,800,000	255 PINE ST
\$1,800,000	6935 SCOTFORTH RD
\$1,875,000	424 PINE ST
\$1,927,500	231 MONROE ST
\$1,975,000	311 SPRUCE ST
\$1,985,000	1931 MANNING ST
\$2,000,000	522 PINE ST
\$2,000,000	119 CHURCH ST
\$2,175,000	2119 DELANCEY PL
\$2,273,000	710 GLENGARRY RD
\$2,500,000	613 SAINT ANDR RD
\$2,500,000	15 W BELLS MILL RD
\$3,100,000	8840 TOWANDA AVE
\$3,200,000	609 SAINT ANDR RD

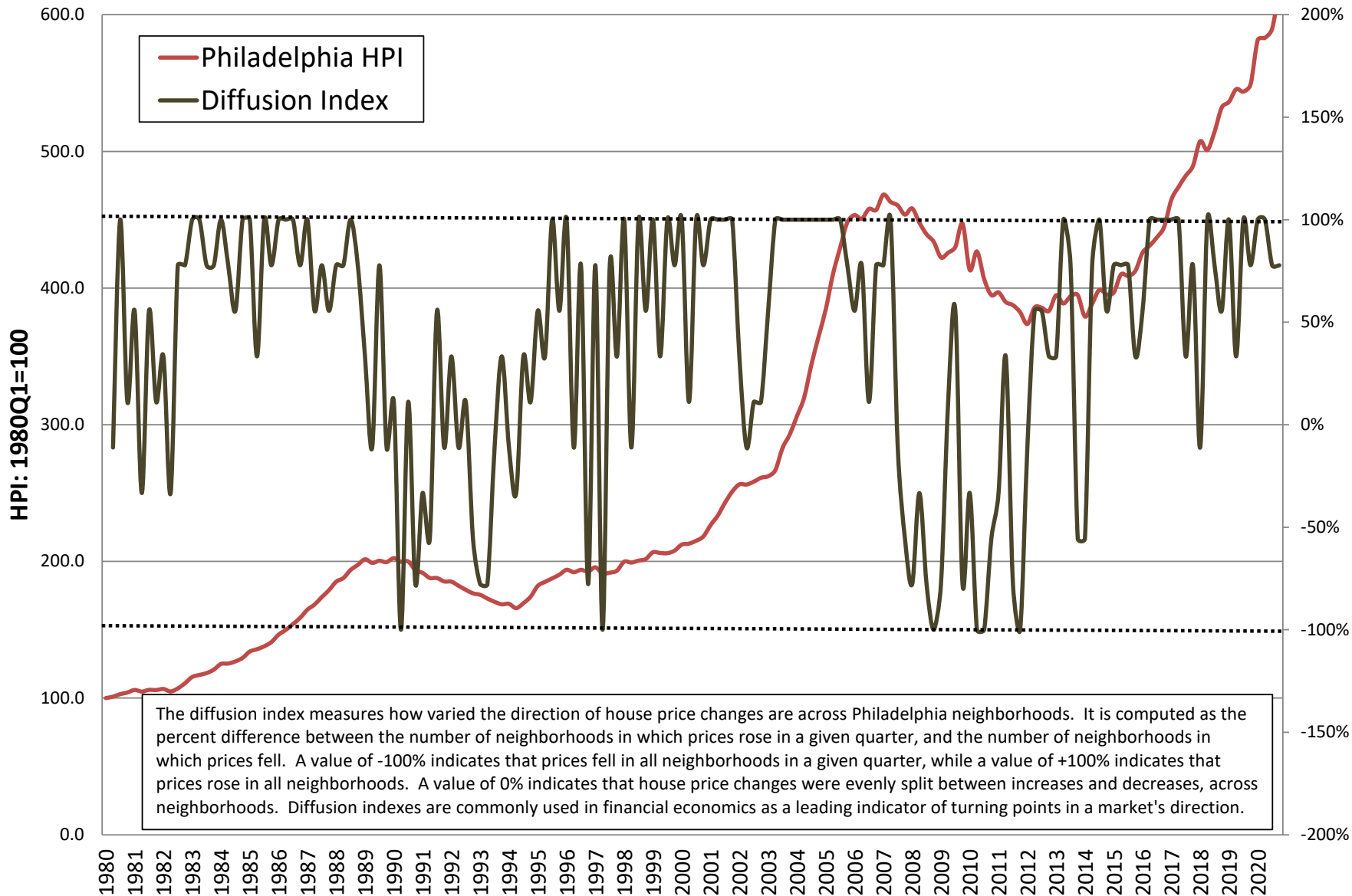
+ \$1 Million Dollar House Sales in 2020 Q4

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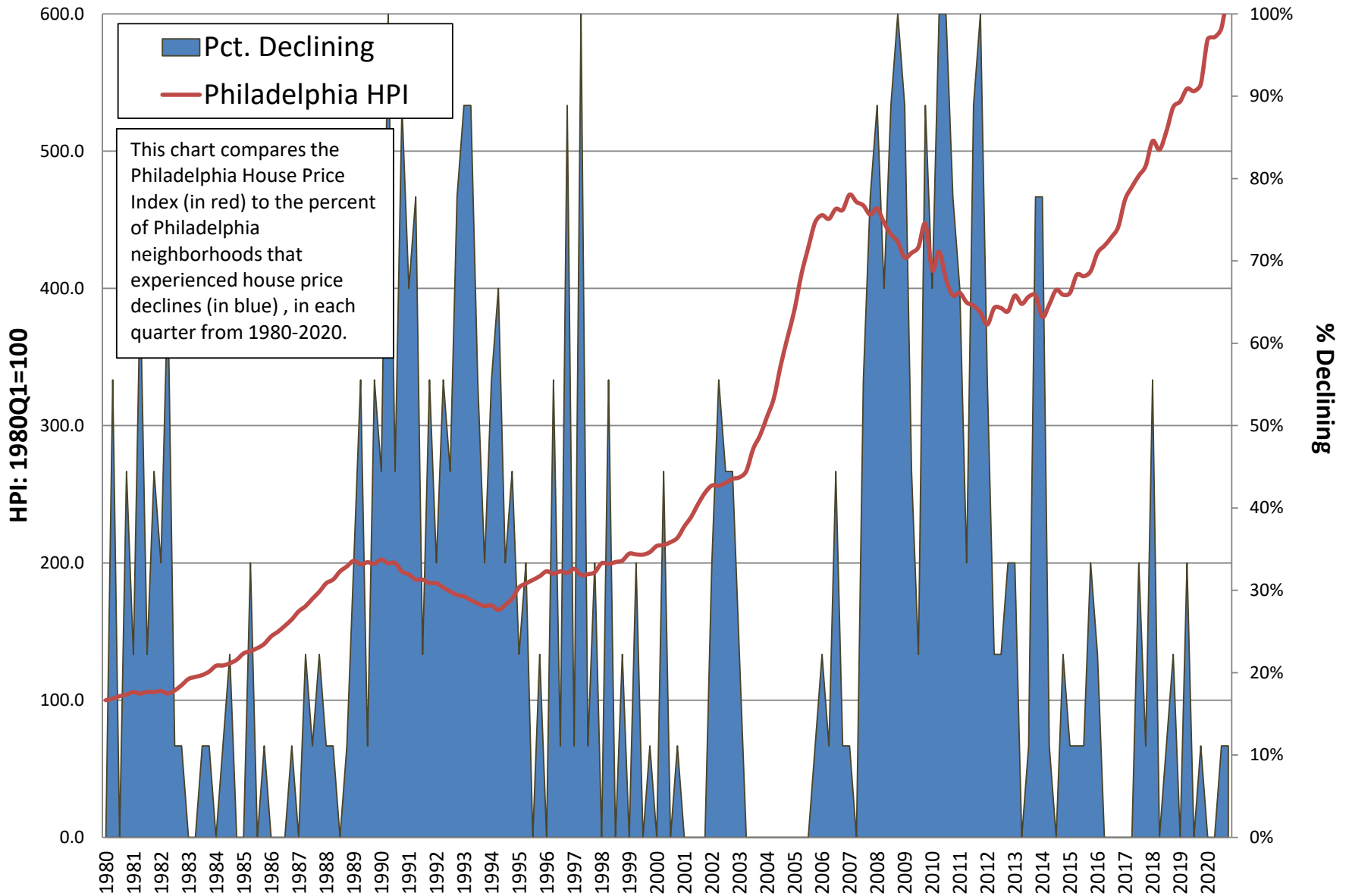
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Philadelphia House Price Diffusion Index 1980-2020

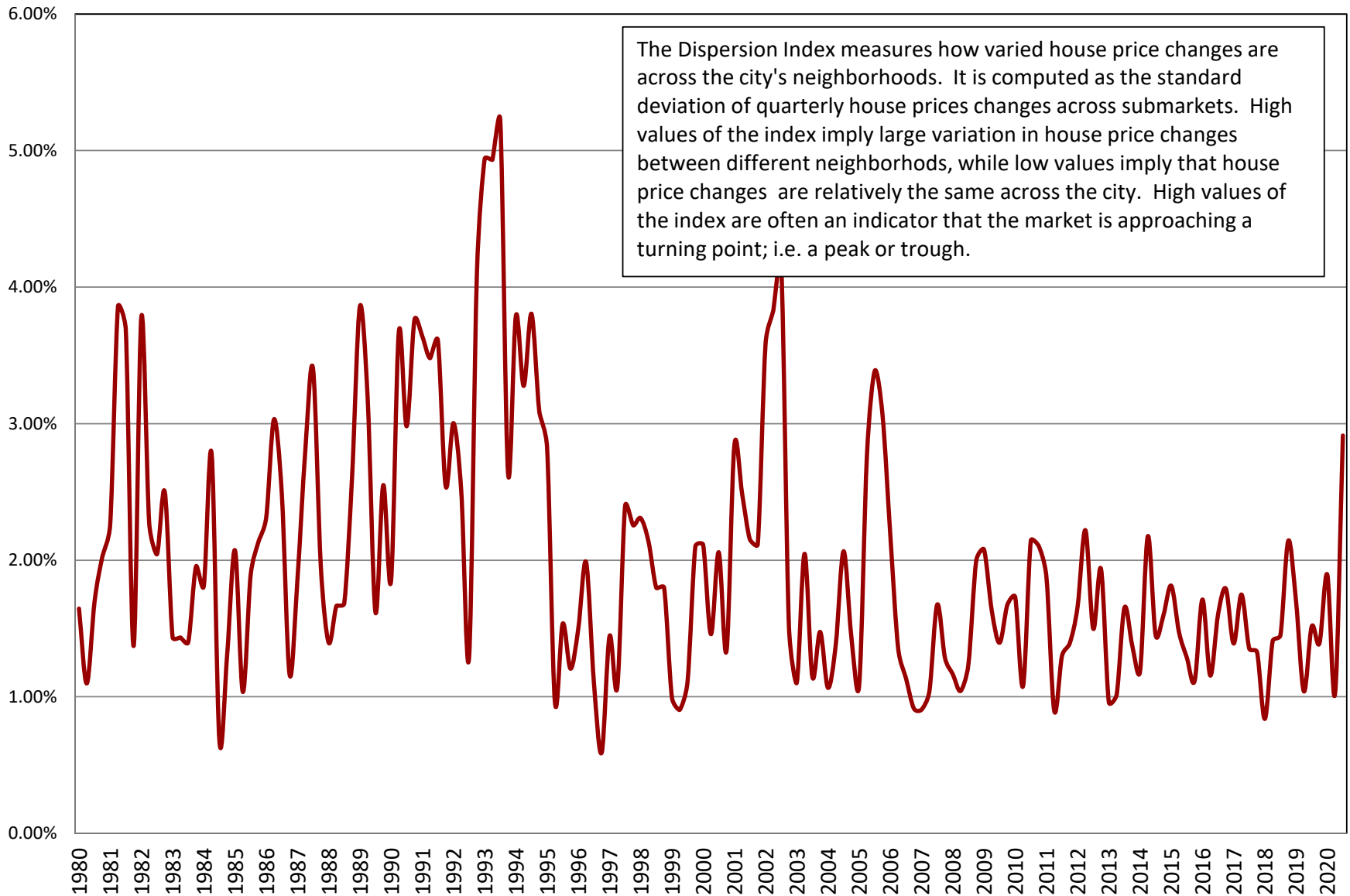


The diffusion index measures how varied the direction of house price changes are across Philadelphia neighborhoods. It is computed as the percent difference between the number of neighborhoods in which prices rose in a given quarter, and the number of neighborhoods in which prices fell. A value of -100% indicates that prices fell in all neighborhoods in a given quarter, while a value of +100% indicates that prices rose in all neighborhoods. A value of 0% indicates that house price changes were evenly split between increases and decreases, across neighborhoods. Diffusion indexes are commonly used in financial economics as a leading indicator of turning points in a market's direction.

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

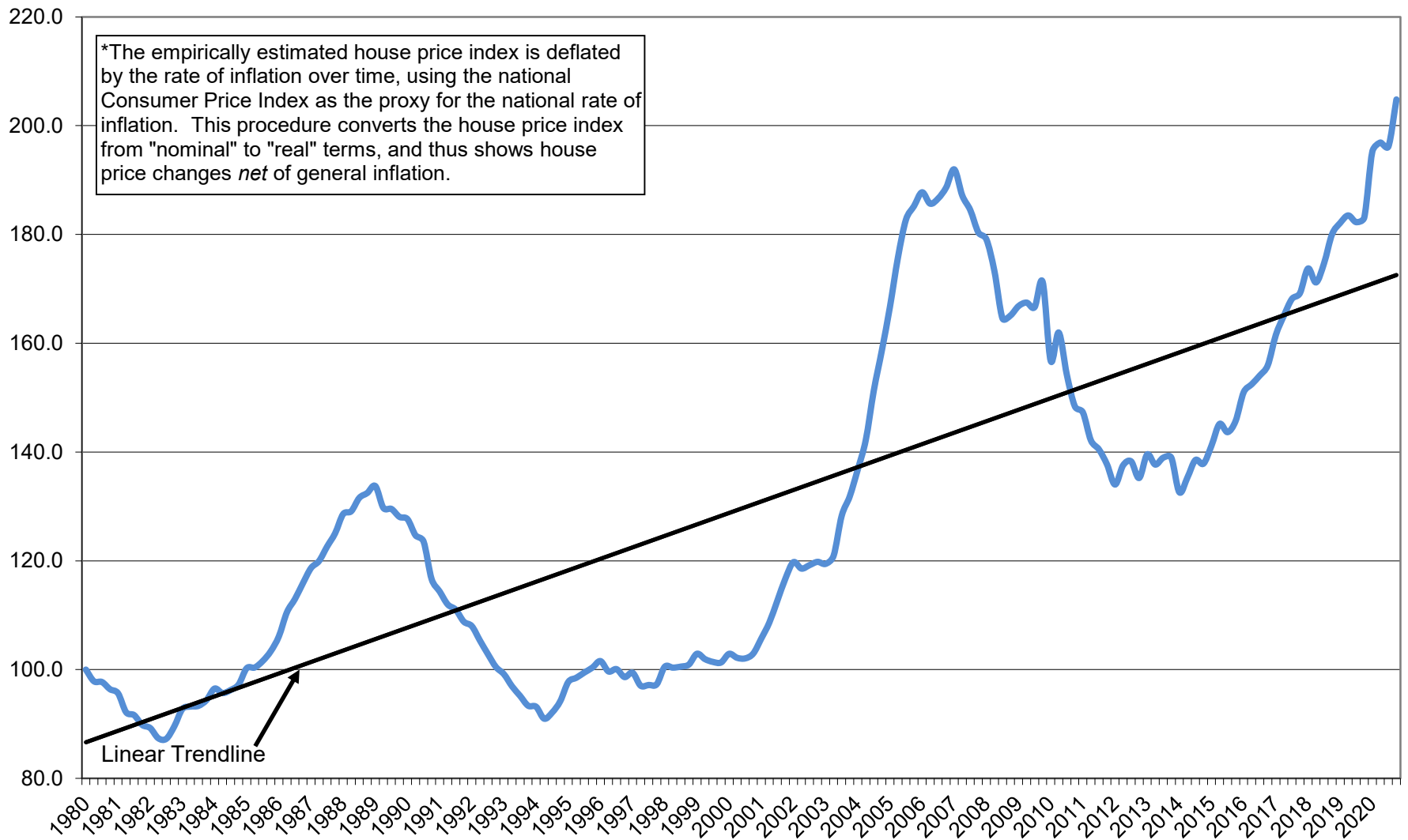


Dispersion Index of Philadelphia Housing



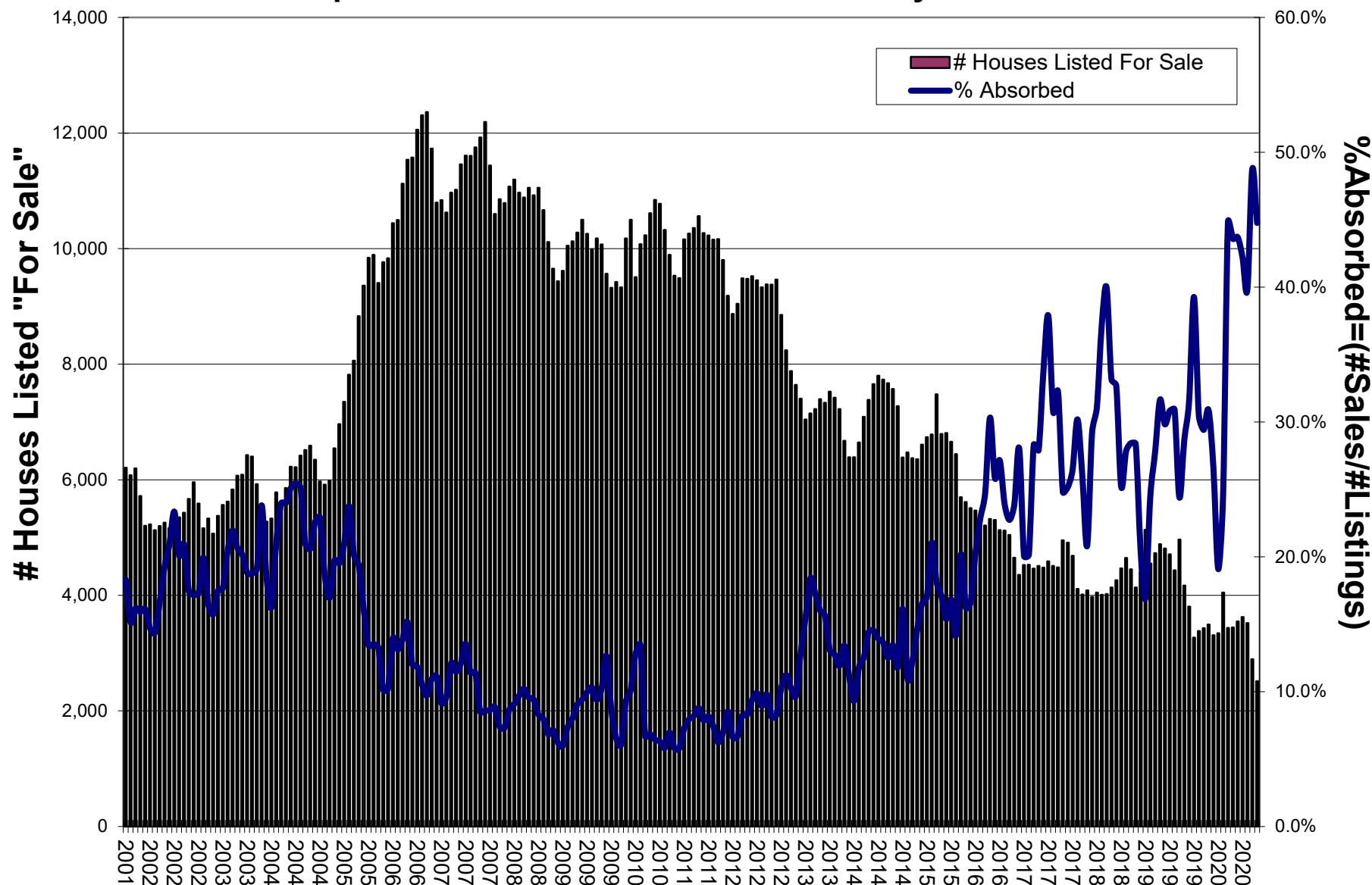
Inflation-Adjusted* Philadelphia House Price Index 1980-2020

1980Q1=100



Source: US Bureau of Labor Statistics

Philadelphia Houses Listed For Sale: Inventory v. Sales Rate

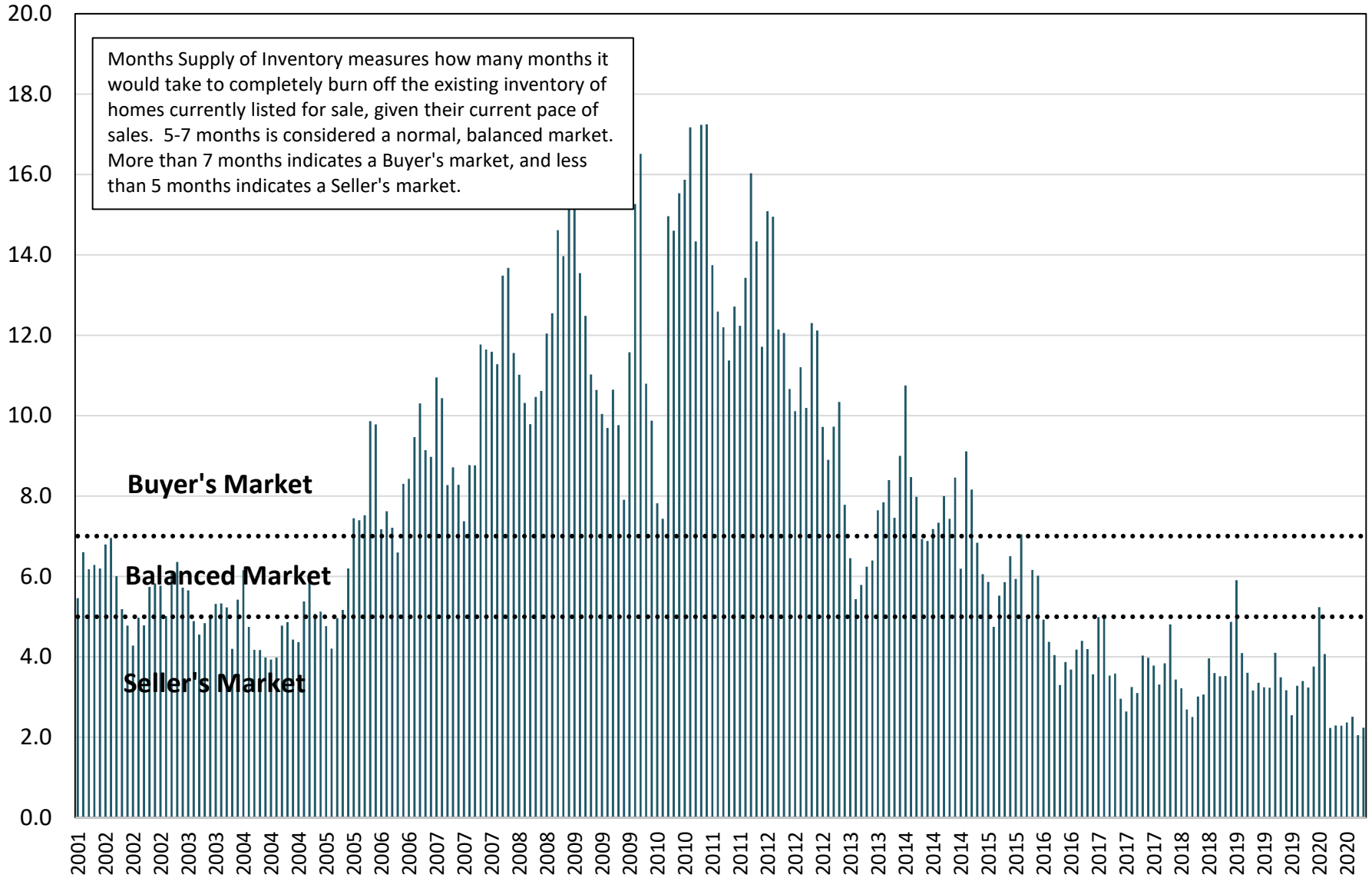


“%Absorbed” is defined as the percent of homes listed for sale in a given month that also sold in that same month.

Source: Trend MLS



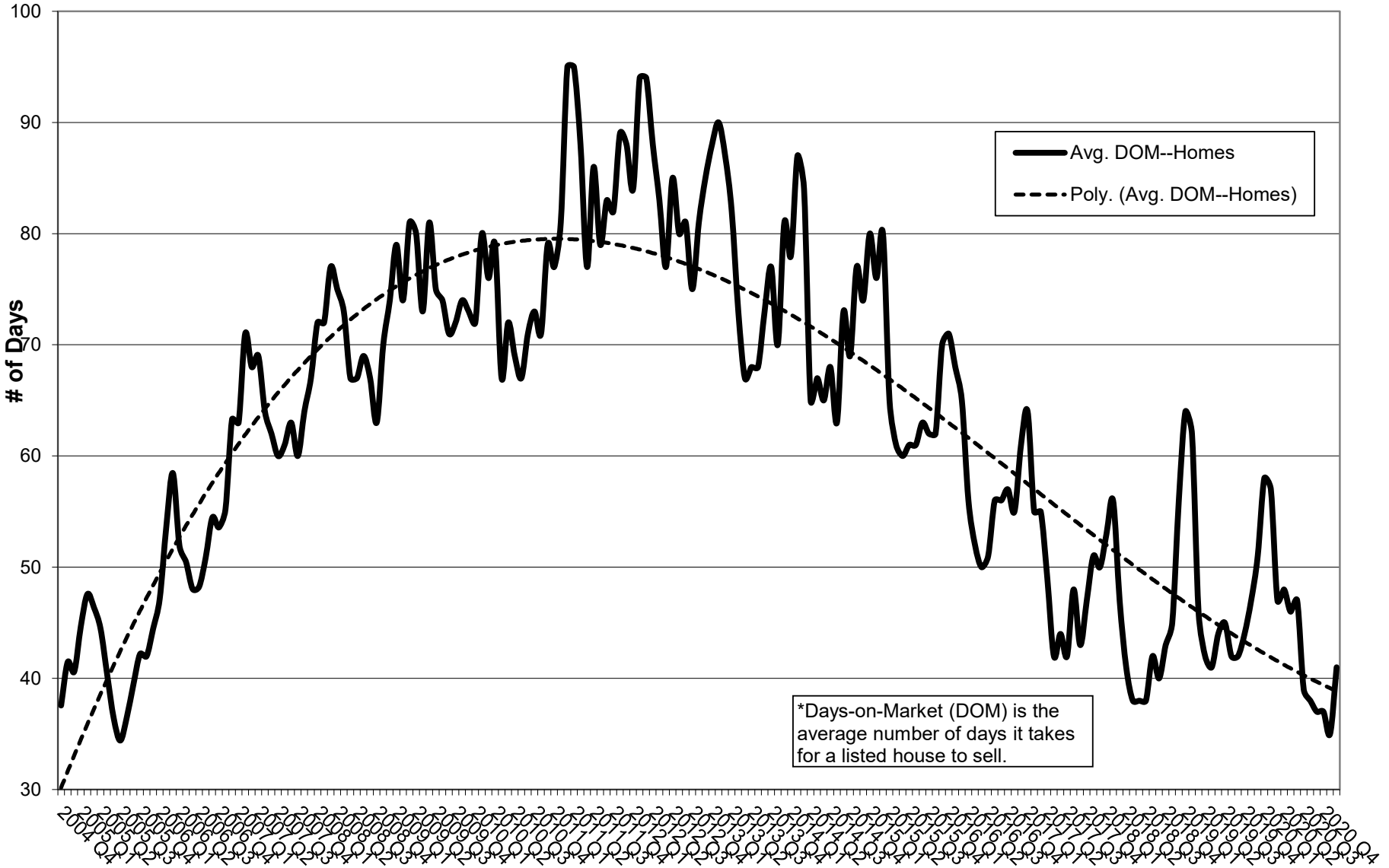
Months Supply of Inventory in Philadelphia



Source: Trend MLS

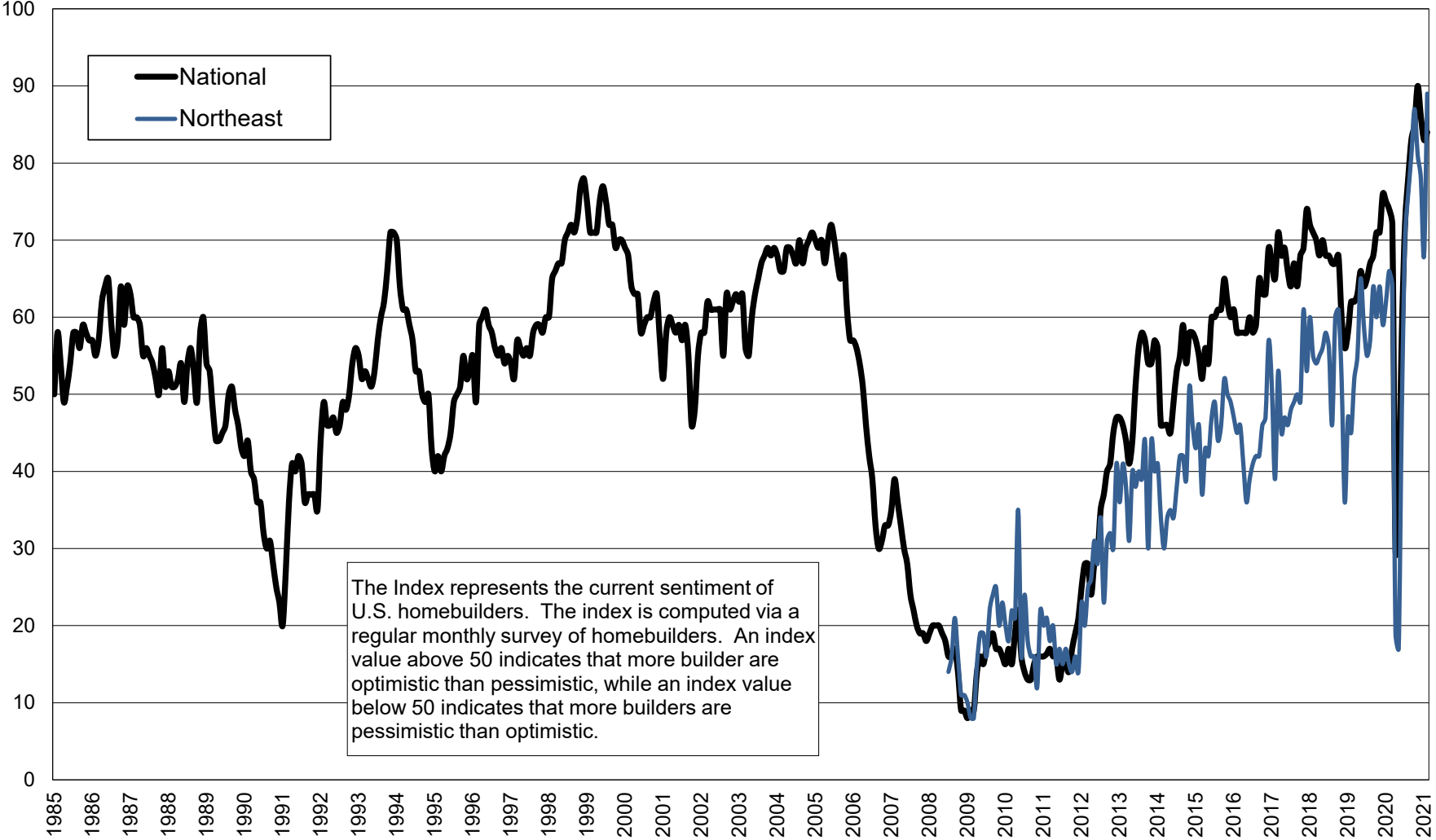


Average Days-on-Market* for Philadelphia Homes



Source: Trend MLS

Index of Homebuilder Sentiment: 1985-2021 (Seasonally Adjusted)



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



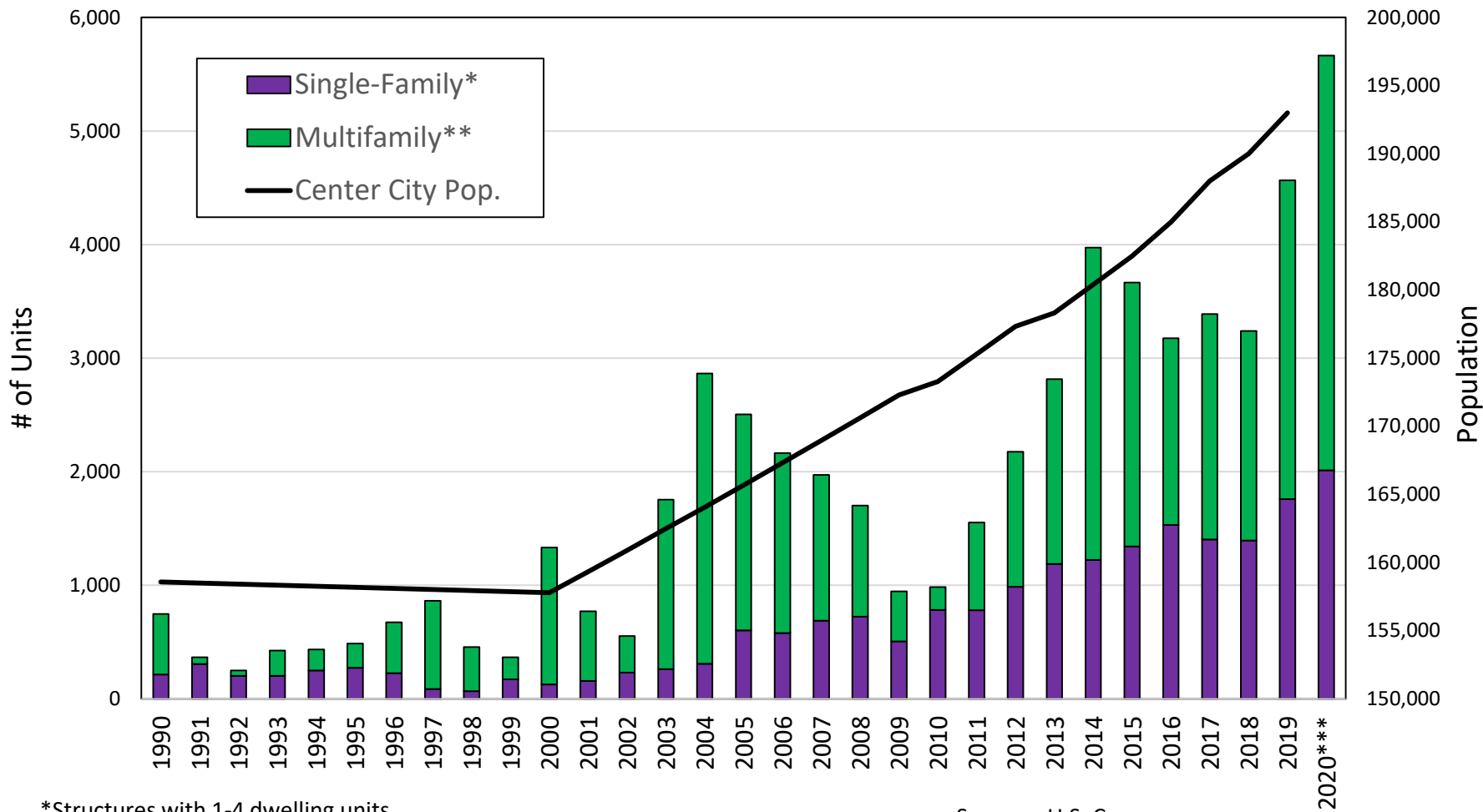
Philadelphia Stock Exchange Housing Sector Index: 2002-2021



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: <https://finance.yahoo.com/quote/%5EHGX/history>

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

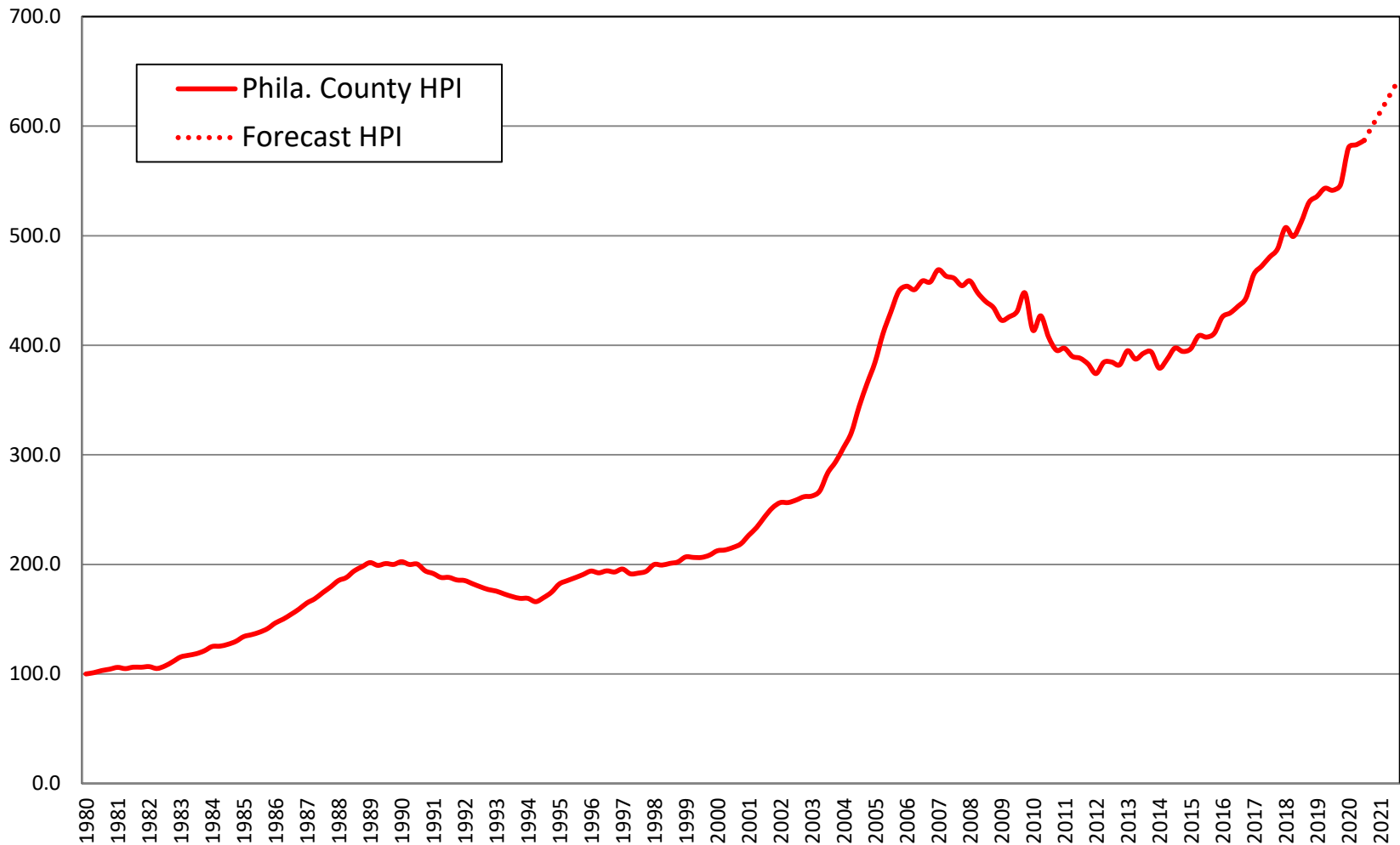


*Structures with 1-4 dwelling units
 **Structures with >=5 dwelling units

Sources: U.S. Census,
Center City District

Philadelphia House Price Index and 1-Year Forecast

Philadelphia House Price Index: Actual v. Forecast



Zillow's website does not currently report its most recent forecast of Philadelphia house prices. Their most recent forecast from several months ago projected 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/>