

# PHILADELPHIA HOUSE PRICE INDICES

September 13, 2021



DREXEL UNIVERSITY  
**Lindy Institute**  
for Urban Innovation

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

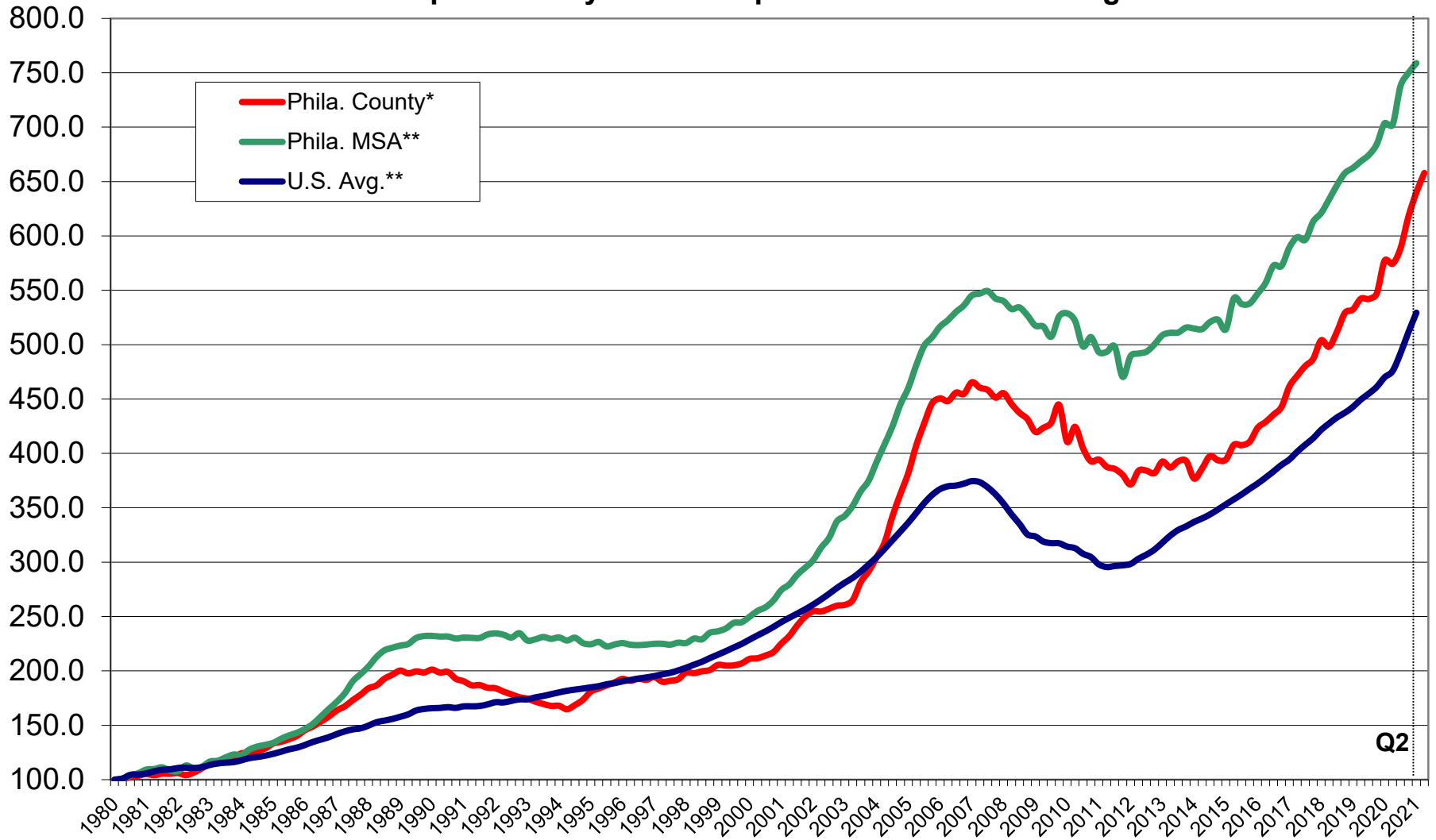
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Kevin.C.Gillen@Drexel.edu

***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. © 2021, Drexel University, All Rights Reserved.*



## House Price Indices 1980-2021: 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 2021Q1 only.

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

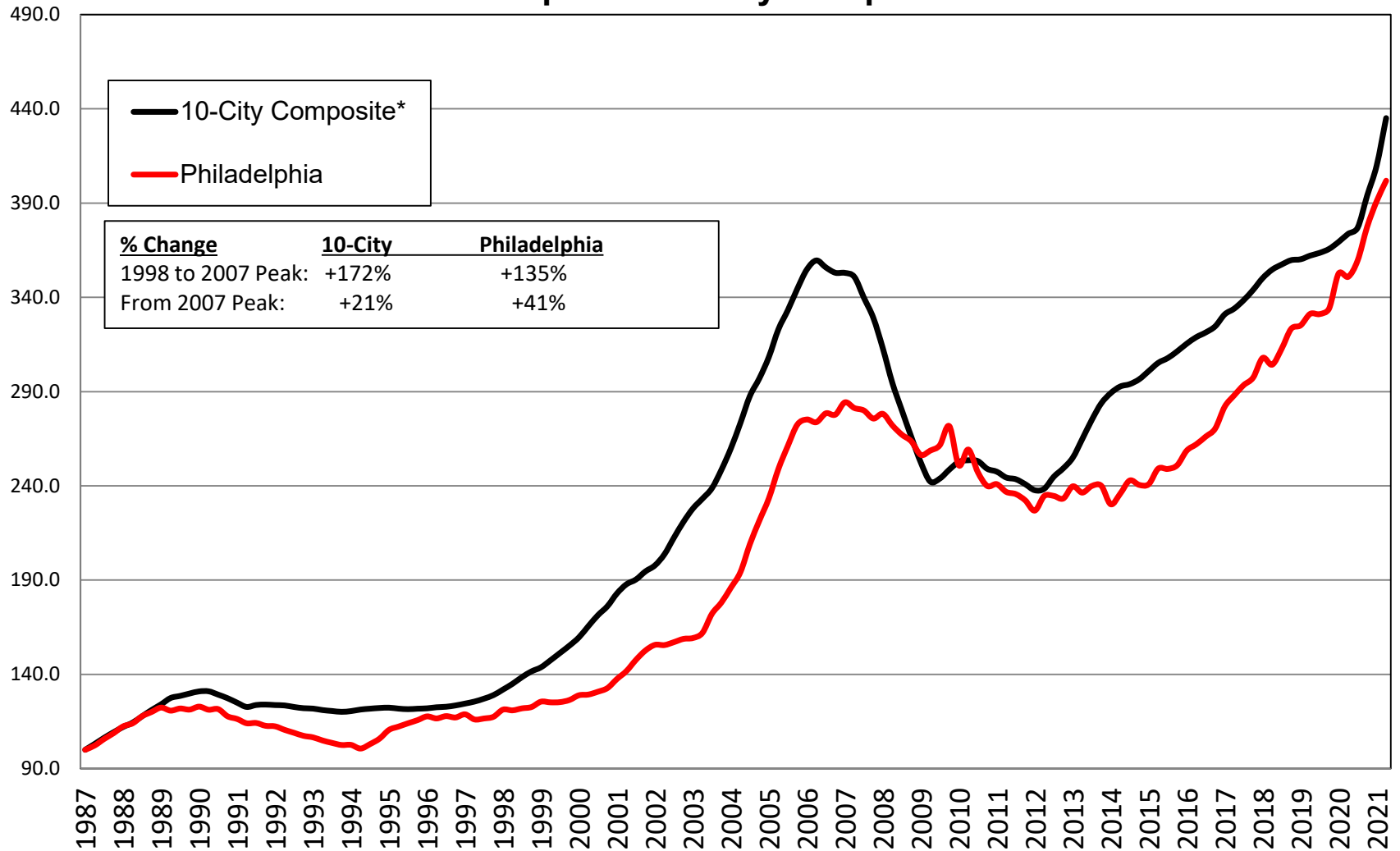
## Total House Price Appreciation Rates by Geographic Market

Period	Philadelphia County*	Philadelphia MSA**	U.S.A.**
<b>41-Year</b>	<b>557.8%</b>	<b>658.8%</b>	<b>429.4%</b>
<b>10-Year</b>	<b>69.7%</b>	<b>53.9%</b>	<b>77.7%</b>
<b>1-Year</b>	<b>14.5%</b>	<b>7.9%</b>	<b>12.6%</b>
<b>1-Quarter</b>	<b>2.8%</b>	<b>1.2%</b>	<b>3.5%</b>

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

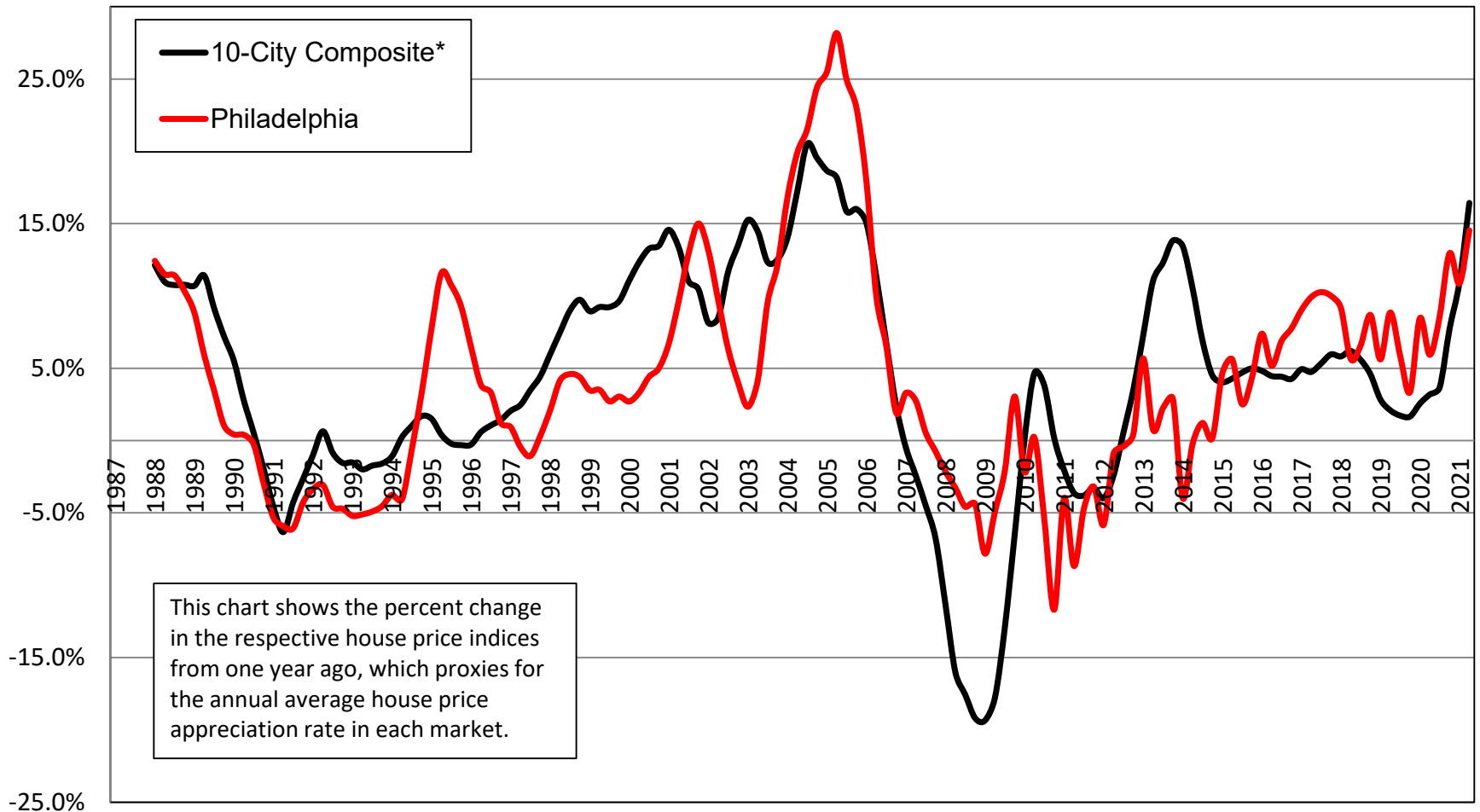
\*\*Source: U.S. Federal Housing Finance Agency (FHFA). These numbers are through 2021Q1 only. “MSA”=“Metropolitan Statistical Area”, which is the entire 10-county region.

## House Price Appreciation 1987-2021: Philadelphia v. 10-City Composite



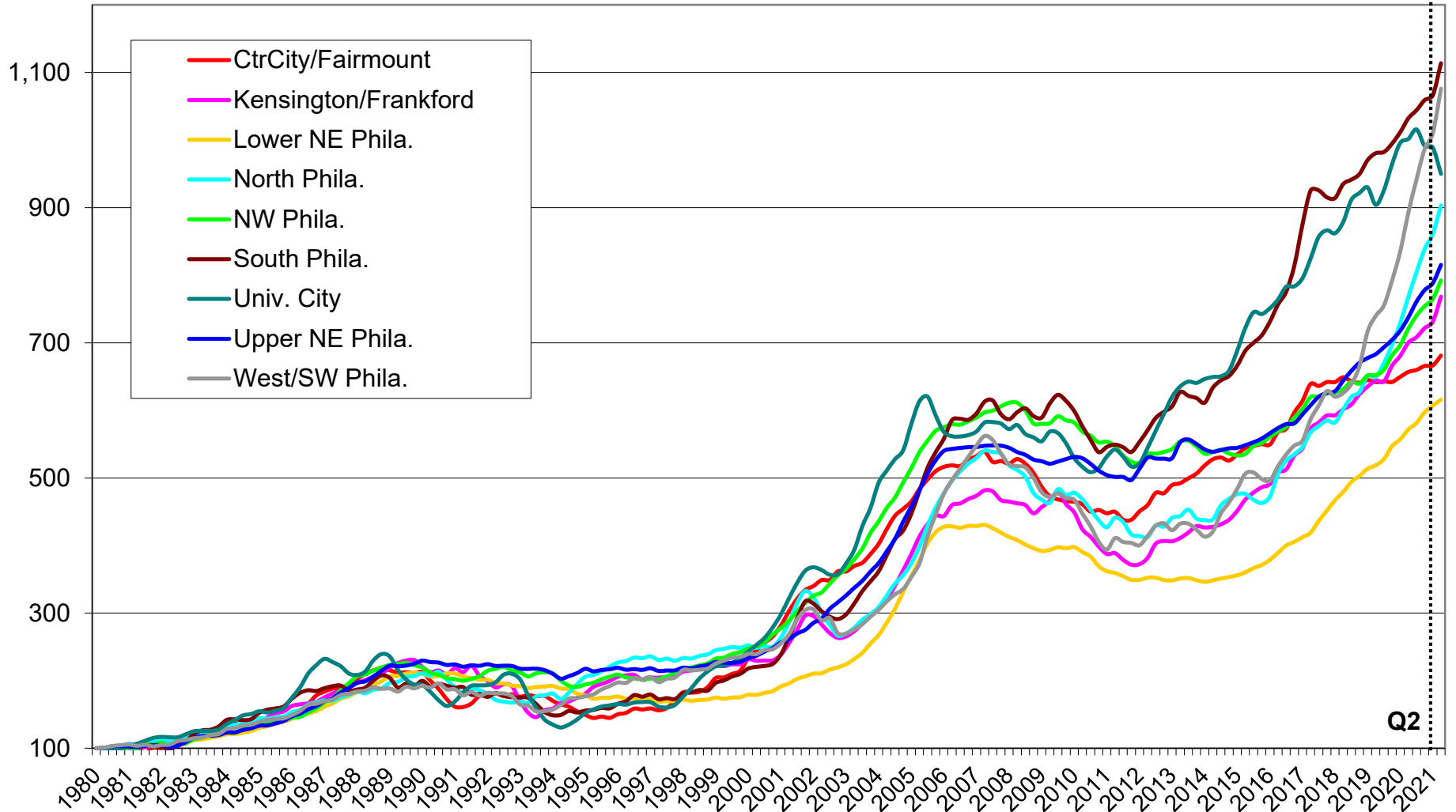
\*Source: S&P/Case-Shiller. The 10-City Composite index includes Boston, Chicago, Denver, Las Vegas, Los Angeles, Miami, New York, San Diego, San Francisco, and Washington, DC. It does not include Philadelphia.

## YoY House Price Change (%) 1987-2021: 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: 1980-2021 1980Q1=100



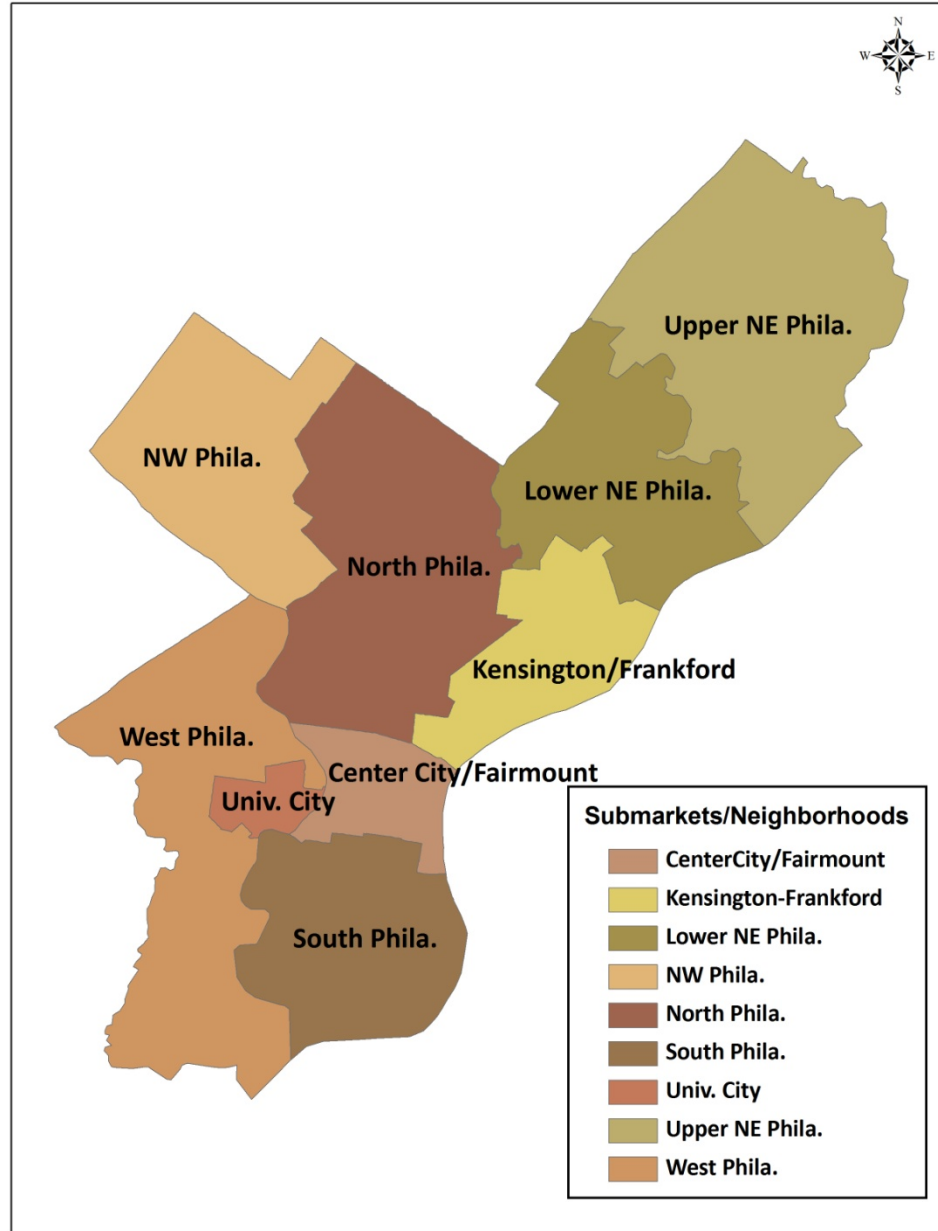
\* All indices empirically estimated by Kevin C. Gillen, Ph.D.

## 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.
<b>41-year</b>	<b>581.1%</b>	<b>668.3%</b>	<b>516.1%</b>	<b>803.3%</b>	<b>692.3%</b>	<b>1013.6%</b>	<b>850.0%</b>	<b>715.3%</b>	<b>976.0%</b>
<b>10-year</b>	<b>51.4%</b>	<b>97.6%</b>	<b>71.4%</b>	<b>104.7%</b>	<b>44.9%</b>	<b>102.7%</b>	<b>75.3%</b>	<b>62.5%</b>	<b>161.8%</b>
<b>1-Year</b>	<b>3.7%</b>	<b>9.7%</b>	<b>7.8%</b>	<b>17.6%</b>	<b>9.9%</b>	<b>7.9%</b>	<b>-5.2%</b>	<b>10.5%</b>	<b>20.5%</b>
<b>1-Quarter</b>	<b>2.2%</b>	<b>5.0%</b>	<b>1.5%</b>	<b>4.9%</b>	<b>3.6%</b>	<b>4.4%</b>	<b>-3.9%</b>	<b>3.4%</b>	<b>6.5%</b>

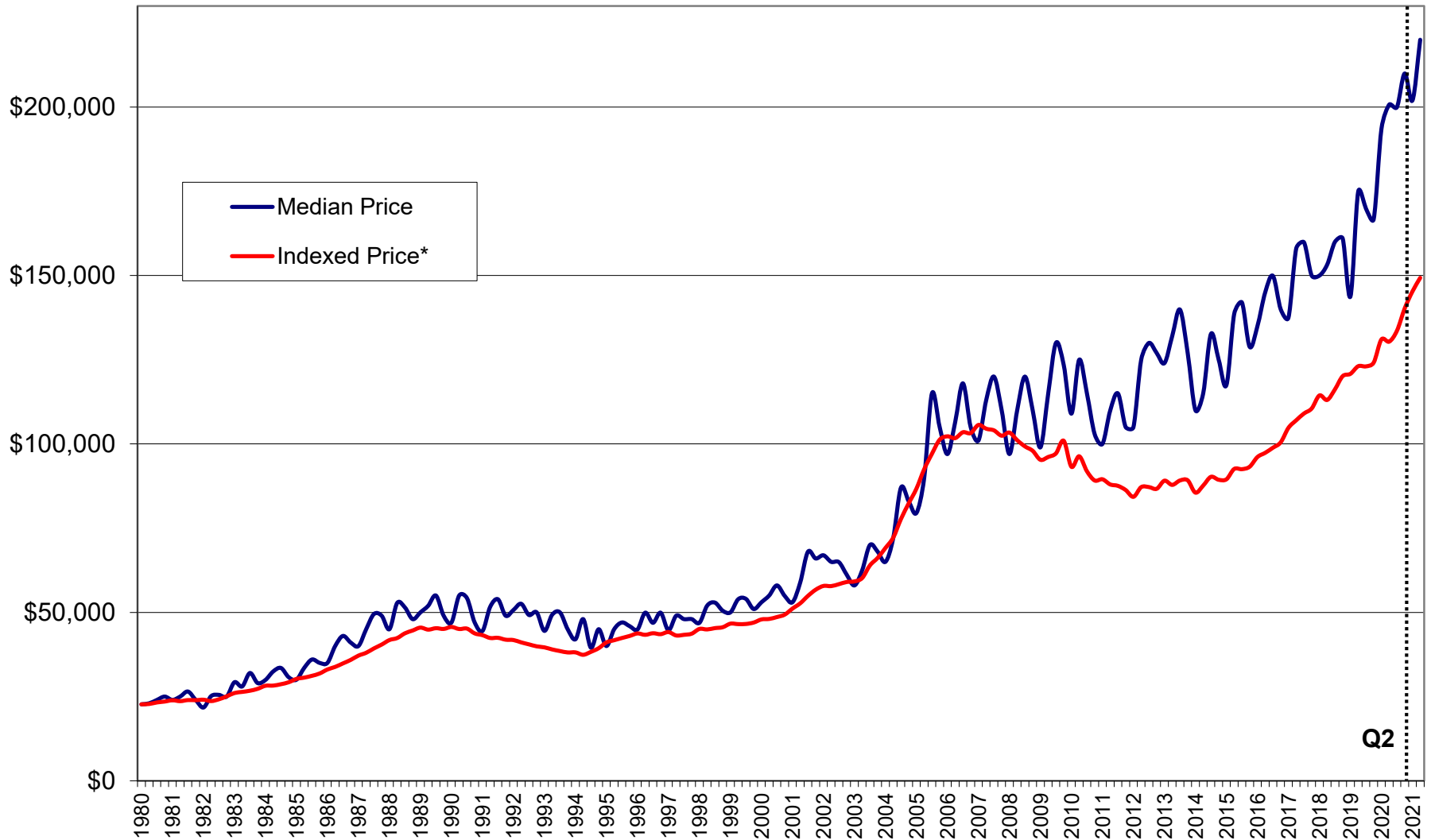
This table gives the total % change in average house values by submarket, through 2021 Q2, from different starting points in time.

# Philadelphia Submarket Boundaries





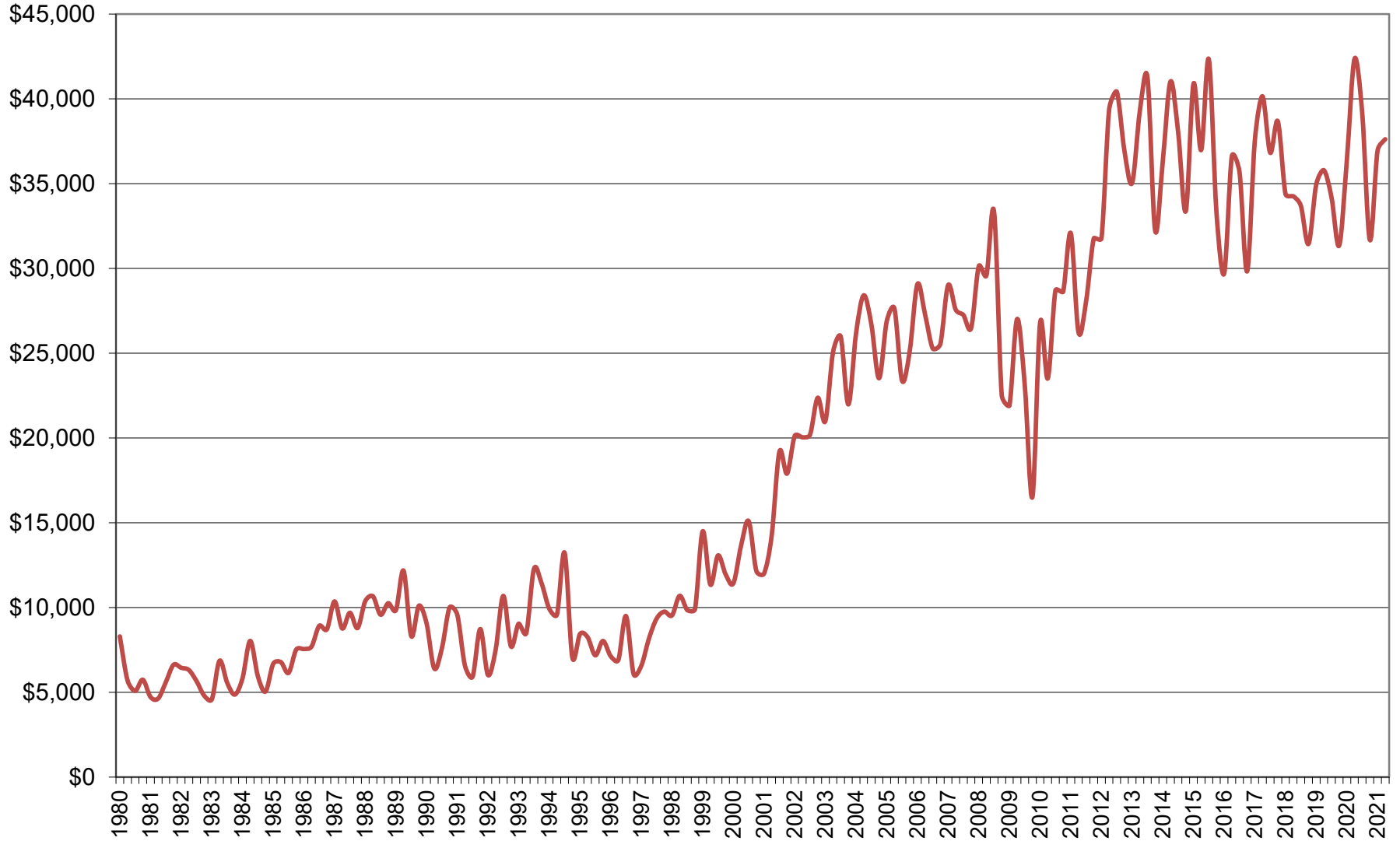
# Median Philadelphia House Price v. Indexed Philadelphia House Price 1980-2021



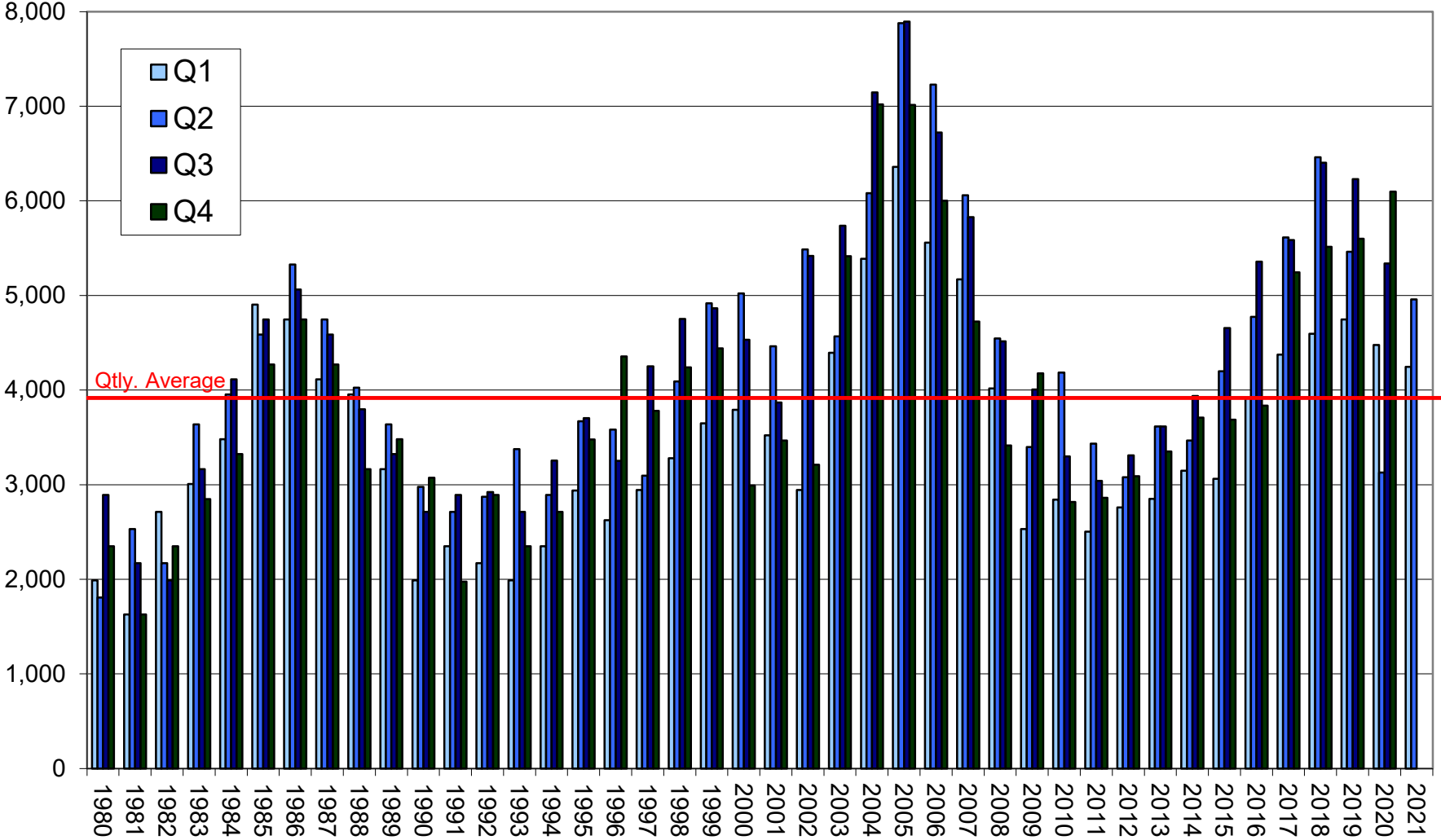
\* Empirically estimated by Kevin C. Gillen, Ph.D.

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## Average House Price Minus Median House Price: 1980-2021

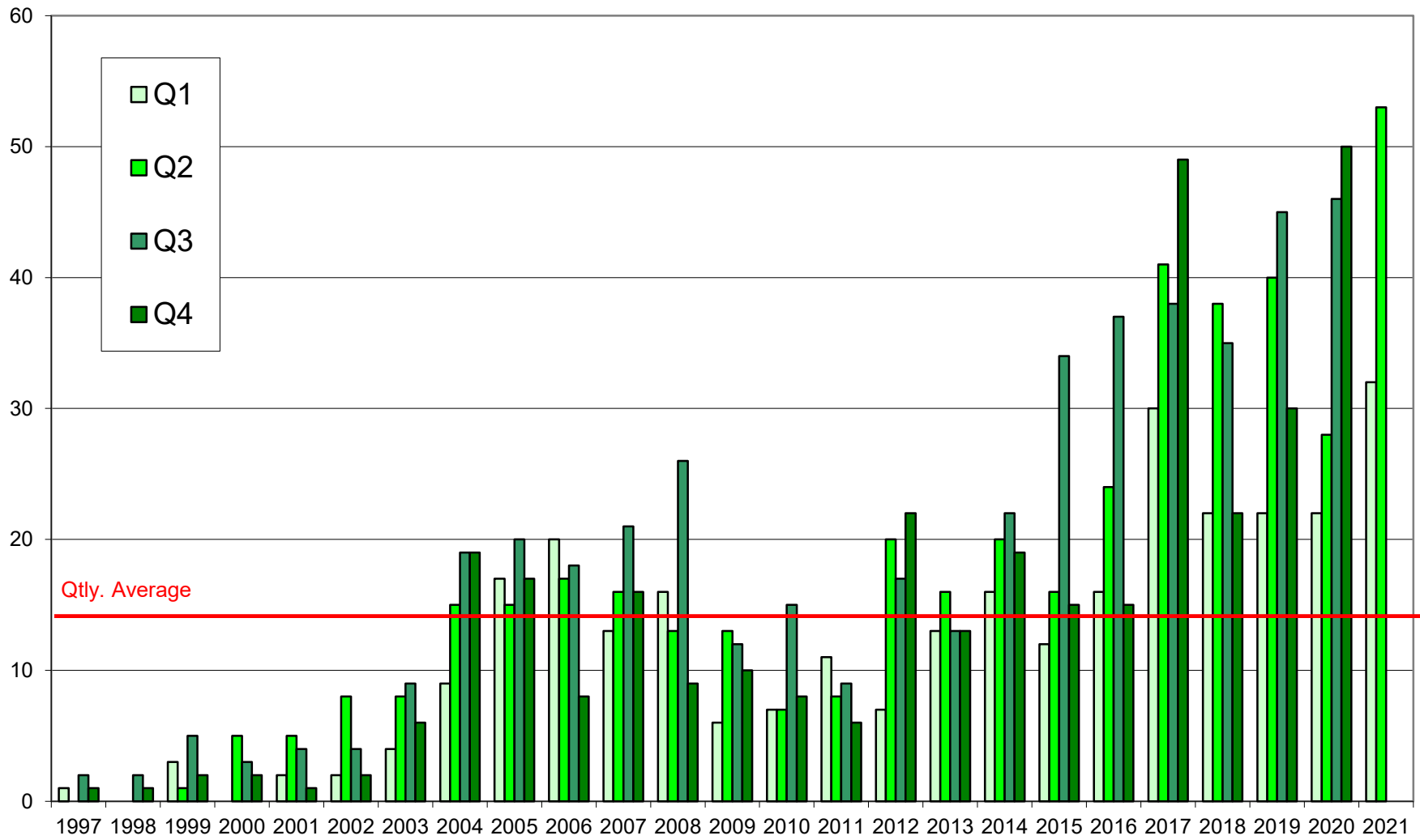


# Number of Philadelphia House Sales\* per Quarter: 1980-2021



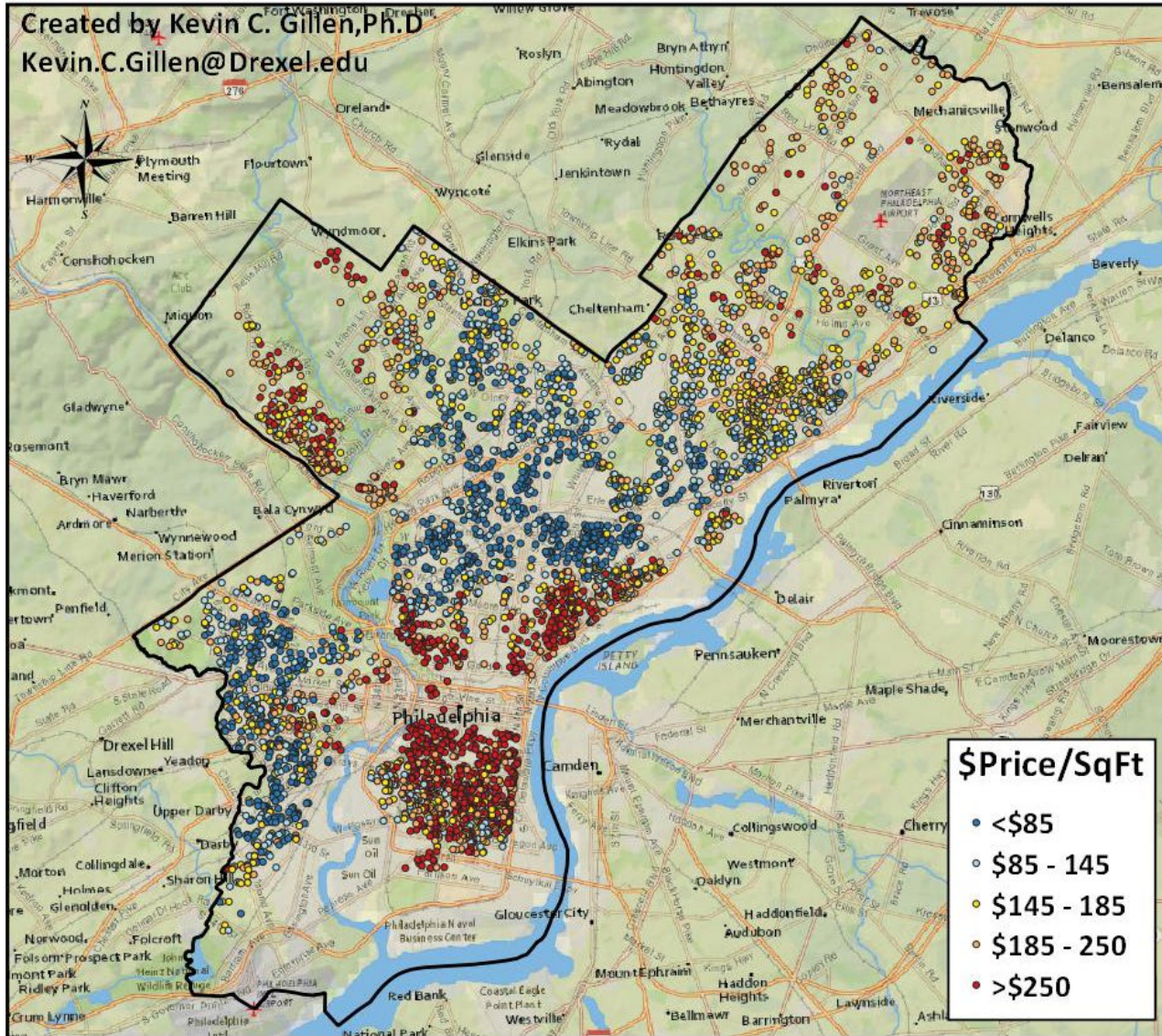
\*Only arms-length transactions between private sector entities were included in these numbers.

## Number of Philadelphia House Sales\* per Quarter with Price >= \$1 Million: 1997-2021



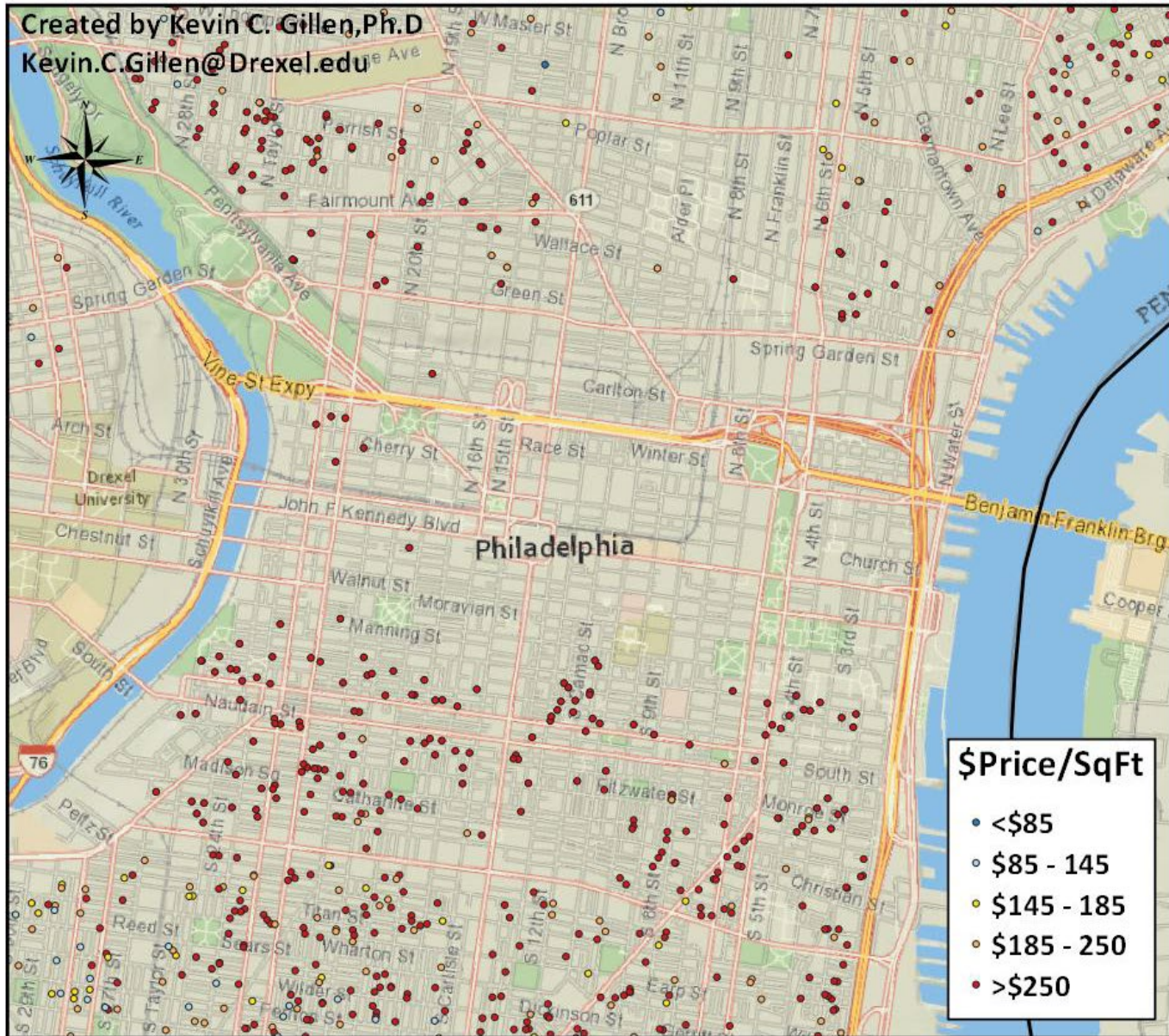
\*Only arms-length transactions between private sector entities were included in these numbers.

# Philadelphia House Sales in 2021 Q2

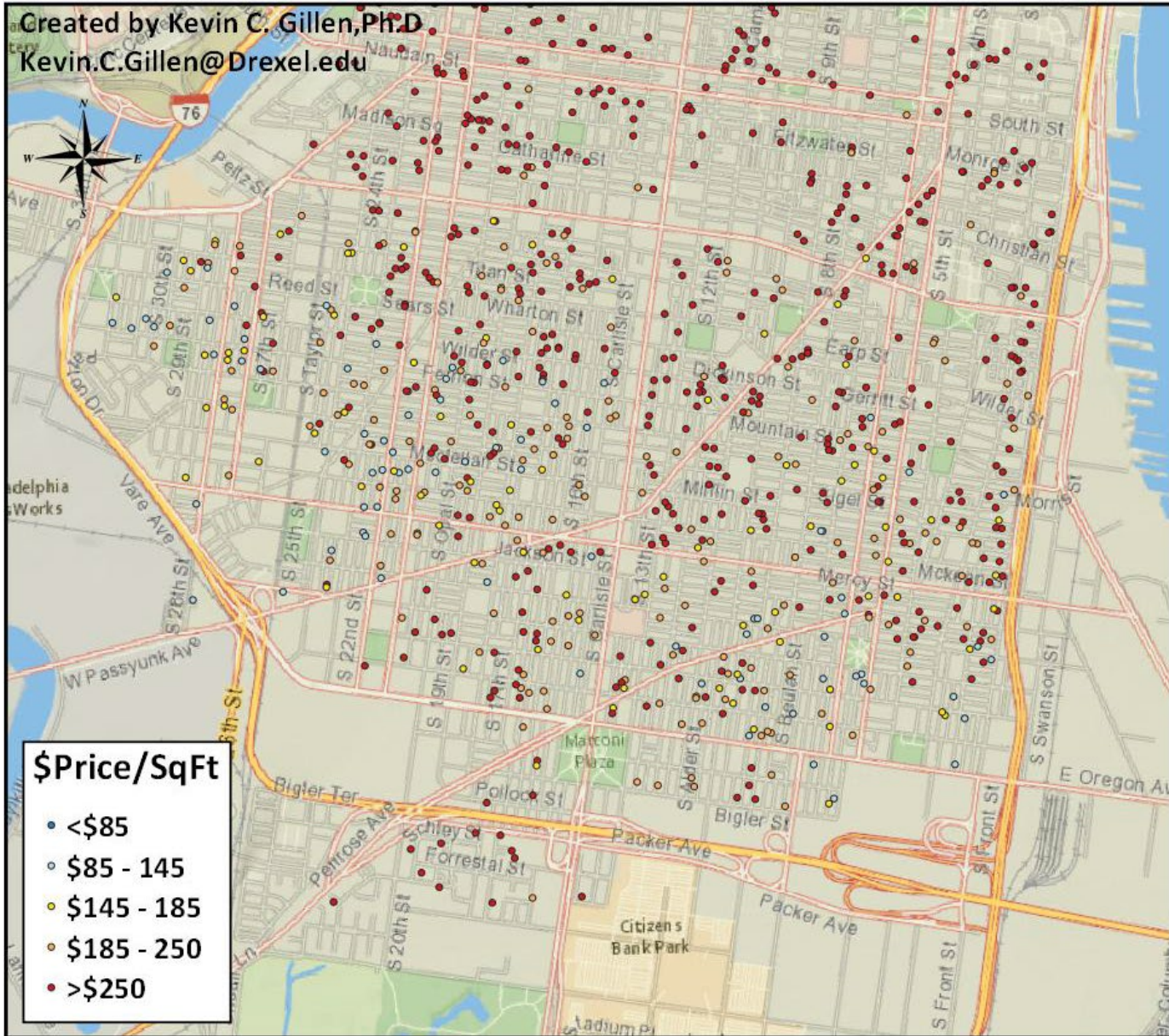


Note: Sales are color-coded by the quintiles of the distribution of \$Price/SqFt. Hence, each of the five categories covers exactly 20% of all sales.

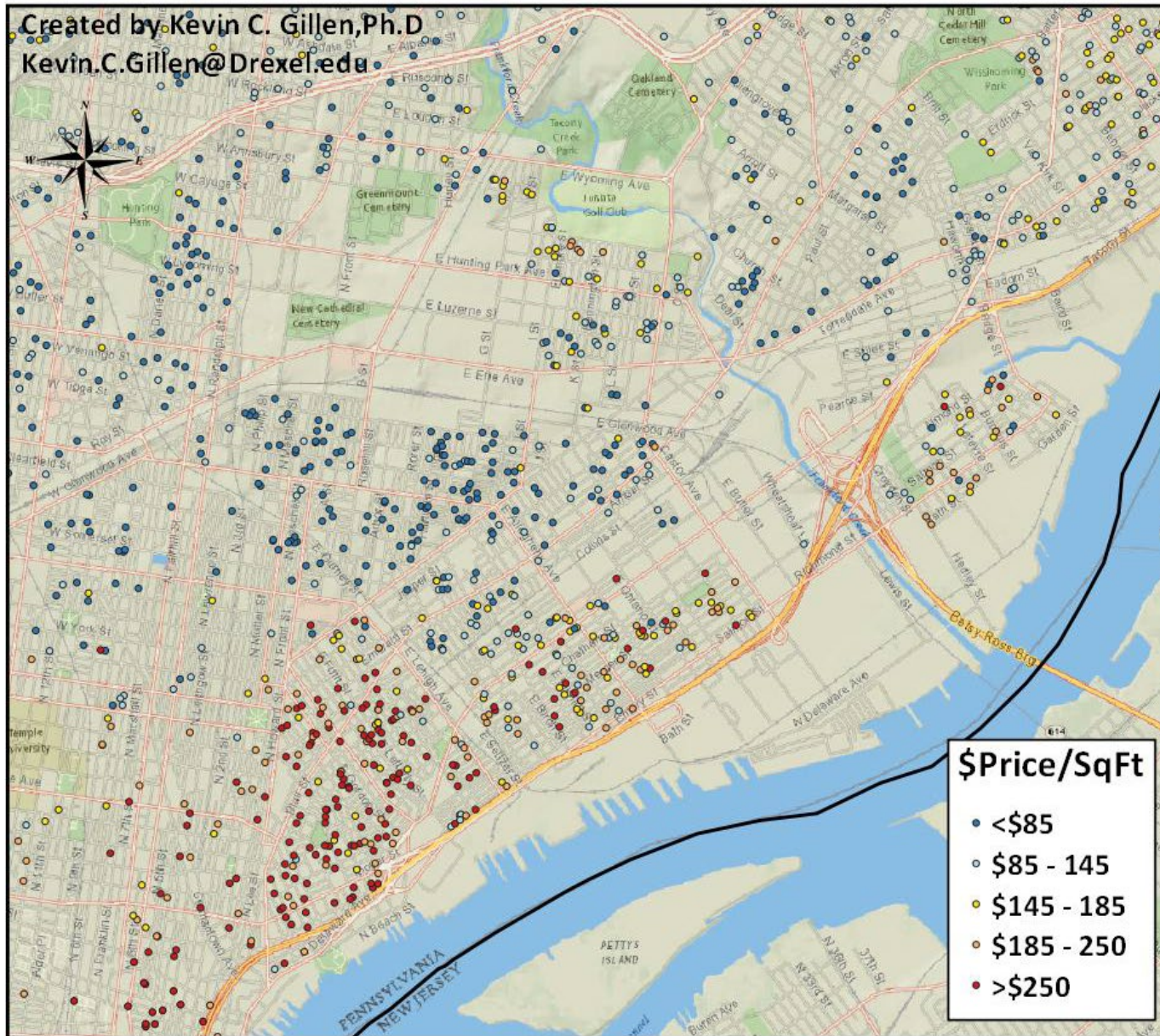
# Center City House Sales in 2021 Q2



# South Philadelphia House Sales in 2021 Q2

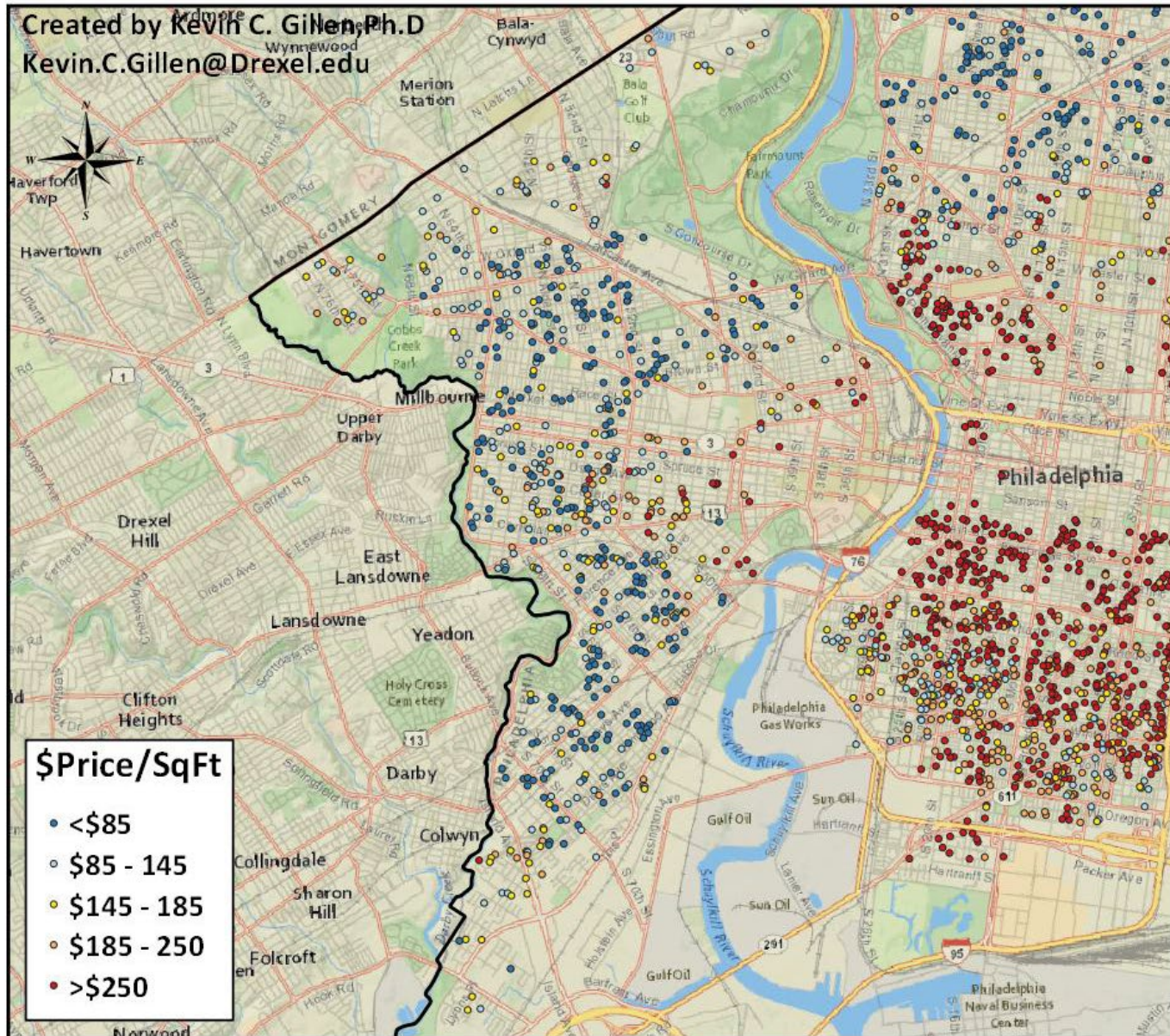


# Kensington/Frankford House Sales in 2021 Q2



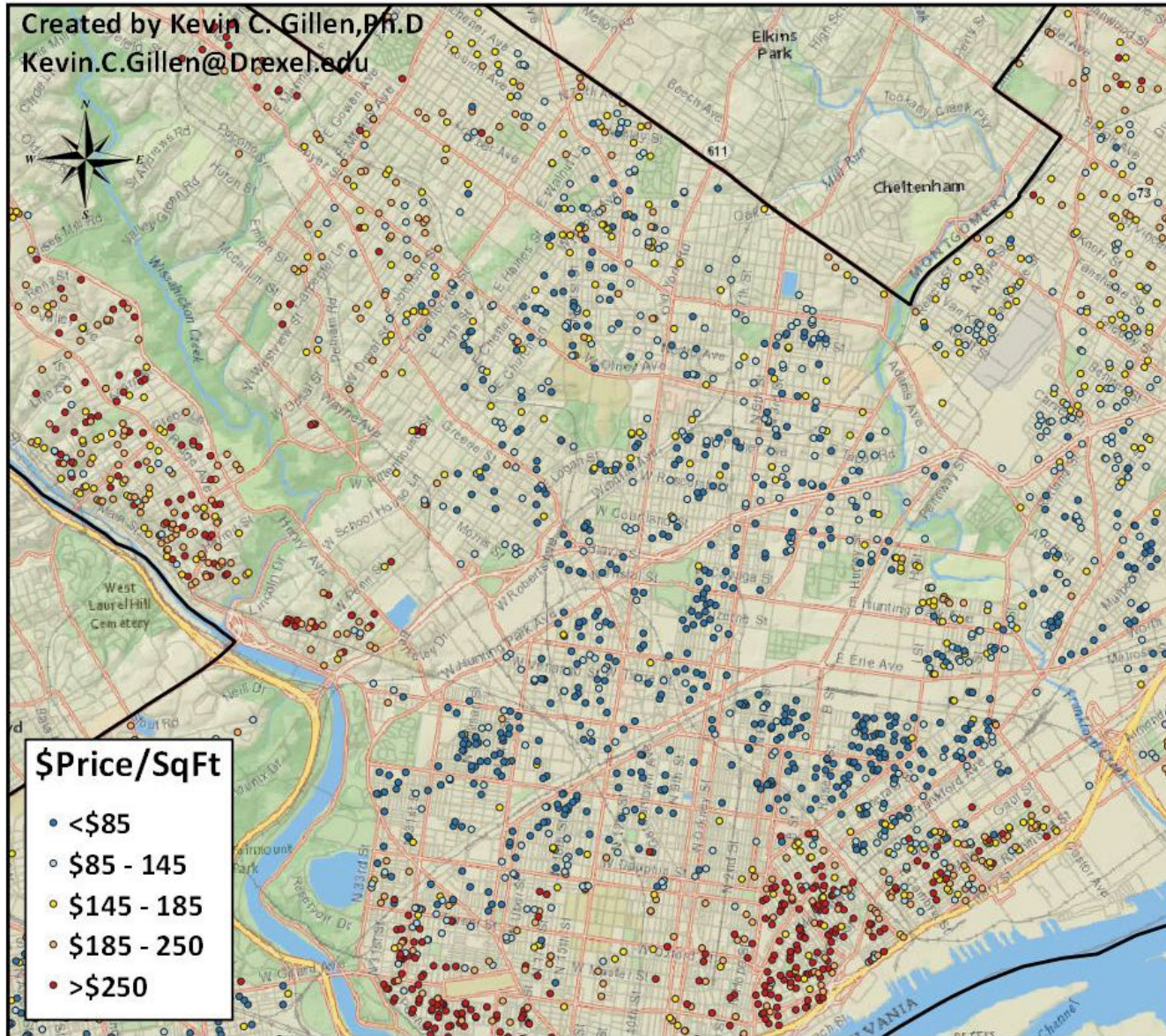


# West/Southwest Philadelphia House Sales in 2021 Q2



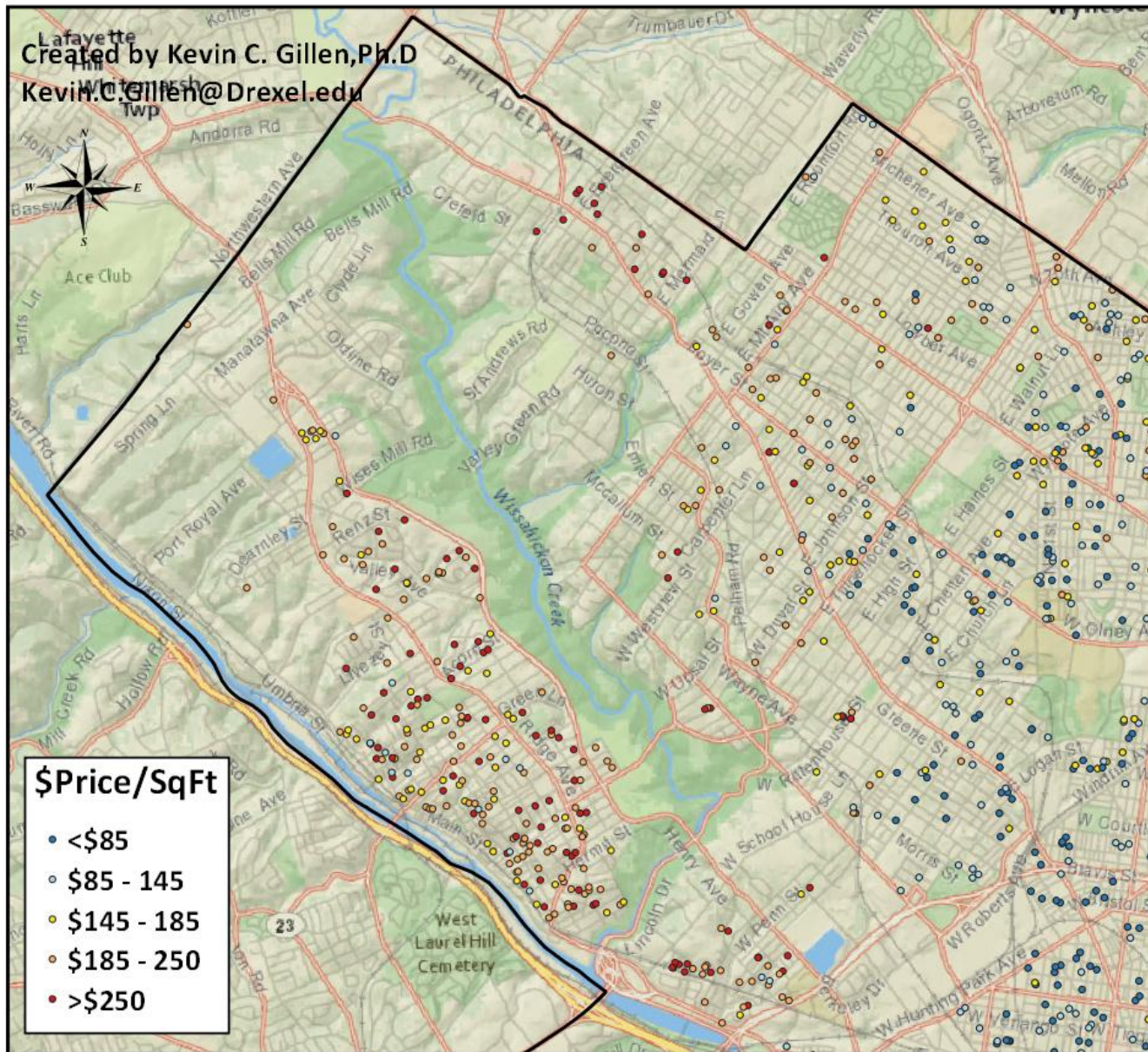
# North Philadelphia House Sales in 2021 Q2

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

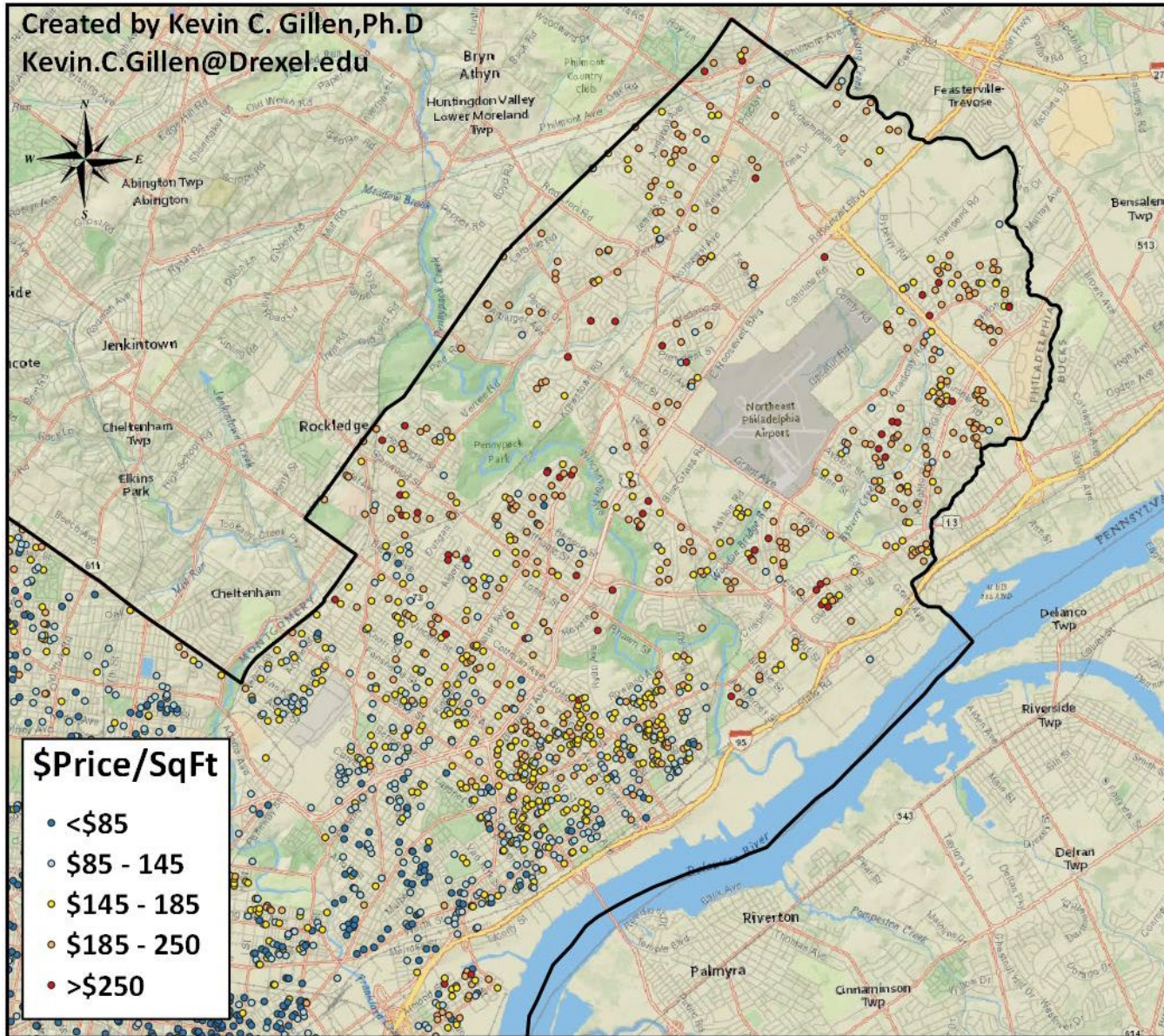


# Northwest Philadelphia House Sales in 2021 Q2

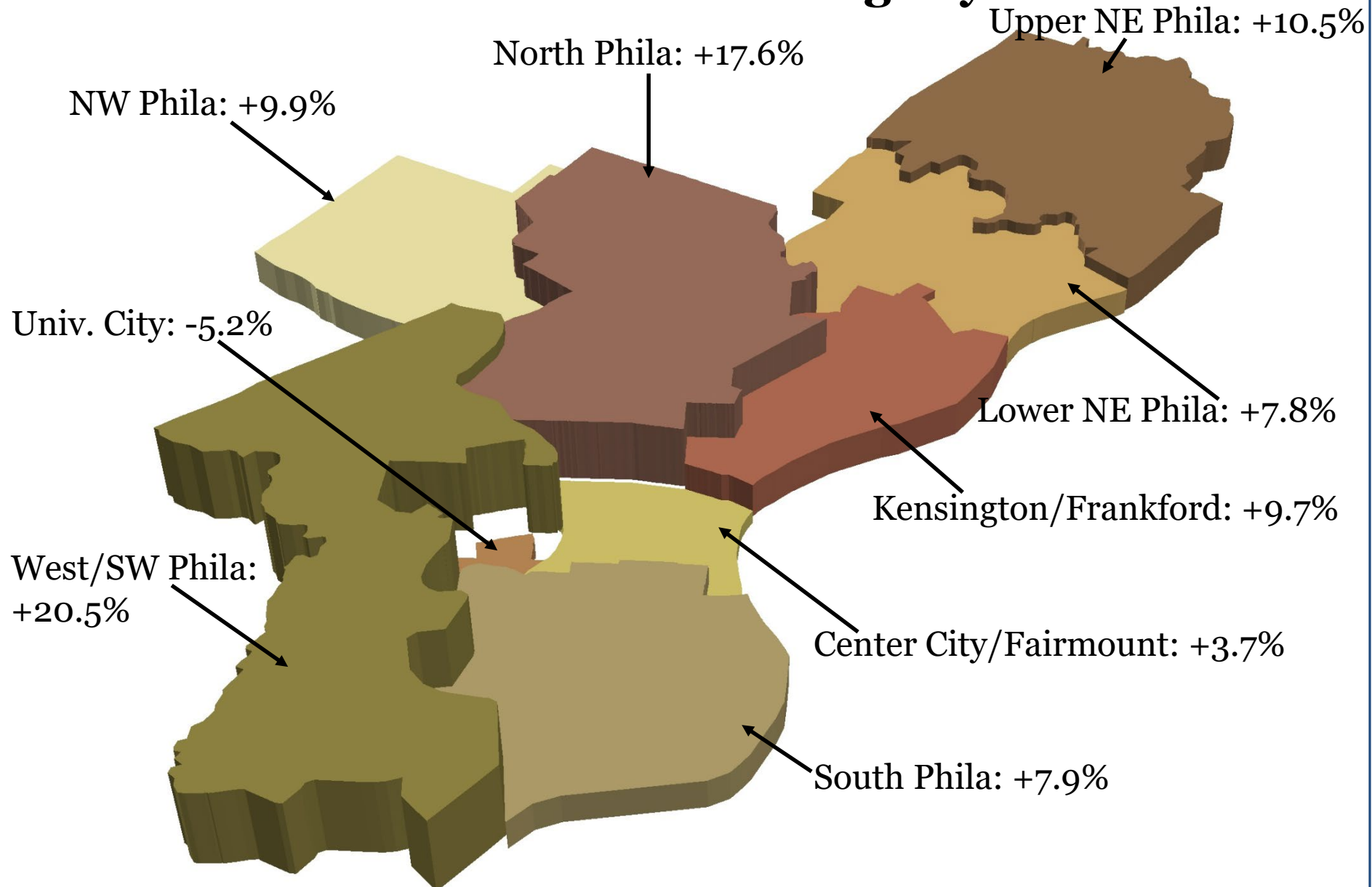
Created by Kevin C. Gillen, Ph.D  
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# Northeast Philadelphia House Sales in 2021 Q2



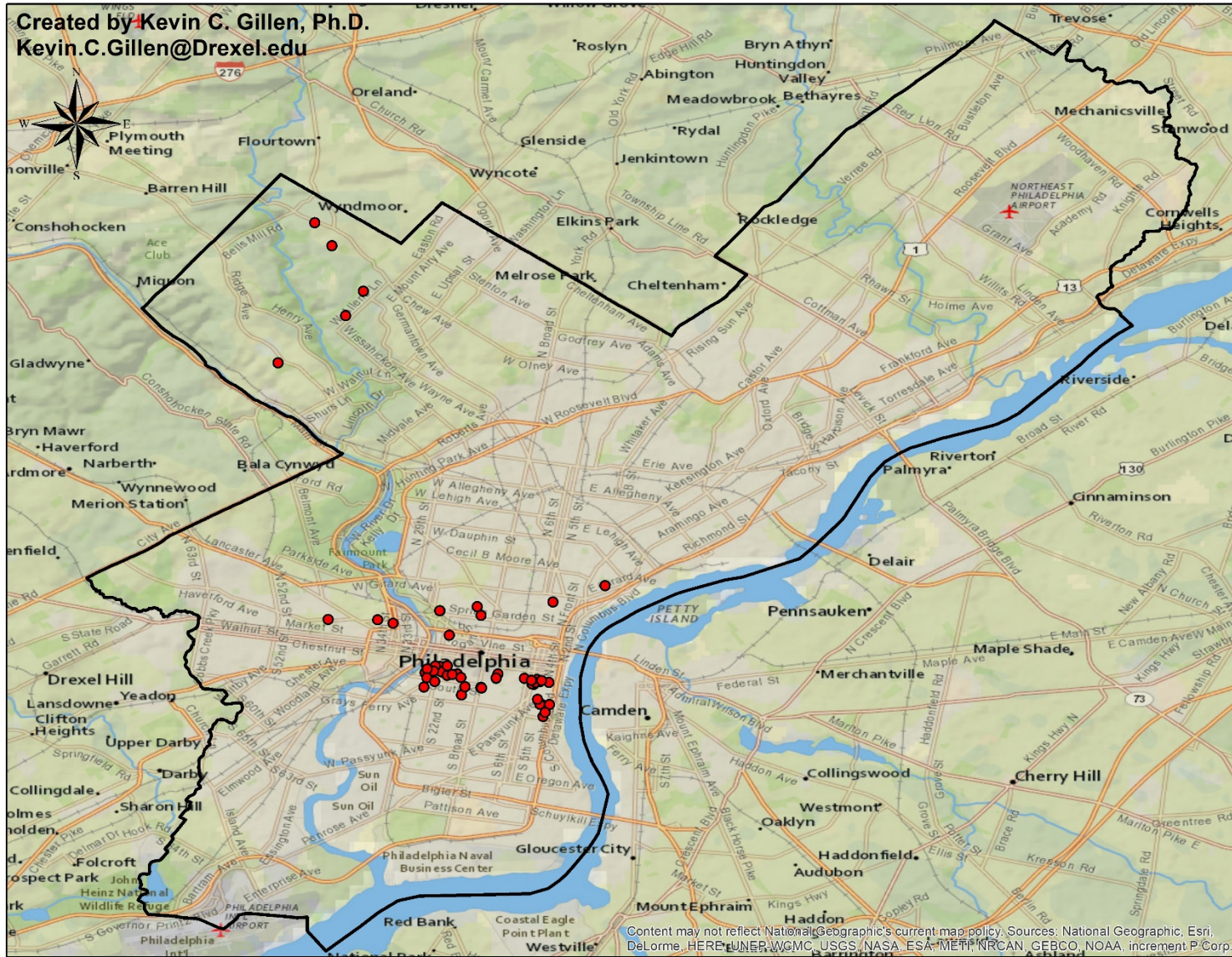
# Annual House Price Rate of Change by Submarket



Note: Each submarket is extruded by its average change in house values over the course of the past year (from 2020 Q2 to 2021 Q2) in order to reflect its growth (or depreciation) rate relative to other neighborhoods.

# + \$1 Million Dollar House Sales in 2021 Q2

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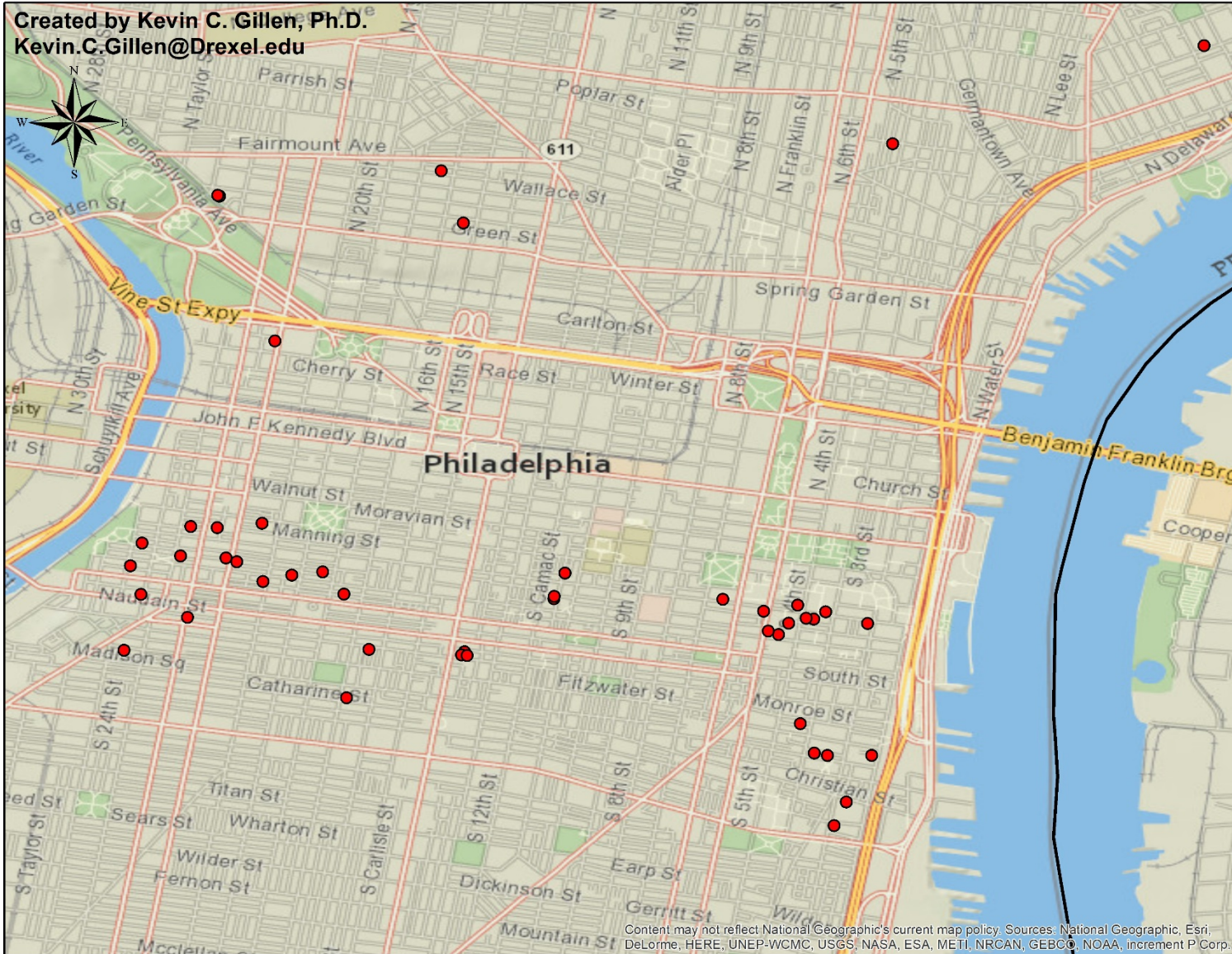
PRICE	ADDRESS
\$1,020,000	2216 RITTENHOUSE SQ
\$1,020,000	320 QUINCE ST
\$1,020,000	2150 KATER ST
\$1,048,000	1637 CHRISTIAN ST
\$1,049,000	776 S FRONT ST
\$1,050,000	3625 SPRING GARDE ST
\$1,050,000	408 W GEORGE ST
\$1,070,000	2328 SAINT ALBANS ST
\$1,085,000	523 E THOMPSON ST
\$1,100,000	1725 ADDISON ST
\$1,100,000	1005 S 2ND ST
\$1,112,000	317 LAWRENCE CT
\$1,130,000	122 CHRISTIAN ST
\$1,137,500	1711 NORTH ST
\$1,143,000	309 SPRUCE ST
\$1,153,000	2415 DELANCEY PL
\$1,155,000	526 S 24TH ST
\$1,160,000	330 QUINCE ST
\$1,175,000	235 CATHARINE ST
\$1,200,000	302 S 2ND ST
\$1,225,000	7401 CRESHEIM RD
\$1,242,500	504 SPRUCE ST
\$1,250,000	307 PEMBERTON ST
\$1,275,000	1620 BAINBRIDGE ST
\$1,295,000	1614 GREEN ST
\$1,340,000	3313 BARING ST
\$1,340,000	1341 BAINBRIDGE ST
\$1,350,000	258 S 4TH ST
\$1,357,549	247 QUINCE ST
\$1,390,000	617 SPRUCE ST
\$1,390,000	1336 KATER ST
\$1,395,000	2102 SPRING ST
\$1,485,000	1333 BAINBRIDGE ST
\$1,485,841	217 CATHARINE ST
\$1,487,000	2427 WAVERLY ST
\$1,540,000	2022 LOCUST ST
\$1,550,000	339 S 5TH ST
\$1,574,800	2225 PANAMA ST
\$1,625,000	1907 PINE ST
\$1,657,000	8850 GERMANTOWN AVE
\$1,665,000	336 SPRUCE ST
\$1,730,000	215 W GRAVERS LN
\$1,950,000	704 SAINT GEORGE RD
\$2,000,000	419 PINE ST
\$2,025,000	404 FOUNTAIN ST
\$2,175,000	326 SPRUCE ST
\$2,375,000	2345 PENNSYLVANIA AVE
\$2,375,000	2347 PENNSYLVANIA AVE
\$2,400,000	326 S 21ST ST
\$2,870,000	2001 WAVERLY ST
\$3,650,000	1812 DELANCEY PL
\$3,825,000	2032 DELANCEY PL
\$3,950,000	258 S VAN PELT ST

This map shows the location of all houses that sold at a recorded price of one million dollars or more in 2021 Q2.



# + \$1 Million Dollar House Sales in 2021 Q2

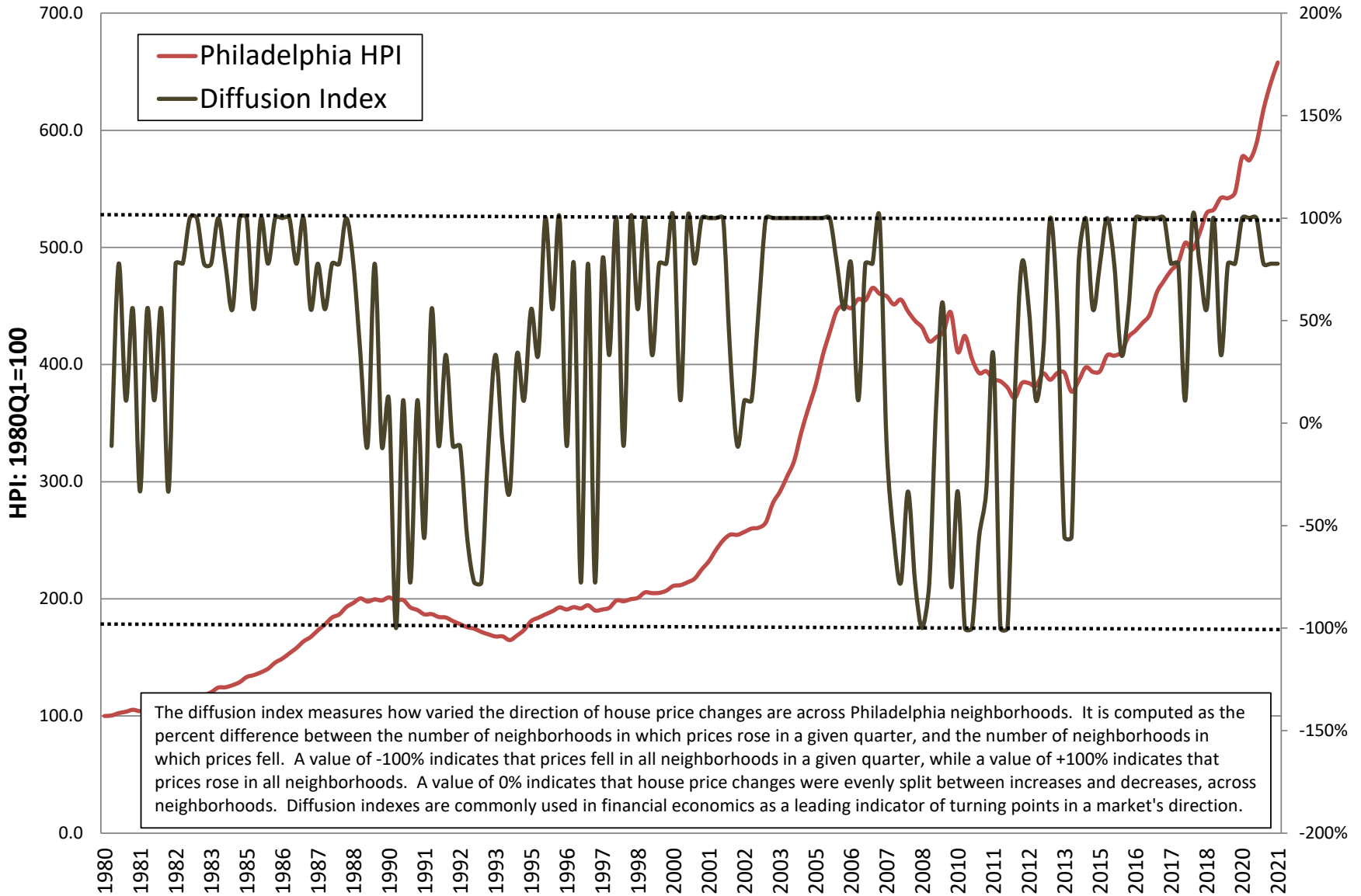
Created by Kevin C. Gillen, Ph.D.  
Kevin.C.Gillen@Drexel.edu



Content may not reflect National Geographic's current map policy. Sources: National Geographic, Esri, DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

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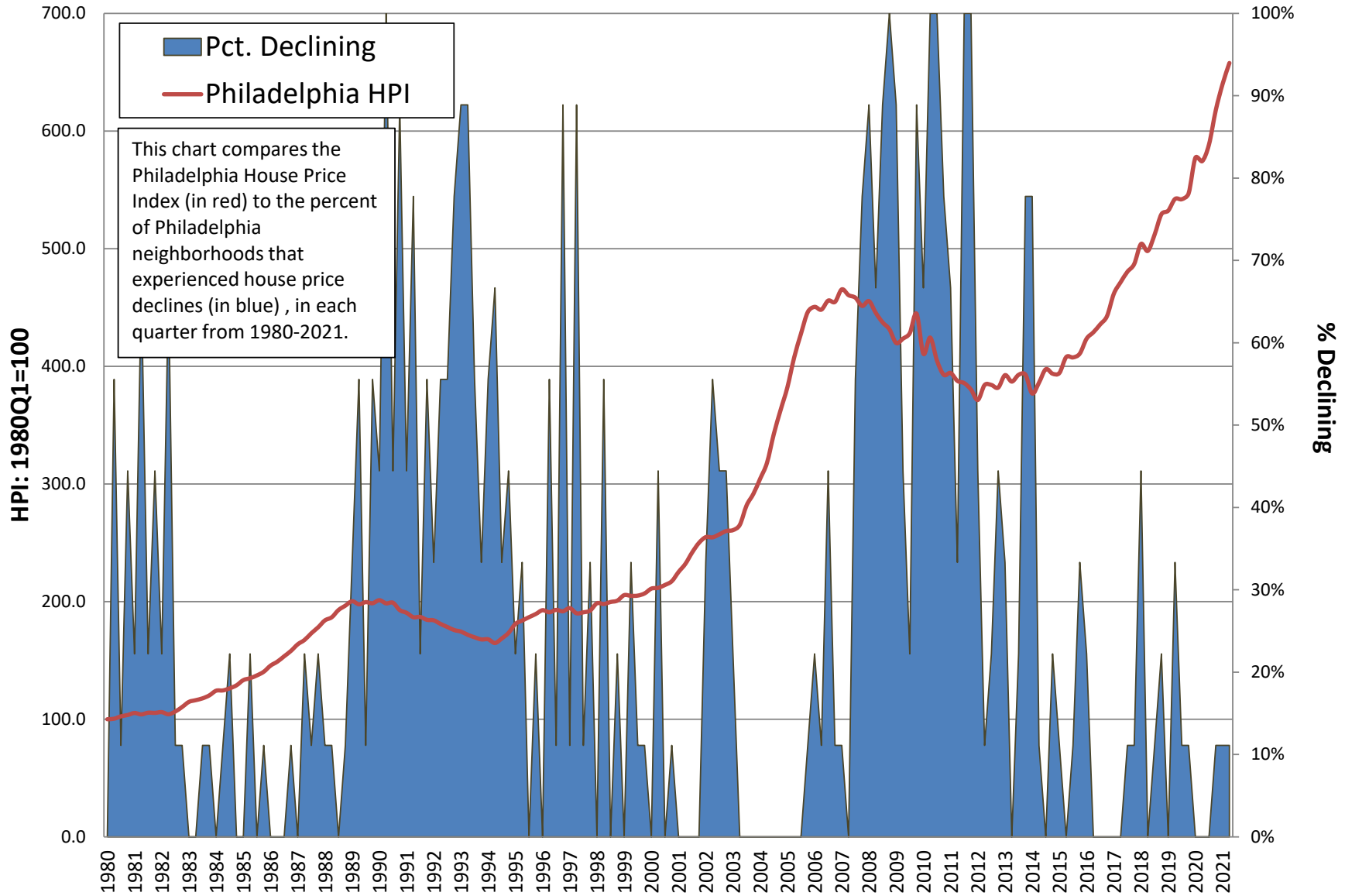
# Philadelphia House Price Diffusion Index 1980-2021



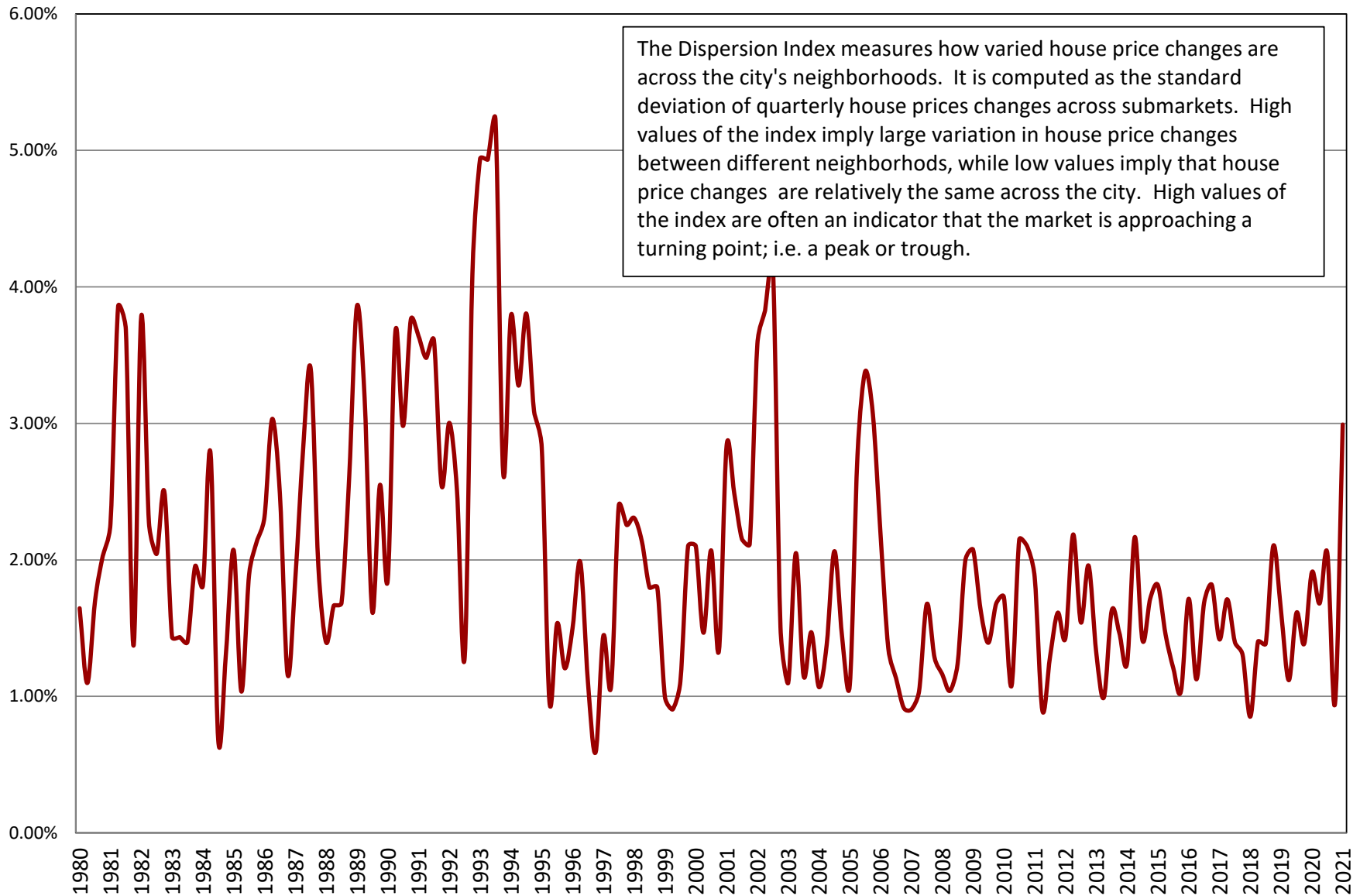
The diffusion index measures how varied the direction of house price changes are across Philadelphia neighborhoods. It is computed as the percent difference between the number of neighborhoods in which prices rose in a given quarter, and the number of neighborhoods in which prices fell. A value of -100% 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.



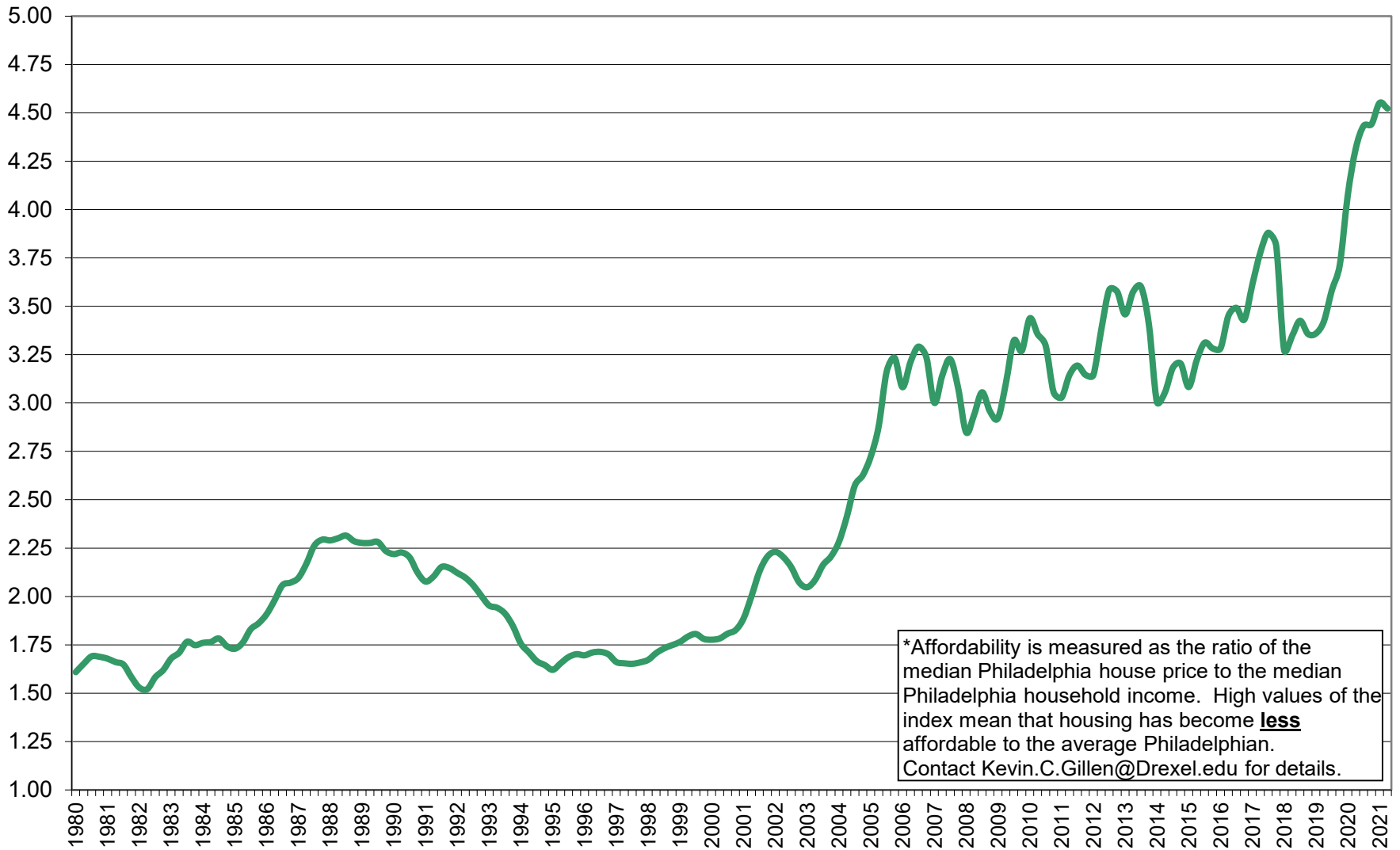
# Philadelphia House Prices 1980-2021: Declines v. House Price Index



# Dispersion Index of Philadelphia Housing 1980-2021



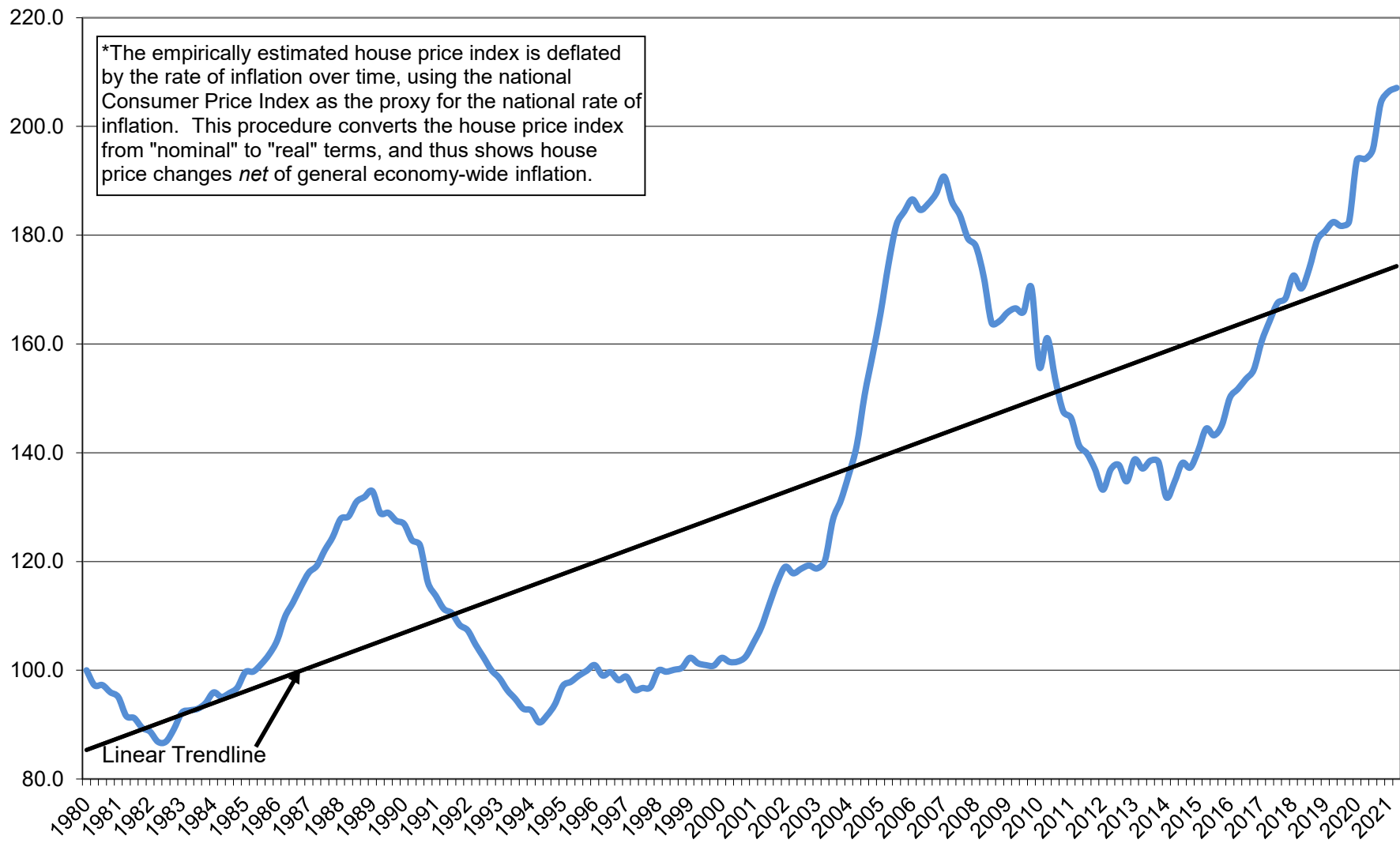
# Philadelphia Housing Affordability\* Index: 1980-2021



Source: US Bureau of Labor Statistics

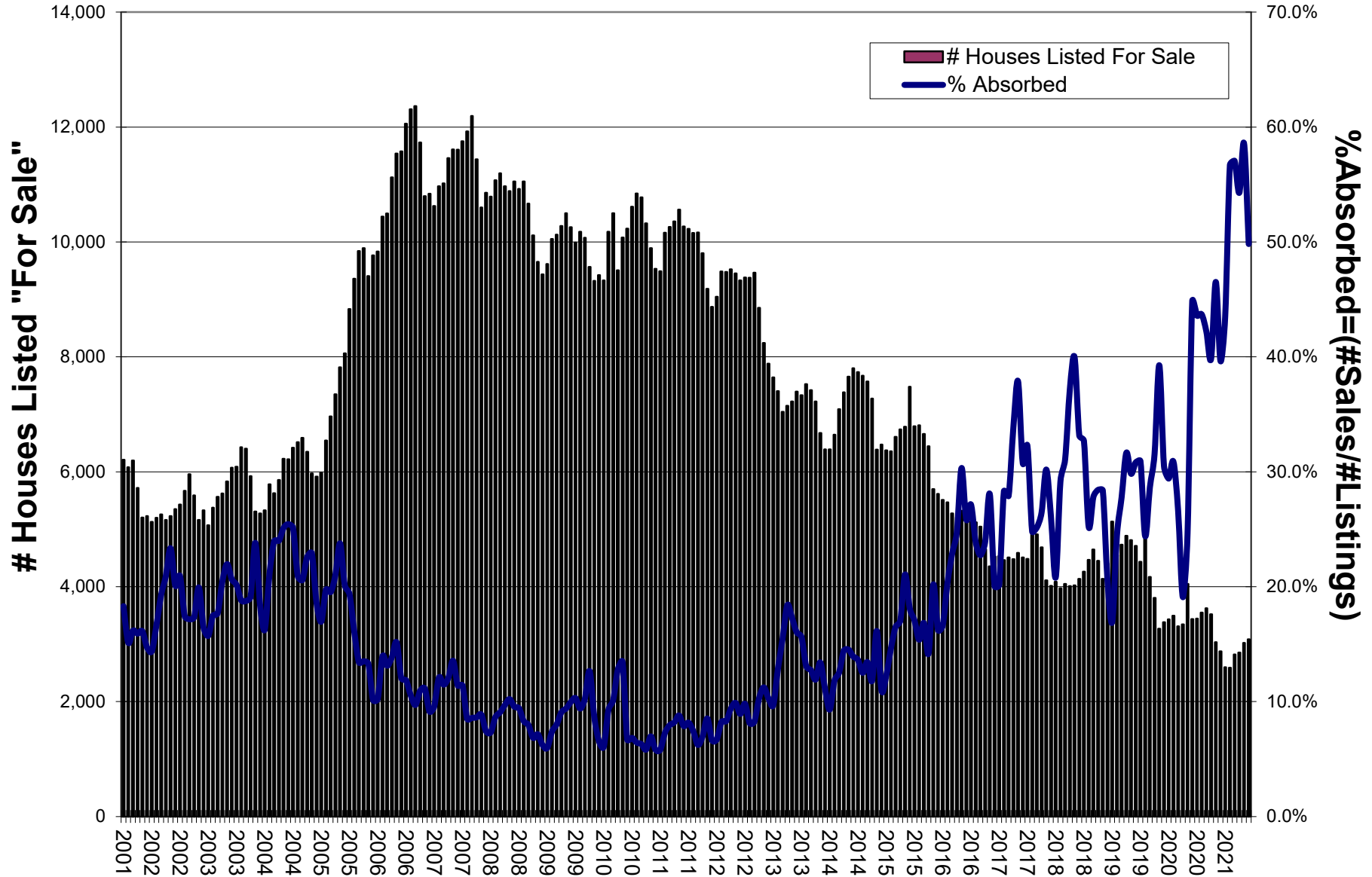
# Inflation-Adjusted\* Philadelphia House Price Index 1980-2021

## 1980Q1=100



Source: US Bureau of Labor Statistics

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

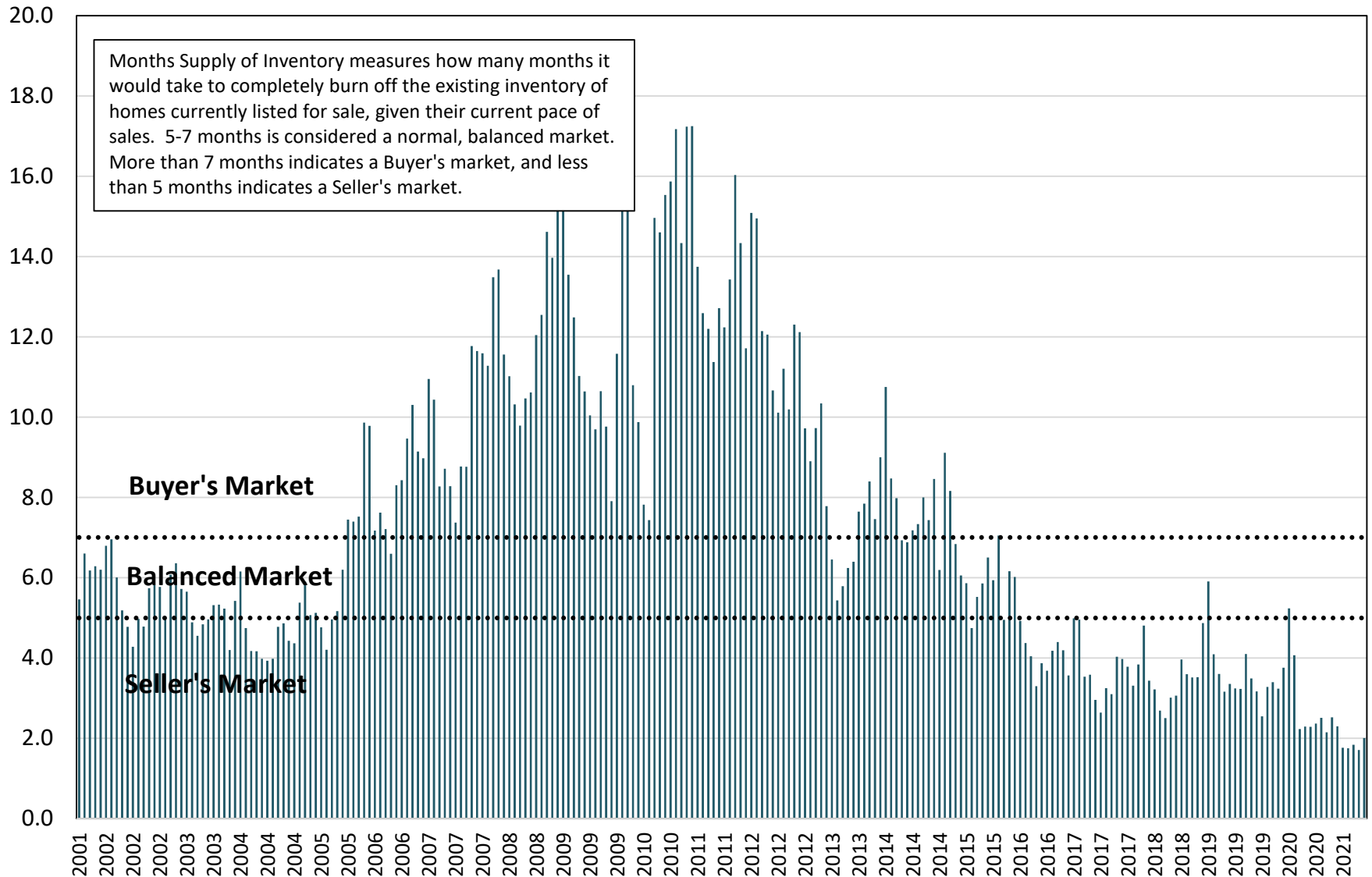


“%Absorbed” is defined as the percent of homes listed for sale in a given month that also sold in that same month.

Source: Bright MLS

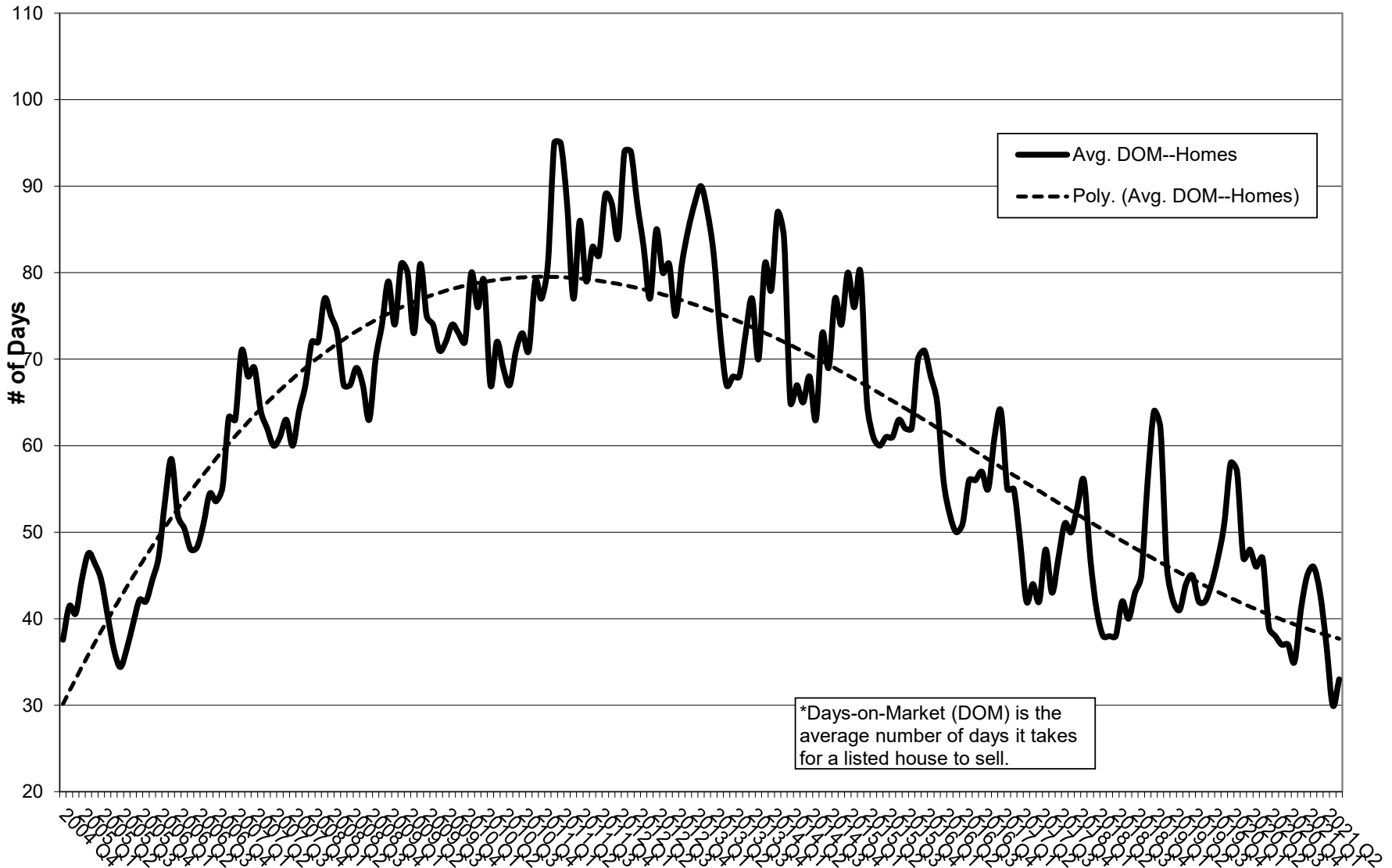


# Months Supply of Inventory in Philadelphia



Source: Bright MLS

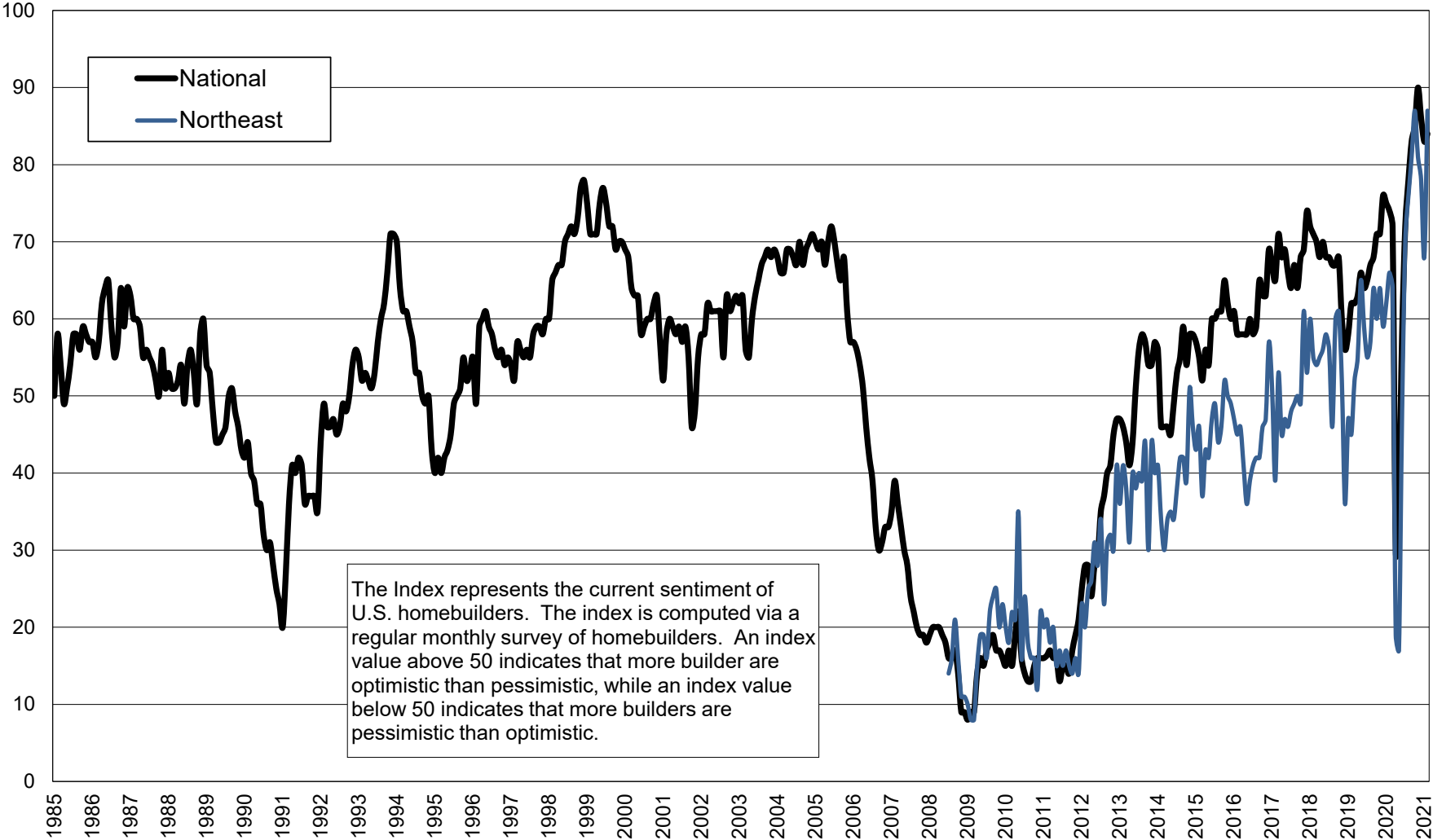
# Average Days-on-Market\* for Philadelphia Homes



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

Source: Bright MLS

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

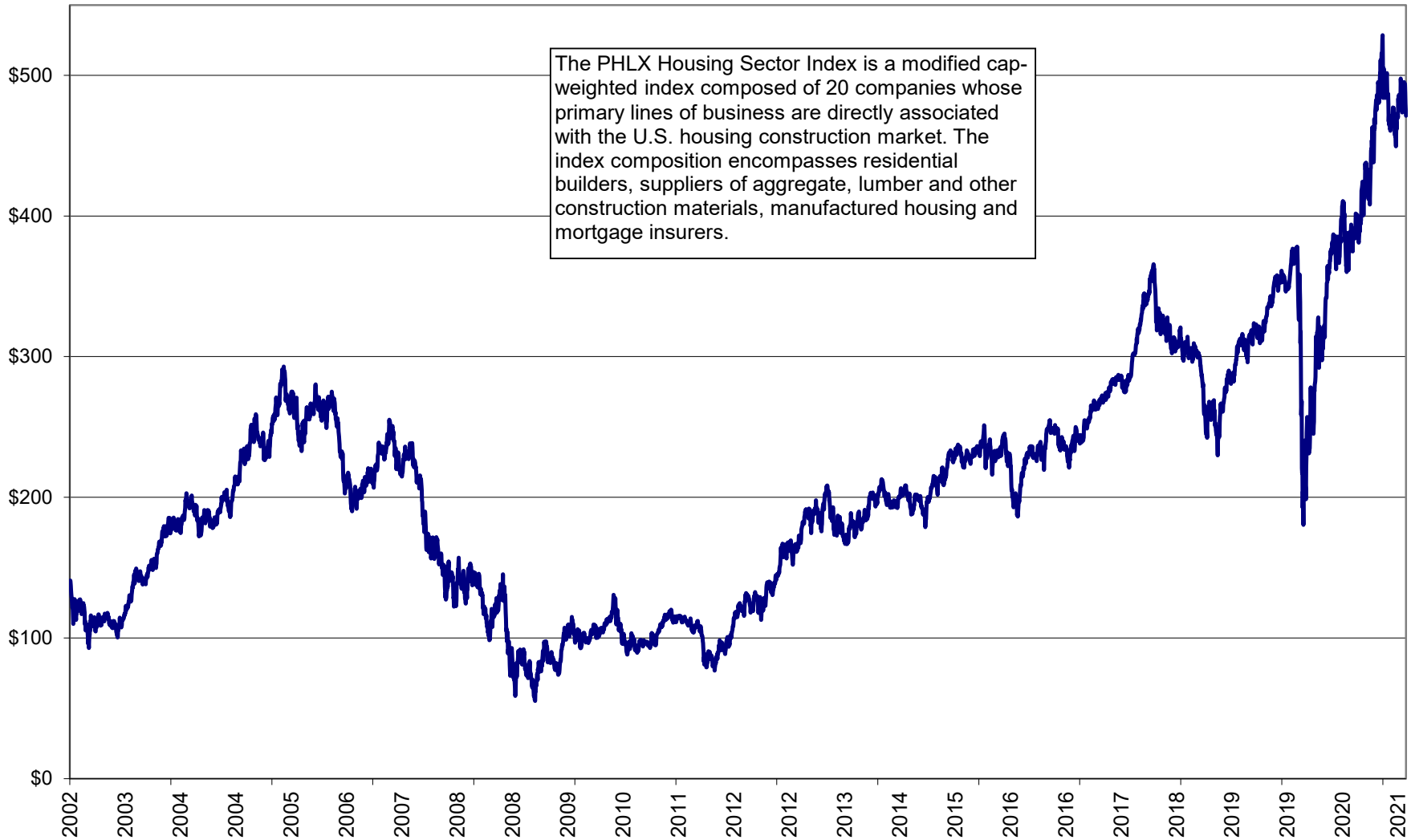


The Index represents the current sentiment of U.S. homebuilders. The index is computed via a regular monthly survey of homebuilders. An index value above 50 indicates that more builders are optimistic than pessimistic, while an index value below 50 indicates that more builders are pessimistic than optimistic.

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



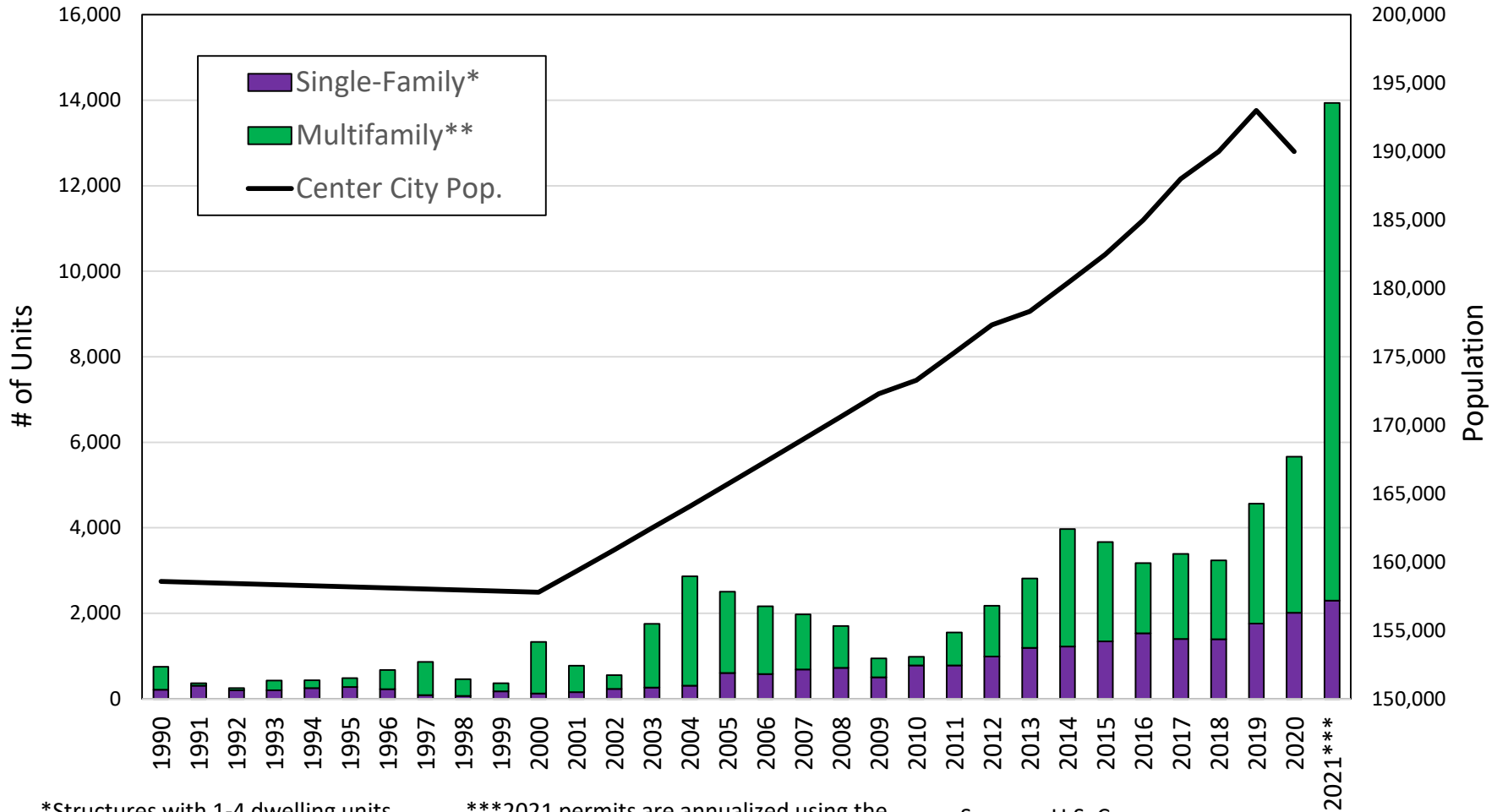
# Philadelphia Stock Exchange Housing Sector Index: 2002-2021



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 1990-2021: Single-Family v. Multifamily



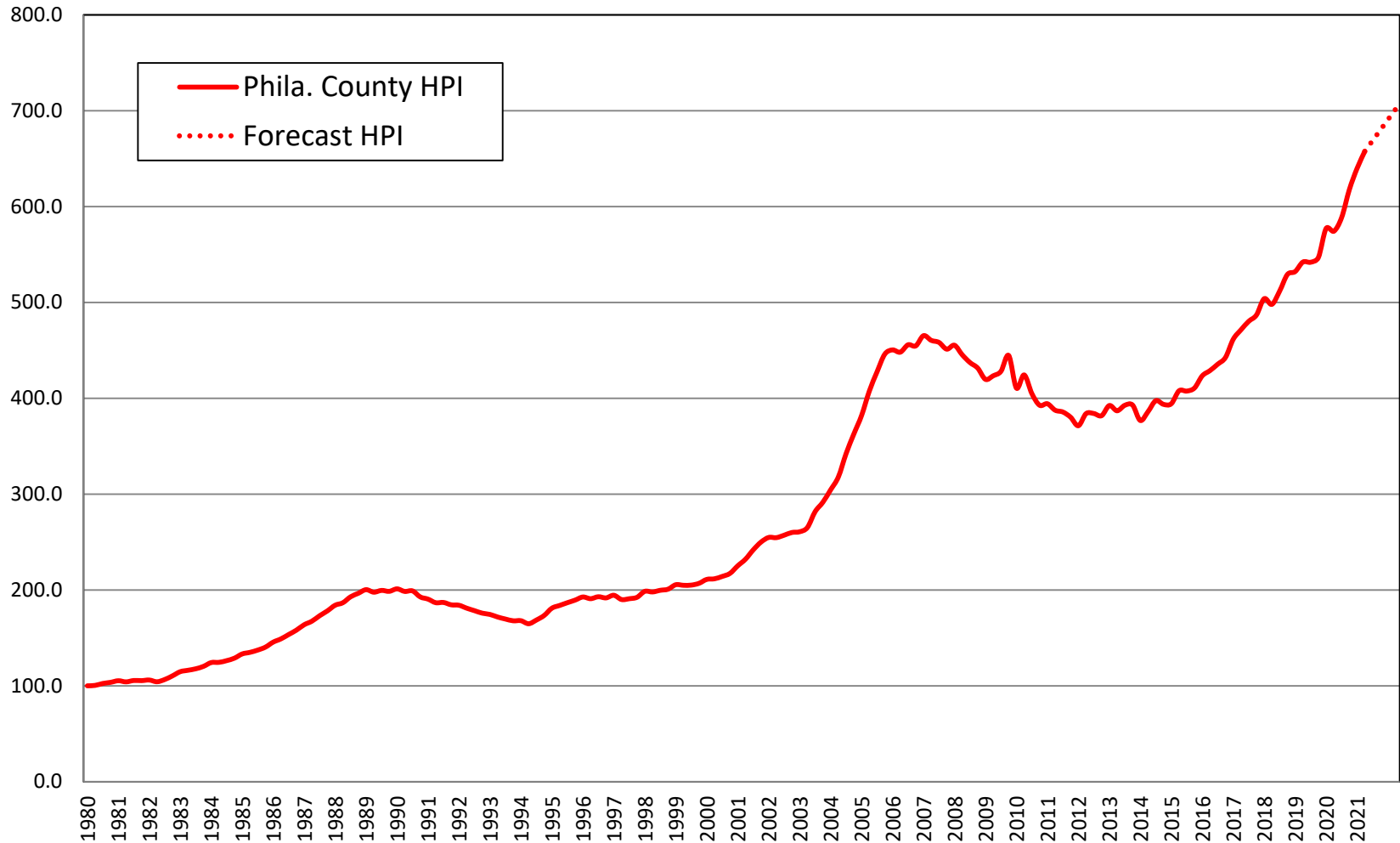
\*Structures with 1-4 dwelling units  
 \*\*Structures with >=5 dwelling units

\*\*\*2021 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 projects an increase of 6.5% in Philadelphia's general level of house prices over the next 12 months. This is a downgrade from their previous forecast of 8.3%.

Source: <https://www.zillow.com/research/data/>