

PHILADELPHIA HOUSE PRICE INDICES

December 10, 2024



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KEVIN C. GILLEN, Ph.D.

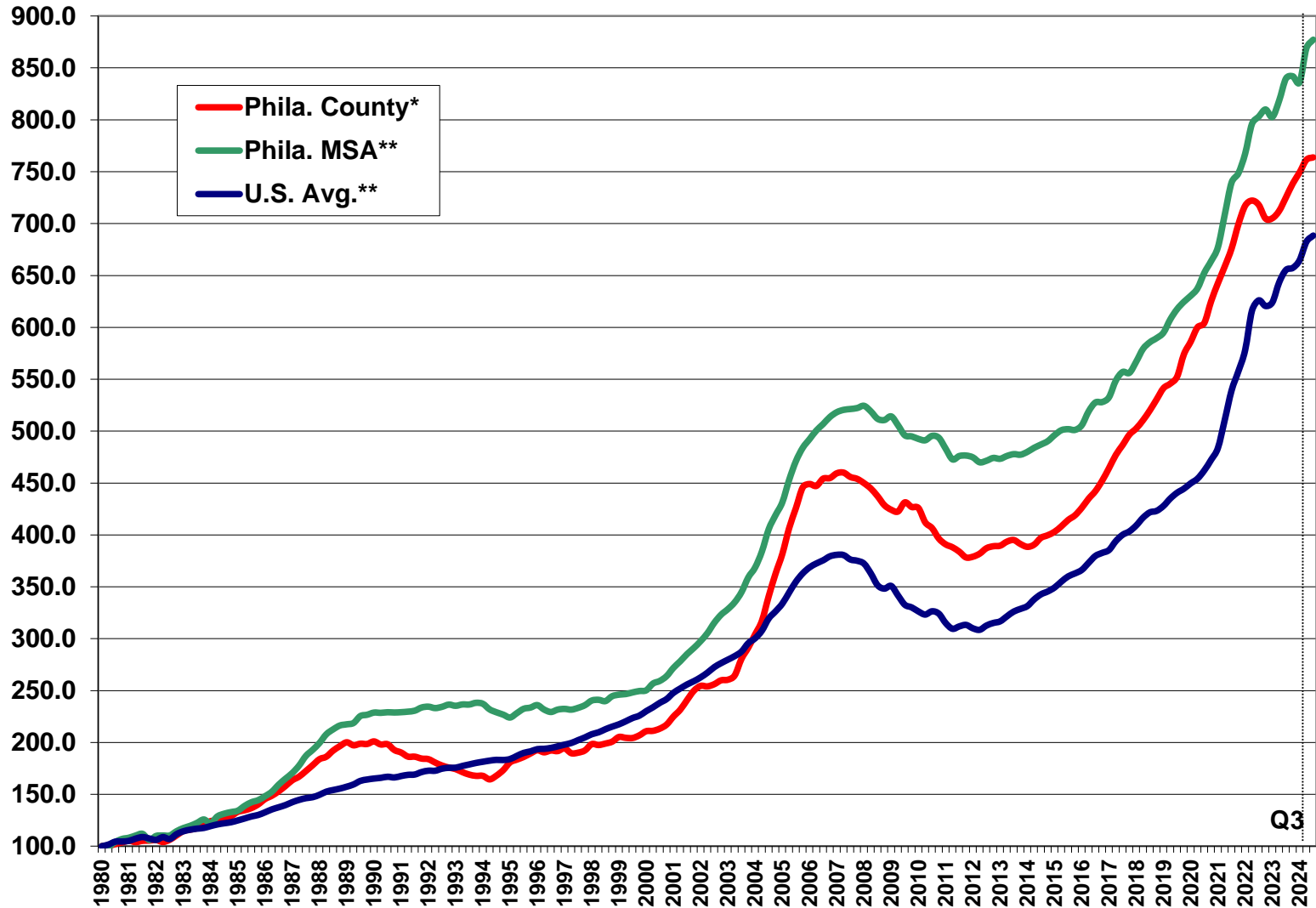
Kevin.C.Gillen@Drexel.edu

***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. © 2023, Drexel University, All Rights Reserved.*



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House Price Indices 1980-2024: 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 2023 Q3 only.

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

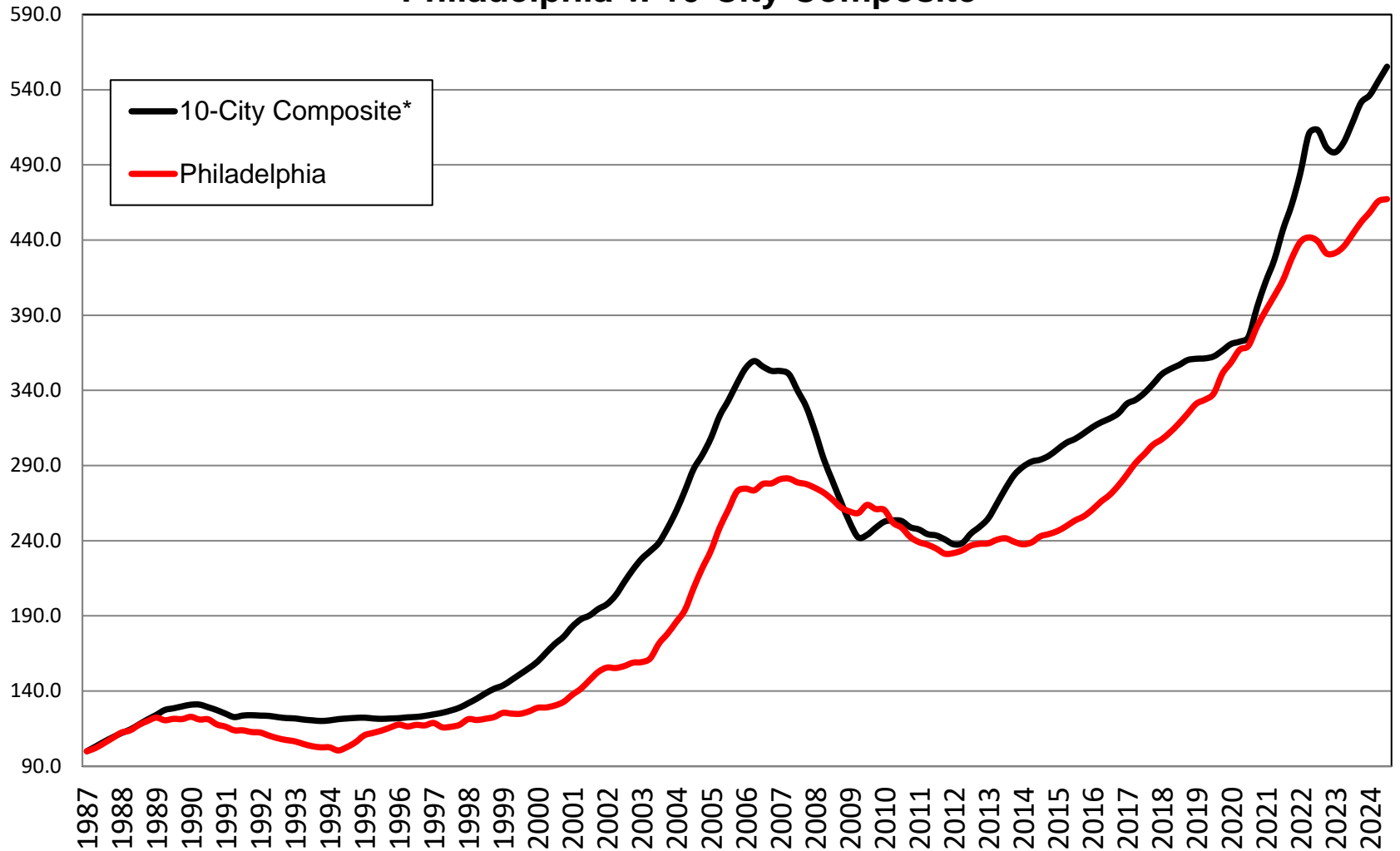
Total House Price Appreciation Rates by Geographic Market

Period	Philadelphia County*	Philadelphia MSA**	U.S.A.**
44-Year	663.9%	777.3%	588.4%
10-Year	92.4%	80.1%	100.9%
1-Year	5.3%	4.4%	5.1%
1-Quarter	0.3%	1.0%	0.9%

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

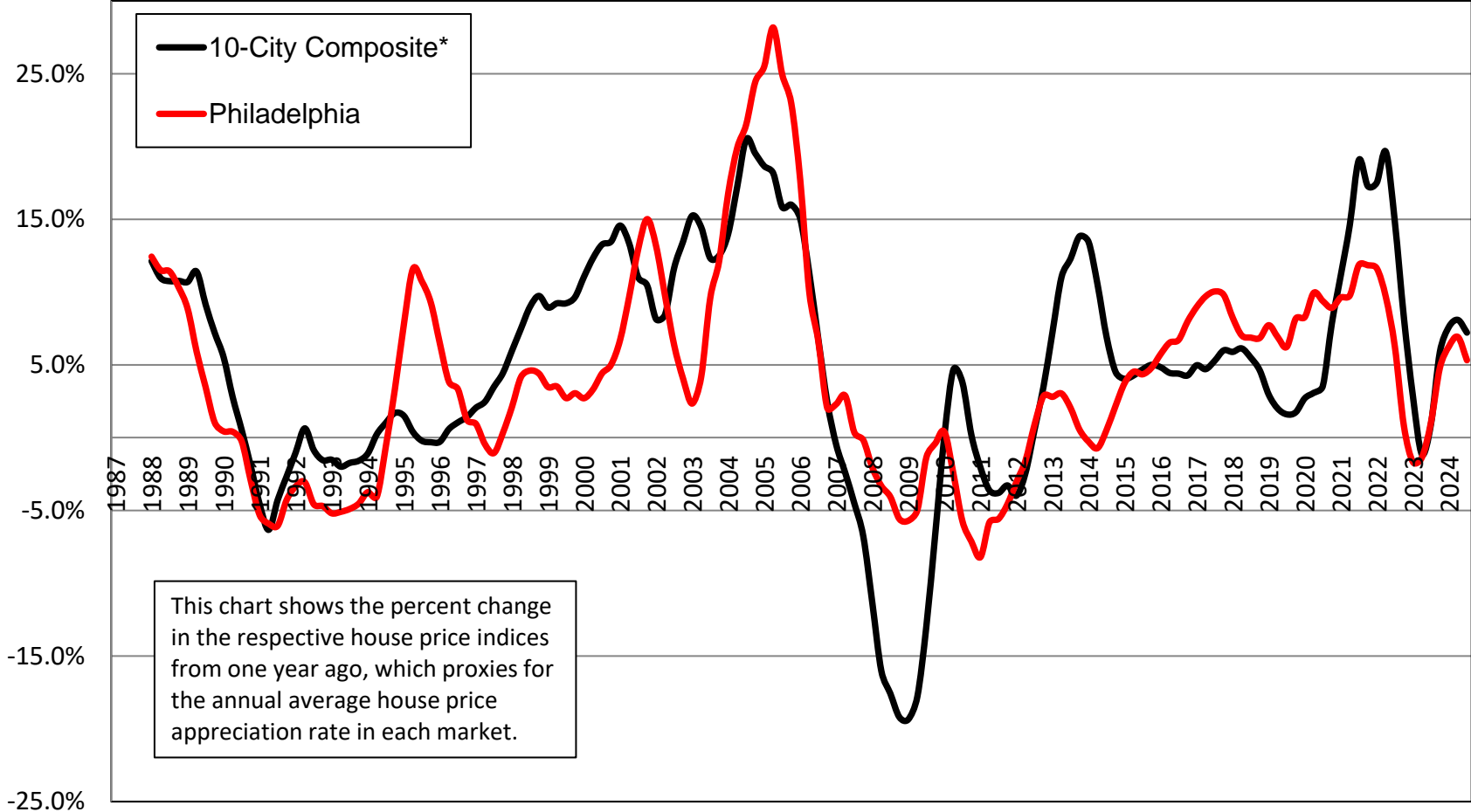
**Source: U.S. Federal Housing Finance Agency (FHFA). These numbers are through 2024Q3 only. “MSA”=“Metropolitan Statistical Area”, which is the entire 10-county region.

House Price Appreciation 1987-2024: 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 (%) 1987-2024: Philadelphia v. 10-City Composite



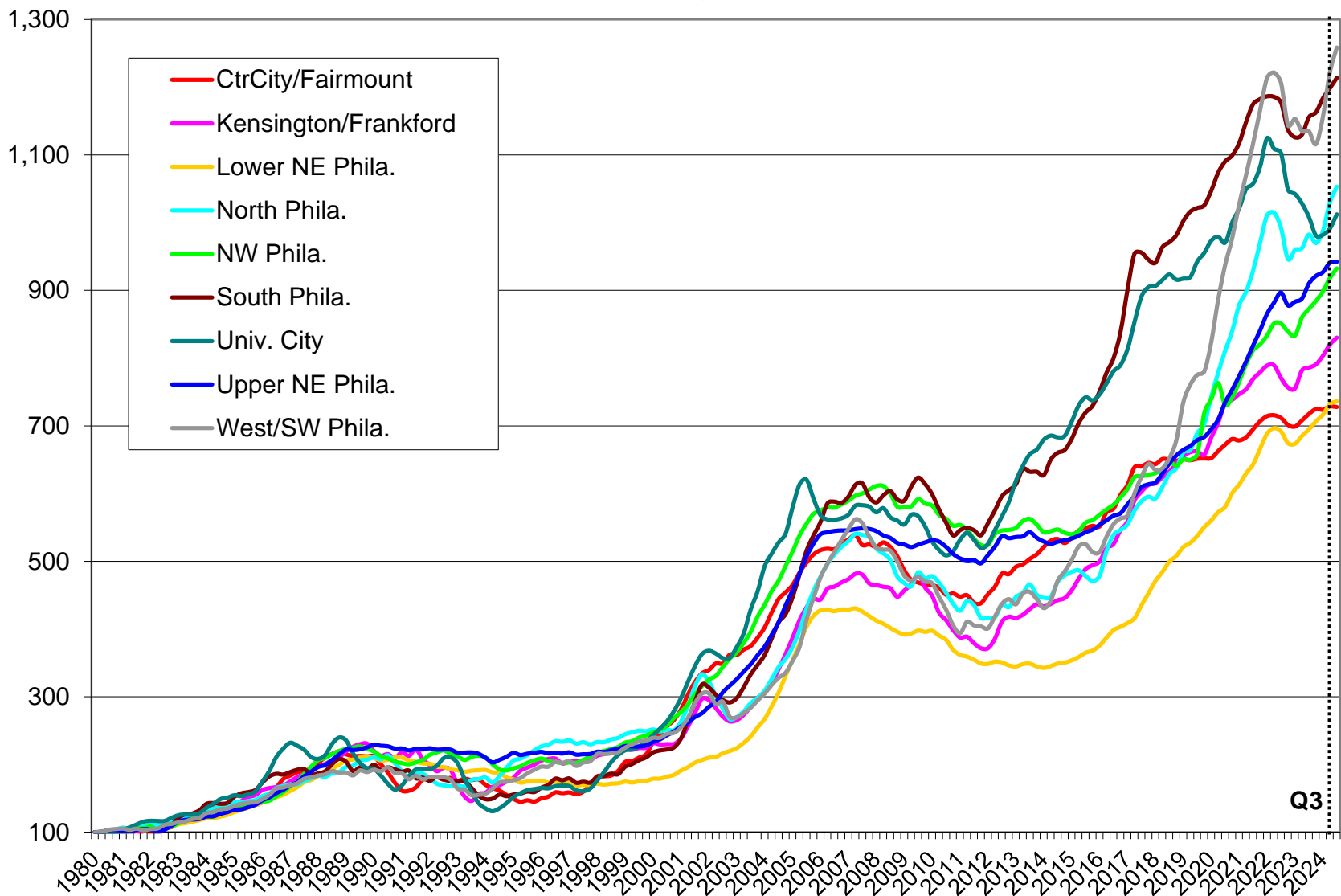
This chart shows the percent change in the respective house price indices from one year ago, which proxies for the annual average house price appreciation rate in each market.

*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.



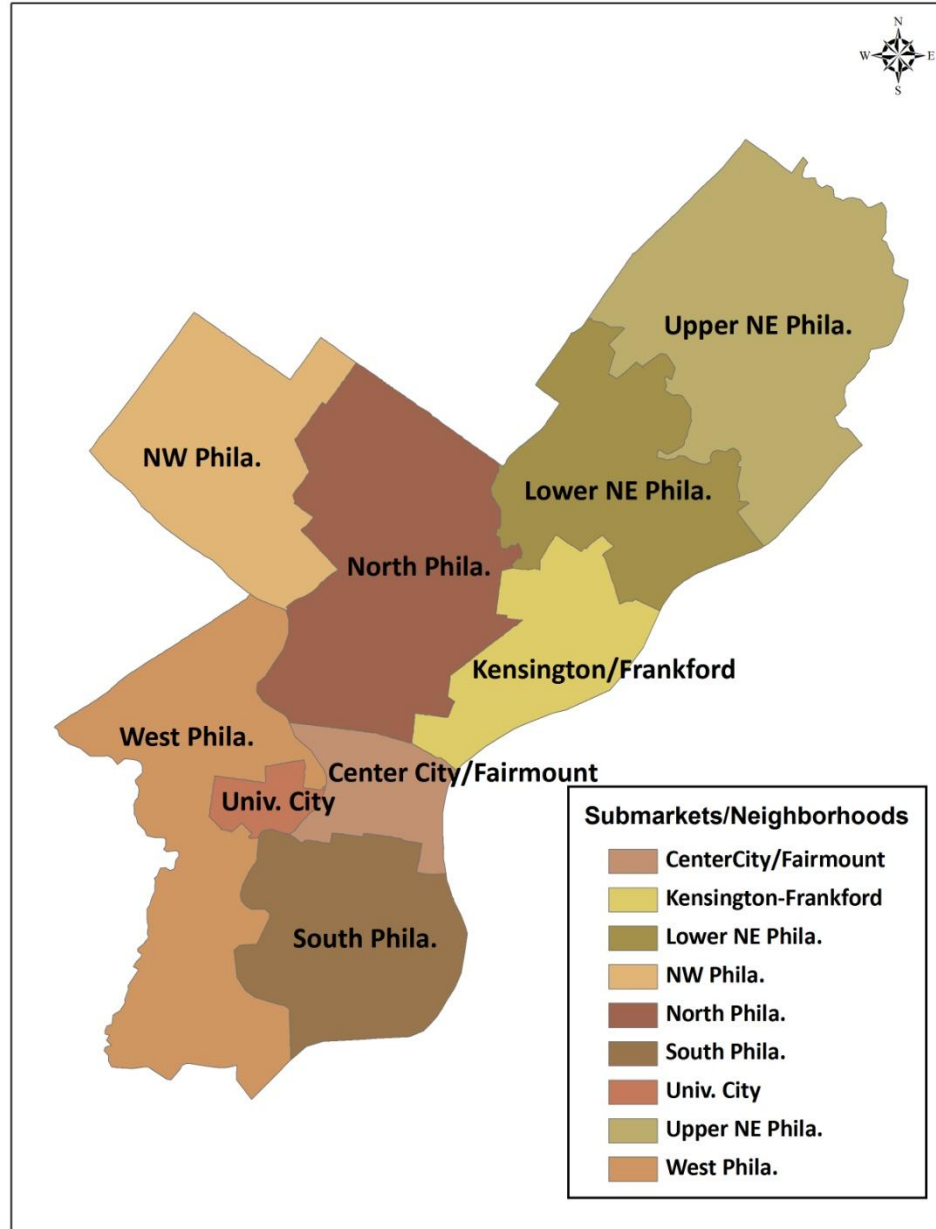
Philadelphia House Price Indices by Neighborhood: 1980-2024

1980Q1=100



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

Philadelphia Submarket Boundaries



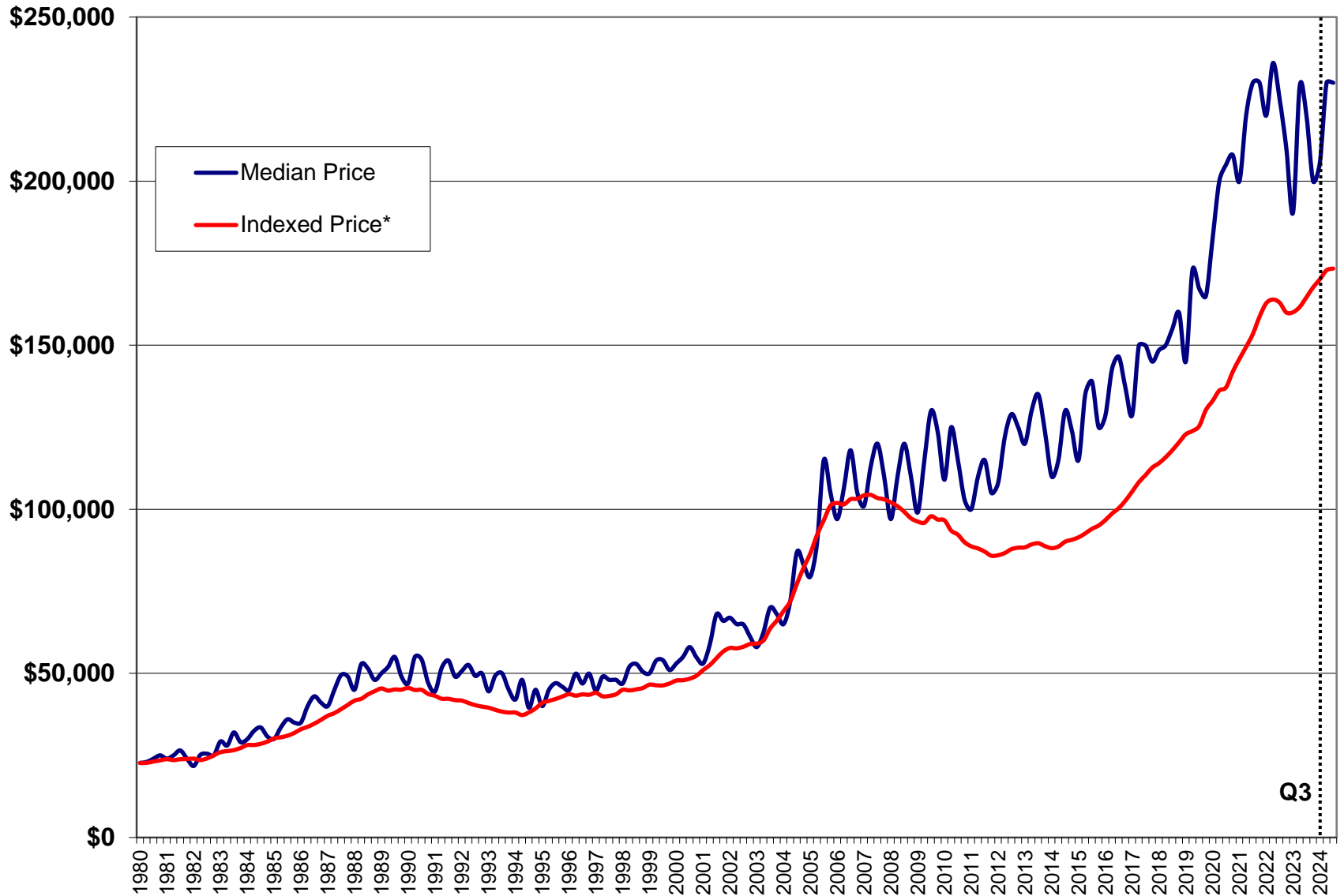
Philadelphia House Price Appreciation Rates by Submarket

Period	Center City/ Fairmount	Kensington /Frankford	Lower NE Phila.	North Phila.	NW Phila.	South Phila.	Univ. City	Upper NE Phila.	West/ SW Phila.
44-year	627.8%	730.3%	636.4%	953.2%	832.4%	1113.8%	912.4%	842.1%	1158.8%
10-year	36.6%	87.6%	110.9%	124.3%	70.5%	83.9%	48.2%	78.1%	166.9%
1-Year	1.4%	5.6%	6.0%	7.2%	6.9%	5.0%	0.4%	3.5%	10.9%
1-Quarter	-0.1%	1.3%	0.6%	2.3%	1.6%	1.3%	2.1%	0.2%	3.0%

This table gives the total % change in average house values by submarket, through 2024 Q3, from different starting points in time.

Note: Unlike the citywide index, the submarket indices are smoothed out by a three-period moving average.

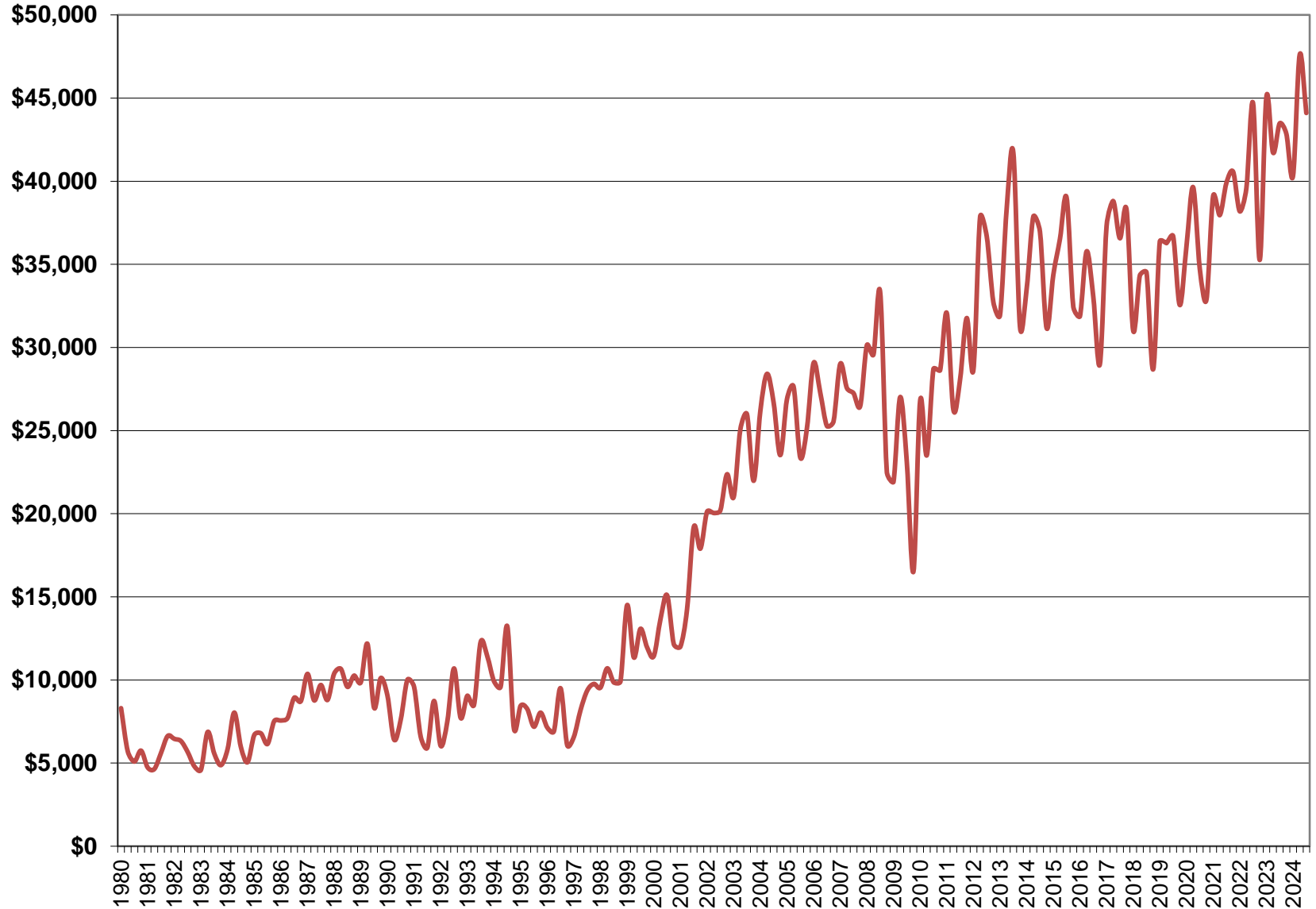
Median Philadelphia House Price v. Indexed Philadelphia House Price 1980-2024



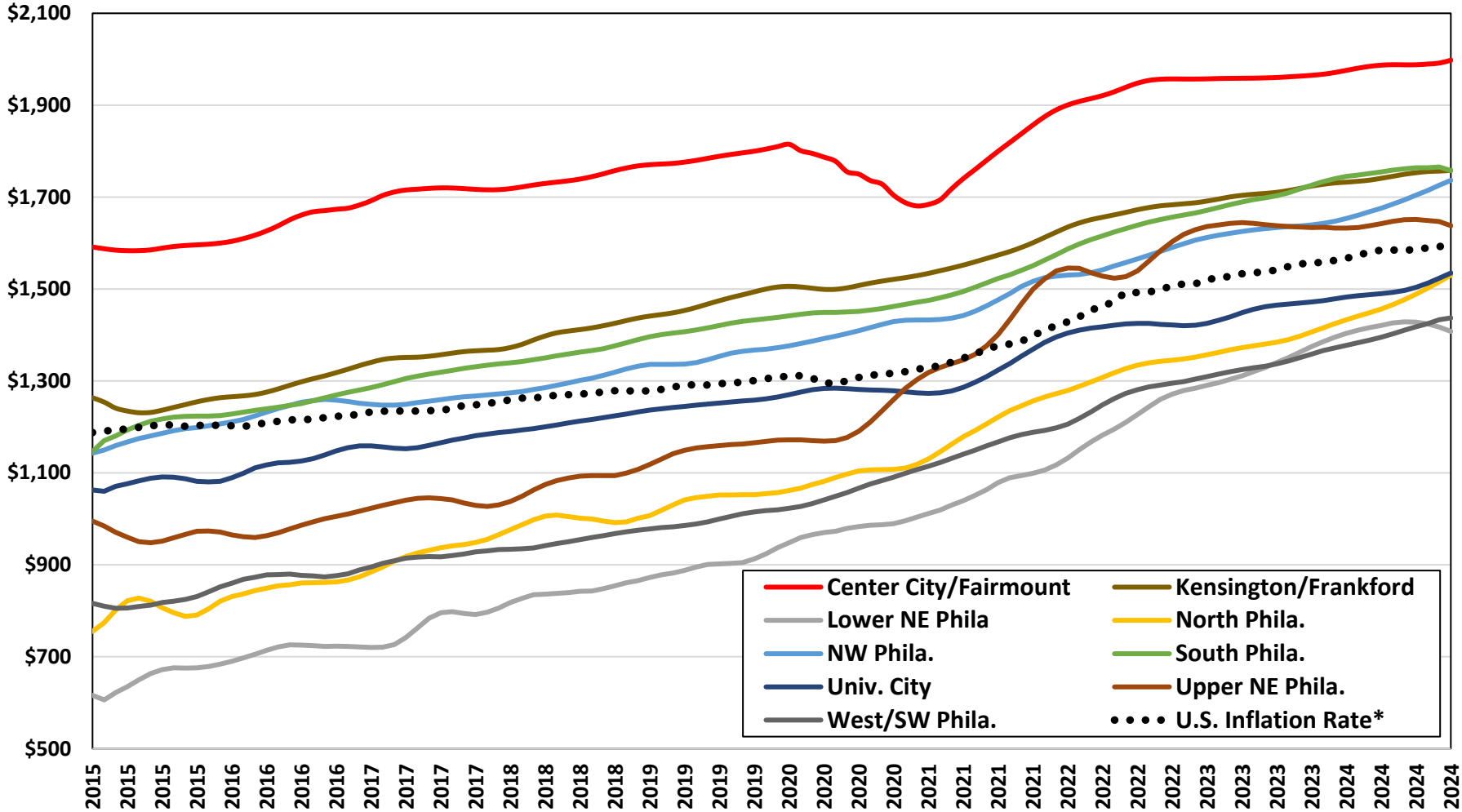
* Empirically estimated by Kevin C. Gillen, Ph.D.

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Average Philadelphia House Price Minus Median House Price: 1980-2024

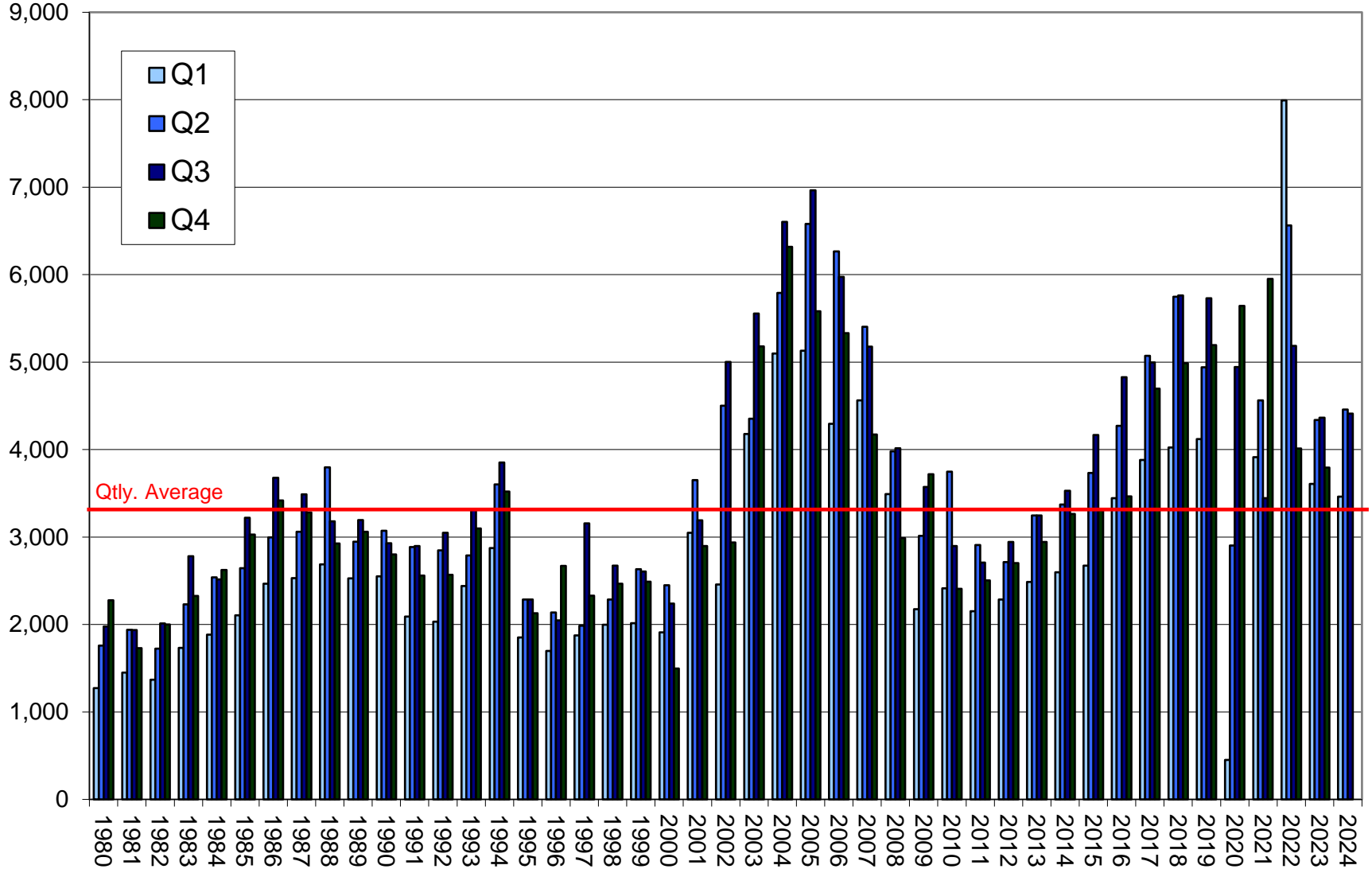


Average Monthly Rent of Philadelphia Dwellings by Submarket: 2015-2024



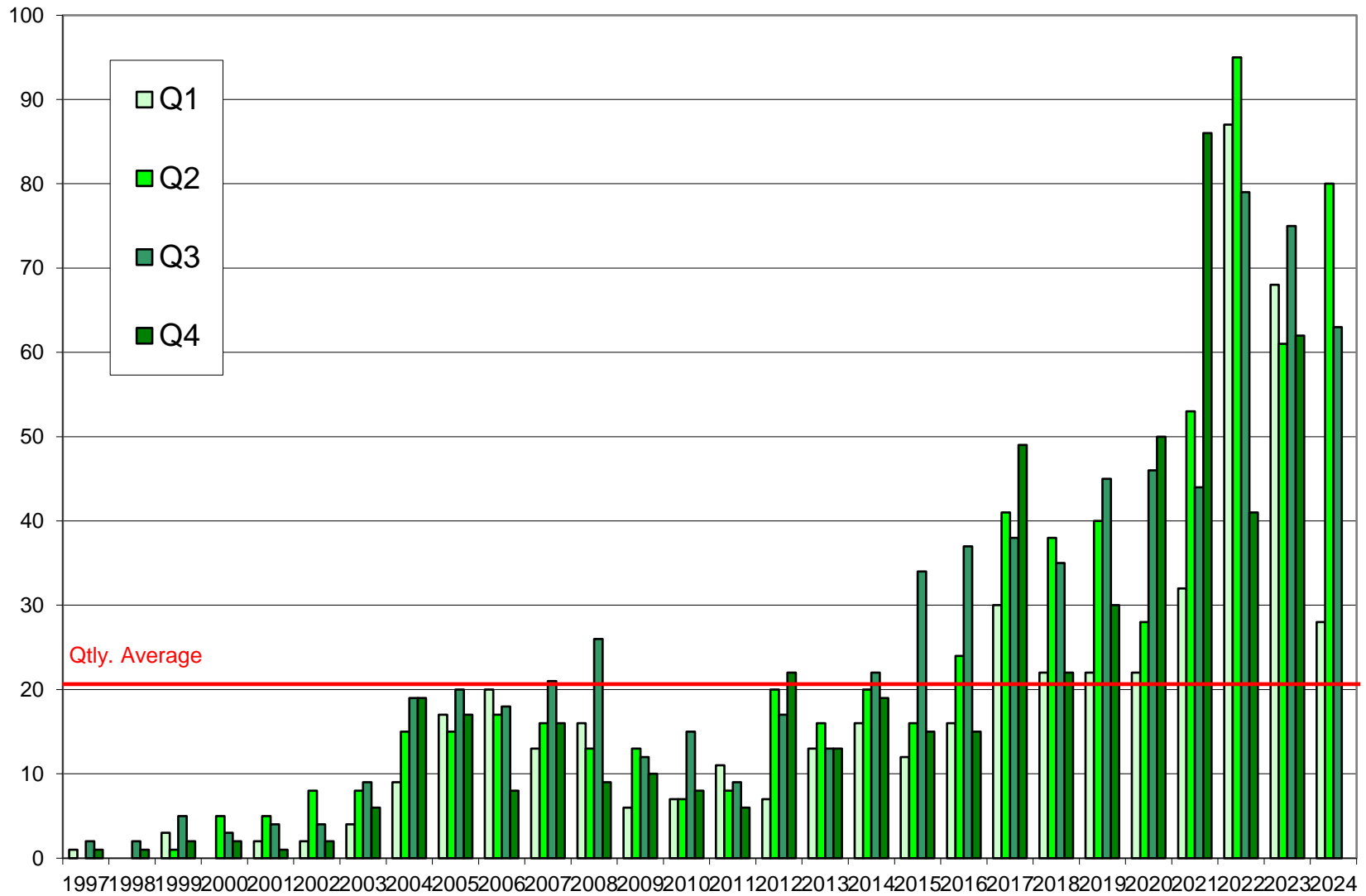
Source: <https://www.zillow.com/research/data> Be aware that Zillow’s computation of average rents includes both apartment units and single-family houses. Zillow does not make it possible to break out rented dwellings by the type of unit at a granular level. *Note: The U.S. inflation rate was computed by applying the monthly change in the national CPI (minus housing costs) to Philadelphia’s average rent in January 2015.

Number of Philadelphia House Sales* per Quarter: 1980-2024



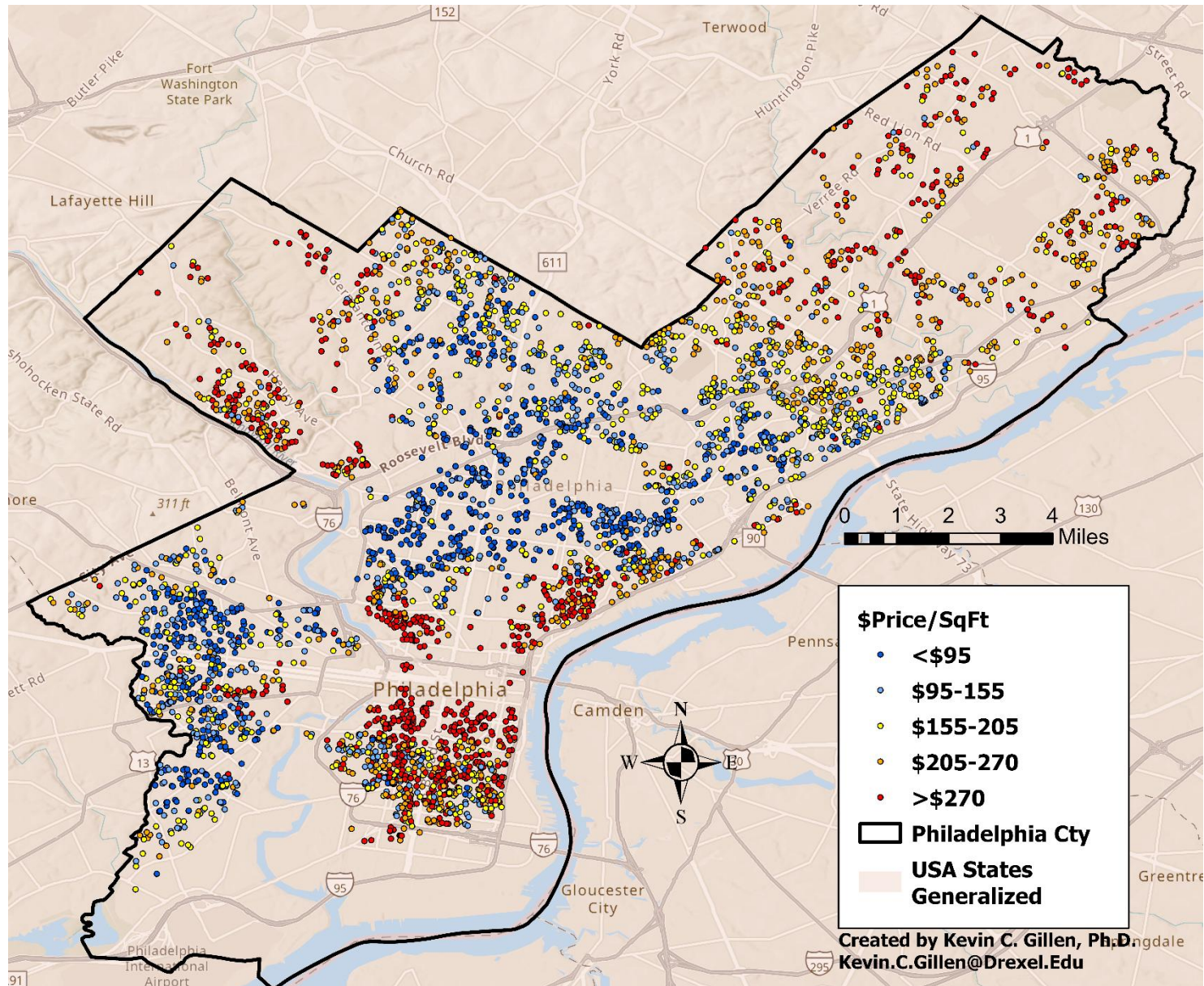
*Only arms-length transactions between private sector entities were included in these numbers.

Number of Philadelphia House Sales* per Quarter with Price >=\$1 Million: 1997-2024



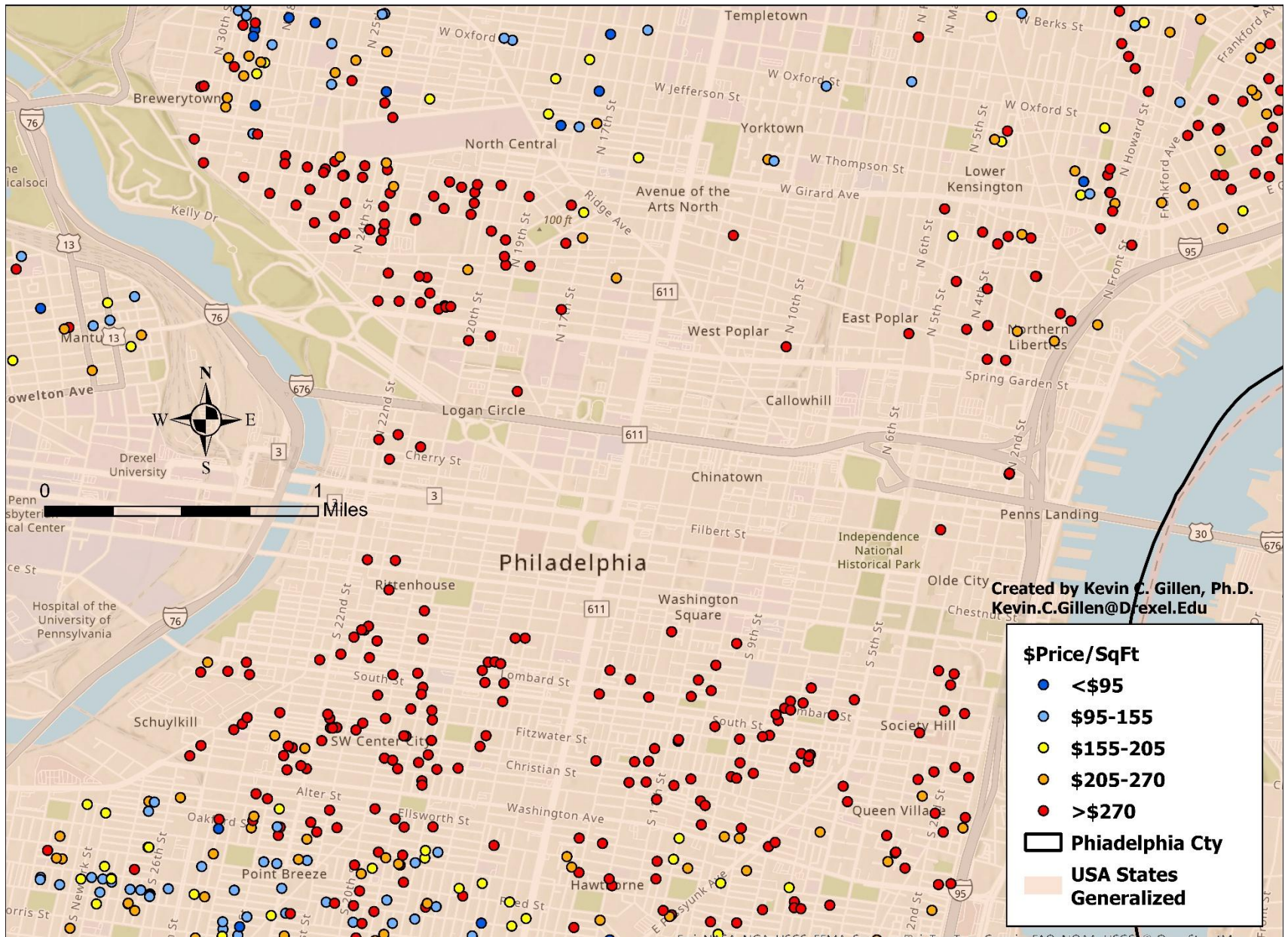
*Only arms-length transactions between private sector entities were included in these numbers.

Philadelphia House Sales in 2024 Q3



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 2024 Q3



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 Kevin.C.Gillen@Drexel.Edu

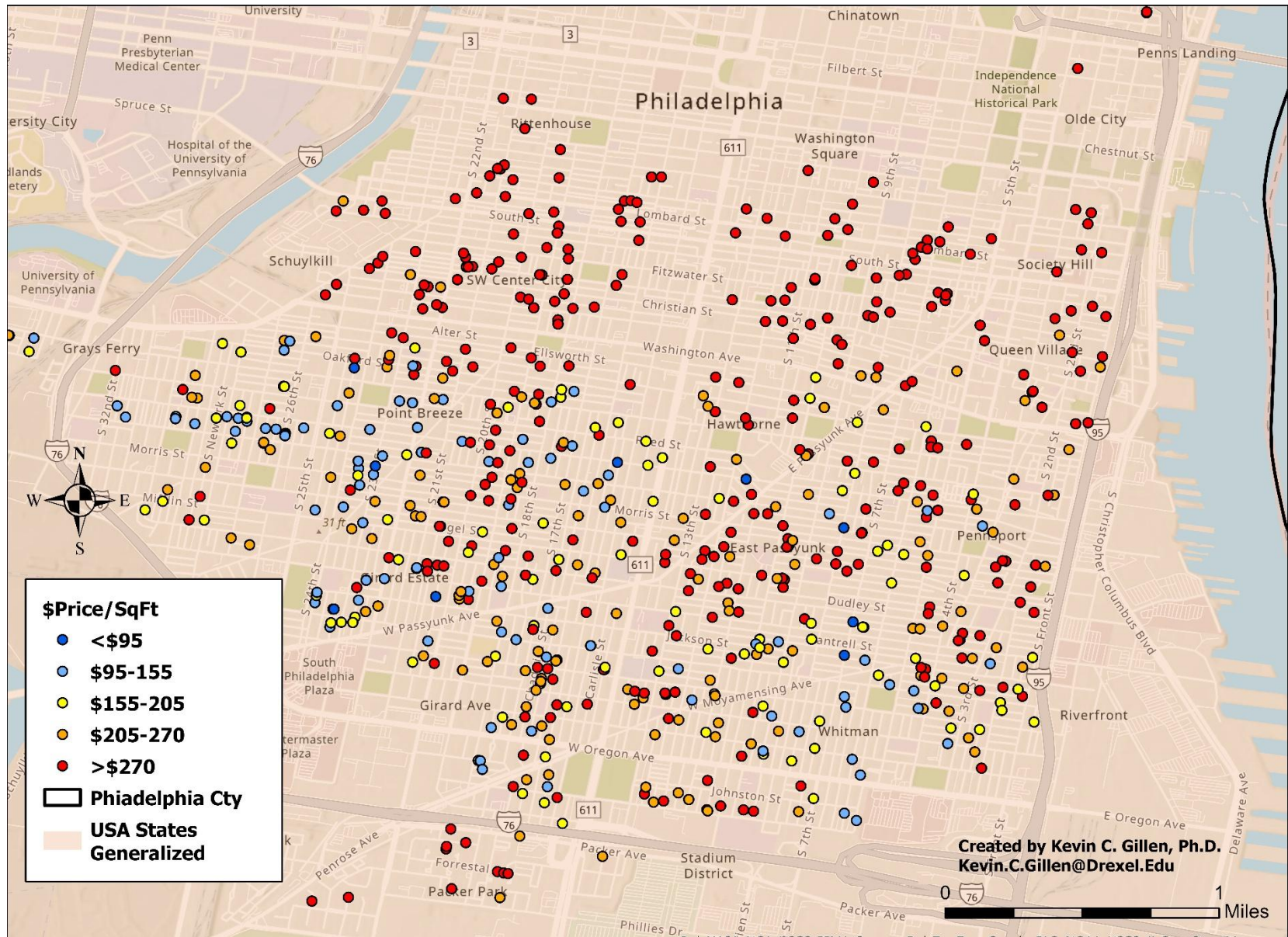
\$/SqFt

- < \$95
- \$95-155
- \$155-205
- \$205-270
- > \$270

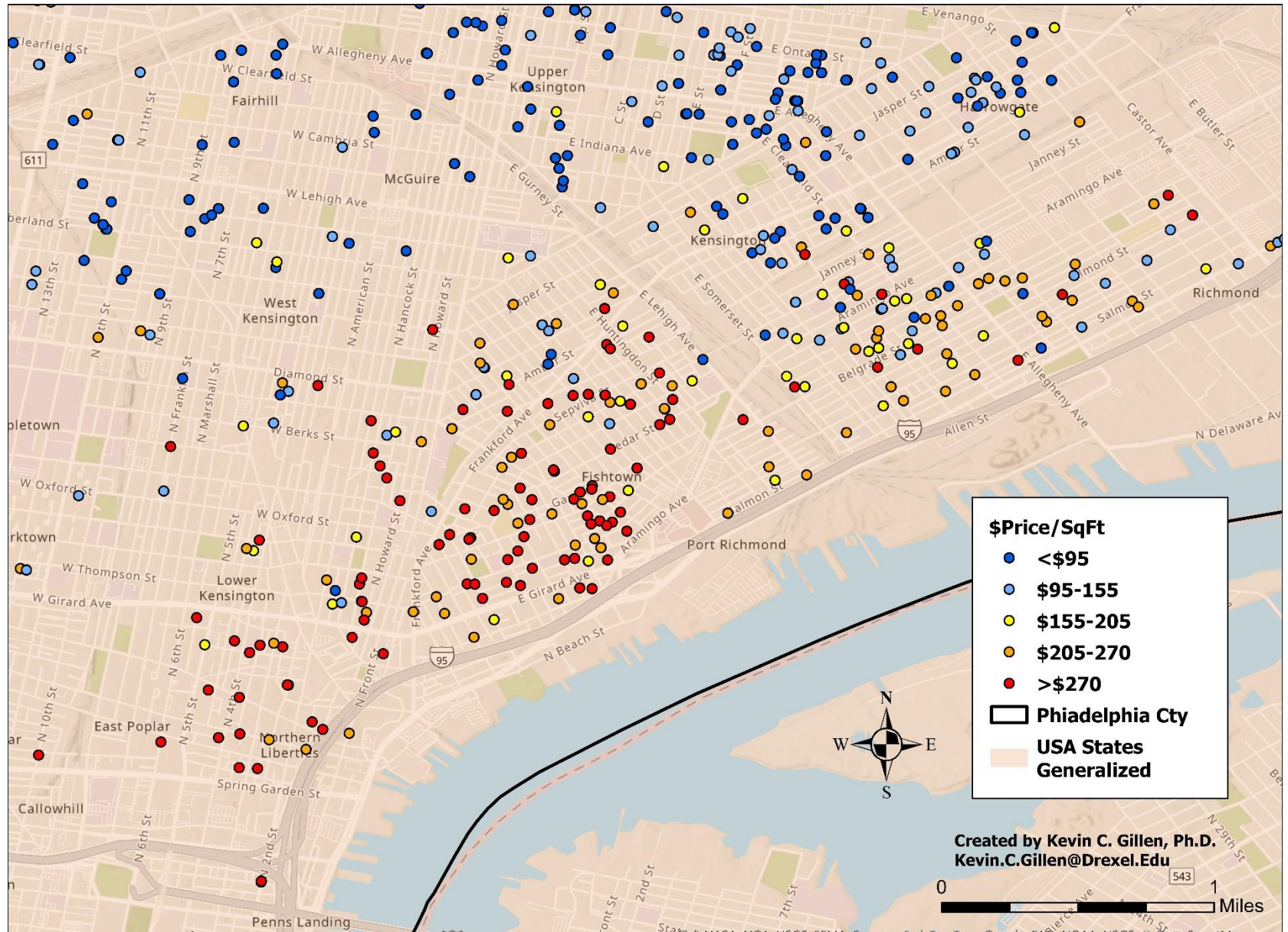
Philadelphia Cty

USA States Generalized

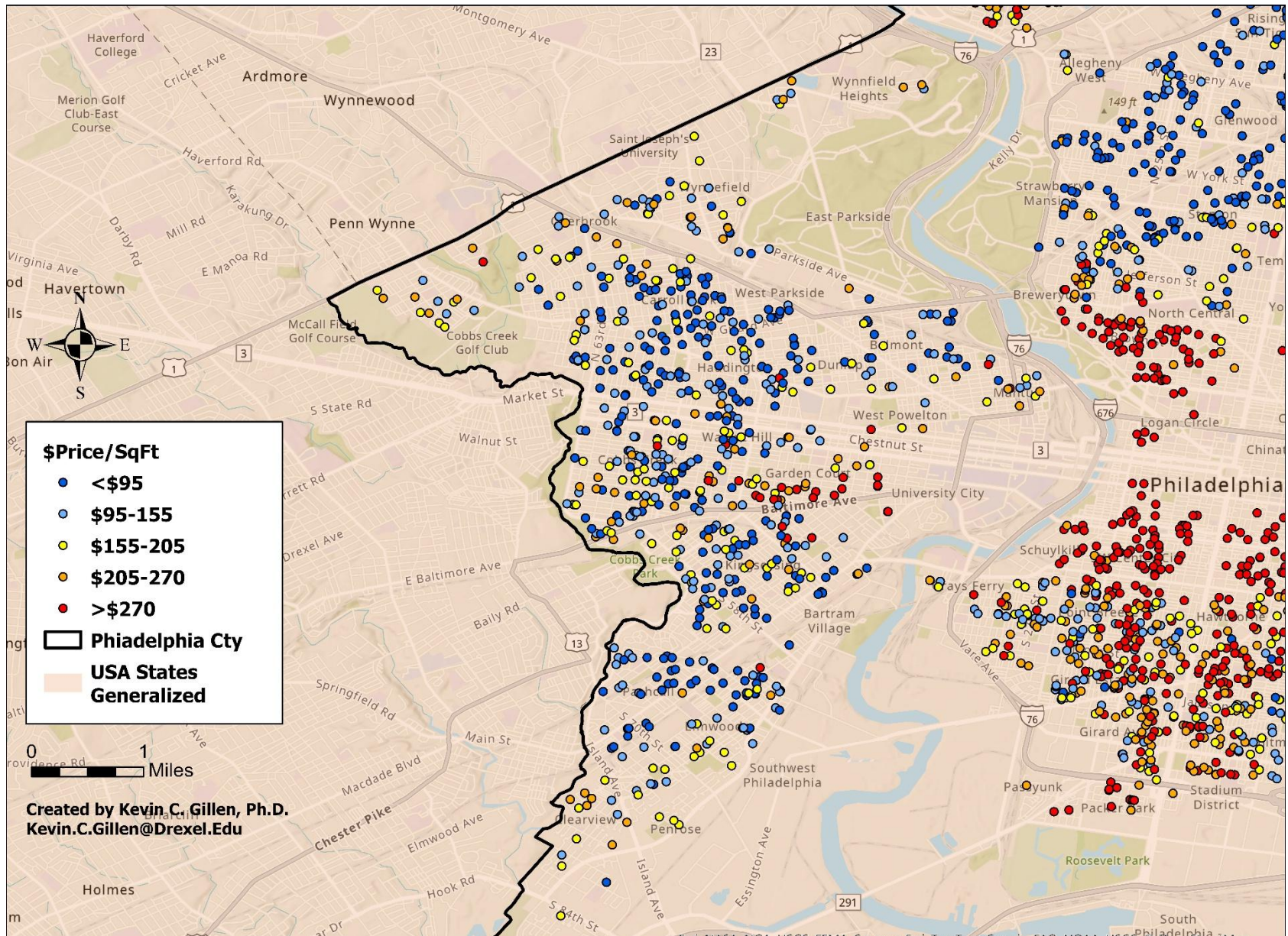
South Philadelphia House Sales in 2024 Q3



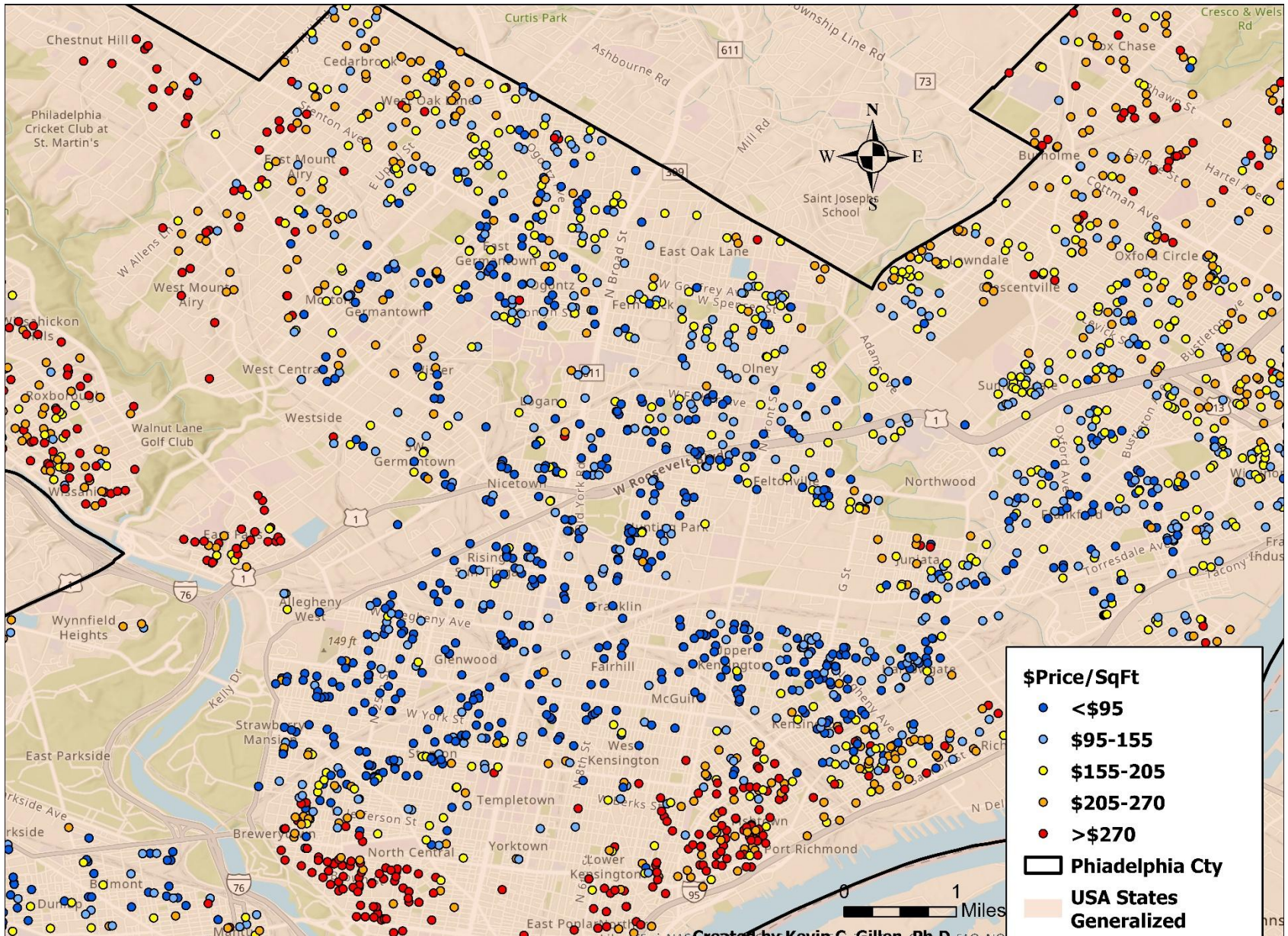
Kensington/Frankford House Sales in 2024 Q3



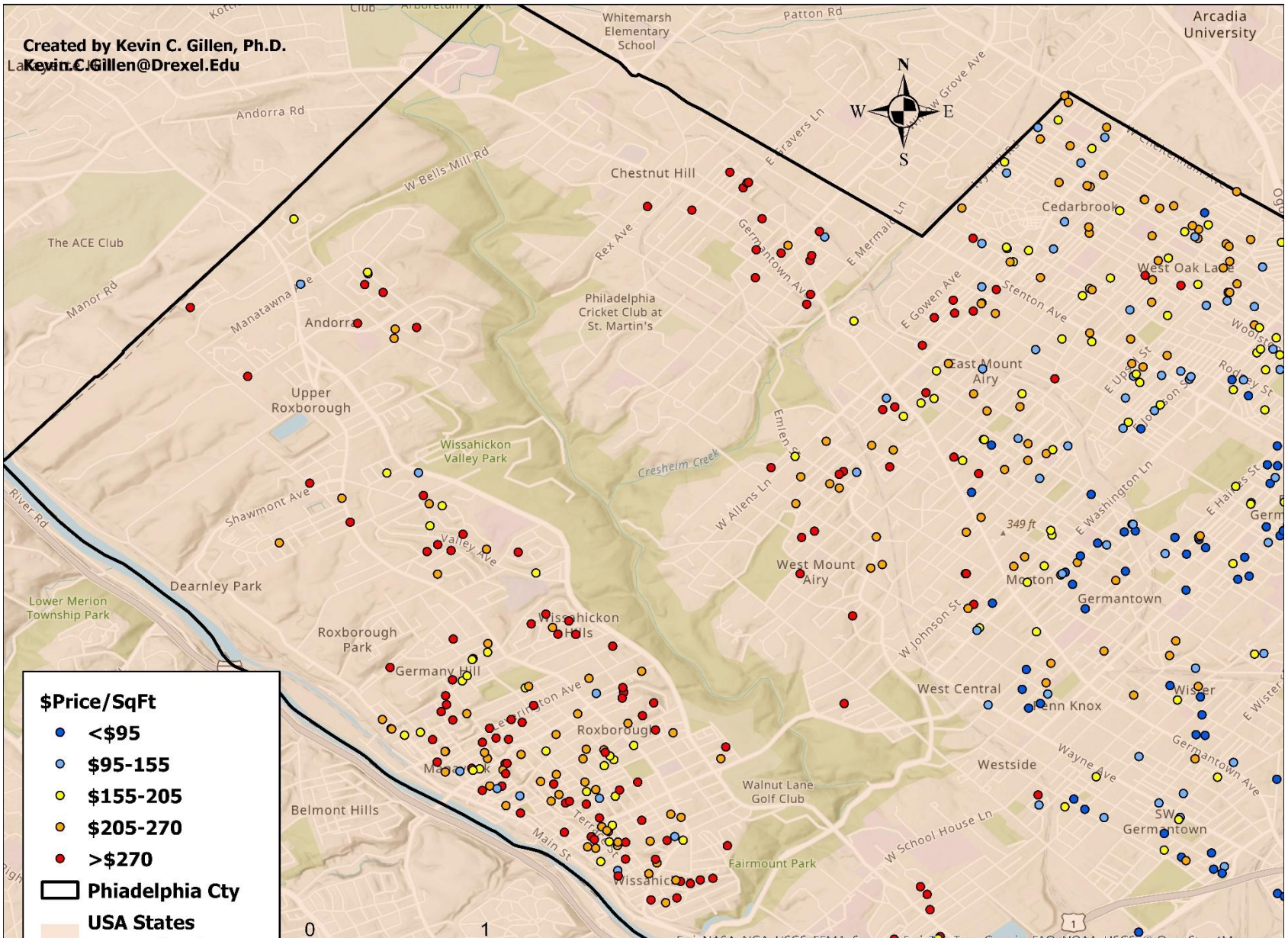
West/Southwest Philadelphia House Sales in 2024 Q3



North Philadelphia House Sales in 2024 Q3



Northwest Philadelphia House Sales in 2024 Q3



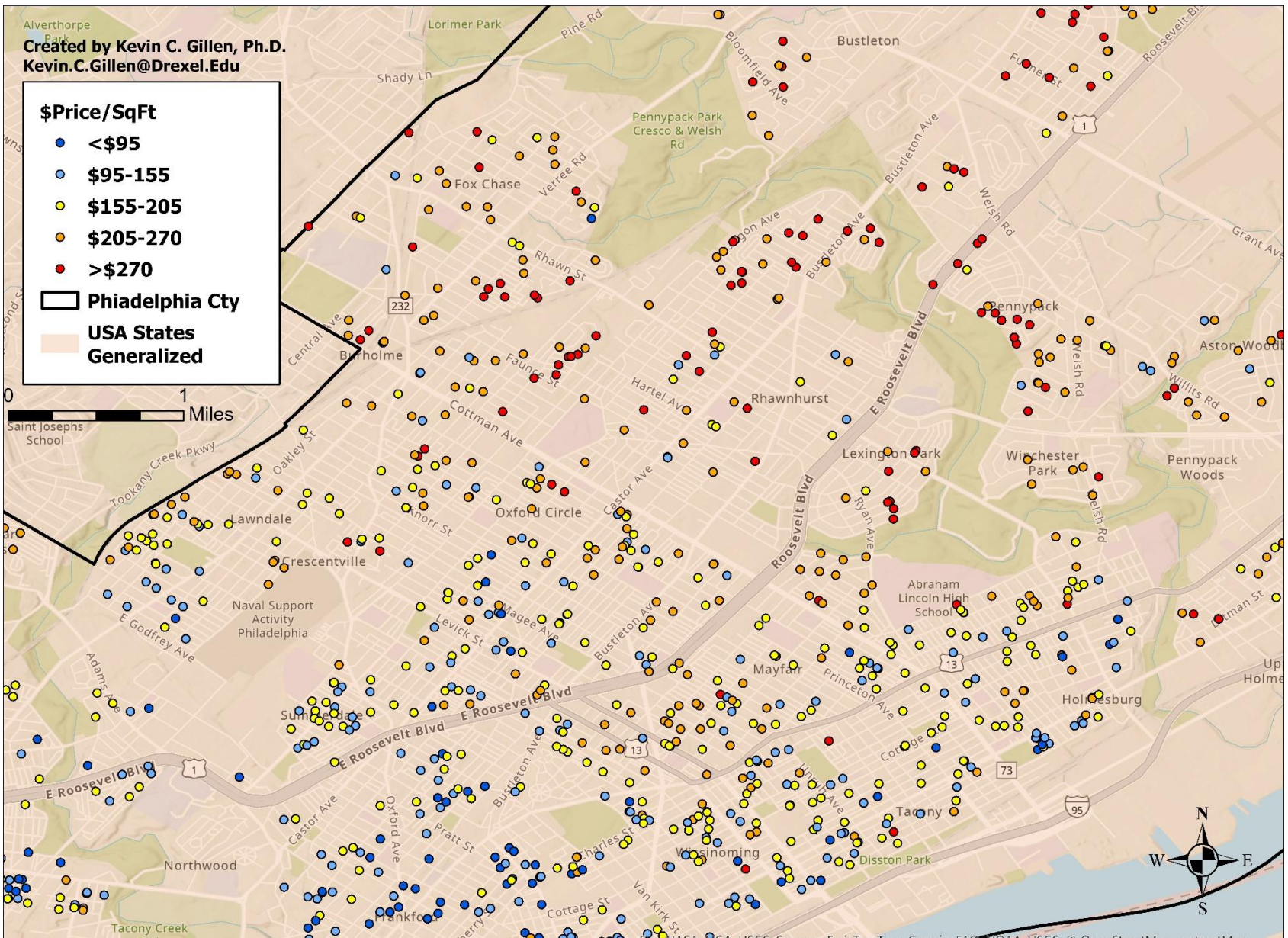
Lower Northeast Philadelphia House Sales in 2024 Q3

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Kevin.C.Gillen@Drexel.Edu

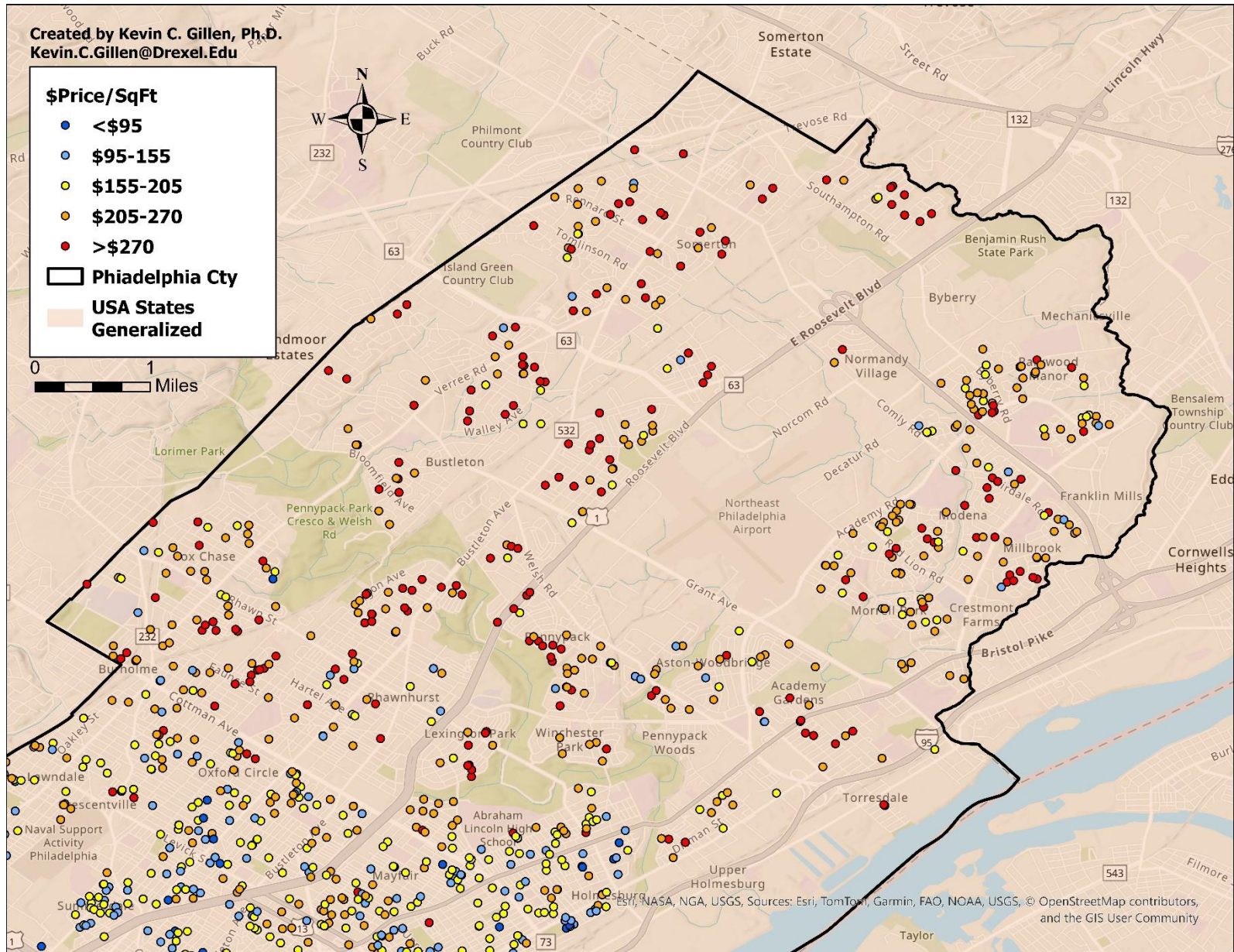
\$Price/SqFt

- <\$95
- \$95-155
- \$155-205
- \$205-270
- >\$270

- ▭ Philadelphia Cty
- ▭ USA States Generalized

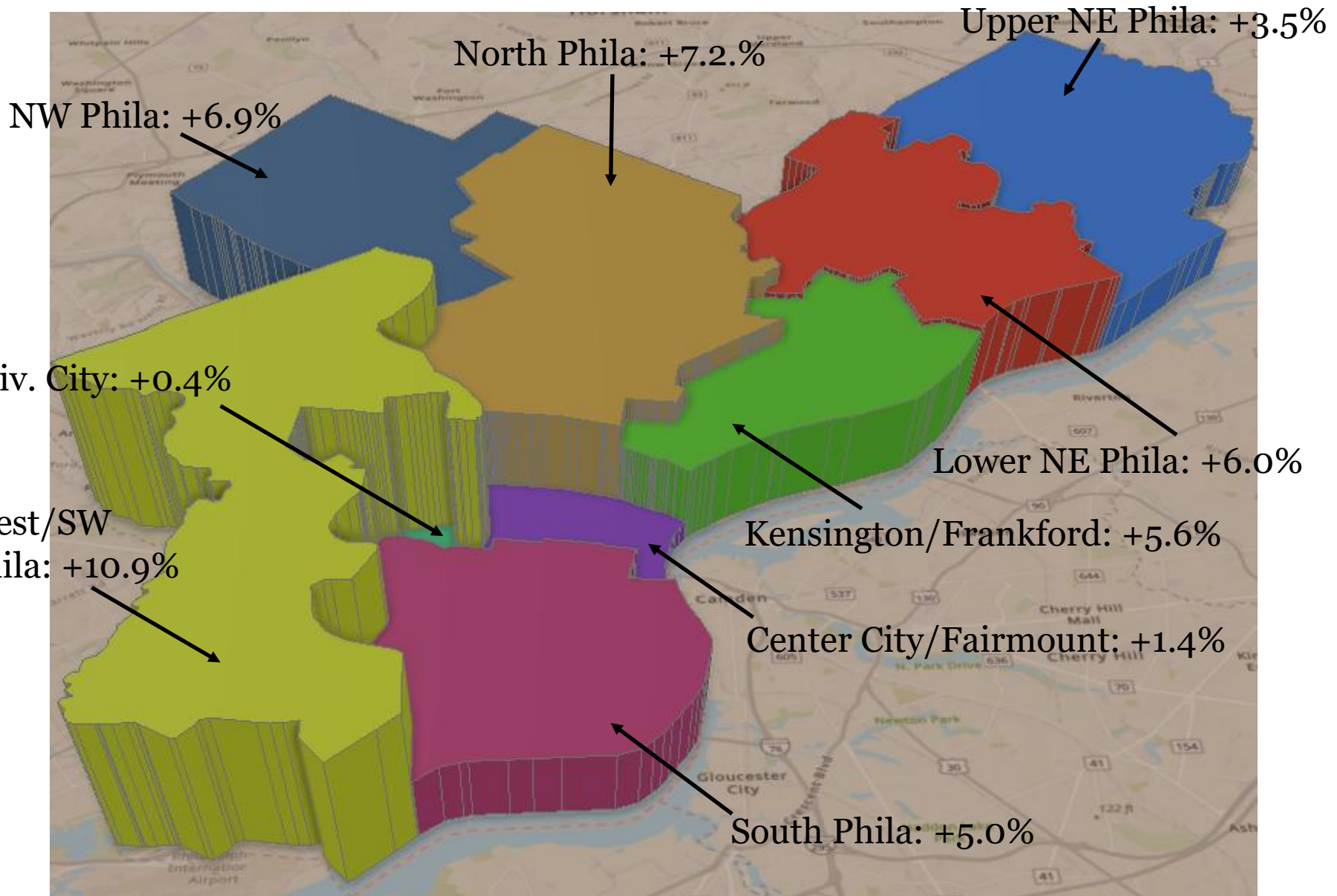


Upper Northeast Philadelphia House Sales in 2024 Q3



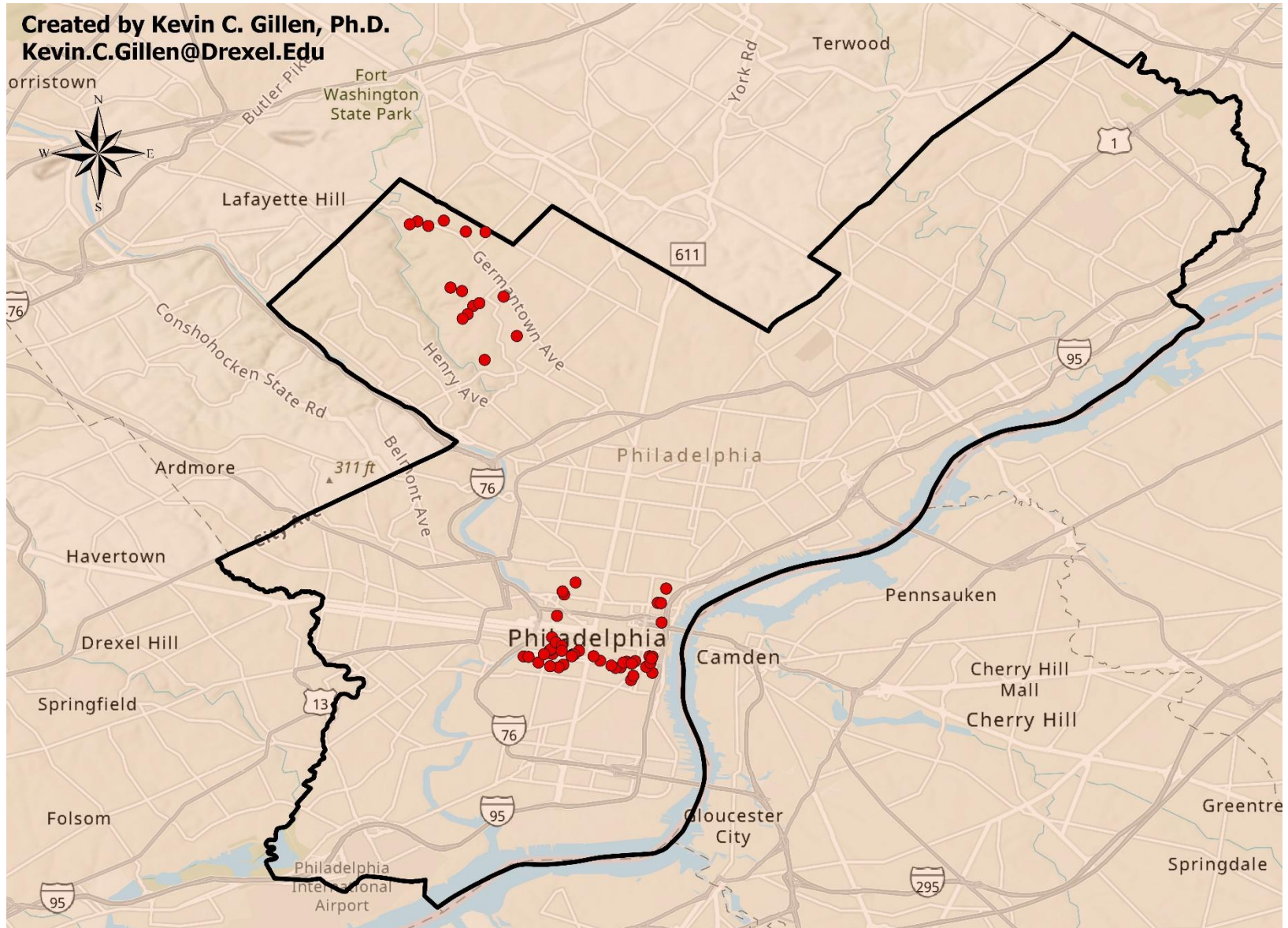
Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

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 2023 Q3 to 2024 Q3) in order to reflect its growth (or depreciation) rate relative to other neighborhoods.

+ \$1 Million Dollar House Sales in 2024 Q3



This map shows the location of all houses that sold at a recorded price of one million dollars or more in 2024 Q3.

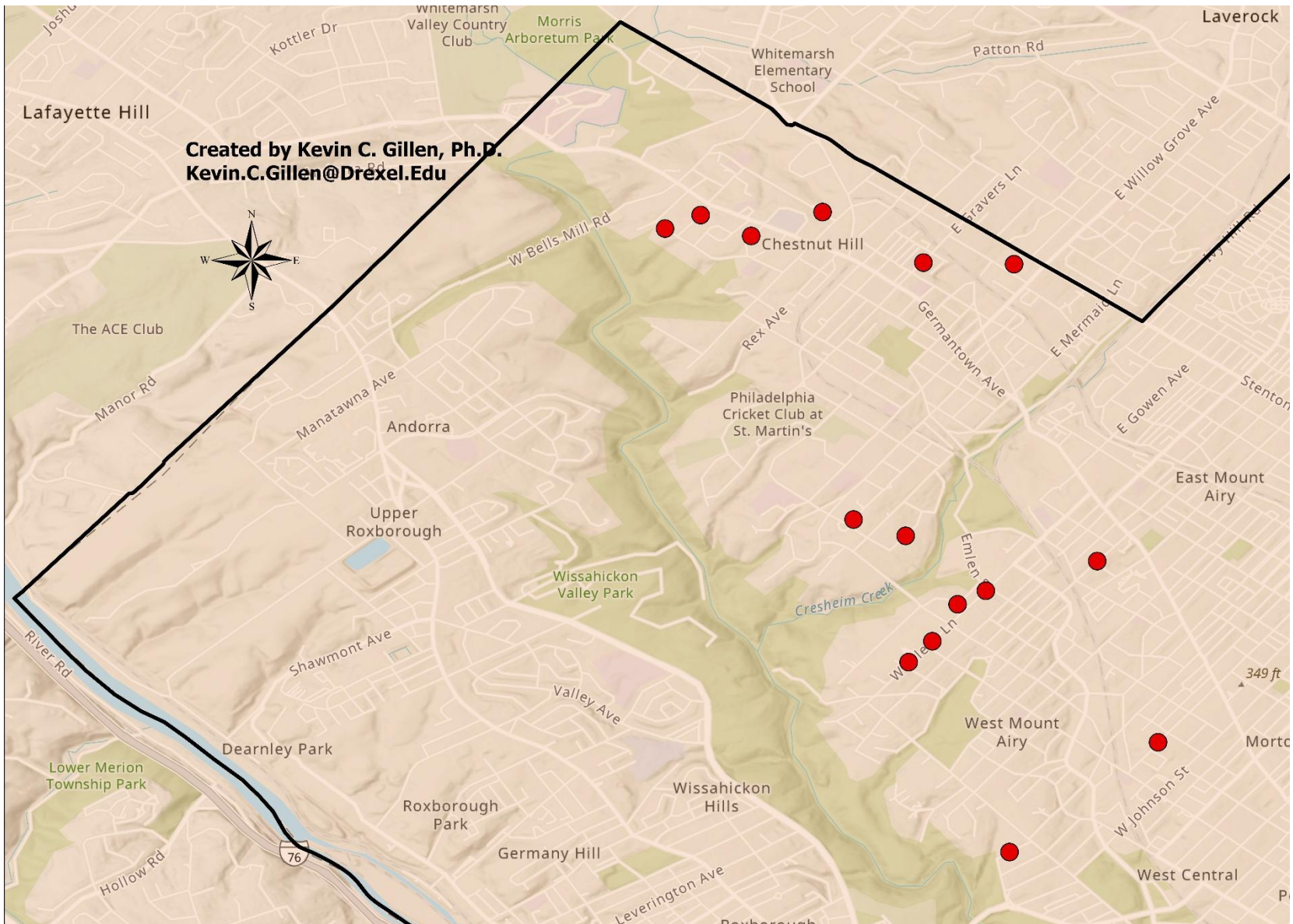
+ \$1 Million Dollar House Sales in 2024 Q3

Created by Kevin C. Gillen, Ph.D.
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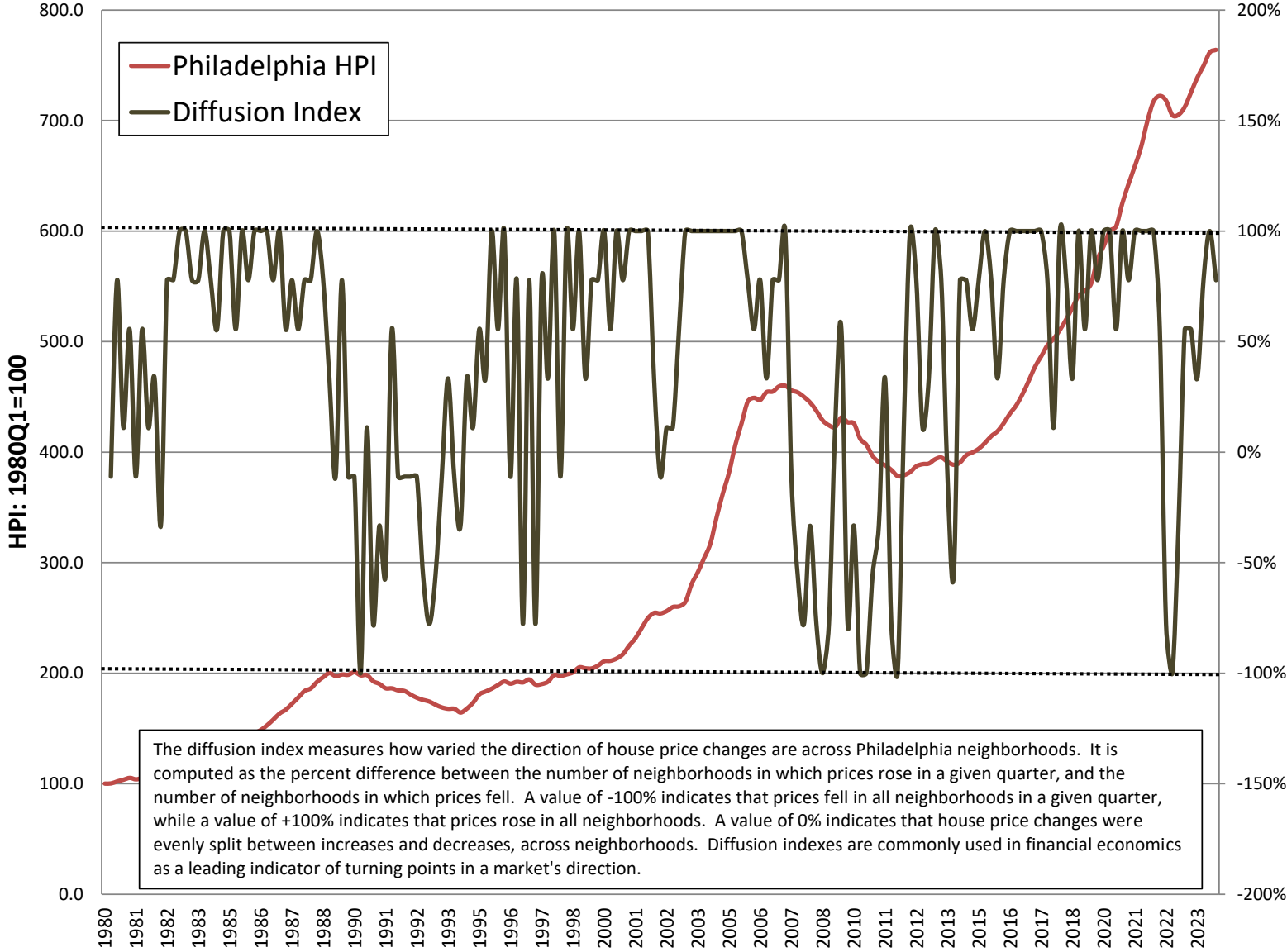
This map shows the location of all houses that sold at a recorded price of one million dollars or more in 2024 Q3.

+ \$1 Million Dollar House Sales in 2024 Q3

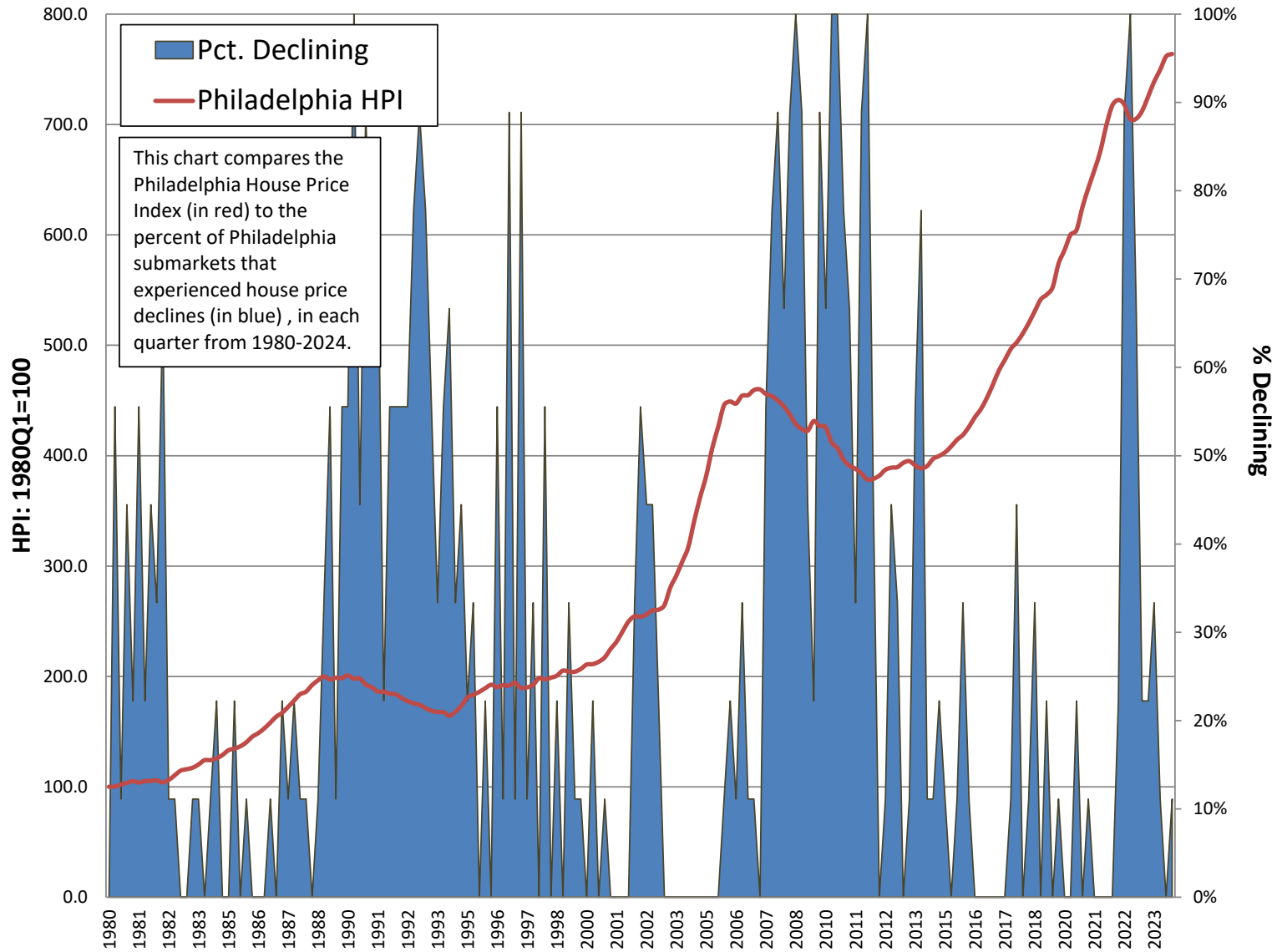


This map shows the location of all houses that sold at a recorded price of one million dollars or more in 2024 Q3.

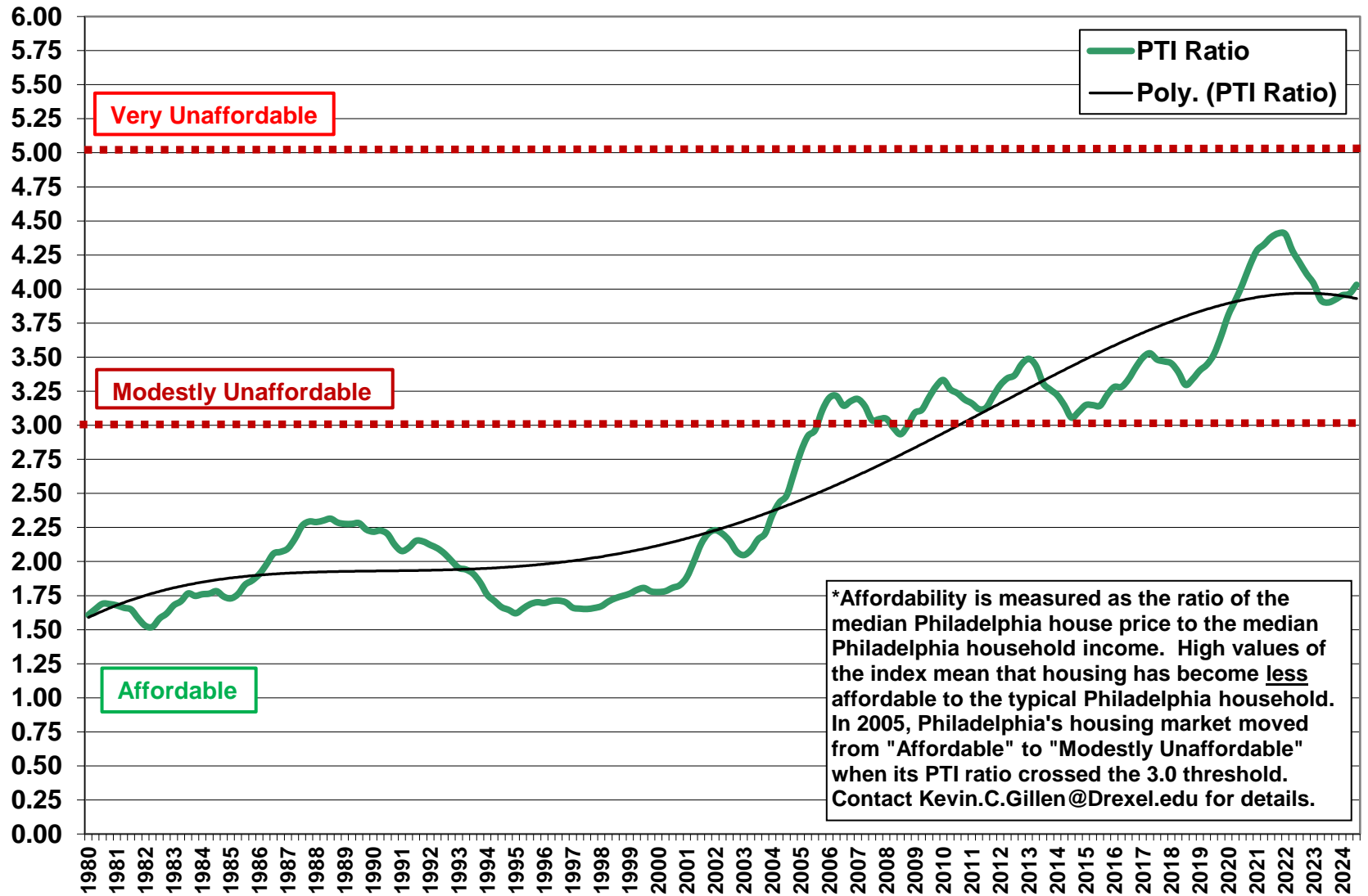
Philadelphia House Price Diffusion Index 1980-2024



Philadelphia House Prices 1980-2024: Declines v. House Price Index



Philadelphia Housing Affordability* Index: 1980-2024



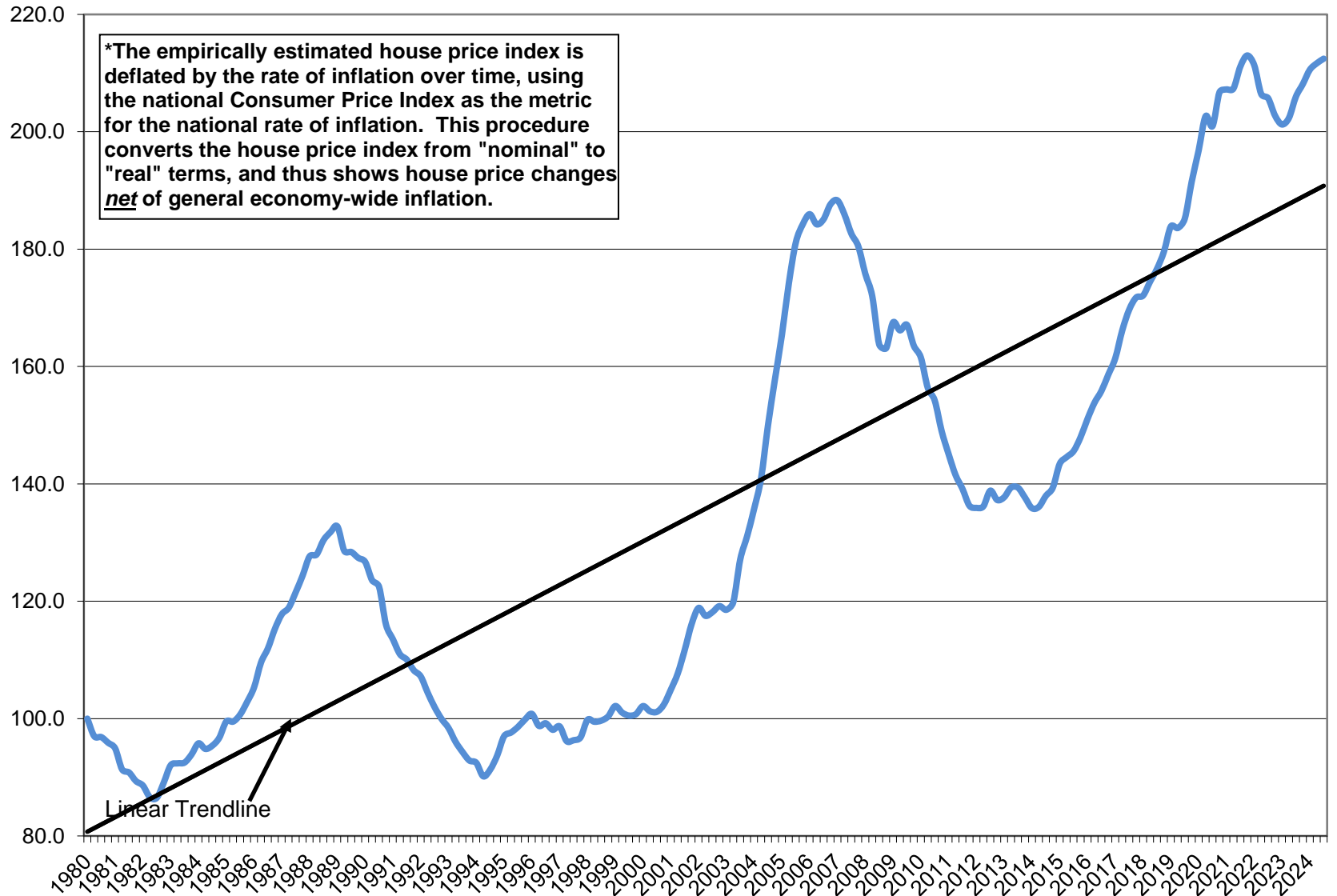
*Affordability is measured as the ratio of the median Philadelphia house price to the median Philadelphia household income. High values of the index mean that housing has become less affordable to the typical Philadelphia household. In 2005, Philadelphia's housing market moved from "Affordable" to "Modestly Unaffordable" when its PTI ratio crossed the 3.0 threshold. Contact Kevin.C.Gillen@Drexel.edu for details.

Sources: US Bureau of Labor Statistics and US Dept. of HUD



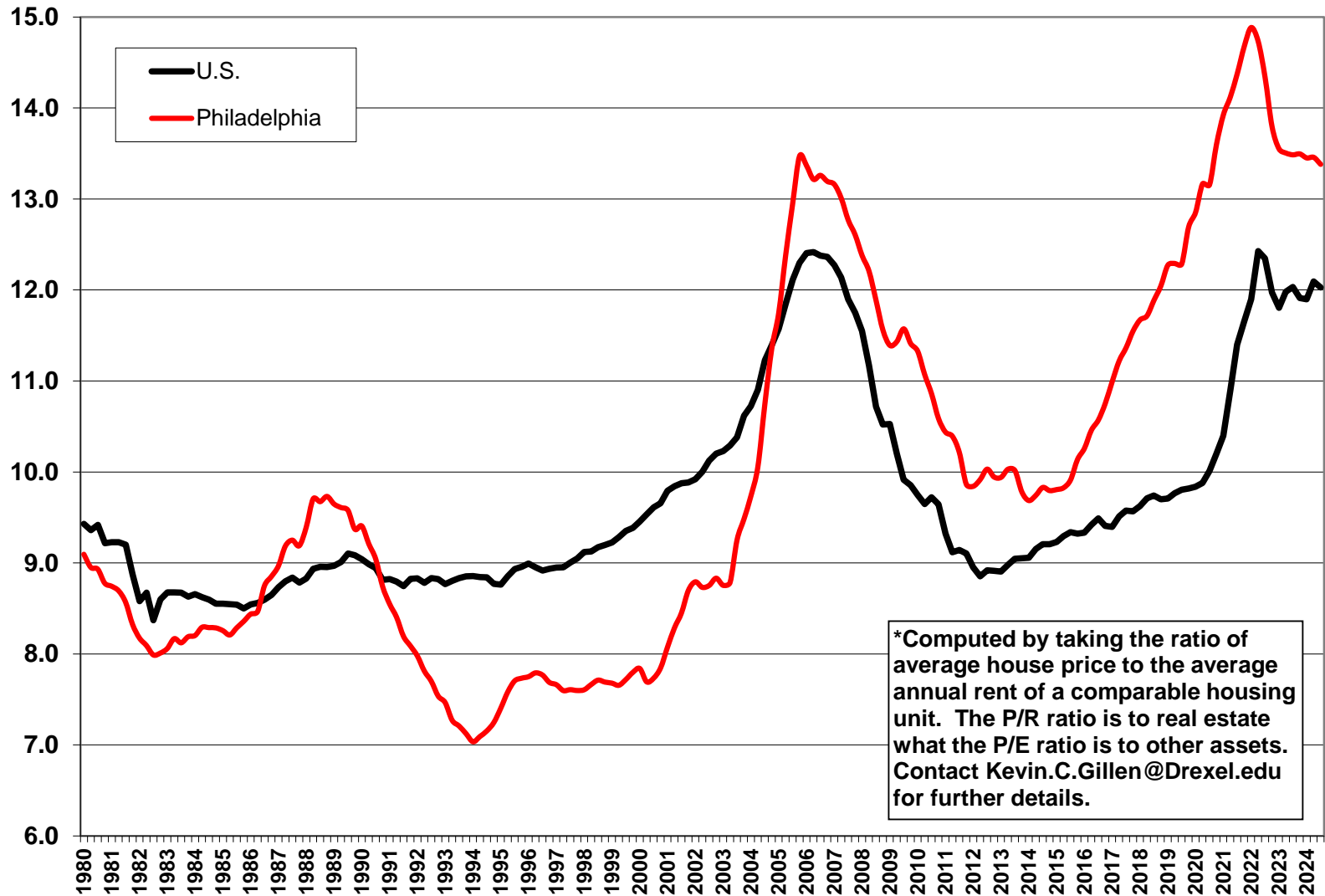
Inflation-Adjusted* Philadelphia House Price Index 1980-2024

1980Q1=100



Source: US Bureau of Labor Statistics

Average House Price-to-Rent Ratios*: 1980-2024 Philadelphia v. U.S.

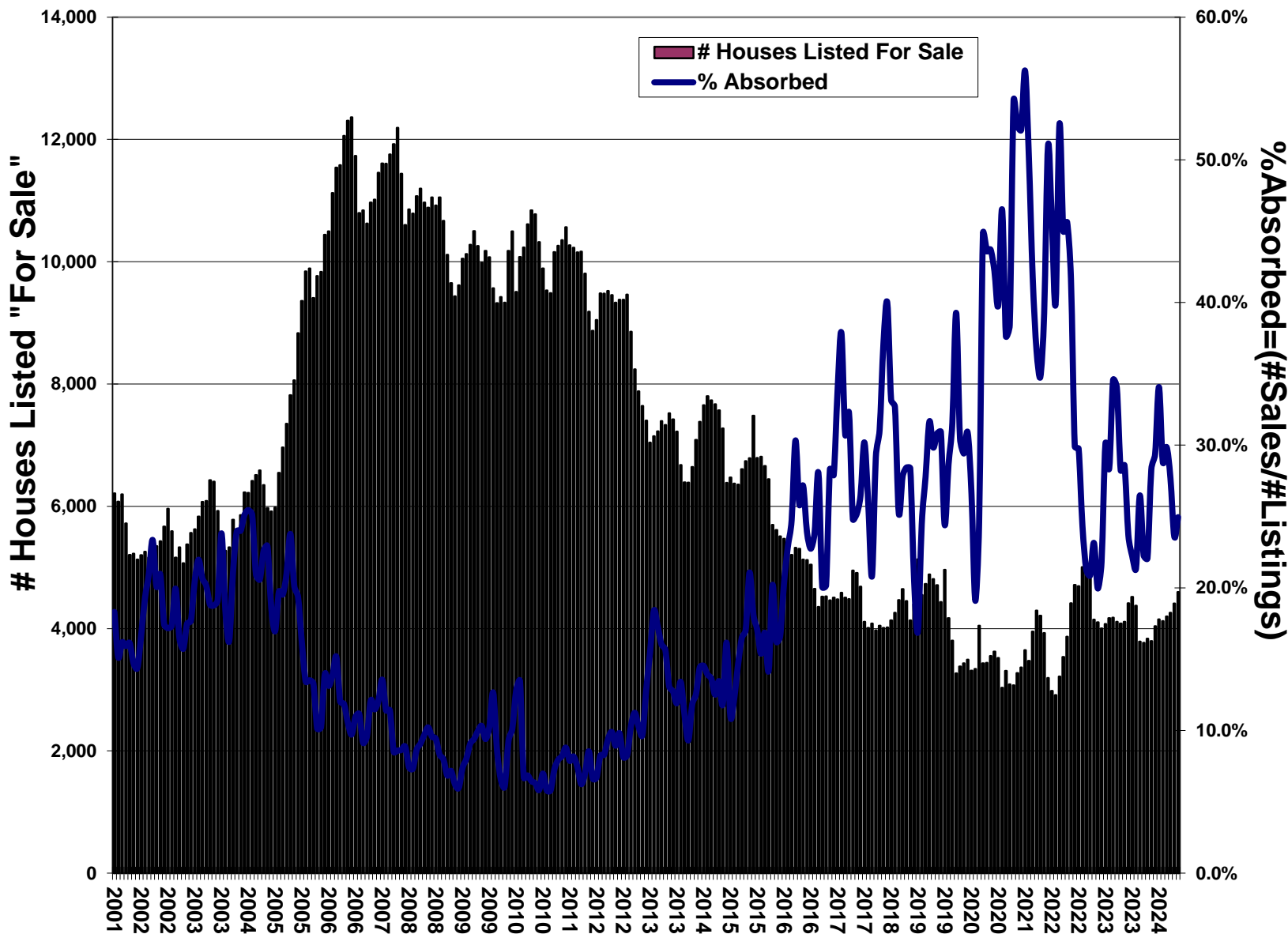


*Computed by taking the ratio of average house price to the average annual rent of a comparable housing unit. The P/R ratio is to real estate what the P/E ratio is to other assets. Contact Kevin.C.Gillen@Drexel.edu for further details.

Source: US Bureau of Labor Statistics



Philadelphia Houses Listed For Sale: Inventory v. Sales Rate

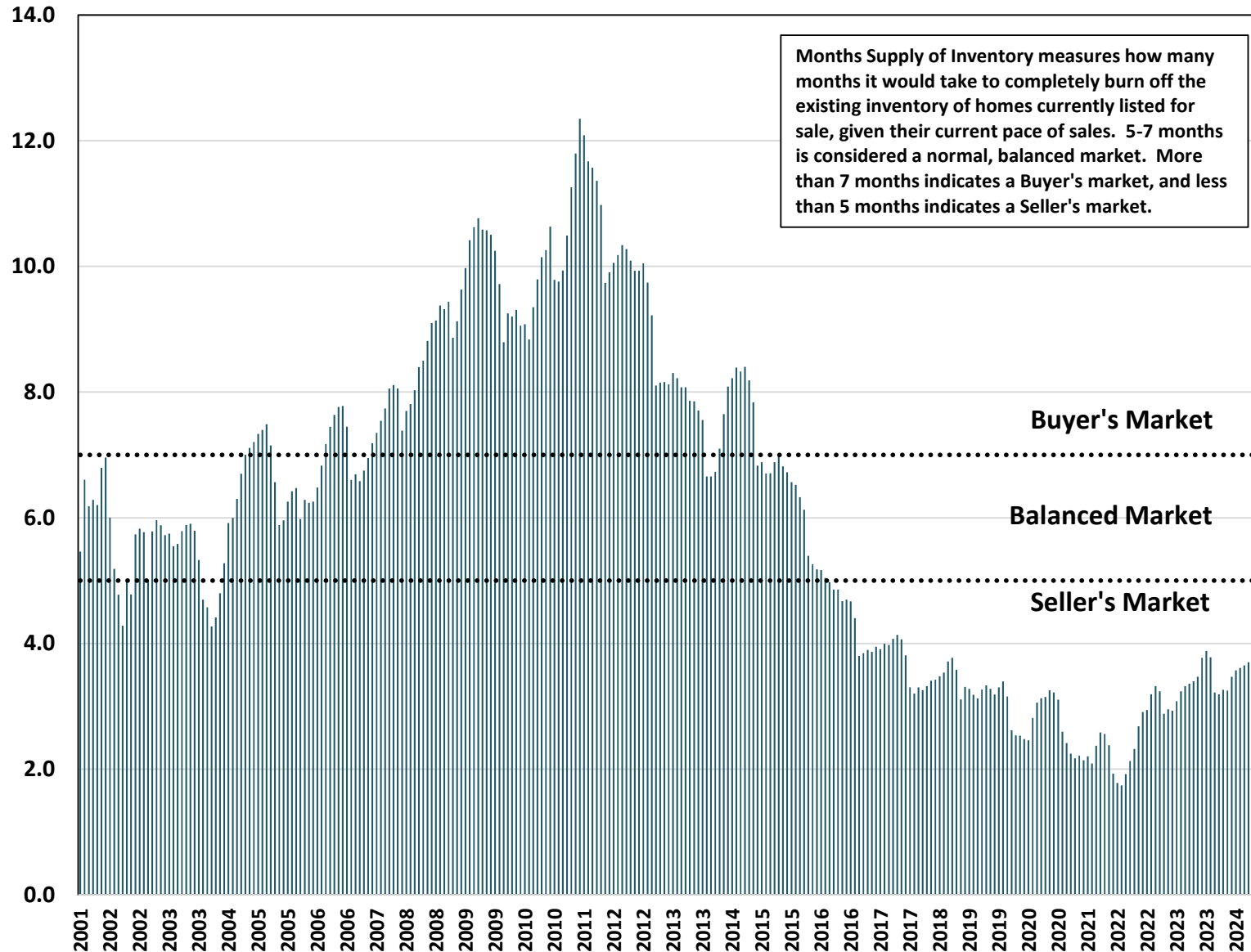


“%Absorbed” is defined as the percent of homes listed for sale in a given month that also sold in that same month.

Source: Bright MLS

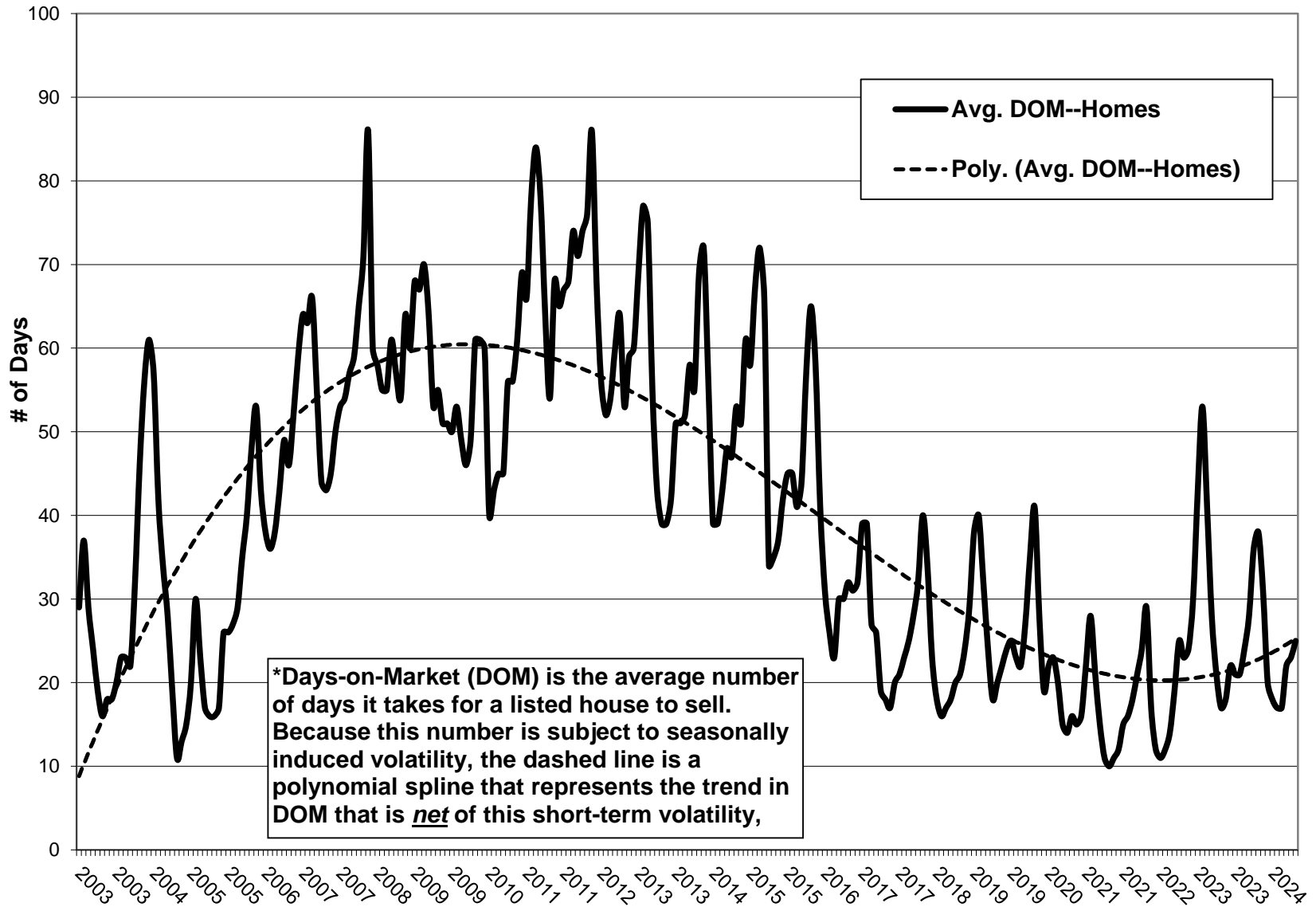


Months Supply of Inventory in Philadelphia: 2001-2024

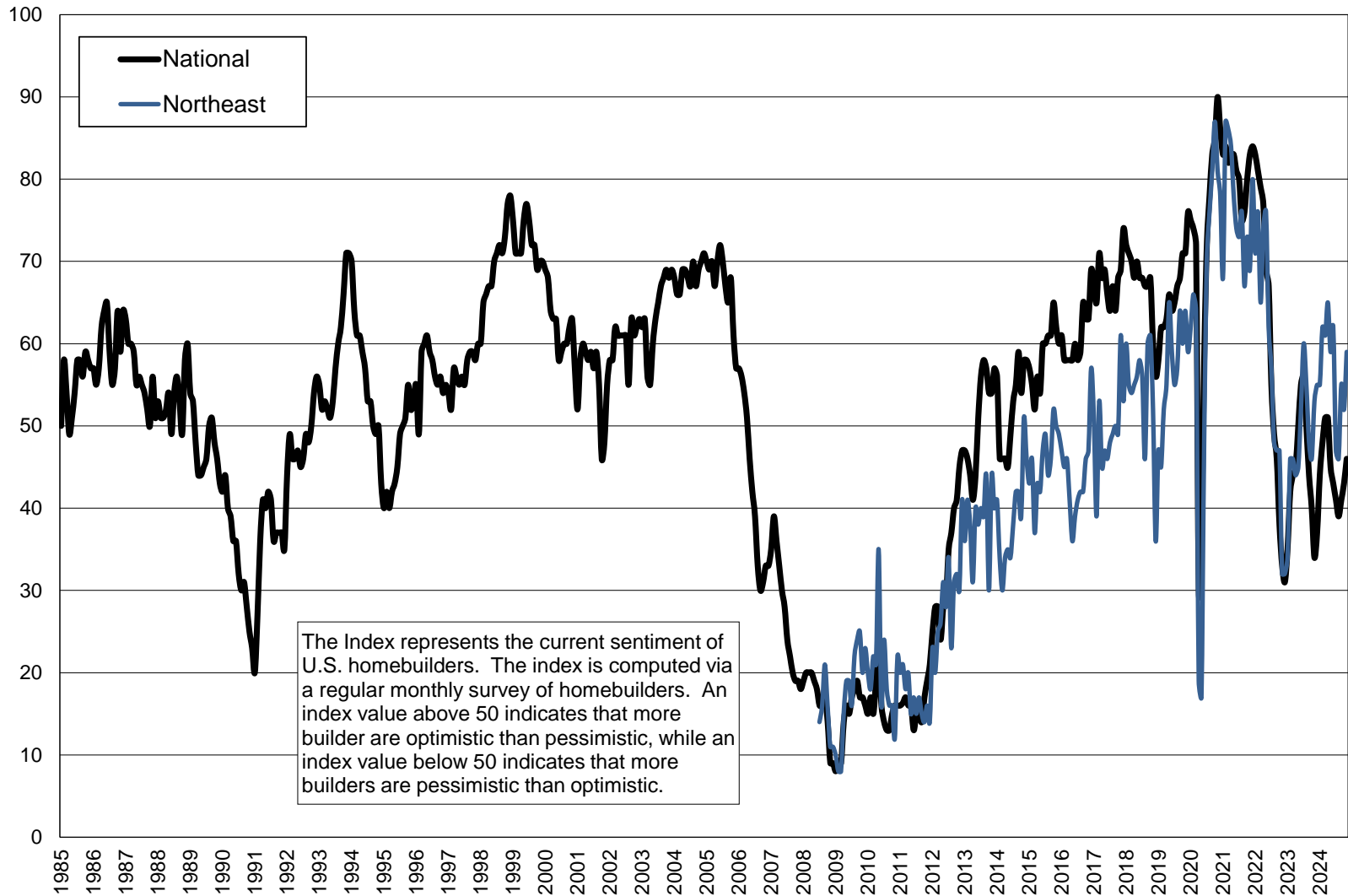


Source: Bright MLS

Average Days-on-Market* for Philadelphia Homes: 2003-2024

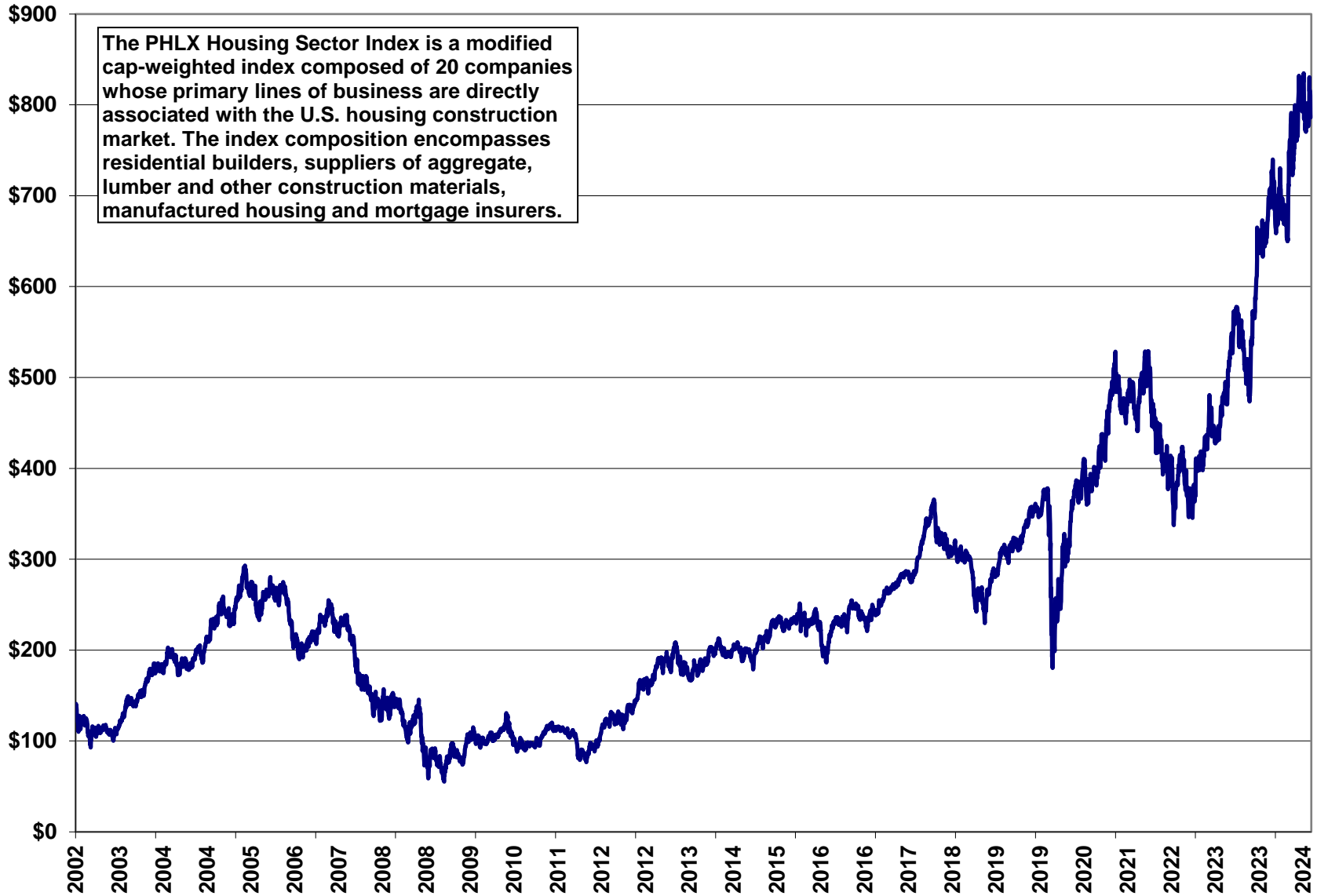


Index of Homebuilder Sentiment: 1985-2024 (Seasonally Adjusted)



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

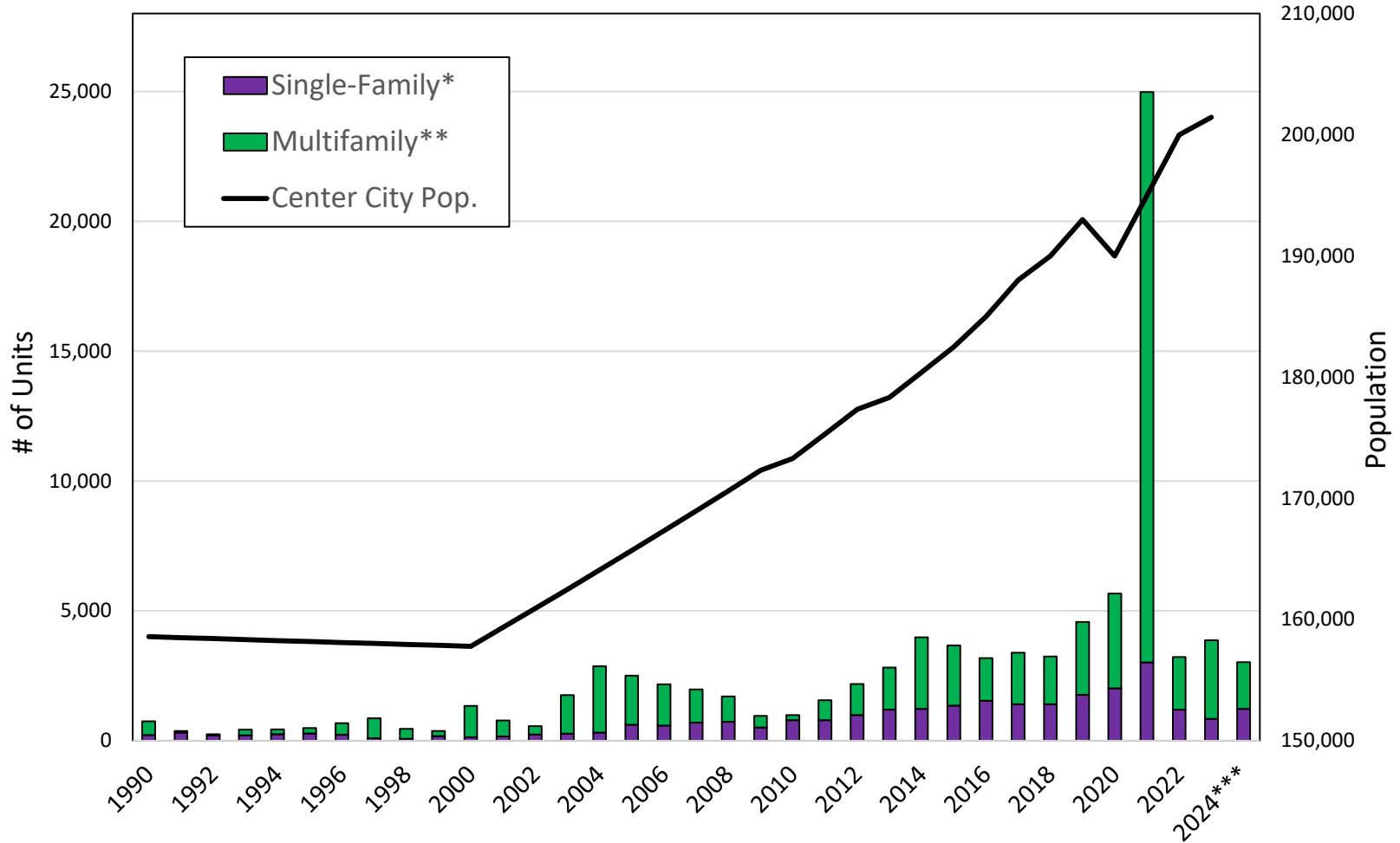
Philadelphia Stock Exchange Housing Sector Index: 2002-2024



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 1990-2023: Single-Family v. Multifamily



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

***2024 permits are annualized using the number of permits filed YTD.

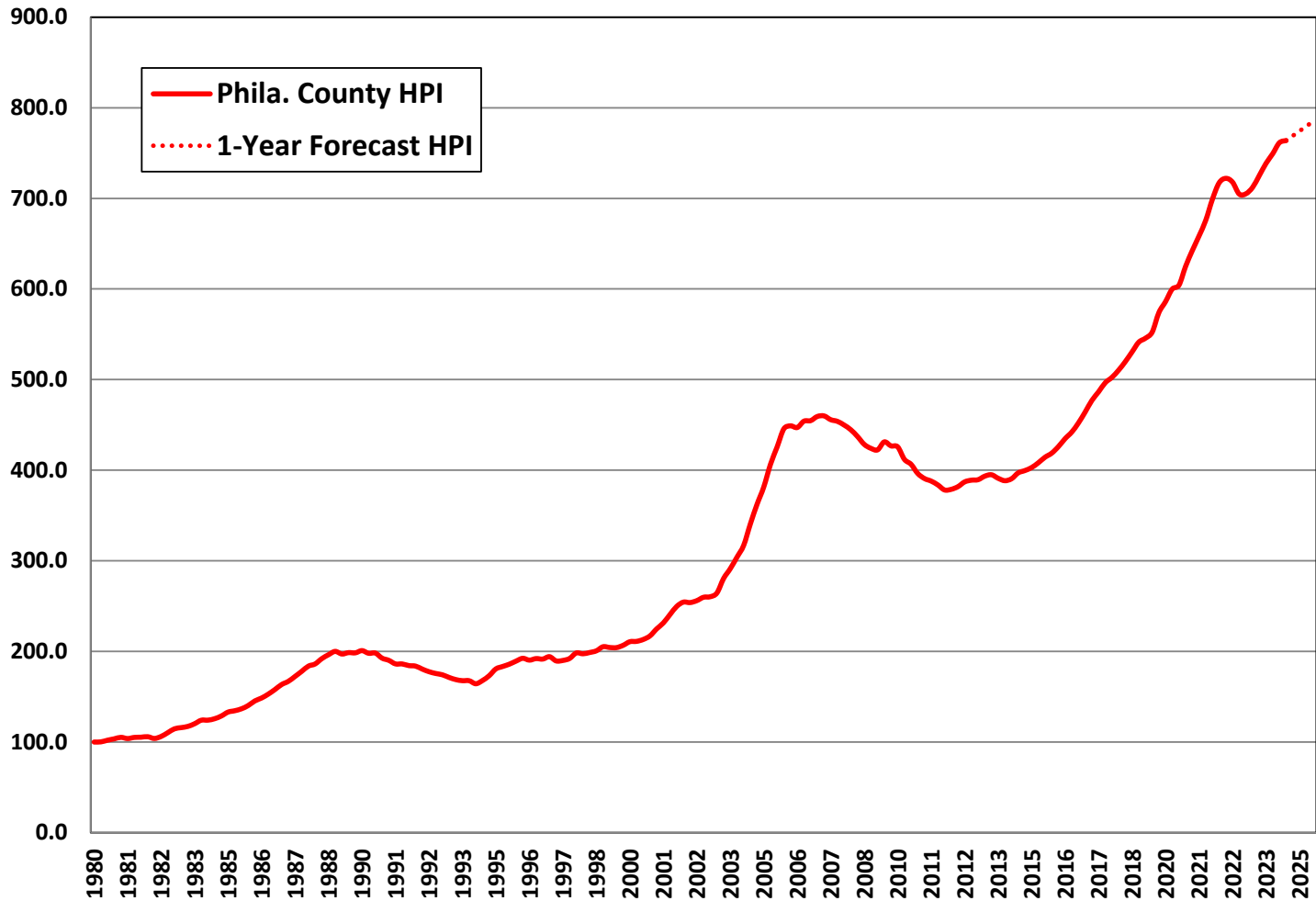
Sources: U.S. Dept. HUD and the Center City District

Note: The large spike in building permits in 2021 is due to many developers seeking approval for their projects before legislated changes to the city's 10-year tax abatement took effect when the new year rolled over.



Philadelphia House Price Index and 1-Year Forecast

Philadelphia House Price Index: Actual and Forecast



Zillow's most recent forecast predicts an increase of 2.7% in Philadelphia's general level of house prices over the next 12 months. This is below Philadelphia's historic average historic annual 4.5% rate of appreciation. In addition, this current forecast is not only a downgrade from Zillow's previous forecast of 3.7% released in the previous quarter, but is also below Zillow's current forecast of 2.9% as the average for the entire U.S.
Source: <https://www.zillow.com/research/data/>