

PHILADELPHIA REGIONAL HOUSE PRICE INDICES

February 9, 2023



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Disclaimers and Acknowledgments: The Lindy Institute for Urban Innovation at Drexel University and Bright MLS provide this report free of charge to the public. The report is produced by Kevin Gillen, a Senior Research Fellow with the Lindy Institute and a member of Bright MLS's Council of Economic Advisors. The author thanks Bright MLS, 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 available for this report.

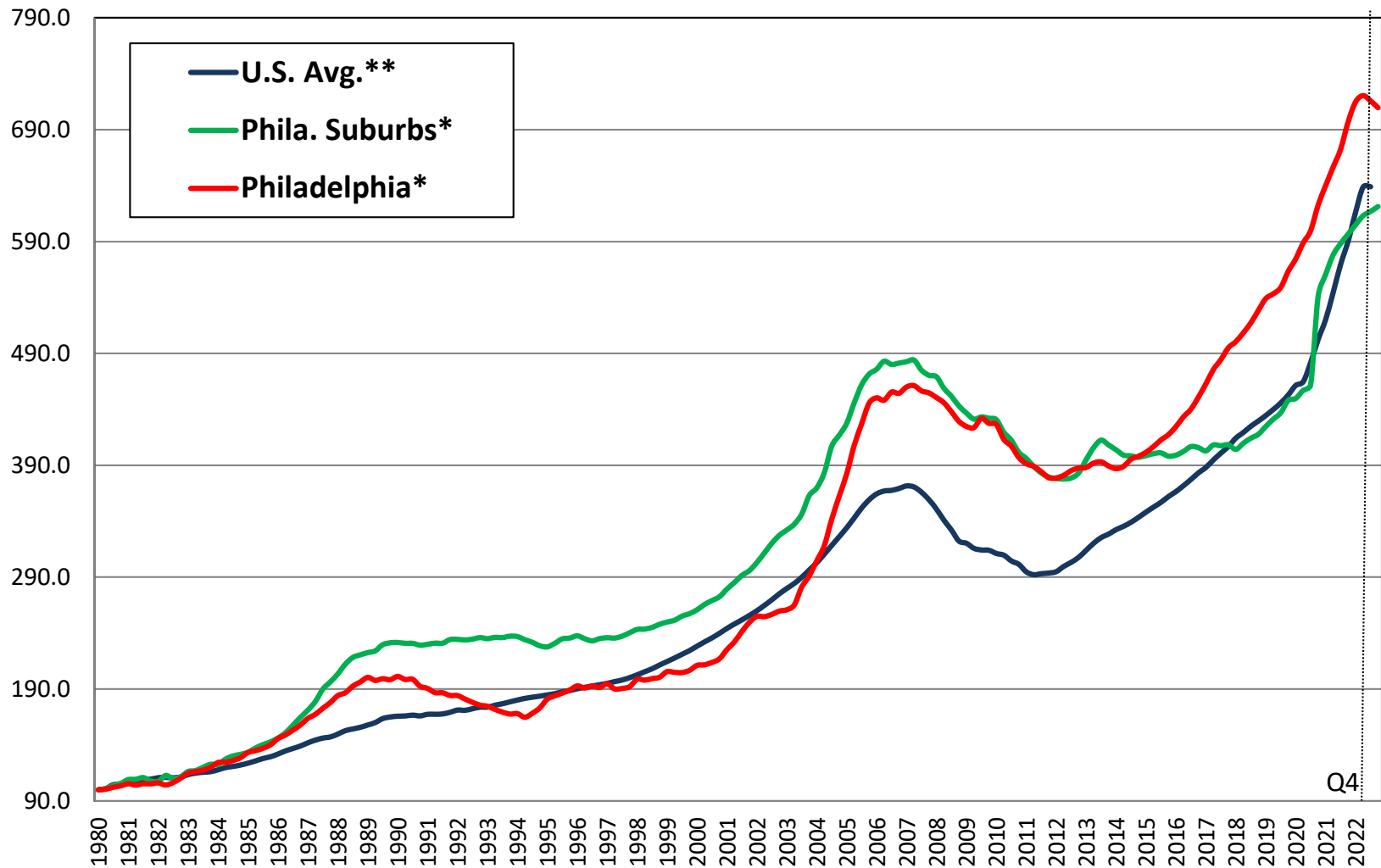
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Philadelphia Regional House Price Indices 1980-2022

City v. Suburbs v. U.S. Average.: 1980Q1=100

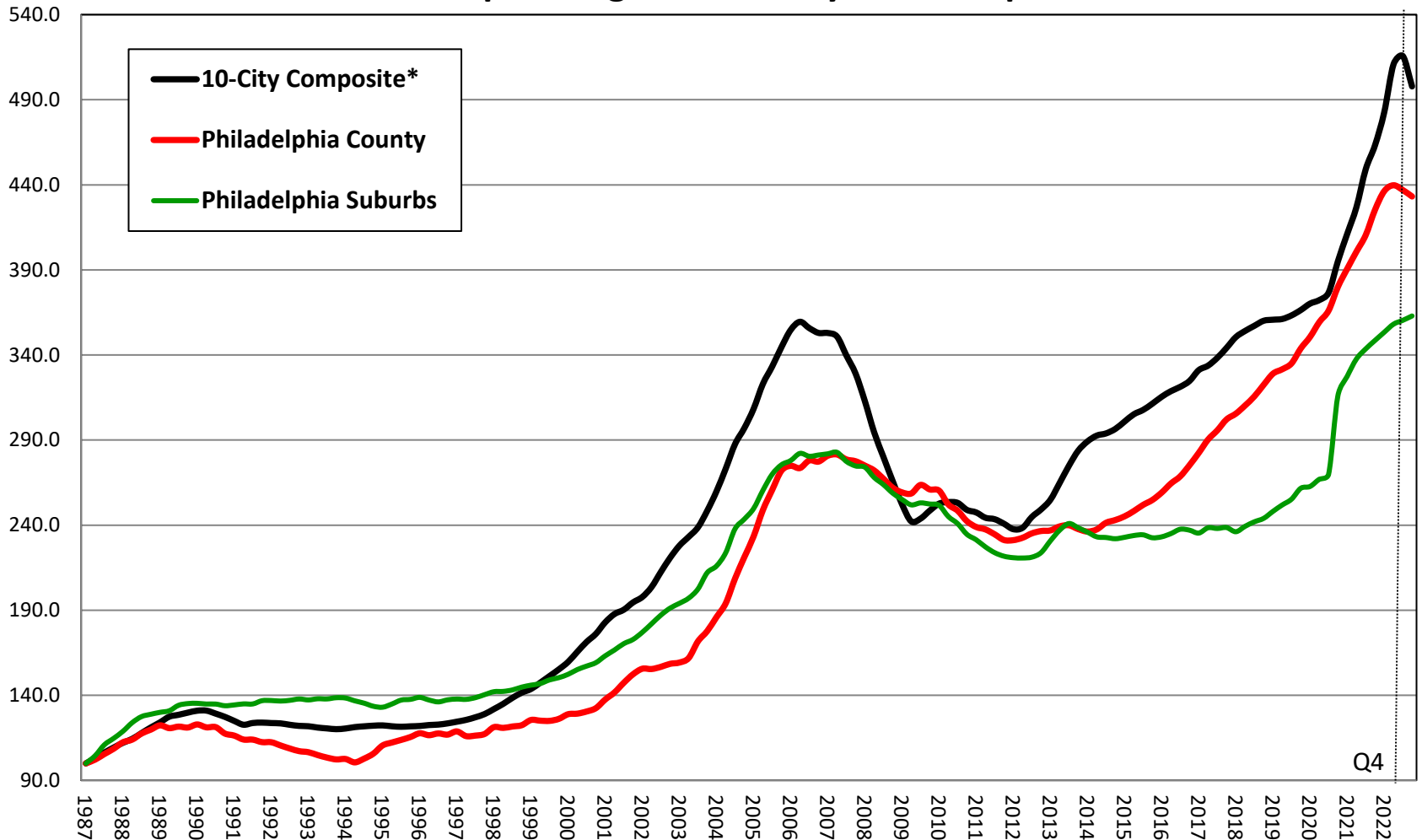


*Empirically estimated by Kevin C. Gillen, Ph.D.

**Courtesy Federal Housing Finance Agency

Note: The suburban index includes all counties in the regional index, except for Philadelphia.

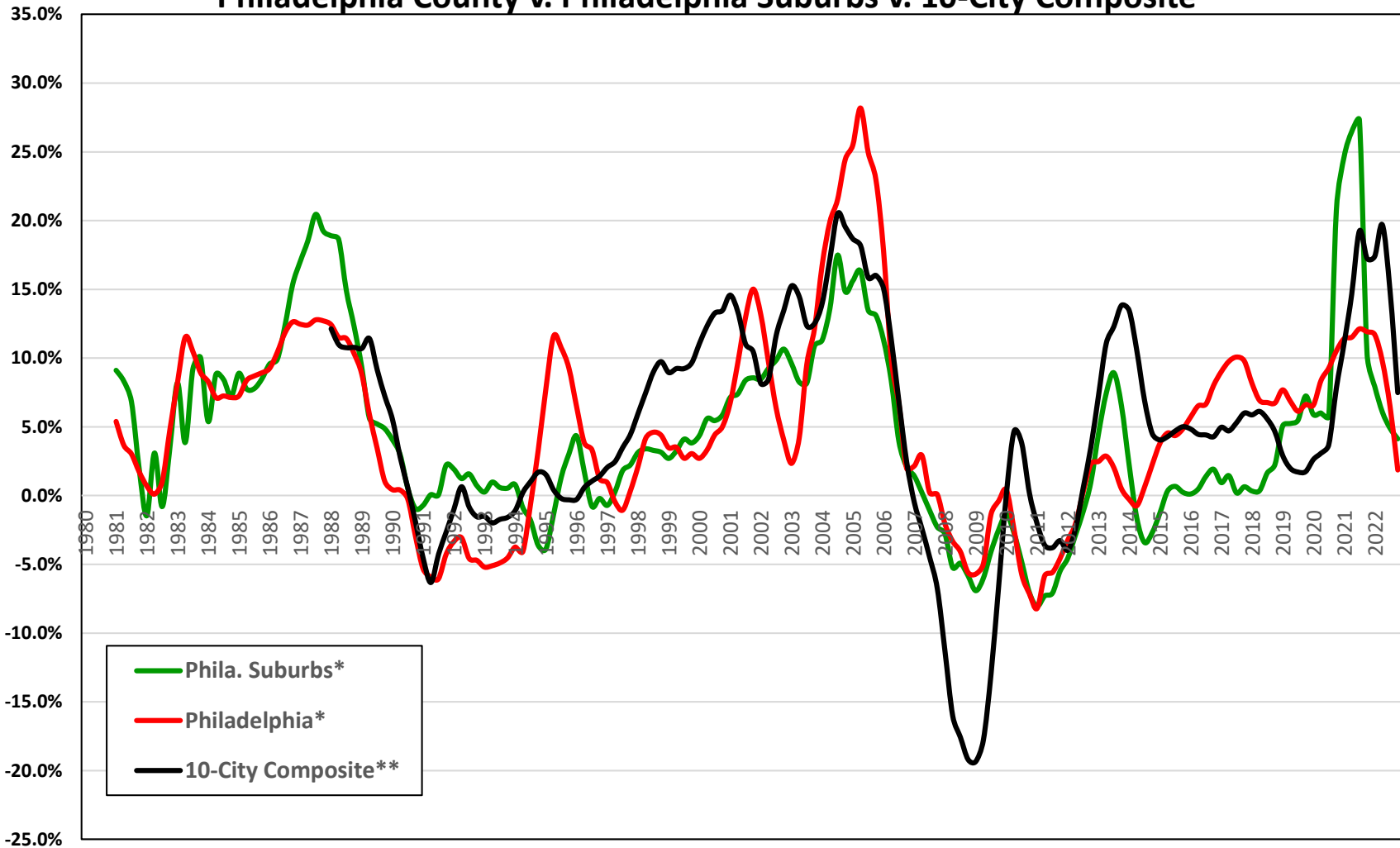
House Price Appreciation 1987-2022: Philadelphia Region v. 10-City U.S. Composite



*Source: Case-Shiller MacroMarkets LLC. 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 Change in Average House Prices: 1980-2022

Philadelphia County v. Philadelphia Suburbs v. 10-City Composite

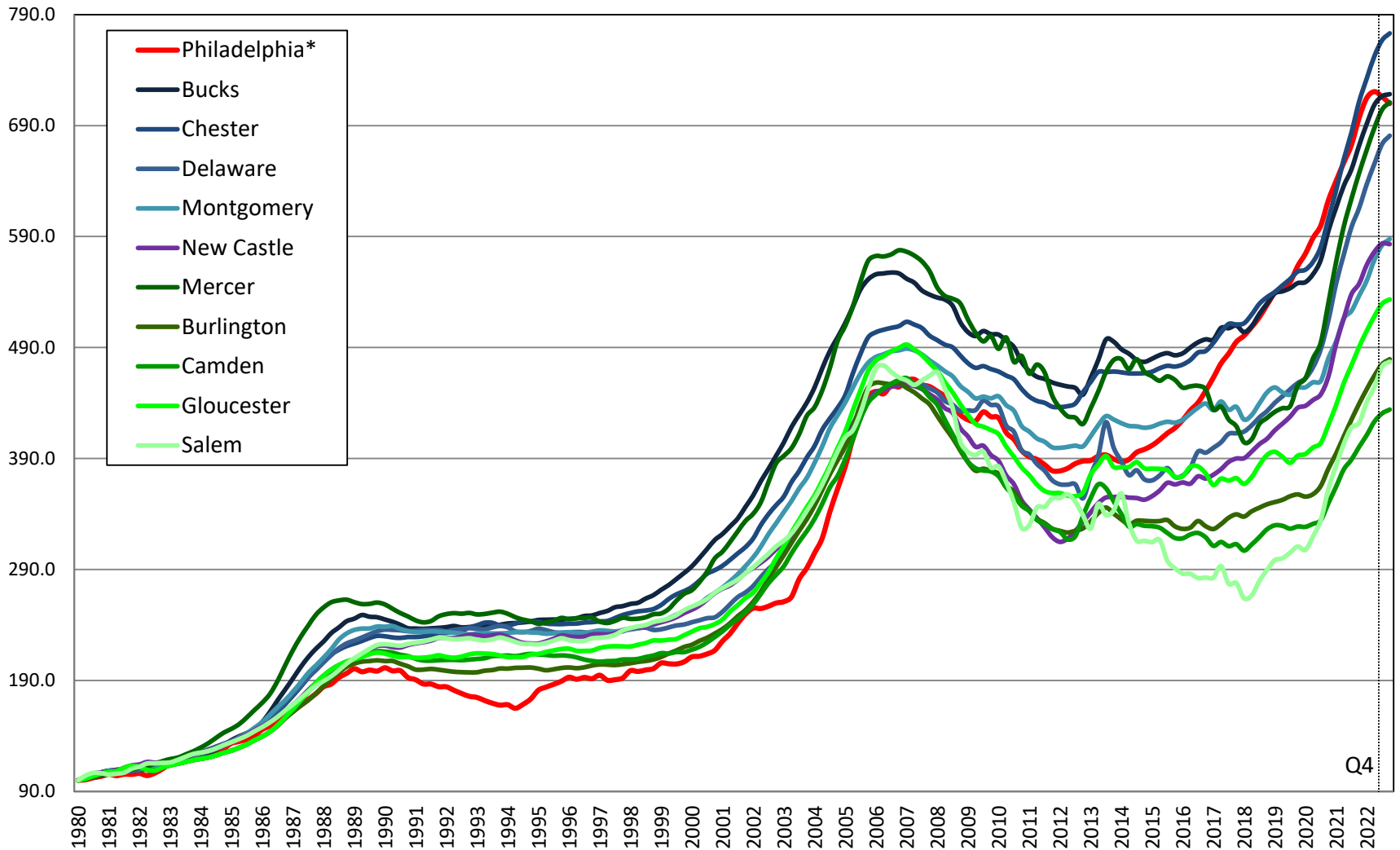


*Empirically estimated by Kevin C. Gillen, Ph.D.

**Empirically estimated by Case-Shiller. The 10-City Composite reflects average annual house price changes in ten large US cities, including: Boston Chicago, Denver, Las Vegas, Los Angeles, Miami, New York, San Diego, San Francisco and Washington DC. It does not include Philadelphia.

Philadelphia Regional House Price Indices 1980-2022, by County

1980Q1=100



*All indices empirically estimated by Kevin C. Gillen, PhD

Total House Price Appreciation Rates by Philadelphia Area Submarket and U.S.

Period	Philadelphia County*	Philadelphia Suburbs*	U.S.A.**
43-Year	609.7%	521.3%	538.9%
10-Year	83.1%	62.1%	110.7%
1-Year	1.9%	4.1%	12.2%
1-Quarter	-0.9%	0.7%	0.0%

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

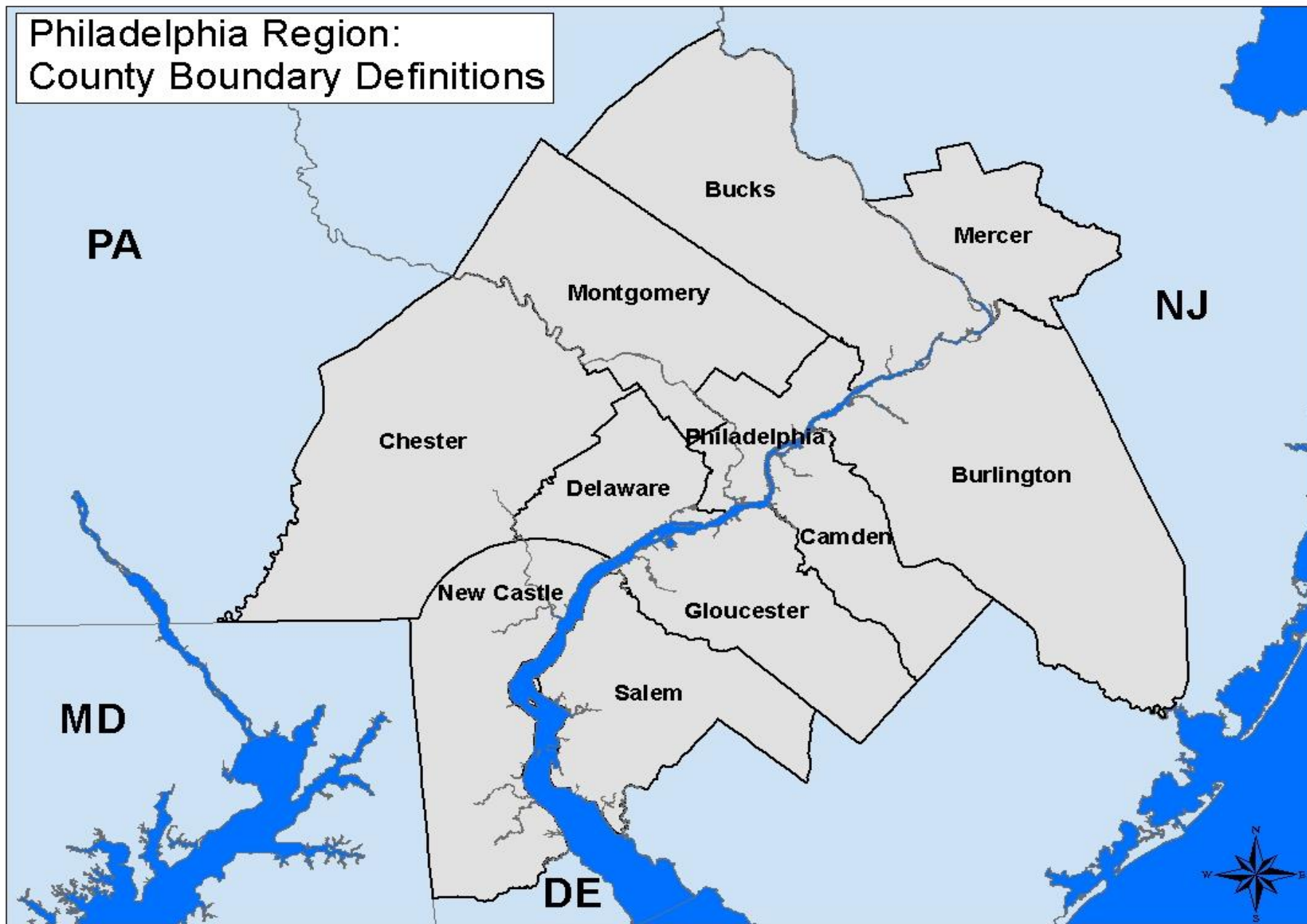
**Source: U.S. Federal Housing Finance Agency (FHFA). These numbers are only through 2022Q3. “MSA”=“Metropolitan Statistical Area”, which is the entire 11-county region.

Philadelphia Region House Price Appreciation Rates by County

Period	Philadelphia	Bucks	Chester	Delaware	Montgomery	New Castle	Mercer	Burlington	Camden	Gloucester	Salem
43-Year	610%	618%	673%	581%	488%	483%	611%	379%	334%	433%	377%
10-Year	83.1%	60.5%	71.9%	92.3%	46.6%	75.1%	68.9%	46.6%	28.4%	48.5%	40.8%
1-Year	1.9%	6.9%	8.7%	10.6%	9.5%	6.5%	9.9%	9.2%	8.4%	8.8%	13.0%
1-Quarter	-0.9%	0.3%	0.8%	1.1%	1.0%	-0.1%	0.9%	0.9%	0.8%	0.7%	0.9%

All county-level indices and appreciation rates estimated by Kevin C. Gillen, Ph.D.

Philadelphia Region: County Boundary Definitions



2022 Q4 Annual House Price Rate of Change by County

Montgomery: +9.5%

Bucks: +6.9%

Philadelphia: +1.9%

Chester: +8.7%

Mercer: +9.9%

Delaware: +10.6%

Burlington: +9.2%

New Castle: +6.5%

Camden: +8.4%

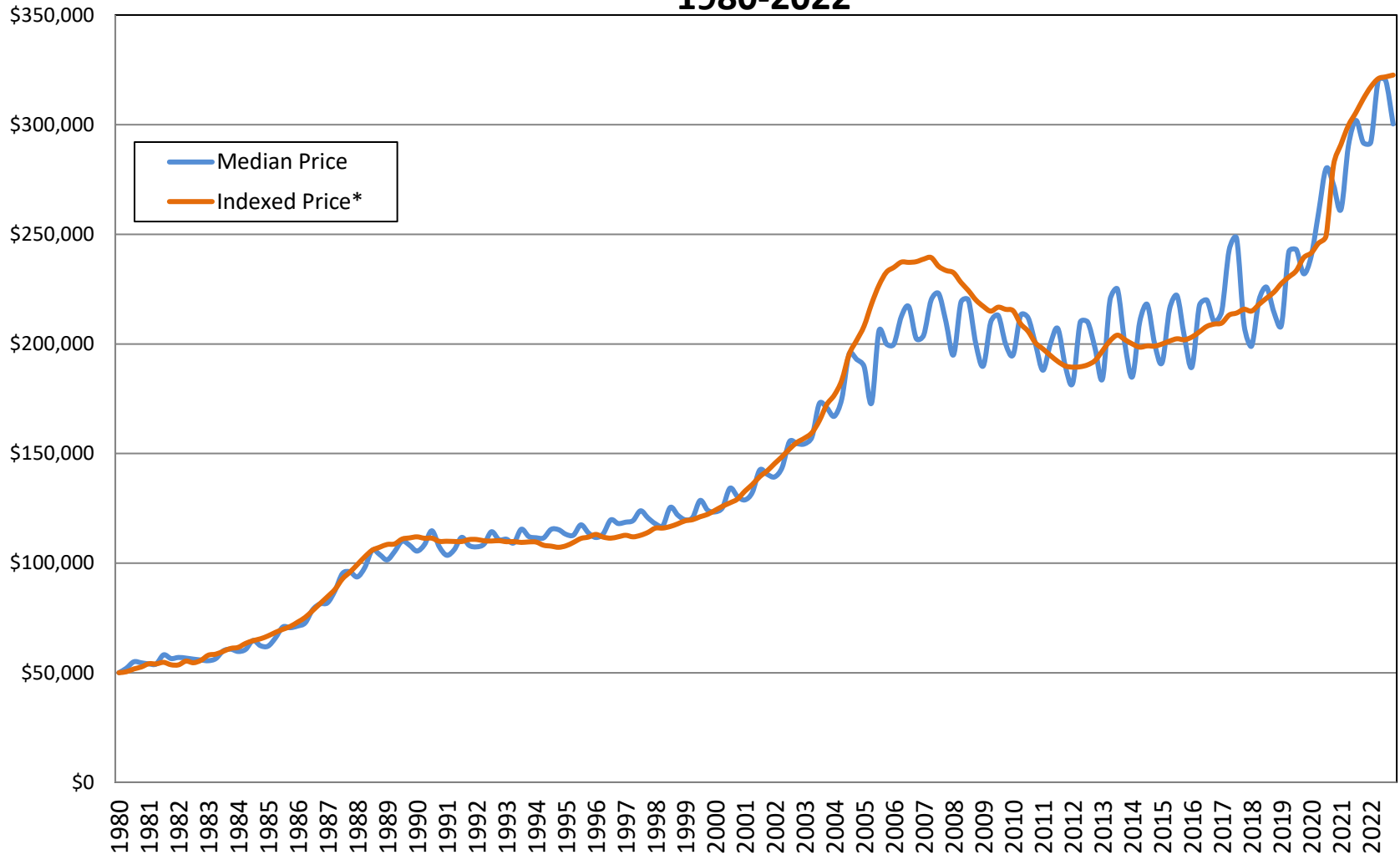
Salem: +13.0%

Gloucester: +8.8%

Note: Each county is extruded by its average change in house values from 2021 Q4 to 2022 Q4 in order to reflect its growth (or depreciation) rate relative to other counties over the past year.

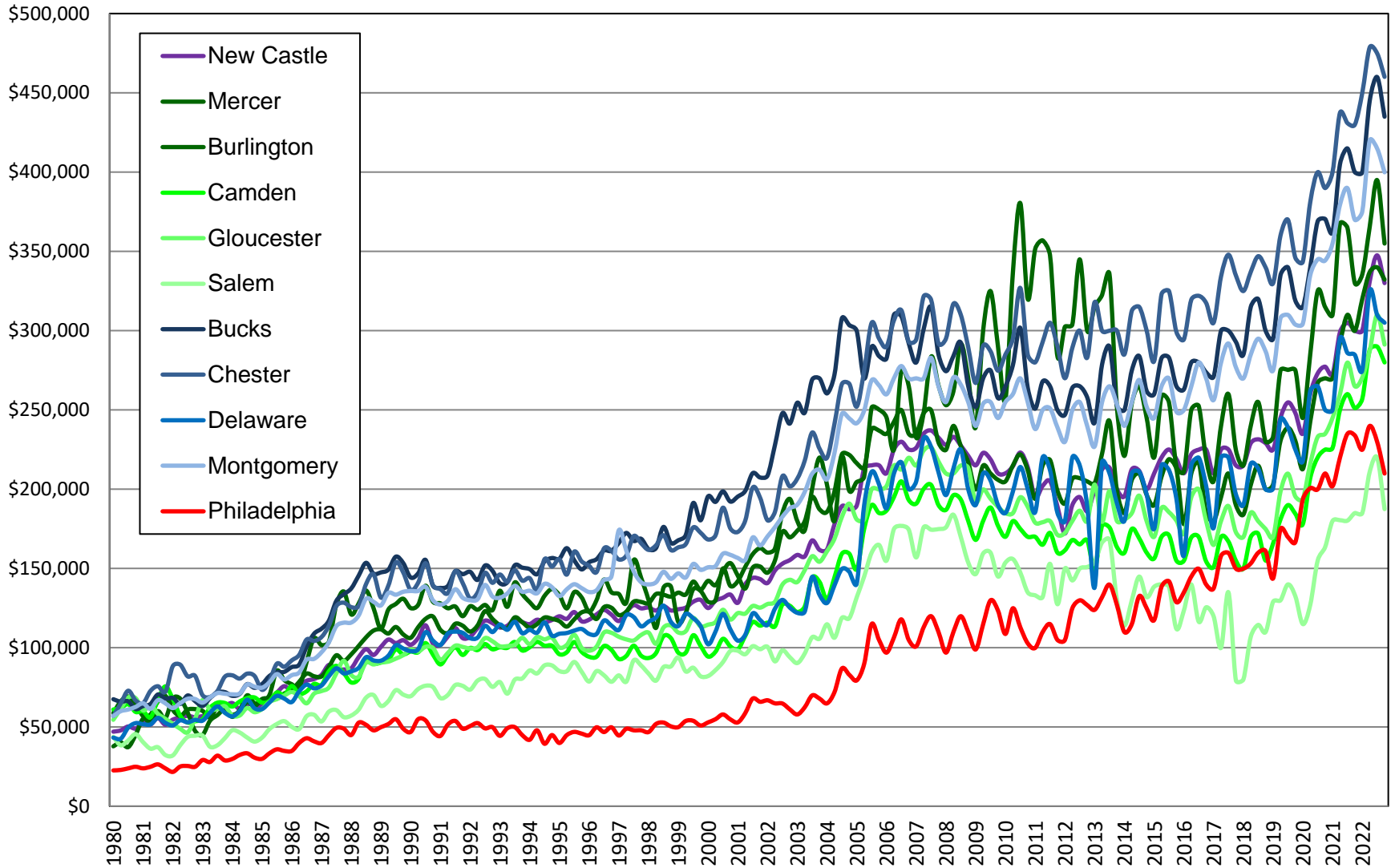
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Median Regional House Price v. Indexed Regional House Price: 1980-2022

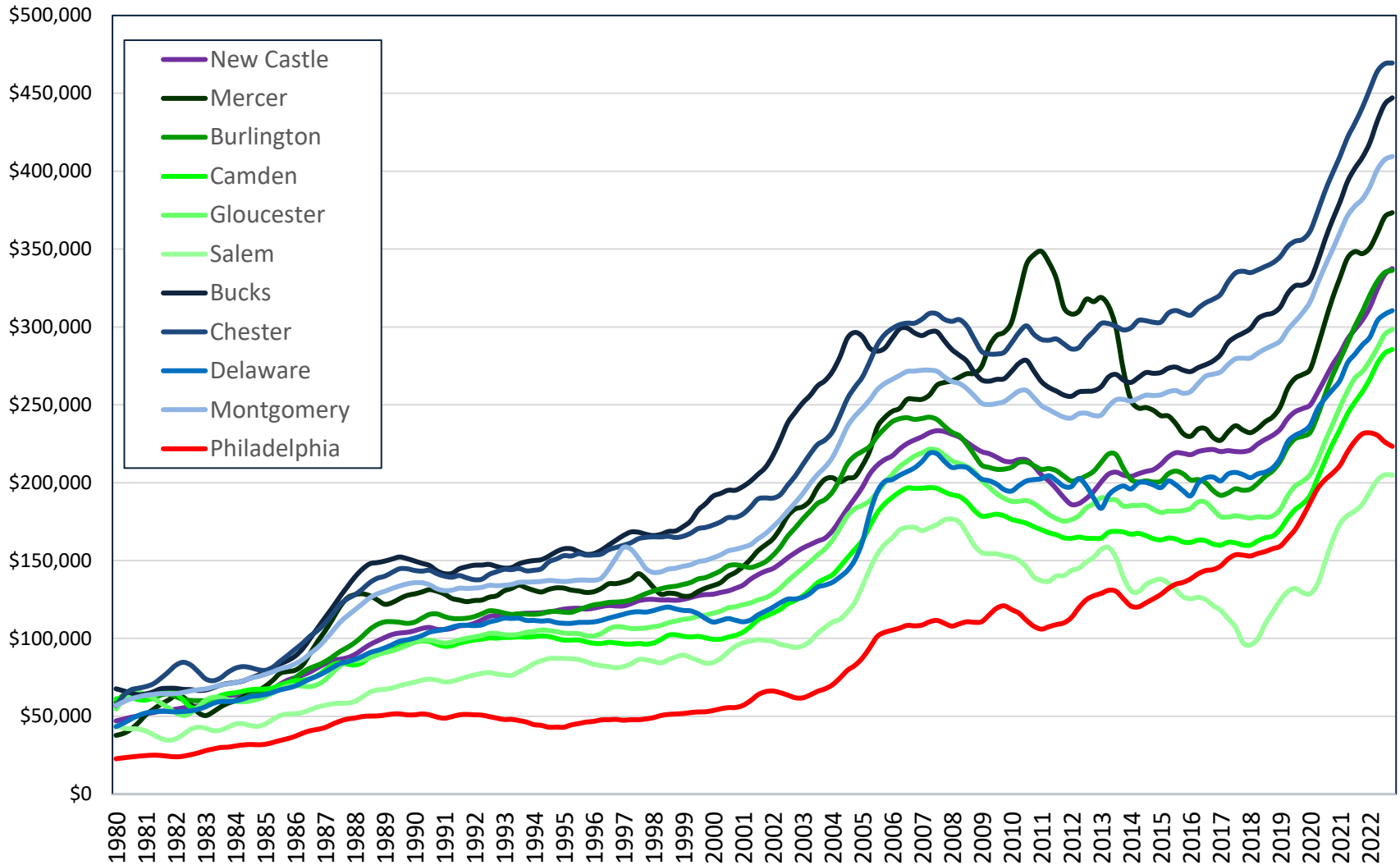


*Empirically estimated by Kevin C. Gillen, Ph.D.

Median House Price by County: 1980-2022

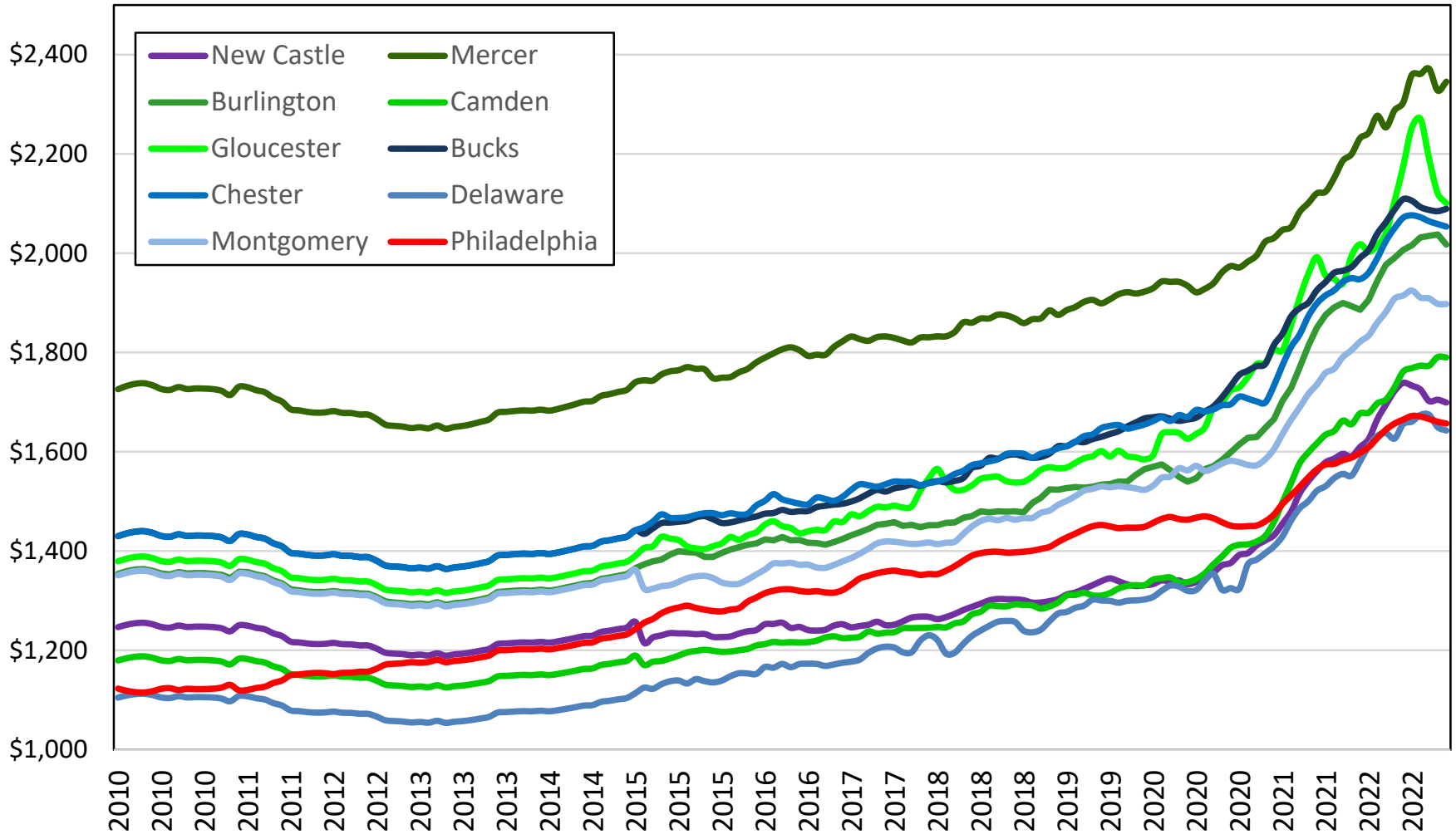


Median House Price by County, Smoothed*: 1980-2022



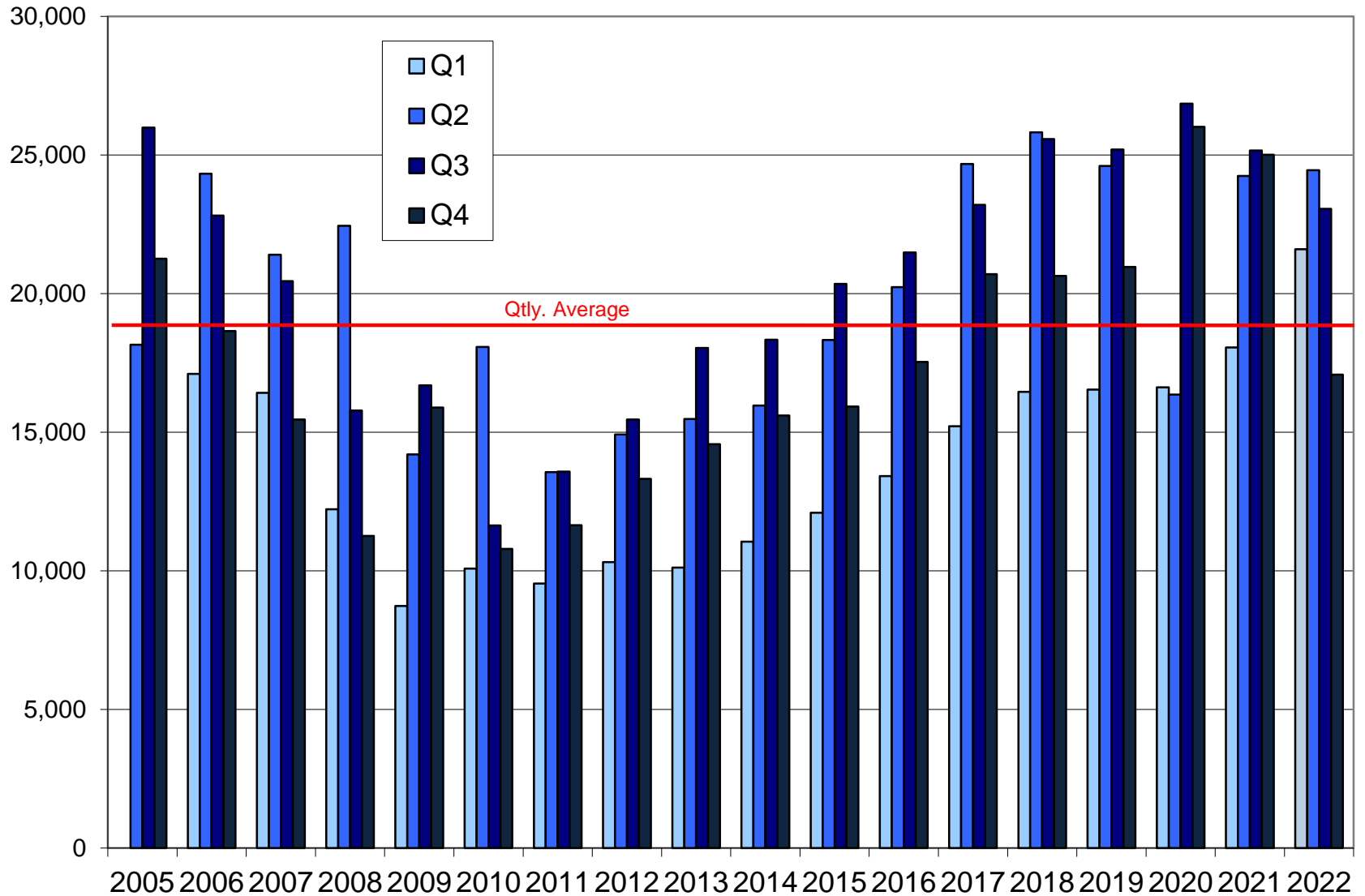
*The price data was smoothed by applying a 3-period moving average, in order to eliminate seasonal noise.

Median Monthly Rent by County: 2010-2022

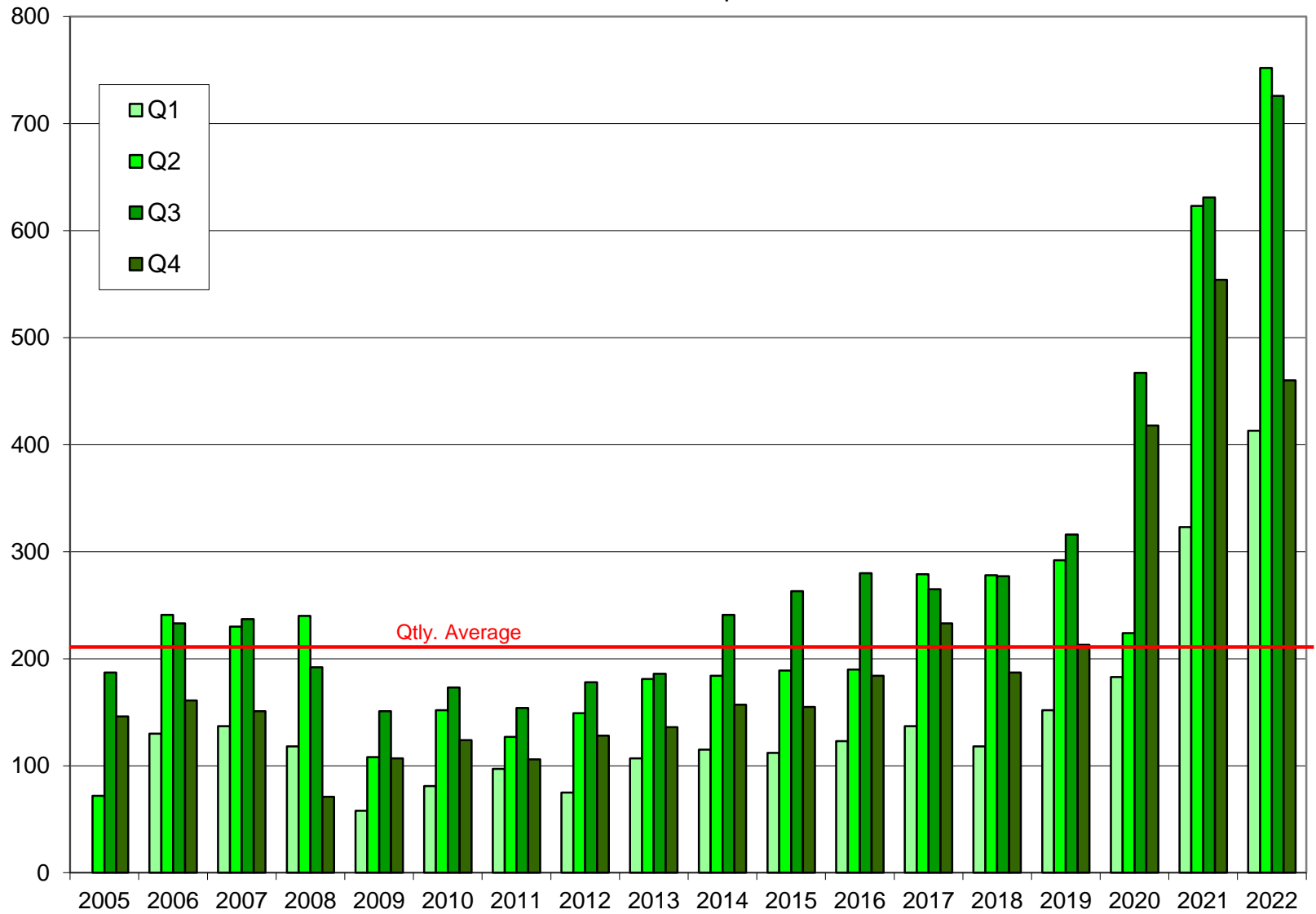


Source: Zillow.com

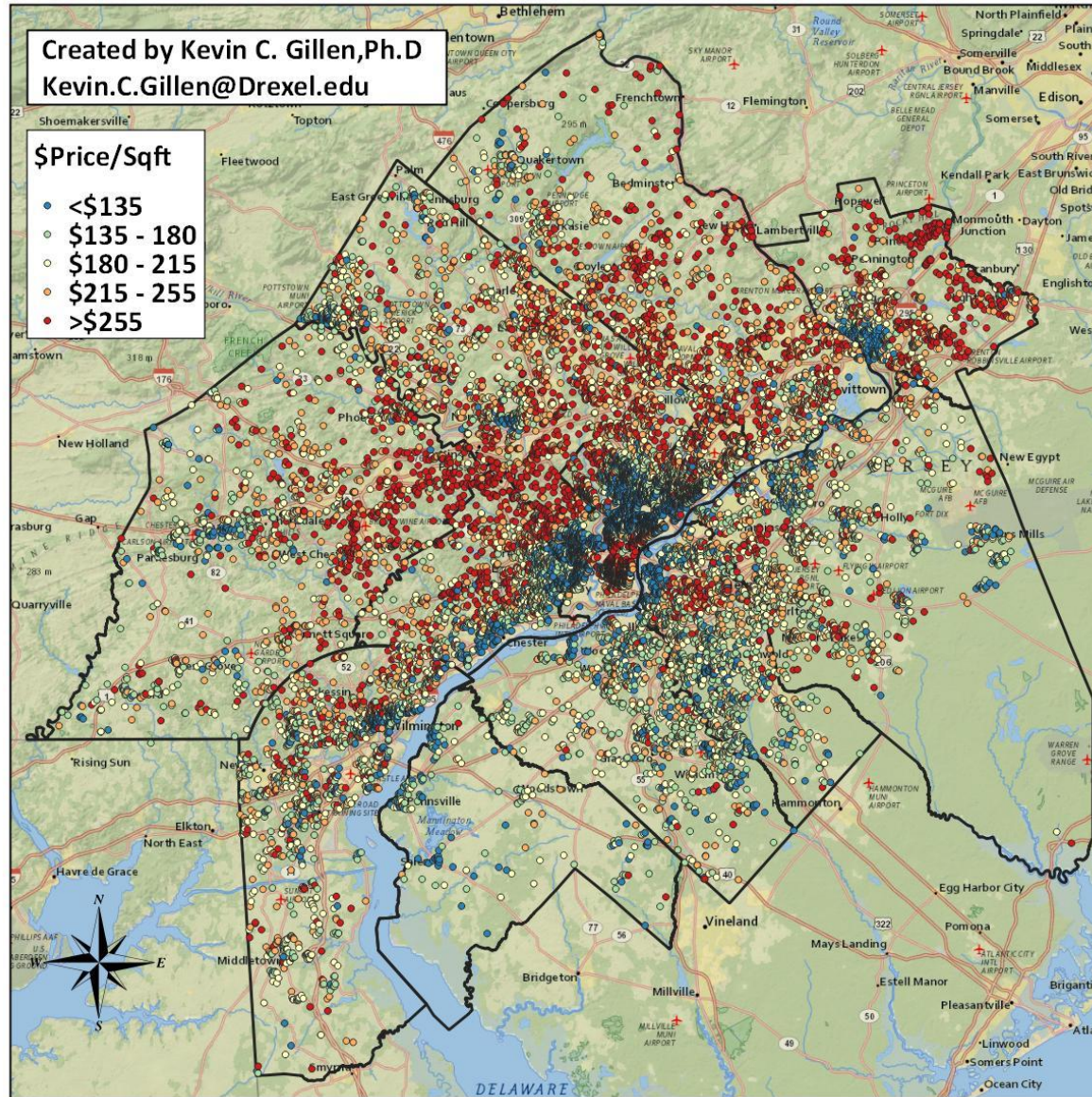
Number of Regional House Sales per Quarter: 2005-2022



Number of Regional House Sales 2005-2022 with Price \geq \$1m

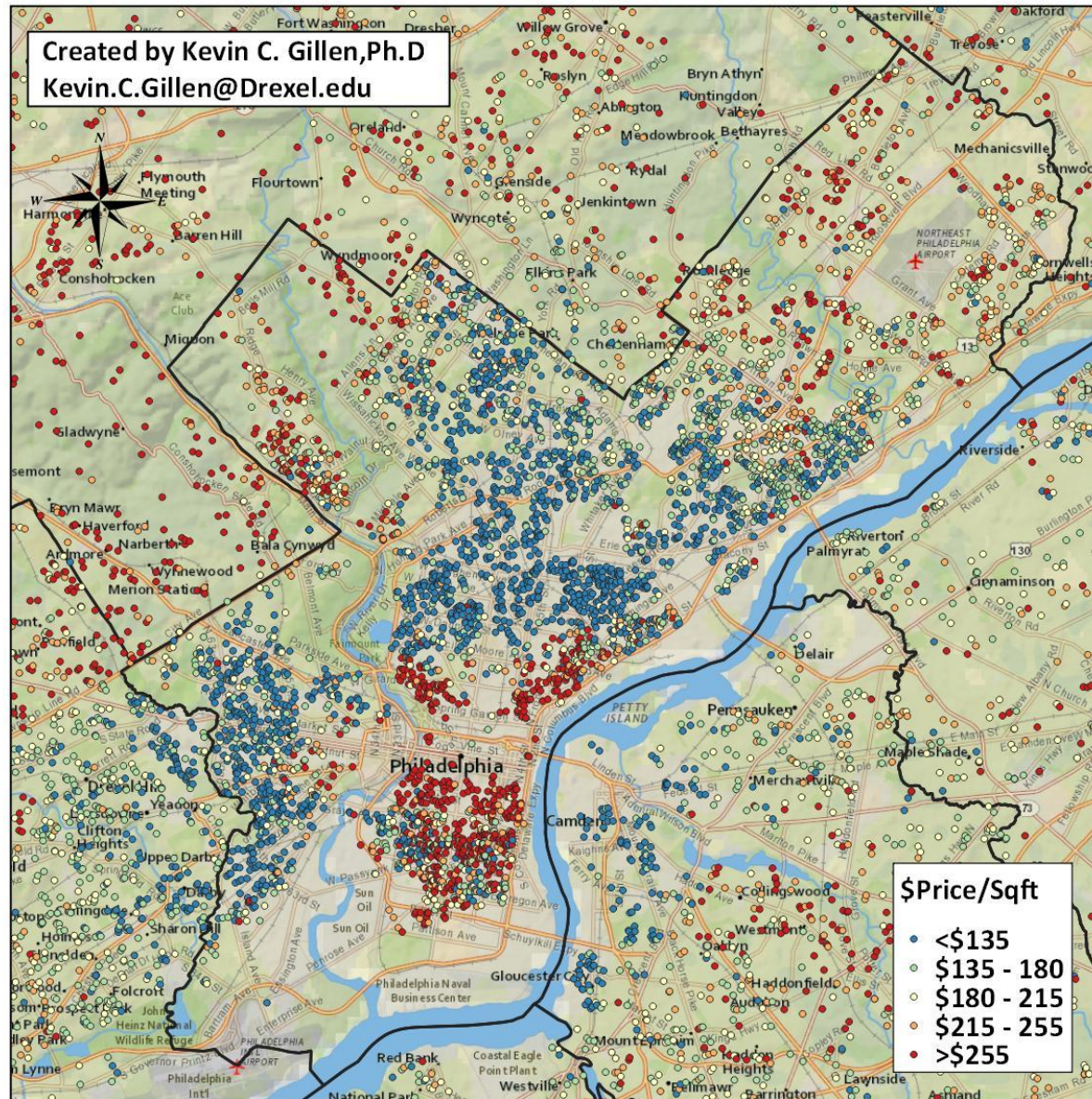


Philadelphia Region House Sales in 2022 Q4



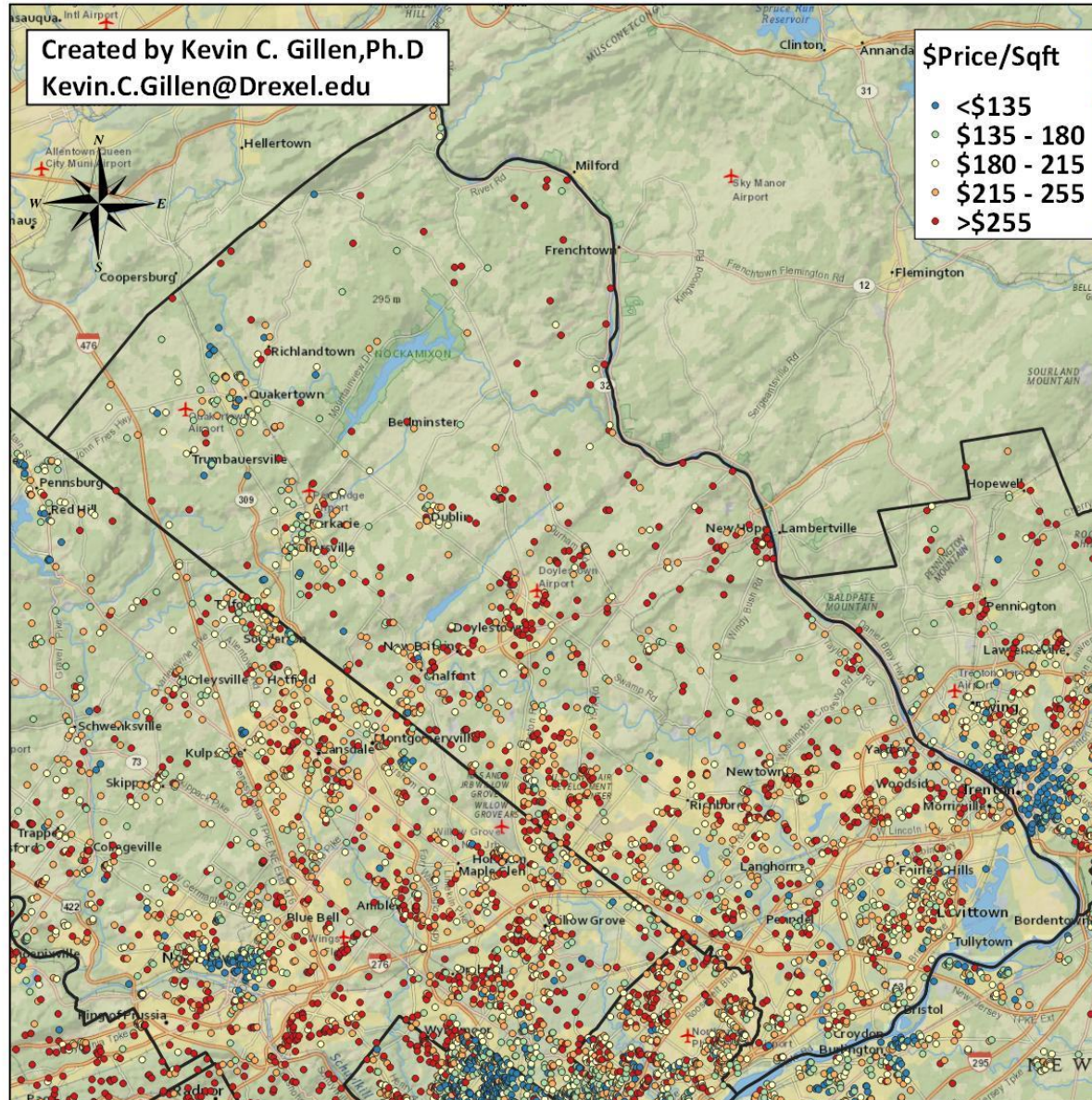
Note: the categories for \$price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.

Philadelphia County House Sales in 2022 Q4



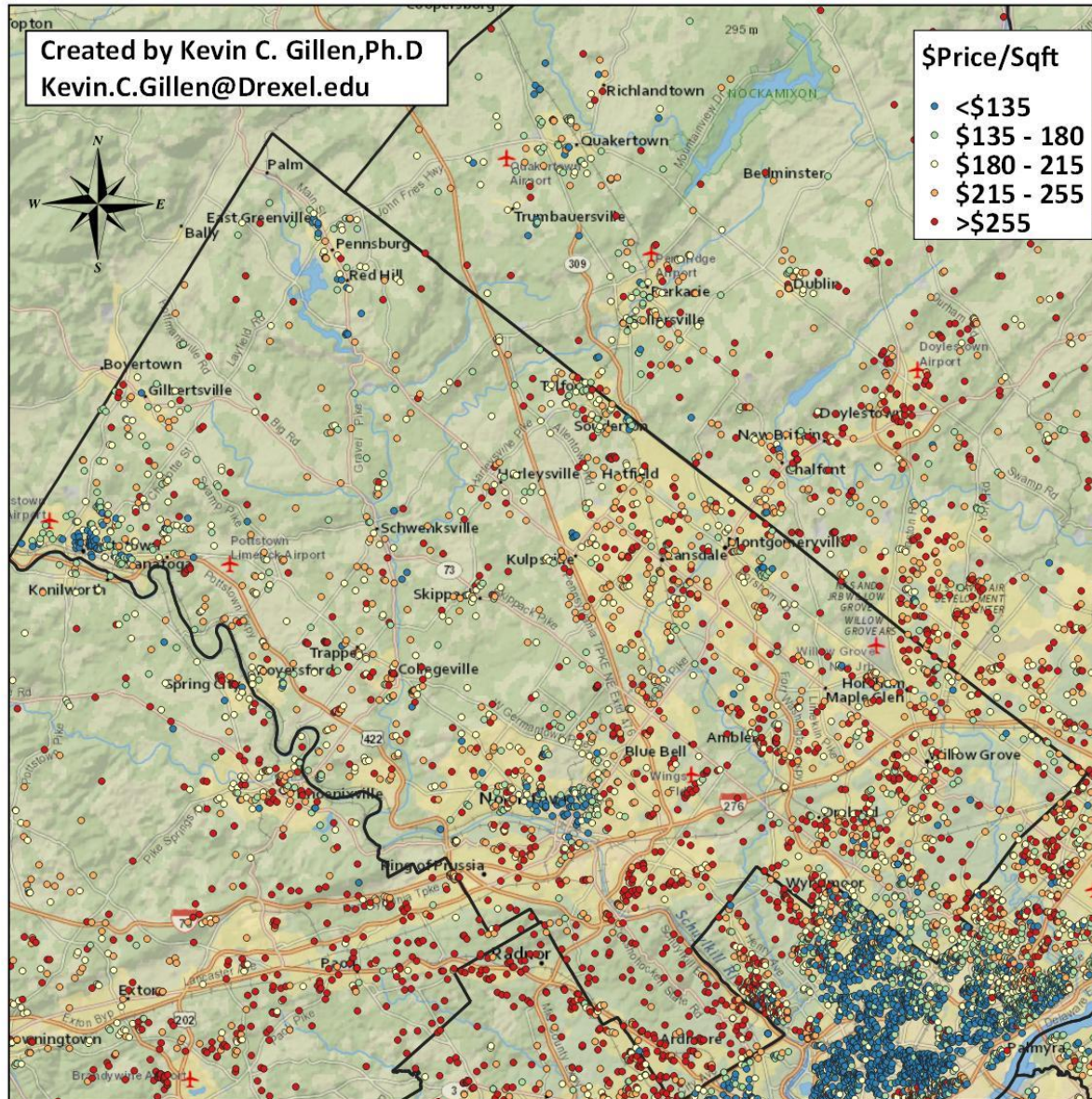
Note: the categories for \$/price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.

Bucks County House Sales in 2022 Q4



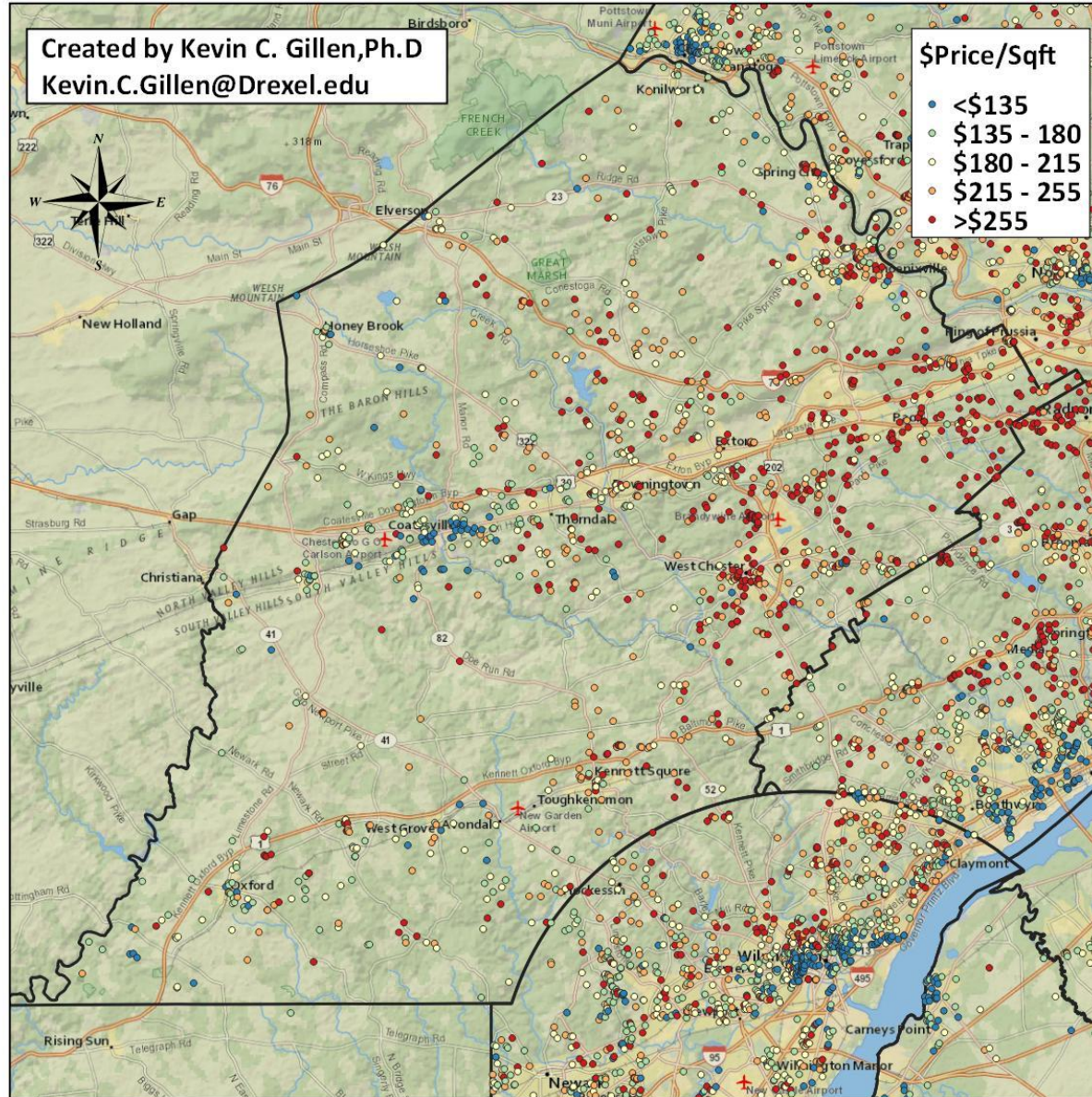
Note: the categories for \$price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.

Montgomery County House Sales in 2022 Q4



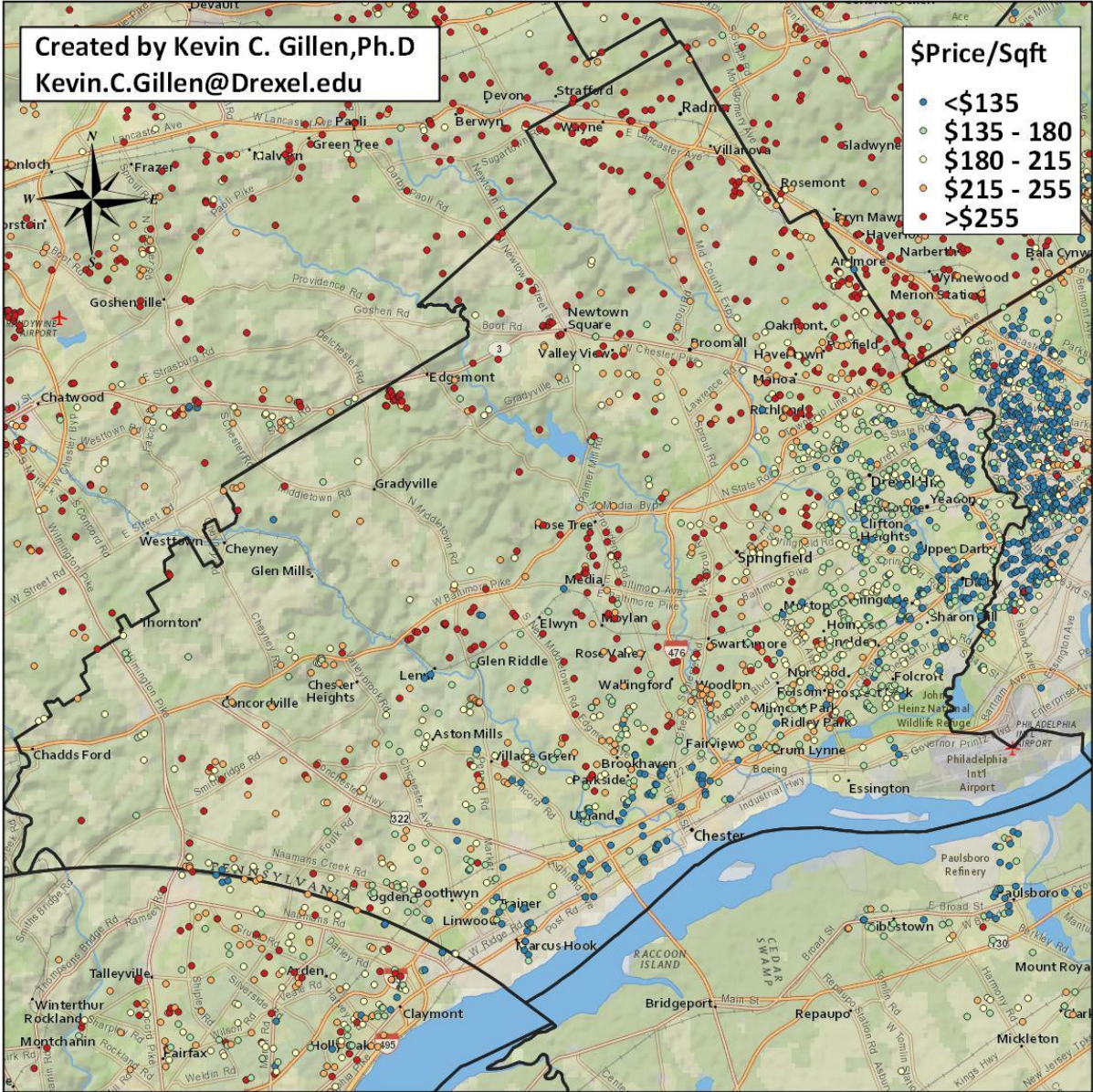
Note: the categories for \$price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.

Chester County House Sales in 2022 Q4



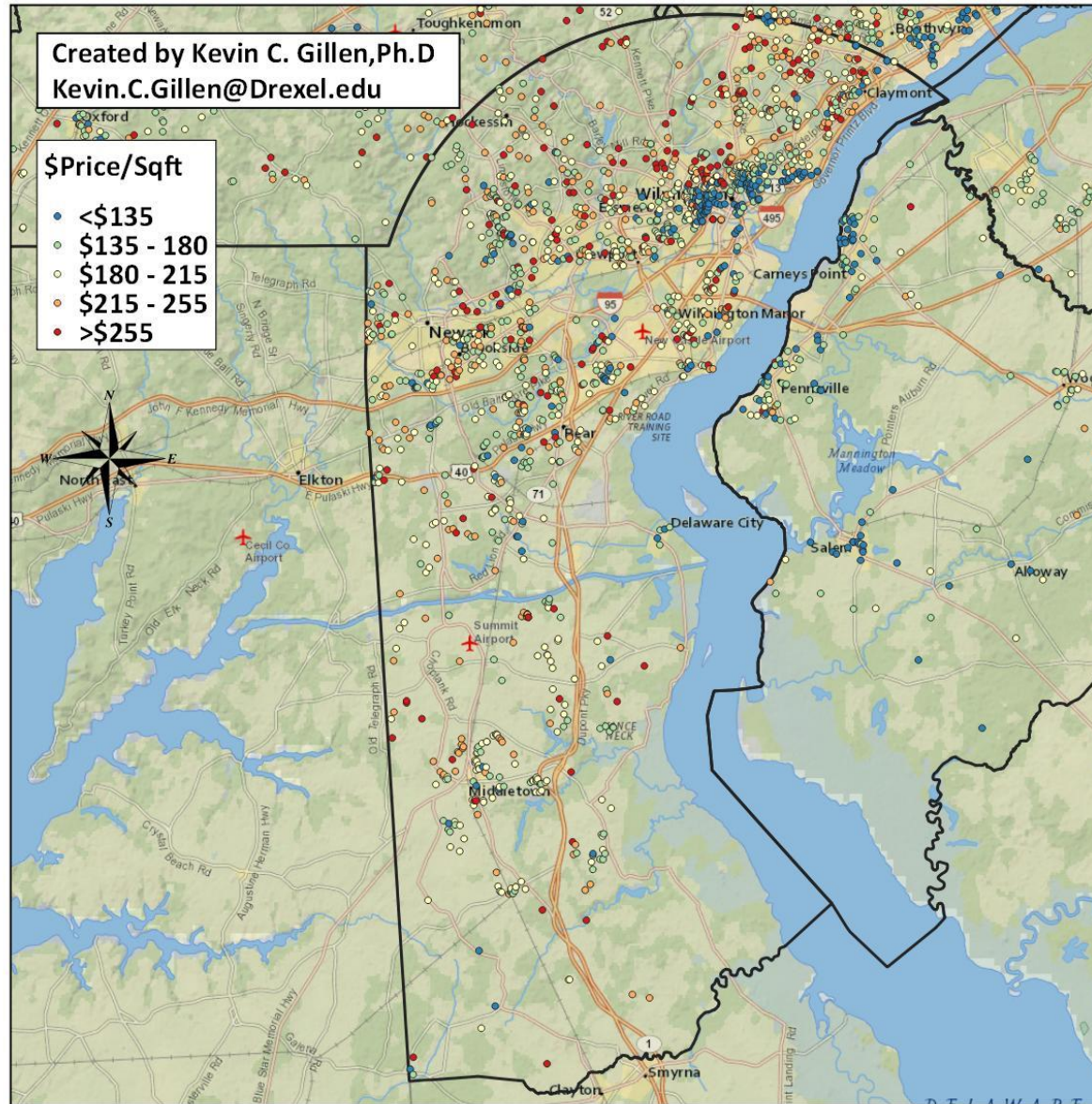
Note: the categories for \$price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.

Delaware County House Sales in 2022 Q4



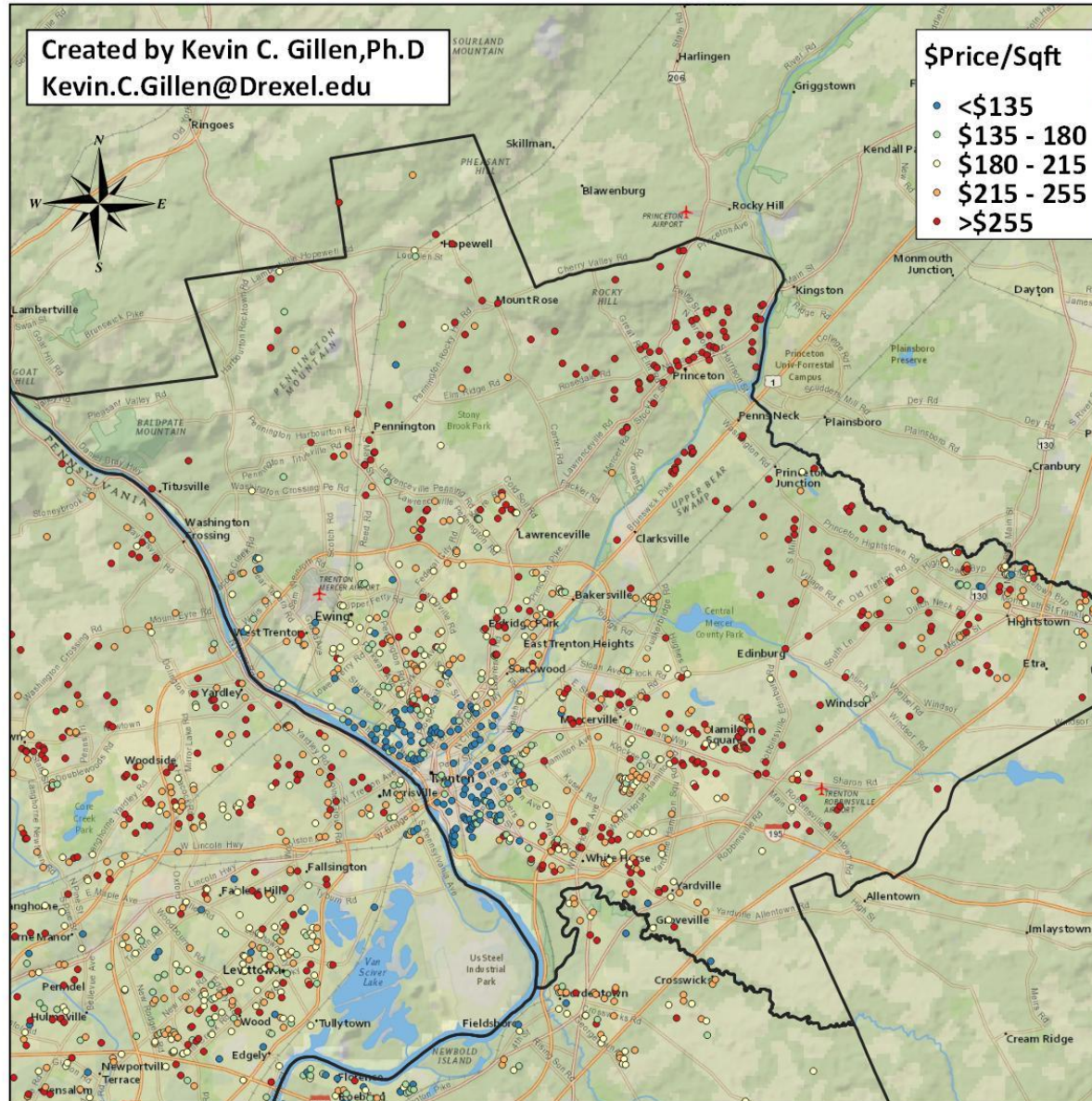
Note: the categories for \$price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.

New Castle County House Sales in 2022 Q4



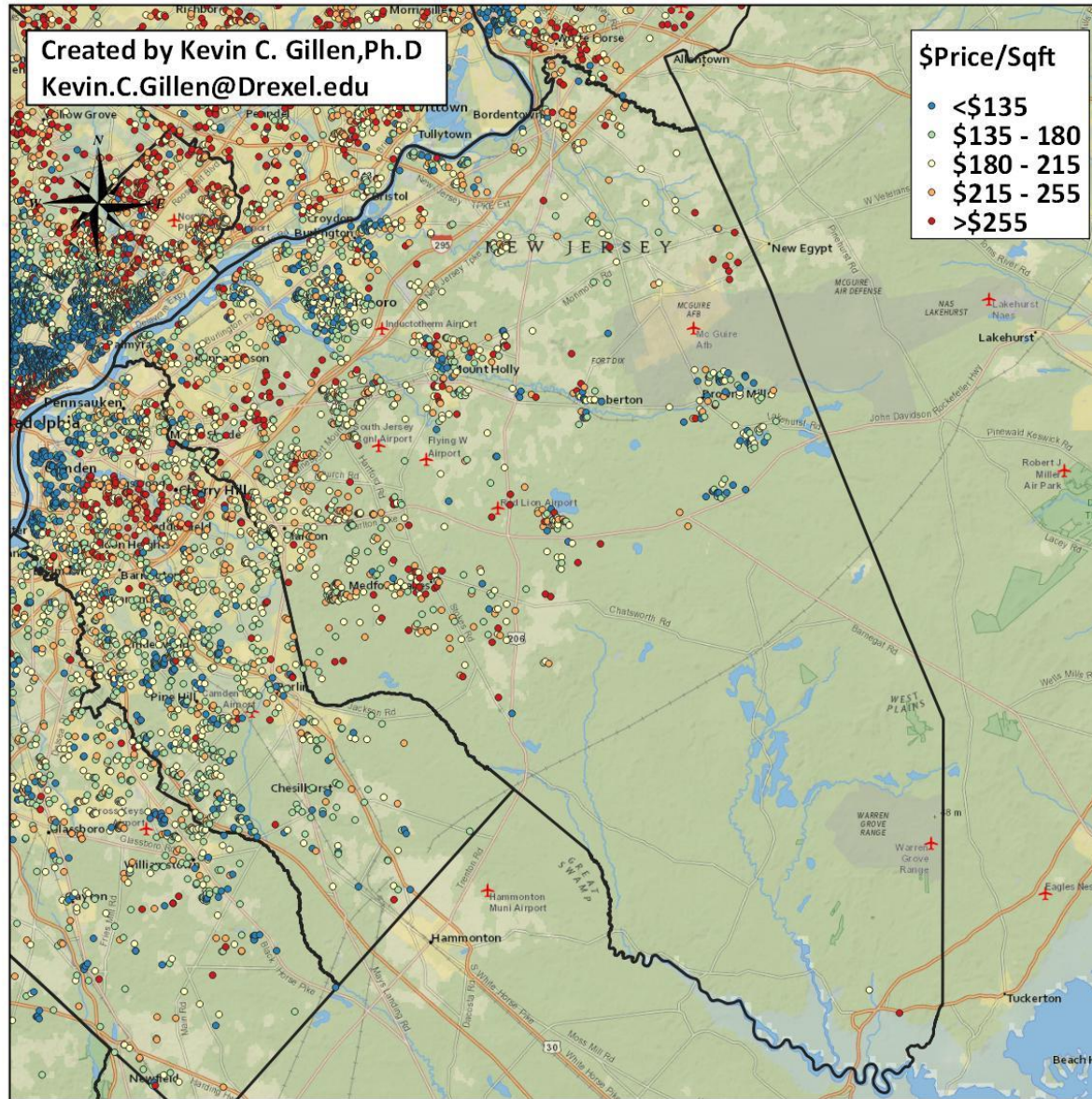
Note: the categories for \$price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.

Mercer County House Sales in 2022 Q4



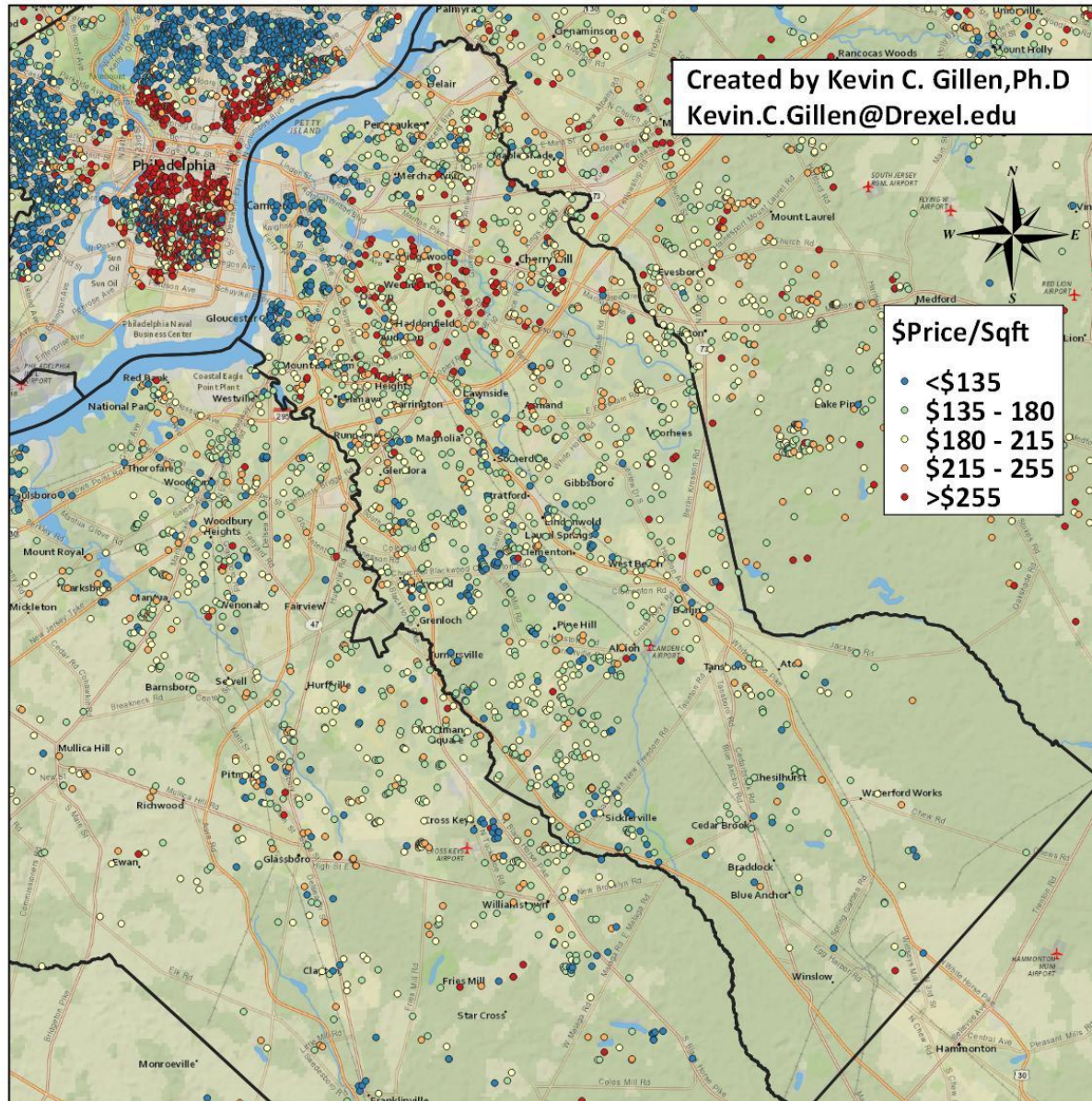
Note: the categories for \$price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.

Burlington County House Sales in 2022 Q4



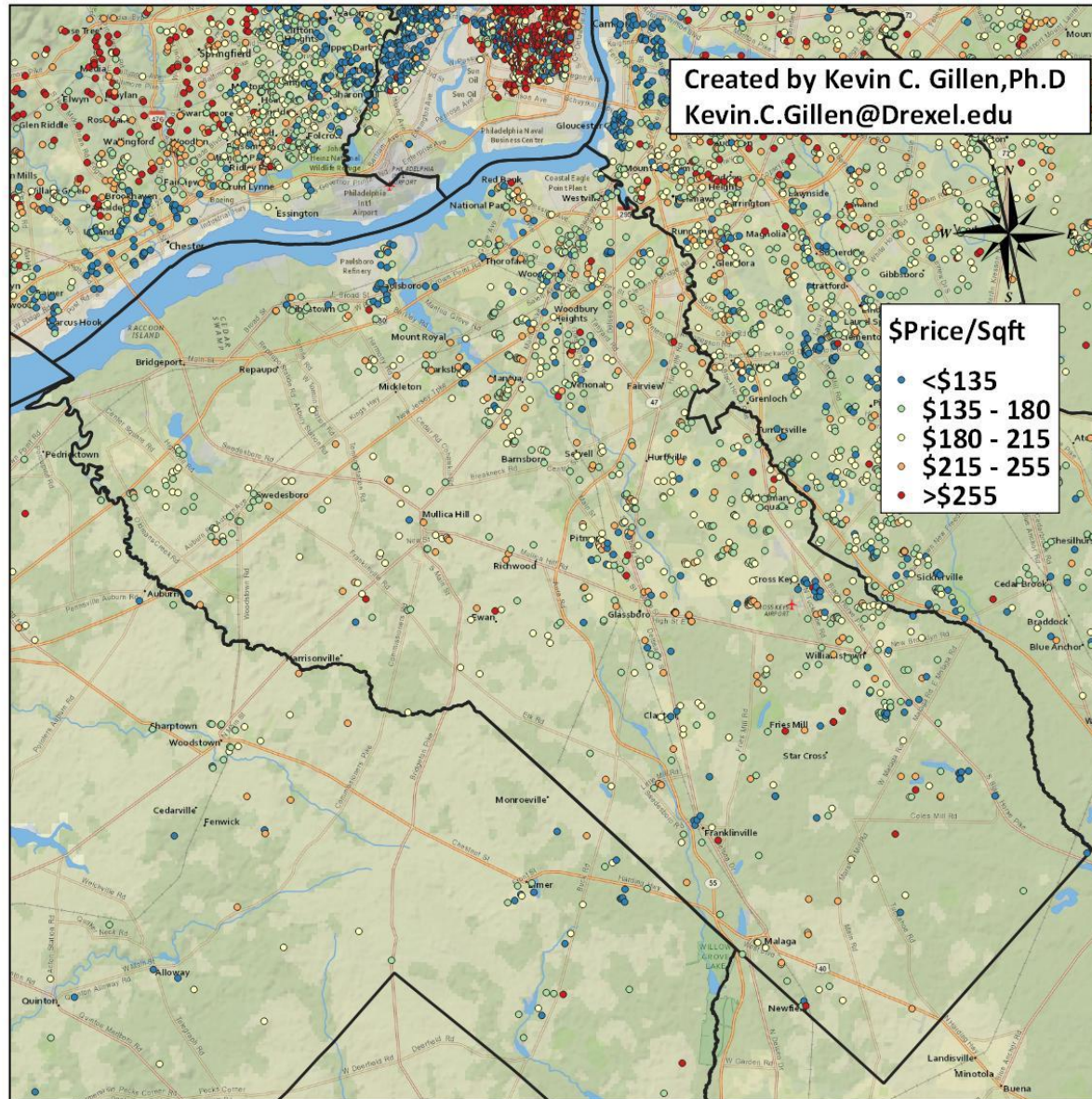
Note: the categories for \$price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.

Camden County House Sales in 2022 Q4



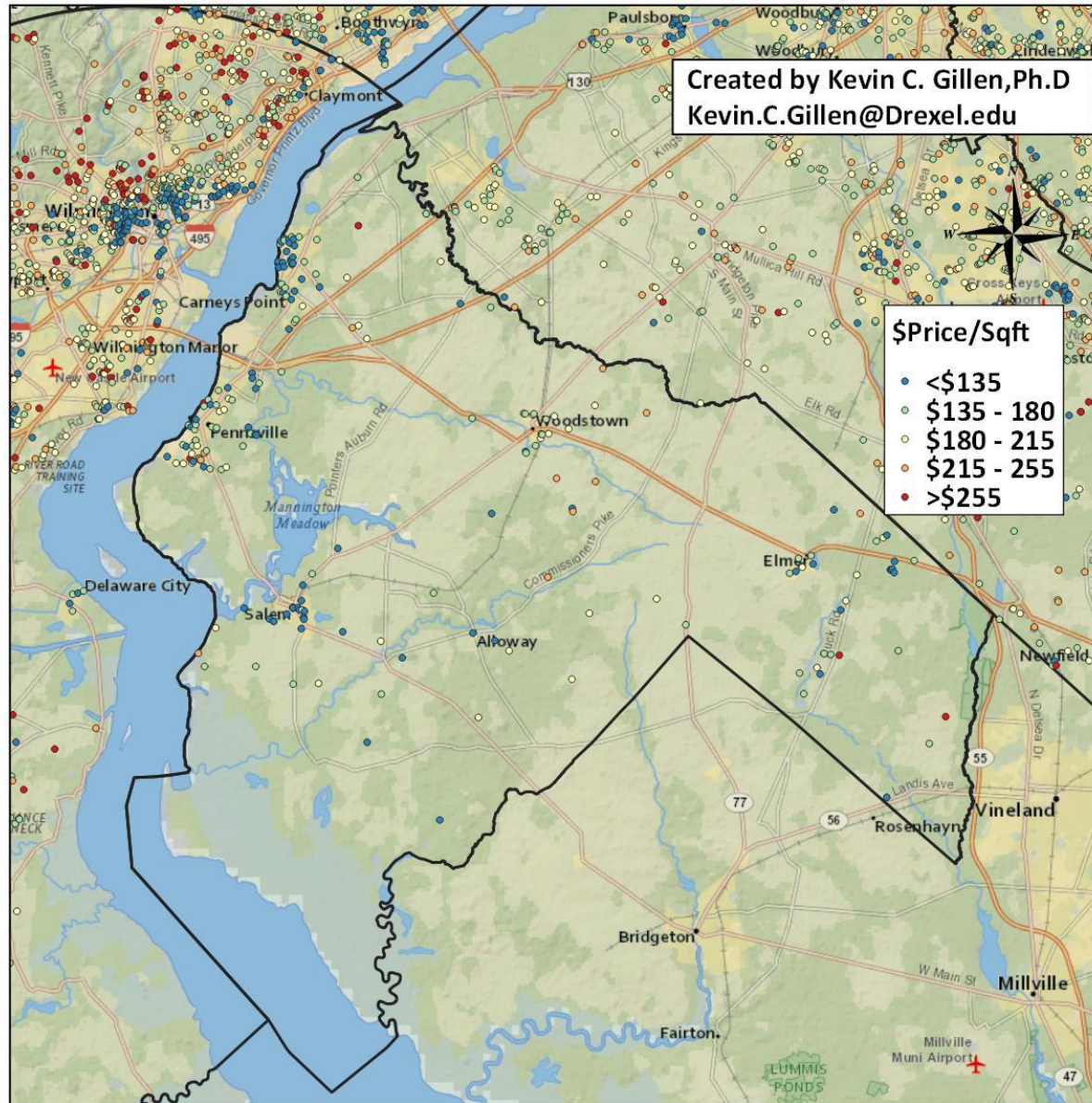
Note: the categories for \$price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.

Gloucester County House Sales in 2022 Q4



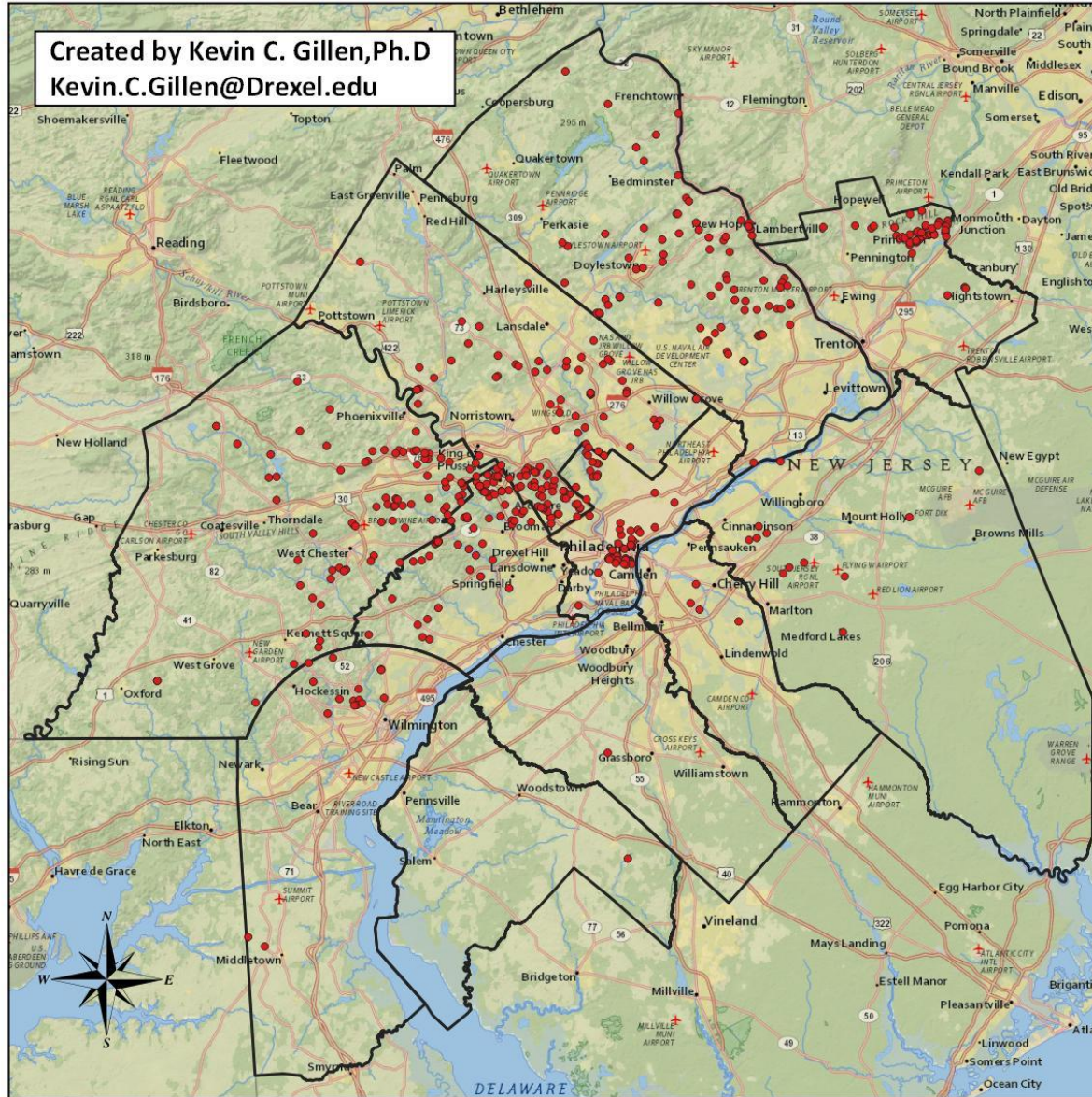
Note: the categories for \$price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.

Salem County House Sales in 2022 Q4

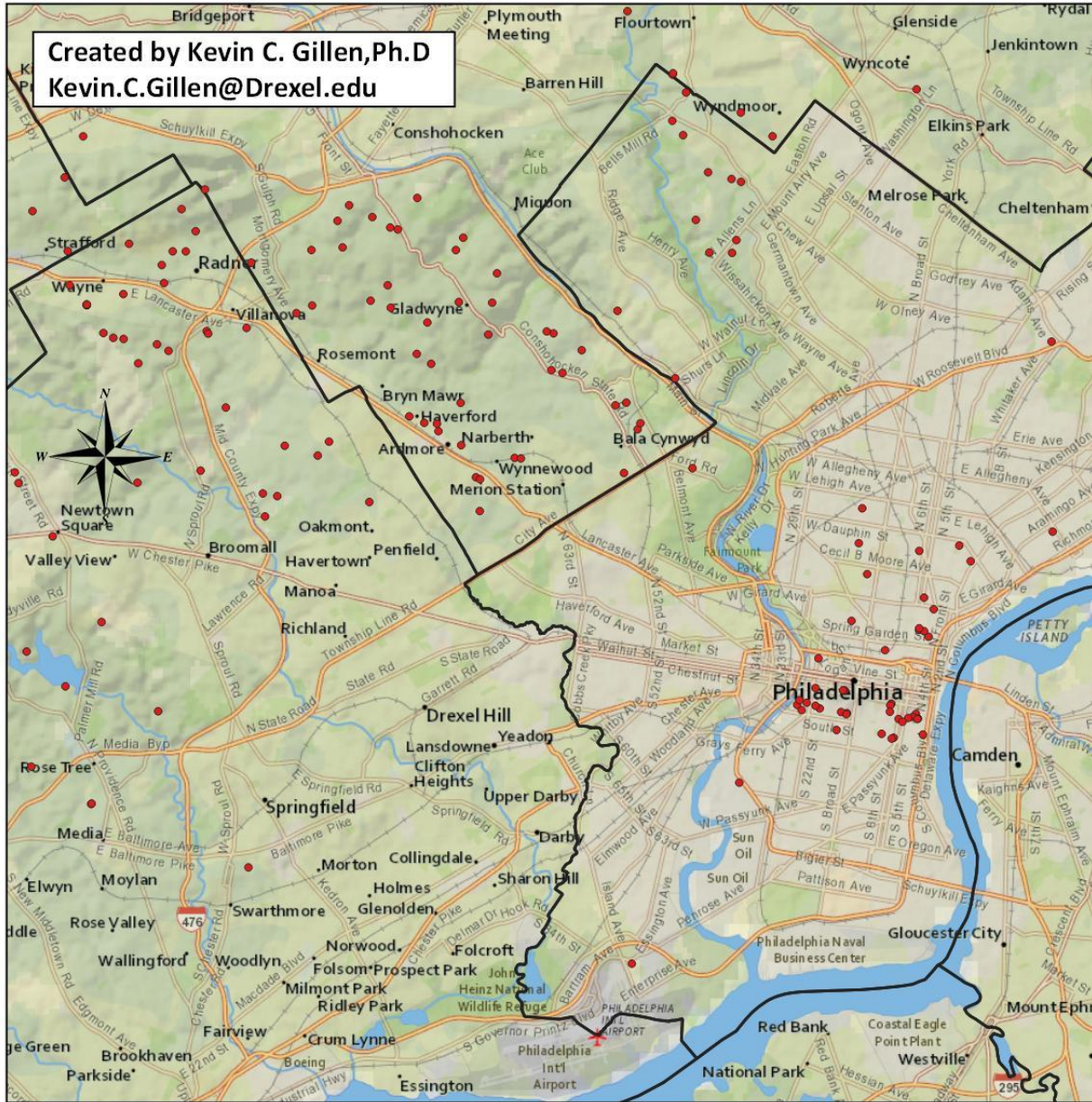


Note: the categories for \$price/sqft are based upon the quintiles of its distribution. Hence, exactly 20% of all sales fall into each one of the five categories.

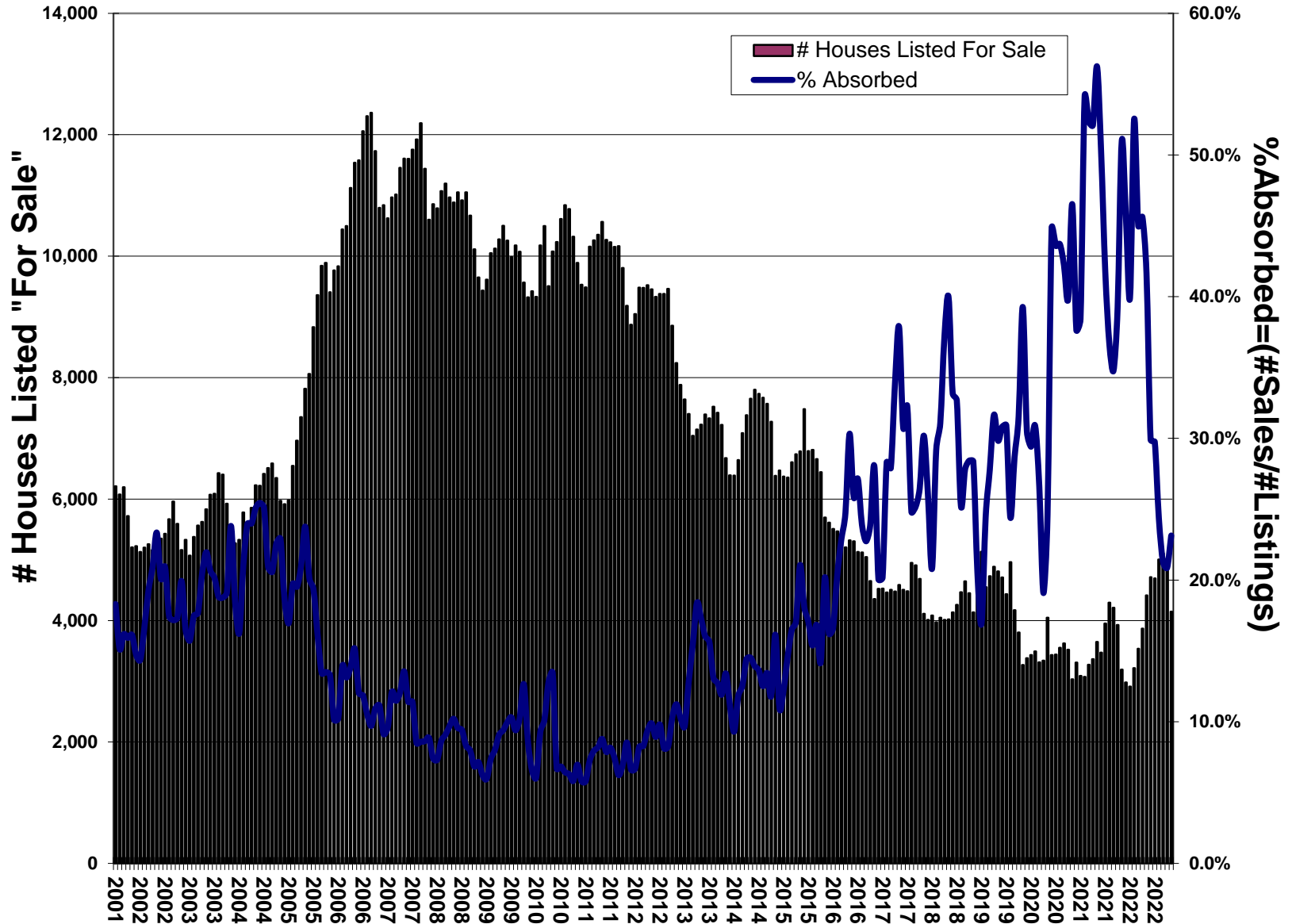
+ \$1 Million Dollar House Sales in 2022 Q4



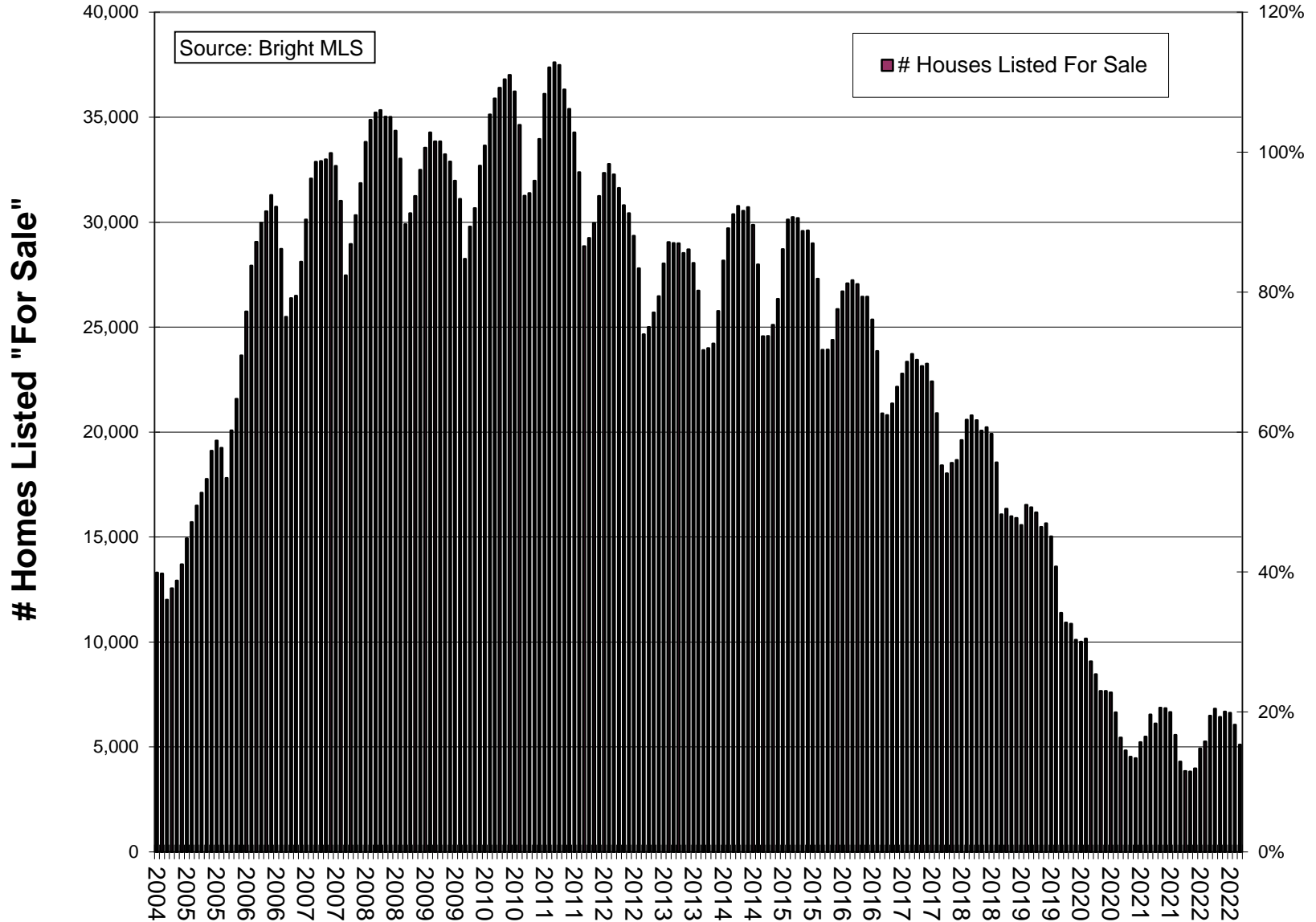
+ \$1 Million Dollar House Sales in 2022 Q4



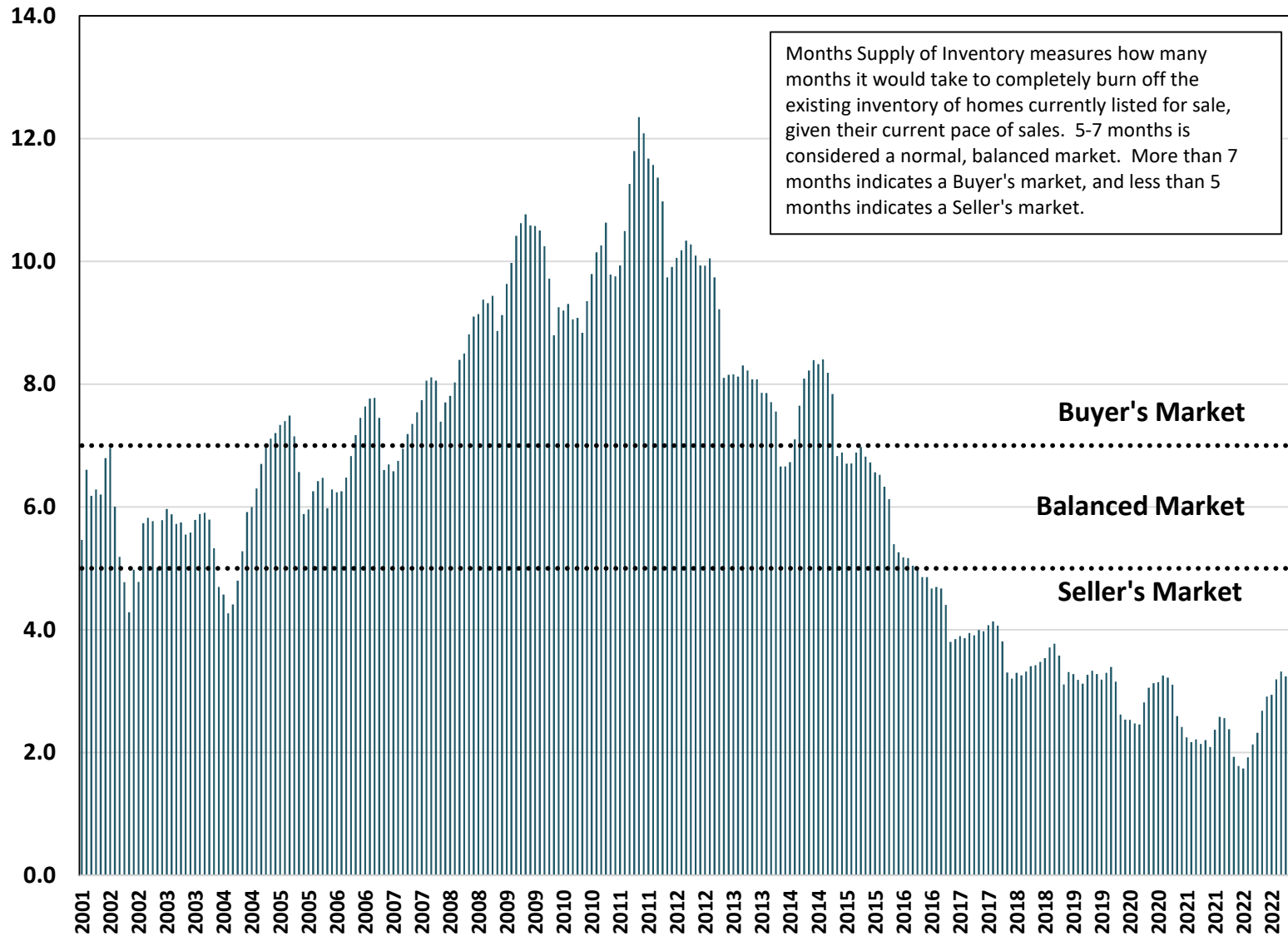
Philadelphia Houses Listed For Sale: Inventory v. Sales Rate



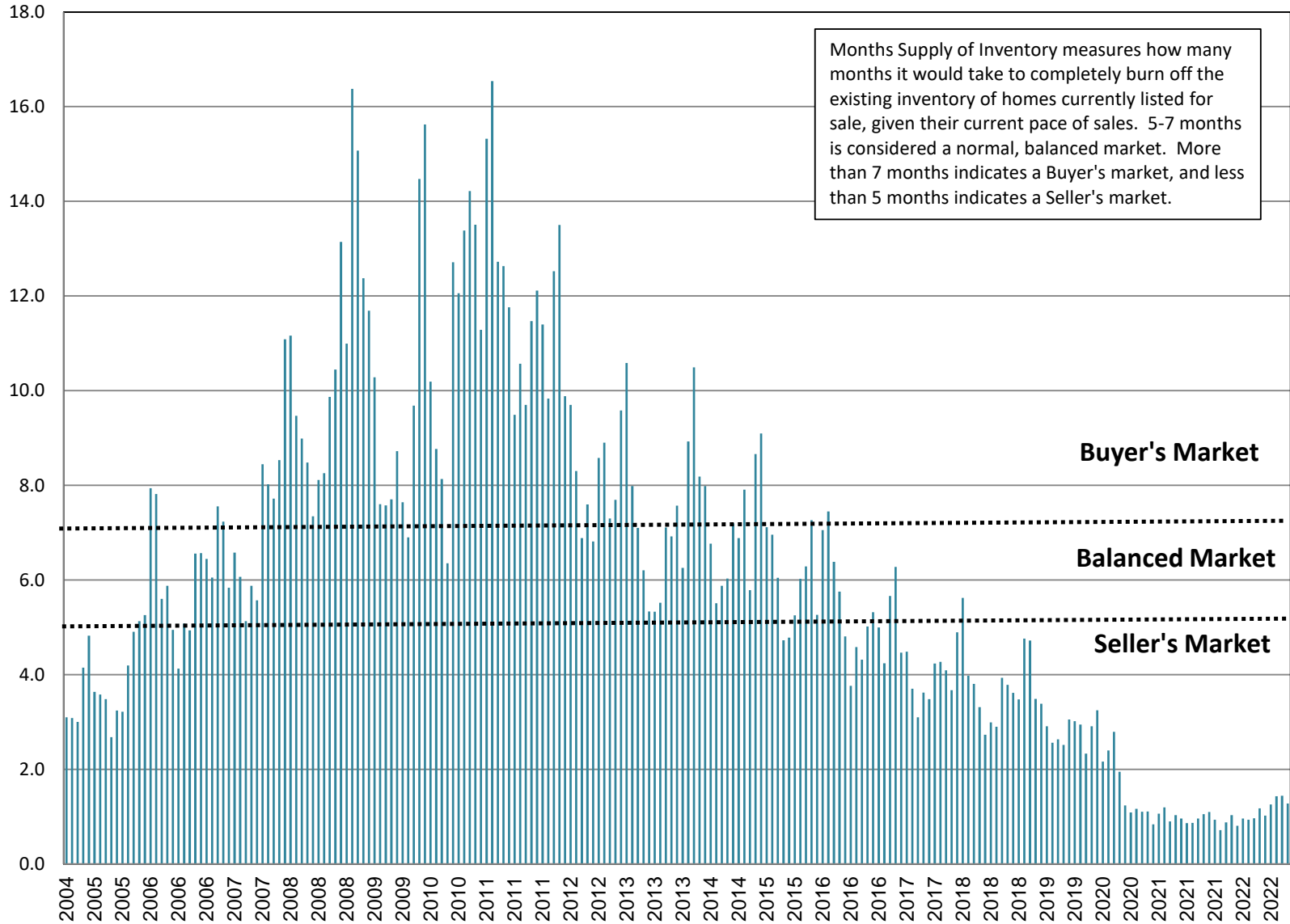
Philadelphia Suburb's Houses Listed For Sale: Inventory



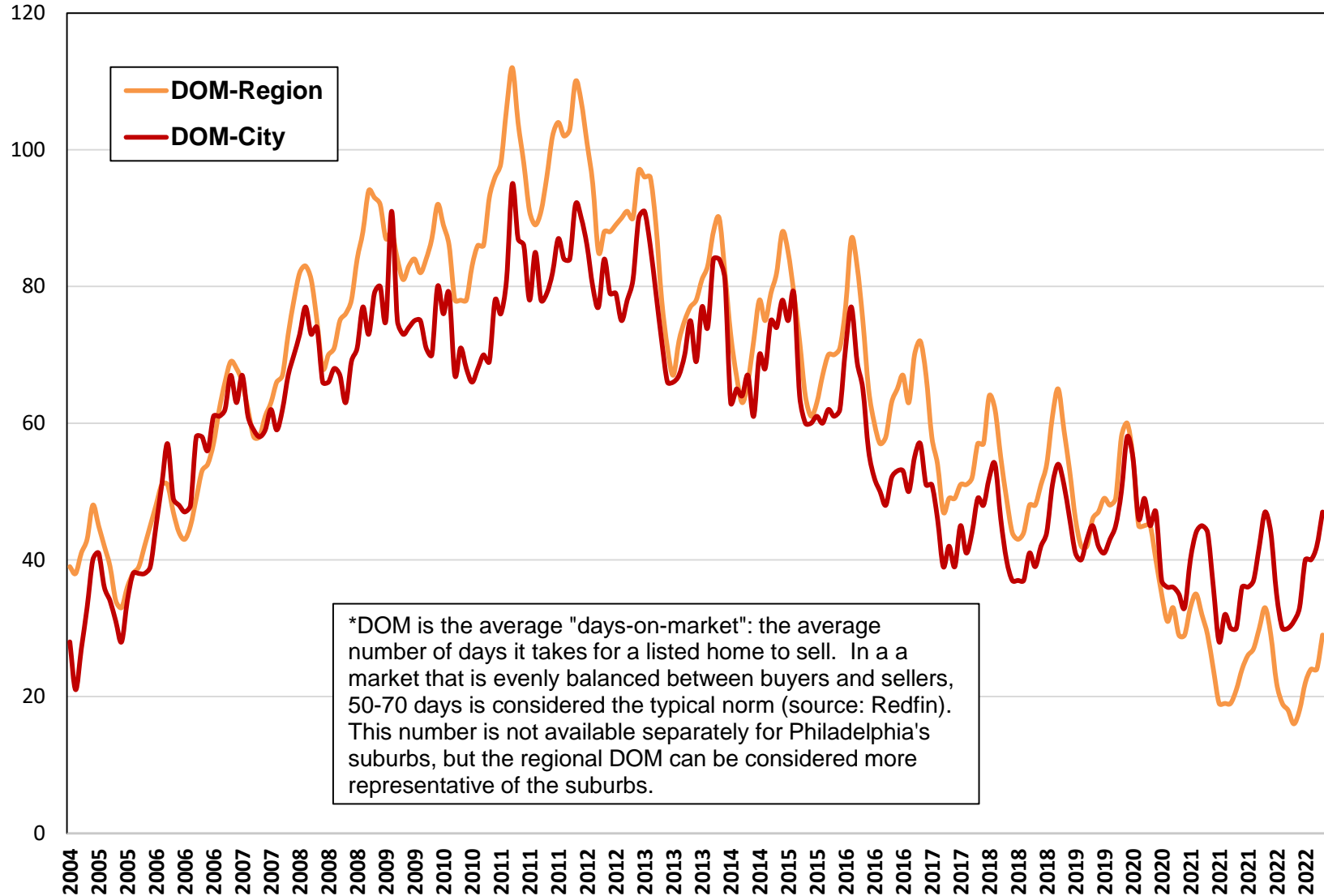
Months Supply of Inventory in Philadelphia



Months Supply of Inventory in Philadelphia Suburbs

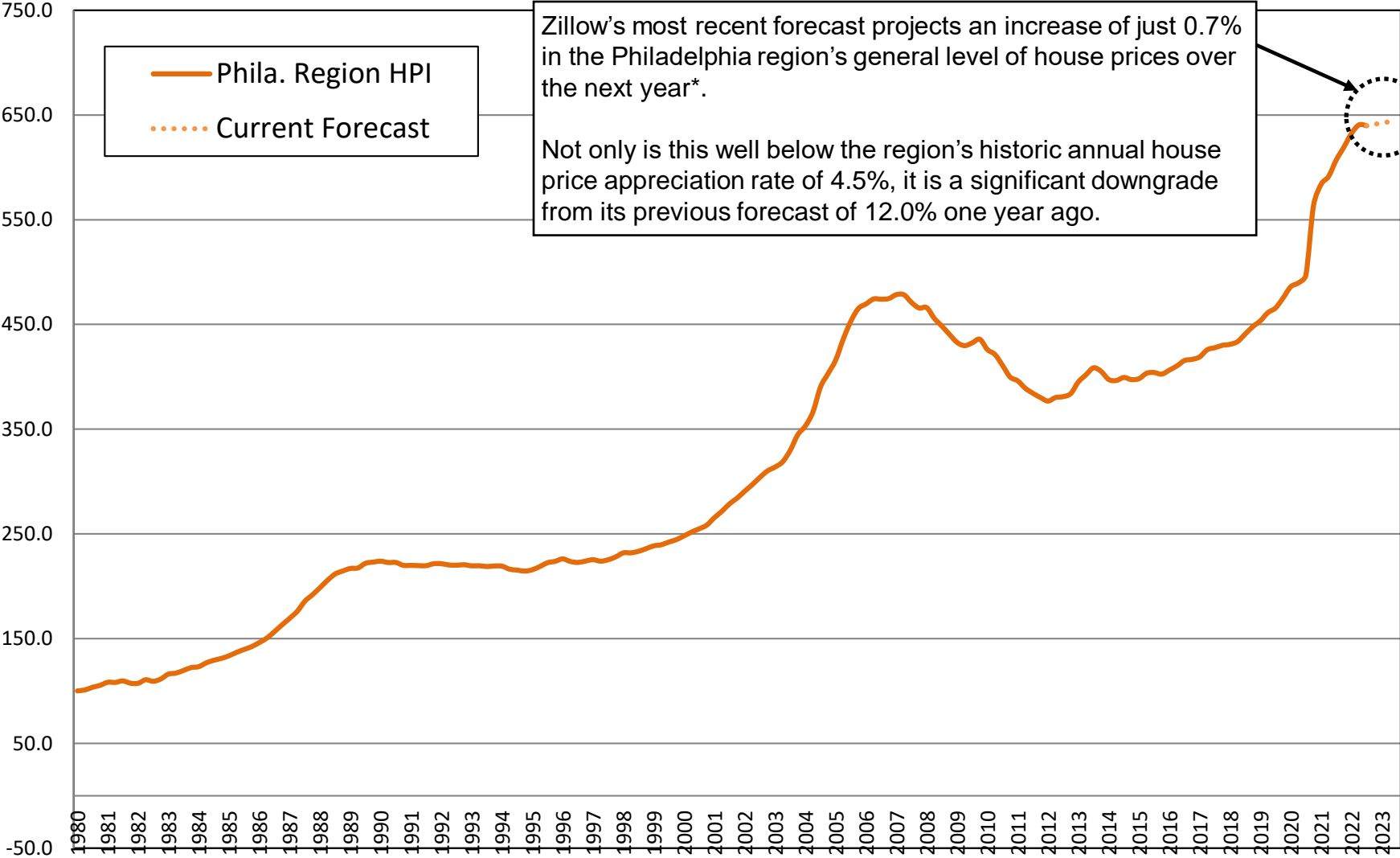


Average Days-on-Market* for Philadelphia Home Sales



*DOM is the average "days-on-market": the average number of days it takes for a listed home to sell. In a market that is evenly balanced between buyers and sellers, 50-70 days is considered the typical norm (source: Redfin). This number is not available separately for Philadelphia's suburbs, but the regional DOM can be considered more representative of the suburbs.

Philadelphia Region House Price Index: Actual v. Forecast



*Note: Zillow has not updated their house price forecast since November of last year.

Their website does not explain why, but does say that it will resume.