

PHILADELPHIA REGIONAL HOUSE PRICE INDICES



November 24, 2015

KEVIN C. GILLEN, Ph.D.

Kevin.C.Gillen@Drexel.edu

MEYERS RESEARCH
a Kennedy Wilson Company

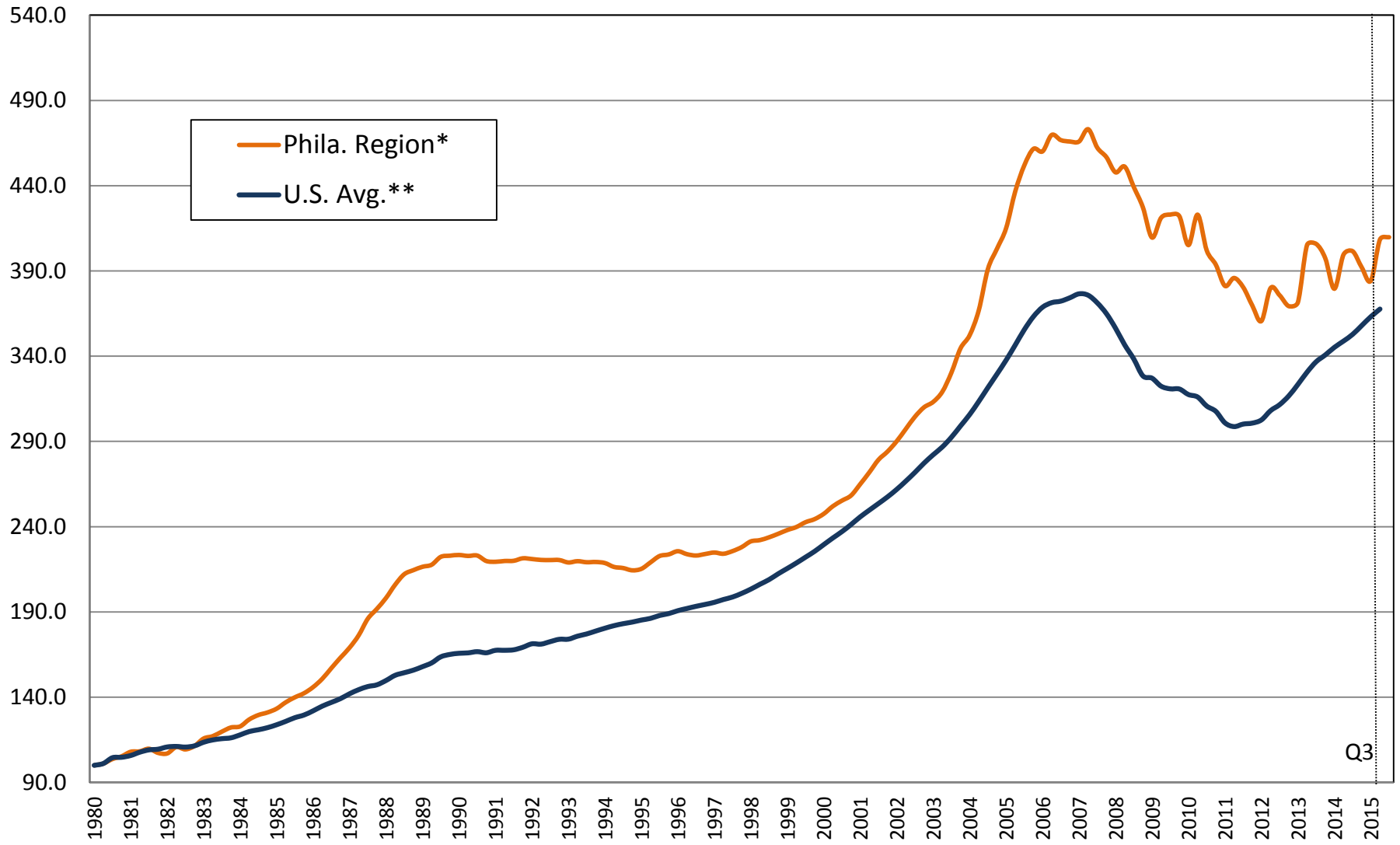
Disclaimers and Acknowledgments: The Lindy Institute for Urban Innovation at Drexel University provides this report free of charge to the public. The report is produced by Lindy Senior Research Fellow Kevin Gillen, in association with Meyers Research LLC. The author thanks Azavea.com, the Philadelphia 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.

© 2015, Drexel University and Meyers Research LLC, All Rights Reserved.

MEYERS RESEARCH  **Drexel**
a Kennedy Wilson Company UNIVERSITY

Philadelphia Regional House Price Indices 1980-2015

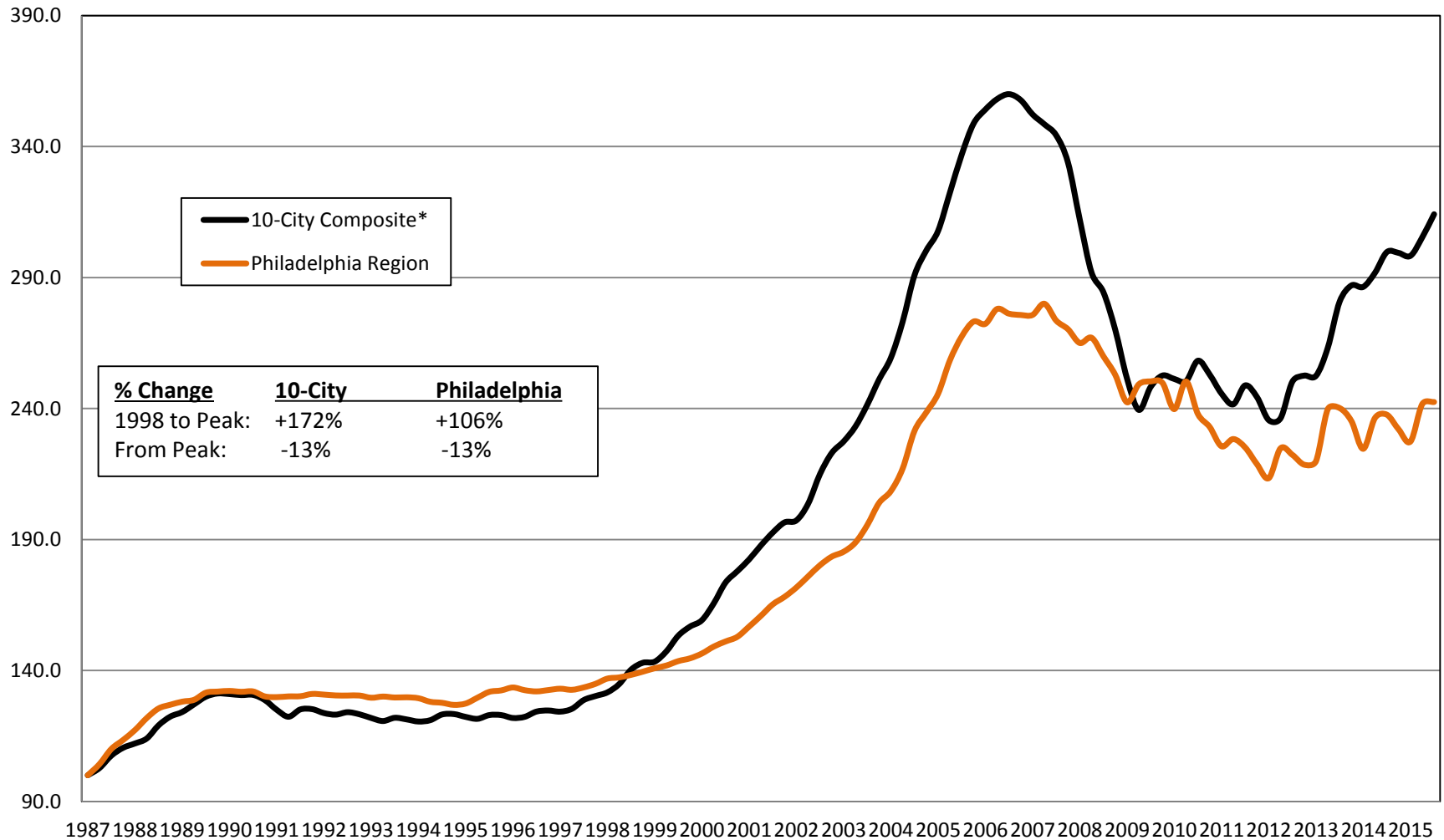
1980Q1=100



*Empirically estimated by Kevin C. Gillen, PhD

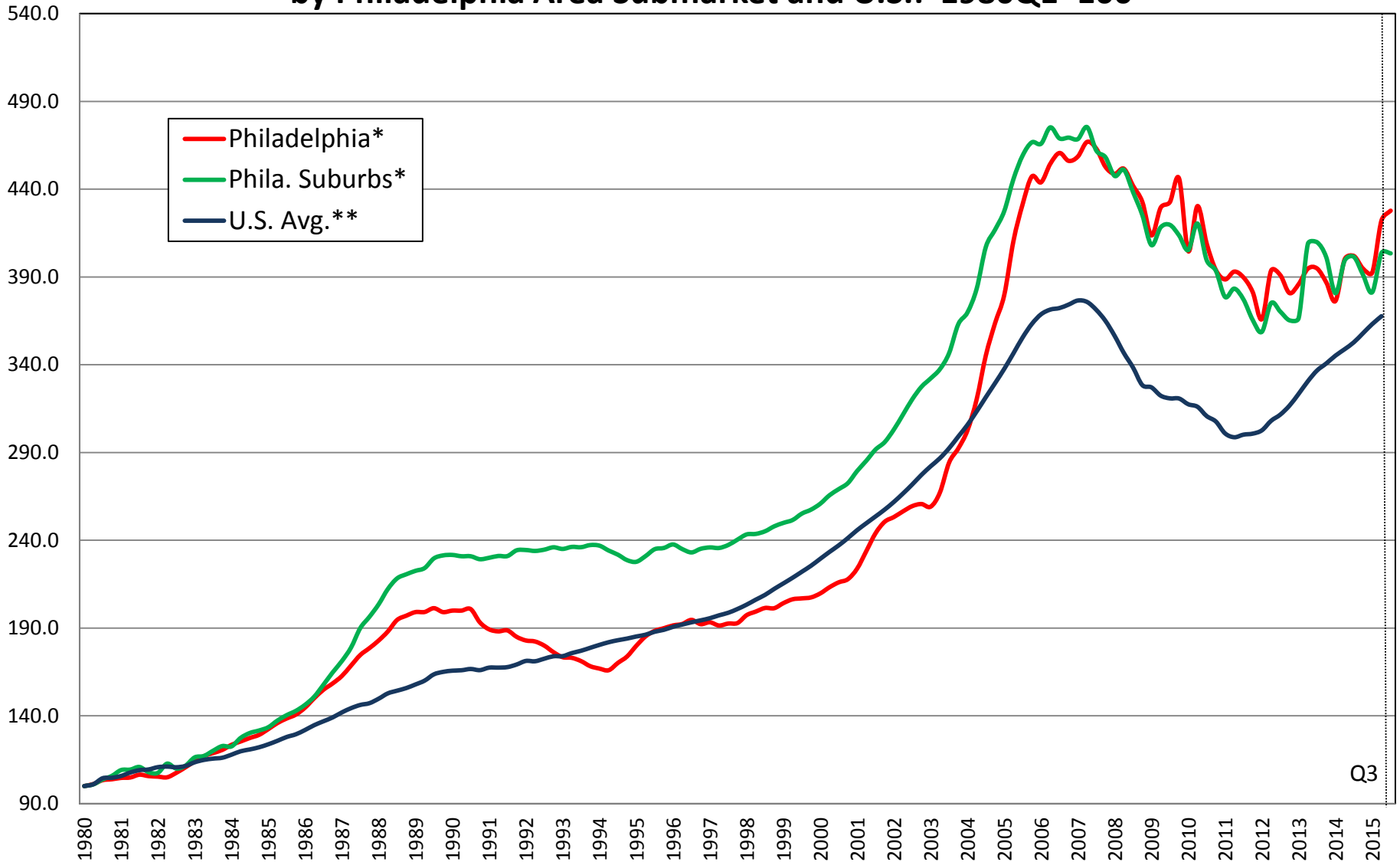
**Courtesy Federal Housing Finance Agency (FHFA)

House Price Appreciation 1987-2015: 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.

Philadelphia Regional House Price Indices 1980-2015 by Philadelphia Area Submarket and U.S.: 1980Q1=100



*Empirically estimated by Kevin C. Gillen, PhD **Courtesy Federal Housing Finance Agency (FHFA)

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

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

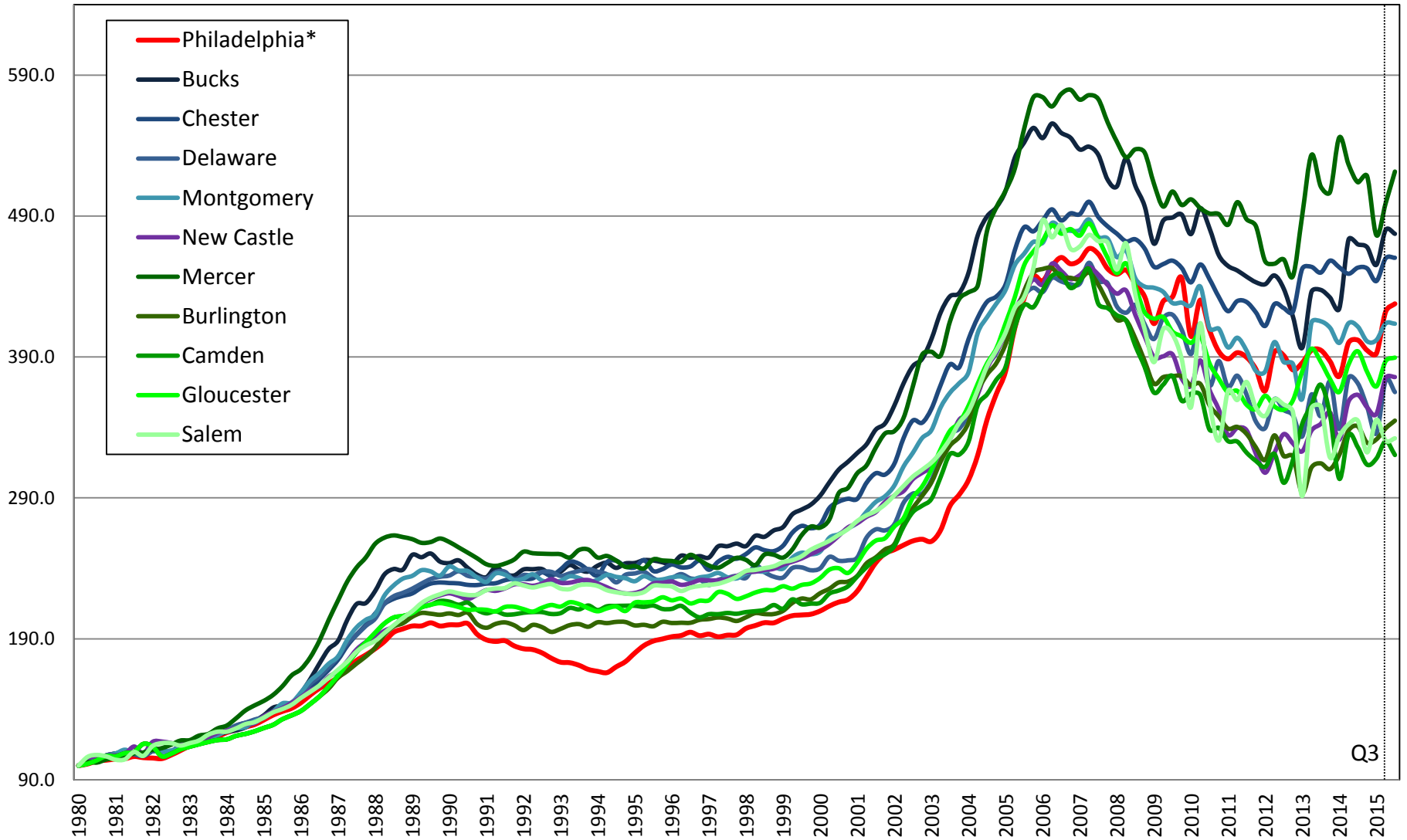
Period	Philadelphia Region*	Philadelphia County*	Philadelphia Suburbs*	U.S.A.**
36-Year	141.0%	145.3%	139.5%	130.2%
10-Year	-9.8%	-0.9%	-13.0%	5.9%
1-Year	2.0%	6.2%	0.5%	5.2%
1-Quarter	0.3%	1.3%	0.0%	1.2%

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

**Source: Federal Housing Finance Agency (FHFA). FHFA numbers are through 2015 Q2 only.

Philadelphia Regional House Price Indices 1980-2015, by County

1980Q1=100



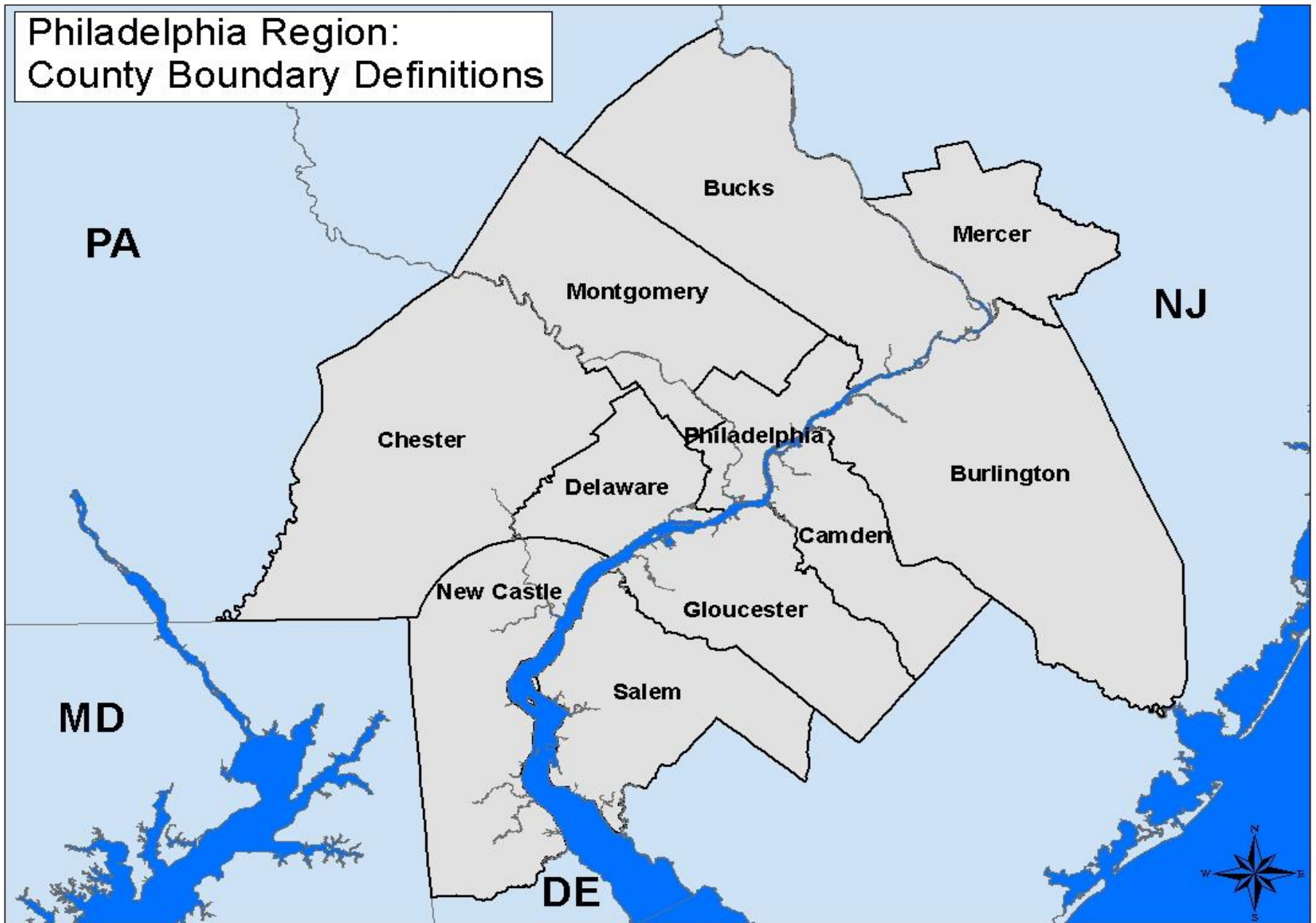
*All indices empirically estimated by Kevin C. Gillen, PhD

Philadelphia Region House Price Appreciation Rates by County

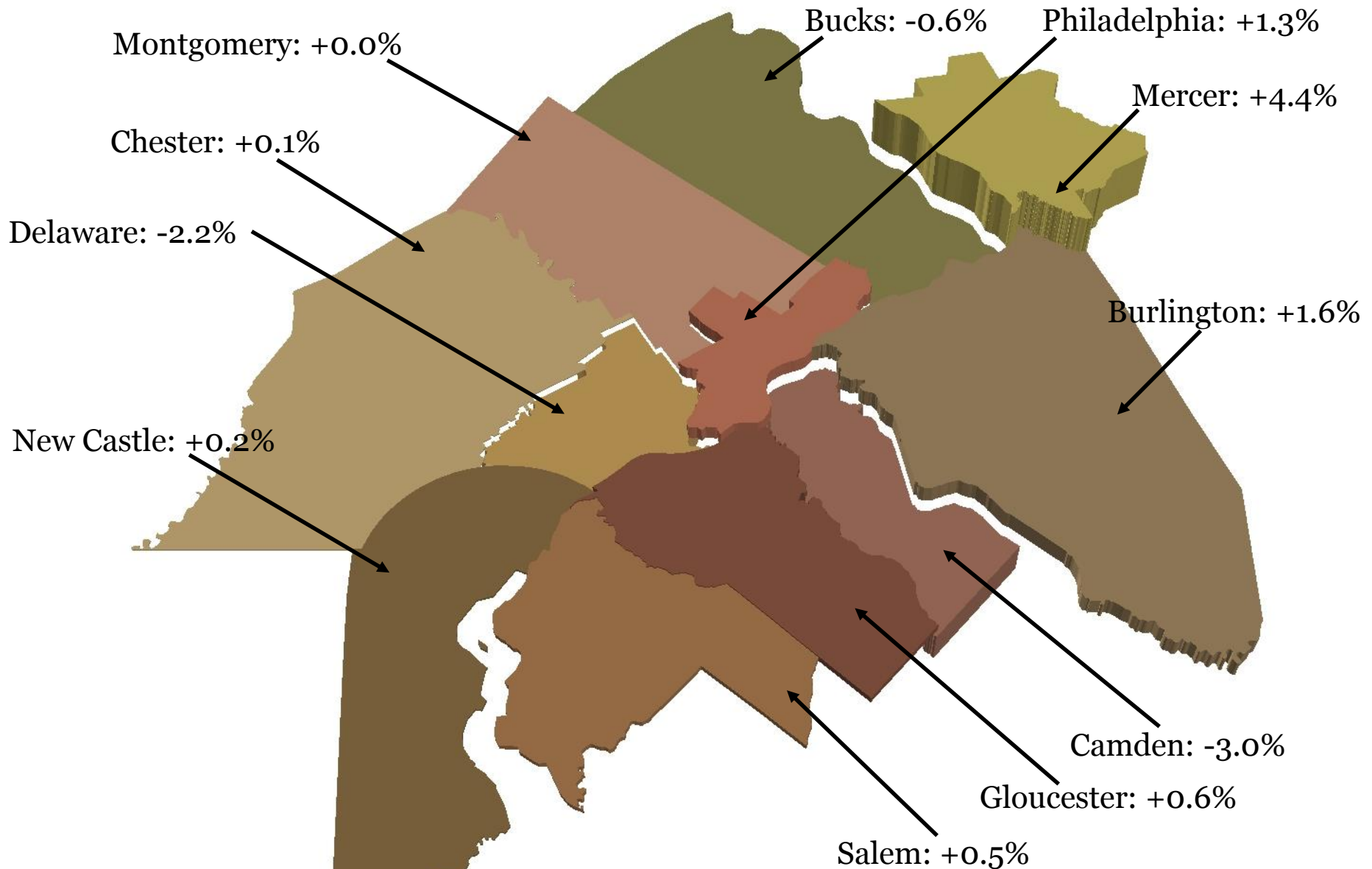
Period	Philadelphia	Bucks	Chester	Delaware	Montgomery	New Castle	Mercer	Burlington	Camden	Gloucester	Salem
36-Year	145.3%	156.3%	152.7%	129.5%	142.0%	132.4%	165.2%	123.8%	116.4%	136.0%	120.1%
10-Year	-0.9%	-12.7%	-4.6%	-17.3%	-11.3%	-14.6%	-5.6%	-23.6%	-28.7%	-15.5%	-26.4%
1-Year	6.2%	1.6%	1.5%	-1.7%	0.5%	3.4%	1.5%	1.2%	-1.7%	-1.2%	-3.7%
1-Quarter	1.3%	-0.6%	0.1%	-2.2%	0.0%	0.2%	4.4%	1.6%	-3.0%	0.6%	0.5%

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

Philadelphia Region: County Boundary Definitions

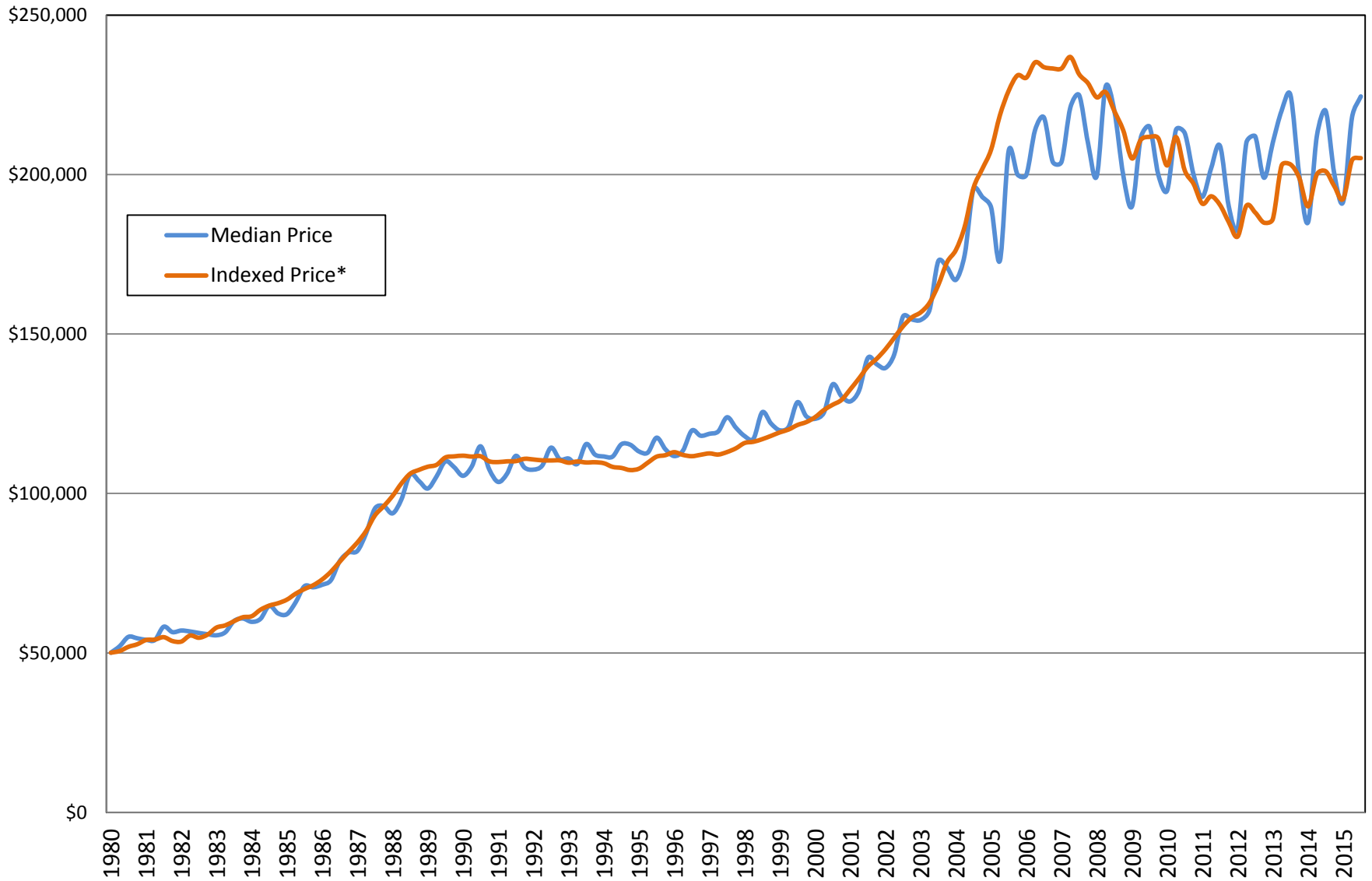


2015 Q3 House Price Rate of Change by County



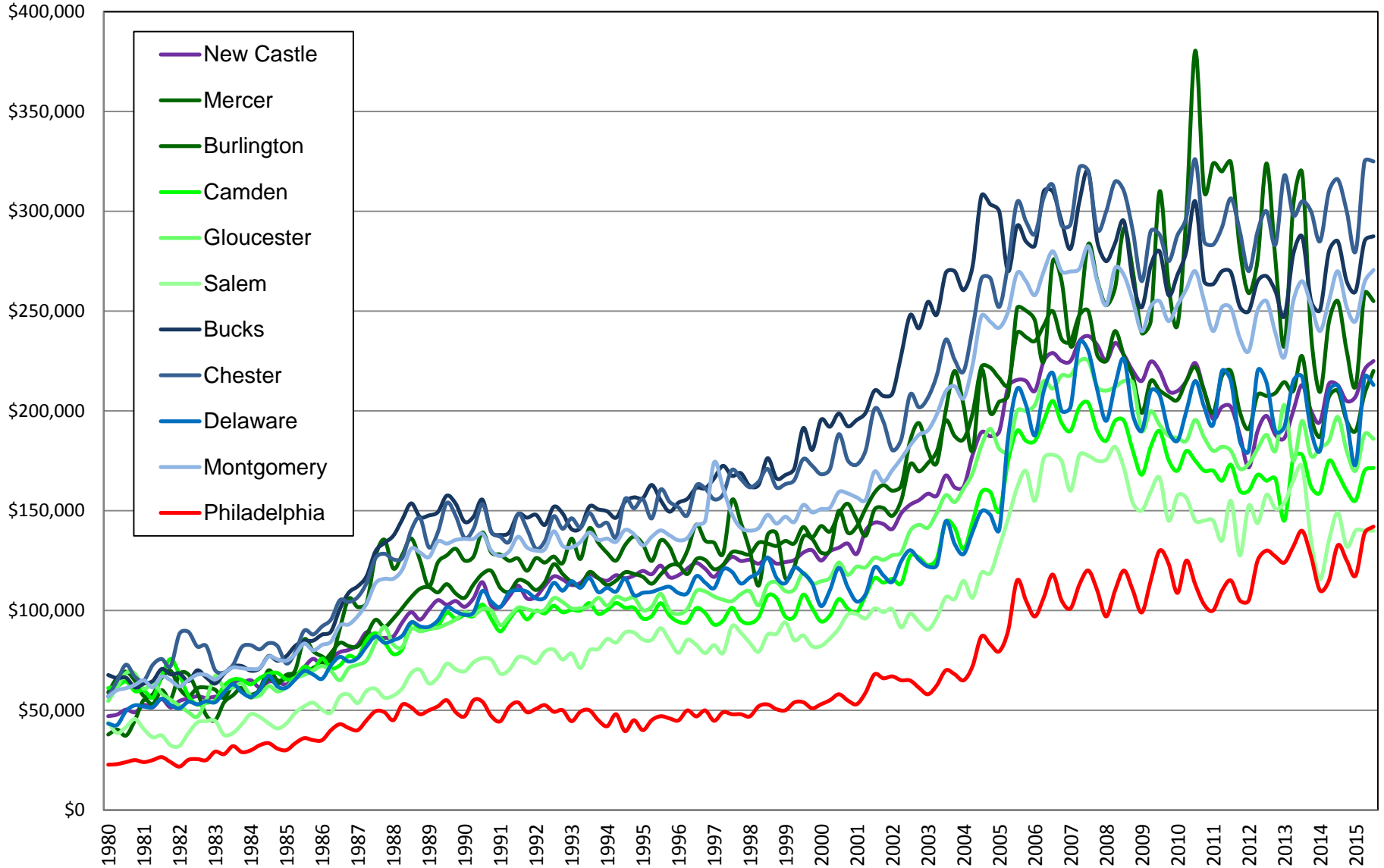
Note: Each county is extruded by its average change in house values during 2015 Q3 in order to reflect its growth (or depreciation) rate relative to other counties.

Median Regional House Price v. Indexed Regional House Price

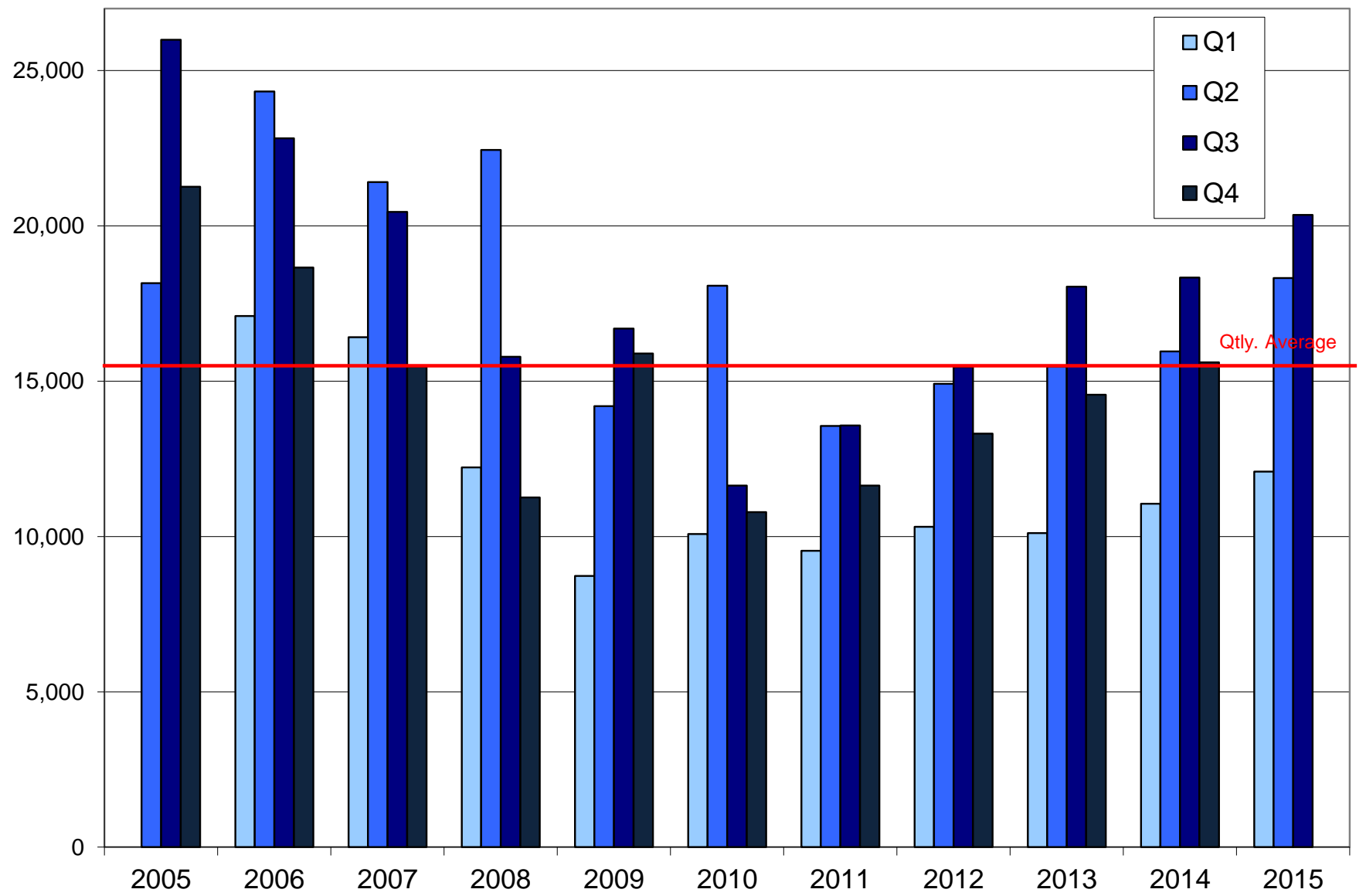


*Empirically estimated by Kevin C. Gillen, PhD

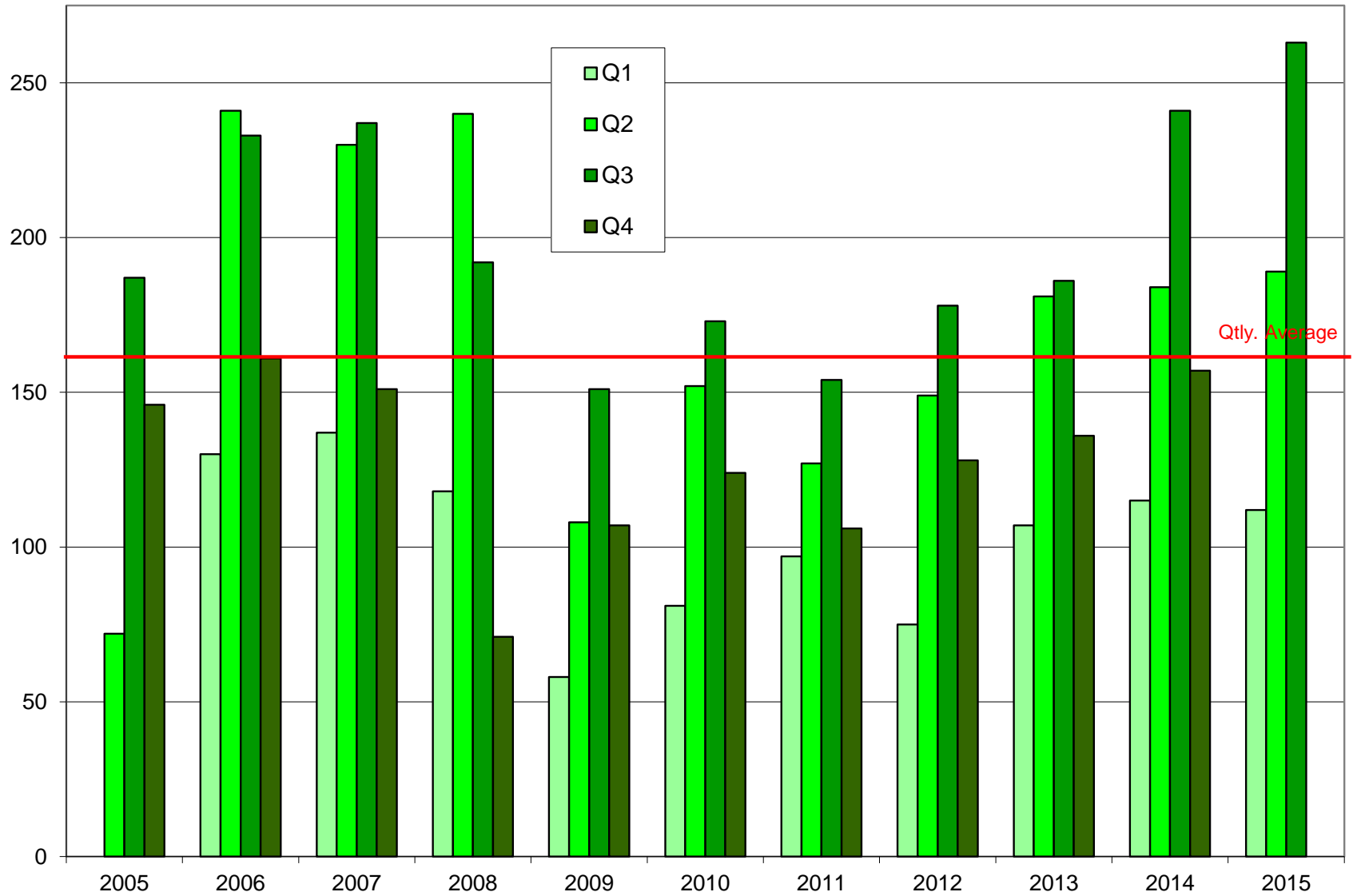
Median House Price by County: 1980-2015



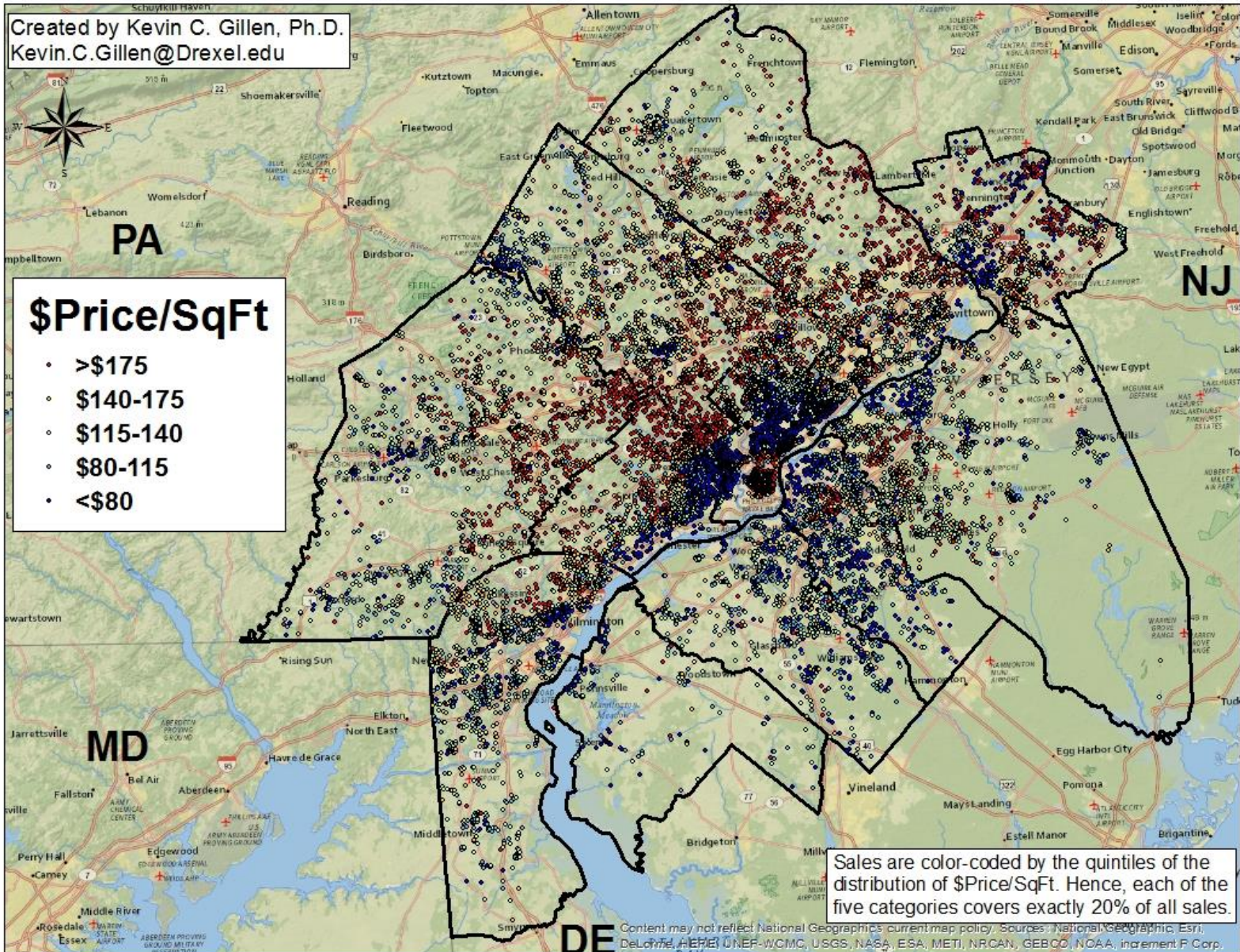
Number of Regional House Sales per Quarter: 2005-2015



Number of Regional House Sales 2005-2015 with Price >= \$1m

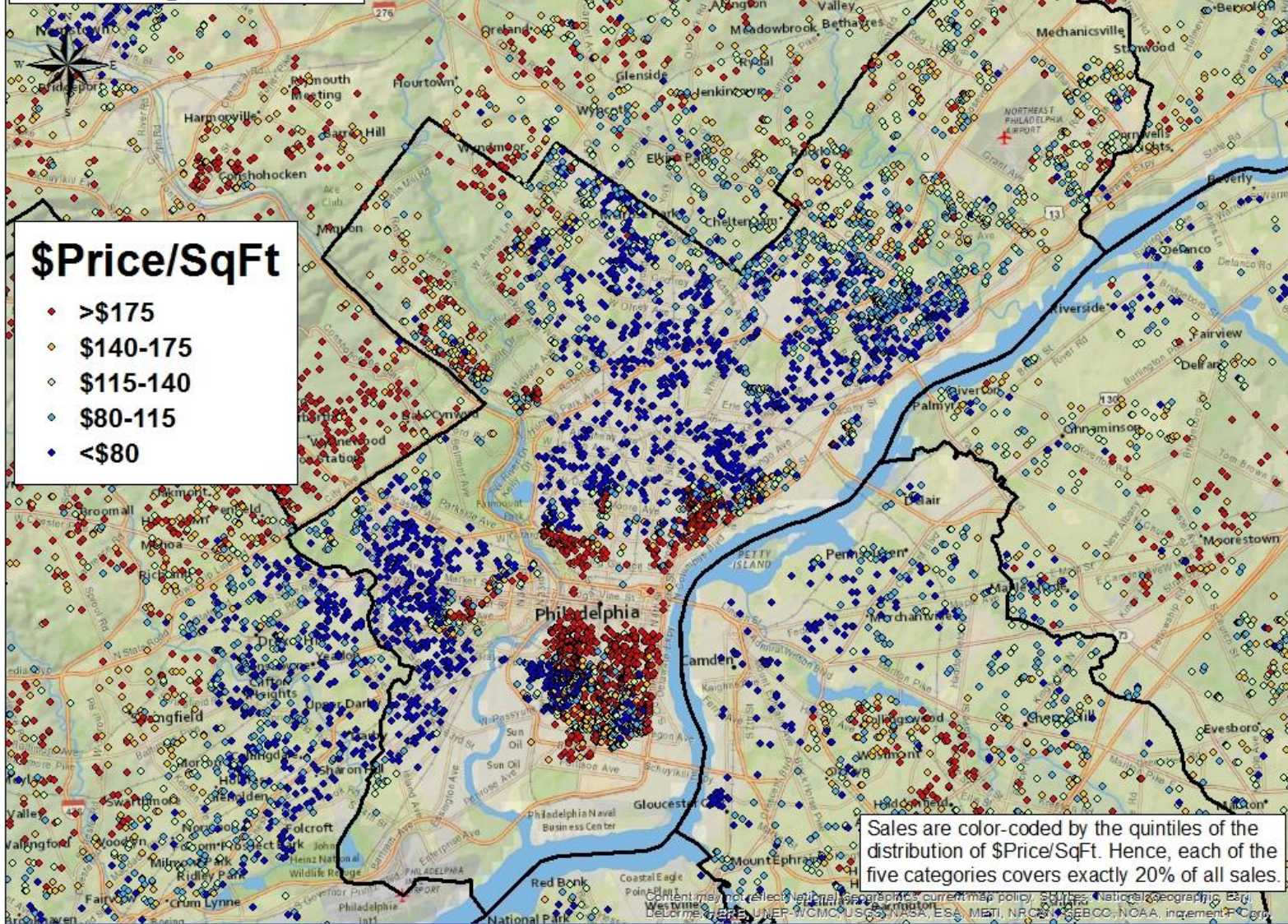


Philadelphia Region House Sales in 2015 Q3

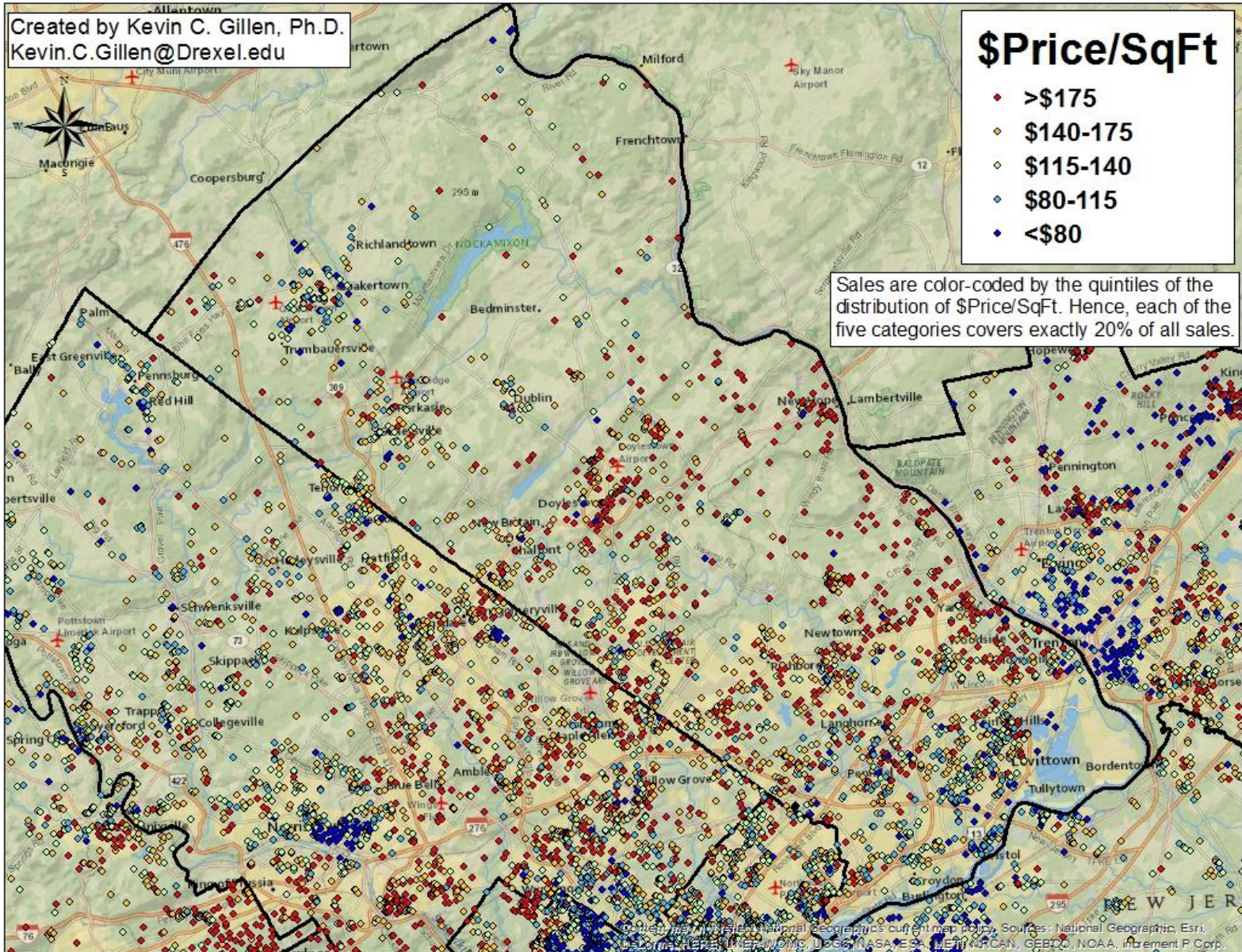


Philadelphia County House Sales in 2015 Q3

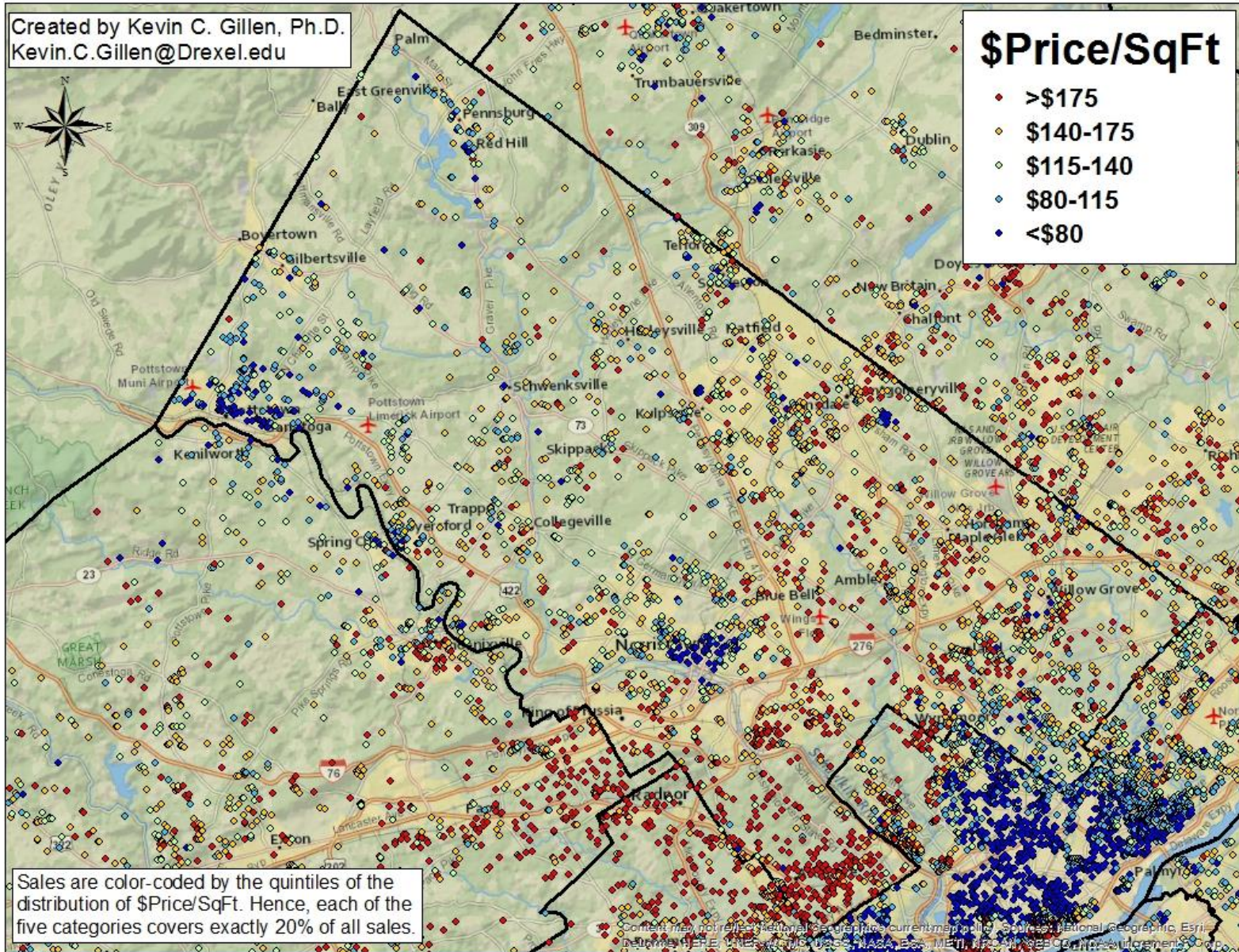
Created by Kevin C. Gillen, Ph.D.
Kevin.C.Gillen@Drexel.edu



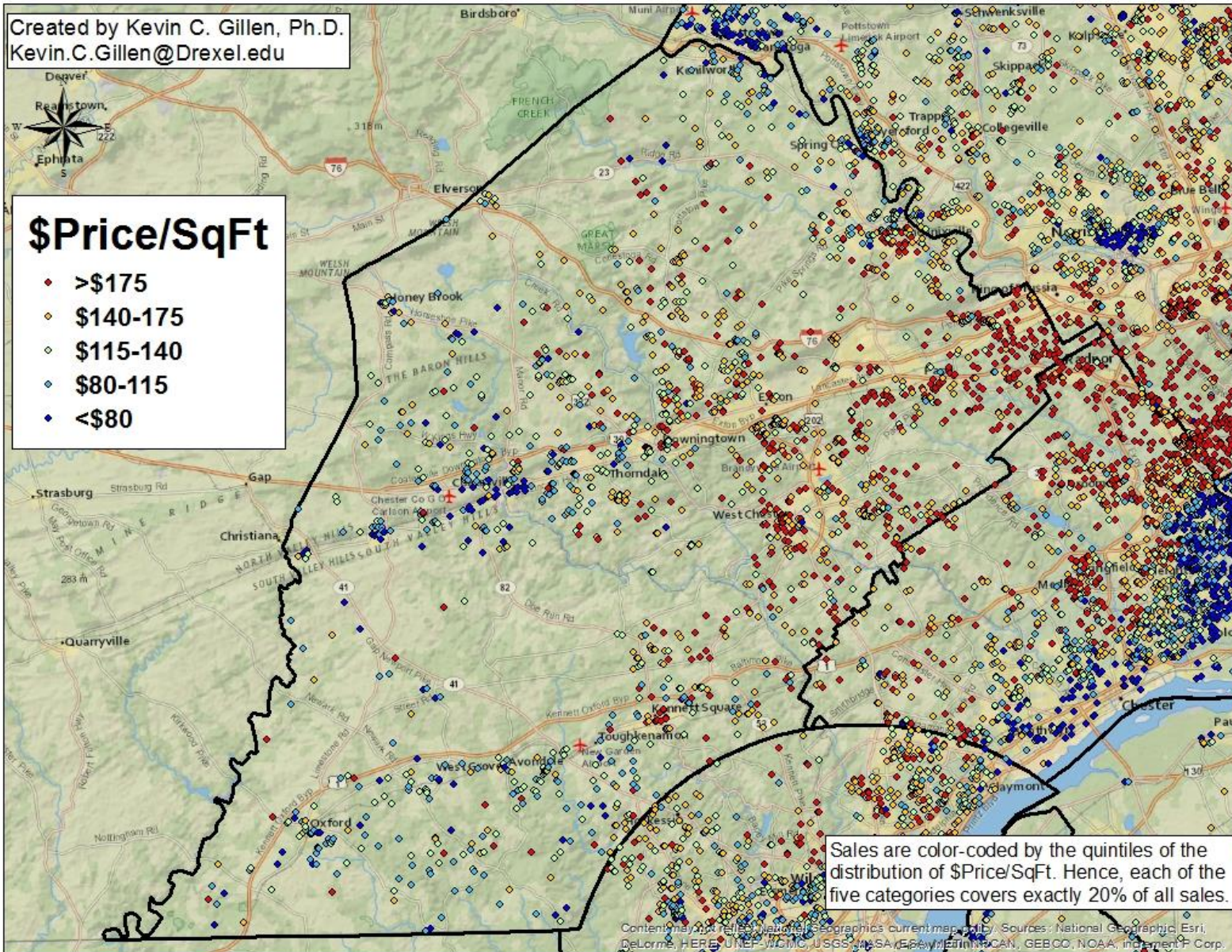
Bucks County House Sales in 2015 Q3



Montgomery County House Sales in 2015 Q3



Chester County House Sales in 2015 Q3

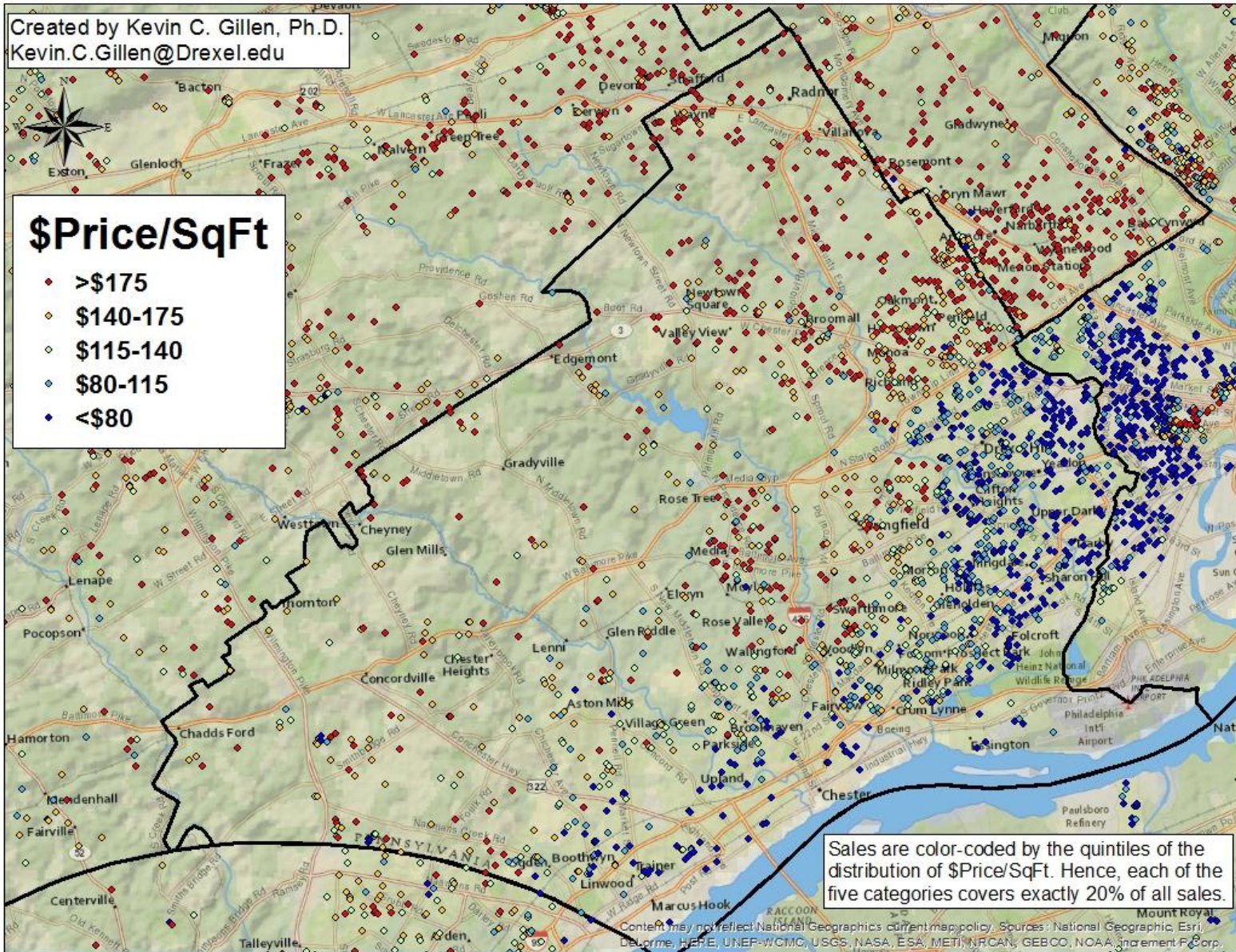


Delaware County House Sales in 2015 Q3

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

\$Price/SqFt

- ◆ >\$175
- ◆ \$140-175
- ◆ \$115-140
- ◆ \$80-115
- ◆ <\$80



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.

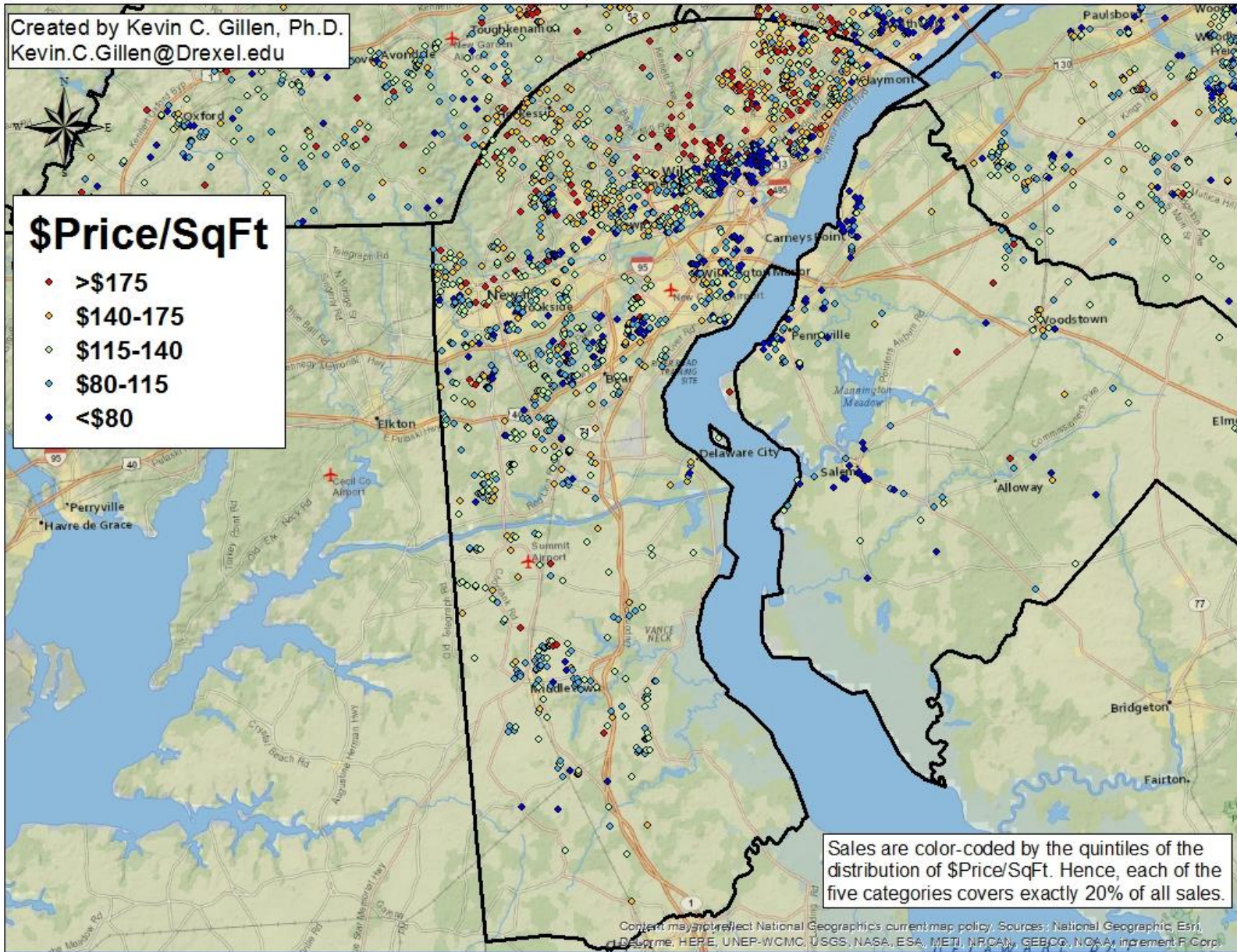
Content may not reflect National Geographic's current map policy. Sources: National Geographic Esri, Delaware, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, Swiremap, P.Corp.

New Castle County House Sales in 2015 Q3

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

\$Price/SqFt

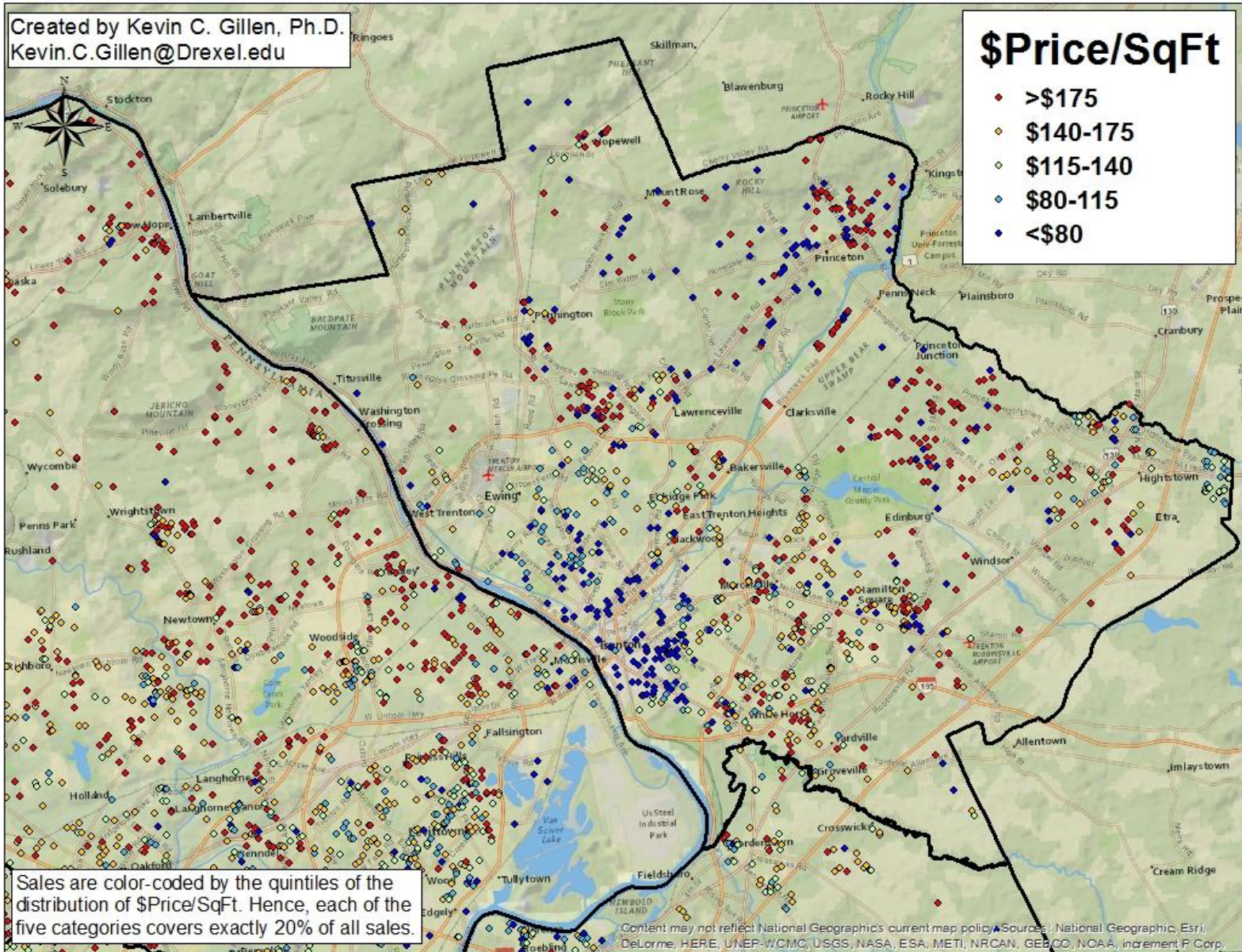
- ◆ >\$175
- ◆ \$140-175
- ◆ \$115-140
- ◆ \$80-115
- ◆ <\$80



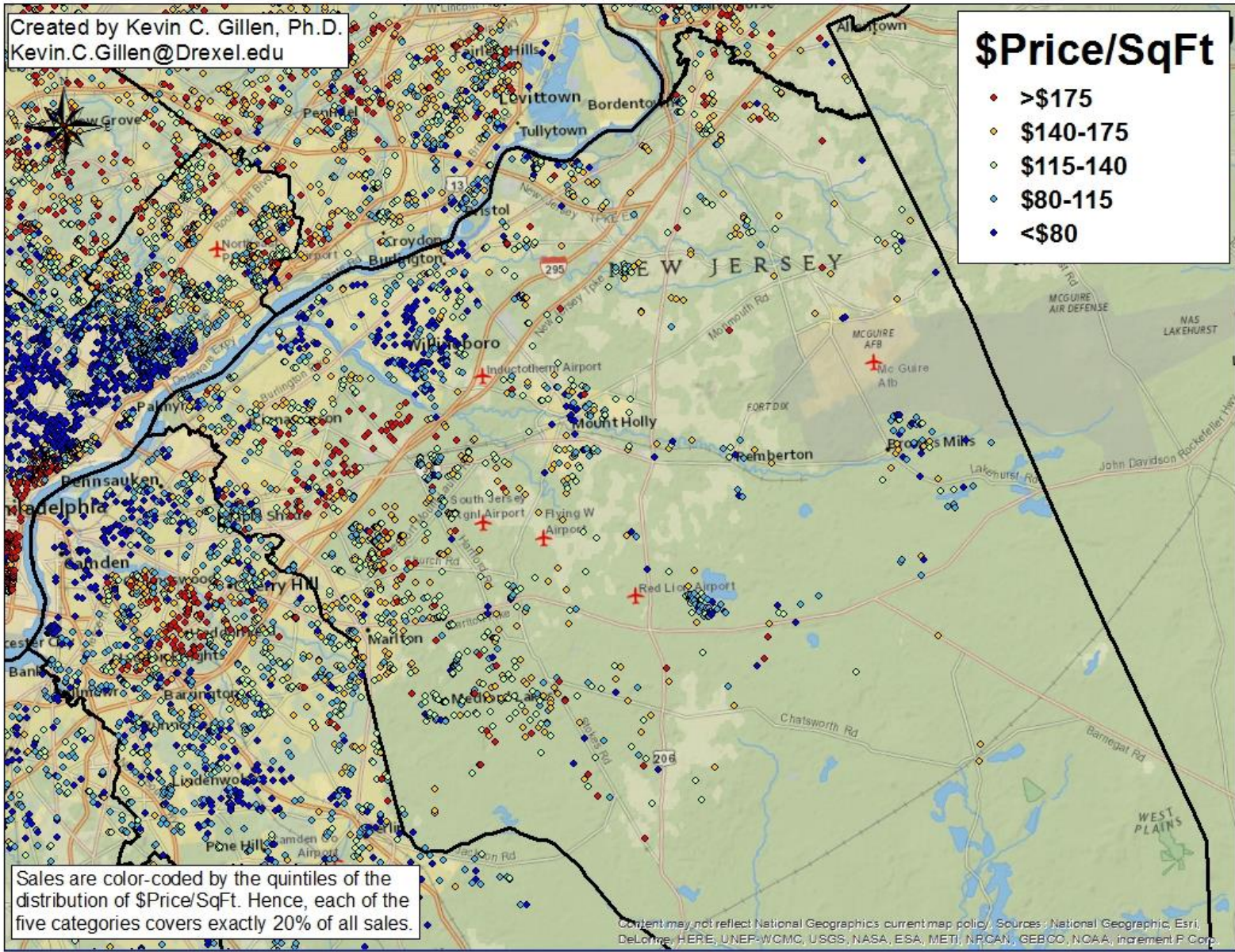
Sales are color-coded by the quintiles of the distribution of \$Price/SqFt. Hence, each of the five categories covers exactly 20% of all sales.

Content may reflect National Geographic's current map policy. Sources: National Geographic Esri, USGS, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment F Corp.

Mercer County House Sales in 2015 Q3



Burlington County House Sales in 2015 Q3

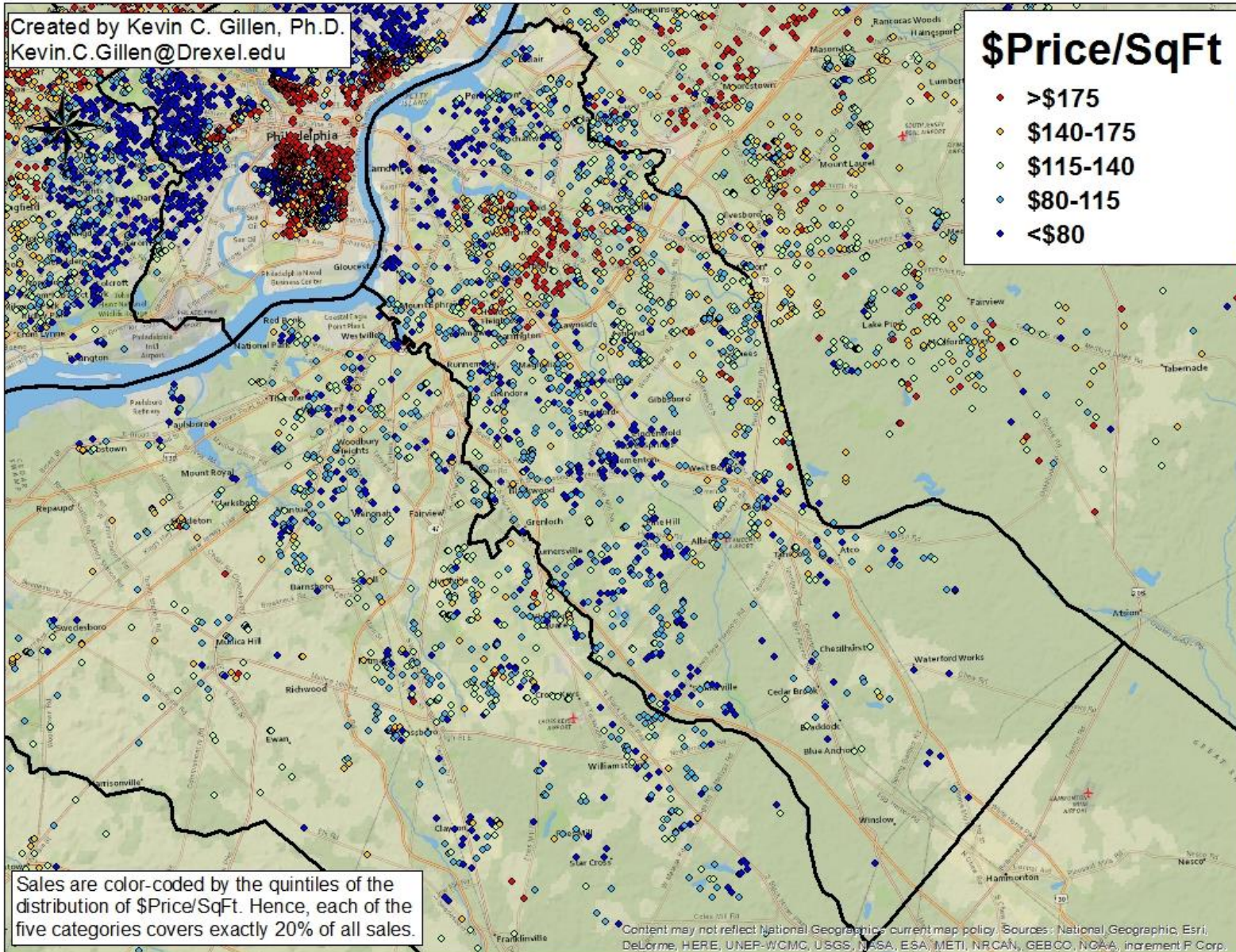


Camden County House Sales in 2015 Q3

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

\$Price/SqFt

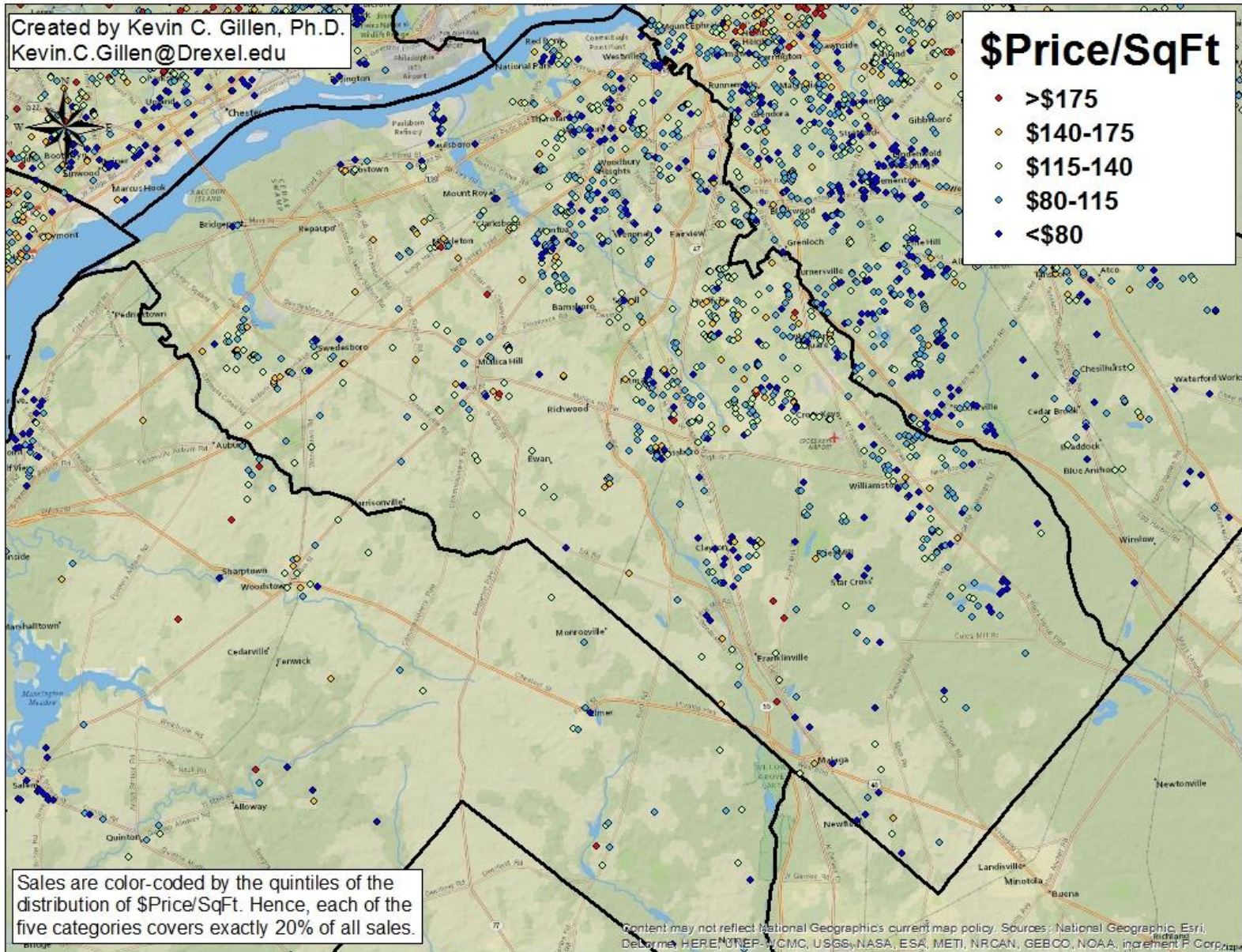
- ◆ >\$175
- ◆ \$140-175
- ◆ \$115-140
- ◆ \$80-115
- ◆ <\$80



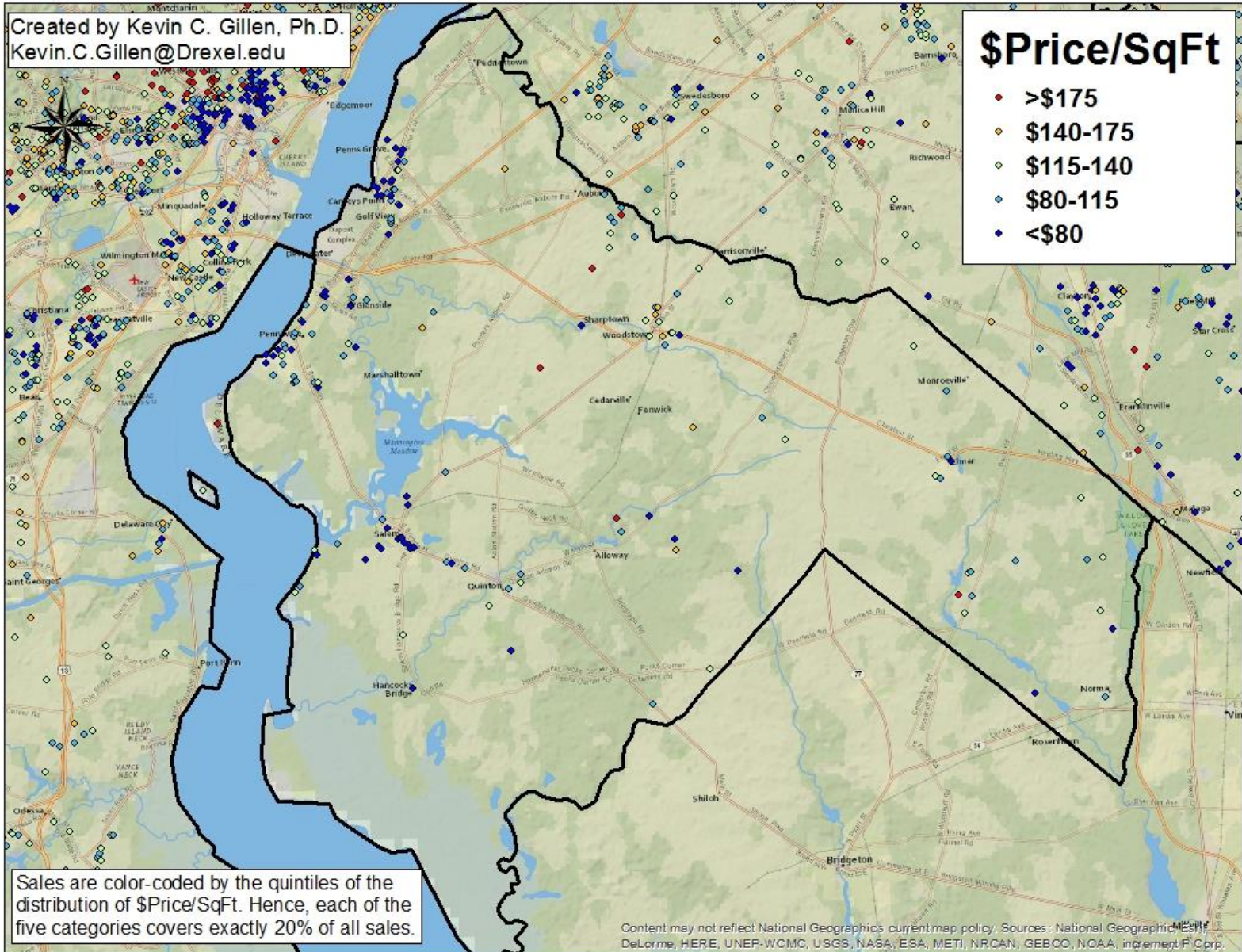
Sales are color-coded by the quintiles of the distribution of \$Price/SqFt. Hence, each of the five categories covers exactly 20% of all sales.

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

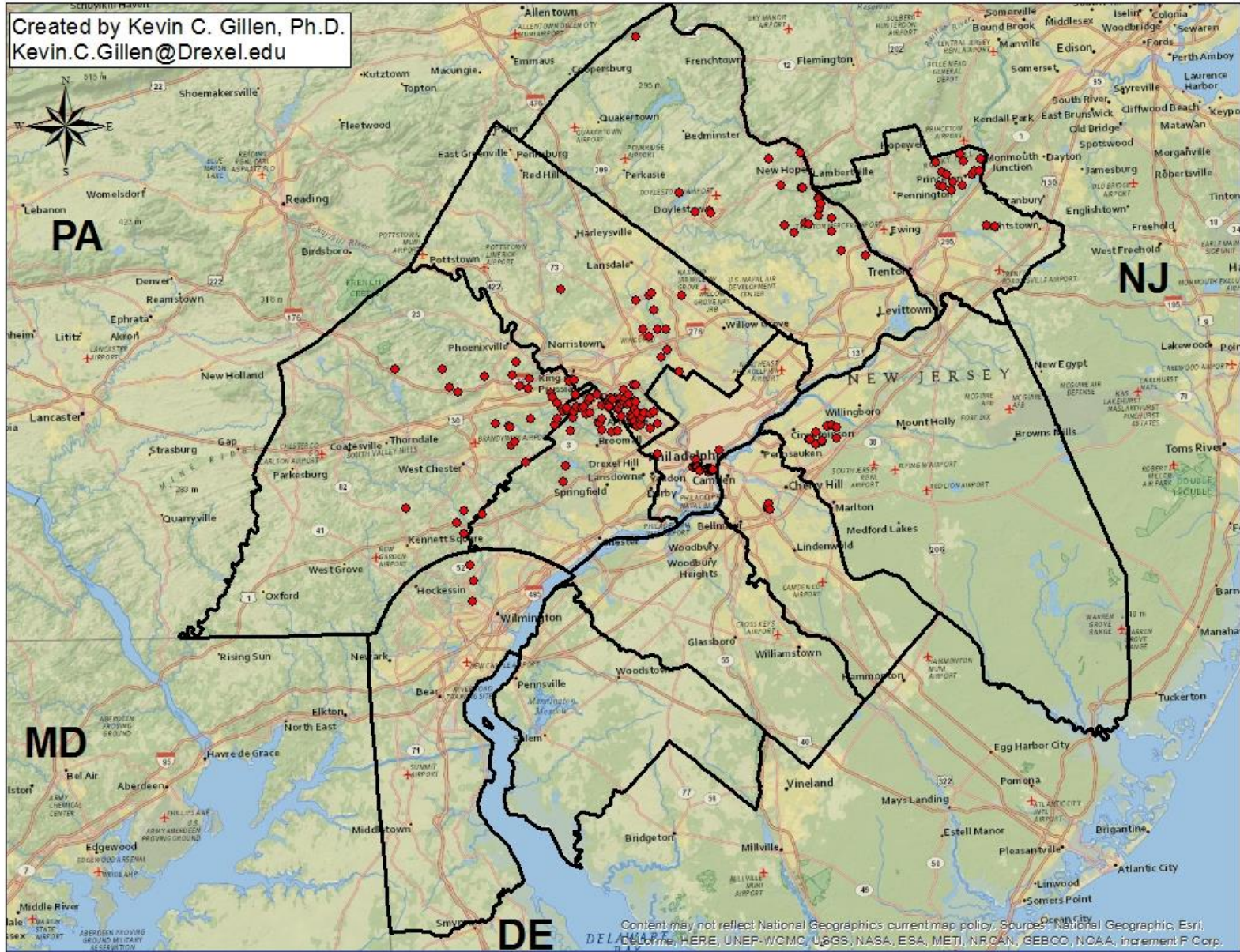
Gloucester County House Sales in 2015 Q3



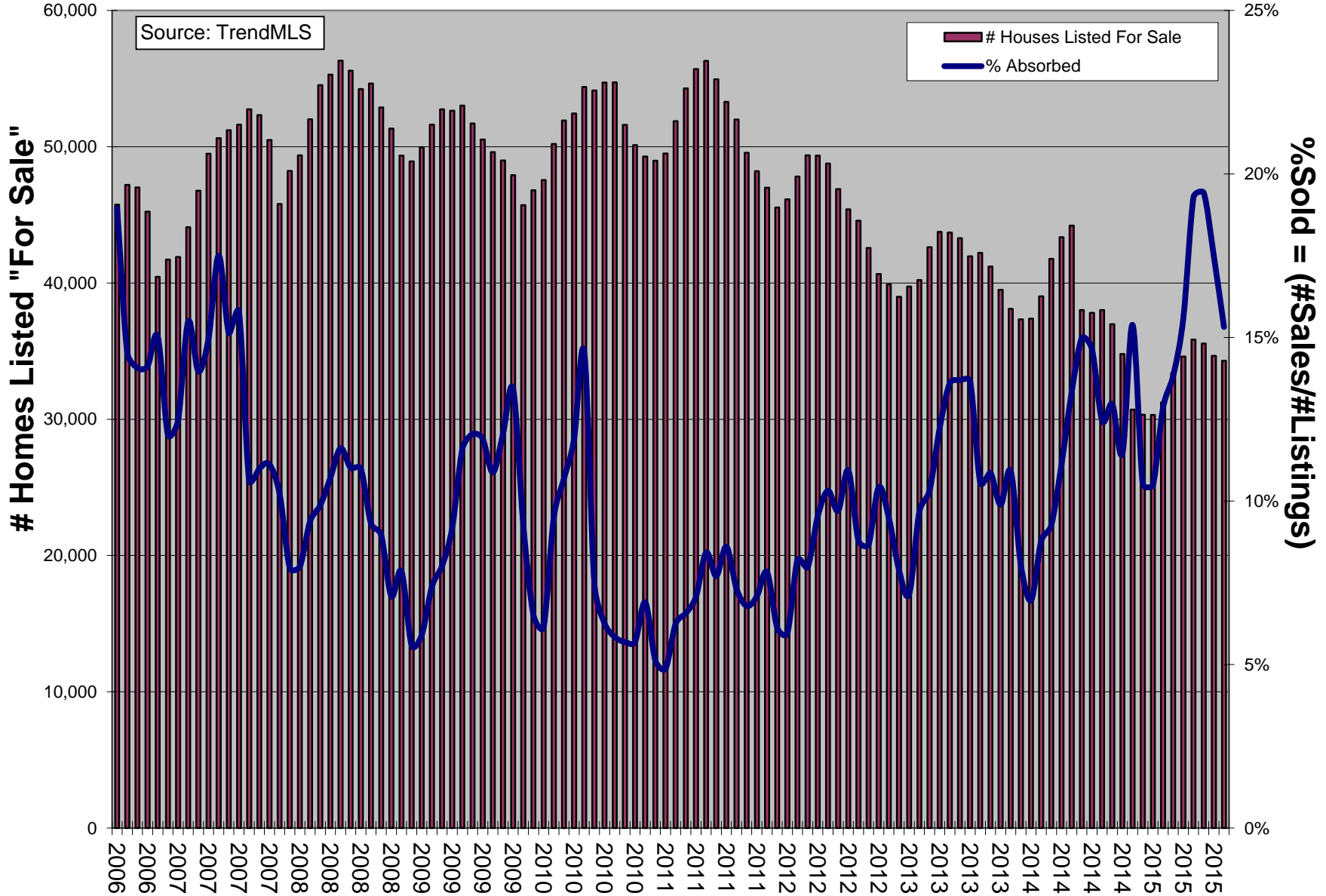
Salem County House Sales in 2015 Q3



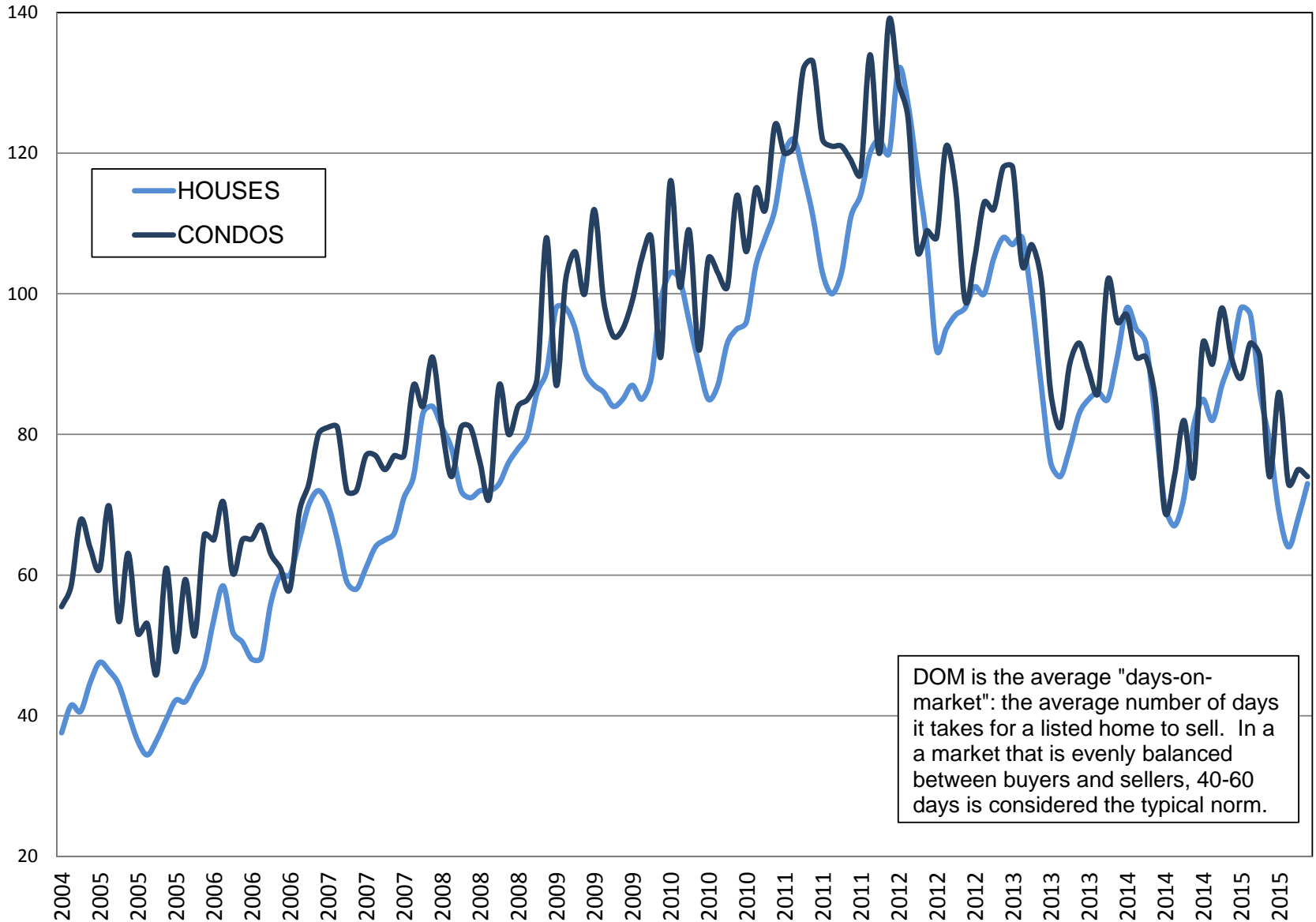
+ \$1 Million Dollar House Sales in 2015 Q3



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

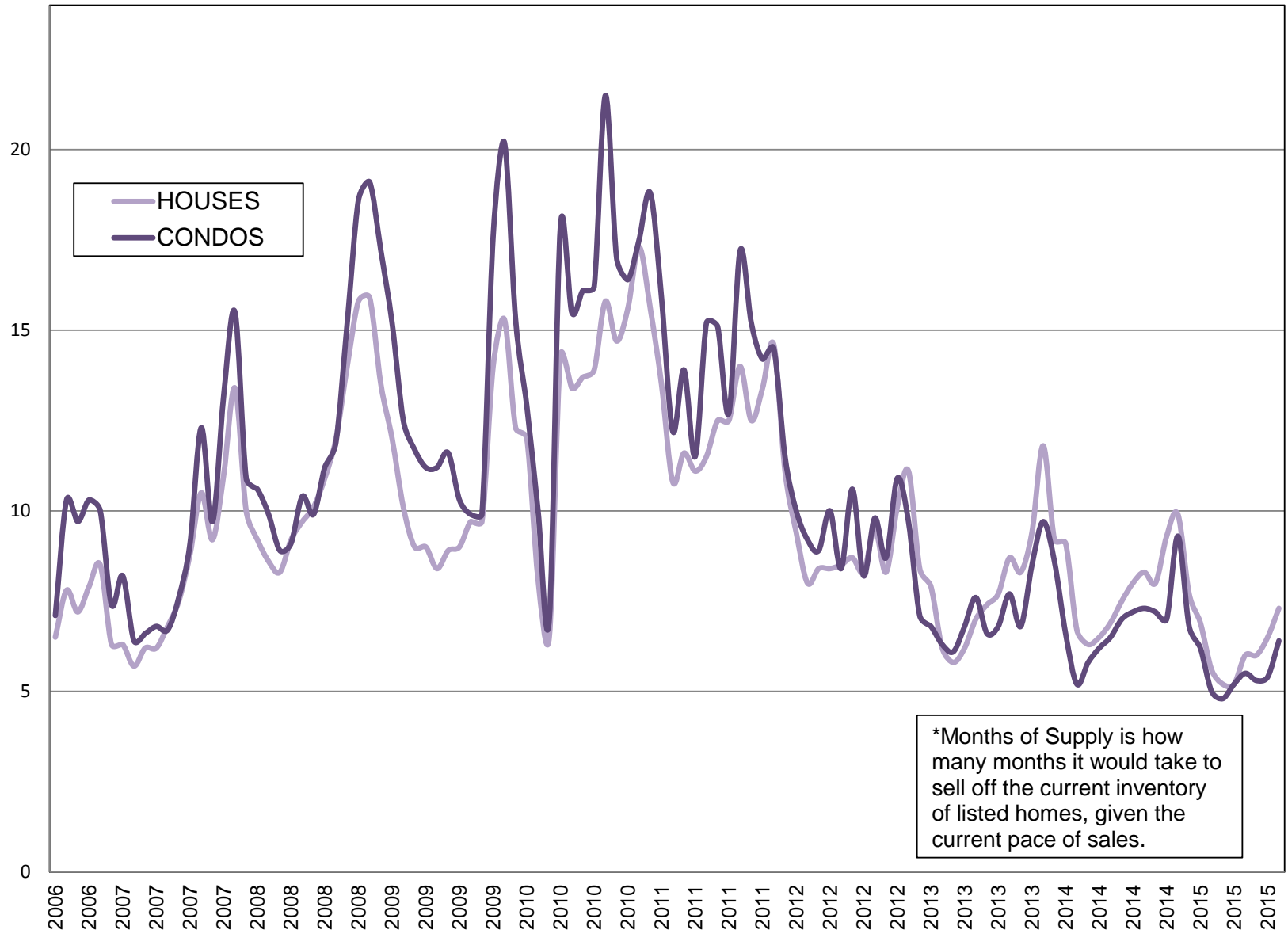


Philadelphia Region Avg. DOM*: Houses v. Condos



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, 40-60 days is considered the typical norm.

Philadelphia Region Months of Supply*: Houses v. Condos



*Months of Supply is how many months it would take to sell off the current inventory of listed homes, given the current pace of sales.

Top 10 Largest Homebuilding Projects Currently in the Philadelphia Region By Total Number of Units Planned

Largest Homebuilding Projects in the Philadelphia Region

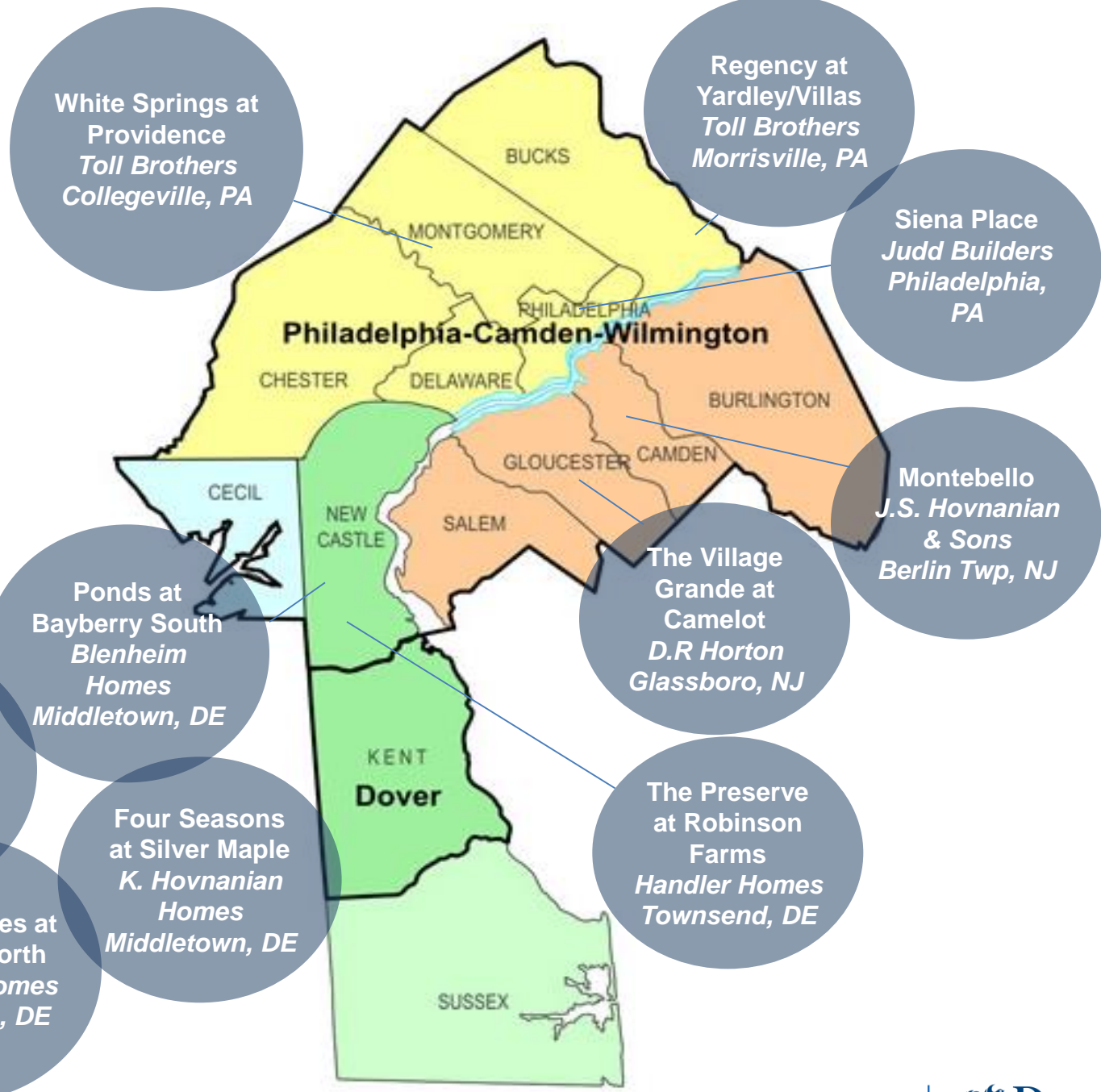
Project Name	Builder/Developer	Location	Total Units Planned	Average Floorplan Size (sq. ft.)	Price Range
The Preserve at Robinson Farms	Handler Homes	Townsend, DE	476	1,645	\$206,500-\$217,500
Estates at Saint Annes (The)	LC Homes	Middletown, DE	469	3,363	\$354,900-\$414,900
Village Grande at Camelot (The)	D.R. Horton	Glassboro, NJ	450	1,910	\$214,990-\$250,990
Ponds at Bayberry South	Blenheim Homes	Middletown, DE	389	1,906	\$278,900-\$333,900
Regency at Yardley/Villas	Toll Brothers	Morrisville, PA	377	2,142	\$477,995-\$534,995
Montebello	J.S. Hovnanian & Sons	Berlin Township, NJ	348	1,948	\$299,900-\$334,900
White Springs at Providence	Toll Brothers	Collegeville, PA	328	2,360	\$389,995-\$431,995
Siena Place	Judd Builders	Philadelphia, PA	313	2,783	\$402,900-\$438,900
Four Seasons at Silver Maple	K. Hovnanian Homes	Middletown, DE	299	1,985	\$286,400-\$341,400
Cinema Series (Bayberry North)	Blenheim Homes	Middletown, DE	286	2,450	\$309,900-\$354,900

Source: Zonda

Notes:

- 1) Three out of the top-10 largest projects are townhome projects: The Preserve at Robinson Farms, White Springs at Providence, Siena Place.
- 2) Four out of the top-10 largest projects are active-adult communities: Village Grande at Camelot, Regency at Yardley/Villas, Montebello, Four Seasons at Silver Maple.
- 3) Five out of the top-10 largest projects are in New Castle County, DE with four of them located in Middletown.

Location of Top 10 Largest Homebuilding Projects in the Philadelphia Region



Pennsylvania Foreclosure Rates

FORECLOSURE RATES FOR PENNSYLVANIA

Pennsylvania
1 in every 1218

Top 5 Counties

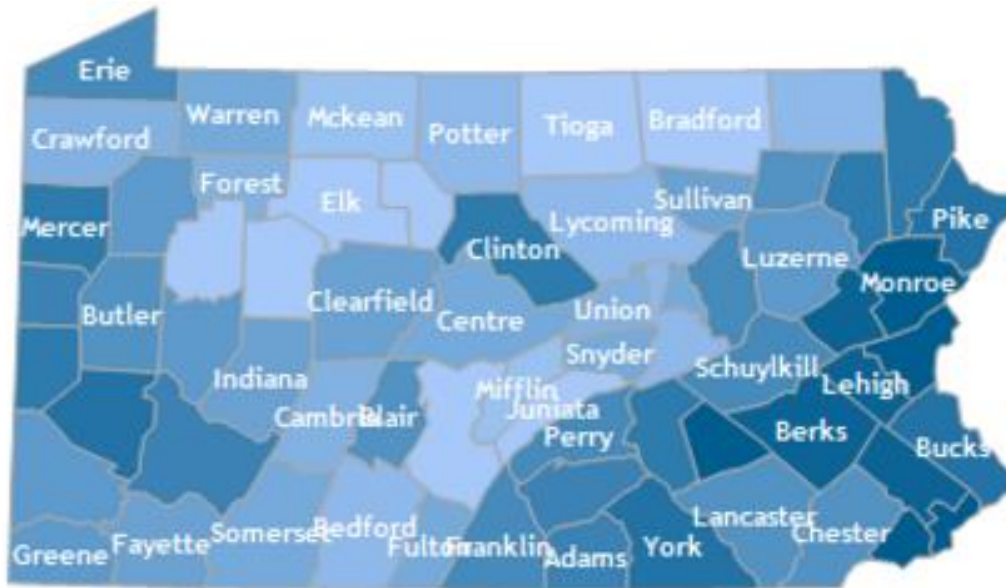
Monroe
1 in every 260

Delaware
1 in every 503

Philadelphia
1 in every 714

Northampton
1 in every 772

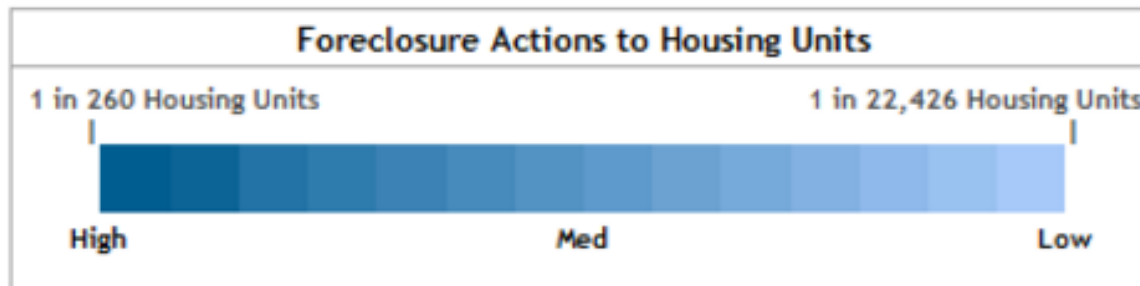
Lebanon
1 in every 783



1 out of every 714 homes in Philadelphia is currently in the process of foreclosure, which is down from 1 out of every 610 homes in the previous quarter.

In the entire Commonwealth, 1 out of every 1,218 homes in Pennsylvania is in the process of foreclosure, which is also down from 1 out of every 858 homes in the previous quarter.

Source: <http://www.realtytrac.com/statsandtrends/foreclosures/pa>



New Jersey Foreclosure Rates

FORECLOSURE RATES FOR NEW JERSEY

New Jersey
1 in every 471

Top 5 Counties

Atlantic
1 in every 257

Camden
1 in every 286

Burlington
1 in every 288

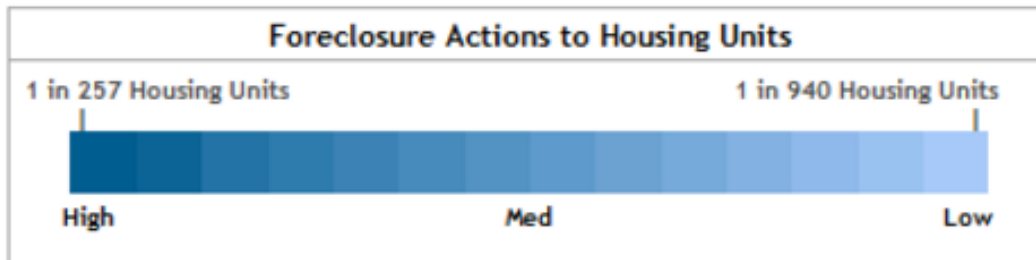
Cumberland
1 in every 303

Salem
1 in every 339



South Jersey's foreclosure rate remains higher than Pennsylvania's, and it is currently trending up while Pennsylvania's is trending down.

Currently, 1 out of every 257 homes in Atlantic County is in the process of foreclosure, up from 1 out of every 371 homes in the previous quarter. And 1 out of every 286 homes in Camden County is in the process of foreclosure, which is also up from 1 out of every 383 homes in the previous quarter.



1 out of every 471 homes in New Jersey is in the process of foreclosure, compared to 1 out of every 584 three months ago.

Delaware Foreclosure Rates

FORECLOSURE RATES FOR DELAWARE

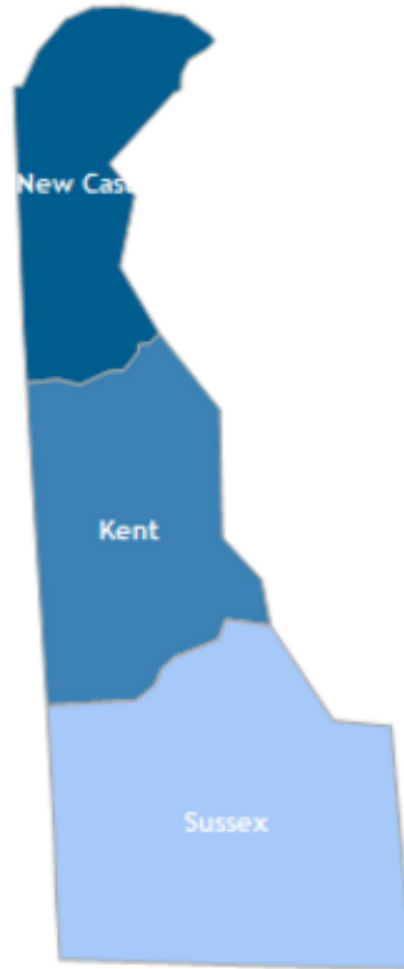
Delaware
1 in every 1152

Top 3 Counties

New Castle
1 in every 919

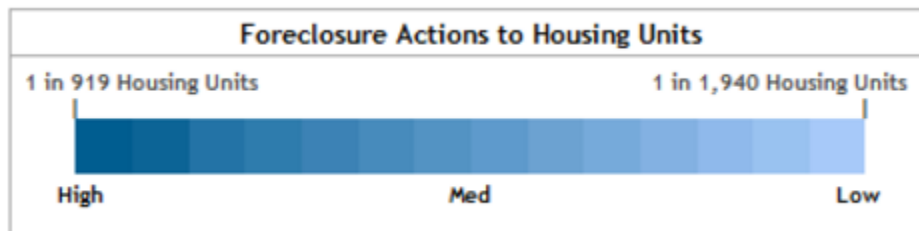
Kent
1 in every 1244

Sussex
1 in every 1940



Delaware has the lowest overall foreclosure rate in the Tri-State area, but the latest results indicate mixed trends:

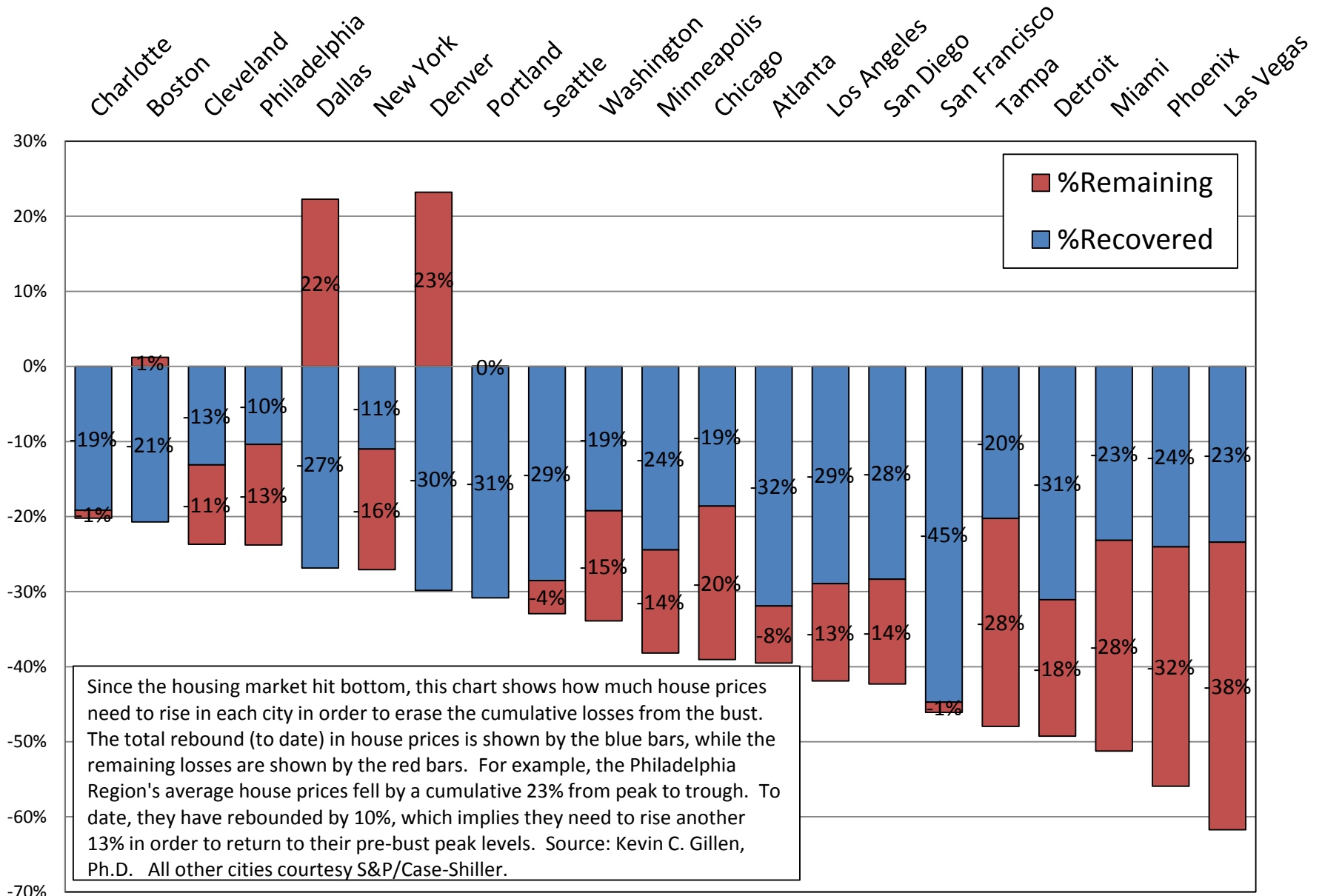
- 1 out of every 919 homes in New Castle County, up from 1 out of every 1,433 homes in the previous quarter.
- 1 out of every 1,244 homes in Kent County, down substantially from 1 out of every 694 homes in the previous quarter
- 1 out of every 1,940 homes in Sussex County, down from 1 out of every 1,365 homes in the previous quarter
- An average of 1 out of every 1,152 homes Statewide, up from 1 out of every 1,207 homes in the previous quarter.



Source: <http://www.realtytrac.com/statsandtrends/foreclosure trends/de>

© 2015 Drexel University | Kevin.C.Gillen@Drexel.edu

Housing's Road to Recovery: %Lost v. %Recovered



Since the housing market hit bottom, this chart shows how much house prices need to rise in each city in order to erase the cumulative losses from the bust. The total rebound (to date) in house prices is shown by the blue bars, while the remaining losses are shown by the red bars. For example, the Philadelphia Region's average house prices fell by a cumulative 23% from peak to trough. To date, they have rebounded by 10%, which implies they need to rise another 13% in order to return to their pre-bust peak levels. Source: Kevin C. Gillen, Ph.D. All other cities courtesy S&P/Case-Shiller.