



# Philadelphia's Post-Pandemic Housing Market: Where Are We...and Where Are We Headed?

*Kevin C. Gillen Ph.D.*  
*October 2020*

## NUMBER ONE

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# Where is our housing economy at?

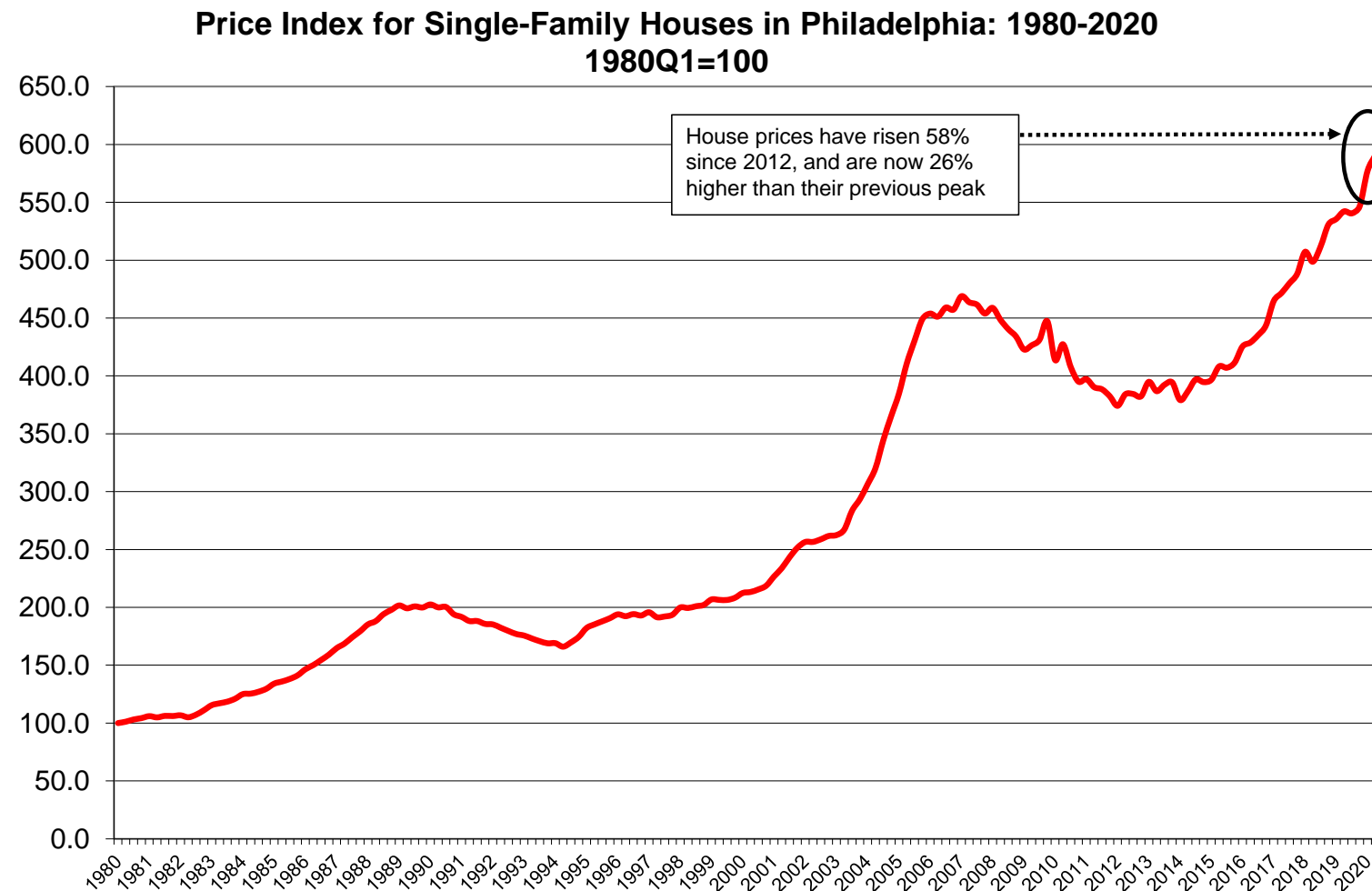
## Short answer:

All things considered, better than you might think...*especially if you were asked this 8 months ago.*

## CITY'S PRICES ARE AT ALL-TIME HIGHS!

### House Price Index for Philadelphia County

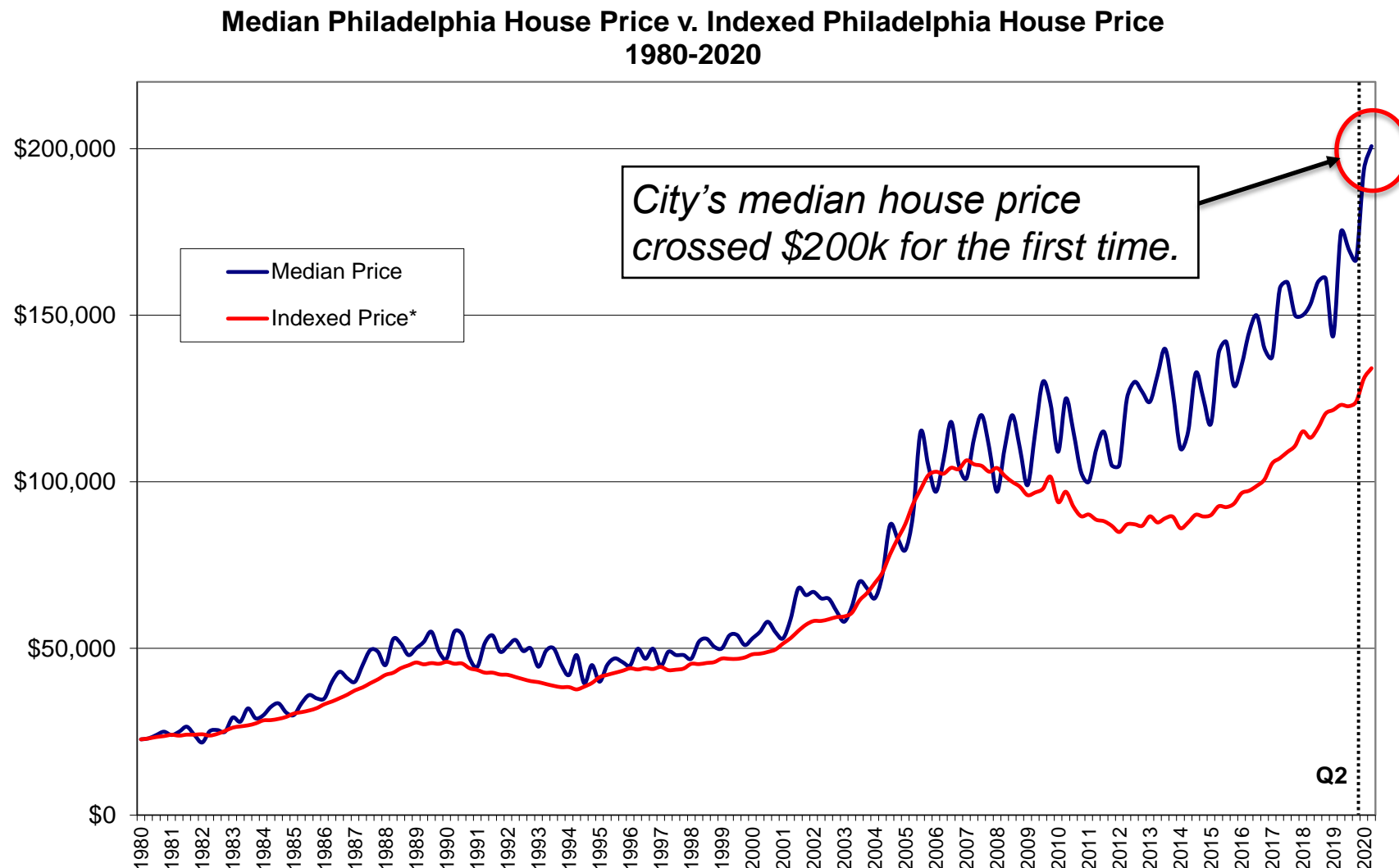
Source: Kevin C. Gillen, Ph.D.



## CITY'S PRICES ARE AT ALL-TIME HIGHS!

### Median House Price Philadelphia County

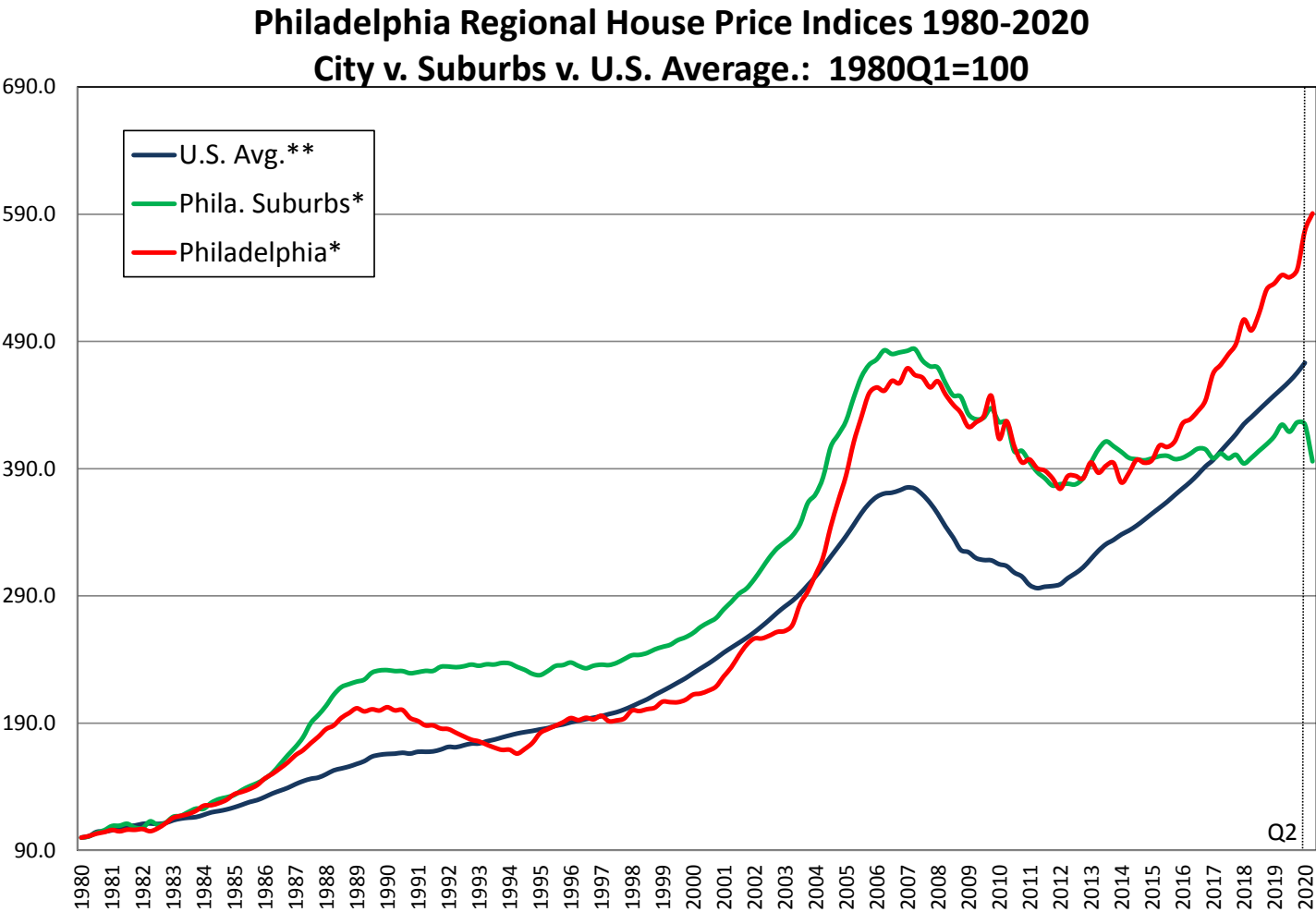
Source: Kevin C. Gillen, Ph.D.



## THE CITY HAS OUTPERFORMED THE SUBURBS!

### House Price Indices: City v. Suburbs v. USA

Source: Kevin C. Gillen, Ph.D., FHFA



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

\*\*Courtesy Federal Housing Finance Agency (FHFA)

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

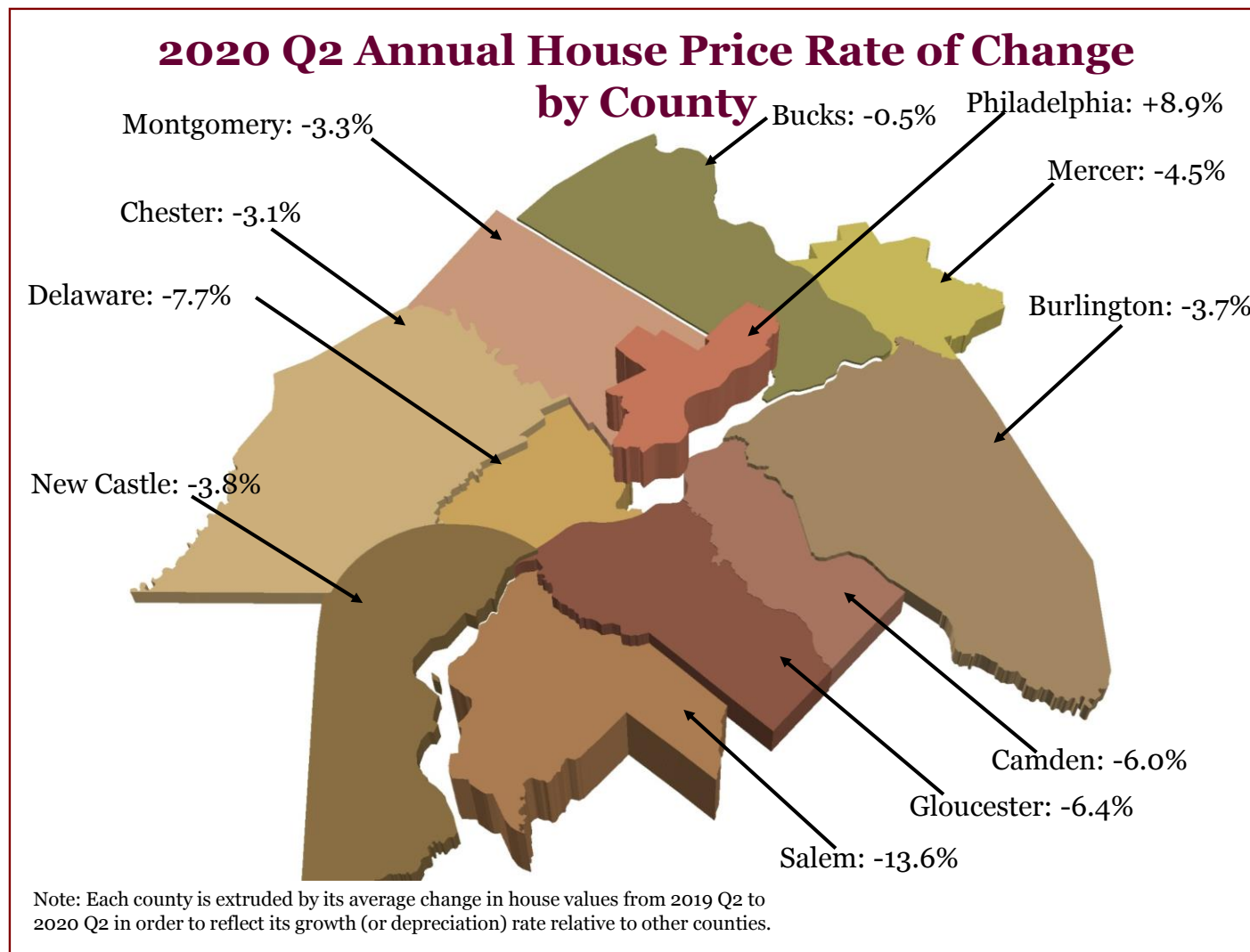
*Philly has  
been beating  
the 'burbs!*



## THE CITY ESPECIALLY OUTPERFORMED THE 'BURBS SINCE COVID HIT

### YoY Change in House Prices by County

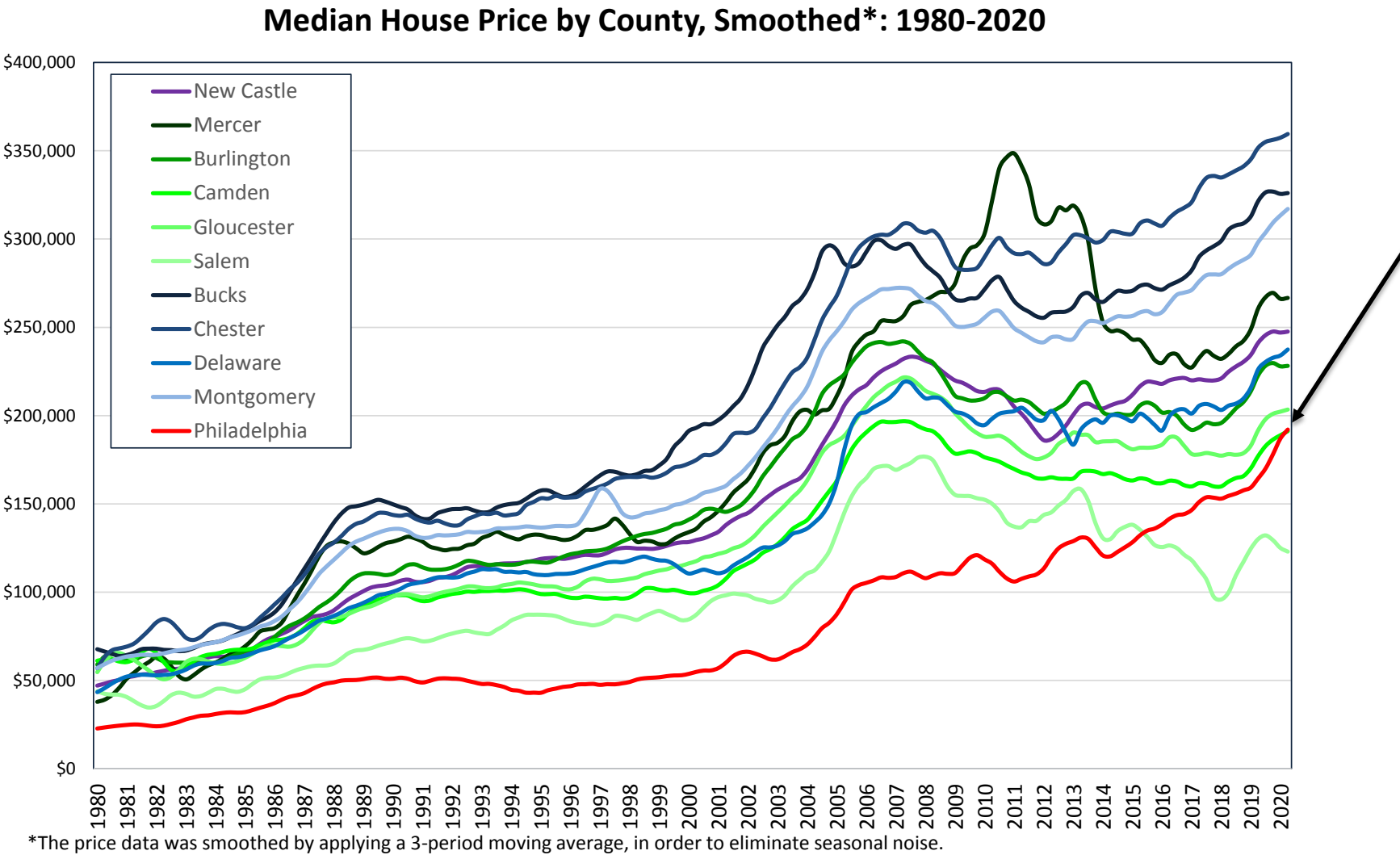
Source: Kevin C. Gillen, Ph.D.



## THE CITY PASSED SALEM...AND THEN CAMDEN COUNTY!

### Median House Price (Smoothed) by County

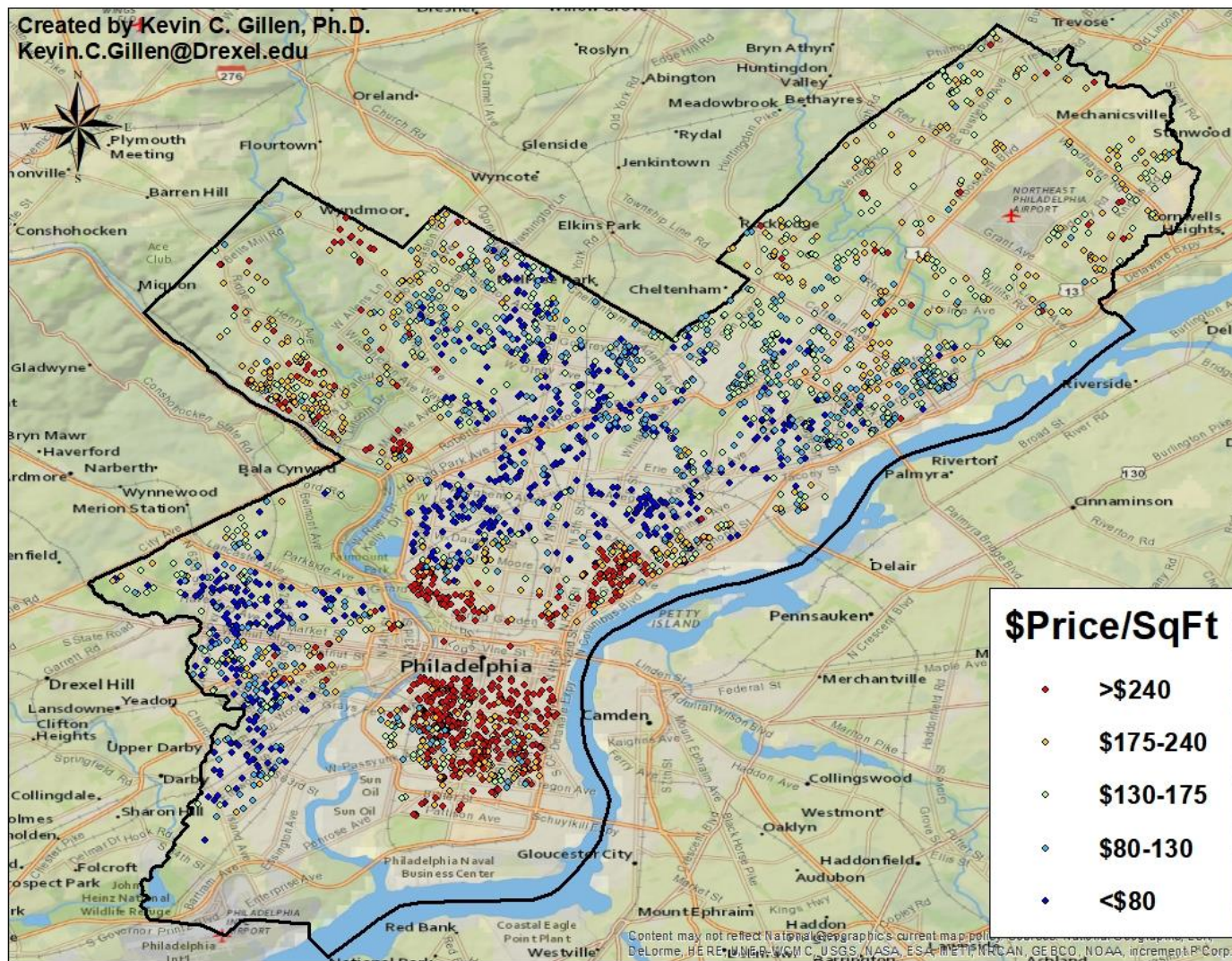
Source: Kevin C. Gillen, Ph.D.



## THE DEFINITION OF CENTER CITY CONTINUES TO EXPAND

### 2020 Q2 House Sales in Philadelphia County

Source: Kevin C. Gillen, Ph.D.



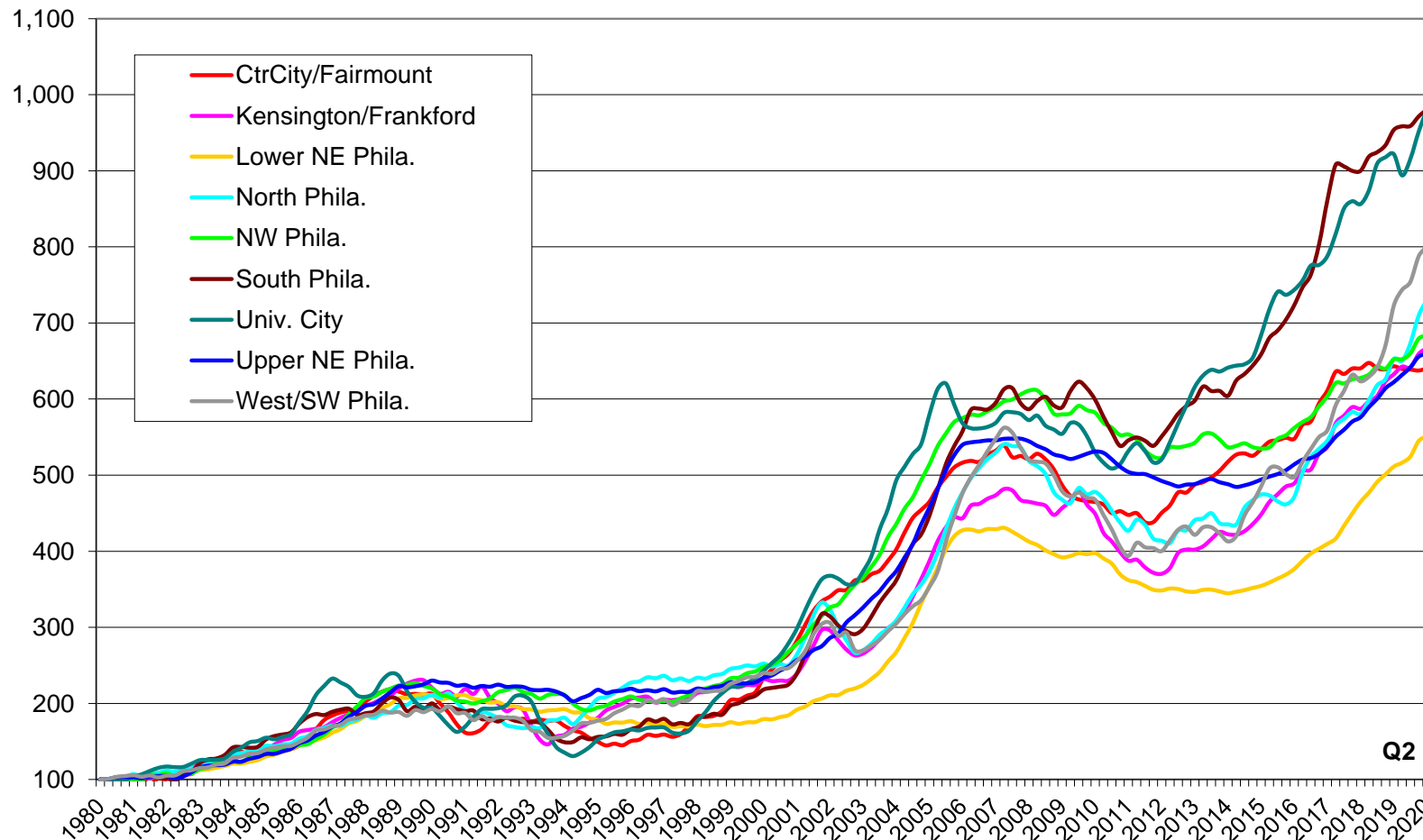


## SIGNIFICANT VARIATION IN PRICE APPRECIATION ACROSS NEIGHBORHOODS

### House Price Index by Submarket

Source: Kevin C. Gillen, Ph.D.

Philadelphia House Price Indices by Neighborhood: 1980-2020  
1980Q1=100



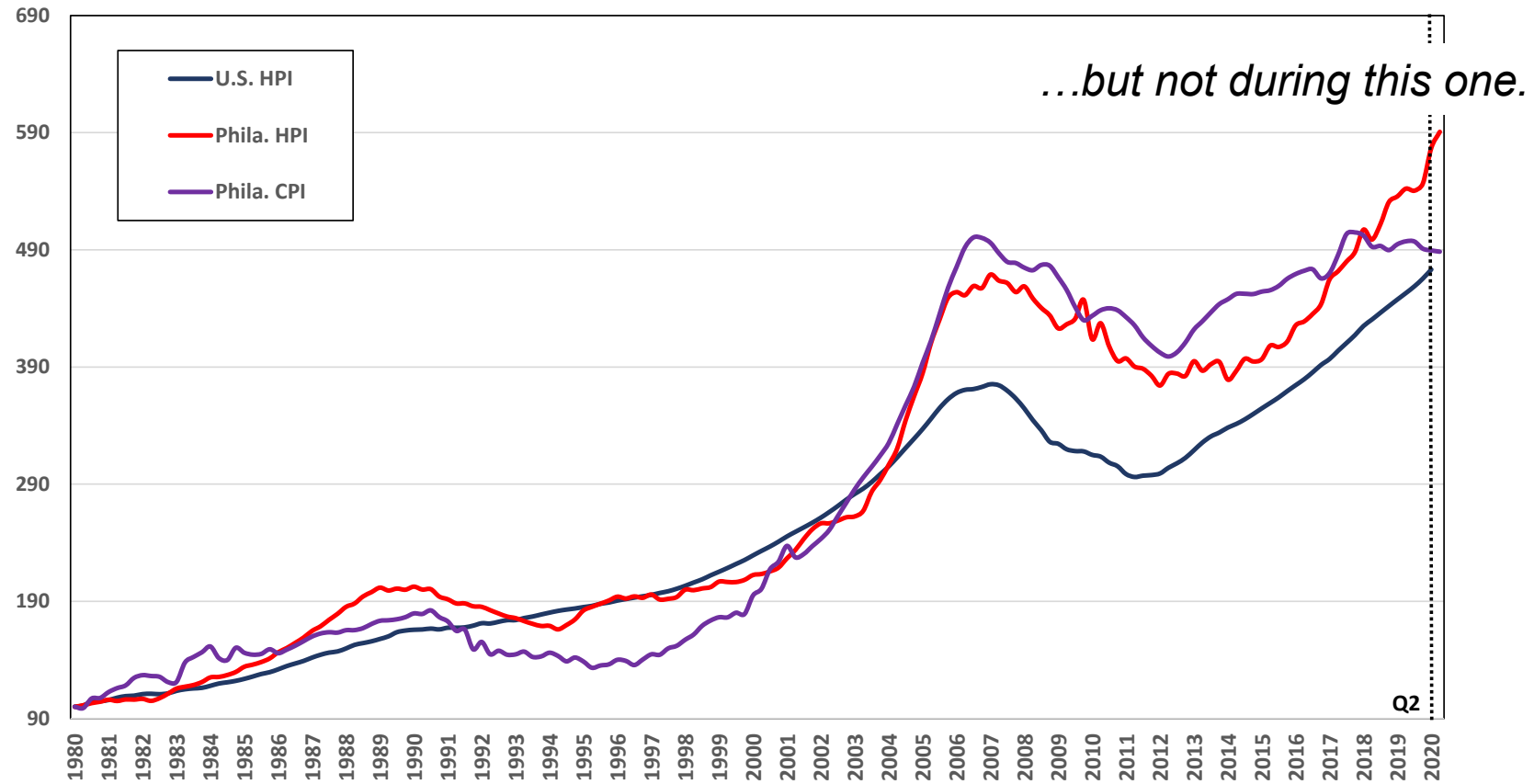
## CONDO PRICES HAVE BEEN SOMEWHAT COOLER THAN HOUSE PRICES

### Condo v. House Price Indices

Source: Kevin C. Gillen, Ph.D.,  
FHFA

*Condo price appreciation significantly outpaced house price appreciation during the last boom...*

Philadelphia Condo Price Index v. House Price Indices: 1980-2020  
1980Q1=100



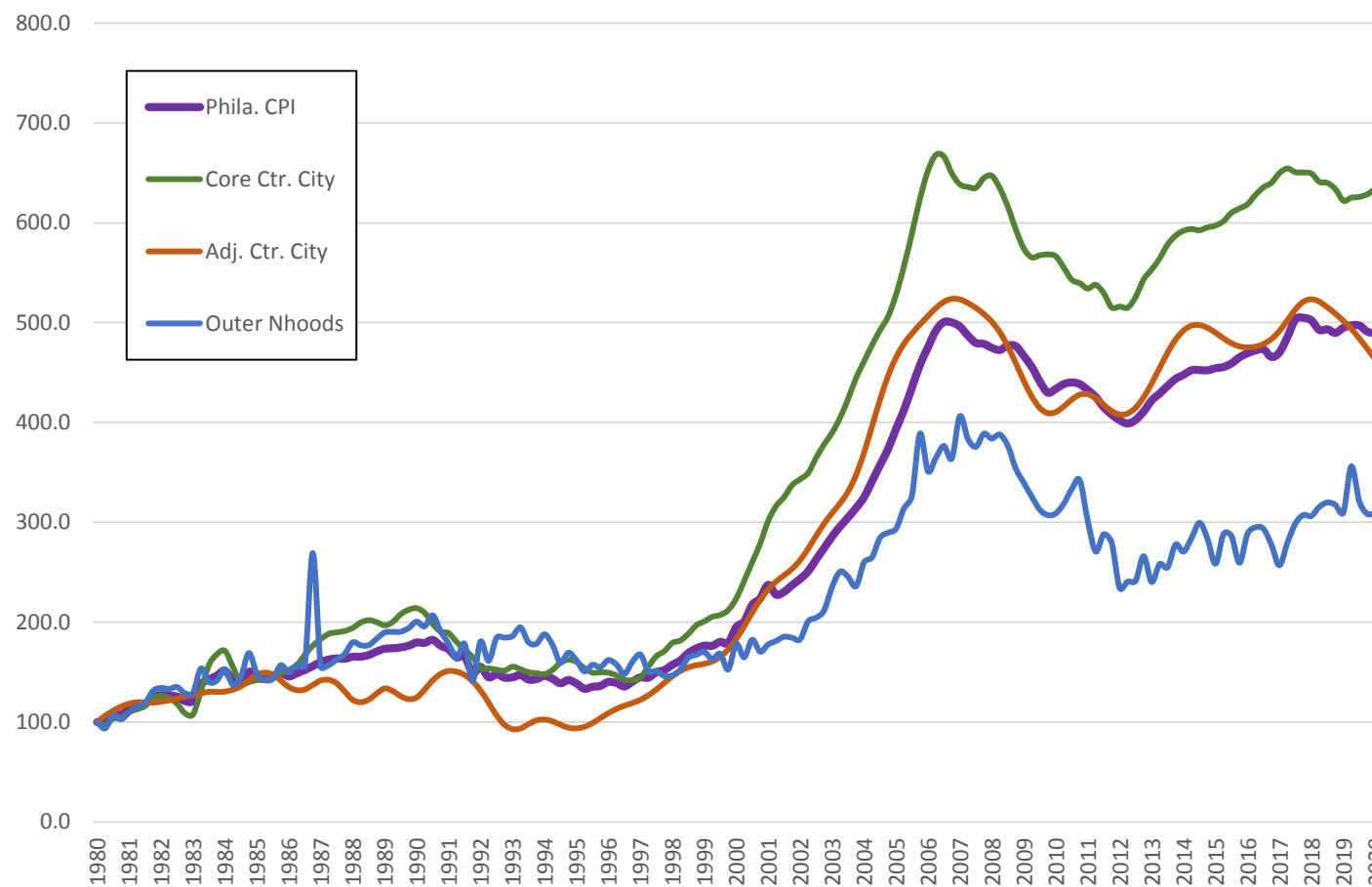
U.S. HPI courtesy of FHFA.gov.  
Philadelphia HPI and CPI by Kevin C. Gillen, Ph.D.

## BUT, LOCATION IS A MUCH MORE FUNDAMENTAL DRIVER OF CONDO PRICES

### Condo v. House Price Indices

Source: Kevin C. Gillen, Ph.D.,  
FHFA

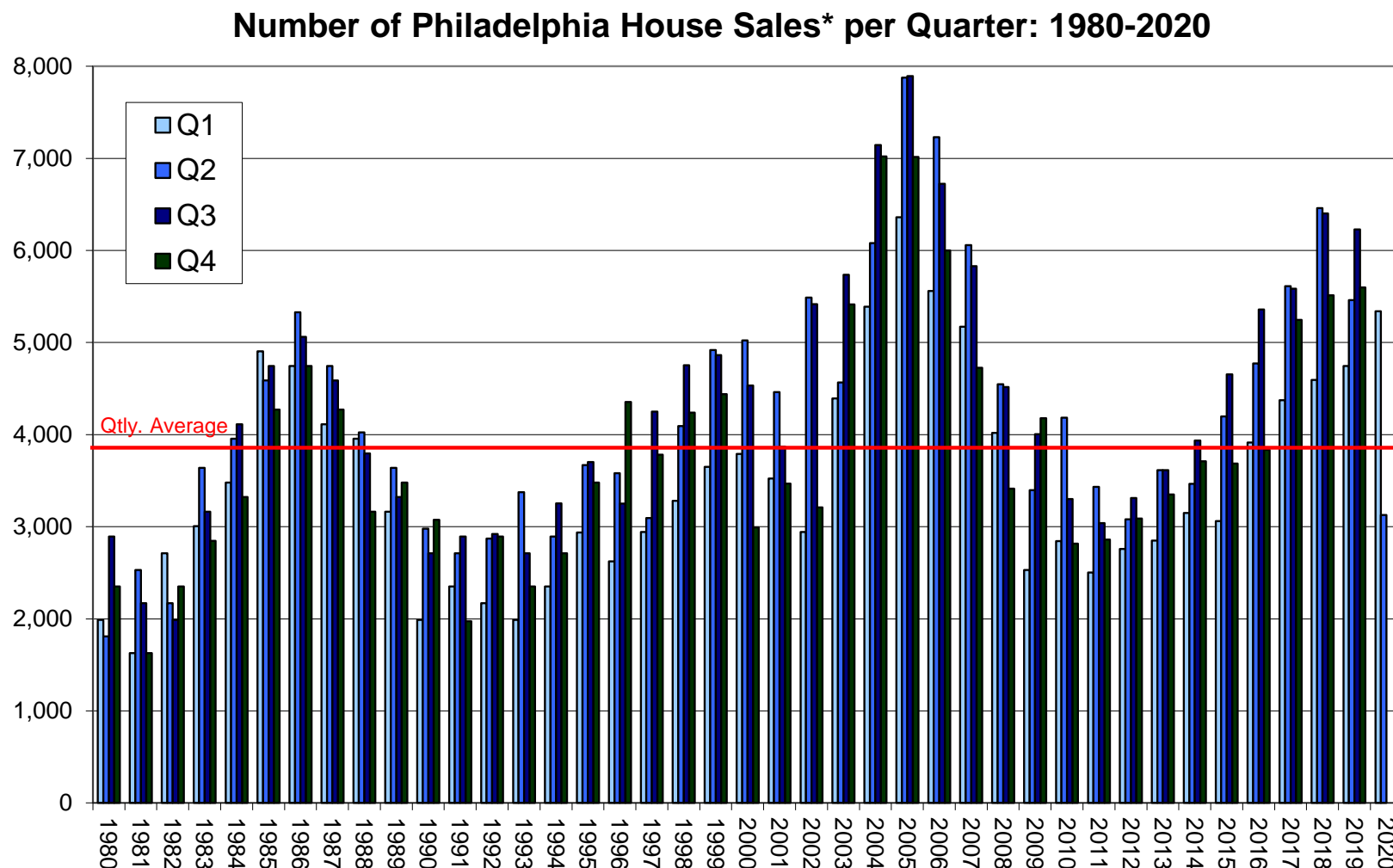
Condo Price Indices by Submarket



## SALES DID FALL SHARPLY THIS PAST SPRING

### House Sales for Philadelphia County

Source: Kevin C. Gillen, Ph.D.



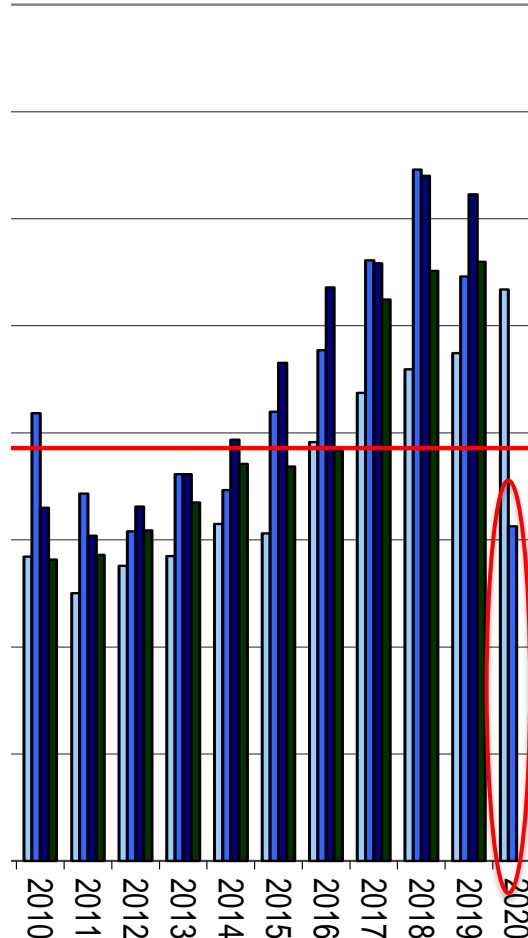


## SALES DID FALL SHARPLY THIS PAST SPRING

### House Sales for Philadelphia County

Source: Kevin C. Gillen, Ph.D.

1980-2020



*A 41% drop in sales activity in just 3 months.*

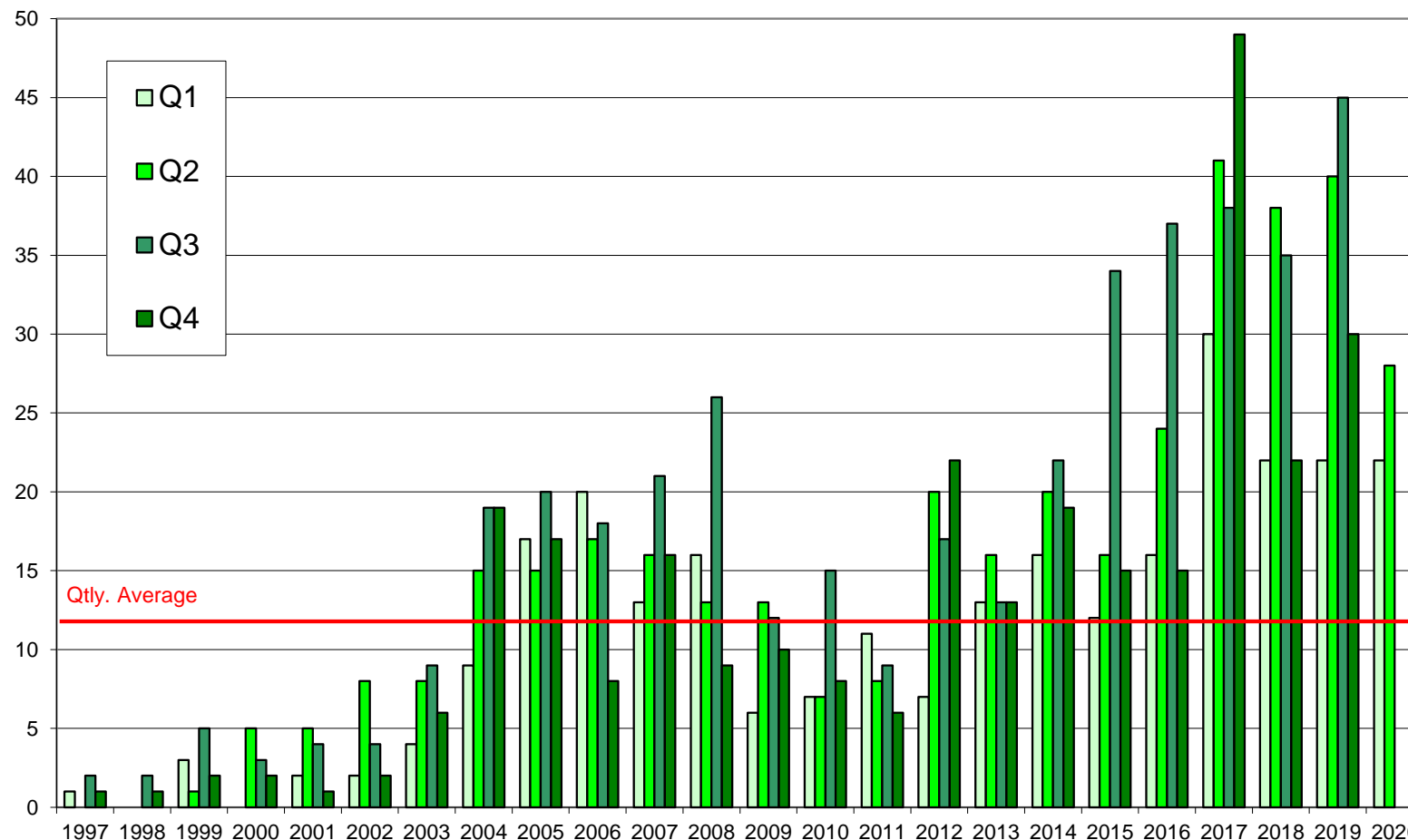
*Worst spring since 2012, when the market was still in its previous downturn.*

## +\$1M HOUSE SALES HELD UP BETTER

### +\$1m House Sales in Philadelphia

Source: Kevin C. Gillen, Ph.D.

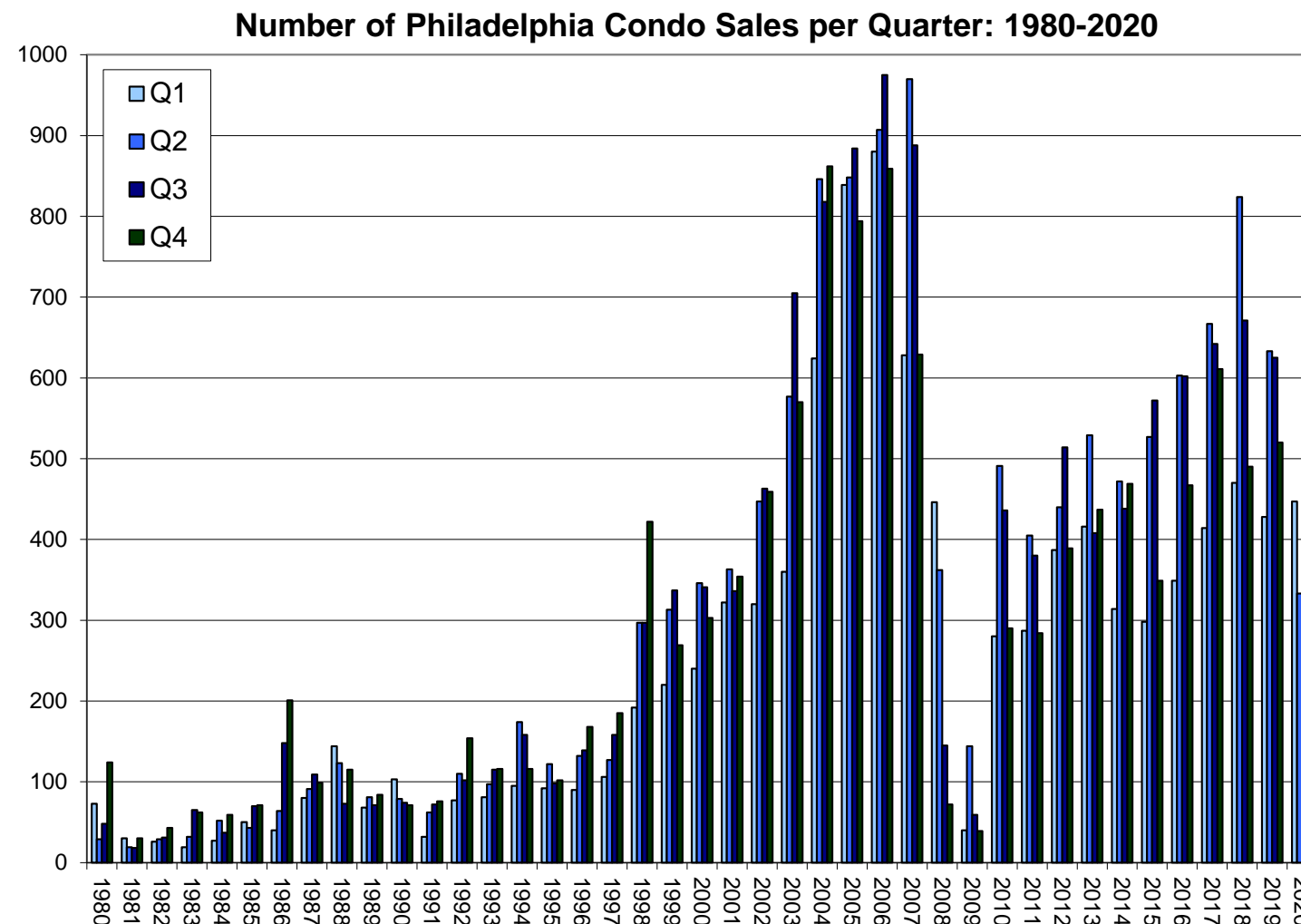
Number of Philadelphia House Sales\* per Quarter  
with Price  $\geq$  \$1 Million: 1997-2020



## CONDO SALES FELL SIGNIFICANTLY IN Q2

### Condo Sales for Philadelphia County

Source: Kevin C. Gillen, Ph.D.



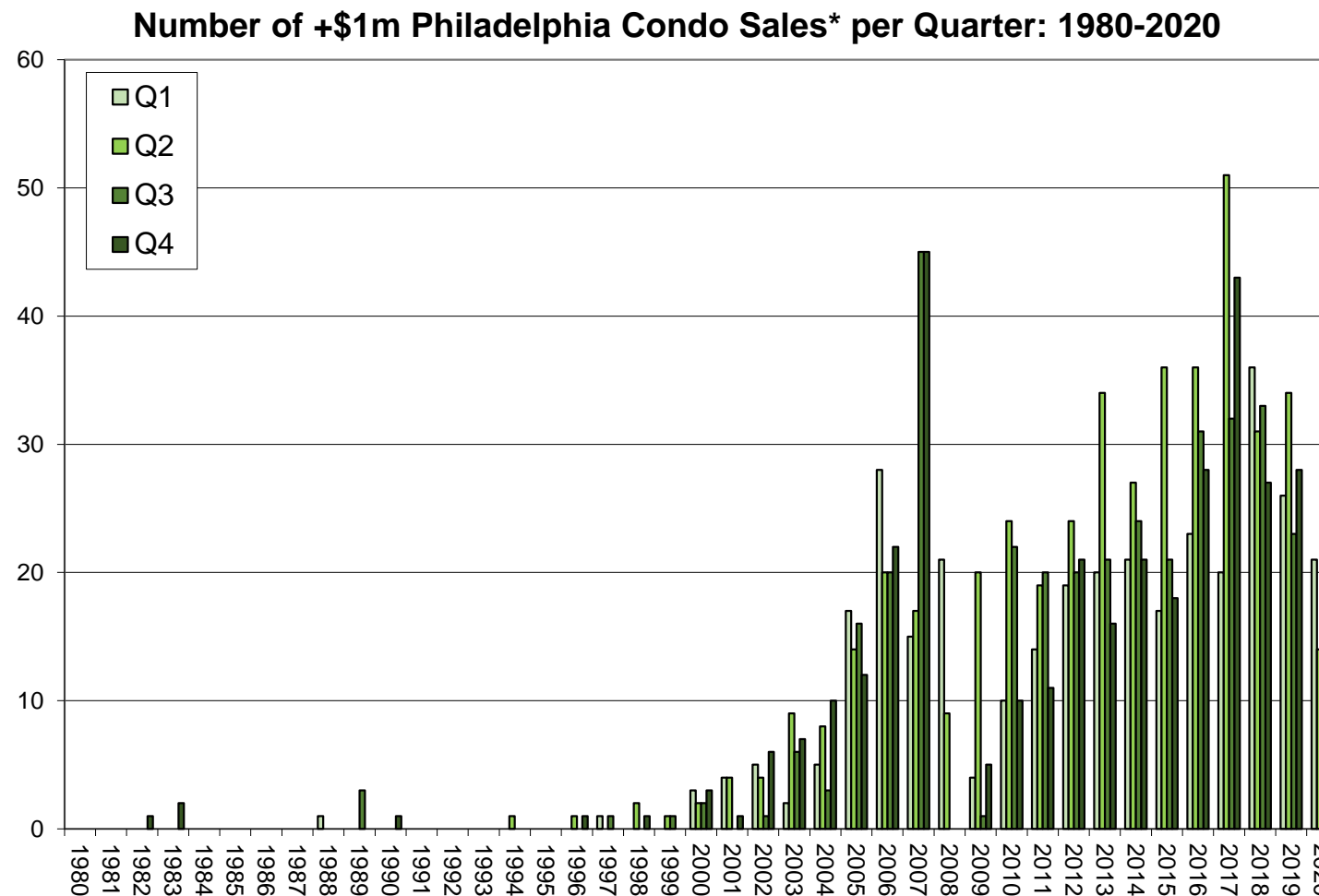
But, “only” a 26% decline in 3 months, compared to a 41% decline in house sales.

Condo sales tend to be less seasonal than house sales.

## AND +\$1M CONDO SALES FELL PRECIPITOUSLY POST-COVID

### +\$1m Condo Sales in Philadelphia

Source: Kevin C. Gillen, Ph.D.



\*This chart plots the number of condo sales that occurred at prices of \$1 million dollars or more.

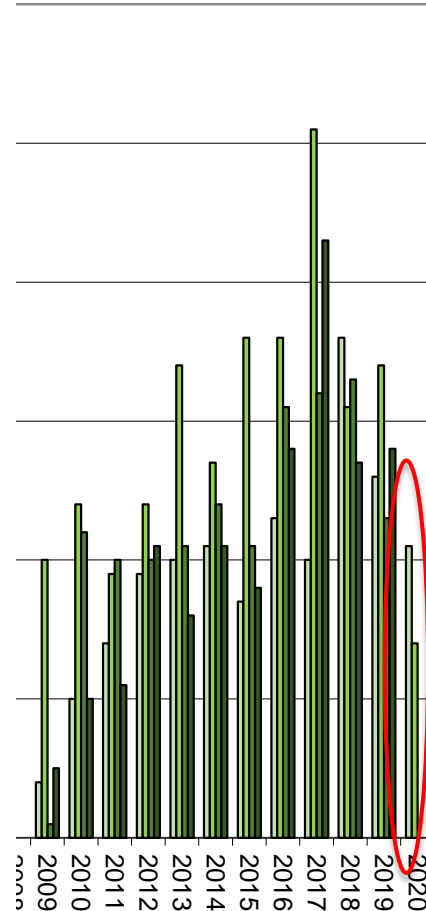


## AND +\$1M CONDO SALES FELL PRECIPITOUSLY POST-COVID

### +\$1m Condo Sales in Philadelphia

Source: Kevin C. Gillen, Ph.D.

Quarter: 1980-2020



***Only 35 sales of condos at a price  $\geq$  \$1m in the first six months of 2020.***

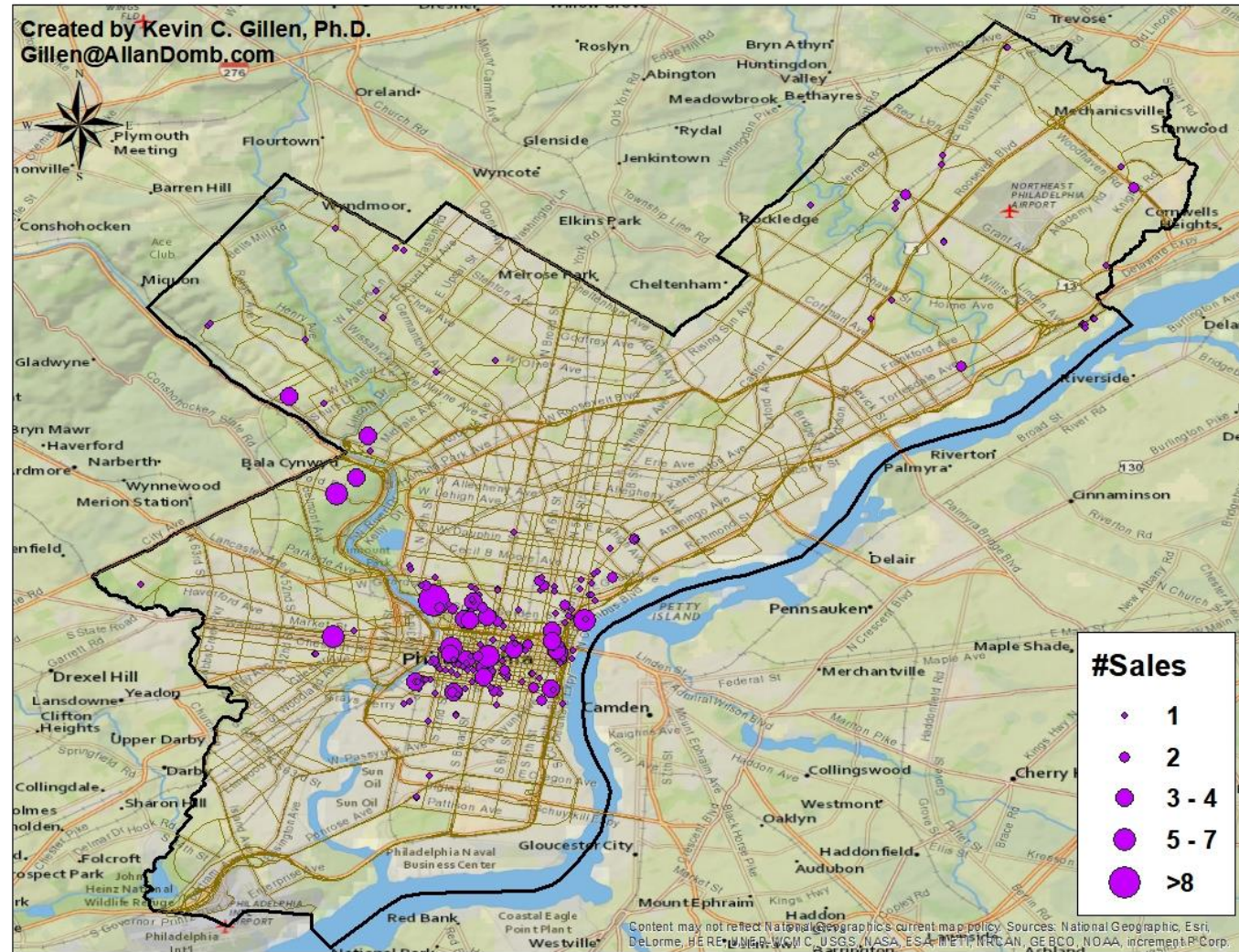
***That's 38% less than what Philadelphia typically averages in the first half of the year (57 sales)***

***Worst 6-month period since 2011, when only 33 such sales occurred and the market was still in its previous downturn.***

## CONDO SALES ARE VERY HIGHLY SPATIALLY CONCENTRATED

### 2020 Q2 Condo Sales in Philadelphia

Source: Kevin C. Gillen, Ph.D.

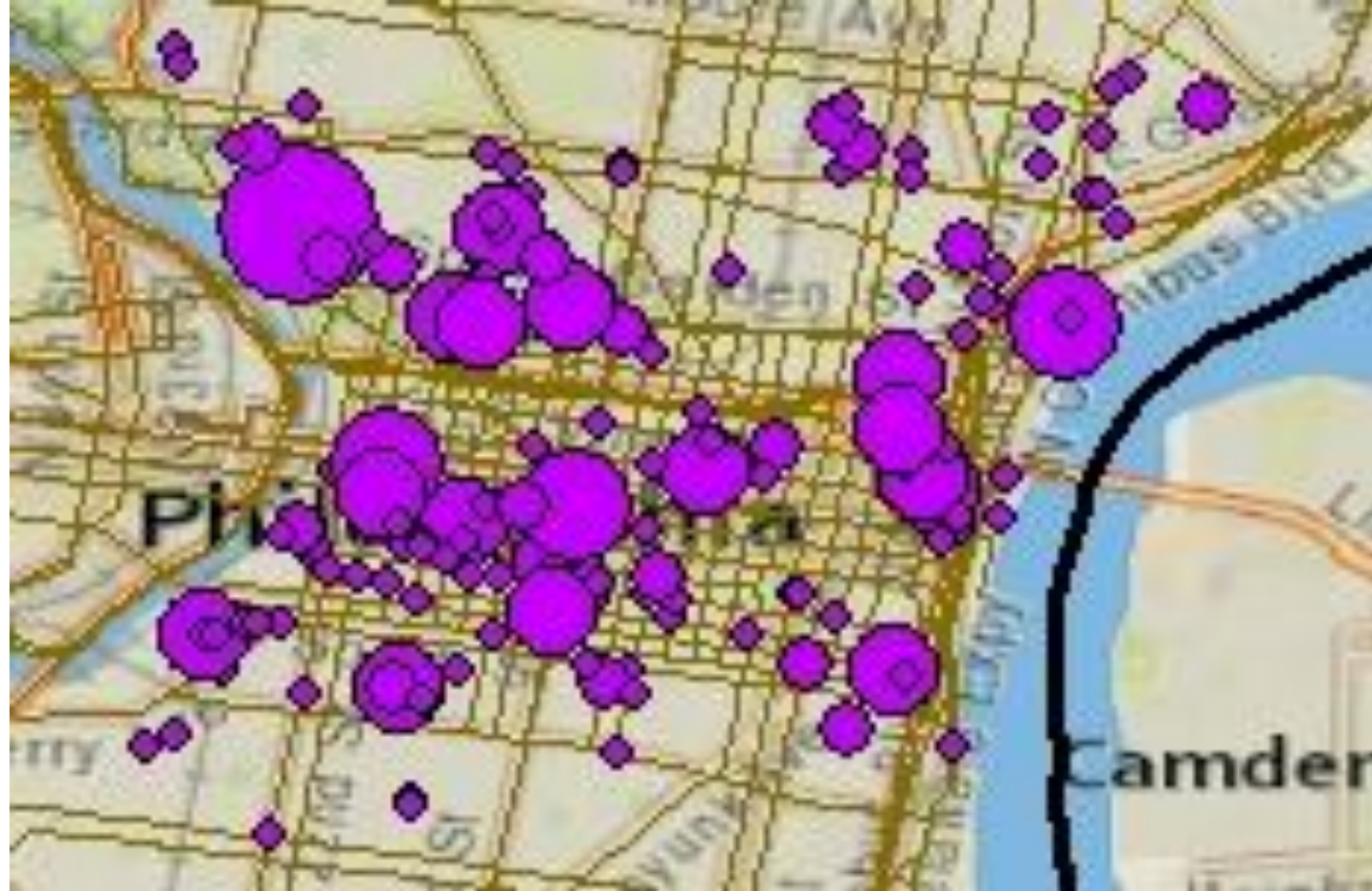




## CONDO SALES ARE VERY HIGHLY SPATIALLY CONCENTRATED

### 2020 Q2 Condo Sales in Philadelphia

Source: Kevin C. Gillen, Ph.D.



## NUMBER TWO

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# Where is our housing economy headed?

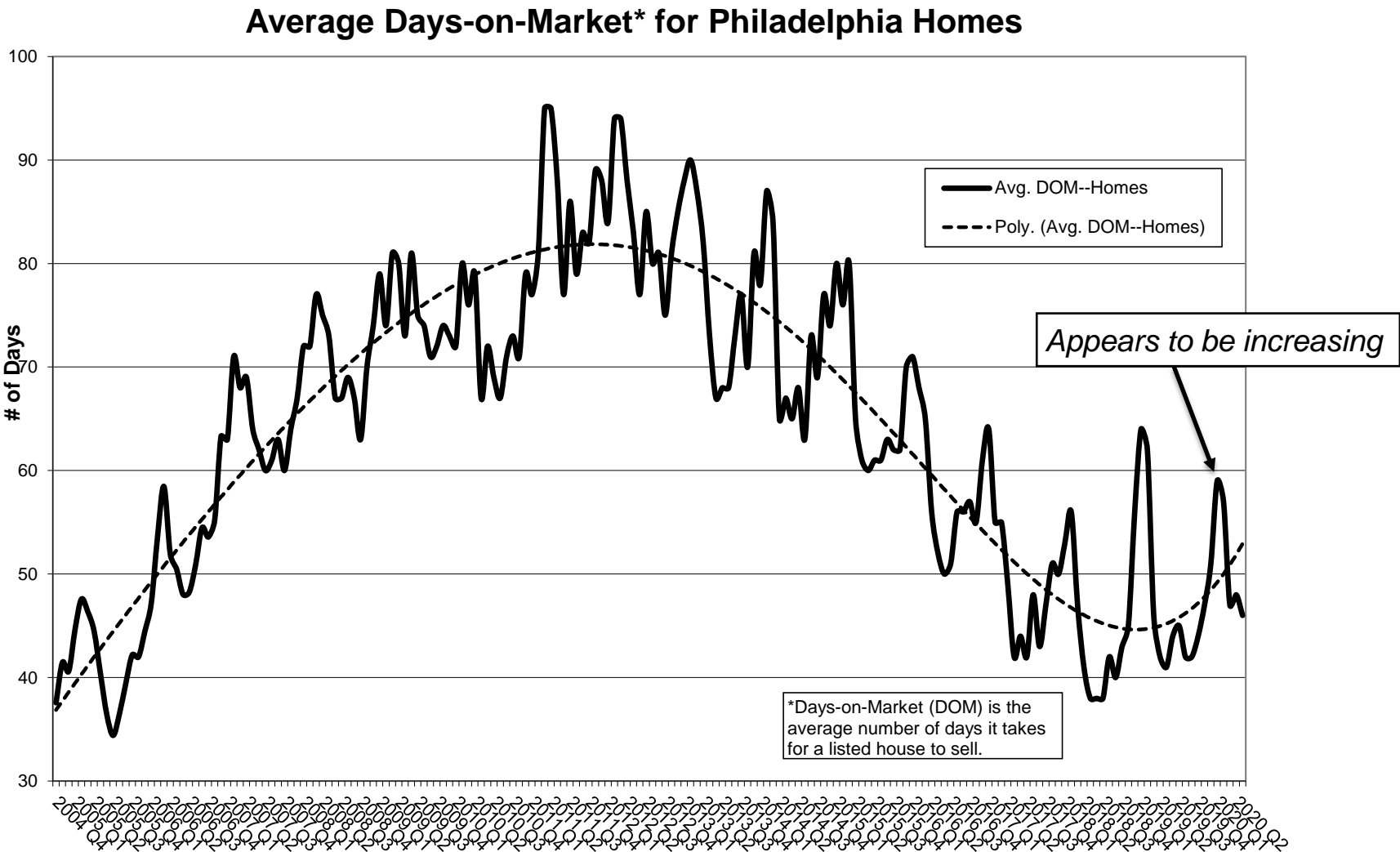
Short answer:

It depends on what indicator you look at!



## IS THE PACE OF SALES SLOWING?

Average DOM in  
Philadelphia  
Source: Bright MLS



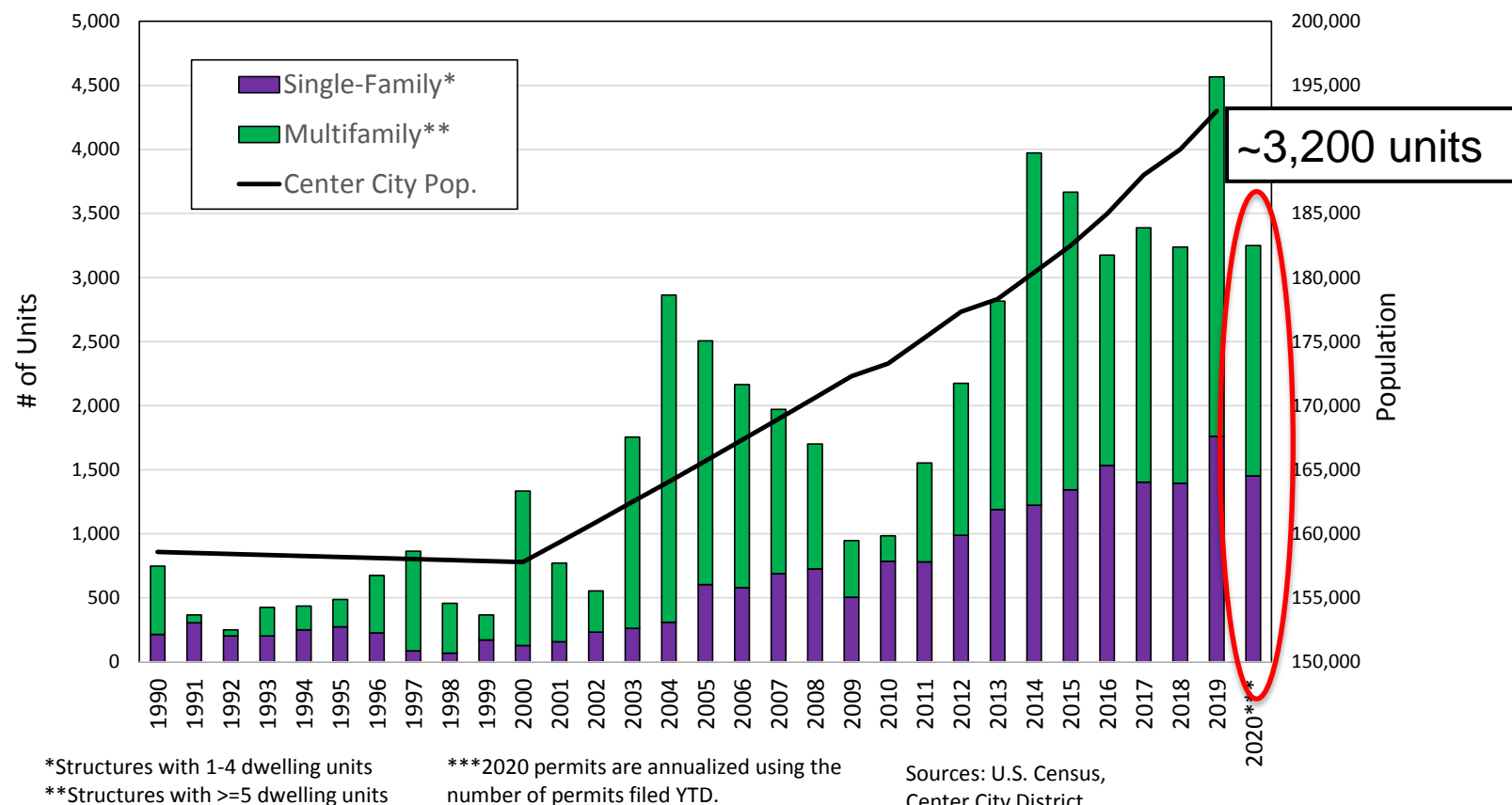
## BUILDING PERMITS ARE HOLDING STEADY

### Residential Building Permits in Philadelphia 1990-2020

Source: US Census

*Permits fell precipitously from March through June, but have since rebounded dramatically.*

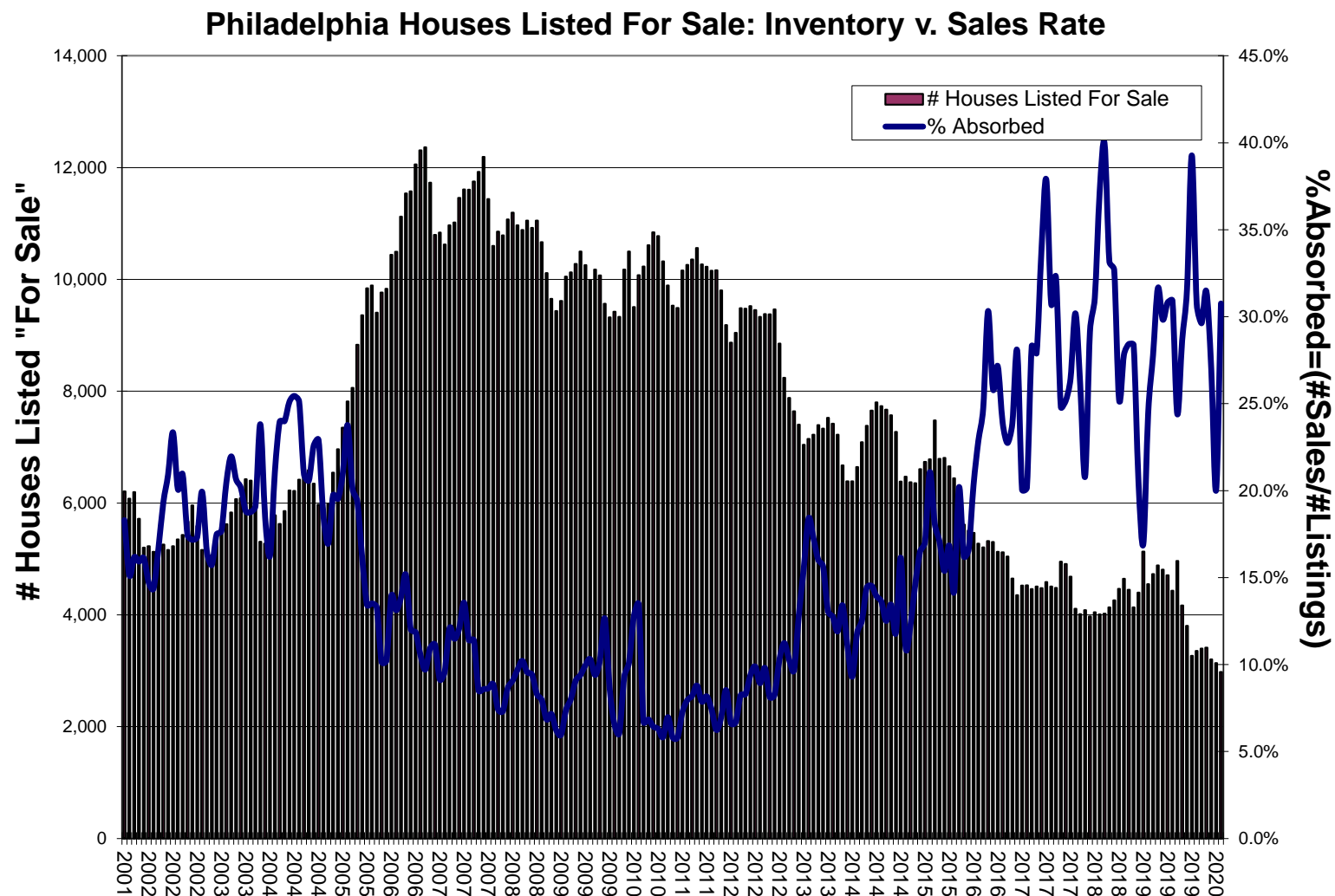
Building Permits Issued for Construction of Residential Units in Philadelphia 1990-2020:  
Single-Family v. Multifamily



## INVENTORIES REMAIN EXCEPTIONALLY LOW

### Houses Listed “For Sale” in Philadelphia

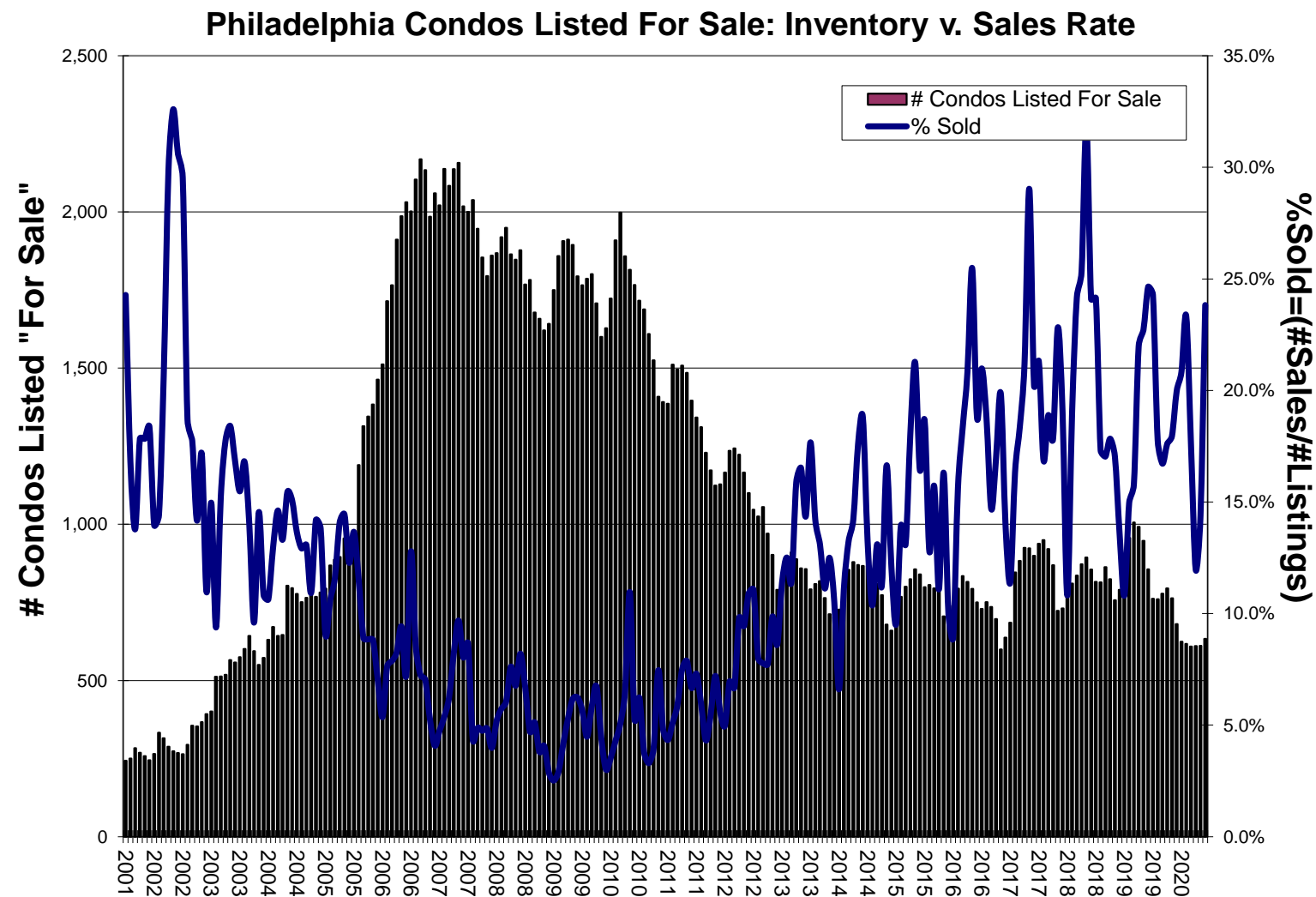
Source: Bright MLS



## INVENTORIES REMAIN EXCEPTIONALLY LOW

### Condos Listed “For Sale” in Philadelphia

Source: Bright MLS

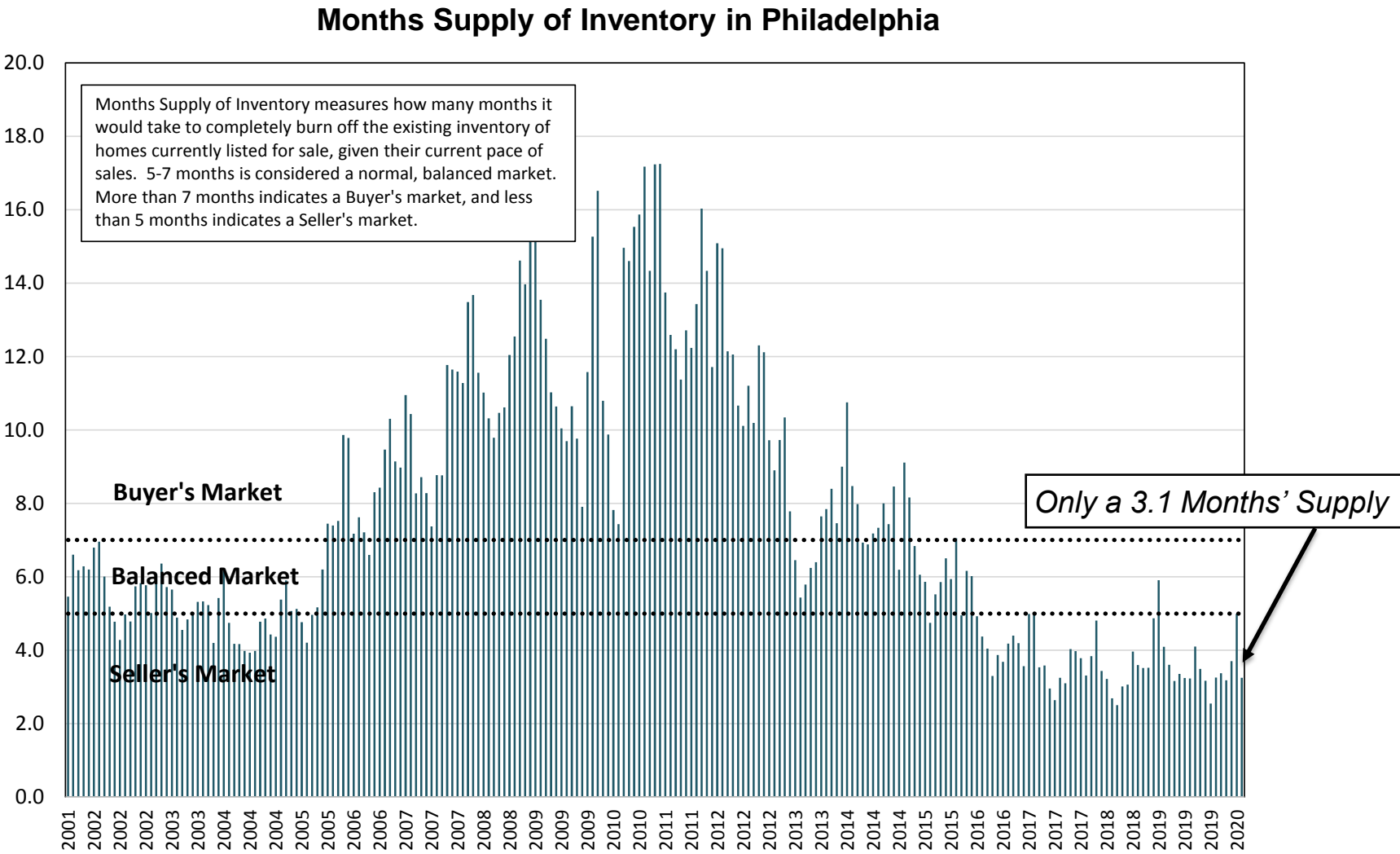




## PHILADELPHIA'S HOUSING IS CURRENTLY IN A DEEP "SELLER'S MARKET"

### Months' Supply of Housing Inventory in Philadelphia

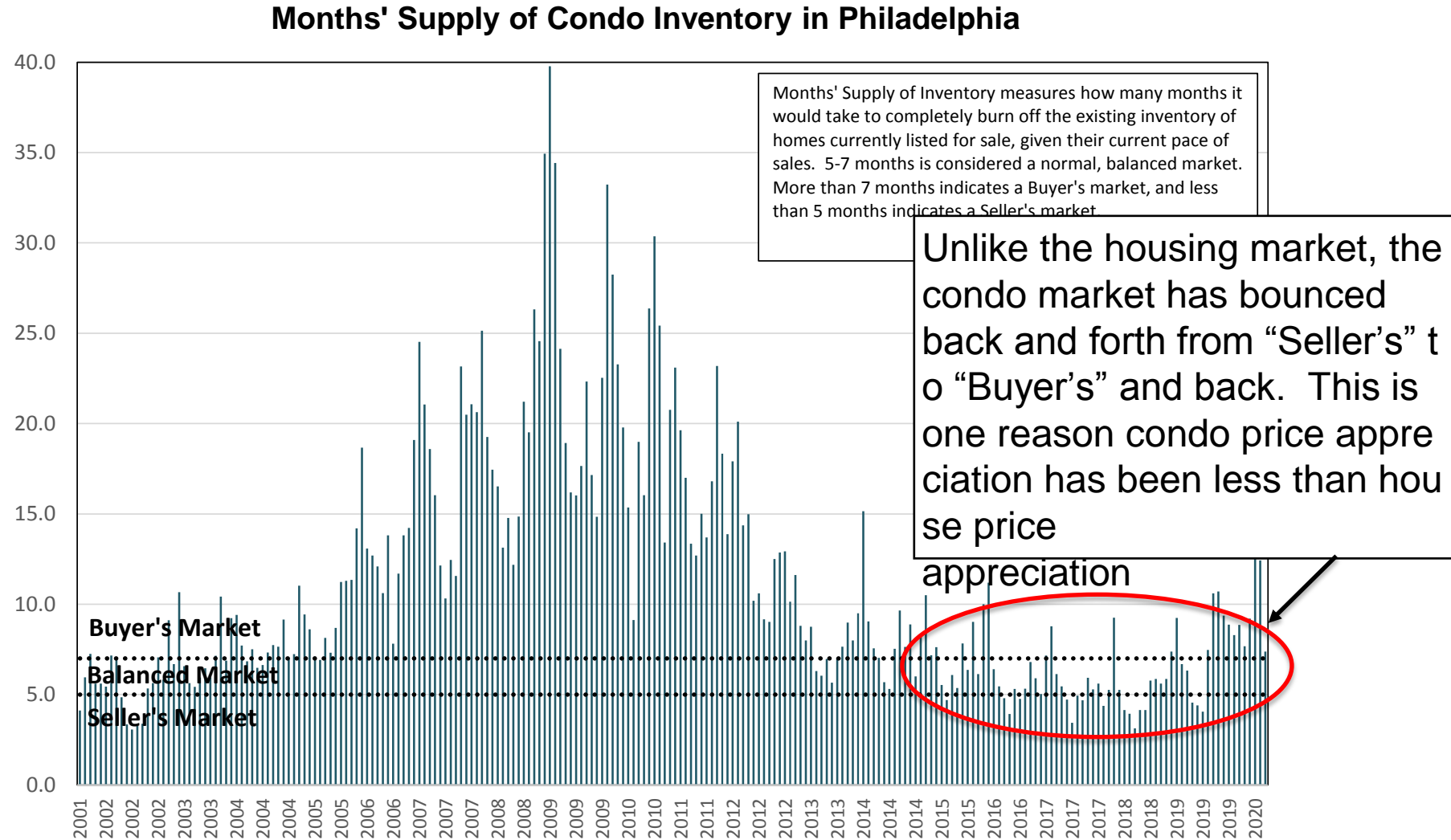
Source: Bright MLS



## LOW SUPPLY IN CONDOS HAS BEEN LESS CONSISTENT

### Months' Supply of Condo Inventory in Philadelphia

Source: Bright MLS



## A DIGRESSION ON INVENTORIES

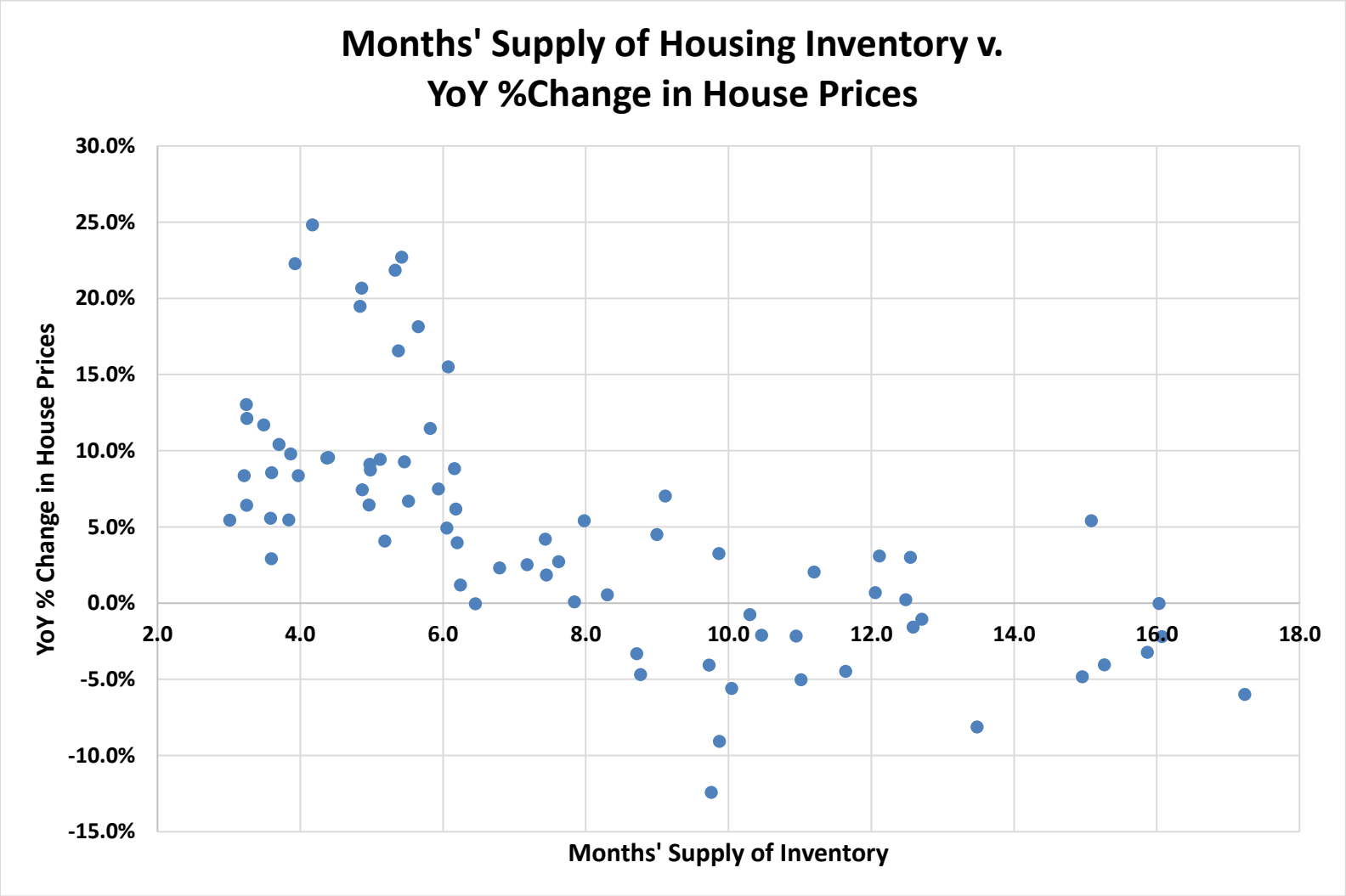
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Q: How are inventories (i.e. listings) a useful metric for understanding the housing market?

A: They are a very good short-term predictor of house price appreciation; e.g. 1-2 years.

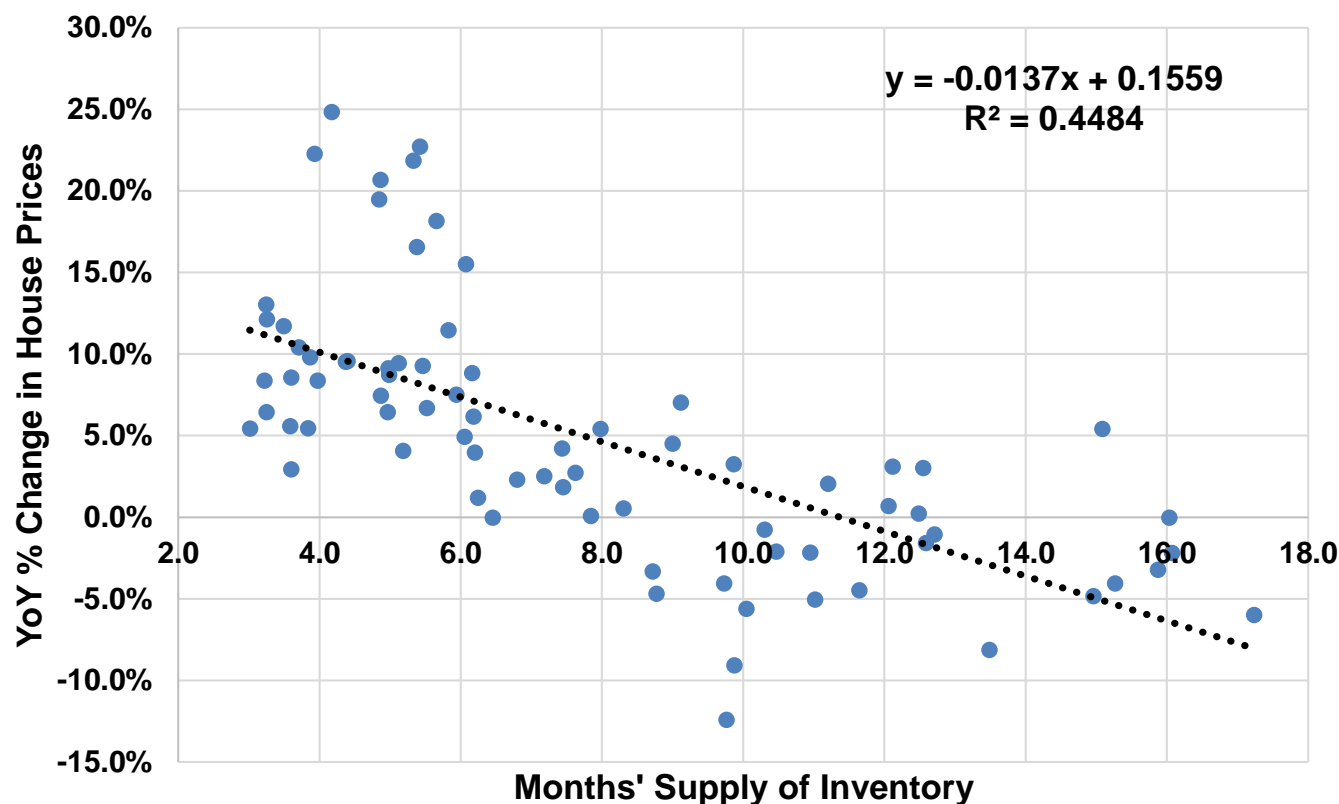
As proof: the next chart is a scatterplot of Philadelphia's Months' Supply of Inventory against the annual % change in the city's House Price Index.

## A DIGRESSION ON INVENTORIES



## A DIGRESSION ON INVENTORIES

**Months' Supply of Housing Inventory v.  
YoY %Change in House Prices**



Several takeaways:

Inventory levels are negatively associated with future house price changes: inventories up => house prices down (and vice-versa)

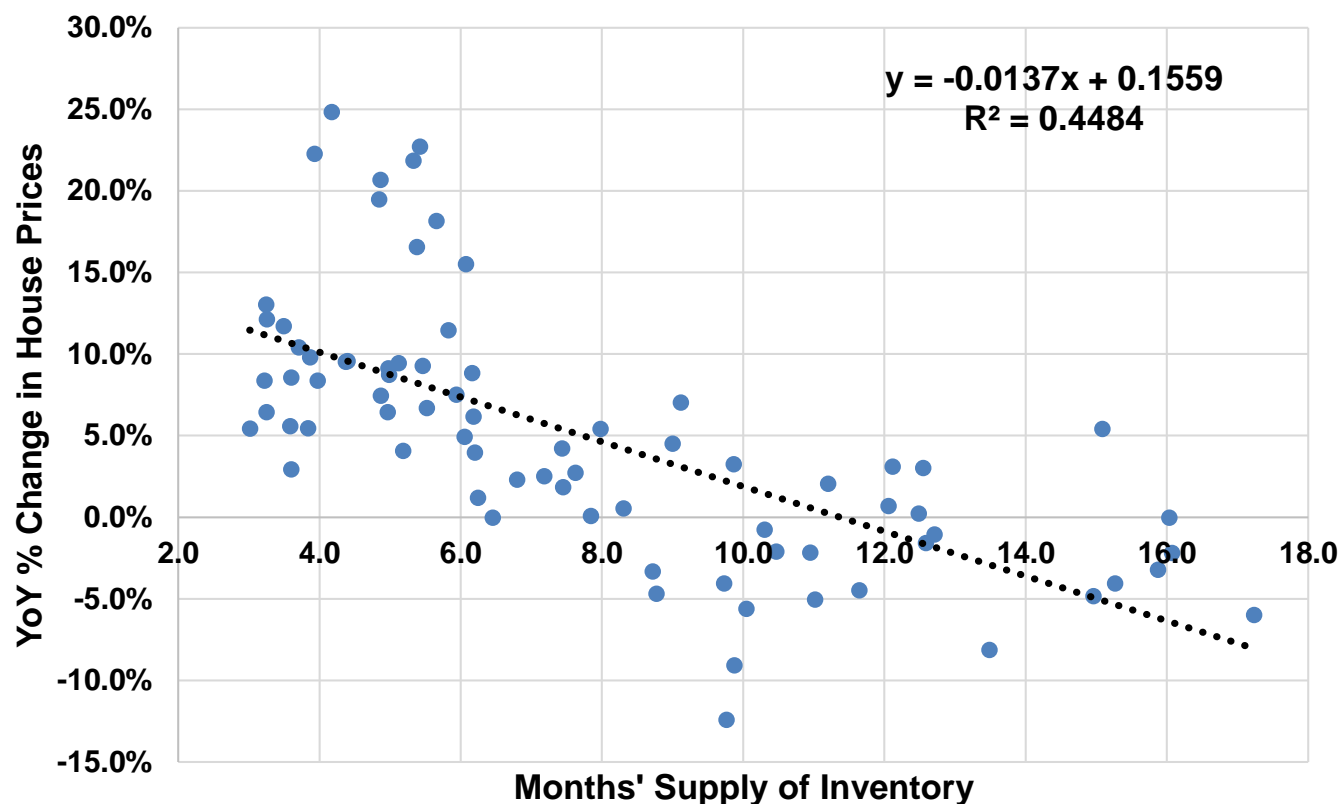
The relationship is “statistically significant” and very strong: inventory levels alone explain nearly half of the YoY fluctuation in Philly’s house price levels.

Every 1 month increase in the MSI is associated with a 1.4 percentage point reduction in the rate of house price appreciation.



## A DIGRESSION ON INVENTORIES

**Months' Supply of Housing Inventory v.  
YoY %Change in House Prices**

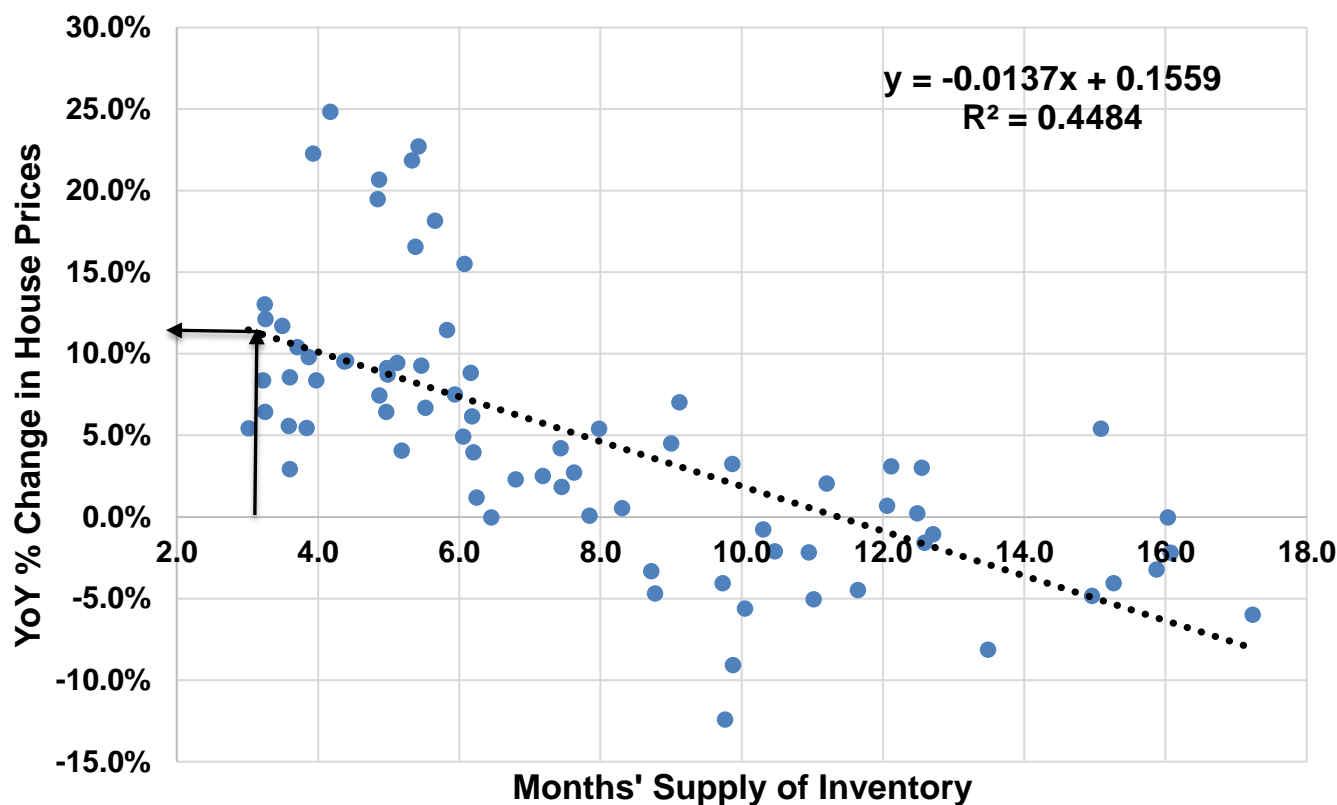


Example: The historic average rate of annual house price appreciation in Philadelphia is 4.5%.

If MSI were to increase from 6 months to 7 months (i.e. from a balanced market to a buyer's market), annual house price appreciation would fall from 4.5% to 3.1%.

## A DIGRESSION ON INVENTORIES

**Months' Supply of Housing Inventory v.  
YoY %Change in House Prices**



So what does this mean for our market, going forward?

**-Current MSI is 3.1 months.**

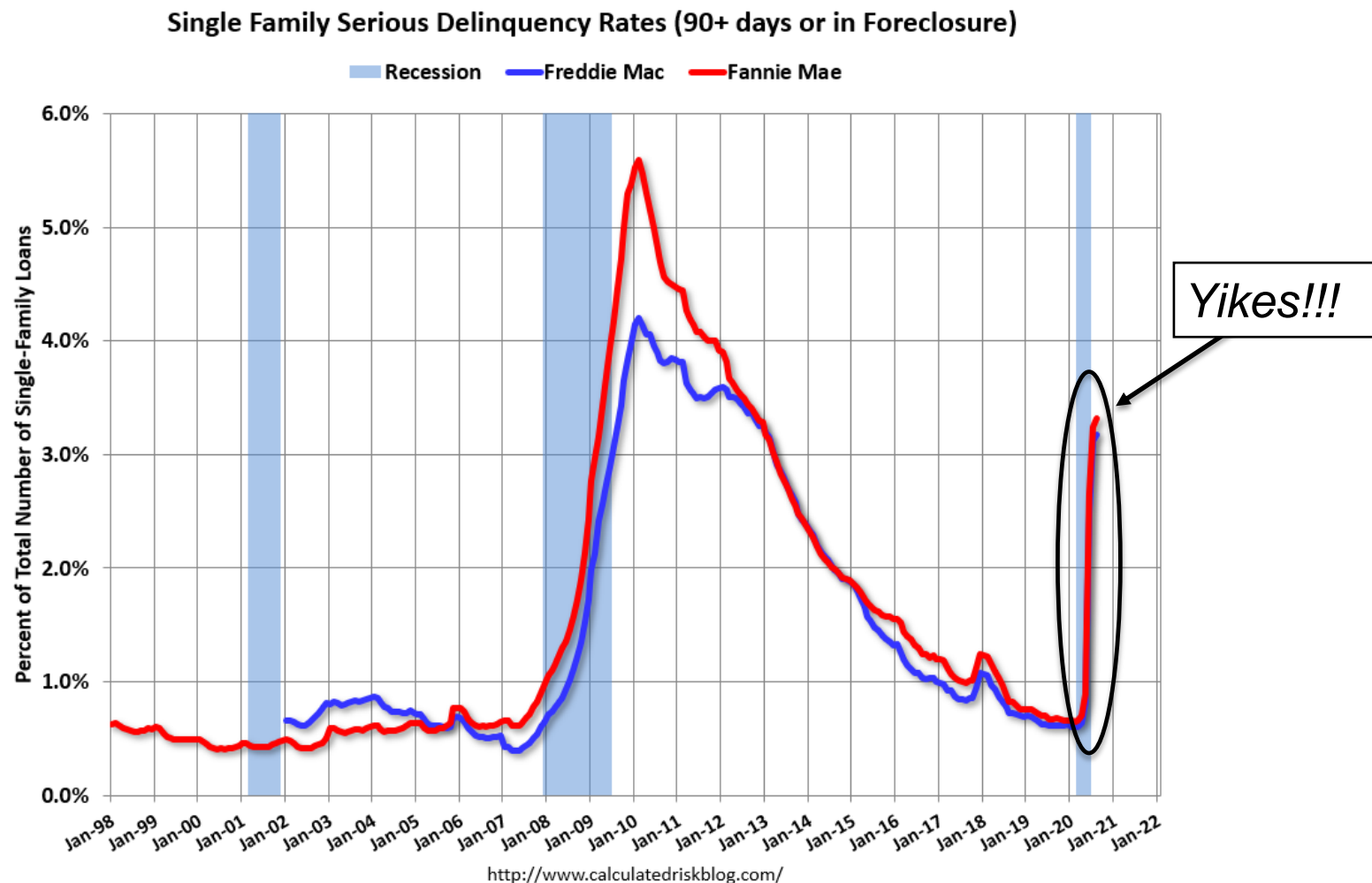
**-This implies that—holding all else constant—we can expect house prices to increase by 11.3% over the next 12 months...  
more than double their historic average of 4.5%!!**

**Do you expect Philadelphia incomes, population or jobs to also grow at more than 2x their historic average over the next 12 months?**

## MORTGAGE DELINQUENCIES ARE WAY UP

### Mortgage Delinquency Rates

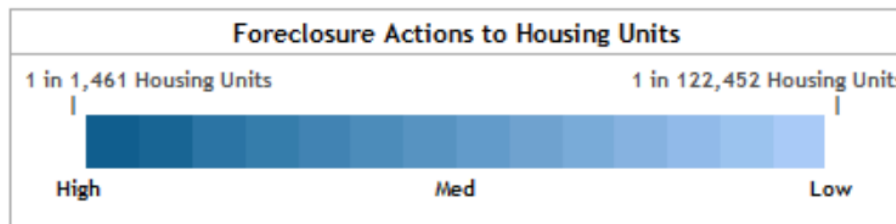
Source: Calculated Risk



## FORECLOSURE RATES WERE DOWN DRAMATICALLY...BUT

### Foreclosure Rates in PA , July 2020

Source: RealtyTrac



#### FORECLOSURE RATES FOR PENNSYLVANIA

July 2020

Pennsylvania  
 1 in every 19495

#### Top 5 Counties

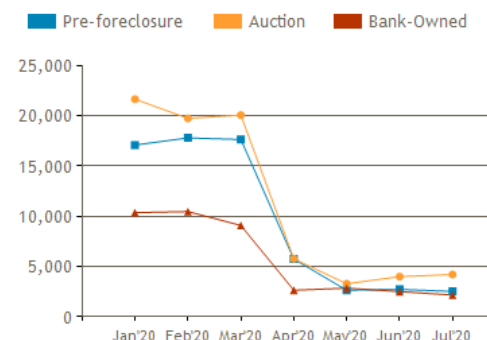
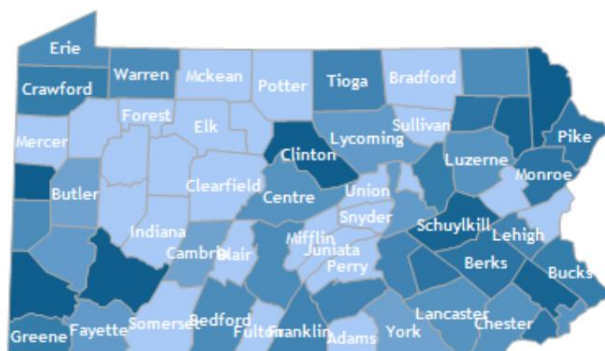
**Wayne**  
 1 in every 1461

**Westmoreland**  
 1 in every 4997

**Lawrence**  
 1 in every 5146

**Washington**  
 1 in every 8649

**Clinton**  
 1 in every 9599



Foreclosure rates across Pennsylvania have plummeted in recent months, but this was largely driven by a statewide moratorium on foreclosures in response to the pandemic.

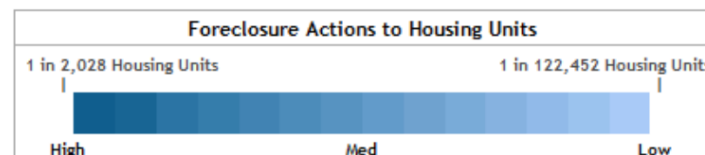
Six months ago, 1 in every 2,458 PA homes was in the process of foreclosure. Currently, only 1 in every 19,495 PA homes is in foreclosure.

For Philadelphia, the numbers have gone from 1 in every 1,570 homes to 1 in every 37,771.

## FORECLOSURE RATES WERE DOWN DRAMATICALLY...BUT

### Foreclosure Rates in PA , August 2020

Source: RealtyTrac



#### FORECLOSURE RATES FOR PENNSYLVANIA

August 2020

Pennsylvania  
1 in every 12480

#### Top 5 Counties

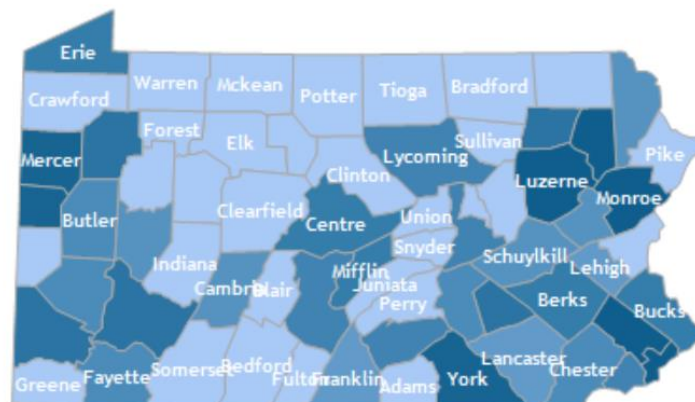
**Monroe**  
1 in every 2028

**Philadelphia**  
1 in every 3907

**Lackawanna**  
1 in every 5207

**Montgomery**  
1 in every 6898

**Luzerne**  
1 in every 7487



Since the statewide moratorium was lifted on September 1:

Pennsylvania has gone from only 1 in every 19,495 homes in foreclosure to 1 in every 12,480 homes in foreclosure... A 56% increase.

For Philadelphia, the numbers have gone from 1 in every 37,771 homes to 1 in every 3,907... an 867% increase!!



## NUMBER THREE

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So: where are we headed?

Short answer:

There are reasons for both pessimism and optimism...but which one wins out depends on how we both act and react.

## PESSIMISM

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# Reasons for pessimism:

- 1) Recession and a sluggish recovery.
- 2) A pending foreclosure/eviction deluge?
- 3) State and city finances—and public services—have taken a beating.
- 4) Excessively tight inventories making house prices either unsustainable or unaffordable.
- 5) The upcoming election and potential uncertainty.
- 6) The death of cities?

## PESSIMISM

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Of these, which am I most concerned about?

Answer: the election

Why: it's not because I'm concerned the "wrong" guy will win, it's because I'm concerned we won't know who really won until months later!

Worst case scenario: the Florida 2000 recount times 20 States.

An old saying in economics: "*Markets like good news.*

*Markets can handle bad news. But markets HATE no news!*"

## OPTIMISM

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# Reasons for optimism:

- 1) Sales have strongly rebounded once real estate was re-classified as an “essential business”.
- 2) The shift in work from traditional offices to home has provided great support to house prices.
- 3) The pandemic has forced an incredible leap forward in productivity gains in how real estate transacts...and this benefits both our entire industry and national economy.
- 4) The death of cities has historically been greatly exaggerated.

## OPTIMISM

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# 1) The resurgence in home sales.

- The biggest reason for the rebound in sales is that a lot of pent-up demand was released once real estate got successfully re-classified as an “essential” business.
- For this, the entire industry should be very grateful to NAR and its state and local affiliates, who lobbied relentlessly to make this happen!!
- And, of course: record-low interest rates.
- *“That goodwill [from consumers] should carry the industry successfully through the end of this year and into the next.”-Vince Malta, President of NAR.*



## OPTIMISM

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# 2) The shift in work from office to home.

- By shifting a significant percentage of the labor force from traditional offices to their homes, this essentially resulted in the 'up-zoning' of millions of houses from 'single-family residential' to 'commercial mixed use'.
- This not only shifted the demand for real estate from commercial to residential, but also made the demand for residential space 'more inelastic'; i.e. more essential.

## OPTIMISM

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# Some choice quotes:

- *"As a result of the quarantine and the shift towards working from home, housing has become the new toilet paper: completely essential and in huge demand."*-Principal of a major CA brokerage
- *"The home is no longer just a residence and office, it's now become a gym, a school, a restaurant, a spa, a library, an escape and a theater. And, all the money in the economy that would have otherwise been spent outside the home on those things is now spent within the home, which will result in a massive shift in spending from dining, traveling and entertainment to residential investment. That is HUGE news for our industry."*-A Senior Officer with NAR
- *"In the post-pandemic world, the home is no longer the focal point of living, it has become **THE** focal point of the entire national economy."* –Another Senior Officer with NAR

## OPTIMISM

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### 3) A great technological leap forward in how housing is bought and sold.

- In essence, the quarantine has forced brokers to move from the physical world to the digital world, and there are a lot of both important and positive consequences of this.
- For example: Showings are now done online. Mortgage applications and approvals are done electronically rather than in-person. Valuations are done by AVMs rather than by in-person appraisals. Negotiations and meetings are accomplished virtually via Zoom or Google Meet. Closings no longer require reams of paperwork and in-person signatures. E-signatures and virtual notarizations are now the new standard.
- ***“The ‘New Normal’ is the ‘Now Normal!’”***-Bob Goldberg, CEO of NAR.

## OPTIMISM

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- There is now a substantial reduction in time--and hence less wasted time--for not just Realtors and other industry professionals (e.g. appraisers, lenders), but also for sellers and buyers when involved in the typical transaction of a home.
- Example: a broker in Boston described a very high-powered lawyer for which he served as the lawyer's agent. As a lawyer, his day begins and ends with the billable hours that he has to ring up. Every hour he spends visiting houses rather than being present in court or otherwise working for his clients represents a serious loss of income. So, reducing the amount of time spent buying a home not only benefits him in a reduced loss of his time, but also a gain in his personal income.
- The less time that people spend selling, buying and engaging in the transaction of each home sale, the more time that they have to devote to other economic activities (e.g. the example of the lawyer), as well as freeing up brokers to increase their volume of transactions. This not only grows the real estate industry, it grows the overall economy.

## OPTIMISM

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- *“The pandemic forced the real estate industry to accelerate the adoption of digital technology by 5 years faster than it would have otherwise.”* –Principal of a local brokerage
- The less time that people spend selling, buying and engaging in the transaction of each home sale, the more time that they have to devote to other economic activities (e.g. the example of the lawyer), as well as freeing up brokers to increase their volume of transactions. This not only grows the real estate industry, it grows the overall economy.
- As the real estate industry grows in size--both as an absolute and relative share of the national economy--it increases the importance **and hence influence** that our industry has on policymaking. This further increases the industry's leverage to more favorably shape the laws, regulations and taxes that the industry is subject to...which further increases its productivity, profitability, size and importance to the national economy!

## OPTIMISM

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- **That is WIN WIN WIN WIN!!**



## OPTIMISM

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# 4) The death of cities has historically been greatly exaggerated

- There's an old saying in urban economics:
- *“Cities don't die of natural causes, nor are they murdered...they commit suicide.”*

## URBAN PANDEMICS

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Let's start with natural causes: urban pandemics through history.

## URBAN PANDEMICS

### The Plague of Athens, 430 BC

75,000-100,000  
estimated deaths.

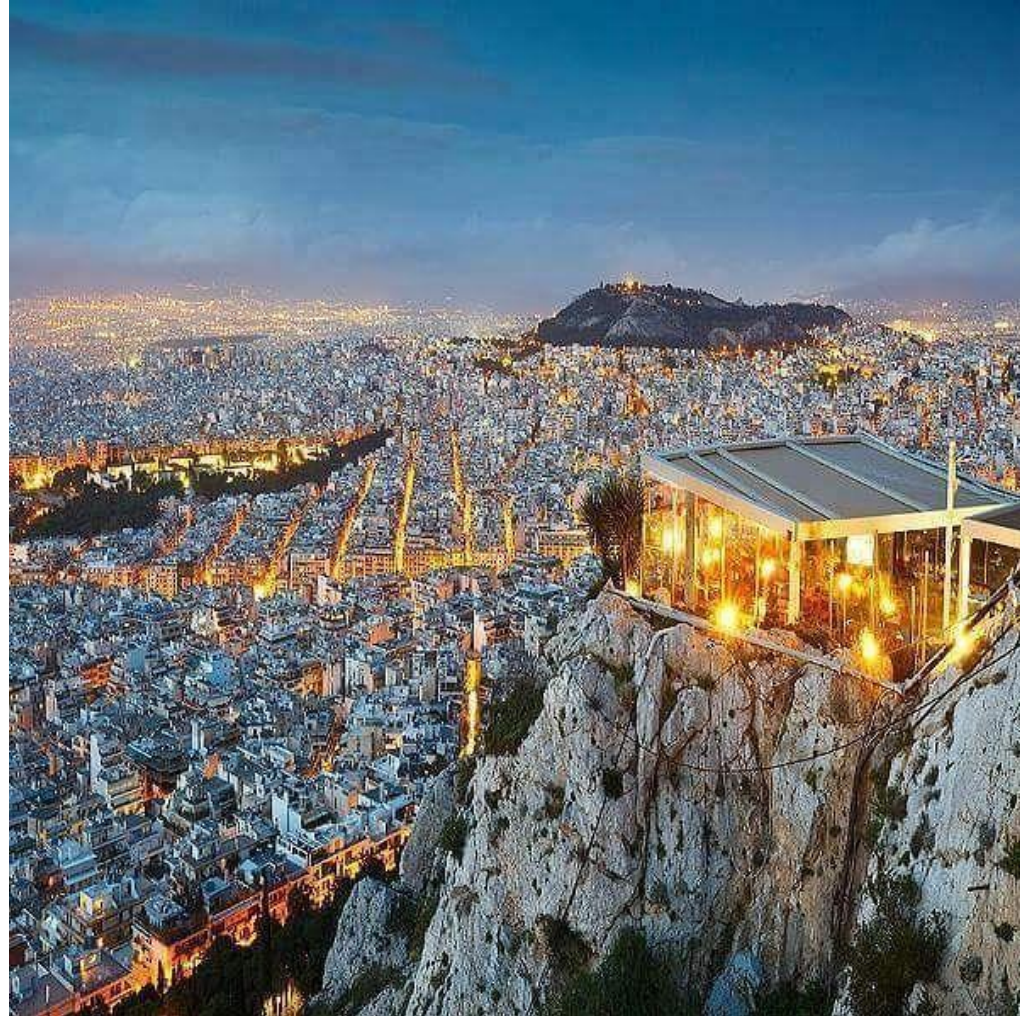




## URBAN PANDEMICS

What happened?

Athens recovered  
and grew.



## URBAN PANDEMICS

The Plague of  
Rome, 165-180 AD

25% of the  
population died.

~2,000 deaths per  
day.





## URBAN PANDEMICS

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What happened?

Rome recovered  
and grew.





## URBAN PANDEMICS

The Justinian Plague, 541 AD

Started in Constantinople (Istanbul), but spread to entire Mediterranean basin.

25-100m estimated deaths.

~50% of Europe's population



## URBAN PANDEMICS

What happened?

Istanbul  
recovered and  
grew.





## URBAN PANDEMICS

The Great Plague of  
London, 1685-1666  
AD

100,000 estimated  
deaths.

~25% of London's  
population





## URBAN PANDEMICS

What happened?

London  
recovered and  
grew.





## URBAN PANDEMICS

The Great Plague of  
Marseille, 1720 AD

100,000 estimated  
deaths.

40% of Marseille's  
population



## URBAN PANDEMICS

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# What happened?

Marseille  
recovered and  
grew.





## URBAN PANDEMICS

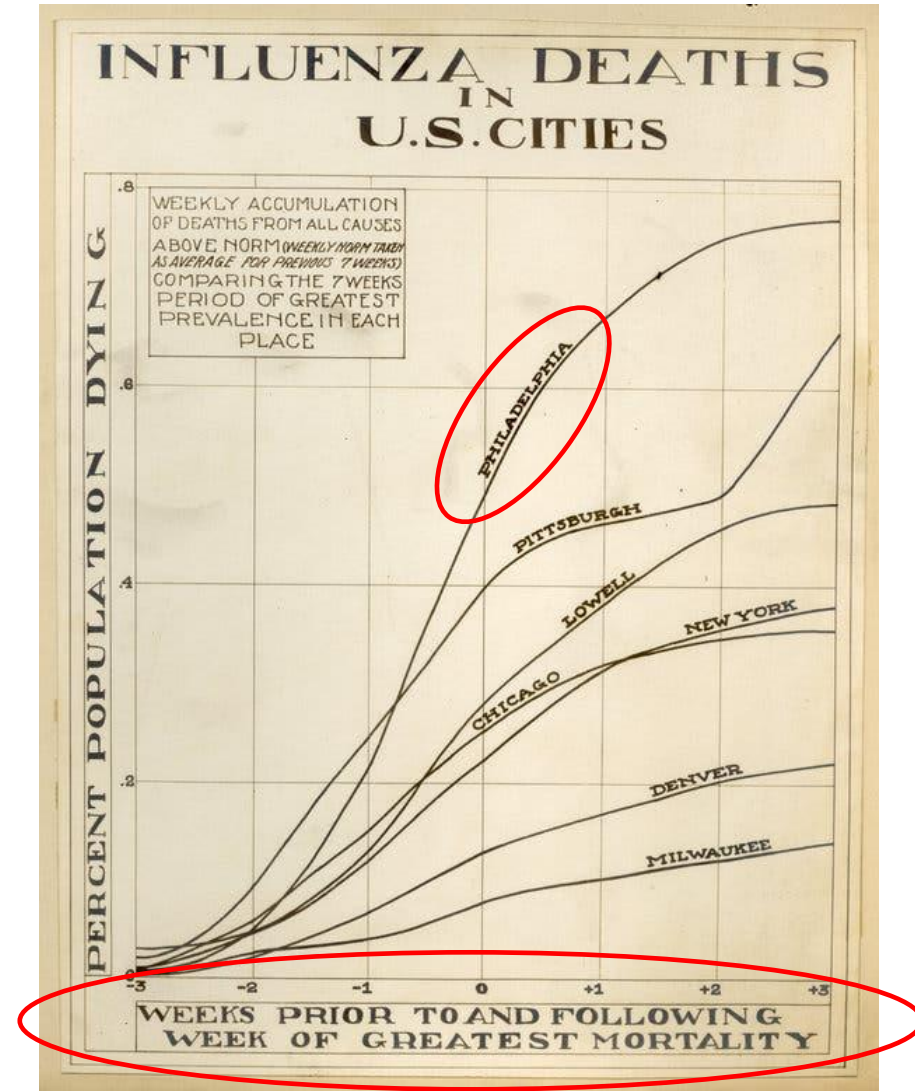
# The Spanish Flu of 1920

12,000 deaths in  
Philadelphia.



Philadelphia was the “New York” of the 1920 pandemic.

- By the way, notice that the duration of the pandemic was 6 weeks.



Source: N.Y. Times



## URBAN PANDEMICS

What happened?

Well...you know.



## OPTIMISM

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Ok, how about attempts at “murdering” cities; i.e. war?

Plenty of historical examples:

- Burning of Atlanta 1864
- Bombings of London and Dresden in WWII



## URBAN WAR

### The nuclear bombings of Hiroshima and Nagasaki in WWII





## URBAN WAR

### Hiroshima and Nagasaki today





## OPTIMISM

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But what does history tell us about how cities die from suicide: *failing to provide basic fundamental public services to its population.*

Especially: public order and protection of personal property.

## URBAN SUICIDE

**Detroit 1965:**

**Was the wealthiest city in the US (as measured by highest per capita income).**



*Woodward Avenue, Downtown Detroit*



## URBAN SUICIDE

**Detroit 1967:  
Besieged for  
four days by  
riots.**



## URBAN SUICIDE

**What happened  
after that?**

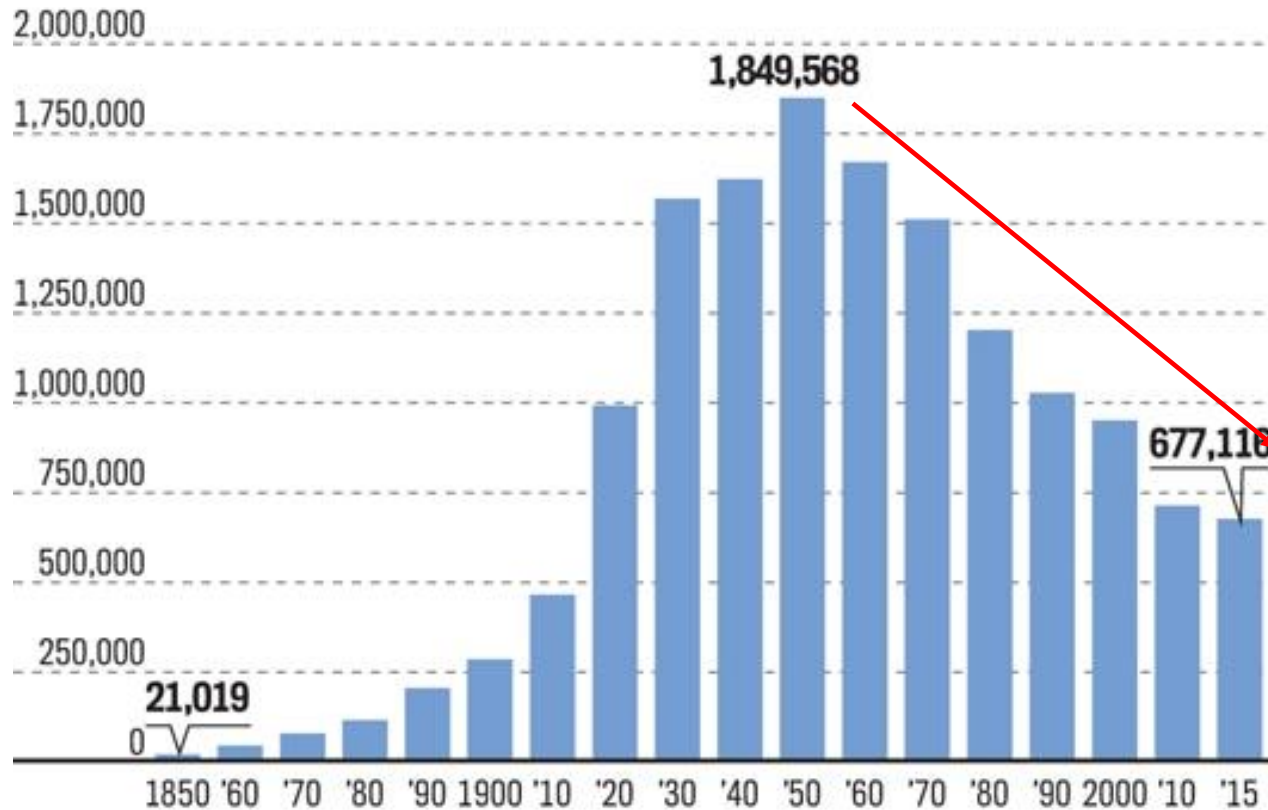
**Detroit went into  
a death spiral.**

**Population, jobs  
and investment  
vacated the city.**

**The city lost  
63% of its  
population.**

### Detroit's growth and decline

Here's a look through the years at the city's U.S. Census population estimates.



Source: U.S. Census

The Detroit News



## URBAN SUICIDE

**It is a legacy  
that Detroit still  
lives with today.**





## URBAN SUICIDE

**New York 1977:**  
A power outage  
led to massive  
looting and  
subsequent  
arson.





## URBAN SUICIDE

**New York 1977:**

**The loss in property damage and reduction in neighborhood quality of life was massive.**





## URBAN SUICIDE

**New York 1977:  
The loss in  
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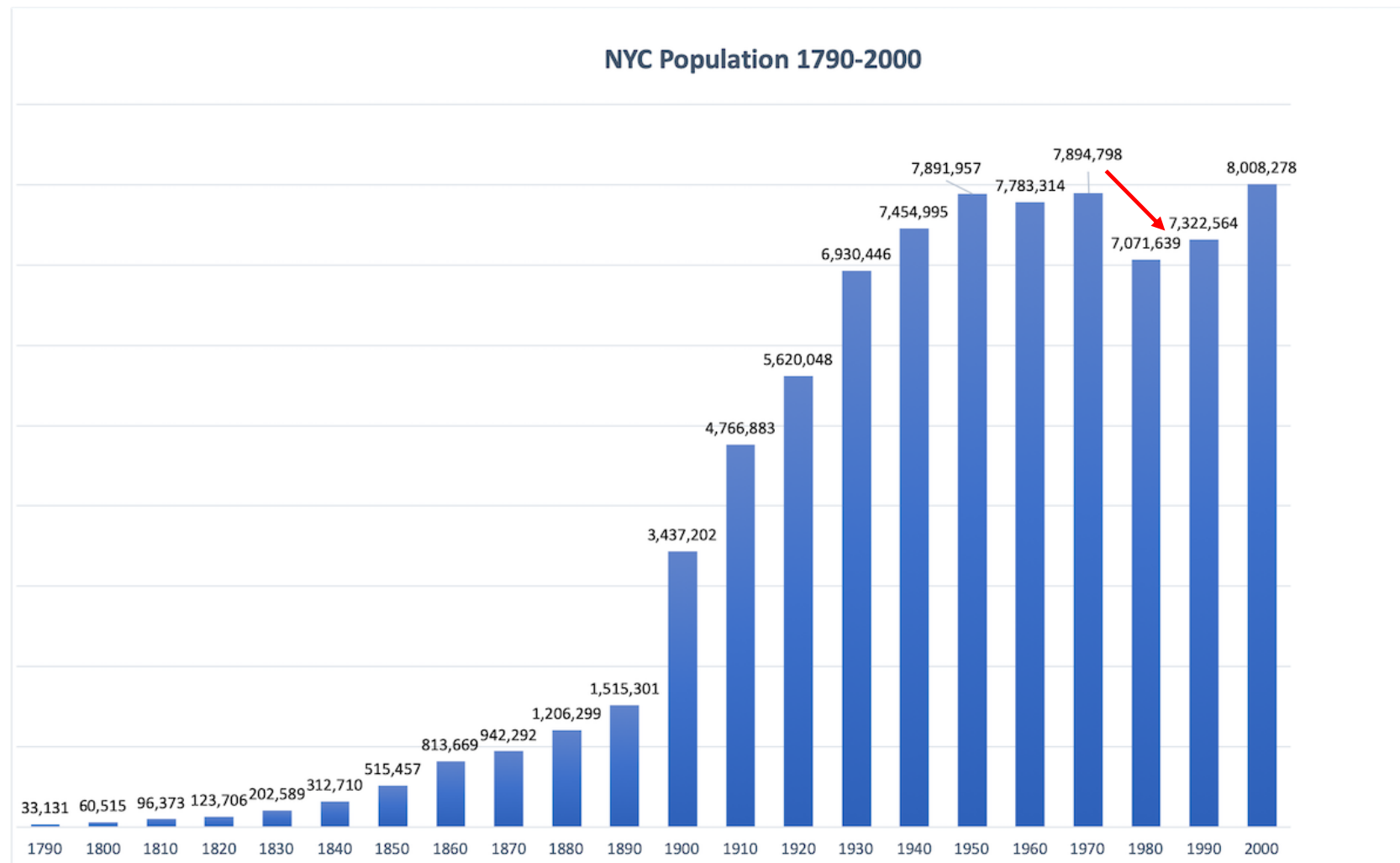
## URBAN SUICIDE

**What happened  
after that?**

**New York lost  
823,000 people  
(about half the pop.  
of Philadelphia).**

**Drops in jobs and  
investment  
followed. Crime  
soared.**

**The city didn't fully  
recover until after  
2000.**





## URBAN SUICIDE

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So: the historical evidence is pretty strong: cities don't die of natural causes, nor are they murdered. *Cities commit suicide.*

The corollary to this: capital flows to where it is loved and appreciated.

To which I'd modify it further: capital flows to where it is loved, appreciated and protected.

## URBAN SUICIDE

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So, is there reason to be concerned that Philadelphia could be committing suicide?.

- Crime has risen dramatically in Philadelphia in the past two years: homicides up 49 percent and shootings up 59 percent.
- If this trend holds, Philadelphia will tally more than 450 homicides in 2020—the highest count in nearly 30 years.
- Disconcertingly, the percentage of felony offenses prosecuted by the city are increasingly dropped or lost.
- Currently, 26 percent more felony cases are either dropped or loss by the current DA than his predecessor did.
- And 42 percent more illegal firearms cases are either dropped or loss by the current DA than his predecessor did.
- Substantial research shows that gun offenders are likely to commit more violent crime.

Source: <https://www.city-journal.org/>

## SUMMARY

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### Summing Up:

- Be grateful that our housing sector has weathered the current adverse conditions pretty well.
- Be concerned—but not overly worried—about the pandemic, inventories, foreclosures, price inflation and affordability. We've gotten through such challenges before.
- Be worried that we might attempt suicide.



# *Thank You!*

*Kevin C. Gillen Ph.D.*

*For questions: [Kevin.C.Gillen@Drexel.edu](mailto:Kevin.C.Gillen@Drexel.edu)*