

2020 & Real Estate: The effects of COVID-19 and social unrest on Real Estate Markets

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I. Abstract

Real Estate markets have experienced a great deal of turbulence these past few months. Certain cities and states had put into effect strict coronavirus guidelines which caused many to flee these areas due to the economic fallout and the personal infringement they felt these guidelines had, such as the forced closures of businesses. Economic fallout caused directly by the shutting down of business caused a further collapse in real estate as tenants could no longer pay their rent, which has led many to flee the costly housing prices of big cities. Over the course of the summer of 2020, we have seen large amounts of civil unrest which have caused massive property damage in many American cities leading to the devaluing of affected and surrounding real estate prices which also led to massive amounts of people leaving big cities. Finally, nearly all American big cities have seen a crime spike this year that has played a significant role in the driving down of prices; whether it was due to civil unrest or economic fallout. However, it is important to note that

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not all big cities had a real estate decline this year. Individuals staying in the same municipality but moving to the outskirts of said municipality causes no aggregate change in real estate prices for the municipality. Particularly wealthy individuals refusing to actually sell their real estate in said cities while moving out of them, which is the case in many Californian counties, can also result in little price impact. This paper will examine all of these specifics and the causes of these declines in further detail.

II. NYC

In 2020, there has been a mass exodus out of U.S. cities. NYC in particular saw more than 246,000 people file for a request for an address change, which equates to a 100% increase compared to 2019. Research shows that people are moving out of New York City due to increased crime, the threat of COVID-19, and the lack of activities within the city. Also, many people can now work from home, eliminating the need to live in the city. For instance, an article from the Pew Research Center states "Survey respondents who did not select one of these reasons gave a variety of other reasons for moving. One said, 'I am traveling and am now blocked from returning home.' Another wrote: 'Needed more space to work from home.' A third said, 'Recalled to active duty for the military's COVID response.'²

According to the Pew Research Center, 1 in 5 Americans have relocated from cities due to the pandemic or know someone who has.¹ Due to the pandemic, many people who would otherwise be working an office job in NYC find that they can now work from the comfort of their home. There are currently no plans to reopen Broadway, the cultural heart of NYC. Limited occupancy is allowed for some museums.³ The current exodus can be attributed to a combination of cramped living spaces, threat of deadly disease, expensive rent, lack of activities, and ultimately, being able to work from home. According to the NYPD, there has been a large increase in crime.⁴ Murder rates, shootings, and burglary have seen an increase of 23.7%, 130.3%, and 118.2%, respectively. The rise in crime rates has led to people feeling unsafe in their NY homes and neighborhoods.

¹ Krauth, Dan. "Pandemic Exodus: Moving Companies Turn Customers Away as People Leave Tri-State in Record Numbers." ABC7 New York, WABC-TV, 31 Aug. 2020, abc7ny.com/7-on-your-side-investigates-pandemic-exodus-leaving-nyc-fleeing-new-york-city/6386411/.

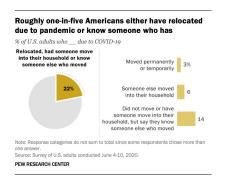
² Cohn, D'Vera. "About a Fifth of U.S. Adults Moved Due to COVID-19 or Know Someone Who Did." *Pew Research Center*, Pew Research Center, 27 July 2020, www.pewresearch.org/fact-tank/2020/07/06/about-a-fifth-of-u-s-adults-moved-due-to-covid-19-or-know-someone-who-did/.

³ Caitlin Huston, et al. "Gov. Cuomo Says No Update on Broadway Reopening as Indoor Dining Is Cleared." *Broadway News*, 9 Sept. 2020, broadwaynews.com/2020/09/09/gov-cuomo-says-no-update-on-broadway-reopening-as-indoor-dining-is-cleared/.

⁴ "NYPD Announces Citywide Crime Statistics for June 2020." *The Official Website of the City of New York*, 6 July 2020, www1.nyc.gov/site/nypd/news/pr0706/nypd-citywide-crime-statistics-june-2020.

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Statistics on Index Crimes

	June 2020	June 2019	+/-	%
Murder	39	30	+9	+30%
Rape	109	138	-29	-21.0%
Robbery	948	1,153	-205	-17.8%
Assault	1,947	1,953	-6	-0.3%
Burglary	1,783	817	+966	+118.2%
Grand Larceny	2,317	3,744	-1,427	-38.1%
G.L.A.	696	462	+234	+50.6%
TOTAL	7,839	8,297	-458	-5.5%

Urban areas such as Manhattan, the heart of New York City, have real estate estimates that are dropping substantially compared to what they were prior to COVID-19. When placed side by side with the real estate estimates from suburban areas in New Jersey for example, that disparity grows further apart. Manhattan's housing market prices have been the lowest of all of NYC since the pandemic hit, having an average of 1.4% under the norm. These areas in New Jersey have been seeing rates go above more than 2% over what the norm has been there⁵.

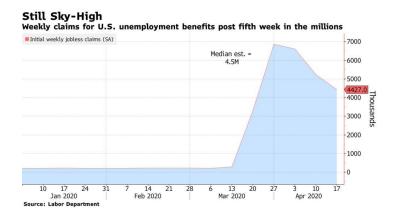
During the COVID 19 pandemic, the number of home sales in Manhattan dropped 54% and the median price fell to \$1 million. COVID has heavily impacted the Manhattan real estate market in an event unmatched in recent history with the exception of the Great Depression, and it is still unclear whether this recovery will be swift or not.

The amount of closed condo sales in the second quarter of the year was down 54% year over year, which is the largest decline in approximately 30 years, according to a new report from the Douglas Elliman brokerage firm. The median sales price fell 17.7%, compared to the same time last year, to \$1 million, the biggest drop in a decade. This shows that people are moving out of New York City and into the suburbs. There are many reasons for such a shift, but the main one is that they can no longer afford to pay the high rent or property tax of their residence. As the city's unemployment rate skyrocketed to 3.4%, many had to move out because they couldn't afford to live in Manhattan anymore.

⁵ Barro, J., 2020. *How Much Is COVID-19 Hurting NYC Real-Estate Values?*. [online] Intelligencer. Available at: https://nymag.com/intelligencer/2020/07/is-covid-19-hurting-nyc-real-estate-values.html [Accessed 13 October 2020].

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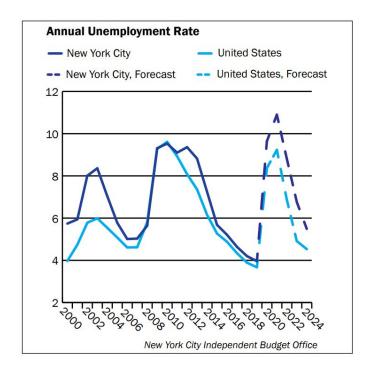


The number of contracts signed for apartments in June was down 70% year over year⁶, and this can be seen as a reflection of the weekly jobless claims chart. As more people across the country began to lose jobs (many of which were from NYC) they began to blow through their savings on expensive rent, mortgage, and/or property tax. Rent and mortgage were not suspended, but tenants could not be evicted for not paying them. This didn't help the situation as people didn't want to take on so much debt unemployed. They could afford to do this for a few months, until they were forced to move out of the city and into the suburbs

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⁶ PropertyShark Real Estate Blog. 2020. NYC Median Sale Price Hits Yearly Low, Sales Drop Below 2,000 Once Again | Propertyshark. [online] Available at: https://www.propertyshark.com/Real-Estate-Reports/nyc-real-estate-covid19/ [Accessed 18 October 2020].





"This is what you get when the market is not able to function," said Jonathan Miller, a New York appraiser and the author of the report, noting that in-person apartment showings in New York City were banned for nearly the entire quarter. "It's an extreme moment, to put it lightly."

These forecasted unemployment rates show that it may take years to recover from the COVID unemployment, and that NYC may see a higher unemployment spike than average in the US.

⁷ Haberman, C., 2020. With Evictions Looming, Cities Revisit A Housing Experiment From The '70S. [online] Www-nytimes-com.cdn.ampproject.org. Available at:

 $< https://www-nytimes-com.cdn.ampproject.org/v/s/www.nytimes.com/2020/10/01/us/coronavirus-evictions.amp.html?usqp=mq331AQHKAFQAr ABIA%3D%3D&_js_v=0.1#aoh=16024583366354&_ct=1602458350574&csi=1&referrer=https%3A%2F%2Fwww.google.com&_tf=From%20%251%24s&share=https%3A%2F%2Fwww.nytimes.com%2F2020%2F10%2F01%2Fus%2Fcoronavirus-evictions.html> [Accessed 18 October 2020].$



III. New York State

As observed across the 5 boroughs, a series of movers leaving to the suburbs has left cities like NYC with a barely functional real estate market. With Queens, Brooklyn, and Manhattan experiencing downward trends since May's peak in prices, many are concerned about how a variety of businesses will recover. Since the government has lacked in creating recovery plans on the federal and state level, both consumers and producers will fare with the difficulties of COVID for quite some time. Such can be observed in Westchester, with towns like New Rochelle and White Plains seeing housing prices rise 3.4% from July to September alone. Accompanied by population increases, these areas have seen economic changes past their homes. With New Rochelle's median household income changing from \$73k to \$80k since the rise of the COVID-19 pandemic, many residents have noted visible price differences in the span of months. Since family-owned businesses had to take advantage of this and turn a profit for the first time in months, it is logical to assume that all from hardware to pastries became more expensive.

Yet, the biggest issue with this trend is that it actually targets those with the most money. Under recently adapted NY State Legislature, all "new purchasers of city and state properties will have to pay an increased NYS transfer tax of .65 percent for residential 1-3 family condominiums and co-op sales of \$3 million or more. (Pardalis/Weiss, Property Shark)" Additionally, the transfer tax will apply to all commercial sales of \$2 million or more, unable to be reduced after purchase. It may seem insane for the regular person to pay so much for an in-city condominium, but these are just the standard costs of living in NYC. Without the people who are able to afford the city's high prices, it becomes difficult for producers to keep their prices too high. Similarly, it becomes difficult to keep rent or construction costs at such extreme costs. Affecting all commercial sales, these tax laws are driving the rich out of New York. As they leave, they take with them high costs and leave the state's economy in shambles.

John Boyd Jr., director at the corporate site-selection firm the Boyd Company Inc., based in Princeton, N.J., said he has heard from companies that are re-evaluating their plans to move to

⁸ "NYC Median Sale Price Hits Yearly Low, Sales Drop Below 2,000 Once Again | PropertyShark." *PropertyShark Real Estate Blog*, 17 Sept. 2020, www.propertyshark.com/Real-Estate-Reports/nyc-real-estate-covid19/. Accessed 25 Nov. 2020.

⁹ "What Every Consumer Should Know: Recent Legislative and Tax Changes Under New York State's Real Estate Law." *PropertyShark Real Estate Blog*, 13 May 2019,

www.propertyshark.com/Real-Estate-Reports/2019/05/13/what-every-consumer-should-know-recent-legislative-and-tax-changes-under-new-york-st ates-real-estate-law/. Accessed 25 Nov. 2020.

¹⁰ Franklin, Sydney. "Westchester Home Sales Drop to Recession-Era Lows." *The New York Times*, 9 July 2020, www.nytimes.com/2020/07/09/realestate/westchester-home-sales-drop-to-recession-era-lows.html. Accessed 25 Nov. 2020.

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New York. Several executives have told him they are very worried that city officials will need to increase corporate taxes to raise revenue. He also stated that much of the real estate outside of New York City is becoming more affordable causing many people to decide to move there instead.¹¹

At least 520,000 jobs have already been lost from the small business sector alone, according to data from the Partnership for New York City referenced in the report. People losing their jobs means they cannot afford the high rent prices in New York City. ¹²

"A lot will ride on what happens with schools at the end of the summer," Ms. Freedman said (the chief executive of the brokerage Brown Harris Stevens), because few potential buyers with children who have left the city to escape the pandemic will choose to return, if virtual classrooms continue. Schools such as the specialized high schools are ranked among the top best in the country and were a big reason as to why many people chose to stay in the city despite the high prices. Now that these schools have resorted to remote teaching, people do not see these high schools as as much of a benefit as they did prior to the pandemic.¹³

Property owners in New York City are being forced to pay \$1.65 billion more dollars in property values than they did last year. This adds to the risk of buying property in New York. Paying more in property tax essentially means that the house you are buying will cost more which pushes many people away from the idea of buying property in New York City.¹⁴

The bottom line is that major cities, especially New York, have lost their appeal, specifically to those that carry the highest economic power, or the highest earners. The stomping ground of the wealthiest of New Yorkers, or those that are in the city primarily for its culture, entertainment, or their white collar jobs, has been eliminated by the rise of the pervasive novel coronavirus. Cultural and entertainment activities have been ceased, and white collar jobs have been moved online. This inherent lack of incentive to remain in the city has caused well-off neighborhoods to empty out in droves¹⁵.

The widespread disappearance of the wealthiest of New Yorkers triggered a major problem for the city: money. The city, after many months of lockdown, trembles on the precipice of a fiscal cliff; a fall from which could heavily hamper the city's economy for years to come. In order to address the budget hole (of several billion dollars) that currently plagues the city, the city needs

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¹¹ Kate King, "People Were Leaving New York City Before the Coronavirus. Now What?," The Wall Street Journal (Dow Jones & Company, April 26, 2020), https://www.wsj.com/articles/people-were-leaving-new-york-city-before-the-coronavirus-now-what-11587916800.

¹² Lisa Chamoff, "With Unemployment Twice As High As The Great Recession's Peak, New York City Rents Have Further To Fall," Forbes

¹² Lisa Chamoff, "With Unemployment Twice As High As The Great Recession's Peak, New York City Rents Have Further To Fall," Forbes (Forbes Magazine, August 14, 2020),

https://www.forbes.com/sites/lisachamoff/2020/08/13/with-unemployment-twice-as-high-as-the-great-recessions-peak-rents-have-farther-to-fall/.

¹³ Josh Barbanel, "WSJ News Exclusive | New York City Property Taxes Rise as Coronavirus Pushes Values Down," The Wall Street Journal (Dow Jones & Company, May 31, 2020),

https://www.wsj.com/articles/new-york-city-property-taxes-rise-as-coronavirus-pushes-values-down-11590926402.

¹⁴ Josh Barbanel, "WSJ News Exclusive | New York City Property Taxes Rise as Coronavirus Pushes Values Down," The Wall Street Journal (Dow Jones & Company, May 31, 2020),

https://www.wsj.com/articles/new-york-city-property-taxes-rise-as-coronavirus-pushes-values-down-11590926402.

¹⁵ Quealy, Kevin. "The Richest Neighborhoods Emptied Out Most as Coronavirus Hit New York City." *The New York Times*, The New York Times, 15 May 2020, www.nytimes.com/interactive/2020/05/15/upshot/who-left-new-york-coronavirus.html.



one of three things; new bonding authority from the state, additional federal aid, or higher taxes on the wealthy. The third solution is the most concerning for the wealthy and middle class that remain in New York; this money would be coming out of their pockets. This threat of taxation¹⁶ prompted a second wave of departures, pushing the city into an even more precarious position.

IV. Effects

"Many municipalities are looking at raising property taxes in order to meet budget shortfalls caused by economic shutdowns related to the Covid-19 pandemic." This is a quote from the newsletter, The Mansion Global, under the subsection 'New York - Tax Talk'. This quote was a response to someone curious as to whether 'major real estate markets around the world considering property tax increases to offset municipal revenue losses as a result of the pandemic?'

S&P Global Ratings also respond to the fear of COVID-19 has permanent effects on major cities, worldwide. In an article called, 'COVID-19: A Closer Look At How It Affects 10 Major U.S. Cities'. S&P Global not only speaks on possible tax increases but the way that major cities, due to COVID, will be facing increasing expenditure and reducing revenues. The article also dives into the root of the problem; weak liquidity. Due to COVID and vandalism, many have lost their businesses and faced serious financial grievances. People, especially those living in large cities, are running to banks to take out cash. Like other economic crises, such as the stock market crashes of '29 and '08, investment banks were not prepared for the mass number of people they were about to face. This is where we look to our central banks. The article continues by saying that, "even property taxes are likely to be affected should the recession be prolonged.". The overall message is that those who rely on economically sensitive revenues will face the most severe consequences.

¹⁶ Fink, Zack. Cuomo Opens Door to Raising Taxes on the Rich, NY1, 8 Sept. 2020,

www.nyl.com/nyc/all-boroughs/news/2020/09/08/cuomo-opens-door-to-raising-taxes-on-the-rich.

Thendrickson, V. (2020, October 01). Which Cities Are Contemplating Property Tax Increases to Offset Covid-19 Financial Woes? Retrieved October 12, 2020, from

https://www.mansionglobal.com/articles/which-cities-are-contemplating-property-tax-increases-to-offset-covid-19-financial-woes-219881 Yocom, B. and Ridley, J., 2020. *COVID-19: A Closer Look At How It Affects 10 Major U.S. Cities*. [online] Spglobal.com. Available at: https://www.spglobal.com/articles/200402-covid-19-a-closer-look-at-how-it-affects-10-major-u-s-cities-11419980 [Accessed 12 October 2020].



V. Tax Policy

Available Policy Options:

Amidst the COVID-19 situation, lawmakers at all levels of government should focus on drafting deliberate and comprehensive economic strategies that stymie harmful taxes and allow businesses to invest and create jobs. To begin that process, these are some achievable tax reforms proposed by the Tax Foundation. These policy options have been divided into three categories: state, federal, and global.

State Tax Policies:

- Modernize tax rules that are friendlier towards the trend of remoteness and teleworking.

Federal Tax Policies:

- Reform/repeal tax increases embedded in the TCJA of 2017

Global Tax Policies:

- The OECD should help countries across the globe to reorder the mix of their taxes away from harmful corporate and individual taxes to less harmful consumption and property taxes.

Clearing the Tax Path for Economic Recovery:

When the immediate health crisis abates, states will be forced to grapple with depleted reserves and reduced revenues while simultaneously seeking to adopt policies that will spur an economic recovery. Revenue needs and enhanced competition could be at tension with each other if states do not act swiftly and accordingly. Whatever difficult decisions states make on taxes and revenues, policymakers should at least regard this as an appropriate time to modernize state tax codes to make them more conducive—at any level of taxation—to economic growth and expansion.¹⁹

State Reform #1: Modernizing Tax Rules

The COVID-19 pandemic has fundamentally revised the nature of the workplace. Although most jobs still require on-site work, businesses are developmentally adopting more expansive telework policies. This has prompted business owners to call for a reflective change in tax regimes. The federal system has not yet evolved to reflect this new reality.

It is important to note that the federal system grants each state substantial autonomy over its tax codes. This yields tax competition that often leads to double taxation and tax complexity for businesses and individuals who operate in multiple states. Such an environment can expose

¹⁹ Hodge, Scott A., et al. "How America Can Clear a Path to Economic Recovery." *Tax Foundation*, 21 Sept. 2020, taxfoundation.org/coronavirus-economic-recovery/.



employers to business tax liability. Therefore, the current tax codes have greatly restricted businesses from experimenting and succeeding with telework options. This is why modernizing the tax rules to suit the COVID-19 reality is needed.

Federal Reform #1: Preventing a Needless Tax Increase

There is yet another ill-timed tax increase scheduled in the Tax Cuts and Jobs Act (TCJA) that lawmakers should remove in order to ease the path to economic recovery for America's multinational businesses. Instead of allowing this rate increase to go as scheduled, expense allocation should be reformed so that the minimum tax rate on foreign income is realistic and plausible.

Global Reform #1: Changing the Mix of Taxes from Income to Consumption and Property

OECD economists have accurately identified how different tax policies can impact and possibly hamper economic growth. First, they found corporate taxes to be the most harmful taxes for economic growth because capital is a highly mobile factor in the economy and thus more conducive to high tax rates. They then found that individual income taxes, including payroll taxes, were the second-most harmful because of how they can undermine work incentives and entrepreneurship. On the other hand, it was concluded that most of the gains to productivity came from the consumption tax on old savings.²⁰ The consumption tax is unavoidable, which prevents wealthy corporations and individuals from taking advantage of the current tax cuts established by the TCJA. Lastly, property taxation was also deemed advantageous to the economy because naturally, property cannot be moved to avoid tax.

In conclusion, converting to a consumption and property taxation system will drastically and positively alter how businesses and companies operate in light of the national situation.

VI. Housing Market Overview

As Covid-19 continues to sweep the world, the housing market has had plenty of note-worthy alterations. For NYC, the high Crime rates and tax increases, on top of the battle against COVID, have contributed to New York City's housing market demise. However because of New York City's struggles, suburban areas witness many positive attributes in the real estate market than they have had prior to the epidemic. Miami has also been a successful player in the housing market because of New York City's issues. Ultimately, Covid-19 has been a blessing and a curse to the housing market of the United States.

²⁰ Burman, Len, and William G. Gale. "The Pros and Cons of a Consumption Tax." *Brookings*, Brookings, 28 July 2016, www.brookings.edu/on-the-record/the-pros-and-cons-of-a-consumption-tax/.

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New York

The spread of coronavirus, tax increases, and increased rates in crime led to individuals living in New York City to flee to suburbs and rural housing. Before the pandemic struck, NYC residents had issues with high tax rates and costly living expenses; however, it did not bring as much chaos and movement as it did in the past year in 2020. With the tax raised by another 4%, families were not able to afford taxes and their insurance; as a result, they began moving out of urban cities and into suburbs. Additionally, due to the spread of COVID-19, unemployment rates have dramatically increased, specifically it is at 16.3%, noted as the highest in the state. With the unemployment rate rising, crime rates have further increased and caused chaos in NYC, including the boarding up and closing of many small businesses and shops. With the riots and civil unrest due to incidents of police of brutality, along with increased crime rates, residents started to become more worried for their safety. Statistics show that violence and crime, such as shootings, have increased to over 85% since last year in New York City. This started to alarm citizens. It was even reported that 30% of residents living in NYC were more alarmed by the crime rates than the spread of COVID-19.

As issues such as high crime, economic stagnation, and civil unrest emerge in NYC, the real estate prices of housing decreased to the lowest point real estate agents have ever seen before in the city. A huge online real estate service, Zillow, reports and provides information to online users that prices of homes have dropped 4.2% since last year and houses have stayed on the market two months longer than they were in 2019. Furthermore, other sources display that the number of sales in Manhattan have dropped 62% and the median sales cost declined by about 17.7% compared to the past years, dropping to \$1 million (known as the biggest drop of the decade). Even in June, the number of contracts signed conveying buyers' desire to buy or rent was down by 76% since last year. Additionally, listings have decreased by 26% since last year. Apartments in Manhattan are reported to have fallen 31% while sales rise in the suburbs. For instance, condos and co-ops that were priced at more than \$4 million fell 44%. News officials even reported that Manhattan apartment sales display the worst on record. Considered to be the biggest plunge of the

²¹ Kelly, Jack. "New Yorkers Are Leaving The City In Droves: Here's Why They're Moving And Where They're Going." *Forbes*, Forbes Magazine, 6 Sept. 2019,

www.forbes.com/sites/jackkelly/2019/09/05/new-yorkers-are-leaving-the-city-in-droves-heres-why-theyre-moving-and-where-theyre-going/.

²² Reisman, Nick. "Unemployment Rates Vary Across New York." Spectrum News NY1, 2020,

www.nyl.com/nyc/all-boroughs/ny-state-of-politics/2020/09/23/unemployment-rates-vary-across-new-york-.

²³ Sipes, Leonard. "People And Businesses Leaving Cities Because Of Protests And Crime." *Law Officer*, 31 Aug. 2020, www.lawofficer.com/people-and-businesses-leaving-cities-because-of-protests-and-crime/.

²⁴ Zillow Research on Aug. 12, 2020. "Zillow 2020 Urban-Suburban Market Report." *Zillow Research*, 3 Oct. 2020, www.zillow.com/research/2020-urb-suburb-market-report-27712/.

²⁵ Chen, Stefanos, and Sydney Franklin. "Real Estate Prices Fall Sharply in New York." *The New York Times*, The New York Times, 2 July 2020, www.nytimes.com/2020/07/02/realestate/coronavirus-real-estate-price-drop.html.

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last years, Manhattan sales this quarter were recorded to be only 1,147, the lowest number in record ²⁶

Miami

New York City and Miami, have displayed differences in the way they were affected by the spread of COVID-19, tax increases, and rise in crime rates. With citizens of New York City alarmed and worried, they began to leave and move into suburban homes. However, suburban areas were not the only place where New York City residents migrated to. South Florida, or in particular, Miami, proved to be a hot-spot for former New York City homeowners (6.1% annual growth in home sales). Although moving to Miami from urban areas has been a trend popularized from paying high real estate taxes after the Tax Cuts and Jobs Act of 2017 for high-income individuals because it limited how much they could deduct from their tax returns, Covid-19's sudden appearance contributed to that as well. Real estate prices in Miami stayed the same during the beginning months of lockdowns, and are once again on the rise. The Miami area has been one of the few urban attractions after the virus changed our world. Projections into the near future predict that the Miami real estate market will continue to grow into 2021. Reasons for this are as follows: Tourist market, low unemployment, low property taxes, no income tax, high rental income. Ultimately, New York City's real estate market issues seem to be a positive for Miami's. 27

Southern California

Despite the general trends demonstrated in the urban areas of New York City and Miami, Southern California experienced fluctuations that were very distinct as the general cost of homes actually increased throughout the progression of the pandemic. Los Angeles County, which comprises several cities in Southern California, saw a house price increase of 4.9% in April, which was the beginning of the COVID-19 crisis. The median sold price of an existing family home went up 3.9%. However, the pandemic took a significant financial toll on many and thus, as these general trends of appreciation in house prices surged, overall sales decreased. The home sales fell 26.6% as compared to March, while the sales from year over year fell 31.5%. Ultimately, in the city of Los Angeles specifically, the median sold price of an existing single family home was \$550,000, a 2.5% increase from year over year.

As the pandemic progressed, southern California saw a steady rebound in home sales, but prices remained on the continuous trend of growth. In June, the jump in sales from May was 48% in Metro Los Angeles, with home prices appreciating an average of \$18,000, or 11.6%, to a new median of \$553,000. July followed this trend of increased home sales as well. In a year to year analysis, existing single-family home sales fell by 5.2% from August 2019. In terms of house sales, the median price has risen by 7.9% from a year earlier to \$677,260. Compared to July, sales

²⁶ Frank, Robert. "Manhattan Apartment Sales Worst on Record, Biggest Plunge in 30 Years." *CNBC*, CNBC, 2 July 2020, www.cnbc.com/2020/07/02/manhattan-apartment-sales-worst-on-record-biggest-plunge-in-30-years html

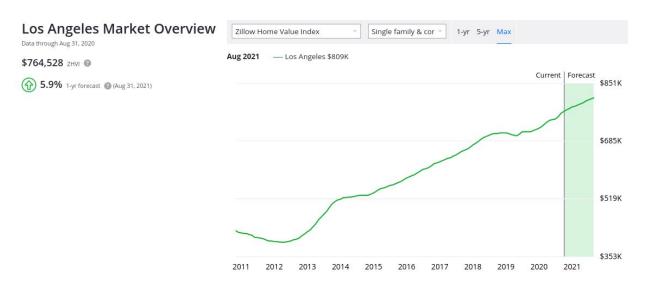
www.cnbc.com/2020/07/02/manhattan-apartment-sales-worst-on-record-biggest-plunge-in-30-years.html.

27 Santarelli, Marco. "Miami Real Estate Market & Investment Overview 2020." Norada Real Estate Market Investments, 21 Aug. 2020, www.noradarealestate.com/blog/miami-real-estate-market.



decreased by 1.7% in August. The median home price of the Los Angeles metropolitan region rose to \$615,000, an appreciation of 12.8% from last year. Relative to July, the median price increased by 4.2%.²⁸

By August, Zillow reports demonstrate a 4.4% in statewide median home value. Meaning that in the past year, Los Angeles home values have now gone up 7.4% and Zillow projects them to rise an additional 5.9% within this next year.²⁹



The graph demonstrates the increase in home prices over the past decade, with a significant rise from 2019 to 2020, and the predicted rise of 5.9% for the next year. It also shows the current median price value of a single family home and condos, \$764,528.

Courtesy of Zillow.com

New Jersey

While the housing prices in urban areas started decreasing due to Coronavirus unemployment, suburbs have done the complete opposite. More and more people started looking for safer and less expensive housing in suburban areas such as Long Island, Boston, and New Jersey. With supplies remaining low and demand climbing back up, the New Jersey housing market 2020 became a very solid seller's market. As such, the median sales price actually

²⁸ Santarelli, Marco. "Los Angeles Real Estate Market & Investment Overview 2020." *Norada Real Estate Investments*, 26 Sept. 2020, www.noradarealestate.com/blog/los-angeles-real-estate-market/#:~:text=As%20compared%20to%20March%202o20,In%20June%20200%2C%20t be%20no

²⁹ "Los Angeles Home Prices & Values." Zillow, www.zillow.com/los-angeles-ca/home-values.

³⁰ Goldberg, Carl. "COVID-19 Will Change New Jersey's Real Estate Market." NJ.Com, 6 Sept. 2020, www.nj.com/opinion/2020/09/covid-19-will-change-new-jerseys-real-estate-market-opinion.html.

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increased in June 2020, by 5.3%. 31 As far as the reason for the real estate boom, according to economists, the deep recession that hit the U.S. economy in light of the pandemic forced the Federal Reserve to lower interest rates dramatically, driving the average mortgage rate from around 3.75% at the beginning of 2020 to under 3% just a few weeks after the pandemic set in.³² That drop made buying a home more feasible for many potential buyers, allowing them to afford more expensive homes with the same monthly payments. The State of New Jersey department of banking and insurance also offered residential mortgage relief allowing them to reduce or delay your monthly mortgage payment to help residents catch up on their payments. This also greatly contributed to the increase in interest for the New Jersey housing market due to many's unemployment and financial instability.³³

Boston

In Boston, the home values have gone up 3.0% over the past year and Zillow predicts they will rise 4.5% within the next year. The average annual profit of property investment was 2.79% in 2015, 4.60% in 2016, 7.34% in 2017, 3.42% in 2018, 1.80% in 2019, -2.0489% in 2020.³⁴ At the end of January 2020, the Real-time Availability Rate (RTAR) for Boston apartments was at 4.51%, a solid 10% decrease from late January 2019. As a result of the varied business philosophies of property owners, the RTAR has steadily increased throughout the month of April. As of the first week of May, it hit 6.47% for the City of Boston as a whole – just above the 6.44% peak seen on April 1, 2019. However, if the economy continues to be shut down, and RTAR surpasses 8% by June, it could be a cause for serious concern.³⁵

Long Island

OneKey MLS, the multiple listing service that includes Long Island, reported on Thursday that the number of pending sales spiked by 60.6% and 55.5% last month for Nassau County and Suffolk, respectively, when compared with the pending sales from the year prior. The COVID19 lockdown put a damper on closed home sales in July, which fell annually by 38% in Nassau and nearly 36% in Suffolk, however, the listing service reported price increases in both counties. In Nassau, closed sale prices ticked up 1.1% annually, to a median \$551,250, and pending sale prices rose by 6.4%, to a median \$580,000. Suffolk County median closed sale prices jumped by 5.8% to \$439,000 and pending sale prices rose by 8.4% to \$450,000, the listing service reported. On the

³¹ Rex. "Real Estate Technology Helping New York and New Jersey Consumers Find Opportunity During COVID-19 Crisis." Cision PR Newswire, 19 Aug. 2020,

www.prnewswire.com/news-releases/former-new-jersey-governor-chris-christie-weighs-in-on-real-estate-technology-creating-opportunities-for-new

⁻york-and-new-jersey-consumers-during-covid-19-301115259.html.

32 Devlin, Nick. "N.J. Home Prices Are Soaring through the Pandemic. See How Seven Areas Have Fared." *NJ.Com*, 23 Aug. 2020, www.nj.com/data/2020/08/nj-home-values-continued-to-climb-as-pandemic-ravaged-the-state.html.

[&]quot;COVID-19 and Residential Mortgage Relief." State of New Jersey Department of Banking & Insurance, www.state.nj.us/dobi/covid/mortgagerelief.html.

34 "Brookline Home Prices & Values." Zillow.Com, www.zillow.com/brookline-ma/home-values.

³⁵ Salpoglou, Demetrios. "How Is Boston's Housing Market Reacting to COVID-19?" *Bostonpads.Com*, 8 May 2020, bostonpads.com/blog/real-estate-news/boston-housing-market-covid.

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North Shore of Nassau County, the most desirable homes — particularly those in move-in condition — are fetching a dozen offers and selling for more than the asking price, said Cynthia Awan, a real estate agent with Lucky to Live Here Realty in Cold Spring Harbor. One home listed for \$1.7 million went into contract for \$1.8 million, she said.

In addition to higher demand from buyers leaving New York City, record-low interest rates and high rents are adding fuel to Long Island's housing market, said Hector Castillo, CEO of Syosset-based Exit Realty New York Metro, which has 12 locations on the Island. The average interest rate was 2.96% this week, down 0.64 percentage points from a year ago, mortgage giant Freddie Mac reported Thursday. Demand is especially fierce for homes in the \$300,000 to \$500,000 range, he said. A house in Huntington Station listed for \$380,000 recently attracted 10 bids, half of them over the asking price, he said. Buyers faced a drastic shortage of homes for sale last month, with inventory down annually by 16% in Nassau and nearly 32% in Suffolk, listing service figures show. At July's pace of pending sales, it would take 2.5 months to sell all the homes listed in Nassau and 1.9 months in Suffolk. By contrast, a year earlier, it would have taken roughly twice that long.³⁶

VIII. Comparing Housing Markets

Not all cities have experienced a massive real estate drop. However, even in cities that were greatly affected, such as NYC, not all neighborhoods were affected equally. Prices for signed contracts on co-ops and condos in Manhattan have plummeted by nearly 57% vs this time last year³⁷. In Staten Island, however, which is much more suburban, prices have remained stable with some sources saying 3% appreciation compared to last year³⁸ or a 0% change according to other sources. In addition to this, Queens, which is also one of the more suburban style boroughs, has actually seen a 10% increase in median price of house sales³⁹. Meanwhile, Brooklyn, the most populous borough, had the smallest drop in sales of all the boroughs, at only -21%, largely due to people taking advantage of low real estate prices in order to upgrade their homes⁴⁰.

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³⁶ McDermott, Maura. "Pending Home Sales in Nassau, Suffolk Spike, Report Says." Newsday. Com, 13 Aug. 2020, www.newsday.com/business/coronavirus/long-island-homes-sales-contract-1.48084459.

³⁷ Frank, R., 2020. Manhattan Apartment Deals Plunge 57%, Suburban Real Estate Surges. [online] CNBC. Available at: https://www.google.com/amp/s/www.cnbc.com/amp/2020/08/06/manhattan-apartment-deals-plunge-57percent-suburban-real-estate-surges.html [Accessed 11 October 2020].

Rockethomes.com. 2020. Staten Island, New York | Real Estate Market Trends September 2020. [online] Available at:

https://www.rockethomes.com/real-estate-trends/ny/staten-island [Accessed 11 October 2020].

39 Santarelli, M., 2020. NYC Real Estate Market: Are Housing Prices Falling?. [online] Norada Real Estate Investments. Available at: https://www.google.com/amp/s/www.noradarealestate.com/blog/new-york-real-estate-market/amp/> [Accessed 11 October 2020].

⁴⁰ Santarelli, M., 2020. NYC Real Estate Market: Are Housing Prices Falling?. [online] Norada Real Estate Investments. Available at: https://www.google.com/amp/s/www.noradarealestate.com/blog/new-york-real-estate-market/amp/> [Accessed 11 October 2020].

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In Los Angeles, Home Sales dropped 5.2% year on year In August, compared to 30% in April, showing an incredibly strong recovery in addition to a relatively low drop in housing sales, Median Home price actually increased by nearly 7.9%⁴¹. These very different results, compared to NYC can be explained for a variety of reasons. First of all, the vast majority of LA County is suburban as NYC has nearly 10 times the population density of LA. Second of all, crime has increased at different rates across the two cities. In LA, the homicide rate is up 20% compared to this time last year⁴². In NYC, homicides are up 40% year to date while shootings are double what they were for all of 2019⁴³. NYC has seen nearly double the crime surge of LA, which explains why the real estate market has crashed in NYC but remained stable in LA. Economic fallout from the virus is at nearly the same rates across both cities as both have a 16% unemployment rate and have had a comparable amount of small business closures⁴⁴.

Of course, no list of American big cities would be complete without including Chicago. Chicago reflects a very balanced and stable trend compared to our two previous examples. In Chicago, there was relatively close to no change in average home selling price⁴⁵. However, there was a 50% decline in the number of homes that were selling year to date which meant a less saturated market. Why this occurred can be split into a few different reasons. First of all, Chicago is mainly suburban as their population density is less than half of NYC's. Second of all, the average median home price is $\frac{1}{3}$ of LA and NYC (\$260,000⁴⁶ vs \$760,000⁴⁷ in LA). This means that property taxes are far lower in Chicago than in our two previous examples. Chicago has a current unemployment rate of about 15%, which is slightly better than our two previous examples⁴⁸. Murder has increased by 37% in Chicago which was already experiencing crime slightly above national average. This increase is still lower than NYC, and the majority of crime is much more concentrated in specific locations in Chicago than in other cities like NYC⁴⁹. These are some of the reasons for why the Chicago real estate market has remained as stable as it has.

⁴¹ Santarelli, M., 2020. Los Angeles Real Estate Market: Housing Prices & Forecast. [online] Norada Real Estate Investments. Available at: fittps://www.google.com/amp/s/www.noradarealestate.com/blog/los-angeles-real-estate-market/amp/ [Accessed 11 October 2020].

⁴² Los Angeles Times. 2020. Deadly Violence In L.A. Up 15% So Far This Year, Mirroring National Trends. [online] Available at: https://www.google.com/amp/s/www.latimes.com/california/story/2020-09-30/homicides-increasing-los-angeles-national-trend%3f amp=true> [Accessed 11 October 2020].

Www1.nyc.gov. 2020. [online] Available at: https://www1.nyc.gov/assets/nypd/downloads/pdf/crime_statistics/cs-en-us-city.pdf [Accessed 11 October 2020].

Labormarketinfo.edd.ca.gov. 2020. [online] Available at: https://www.labormarketinfo.edd.ca.gov/file/lfmonth/la\$pds.pdf [Accessed 11 October 2020].

Santarelli, M., 2020. Chicago Real Estate Market 2020: Housing Prices & Forecast. [online] Norada Real Estate Investments. Available at: https://www.google.com/amp/s/www.noradarealestate.com/blog/chicago-real-estate-market/amp/> [Accessed 11 October 2020].

⁴⁶ Zillow.com. 2020. [online] Available at: https://www.zillow.com/chicago-il/home-values/ [Accessed 11 October 2020].

⁴⁷ Zillow, I., 2020. Los Angeles CA Home Prices & Home Values | Zillow. [online] Zillow. Available at:

https://www.zillow.com/los-angeles-ca/home-values/ [Accessed 11 October 2020].

Ycharts.com. 2020. Chicago, IL Unemployment Rate. [online] Available at: https://ycharts.com/indicators/chicago il unemployment rate>

[[]Accessed 11 October 2020].

49 Goudie, C., 2020. Chicago Murders Up In 2020, Outpacing National Increase: FBI Data. [online] ABC7 Chicago. Available at: https://www.google.com/amp/s/abc7chicago.com/amp/chicago-murders-2020-crime-fbi/6431761/ [Accessed 11 October 2020].

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On the other hand, a city whose real estate prices are increasing rather than decreasing, is Nashville, Tennessee. Nashville is a major center for the music industry. Overall, this city has a very diverse economic system, with a wide range of professions including manufacturing, transportation, education, health care, financial services, and corporate headquarter sectors. With all of these included, Nashville did not suffer as high of an unemployment rate during the pandemic as other major cities like NYC because of its vast opportunities. Nashville real estate is constantly increasing in value. Since 2012, home values increased by over 80% and from last year, home values increased by 4.1%. Square footing in Nashville is \$192 vs \$161 per square foot in the Nashville-Davidson-Murfreesboro-Franklin Metro area⁵⁰. One of the reasons for the growth in real estate prices is Nashville's low unemployment rate and constant growing prices.

While Nashville's prices continue to climb, the crime rates of the city also continue to increase. The crime rates are rated as an F and every year crime has been increasing at a rate of 3%. Nashville's crime rate is 99% higher than the average crime rate in other United States cities⁵¹. Nashville has the 23rd highest population in the United States and its population is constantly growing. It has become a trendy destination for immigrants due to a healthy job market and relatively low cost of living, despite the high demand for the market⁵². As previously mentioned, the unemployment rates in Nashville, Tennessee have been relatively low in the past 20 years compared to the rest of the United States. However, that amount has been declining more and more. Two major peaks when unemployment rates were highest was in April 2020, due to the pandemic and the shutting down of many businesses, and in June 2009, where the United States suffered a recession. However, after both those incidents, Nashville recovered very quickly than most other big cities, leaving it a very good place to live⁵³. As can be seen, Nashville, Tennessee has constant increasing real estate prices because of its good area, constant growth of jobs, and quick recovery during difficult times.

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⁵⁰ Rohde, J., 2020. What's Attracting Investors To Nashville's Real Estate Market In 2020?. [online] Learn.roofstock.com. Available at: [Accessed 11 October 2020].

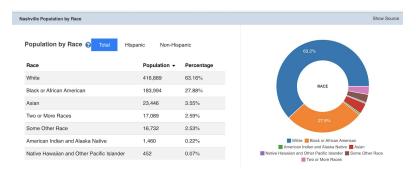
⁵¹ Areavibes.com. 2020. *Nashville, TN Crime Rates & Map*. [online] Available at: https://www.areavibes.com/nashville-tn/crime/ [Accessed 11 October 2020].

⁵² Worldpopulationreview.com. 2020. *Nashville, Tennessee Population 2020 (Demographics, Maps, Graphs)*. [online] Available at: https://worldpopulationreview.com/us-cities/nashville-tn-population [Accessed 11 October 2020].

Fred.stlouisfed.org. 2020. *Unemployment Rate In Nashville-Davidson--Murfreesboro--Franklin, TN (MSA)*. [online] Available at: https://fred.stlouisfed.org/series/NASH947UR [Accessed 11 October 2020].

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Houston, Texas is the fourth largest city in the United States with a population of approximately 3 million people. In such an immensely populated city, there has been fluctuation in the housing market. However, as a result of the ongoing pandemic, the oscillation in the sale prices have been rather unstable. According to market recaps by the Houston Association of Realtors, the total property sales increased by 18.3% in June 2020 compared to June 2019. ⁵⁴ The theory behind this elevation in property prices is said to be the increased length of time spent at home. With millions stuck at home due to Covid-19 quarantine, many want to find a better environment they can stay in. Statistics show that 9,328 single family houses were sold in the month of June compared to 8,063 single family houses in June of last year.

Concurrently, the average rent values in Houston made a 6.16% increase from last year with a \$1379.55 This lays a heavier burden on the Houstonians as employment rates went down 6% or approximately 190,000 as of July 2020. 56 The industries that were hit the hardest by the decline in employment are the hospitality and leisure sectors of the industry as more than 60,000 jobs were lost by July 2020. Thus, people began to turn their attention to the housing markets of Houston and the forecast on the real estate values were relatively positive. Based on Zillow, the house price appreciation rates dropped 0.44% in the latest guarters and further decrease by 1.5% is predicted to occur in the next 12 months. In comparison to Houston's real estate appreciation in the last ten years, this is a steep decline to some extent because the overall appreciation rate is 4.6% over the last ten years and the appreciation rate recorded in July 2020 creates a 5.04% difference.

⁵⁴ Wendlant, Catherine. "How the Coronavirus Has Hit Houston's Housing Market." Houstonia Magazine, Houstonia Magazine, 16 July 2020, www.houstoniamag.com/home-and-real-estate/2020/07/how-the-coronavirus-hit-houston-housing-market.

55 Santarelli, Marco. "Houston Real Estate Market 2020: Housing Prices & Trends." Norada Real Estate Investments, 19 Sept. 2020,

www.noradarealestate.com/blog/houston-real-estate-market/.

⁵⁶ "Houston Area Employment - July 2020: Southwest Information Office." U.S. Bureau of Labor Statistics, U.S. Bureau of Labor Statistics, 2 Sept. 2020, www.bls.gov/regions/southwest/news-release/areaemployment_houston.htm.

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IX. The Financial Crisis of 2008

The financial meltdown of 2008 began with the selling of subprime mortgages in the 90s and continued to be the worst financial tragedy of the 2000s. In 1999, the Federal National Mortgage Association increased their selling of subprime mortgages which made home loans more accessible to those with lower credit and savings. By 2002, the Federal National Mortgage Association and Federal Home Loan Mortgage Corp had already lent out \$3 trillion worth of mortgage credit.

Subprime borrowers were offered Adjustable-Rate Mortgages, mortgages which fluctuate to higher prices after the initial payment. The up trending market during 1999 through 2005 made these mortgages virtually risk-free due to positive equity gained through increasing home value. Other methods of selling mortgages became popular such as Mortgage-Backed Security and Credit Default Swaps. These practices only worked when home owners made their payments consistently. In addition, consumer debt hit it's all-time high of \$2 trillion in 2004.

These circumstances only made the housing market more volatile going into the eventual crash in 2008. By March 2007, Bear Staerns suffered great losses from underwriting many subprime mortgages. Homeowners began defaulting on payments while the subprime mortgages were resetting to higher prices and home prices declined. Many people couldn't afford their homes anymore, foreclosing and filing for bankruptcy. This first wave was known as the subprime meltdown.

However, the Dow Jones Industrial Average on October 9 2007 reached a closing high of 14,164. Eventually, though, the turbulence in the housing market turned into a recession. By january 2008, the Dow Jones Industrial Average traded below 11,000, the first time it happened since two years prior. By September 6th 2008, the financial market was down 20% since the October 2007 peak. The US government finally intervened, taking over the Federal National Mortgage Association and Federal Home Loan Mortgage Corp after their heavy losses from the collapsing subprime mortgage market. A week later on September 14, turmoil continued with the major investment firm Lehman Brothers announcing the largest bankruptcy filing in US history at the time. Lehman Brothers succumbed to the collapsing subprime mortgage as well, leading the market to plummet even further.

The net asset value of the Reserve Primary Fund fell below \$1 per share. Investors were only entitled to 97 cents for every \$1. Panis erupted in the money market fund industry, resulting in a rush to the banks. Many people filled in redemption requests. On the other hand, talk of government bailouts and bans on short selling led the markets to soar and the Dow to close at 11,388. From the intraday high of 11,388 on September 19th, the Dow fell to 7,882 on October 10th. The turmoil that would unfold was historical.



Goldman Sacha and Morgan Stanley converted from investment bank to bank holding companies to have better chances at gaining government bailouts. After a 10 day bank run, the Federal Deposit Insurance Corporation transferred assets of the nation's largest savings and loan to JPMorgan Chase. In tandem, the Dow suffers A 6.98% decline, the largest point drop in history at the time. Finally, in October a \$700 billion TARP plan passed a vote in Congress.⁵⁷

The current situation with COVID 19 forcing residents out of big cities and declining financial real estate prices relates to the economic meltdown of 2008. Though in 2019, the cause was a pandemic, both had major impacts on the housing market and stock market. The mishandling of businesses such as those closing due to coronavirus and the giving out of subprime mortgages both subsequently caused the housing market to increase in price, thus crashing the economy. Finally, a lesson can be learned from 2008 on economic crises, how and how not to handle these situations, which can easily be applied in today's day and time.

X. Conclusion

Thus we can see that there have been many different factors surrounding the recent real estate market volatility of the big cities of the US. We have observed how not all cities have responded the same to these factors and that definitely not all cities saw their prices cut. We saw how many have followed an expected real estate decline such as NYC. However, cities like Chicago, which has some of the cheapest housing costs of all big cities and a significant suburb have barely seen a noticeable change to their real estate prices. Other counties such as many of those in Southern California have also not seen an expected significant decline in their prices as many of the wealthiest residents of these areas simply leave the state without selling their property within the state. Even separate sections of cities have seen vastly different worlds when it comes to real estate prices. While Manhattan Real estate had essentially been cut by a hatchet, Queens Real Estate had in fact risen in price during 2020. All in all, every city has seen its own unique situation when it comes to the events of 2020 and their effects on pricing.

⁵⁷ Kosakowski, Paul. "The Fall of the Market in the Fall of 2008." *Investopedia*, Investopedia, 29 Aug. 2020, www.investopedia.com/articles/economics/09/subprime-market-2008.asp.