Migratory Patterns of New Yorkers Amidst the COVID-19 Pandemic and the Resulting Boom in Housing Demand in the Hudson Valley

by

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Submitted to the Program in Real Estate Development in Conjunction with the Center for Real Estate in Partial Fulfillment of the Requirements for the Degree of Master of Science in Real Estate Development

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ABSTRACT

The COVID-19 pandemic sparked a large-scale migration away from America's cities, including, in particular, New York City. This paper studies the nature of the migration away from NYC: where people moved and was it permanent or temporary. Data shows that approximately 1,100 households changed their address from NYC to Dutchess County, a pastoral area in the Hudson Valley. Over the last decade, there has been an increasing amount of interest in this county due to its fine restaurants, train lines and amenities; the interest there has been compounded by the effect of COVID-19. Demand has outpaced supply, especially during 2020, resulting in a chronic housing shortage. The second part of this paper offers a business plan to answer this market need while offering compelling financial returns.

Thesis Supervisor: Jennifer Cookke
Title: Lecturer, MIT Center for Real Estate

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Introduction

New York City, known for its dense vertical living and jam-packed subways, was one of the first American cities hit hard by the COVID-19 pandemic. Seemingly overnight, the virus gripped the Big Apple, and 8.4 million New Yorkers were ordered to stay at home to help stave off the spread. By mid-March 2020, the pandemic was starting to engulf the US and reality had set in that COVID-19 would have a major social and economic impact on the country.

On March 16, 2020 the global equity markets experienced their steepest decline since 1987 (Schnure). By this time, the crisis was intensifying for the property sectors with the most exposure to COVID-19. Lodging & Resorts and Retail REITS posted total returns of -59% and -42% respectively YTD through March 16 (Schnure). People were on edge.

By April, the USNS Comfort ship had traveled under the Verrazzanno-Narrows Bridge and was stationed on the Hudson River outside of New York City, ready to support already-overwhelmed hospitals. On April 3, 2020 Henry Kissinger penned an Op-Ed in *The Wall Street Journal* titled "The Coronavirus Will Forever Alter the World Order." In it, he wrote:

> The coronavirus has struck with unprecedented scale and ferocity. Its spread is exponential: U.S. cases are doubling every fifth day. At this writing, there is no cure. Medical supplies are insufficient to cope with the widening waves of cases. Intensive-care units are on the verge, and beyond, of being overwhelmed. Testing is inadequate to the task of identifying the extent of infection, much less reversing its spread. A successful vaccine could be 12 to 18 months away. (Kissinger)

In a matter of weeks, New Yorkers and people around the country changed how they shopped for groceries, where they socialized, and halted vacation plans in an effort to slow the spread of the virus. Office buildings closed their doors and working from home became the new normal for millions of office workers. *The Wall Street Journal* proclaimed that this shift was "potentially as monumental as the movement of workers into factories during the Industrial Revolution" (Mims).

People suddenly required more space at home to accommodate home offices and yearned for larger living spaces given the long hours spent at home. Hundreds of thousands of people with means took advantage of their newfound geographical freedom and migrated out of the City. According to a Pew Research Center survey taken in June 2020, approximately 22% of US adults reported that they moved due to the pandemic or know someone who did (Cohn). That number will rise as the pandemic continues to unfold.

In the months following the start of the pandemic, the residential real estate market was heating up. Homes were being sold in cash above asking, and with contingencies waived. A July 17th *New York Times* article titled "5 Ways the Coronavirus Has Changed Suburban Real Estate" reported that "Sales agents are fielding calls at all hours of the day and night, trying to keep pace with market conditions that seemingly changed overnight" (Prevost). Similarly, a July 16th *Wall Street Journal* article highlighted that "Sales in resort and rural areas are surging as home buyers look for getaways from Covid" (Taylor).

While people have been moving to a disparate list of locations, the Hudson Valley has been an outsized recipient of these fleeing New Yorkers due to two major reasons: its geographic proximity with train lines and a network of highways that make it an easy commute into the City; and its scene of acclaimed restaurants, impeccably designed boutique hotels, and well-curated amenities that attract city dwellers and make them feel at home. It is clear that there are not enough of the right kind of homes, and this excess demand creates a business opportunity for the right kind of developer—which is the reason for this paper. Over the course of researching this paper, it has sparked an actionable business plan that will hopefully come to fruition in the near future.

The first part of this paper will establish the demand side of the single family home market in New York's Hudson Valley. Chapter One establishes why an increasing number of people in the last decade, and three years in particular, have been lured to move here. Chapter Two outlines why people would want to migrate away from the City in light of COVID-19, and for how long. Chapter Three explains how office workers have the newfound freedom to live where they want to with the near-ubiquitous adoption of Zoom. Chapter Four begins to quantify the demand in the Hudson Valley by looking at the population movement to date; the methodology analyzes Change of Address Requests made by New Yorkers to the United States Postal Service.

The second part of this paper, beginning with Chapter Five, identifies a land parcel and offers a business plan to create much-needed housing in this area. Finally, Chapter Six further builds out this business plan with comparable sales and a financial model with compelling risk-adjusted returns.

Part I: Understanding the Demand

Chapter One: The Lure of the Hudson Valley

The Hudson Valley, a large swath of land on either side of the Hudson River approximately a 30-to-120-minute drive outside of NYC, is a natural choice for thousands of people in search of a temporary or permanent home. This area comprises four counties: Dutchess and Columbia counties on the east side of the Hudson River and Ulster and Greene counties on the west side. The land is largely pastoral and undeveloped, dotted with small towns and farms with a handful of cities, including Kingston and Hudson, both of which have experienced a striking influx of city people.

Figure 1

Overlook Mountain Trail

The Hudson Valley has been thought of as a place for leisure travel for centuries. Decades before F. Scott Fitzgerald wrote his 1922 tale *The Great Gatsby* following a cast of super-rich characters around the Hamptons, the Hudson Valley was the playground for wealthy New Yorkers of this caliber. During the Victorian era, the power elite of the day spent summers at grand Hudson Valley hotels, such as the Catskill Mountain House, Hotel Kaaterskill, and The Grand Hotel, each set high up on ridges with million-dollar vistas. During its prime from 1850 to the turn of the 20th century the Catskill Mountain House hosted three US Presidents including Teddy Roosevelt.

Over the course of the 20th century, the Hudson Valley changed to accommodate the rising number of middle-class families in America. The grand hotels became obsolete in favor of more middle-class accommodations until, eventually, there was a graveyard of languishing hotels. In 1962 the State of New York acquired the Catskill Mountain House and burned it to the ground after decades of weather damage and neglect (Mallery).

However, starting around the turn of the 21st century, this trend reversed its course. The Hamptons is, and may always be, the reigning leisure destination for New Yorkers. But there is limited land in the Hamptons, and much of it has already been claimed for development. Many people are priced out of the Hamptons, or don’t prefer the see-and-be-seen lifestyle.

Notable Amenities

Increasingly starting around 2010, boutique hotels and restaurants with a distinct city vibe sprang up in the Hudson Valley and the area started to become known for its food scene. In 2017, *Conde Nast Traveler* published a story titled “Hudson: The Trendiest Town in New York State.” The Hasbrouck House in Ulster County was named America’s Most Romantic Retreat by World Boutique Hotel Awards and regularly sells out their guest rooms, which go for $330 per night. On the other side of the Hudson, the Maker Hotel offers bohemian decor in belle epoque style where guests stay from around $537 per night on peak weekends.

Figure 2

The Hasbrouck House

© 2020 The Hasbrouck House

Figure 3

The Maker Hotel

© 2020 The Maker Hotel

Esquire Magazine's 2020 List of Best New Restaurants in America

In 2020, *Esquire* magazine's annual list of Best New Restaurants in America named three restaurants in the Hudson Valley. Those restaurants were Goosefeather in Tarrytown; Blue Hill at Stone Barns, also located in Tarrytown, NY; and Troutbeck in Amenia, NY. By contrast, Los Angeles had only two restaurants that made the list in 2020 and Boston did not make the list at all.

Figure 4

Troutbeck

From the wave of new restaurants and hotels to the hiking trails, farm stands, and apple orchards, there is no shortage of enticing reasons to visit—or stay for good in—the Hudson Valley.

Data shows that New Yorkers are moving to the Hudson Valley in droves. Armed with the newfound ability to work from home, these people are seeking greenspace and square footage, yet they still want to have access to the City in order to maintain friendships, personal networks and still take advantage of all that New York offers.

Chapter Two: Millennials Are Approaching Their Next Phase in Life

The motivation behind why people left the City is an important indication in determining the permanency of the migration to the Hudson Valley and how many people will stay or return to the City. There is a distinction between people who left the City temporarily seeking refuge, and the people who decided that 2020 was a good time to pack up their apartment permanently—which is the demographic this paper seeks to quantify and understand.

Short-Term: People Who Moved During the Height of COVID-19 but Who May Still Return

There were myriad short-term reasons that urgently prompted people to leave the City in light of COVID-19. Two of the top reasons were that the greater density posed a higher personal safety risk and the hope for a regular, in-person school year for children.

Given the way that the virus travels, many people no longer felt safe on the crowded subways that are the hallmark of NYC commuting, where on any given Monday morning at the rush hour peak it would not be unusual to find a car full of people squeezed up against each other. All of a sudden, taking an elevator ride with another person became a nerve-wracking concept. The green open space of the Hudson Valley offered a safer level of space between people. The aisles in grocery stores are much wider, doctors' offices have larger seating areas, and there are fewer, if any, elevator buttons to press in daily life in the Hudson Valley. This space provided some much-needed comfort.

Further, schools are more likely to stay shuttered throughout the pandemic in the densely populated City, which is home to the largest school district in the US. While the virus shuttered nearly every school in the spring of 2020 in a historic challenge to education, the New York City public school system was particularly affected. Throughout the summer of 2020, families were surmising what the future of in-person schooling would hold for the 2020-2021 school year. One popular notion was that smaller, more nimble school districts outside of the City would hold better chances of staying open for in-person schooling, something that so many children desperately need.

Another short-term reason why people left this City is that they needed more space to work from home. In a small New York apartment, many people were left without an adequate home office. The average US apartments today are small, and according to RentCafe, they have been getting smaller for the past ten years (Balint). The following chart highlights that the average renter in Manhattan only has 393 square feet to him or herself.

Figure 5

Cities by Least and Most Personal Space

Least Personal Space

		AVERAGE SQ. FT. PER RENTER	AVERAGE APT. SIZE IN SQ. FT.
1.	Santa Ana, Calif.	292	859
2.	Fremont, Calif.	318	832
3.	Queens, N.Y.	329	724
4.	Chula Vista, Calf.	340	869
5.	Brooklyn, N.Y.	351	737
6.	Anaheim, Calif.	353	851
7.	Hialeah, Fla.	356	830
8.	Manhattan, N.Y.	393	747
9.	El Paso	397	810
10.	Los Angeles	412	791

Most Personal Space

		AVERAGE SQ. FT. PER RENTER	AVERAGE APT. SIZE IN SQ. FT.
1.	Louisville, Ky.	731	933
2.	Winston-Salem, N.C.	723	916
3.	Omaha	689	924
4.	Kansas City, Mo.	685	898
5.	Greensboro, N.C.	685	938
6.	Boise, Idaho	678	903
7.	Atlanta	677	976
8.	Richmond, Va.	677	865
9.	Raleigh, N.C.	674	959
10.	Memphis	671	919

Source: Balint

Renting extra space in the City, however, can be cost prohibitive. Even for people with means, they had to make a decision: do they want more space, or do they want to stay in the city? The two are oftentimes mutually exclusive.

Long-Term: Millennials Who Left Seeking Homeownership

However, there is a bigger picture reason that has been building up over time that has lured people out of the City and took a pandemic to boil over: Millennials are getting older. Many Millennials are of the age that they are seeking homeownership, having kids, thinking about school systems, and need more space for their lifestyle.

For generations, especially this one, New York City attracted young people in search of good jobs and nightlife. Millennials comprise a large population cohort in America today, even larger than their parents, the Baby Boomers. In this paper, the Millennial cohort is defined as people with birthdates between 1985 and 1996. As of 2016, the City was home to 1.6 million Millennials, which makes up nearly one fifth of the population (Mulligan). However, Millennials today earn lower real wages than counterparts in previous generations. A 2016 report by the Comptroller's Office titled New York City's Millennials in Recession and Recovery reported:

> Although the unemployment rate among young people has declined since the recession, their earnings have continued to lag. Compared to their counterparts in the previous generation,

> employed millennials in New York City in 2014 earned about 20 percent less in real terms. For example, the average real wage incomes of employed 29-year-olds decreased from about $56,000 in 2000 to $50,300 in 2014. Although millennials entered the labor market at various stages of the recession and the recovery, the decline in average real earnings held for every age between 18 and 29, suggesting a fundamental deterioration of the earnings opportunities available to young workers in New York City (Mulligan).

This lag in real earnings can be attributed to the fact that after the financial crisis of 2008, the City's economy diversified towards media and advertising, and away from traditional "white-shoe" industries such as finance and legal services, which offer higher wages.

At the same time, condo prices in New York City over this period were on the rise. The average price per square foot of a condo in 2020 is $1,589 versus $1,080 in 2010, representing a 47% increase (City Stats: Condo Vs Co-Op Comparison). The increasing population coupled with the scarcity of land and high construction costs drove up condo prices to record-levels. Thus, with the combination of earning less real wages and the increasing cost of purchasing a home in NYC, many Millennial New Yorkers who were ready to purchase their first home were priced out.

On the contrary, the price of homeownership is much lower in the Hudson Valley—an attractive proposition for Millennials in search of their first home. Homeowners here also do not have to pay the 3.8% New York City tax, another much appreciated economic relief. This tax goes in part towards subway system upkeep and adds another layer of costs associated with living in the City.

The Migration Started in 2017

In an interview for this paper, Jonathan Miller, a well-known real estate appraiser in the Greater New York area, said he started to see a trend of Millennials moving out of New York City because they were priced out starting in approximately 2017 (Miller). Even before the onset of COVID-19, Bloomberg reported that 2,600 domestic residents per week were moving away from the City (Tanzi and Lu). In other words, COVID-19 has amplified a trend that was already in place. Data between July 1, 2018 and July 1, 2019 shows that the metropolitan areas of New York, Los Angeles and Chicago were losing 376, 260 and 164 people per day, respectively (Tanzi and Lu). Thus, the pandemic has sped up people's timelines and encouraged more people to leave but was not the sole cause. This points to the fact that the migration out of NYC towards the Hudson Valley will be an enduring phenomenon even after the pandemic is over.

Eventually, the pandemic will be under control as the population develops herd immunity, and the fear will dry up and no longer drive people away from cities. Schools around the country will operate in-person as usual. The short-term drivers of the migration will disappear and there might even be a rush back to the cities. However, the long-term drivers of the migration that lured Millennials to the Hudson Valley with prospects of homeownership and more space to work from home will be a long-lasting macroeconomic trend that will continue for generations to come.

Chapter Three: The Widespread Movement to Work-from-Home

As quickly as it came on, COVID-19 changed how people conduct business, and the nature of work and office space. The telecom service Zoom, a digital meeting platform, became popularized throughout the nation seemingly in a matter of weeks. Meetings that had been taking place in person were now all or mostly online and companies have been forced to reinvent themselves. Unlike during the Spanish Flu pandemic of 1918, many office workers today are no longer physically tied to the City, which was one of the reasons the City did not clear out back then as is happening now.

By early May 2020, a Gallup poll indicated that 52% of employed Americans self-reported that at that time, they were always working from home, and another 18% of employed Americans self-reported that they sometimes work from home. That combined 70% represents a whopping 100 million people in the US alone (Mims).

Businesses Have Embraced Working from Home

All of a sudden business were left with no choice but to adapt to a work from home culture. They were forced to rethink their whole ecosystems to create a well-functioning and productive system; there was no other way. Companies seemed to be making do at the worst and continuing to thrive at best, such as Silicon Valley, which was leading the path forward.

Companies such as Twitter and Facebook were some of the first movers in announcing liberal and enduring work from home policies. On May 12, Twitter CEO Jack Dorsey announced to employees that they could continue working from home permanently (Heater).

Even the white-shoe finance companies which are considered to have the most formal office cultures, stalwart supporters of suits and ties in an era where office culture is turning to more casual attire, have adopted the work-from-home lifestyle. James Gorman, the CEO of Morgan Stanley, was quoted on April 16, 2020 in a Bloomberg interview saying that in the future, the company will have “much less real estate.” He continued, “We’ve proven we can operate with no footprint. Can I see a future where part of every week, certainly part of every month, a lot of our employees will be at home? Absolutely” (Schatzker). If even the largest of the finance companies, who have complicated operations across tens of thousands of employees are able work “extremely well” under this new way of life, that is certainly telling for the rest.

As the initial months of the pandemic passed and people settled into their new work-from-home arrangements, some people decided they liked that lifestyle. Indeed, some people liked it so much that they could not ever see going back to the office full-time.

Likewise, companies realized that this arrangement could actually create a cost savings by reducing the amount of office space they rented. For a well-located and modern office building that is adequate but not over the top, the rent per square foot can be approximately $63 per square foot per year (LoopNet.com). For a modest 5,700 office space that would cost the company $359,100 per year, not including all of the extras that come along with renting a space, including utilities and office furniture. In the future, companies may choose to create permanent savings in their budgets by allowing a work-from-home culture and having conference and meeting room space available to book on-demand only as needed.

While it is still too early at the time of writing to determine the long-term impact that the pandemic will have on the lasting effect of work-from-home culture, it is clear that many people—and many companies—like this arrangement. Indeed, in Germany, Labour Minister Hubertus Heil wants to write it into the law. He argued in a German newspaper that "Everyone who wants to and whose workplace allows it should be able to work in a home office - even when the coronavirus pandemic is over" (Thomasson). The Finance Minister, Olaf Scholz, continued, "The past weeks have shown how much is possible in the home office - this is a real achievement that we should not just abandon" (Thomasson).

Time will tell whether companies experience a change in productivity levels. One Stanford Professor conducted a two-year study of productivity levels of employees in China who worked from home versus those who worked in the office. His reports showed "An astounding productivity boost among the telecommuters *equivalent to a full day's work*. Turns out work-from-home employees work a true full-shift (or more) versus being late to the office or leaving early multiple times a week and found it less distracting and easier to concentrate at home" (Mautz).

Of course, people who have small children at home or extroverts who thrive on daily office interactions may not prefer this new arrangement, but the longer the pandemic endures before there is a vaccine, the more permanent it will become. People and companies will get used to this new way of life, and employees will start to demand it. The ability to work from home will become a negotiating point just the same as a salary and vacation package. Business meetings that require in-person contact will still happen, but they will not happen every day, unless the boss prefers it. Employees will be called into their office on a weekly or monthly basis, versus a mandatory daily basis. Sure, some people are more productive in the office and prefer working there. But there will be choice in the matter.

Physical Proximity to Work is No Longer Absolutely Required

Thus, the commuting radius just greatly expanded. Miller said in an interview for this paper, "The whole concept of the tether between work and home just got infinitely longer" (Miller). Commuting into NYC from the Hudson Valley is a comfortable commute a few days here or there. Every day would be arduous, but many would agree that a two-hour train ride a few times a month is agreeable. He continued, "People are rethinking proximity to work. And markets like the Hudson Valley are expected to benefit. Just the idea that you have a concentration of high-end dining establishments in a mostly rural or exurb type location says a lot about the expectations for growth there" (Miller).

Now that people have the ability to work from home, they can work from anywhere and staying in the City becomes harder to justify. The great migration has just begun.

Chapter Four: Tracking the Population Movement

During the summer of 2020, thousands of New York City residents put their homes on the market in preparation to leave the City. StreetEasy reported that 2,714 new listings came onto the market in Manhattan in July 2020 alone—an 87% increase over July of 2019 (McDonald). The moving company United Van Lines, which tracks moving data across the country, stated that interest in moving out of the city this summer has doubled compared with last year (Cooper, Carroll and Sanchez).

US Postal Service Change of Address Requests

At the time of writing, it is amidst the pandemic and people are still determining if they want to move, and to where. It could take another year, possibly two, to understand the full spectrum of relocation patterns. To date, the best proxy for tracking the population movement and understanding where people are moving from, and to where, are US Postal Service Change of Address Requests. In a Freedom of Information Act request obtained by the *New York Post*, it was reported that 295,103 Change of Address Requests were filed by New York City residents from March 1 to October 31, 2020 (Klein). It should be noted, though, that one single request could represent a whole family, so the actual number of people who left was much higher than 295,103; it could be in the range of 400,000 to 500,000, or more.

The outlying suburbs of New York, especially for single family homes north of $500,000, saw an equally tremendous influx. The media came out with attention grabbing headlines, such as “Coronavirus Escape: To the Suburbs” in *The New York Times*; “Coronavirus: Americans flee cities for the suburbs” in *USA Today*; and “Will the Coronavirus Make the Suburbs Popular Again?” in *Architectural Digest*. At a press conference on August 3, 2020, Governor Andrew Cuomo said, “I literally talk to people all day long who are now in their Hamptons house, or in their Hudson Valley house or in their Connecticut weekend house” (Cuomo). The US Postal Service Change of Address Request report showed that 392 former NYC households changed their address to Woodstock, NY alone.

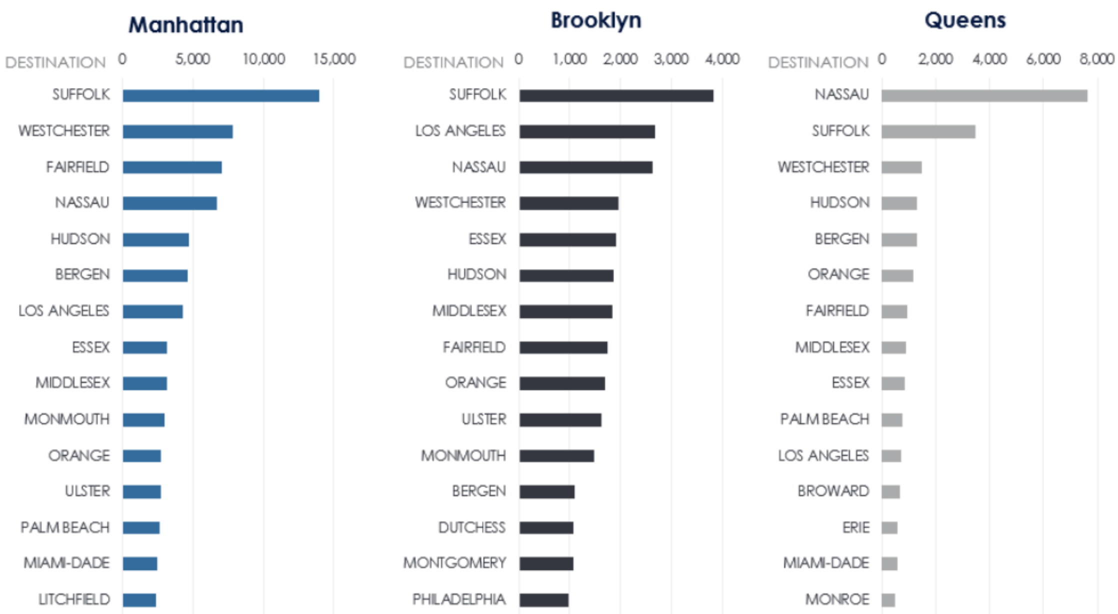
Unlike the Spanish Flu pandemic of 1918, people nowadays have greater access to mobility thanks to the internet. With the help of a local broker, apartment and house shopping can be done solely online. In 2017, *The Wall Street Journal* published a story titled, “Buying A Home Sight Unseen Is Easier Than Ever—and More Common.” This trend picked up steam during the pandemic.

Top Destinations

The following chart lists the top 15 counties where Manhattan, Brooklyn and Queens residents are moving. The top destination in all three cases is Long Island. Westchester County is also high on the list. Notably, Dutchess County appears 13th on the list for Brooklyn residents and not at all for Manhattan and Queens residents. This can be, in part, explained due to the fact that Dutchess County is notably supply constrained, with listing inventory unable to meet the surging supply. Listing inventory fell by 18.5% year-over-year from 2019 to 2020 to just 640 homes on the market (Miller, Putnam & Dutchess Sales 3Q 2020). The average homes were being sold in just four months, 16.7% faster than last year (Miller, Putnam & Dutchess Sales 3Q 2020). Miller noted, "For the last seven to ten years, there has been a chronic housing inventory shortage across the US. We've had an unusual mix of low interest rates with urban to suburban migration. This low inventory is especially notable in suburban or exurban locations." If there were more modern homes suitable to the tastes and preferences of outbound New Yorkers actually available, surely Dutchess County would be higher on the below list.

Figure 6

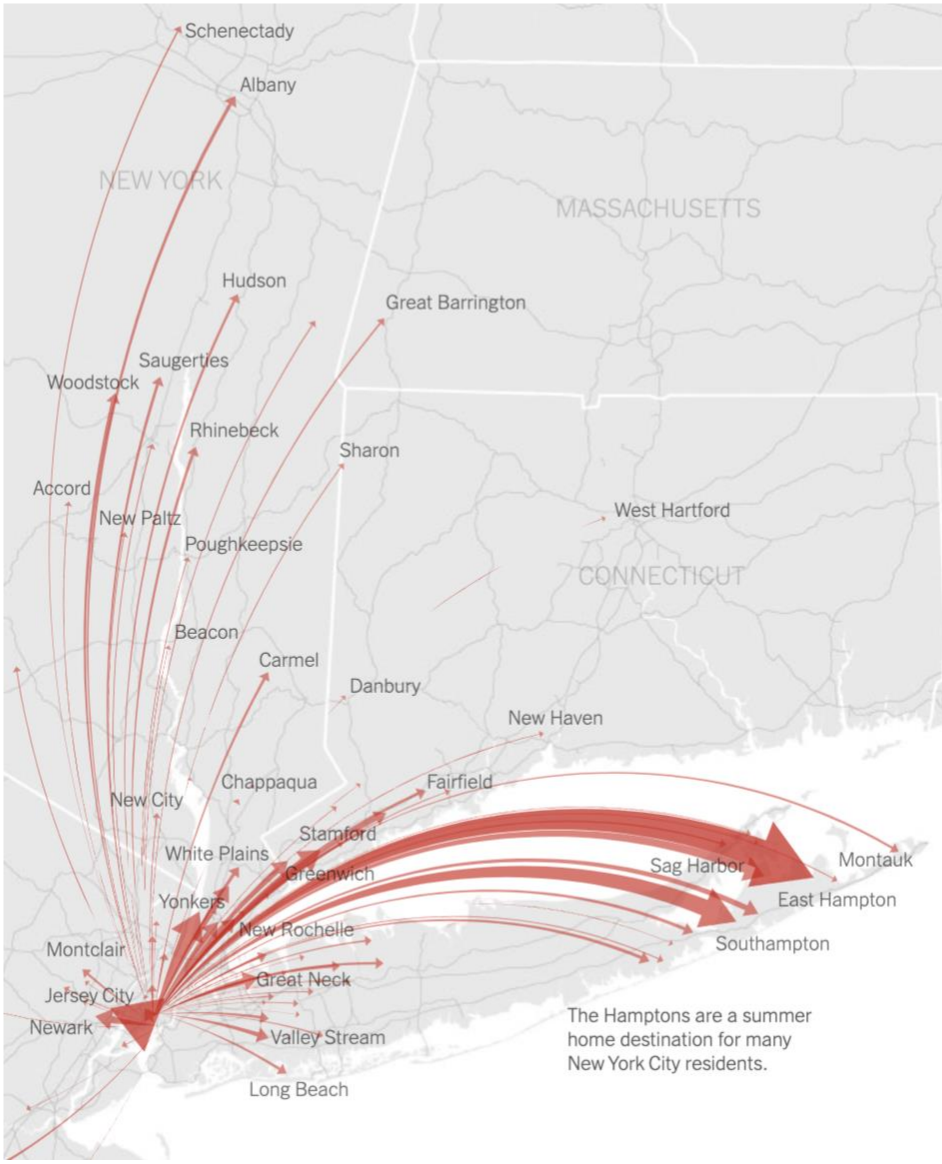
Out of City Change of Address Requests by Borough (March – September 2020)



Source: Klein

Figure 7

Top Destinations in the New York Region



Source: Paybarah, Bloch, Reinhard

Record-Breaking Sales Velocity

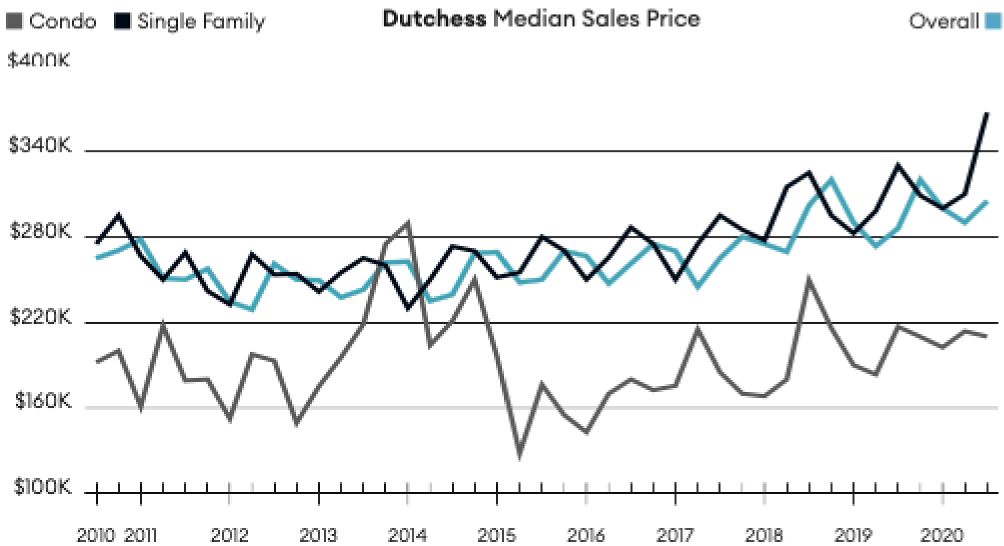
In a November 2020 Yahoo Finance interview Miller likened the demand in suburban housing markets to a rocket ship-like trajectory, which began in April or May and peaked in July; by November it is already on its descent. He said, "Since about July or August, depending on the market, we saw the suburban markets that benefited from inbound migration from urban markets actually plateau or decline. They're still well above year-ago levels, but that rocket ship trajectory has not been able to be sustained" (Miller, Housing Notes).

This rocket ship-like spike was driven by two factors: the typical spring buying market was halted by shutdowns, kicking the can down the road into the summer, and people in the urban markets were moving due to concerns about safety in light of the dense environments (Miller, Housing Notes). "Places like Litchfield, CT and Kent, CT which have been dormant since the financial crisis are now all of the sudden exploding with activity. Westchester saw the biggest increase in sales velocity in the 30 plus years that I've been tracking." Miller said.

In Q3 2020 pent up demand in Dutchess County pushed up the median sales prices for single family housing by 12.5% year-over-year from 2019 (Miller, Putnam & Dutchess Sales 3Q 2020). Likewise, the average sales price increased by 29.5% year-over-year, the largest rise in over nine years. The listing discount measuring the amount of negotiability on the side of the buyer also slipped from 2.8% down to .8%.

Figure 8

Dutchess County Median Sales Price



Dutchess County Condo & Single Family Matrix	Q3-2020	%Δ (QTR)	Q2-2020	%Δ (YR)	Q3-2019
Average Sales Price	$424,870	35.5%	$313,451	29.5%	$328,184
Average Price Per Sq Ft	$186	18.5%	$157	17.0%	$159
Median Sales Price	$360,000	18.0%	$305,000	12.5%	$320,000
Number of Sales (Closed)	477	68.6%	283	-2.5%	489
Days on Market (From Last List Date)	77	-11.5%	87	5.5%	73
Listing Discount (From Last List Price)	0.8%		2.8%		2.8%
Listing Inventory	640	-2.1%	654	-18.5%	785
Months of Supply	4.0	-42.0%	6.9	-16.7%	4.8
Year-to-Date	**Q3-2020**	**%Δ (QTR)**	**Q2-2020**	**%Δ (YR)**	**Q3-2019**
Average Sales Price (YTD)	$365,252	N/A	N/A	15.0%	$317,518
Average Price per Sq Ft (YTD)	$172	N/A	N/A	9.6%	$157
Median Sales Price (YTD)	$325,000	N/A	N/A	9.5%	$296,900
Number of Sales (YTD)	1,067	N/A	N/A	-5.7%	1,131

Source: Miller, Putnam & Dutchess Sales 3Q 2020

A lot of this activity came from the City's rental market. Miller noted, "The rental market in Manhattan has been crushed." He is reporting record vacancy and record concessions.

Miller developed a new term, "co-primary," to encapsulate this new trend of homebuyers looking for primary homes in what were traditionally second home markets for New Yorkers, such as the Hamptons, the Hudson Valley or Aspen. "Co-primary is a market these people could consider living in at any time during the year, or as long as they needed to, instead of for a specific time during the year," he said. He also noted that this trend is skewed to the upper end of the wealth strata.

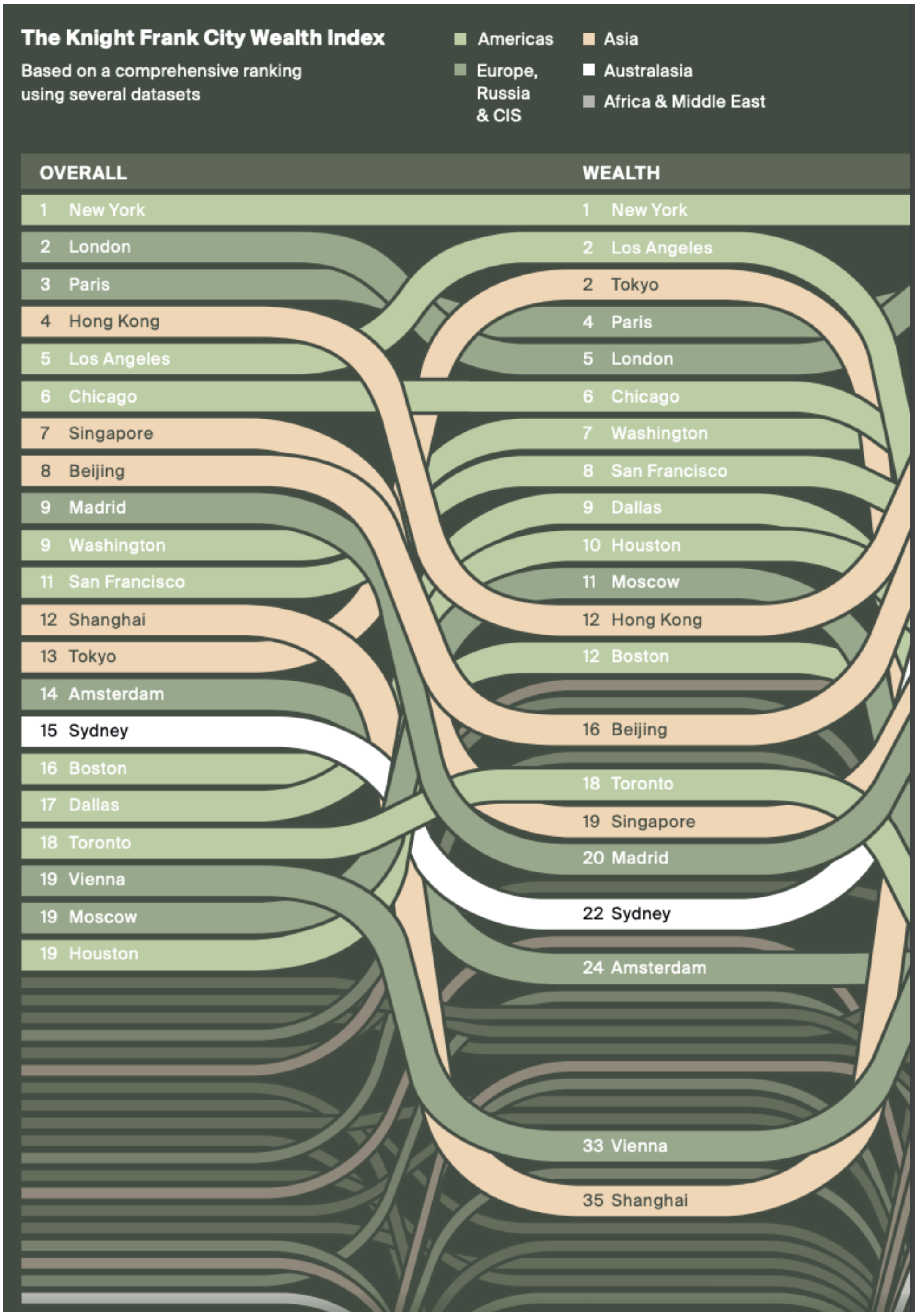
Yet, the Draw of New York City is Magnetic and Has Stood the Test of Time

New York City has staying power. Through the 1918 Spanish Flu, the Great Depression, and the 2001 terrorist attacks, the most faithful New Yorkers never lost their allegiance. NYC has a very powerful centrifugal force driven by excitement and wealth that keeps drawing people in. The dining and nightlife scene, art shows, theater and so forth are what make the City so special—and it's impossible to recreate that energy.

NYC is home to 348,000 high net worth individuals, the most of any US city; here high net worth is defined as people with net assets in excess of one million dollars (Global Wealth Migration Review). The US is also home to the greatest number of ultra-high net worth individuals of any country in the world with 240,575 people, more than Europe and Asia combined; here ultra-high net worth is defined as people with net assets in excess of thirty million dollars (Shirley). In the 2020 Douglas Elliman | Knight Frank Wealth Report, New York City edged out London to recapture the top spot as the most appealing place for wealthy people to live, invest and spend time (Shirley). The study assessed three main components to life in each city: wealth, investment and lifestyle. In a post-pandemic world, New York City will maintain its allure as a place for business and entertainment. People will want to be close to the City to have access to this but will not necessarily have to live there day to day.

Figure 9

The Knight Frank City Wealth Index



Source: Shirley

Thus, many New Yorkers are not trying to abandon the City altogether. Rather, they want to go somewhere that still feels like the City in some capacity, where the restaurants and people are familiar, and where they can still access the City with relative ease, but where they can make a new home in nature. The Hudson Valley is just that place.

Migration to the Hudson Valley is a permanent and long-lasting change of events. In the future, companies will have flexible day-to-day work from home arrangements while important meetings, entertainment and cultural events will still be conducted in the City. There will always be the draw of the City but gone are the days of nine-to-five office hours. Therefore, co-primary markets such as Dutchess County currently pose an attractive long-term investment, and the following chapter presents a business plan for how to capitalize on an investment there.

Part II: Application & Business Plan

Chapter Five: Optimizing for the New Normal

New Yorkers moving to the Hudson Valley are looking for similar things in a home and with the influx, builders cannot keep up. In-demand features include modern kitchens, clean contemporary design, large windows and grounds with easy upkeep. In terms of schematic design, people want a big master bedroom with an ensuite bathroom and large closets, with two to three smaller bedrooms for children, guests or home offices. Open floor plans on one level of living with cathedral ceiling living rooms is an archetype that sells really well. Turnkey houses are the most in demand.

Figure 10

Exemplary Home Located in the Hudson Valley

© 2019 The New York Times

The following section is a business plan for building the ideal single family house in the Hudson Valley. It offers a building site, buyer profiles, construction budget, a proforma and projected returns. The capital stack is comprised of an equity investor for 40% of the required capital and the remaining funds would be from a local bank. The house would be built over the course of eight months, and would be sold upon completion, if not before.

Site Location

The land that was selected for this is located at 5 Dearhorn Lane in Amenia, NY. (Note, the address has been altered to protect the identity of the site.) This 10-acre property is listed for $100,000 and can support one single family house. The gently sloping site offers one ideal building site that is secluded and sits high overlooking pastoral fields. The natural landscape features Goldenrod wildflowers and mature trees.

Compelling Reasons to Develop at This Site

- Superior Location in Dutchess County
  - The property is located in Amenia, NY in the northeast section of Dutchess County and is less than 100 miles to the Empire State Building. Located near the border between New York and Connecticut, this pastoral region is known for its farm stands and far-reaching views.
  - Silo Ridge Field Club community, with million-dollar homes, golf, equestrian and dining, is less than four miles away from 5 Dearhorn Lane. It was developed by Discovery Land Company, which has an excellent reputation for developing luxury communities around the world and is known for attracting celebrity clientele. NFL Quarterback Tom Brady and his wife Giselle Bundchen reportedly bought property at Silo Ridge (Ortved).
  - There is strong buyer interest in this area, with a shortage of modern, well-appointed homes. Such homes within a 35-mile radius have sold well before completion.

- View
  - The million-dollar view is spectacular and will be a major selling point for buyers. With a miles-long vista, the property overlooks gently sloping, lightly wooded undeveloped land dotted with wildflowers and mature trees. The viewshed land is state-owned and protected. It’s the quintessential Hudson Valley view.

- Attractive Returns
  - We are anticipating an IRR of 25% with an equity yield of 1.9x.

Investment Risks and Mitigation Strategies

- Road Noise at the Site
  - The parcel is located adjacent to Route 343 and has some road noise. Passing trucks pose the biggest nuisance. This is perhaps the biggest detractor from this site.
  - The design of the house and landscaping must thoughtfully contribute toward minimizing the road noise. This includes creating a back patio area that is protected by the walls of the house and helps to dull the noise. In addition, the budget will include expenditure on a row of bushes alongside the edge of the property near the

road to minimize the sound, closest to the source, of tires hitting pavement.

- Abundant Land Sites in the Hudson Valley
    - Given that the Hudson Valley is largely undeveloped, much of which is either already zoned residential or can be readily converted from agricultural to residential designation, there is an abundant supply of as-of-right developable land.
    - While this is true, there is a shortage of people willing and able to develop the land, simply because interest in the area had been relatively slow up to now.

- High and Unpredictable Construction Costs
    - There is a nationwide shortage of lumber. Therefore, it will be important to work with a reputable contractor who purchases materials ahead of time, which will reduce the uncertainty once the project begins.
    - Further, there are generally not enough construction workers in New York State. Given the new wave of interest in the Hudson Valley especially, there are not enough well-established construction companies to get all the work done. This is driving up construction costs. As a mitigation tactic, it will be important to use as much prefabricated building materials as possible. It would be wise to use Structural Insulated Panels to reduce the amount of on-site work that needs to be completed.

- Site Conditions Affecting the Proposed Construction Budget and Timeline
    - The soil at this particular site is somewhat rocky. There are rock protrusions along the proposed driveway and near the homesite, although not within it. This condition could potentially affect the construction budget and timeline if unforeseen rock formations are found and must be removed.
    - As a mitigation strategy, it will be necessary to have a geotechnical engineer assess the site before construction begins.

- Potential for Changing Lifestyle Patterns After the Pandemic
    - It is important to highlight that the country is in the midst of a social and economic shift, and we are years from fully understanding the lasting impacts that the pandemic will have. As a mitigation strategy, it will be necessary to proceed slowly and use a data-driven approach to quantifying demand, so as not to over-build at the wrong time.

Buyer Profiles for 5 Dearhorn Lane

Three buyer profiles are particularly well-suited for this site. They are as follows:

- Weekend Retreat for NYC-based Couple
    - This couple has full-time jobs in the City and are looking for a place to escape for extended weekends. They are required to be in the City for work at least a few days a week, but with their increasing ability to work from home, they want to find a home to enjoy greenspace. They have a dog and are looking for a place where he

can roam freely and let out some energy. They plan to have frequent guests and want at least one extra guest bedroom where guests can feel comfortable.

- Full-time Country House for Family
  - This is a family with two teenage children who, up until 2020, went to school in NYC. They are about to enroll as day students at Hotchkiss, an elite private school, and are seeking a home that is an easy drive to school. The parents work in the City from time to time and are looking to take advantage of their newfound ability to work from home. They need two small home offices.

- Retired Couple who Maintains a Pied-a-Terre in the City
  - This couple loves to golf and take advantage of the amenities of the Hudson Valley, yet also have easy access to NYC, where they maintain a small pied-a-terre. They also spend time in Florida and love the fact that the Albany Airport is an easy 1.5-hour drive from 5 Dearhorn Lane for easy trips back and forth and so that they do not have to deal with crowded NYC airports. At least two guest bedrooms would be ideal for their grown children and grandchildren to come visit.

House Schematic

With these three buyer profiles in mind, the ideal house is approximately 1,820 square feet with an open floor plan, four bedrooms and two full bathrooms. Any of the bedrooms could easily be converted to an office. Large, south facing windows will face towards the expansive view outside and help make the house feel more spacious with an abundance of natural light. A fireplace adds a lot of character and warmth to the house relative to the additional cost of building it.

Post-and-beam construction is both extremely sturdy and fits well with the architectural language of the Hudson Valley. It creates an industrial look that is beautiful and functional.

Figure 11

Exemplary Post-and-Beam Home, Exterior

Figure 12

Exemplary Post-and-Beam Home, Interior

Construction Budget

The construction budget estimates $329 per square foot total for hard and soft construction costs. With the $100,000 for the land, the budget estimates $384 per square foot. These estimates include a healthy contingency budget, including 10% for soft costs and 5% for hard costs.

Figure 13

Sample Construction Budget

4 bed 2 bath Construction Budget	
Hard Costs	
Land	$100,000
Well	$15,000
Grading	$15,000
Foundation	$15,000
Septic	$40,000
Electricity	$5,000
Internet	$5,000
Driveway	$25,000
GC & Subs Labor	$75,000
Landscaping	$5,000
Misc. Core and Shell Building Materials	$65,000
Interior Finishes Materials	$50,000
Bathrooms Fixtures (2)	$15,000
Kitchen Finishes & Materials	$25,000
Misc. Flooring	$4,000
Windows	$20,000
Roofing	$20,000
Hard Cost Contingency	$19,950
Hard Costs Total	**$518,950**

Soft Costs	
Interest	$9,056
Contingency	$15,580
Land Option	$12,000
Staging Furniture	$8,000
Architect Fees	$30,000
Land Acquisition Due Diligence	$13,000
Misc. Consultant Fees	$26,000
Renders	$5,000
Real estate taxes on the land	$1,800
Development fee	$60,000
Soft Costs Total	**$180,436**

The total development cost including land totals $699,386, or $384 per square foot. Without considering the cost of land, the total construction costs total $599,386, or $329 per square foot.

Construction Timeline

Construction is expected to take approximately eight months. Marketing of the home will take place as soon as the renderings are completed during the design phase. Ideally, the house will be purchased while construction is still ongoing.

Chapter Six: Analysis of Comparable Properties and Financial Returns

The expected sales price of this speculative development is the single most important number to focus on; it will set the bar for the maximum construction price and will largely determine financial returns. A careful analysis of similar properties which were sold in the last two years determines that a conservative sales price estimate for 5 Dearhorn Lane is $925,000.

Comparable Properties

- 101 Ridgewood Rd, Rochester, NY 12446
  - Sold for $1,305,200 on July 21, 2020, approximately $549 per square foot.
  - The home is 2,376 square feet with three bedrooms, three bathrooms, and a pool. The design and finishes are extremely well-thought out and sophisticated.
  - It is part of a well-known development called Hudson Woods, which has been featured in the *New York Times* as a design destination.
- 20 Handys Walk, Woodstock, NY 12498
  - Sold for $1,990,000, approximately $832 per square foot.
  - The home is 2,393 square feet with three bedrooms, three bathrooms, and a pool. It is designed after a rustic barn and is balanced with Swedish design elements.
  - The home is located in Woodstock, NY, which is a highly sought-after town with a plethora of amenities.
- 6 Crimson Hill Rd, Rhinebeck, NY 12572
  - Sold for $865,000 on September 8, 2020, approximately $347 per square foot.
  - The home is 2,493 square feet with three bedrooms, three bathrooms, and a modern barn style aesthetic.
  - The home is located in Rhinebeck, NY, which is a highly sought-after town with good schools and a nearby train station.
- 40 Barrytown Rd, Red Hook, NY 12571
  - Sold for $1,250,000 on August 17, 2020, approximately $533 per square foot.
  - The home is 2,344 square feet with two bedrooms, two bathrooms, and a pool. It features rustic decor with superb stonework throughout the interior and exterior.
  - The home is located in Red Hook, NY, in a secluded lot with mature trees and landscaping. This home is not a new construction.
- 8 Mountain Ln, Beacon, NY 12508
  - Sold for $752,400 on May 19, 2019, approximately $280 per square foot.
  - The home is 2,688 square feet with three bedrooms, three bathrooms, and the property features a lovely stream.
  - The home is located in Beacon, NY, which is a highly sought-after town with a lot of young newcomers. The town is known for its cultural offerings, such as Dia Beacon, and for their restaurant scene.

The average price per square foot of these five properties is $508. Using this figure, at 1,820 square feet, 5 Dearhorn Lane has an expected sales price of $925,000.

It is also important to note that there is a wide range in price per square foot in the comparable properties, from $280 up to $832. This suggests that the value of the land can vary widely based upon the town, acreage and views. 5 Dearhorn Lane checks the same boxes as the higher value properties.

Financial Model

With the total development costs set at $699,386 and the sales price estimated at $925,000, the financial returns for this development are compelling. The below information details the Sources & Uses of the funds, the assumptions that were made, a schedule of debt and equity draws that are made during the construction phase, and finally financial return metrics that the developer and equity partners would expect to receive.

Figure 14

Sources & Uses Schedule

Sources

Sponsor Equity	$25,000
Equity Partner(s)	$254,755
Construction Loan	$419,632
Total	$699,386

Uses

Land	$100,000
Hard Costs	$418,950
Soft Costs	$180,436
Total	$699,386

Assumptions

- Land Acquisition
  - Land Purchase Date: 4/1/2021
  - Construction Duration: 8 months
  - Construction End Date: 12/1/2021

- Disposition
  - Time on the Market: 6 months
  - Disposition Date: 6/1/2022
  - Sales Costs @ 6%: $55,500

- Debt Financing
  - Construction Loan Rate: 5%
  - Loan to Value: 60%

- Sponsor Equity
  - % of Sponsor Equity to Total Equity: 9%

- Equity Partner Equity
  - % of Equity Partner Equity to Total Equity: 91%

Debt & Equity Draws

As detailed below, the total amount of interest paid during the life of this project is $11,312, which is very low considering the historically low interest rates right now. This figure is also positively impacted by the relatively short eight-month construction duration. The model assumes a 5% annual interest rate, which translates to a 0.42% monthly rate.

Figure 15

Schedule of Debt & Equity Draws by Month

	4/1/21	5/1/21	6/1/21	7/1/21	8/1/21	9/1/21	10/1/21	11/1/21	Total
% Land Acquisition Costs	100%	0%	0%	0%	0%	0%	0%	0%	100%
% Construction Costs	60%	10%	10%	5%	5%	5%	10%	0%	100%
Land Acquisition Costs	$100,000								
Construction Costs	$361,132	$60,189	$60,189	$30,094	$30,094	$30,094	$60,189	$0	$601,886
Total Development	$461,132	$60,189	$60,189	$30,094	$30,094	$30,094	$60,189	$0	$701,886

Costs									
Maximum Equity Draw	$279,755								
Equity Draw	$279,755								
Construction Loan Draw	$181,377	$60,189	$60,189	$30,094	$30,094	$30,094	$60,189	$0	
Construction Debt Balance	$181,377	$241,566	$301,754	$331,849	$361,943	$392,037	$452,266	$452,226	
Construction Loan Monthly Interest Rate	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	0.42%	
Construction Loan Interest	$756	$1,007	$1,257	$1,383	$1,508	$1,633	$1,884	$1,884	**$11,312**

Financial Returns

The total returns to equity are $509,868, which yields a 1.8x Equity Multiple, which is within the target range.

Figure 16

Project Returns

Total Returns to Equity	Year 0	Year 1
(-) Sponsor Cash:	-$25,000	
(-) Equity Partner(s) Cash:	-$254,755	
(+) Cash Flow to Sponsors:		$60,000
(+) Proceeds from Sale of Property:		$925,000
(-) Selling Costs:		-$55,000

(-) Repayment of Permanent Loan:		-$419,632
Total Cash Flow to Equity:	**-$279,755**	**$509,868**
Total Returns to Equity	$509,868	
Invested Cash	$279,755	
Equity Multiple	1.8x	

Conclusion

At the time of writing, the pandemic is still very much unfolding. The coldest winter months of 2021 are still ahead, when the mix of flu season may exacerbate the pandemic.

Yet, the future seems bright, with hopes that two vaccines will be made widely available by summer 2021. Even with the vaccine, however, officials are warning that the transition back to normal life will not happen overnight. Dr. Fauci, Director of the National Institute of Allergy and Infectious Diseases, said in a CNN appearance that the vaccine is “not going to be a light switch back to everyday life” (Arnold). He elaborated that the efficacy rate—although high—is not absolute and not everyone will have the ability or will want to get the vaccine. Further, the dissemination of the vaccine poses logistical challenges. Vijay Samant, a former head of vaccine manufacturing at Merck, told *The New York Times* in December 2020, “The whole delivery process is humongous. I don’t think you’ll make a meaningful vaccination impact in the first six months” (Thompson). Therefore, the social distancing and work from home lifestyle will likely continue for at least the first half of 2021, if not longer.

The long-term demand for housing in the Hudson Valley remains to be seen. Miller said, “We won’t really know until after there is a vaccine and we can observe human behavior and how the masses respond. We’re not going back to the other extreme which is where everyone worked in the office five days a week” (Miller). In an interview for *The New York Times*, the CEO of Nielsen, a research firm with 3,000 employees in NYC, said they plan to convert their offices to team meeting spaces where people can choose to gather a couple times a week” (Haag).

While it is certainly possible that the spike in housing demand in the Hudson Valley was a temporary effect of the pandemic, lasting only as long as the pandemic, it seems more plausible that it will be a permanent trend. Sure, the velocity of the demand may decline, but the Hudson Valley is, without a doubt, a major co-primary market for New Yorkers. There is now a centrifugal force of restaurants, boutique hotels, and fun outdoor attractions that is snowballing.

New housing stock in the Hudson Valley is needed to keep up with this demand. There is a strong business case for building single family homes for New Yorkers who are looking for a country retreat or full-time home with easy access back to the City. The housing demand is palpable, and the risk adjusted financial returns are extremely attractive.

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