

An In- Depth Analysis of the Effects of Various Public Service Facilities on Corona, Queens

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An In-Depth Analysis of the Effects of Various Public Service Facilities on Corona, Queens

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Abstract

The city of Corona, Queens has been deficient in terms of public service facilities as it has historically had poor infrastructure. The COVID-19 pandemic has exacerbated the need for these facilities as Corona, Queens suffers from the pandemic more so than other parts of the city. The International Socioeconomics Laboratory conducted research on the socioeconomic status of the neighborhood and related it to the imminent need for a public service facility. A survey was performed (n=409, n=173 for Queens) to see which of the following facilities the people desired the most: healthcare facility, recreational facility, educational facility, or corporate-owned facility. ANOVA tests found that amongst all Queens participants, the desire for medical facilities was the highest (7.017 +/- 2.500), while amongst all participants, recreational facilities just barely edged out medical facilities. Amid both tests, corporate-owned facilities were the least desired, indicating the people's preference of having a public service facility constructed (the difference in the means between corporate-owned facility and the aforementioned public service facilities was statistically significant, $p < .05$). The results of our study can be applied to a larger population and/or a different neighborhood. The same general trend should be upheld given that the locations have relatively similar socioeconomic statuses.

Categories: Healthcare, Public Health, Public Service Facilities,
Key Words: FQHC, uninsured, healthcare improvement

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Introduction

Queens County, today, spans approximately 108 square miles and is the largest of the five boroughs in New York City. It was founded in 1683, originally including Nassau County before a partition in 1899. More officially, however, the Borough of Queens was enacted and authorized in New York City legislation in 1897, after a vote on consolidation only three years prior. The settlement of Queens was 1 of only 12 original counties of New York. Its original name was named after Queen Catherine of Braganza, the Queen of England, Scotland, and Ireland from 1662 to 1685. Geographically, Queens is connected to the western end of another New York City borough, Brooklyn (Williams, 2015). Despite its large size, Queens' population slightly falls behind that of Brooklyn, making it the second most populated county in New York. However, its size is still relatively large; if it were made into a city by itself, it would be considered the 5th most populated city in the United States. Queens is also an ethnically diverse area that accommodates a variety of cultures. In fact, of all of the residents living in the area, only a little more than half of them are American-born, making it one of the most diverse places in the United States. In addition, in Queens County alone, there are people from almost every ethnicity and background with hundreds of different languages and dialects spoken (U.S. Census Bureau, 2019). As of 2020, Queens is home to a population of about 2.23 million people. The borough also has the second-largest economy in the city; second only to that of Manhattan. Due to current

circumstances, as discussed and further studied in this paper, the county has experienced a -0.92% population decline (U.S. Census Bureau, 2020). Despite this, it can be seen that Queens has the most diversified economy in the city, as residents have occupations that evenly spread across healthcare, retail, trade, manufacturing, construction, transportation, and television sectors. Such diversity can be noted of the economic makeup which is heavily represented in Queens' small-business majority.

Formerly named West Flushing, Corona is a popular neighborhood located in Queens county. There are many theories surrounding why the name was changed and how the new name signified the residents that lived there at the time. The first theory involves a petition that may have caused the name to change. A popular real estate developer during the late 19th century, Thomas Waite Howard, petitioned to have the name changed to the word "Corona," a word that means "crown" in Spanish. During its establishment to the end of the 19th century, the neighborhood of Corona had increased in popularity (Macaulay CUNY, nd). New York and Flushing Railroads began services in the area. Its goal was to serve a newly opened racecourse. In 1858, the Fashion Race Course hosted the first game of baseball that charged an admissions fee, thus marking the start of the professional baseball that we see today. The Fashion Race Course provided eye-catching entertainment as it was the first-ever all-star baseball game, showcasing a competition between All-Stars from the Brooklyn Baseball Team and the All-Stars from the Manhattan Baseball team (Wilkinson, 2005). Corona and East Elmhurst were often referred to as one "Corona/East Elmhurst" and was also where many famous people from politicians to musicians and rappers grew up. These people include Eric Holder, Helen Marshall, Jeffrion Aubry, Jimmy Heath, Kid n' Play, Kwamé, Salt-n-Pepa, and Kool G Rap. From 1940 to 1960, Corona and East Elmhurst (which are adjacent neighborhoods) were home to many admired African American athletes, musicians, and civil rights leaders.. It is undeniable that the history in Corona is entrenched with various African American heritage and a neighborhood of ethnic diversity. Corona, Queens is split into two neighborhoods: Corona, which is South of Roosevelt Avenue, and North Corona, which is North of Roosevelt Avenue. The neighborhood is bordered by Flushing and Flushing Meadows-Corona Park to the east. To the west it is bordered by Jackson Heights; to the south it is bordered by Forest Hills, Rego Park; the southeast it is bordered by Kew Garden Hills; to the southwest it is bordered by Elmhurst, and finally to the north it is bordered by East Elmhurst. Corona was founded in 1854 and has been a popular home for people of varying ethnicities ever since (Honan et al., 2015). In the late 19th century, Corona was established as a residential area near Newtown where Italian immigrants were some of the first to live in the area. Founded by real estate speculators, this land was established the same year that the "New York and Flushing Railroad" company began its services around Queens. At the beginning of its establishment, this land had achieved many successes. During the middle of the 20th century, the neighborhood saw an influx of new residents from many famous African Americans. Later, the neighborhood experienced another flood of new residents: Latin Americans. In fact, according to a population poll from 2019, Latinos take up more than half the current population in Corona with 54% of its population. In contrast, African Americans make up 4%, Whites make up 5%, and Asian Americans make up 35% of the total population of the neighborhood as of 2019 (U.S. Census Bureau, 2019).

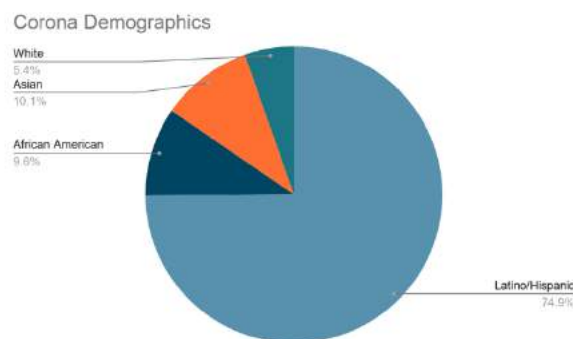


Figure 1. Corona is a heavily dense Latino community where populations of other ethnicities are lower than the borough average.

Corona has a rich Hispanic heritage that lives on to this day. In Corona, visitors are bound to find Latin American restaurants, whether it is a Colombian bakery on many street corners or a Mexican taqueria with music playing. This all started in the 1960s when the Eisenhower administration reconstructed the immigration policies, which relaxed constraints on immigration from countries in South and Central America (Haller, 2015). This led to many Ecuadorians, Dominicans, and Colombians moving to Corona in hopes of finding better economic opportunities and sustaining their family back in their home country. Although this immigration led to a very culturally diverse neighborhood, the Latinos that moved to Corona for work were only able to find low-paying and blue-collar jobs. In 1992, due to the large influx of immigrants, Corona was deemed the most “ethnically mixed community in the world” (Haller, 2015). Corona is a very diverse neighborhood with almost 86% of its population speaking a language other than English at home; mainly Spanish is spoken (Haller, 2015). The median household income in Corona is \$67,143, which is lower than the New York average of \$72,108 however, higher than the country average at \$65,712. The average rate of poverty in Corona is at 10.2% which is below state and country level (Census Reporter, 2019). In addition, Corona’s residents take an average of 45 minutes to commute to work (Census Reporter, 2019). 71% of individuals in Corona take public transportation to work while only 14% of people drive alone (Census Reporter, 2019). To accommodate all the people living in Corona, there are 46,458 households with about 3 people per household (Census Reporter, 2019). Most of these households are multi-unit households implying that more than one family lives inside it. These multi-unit households are usually buildings or houses with multiple entrances to the house, one for each apartment (Census reporter, 2019). Lastly, regarding education, only 75% of people have completed high school or higher education in Corona while the state average is 88% (Census reporter, 2019).

The varying diversity of races encouraged the establishment of the Corona Plaza, which became a popular open space for people of all races to gather. Located at the intersection of Roosevelt Avenue and National Street, the plaza was transformed from an underutilized lot to a popular convention. Corona also became a home to many attractions, including the Louis Armstrong House, a historic house museum that served as the home of musician Louis Armstrong from 1943 to his death in 1971. The house became a city-wide success and even became a national landmark in 1976. Corona contains numerous religious institutions and public schools. This includes P.S. 92 and the High School for Arts and Business. A portion of the many religious schools in the area are Mt. Olivet Christian School located on 97th street, the Our Lady of Sorrows Catholic Academy located on 105th Street, and the St. Leo Catholic Academy located on 49th Avenue. The Sister Ciara Muhammad School is an Islamic academy located on Northern Boulevard and the School of Transfiguration, a Greek Orthodox school, is located on 38th Avenue. These institutions are a reflection of the diversified cultures and religions of the many ethnic and racial groups that reside in Corona.

Corona, Queens is a neighborhood with a complex historical background. Many different groups of immigrants have made their home in Corona, contributing to the neighborhood’s rich and diverse culture. Prior to the 1950s, Corona’s demographic consisted mainly of Italians and African Americans. After the 1950s, there was an enormous flood of Dominicans and Latin Americans moving to the neighborhood. Many of these immigrants were impoverished, this pattern of poverty has continued into present times - Corona has a 12.9% poverty rate (Furman Center, 2018). Many of these people also do not have insurance. In 2018, the population of uninsured residents in Corona was estimated to be about 25%, which is significantly higher than the citywide rate of 12% (Hinterland et al., 2020). This widespread lack of health insurance causes many to accumulate copious amounts of debt when they need medical assistance. The mass immigration that occurred between 1980 and 2018 has contributed to a 107% growth in New York City’s population and has resulted in about half of all of Queens’ residents to be foreign-born and more than 50% to speak a language other than English. Unfortunately in Corona, 27% of children (under 18) and 23% of seniors (65 and above) live below the poverty line. As the epicenter of the COVID-19 pandemic becomes New York once again, Corona is hit with an enormous surge in cases (Dhaliwal, 2020). The struggle, which is more transparent than ever before, with COVID-19 in the present reveals the story of race, poverty, and inequity. Nationally, Latinos have been overrepresented in the cases of COVID-19 in 43 out of 44 states (Holpuch, 2020).

Hispanic and Black communities have been disproportionately affected by the coronavirus pandemic in NYC

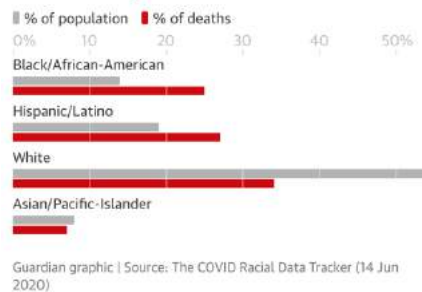


Figure 2. Hispanic and Black communities disproportionately affected by COVID-19 pandemic in NYC.

In New York City, 34% of COVID deaths were Latinos, yet they make up only 29% of the population. Similarly, Black people make up 28% of the deaths, while they only make up 22% of the city's population (Holpuch, 2020). The high rates of COVID-19 in Hispanic and Black communities, including Corona, is due to historical consequences that have left a legacy.

Undocumented Latino Families:

A contributing factor to the disproportionate rates of Latino and Black people in Corona affected by the COVID-19 pandemic is the lack of health insurance and government relief programs. In Corona, due to the large number of undocumented immigrants, many residents do not have health insurance. Governor Cuomo had stated in early May that there will be no more funding for undocumented immigrants without federal support. Many parents or guardians in Corona are undocumented, causing family members to work outside during the pandemic. Furthermore, businesses have been forced to close, and the amount of COVID-19 cases has been increasing, causing people to lose their jobs without the safety net of government unemployment relief. Fear increases as landlords progressively threaten to expose the undocumented immigrant status of their tenants to pay rent when there has been a struggle to do so due to the pandemic and its effects. Immigrants are given so little relief, yet they make up over 75% of essential and front-line workers but have a lack of Personal Protective Equipment (PPE) (Holpuch, 2020). The lack of relief for Corona residents is shown by the long lines in front of COVID testing facilities and food donation centers in the neighborhood, to the point where residents bring chairs to wait in the line (Holpuch, 2020). With little support for the diverse amount of people in the area, many are struggling to survive. Students are worried more about their next meal rather than their studies and futures while families live together in substantially crowded areas. If even one person, typically an undocumented person without unemployment benefits, goes to work, they step foot outside the comfort of their homes to a world that is no longer safe and full of inequities as they battle both against the virus and the legacy of racism.

Health Insurance and Services:

Many residents living in Corona, Queens are uninsured. For instance, in North Corona, uninsured residents are 33.3% of the population while the number resided around 20.2% in nearby Elmhurst. Despite the decline of uninsured Corona residents that has been occurring since 2008, the uninsurance rates are still quite high when compared to other city averages (Kimiagar et al., 2020). In 2017 while Elmhurst/Corona had an uninsured rate of 14.6%, Queens had an uninsured rate of 9.0% and New York City had a rate of only 7.2%. The need for health insurance and services for residents of Corona is more imperative as Corona also has the most cases of uncontrolled diabetes in the city (McAllister et al., 2020). It was found that those with diabetes have a higher chance of experiencing serious complications from COVID-19 (American Diabetes Association, 2020). The high rate of diabetes combined with the current pandemic makes the need for health insurance significantly more critical. A solution to the high demand for health services in Corona is to establish a hospital or health center. This center has the potential

to serve those in need of assistance while reducing the crowds at nearby hospitals like Elmhurst Hospital, a hospital notorious for being excessively crowded, especially during the initial stages of the COVID-19 pandemic (Dwyer et al., 2020).

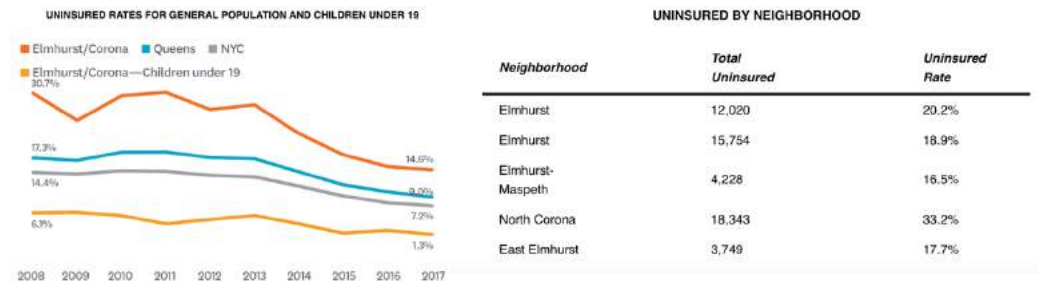


Figure 3: Uninsured Rates for General Population and Children Under 19 in Elmhurst/Corona, Queens
Table 1. Uninsured rate by neighborhood in Elmhurst and Corona, Queens

Density in Elmhurst Hospital & Potential Hazards:

Elmhurst Hospital was besieged by COVID-19 patients especially in the beginning of the outbreak. Elmhurst Hospital has a maximum capacity of 545 beds and more than 80% of those beds were full of COVID-19 patients (Khakhkhar et al., 2020). Both Elmhurst and Corona residents depend on this local hospital, yet there is an insufficient amount of rooms for all patients to be treated. People from other boroughs also poured into Elmhurst Hospital, taking up even more rooms and preventing local patients from receiving aid. 3,500 beds were available in other hospitals just 20 minutes away, yet Elmhurst hospital faced overwhelming numbers of incoming patients from all across the city (Dwyer, 2020).

TABLE 1. AGE-ADJUSTED RATE OF COVID-19 CASES PER 100,000 IN NEW YORK CITY (CASES WHERE RACE OR ETHNICITY WAS KNOWN)

Race/Ethnicity	Non-hospital cases	Non-fatal hospitalizations
Black/African American	806	395
Hispanic/Latinx	668	342
White	619	163
Asian/Pacific Islander	303	137

Source: New York City Department of Health, May 7, 2020.

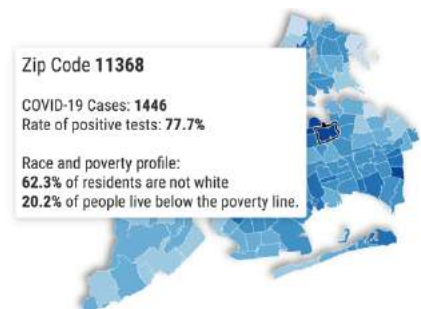


Table 2. Rate of COVID-19 Cases per 100,000 in New York City (based on race & ethnicity)
Figure 4. COVID-19 Statistics in Corona, Queens

The exceptionally dense and minority population of frontline and essential workers residing in Corona, Queens have faced these hardships the most. Corona has been one of the high-risk areas in the city and has to share a hospital with the population in Elmhurst. Furthermore, citizens must face competition to get a room in the hospital because of the large influx of people from other boroughs. Corona, Queens residents are predominantly Hispanic, Asian American, and African American, which are groups that currently suffer the most (Correal et al., 2020). 41.2% of the frontline workers in New York City are Hispanic and African American, demonstrating that Corona needs much more aid than it is receiving now (Rho et al., 2020).

Other hospitals besides Elmhurst hospital are likewise full of patients from local areas and take more time for Corona residents to commute to, especially if the matter is dire. At the beginning of the pandemic, Elmhurst hospital was one of the first hospitals to receive a COVID-19 patient and was labeled, "the epicenter of the epicenter" (NYC Health + Hospital, 2020). Elmhurst hospital has already brought in 165 doctors, nurse practitioners, and medical assistance, with

plans to invite more. The hospital also plans to add 230 more medical beds and 69 more ICU beds (Rho et al., 2020). This may sound like a positive turn particularly with the second wave of COVID-19 beginning in New York City. However, all of these acclimations to take in more patients are being added to the same facility without expanding the area. This could be hazardous as this will increase the density and could drastically spike the rate of infections and deaths. Even though hospitals are making efforts to treat more patients, admitting more COVID-19 patients in a closed area will put frontline workers at a higher risk with a lack of PPE. Elmhurst hospital is also one of the first hospitals to receive the COVID-19 vaccine since it was one of the most affected hospitals (Troutman et al., 2020). Elmhurst hospitals can only receive a limited supply of these vaccines and will most likely distribute them amongst the patients that are admitted to the hospitals. The hospitals are already filled with infected patients and residents like Corona, Queens residents can not go in to get the vaccine even though they are one of the hardest-hit areas. Corona does not have a nearby accessible hospital, they can not get easily accessible vaccines, but the population in Corona is mostly frontline and essential workers. Most of these workers live under the poverty line and 25% of the population in Corona, Queens do not have health insurance to even go to the hospital or the doctor without paying more than they can afford (Holpuch, 2020). The Corona, Queens area deserves another facility that will help aid the suffering residents. Compared to nearby neighborhoods, Corona is at a massive disadvantage in terms of medical aid and assistance. The Corona, Queens population stands at 112,425 people; comparatively, nearby neighborhoods such as Rego Park, Kew Gardens, Elmhurst, and Jackson Heights have drastically less of a population yet many more medical facilities such as hospitals. The COVID-19 positivity rates have been increasing especially in the central Queens area due to the increase in hospital density which forces residents to travel outside their neighborhoods to receive assistance. Positivity rates in Kew Gardens were 19.7%, and, similarly, the positivity rate in Rego Park was 17.44% (Krauth et al., 2020). While, in Forest Hills, the positivity rate was 15.12% which is drastically lower than Corona's positivity rate of 23.18% (Krauth et al., 2020). Corona, Queens residents have to share their medical facilities and hospitals with other neighborhoods and do not have one of their own even though they are disproportionately affected and at risk.

Redlining:

The legacy of redlining during the 1900s through the United States has been the segregation among many communities and has created a disparity between the quality of education and the resources provided. For instance, from 1934 to 1968, there was a "race tax", where the suburbs that are predominantly white create decades of racial segregation (Baldegg et al., 2014). Although there have been laws like the fair housing act in 1968, many underlying and conspicuous issues existed where black people were not permitted to have a mortgage, so they signed contracts with white businessmen that scammed them and took their money. The Black residents were going to lose their homes because they supposedly did not pay for it, for they were exploited simply yearning to live a life in peace. For example, 106 out of 552 black people in Chicago won their homes but the rest lost them. Now the area is one of the poorest areas with almost 50% of people under the poverty line and 1 in 5 homes empty (Baldegg et al., 2014). The exploitation benefitted white communities, yet the government had not ventured into the circumstance. This was a practice of discriminatory denial of services. Many similar situations can still be seen throughout history, including in Corona. 98% of homeowners in the U.S. that got a loan were white and the more homes they can buy, the more wealth they can accumulate. The residents of Corona are put at a disadvantage because the legacy of redlining has left much of the Black community in Queens which makes up 20.7%, 1/5th, of the population according to the Census 2019, and other people of color impoverished because in the 1930s when the Federal Housing Administration (FHA) was created, Black communities were denied many services such as mortgages, access to health insurance, and many had to unjustifiably pay higher taxes (Nonko, 2016). Their communities were labeled as "undesirable" due to the history of racism in the United States. This lack of benefits has left an inequitable legacy on communities of color that still struggle today. Queens NY, section D8 (Roosevelt Ave., 100th st., National Ave., Corona Ave.) is just one of the areas in a red zone of Corona, NY, including 44th avenue that has a history of redlining. The trend of the desirability of the area has decreased from the last 10-15 years. The terrain is depicted as vacant. The area is graded as "Definitely declining" at 74% (Mapping Inequality, 2020). Ironically, those same neighborhoods are being gentrified with soaring real estate prices and increased rent, which is more destructive than ever before during

COVID-19 when unemployment is soaring and not everyone can accept the government and manage the cost of medical services.

2

	Applicant Race				
	Black		White		
Year	#	% denied	#	% denied	Global redlining index (R_F)
2013	9930	40.2	46475	23.8	1.88 (1.77, 1.99)
2014	7203	37.8	29848	23.4	1.93 (1.81, 2.01)
2015	7487	34.8	32249	20.8	1.95 (1.83, 2.07)
2016	8090	37.1	32930	20.6	2.19 (2.06, 2.33)
2017	7200	29.9	27548	17.0	2.06 (1.92, 2.22)



Table 3. Adjusted Odds Ratio 2013-2017 of Loan Acceptance, brackets show the 95% confidence interval.
Figure 5. Redlining in NYC

Table 3 uncovers the adjusted likelihood proportion of a Black man in New York City getting a loan denied compared to a White man in the year 2013-2017. It shows that while redlining is no longer prominent in its existence as it was in the 1900s, it is still very much present. The table represents higher index scores in transcendentally white communities that were not marginalized by redlining, whereas predominantly Black communities have a much lower index score, meaning they were affected most by redlining through the denial of services such as loans simply because of the color of their skin. Black individuals are almost two times more likely than White people to have gotten loan requests denied. Neighborhoods not denied loans at a higher rate were Upper West (2.33) and Upper East (2.31), and those with the lowest scores were Rockaways (1.86) and Southeast Bronx (1.88), areas that are predominantly black and brown (Choi et al., 2020). Figure 2 reveals the areas of New York City that have faced redlining throughout history, leaving more impoverished and predominantly black neighborhoods extremely affected. Corona, Queens and the surrounding area, including Flushing and Jackson Heights, is marked in a light to dark red. This color reveals that those areas of NYC have faced the harsher effects of redlining that can still be seen today. They are seen by the underfunded school, detrimental to the education of children in Corona. It is also seen by the increased rent prices and gentrification of the area. Overall, many other services in Corona and the surrounding area have a lack of funding and accessibility (Choi et al., 2020).

Student Necessities:

To emphasize, the culturally vibrant neighborhood, Corona, Queens has a history of socioeconomic disadvantages. It is known to have an abundance of immigrants from Latin America, many of which are underprivileged and came to the U.S. with little to no money. Living in Corona allows them to have a sense of cultural place they can associate themselves with, but at the same time a financial burden with many families struggling to pay bills. The median income in Corona is about \$53,000, which is substantially less than the rest of New York City (Mansoor, 2020). The living space is much smaller, homes are closer to one another, many people live close to poverty, and the area is generally overpopulated. Some apartments have as many as 15-20 people, because rent is such a massive burden for people (Salama, 2020). As a result, people are exposed to more sickness and low quality food. Most of the foods obtained by these low-income families are cheap and unhealthy. Overtime, this results in health complications which leads to diabetes, obesity, and high blood pressure. All of which are significant causes in lowering the local life expectancy (King et al., 2020). Children and adolescents have to earn money for their families, so they don't have enough time to dedicate to schoolwork. Thus underprivileged children in Corona tend to have lesser opportunities later in life than more privileged children who live in Forest Hills and Rego Park. Less than a third of students in Corona graduate college (King et al., 2020). Lack of education hinders many of these students in Corona to excel and get themselves and their families out of poverty. Additionally, the environment these students live in negatively impacts them, especially as remote learning increases. Poorly maintained housing leads to many respiratory illnesses such as asthma, which too many children in Corona have, leading to congenital disabilities, injuries, and mental illnesses (King et al., 2020). These issues are still a significant problem for Corona's residents today, and change must be done to fix these inequality issues.

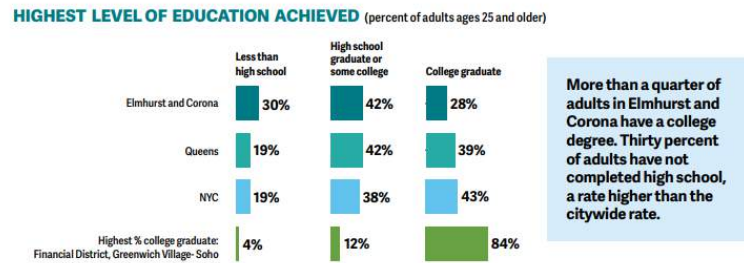


Table 4. *Highest Level of Education Achieved in Elmhurst & Corona, Queens* (King et al., 2020)

Many students in Corona, Queens are undocumented Latinx immigrants or have family members who are undocumented immigrants. They are often underprivileged and focus on getting their next meal rather than doing their homework or studying. Now that there is a pandemic, they are in a state of constant anxiety about food, resources, family members' health, and their lives (Holpuch, 2020). Some parents are essential workers who have to work outside during the pandemic, further putting these students at risk for COVID-19. As a result, some of them have been ill or seen family members sick and pass away, which creates trauma and hinders them in school. At the time, it was considered the epicenter of COVID-19. Cathy Rojas teaches at a particular high school in Corona, Queens, for undocumented immigrants, in which 98% are Latinx. Many of her students who were academically achieving at the beginning of the school year before the pandemic are now falling behind. Many are just so unmotivated to hand in schoolwork or put minimal effort into the work. Since many of their family members are undocumented immigrants, paying the bills and getting food is a huge struggle. Before COVID-19, many students in Corona relied on the two meals provided in school to survive because they didn't have the means to get food. Now that schools are closed, it is an intense struggle for them to get any food at all. Besides, countless students do not have access to electronic devices or the internet necessary for school. In addition to personal electronics being too expensive, the New York City Department of Education was running out of them, and many of Corona's students were not able to get access to electronics or the internet until the end of May. They had no access to education for almost three months. By the time they had gained access to remote learning, they only had a mere 2-3 weeks of school, and even then, it was just a light review, but it was even more challenging because it is difficult for someone who missed school for three months to take in all the information they missed in a matter of days (Holpuch, 2020). Many of Corona's students are forced to take summer school classes to pass and learn about what they missed during the start of the pandemic. This is a significant problem with the education system: the digital divide. Lower class students are held behind because they don't have proper resources. These students were neglected by the flawed American education system and not given equal opportunity.

Housing/Rent:

The high rent prices have many implications on citizens' daily lives in Corona, Queens, and have only been exacerbated by the COVID-19 pandemic. In order to meet the high rent prices, many families in Corona, Queens are forced to split rent with other families, strangers, or extended family; thus, people in the neighborhood are too densely populated in small apartments and townhouses, which are not always thoroughly sanitized and monitored, creating a breeding ground for a virus like COVID-19 (Zaveri et al., 2020). Furthermore, many of these individuals work blue-collar jobs as construction workers, taxi drivers, or street vendors (Dhaliwal et al., 2020). These types of occupations put citizens at very high risk for the COVID-19 virus. Additionally, most blue-collar workers cannot perform their jobs remotely at home, and they will have difficulty finding another job in the time being because all similar jobs can not be carried out remotely. Therefore, to meet these high rent prices and sustain a similar level of daily living, blue-collar workers were forced to work their jobs through the height of the pandemic, exposing themselves to the possibility of contracting the virus, but even more importantly, these people returned every day to densely populated homes in the neighborhood, and putting their friends, family, and neighbors at risk. This demonstrates how some previously existing socio-economic

issues in the area play a substantial role in the high death and infection rates observed throughout Corona, Queens.

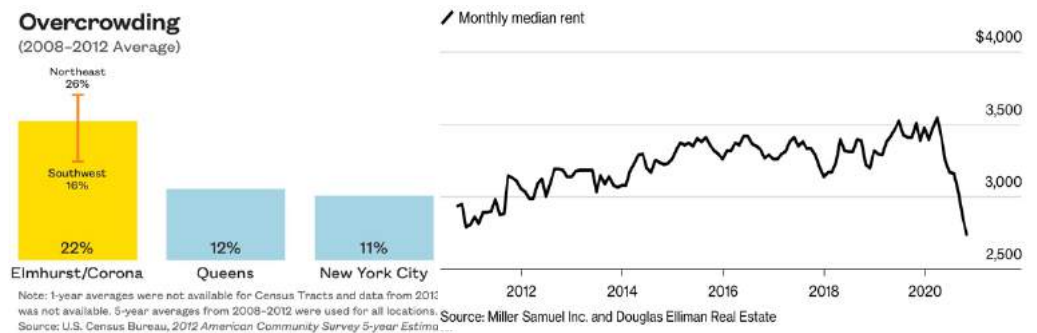


Figure 4. Percentage of Overcrowding in Elmhurst/Corona, Queens in comparison to New York City (U.S. Census Bureau, 2012)

Figure 5. Median Monthly Rent Prices in Manhattan, New York (Miller Samuel Inc. & Douglas Elliman Real Estate, 2020)

In Corona, Queens, approximately 76% of properties are rented (American Community Survey et al., 2020). Throughout the pandemic, rent prices have only gone down by 1% in areas that have experienced high COVID-19 cases and deaths. Rent prices have gone down by 6.7% in more affluent areas, such as SoHo and the Upper Eastside (Ukmar et al., 2020). These are the lowest rent prices Manhattan has seen since October of 2010 (Carmiel et al., 2020), dropping more than they did during the 2007-2009 recession (Chen et al., 2020). In November, the median rent was about 6% in Brooklyn and Queens, \$2,400 and \$2,100, respectively demonstrating that citizens of places like Corona, Queens have continued to face difficult situations financially even with the lowered real estate prices across the New York City area.

1. Pandemic Impacts

In July 2020, Corona, Queens had a rate of 39.9 infections for every 1,000 residents, the second-highest COVID-19 infection rate in New York. In addition to having the second-highest infection rate in NYC, Corona also has the second-highest percentages of COVID-related deaths, with 3.7 deaths for every 1,000 citizens (Block, 2020). These rates reflect the health challenges that residents are currently facing. Furthermore, Corona also has a high percentage of both uninsured residents (19%) and overcrowded homes (12.2%), both of which contribute to how fast this disease has spread in the area (Block, 2020). Local hospitals such as Elmhurst Hospital have experienced a huge surge of cases without the sufficient equipment to treat their patients. With only 545 beds and a general lack of personal protective equipment (i.e. N95 masks and face shields), the hospital is constantly struggling, working at over 100% capacity (Khakhkhar, 2020). Especially since Corona is primarily populated by immigrants holding essential jobs, working in public areas with constant exposure, residents are constantly being put at risk.

2. Job Insecurity/Income Loss

Job insecurity has always been a fear for many workers in Queens, but COVID-19 turned those fears into reality. The increasing unemployment rate during this pandemic is creating a more dangerous situation for families to get infected (Correal, 2020). One of the reasons why so many residents in Queens have lost their jobs during this pandemic is due to the industry that they work in. For example, many Queens residents who work in air transportation have lost their jobs since COVID-19 has made it nearly impossible to travel. People who work in the transportation industry have also been severely affected by the pandemic since many people are socially distancing and working from home, meaning there is a surplus of idle transportation workers (Correal, 2020). Affordable housing is also at risk (Block, 2020) in many communities in Queens, adding to the reason why so many people are leaving. The high-density environments in the city make it dangerous for people who are lower income because they are at a higher risk of getting COVID-19. More than half of the workers in Corona and surrounding areas are essential workers that are employed in food service, construction, etc. These essential workers are

relatively safe in terms of job security, but also have the most contact with people which could be detrimental to their own health and their family's health. Queens has been the hardest hit borough during this pandemic as many residents either do not have a job or a job that could compromise their health and the health of others around them.

COVID-19 has decimated Queens, as many residents are facing unemployment and struggling to receive a stable income, which causes residents to struggle with affording rent and accessing food. Many residents who are struggling with income are being forced to decide where their money goes, whether it is for rent or food. The government is trying to provide assistance during this pandemic with stimulus checks and funding of food banks, but those are not nearly enough to compensate for the amount of people that have lost their income during the pandemic. For example, the government has given numerous EBT credits for food, but more than half of Latinx families have said that they still worry about food and around 40 percent said that they have used all their food money. These food credits also do not help with the rent burden that many families are facing. The stimulus checks sent out by the government can only provide so much and it is just a temporary cushion to those families who have suffered hardships during the pandemic. Federally funded food banks and food pantries are another way that the government is helping people who have lost income from the pandemic. For instance, some food banks saw an increase from 1,000 families served to about 7,000 families served per week in March (Salama, 2020). However, these food banks have since lost federal funding, which has left many families without food. Food banks all over the country are predicted to shut down due to the lack of funds and the constant increasing rate of high demands for food (Jaffe, 2020). This impacts many families in Queens that rely on these services.

3. Rent Insecurity / Rent Burden

Rent has tormented residents of Corona, Queens for decades- residents have long struggled with coming up with enough money to pay for their living situations. With the rise of the COVID-19 pandemic, jobs have grown scarce and unemployment skyrocketed, making it incredibly difficult for Corona residents to pay their rent. The pandemic has put the sources of income for many into jeopardy for a variety of reasons. Some have lost their jobs as a direct result of the pandemic (e.g. a business they worked for had to shutter), while others have fallen sick and faced the decision of whether they would get the care they needed or pay rent that month. Prior to the pandemic, the percentage of Corona residents that had difficulty paying their rent each month was 62% - much higher than both the boroughwide and citywide rates of 53% and 51% respectively (Census Reporter, 2019). Without stable incomes, those that have previously struggled with paying their rent or those whose rent comprises more than 50% of their monthly income face even more difficulties as the pandemic bankrupts businesses and hangs workers out to dry. Corona's high death toll has also had a significant impact on struggling residents; those that worked outside the home were much more likely to encounter the virus, fall ill, and due to an inability to pay for medical care, perish. With households' primary breadwinners gone or incapacitated, the burden that monthly rent is placing on families is growing at an unprecedented pace.

Even those with jobs are suffering. While one-third of residents in Community District 4 (Corona, Jackson Heights, Elmhurst, and Lefrak City) work in 'essential' services (Siegelbaum & Beckler, 2020), the living situations that many are in pose a significant risk to their ability to go to work. Queens Community District 4 has the largest percentage of homes where there is more than or exactly one occupant per room (excluding bathrooms), with 22.2% (Census Reporter, 2019). The overcrowding that has plagued the borough for decades, and Community District 4 in particular, has made it much more likely for people in these neighborhoods to become infected with COVID-19, forcing them to remain at home, where they are unable to work. As some residents become seriously ill, they must seek out medical attention - this presents another problem, given that a fifth of residents in that district do not possess health insurance (Siegelbaum & Beckler, 2020). Without health insurance, people must pay the entire cost of whatever healthcare procedures they need, which tend to be rather expensive. This contributes to the increased burden the pandemic has placed upon these residents: their cash flow is cut off, they are unable to work, and if they have become seriously ill, they are forced to pay for treatments that may cut into the money that they have available to pay rent. The problems compound upon each other - overcrowding makes it more likely that people get sick, and if they

are sick, they are unable to work. If people are unable to work, they run the risk of having to make the decision between paying rent that month and getting the care they need, putting residents of the district under duress like never before.

a. Stimulus Checks

With the unprecedented rise of the pandemic, the U.S. government saw it necessary to provide the American people with stimulus checks in order to help mitigate the negative impacts of the dramatic life changes brought about by COVID-19. Since March 2020, the U.S. government has given Americans a total of \$1,800: \$1,200 in April, and another \$600 in December (IRS, 2020). While it helped in the short term, the meager amounts of money the government had given to those whose lives have been thrown off-track did not make a significant impact on their financial situations: they continued to struggle. The average rent for a two-bedroom apartment in Corona, Queens is \$2,076 a month (Apartments.com, 2021) - neither of the stimulus checks covered even a month of rent for families in the neighborhoods whose sources of income had dried up (not to mention that rent was not the only expense that households faced). There were other issues; dependents that were between the ages of 17 and 24 did not qualify for either their own stimulus checks (where they would be counted as adults) or contribute to the family stimulus check (as a tax-deductible child, which those over 16 are not). Undocumented immigrants or 'nonresident aliens' (IRS, 2020) did not qualify for stimulus checks, causing more hardships for a group who was considered the most likely to lose their jobs during the lockdown (FPI, 2020). The stimulus checks did little to alleviate the pressure that has been caused by the pandemic, leading to increased hardship and financial struggle across the neighborhood. These government-provided stimulus checks have been a source of little solace for Corona residents.

4. Food Insecurity

Residents of Corona have always suffered from food insecurity, and COVID-19 has only worsened it. There is a heightened demand for food banks, with some serving over ten times the people they had before March. However, it seems like their federal funding has dried up. In May, the government initiated the Farmers to Families Food Box program, a \$4.5 billion plan that was supposed to support families all over the country throughout the year). However, due to high demand and insufficient funds, the program has been cut short a month early in many locations. Other federal food programs are also running out, as food banks all over the country are predicted to lose 50% of the food they currently receive from the Agriculture Department (Jaffe & Reiley, 2020). As about 50 million Americans (Mehta & Chang, 2020) are experiencing food insecurity, for many families, this could mean going hungry in the coming months. In Corona, a neighborhood densely populated by unemployed immigrants who do not qualify for national stimulus packages, this could mean food insecurity rates higher than ever **Figure 3**

Besides food banks and national stimulus packages, many New Yorkers also depend on other federal food programs such as SNAP and the NYC DOE Grab and Go. In the beginning of the pandemic, all NYC school children received \$420 in the form of EBT credit for food. However, even with this federal support, many still struggle to provide for their families. In 2017, New Yorkers spent around \$2,801-\$3,200 on groceries annually (McDowell, 2019). With stimulus packages of a mere \$1,200 in April and \$600 in December, we can see that an issue is raised. To fill the gaps, about 48% of Latinx New Yorkers reported participating in SNAP, and 38% in the DOE Grab and Go program. Still, even with these initiatives, 55% of Latinx families reported worrying about food, with 41% saying they had already used up their food money (CUNY Graduate School of Public Health & Health Policy, 2020). These statistics also do not account for the undocumented immigrants who have lost their jobs and cannot afford to feed themselves. With a majority of undocumented immigrants being unemployed, money for food is a glaring concern for most immigrant families. Issues surrounding food insecurity are much worse in neighborhoods with predominantly people of color, which is a common theme among the neighborhood's struggles.

5. Disparities in Education

New York City's Department of Education has always received backlash for the clear racial disparities in schools throughout the city. 74.6% of Black and Hispanic students attend schools with less than 10% of White students while 34.4% of White students attend schools with more than 50% White students. This is a major issue because our public schools do not represent the diversity of New York City. Queens High School for the Sciences at York College, the only

specialized high school in Queens, is composed of more than 75% Asian students (New York City Council, 2019). In a borough where 48.9% of residents are underrepresented minorities (U.S. Census, 2019), it is clear that the ‘elite specialized’ schools are not nearly as representative of the demographics of the region. Leading to the question as to why there is such a drastic racial disparity in education, and the NYCDOE in general. According to NYC Health’s 2015 Community Health Profiles, as little as 28% of Queens Community District 4 (includes: Elmhurst, Corona, Corona Heights, and Lefrak City) are college graduates, 39% are high school graduates or some college, and an alarming 33% did not finish high school (NYC Health, 2015). Meanwhile, in Manhattan Community District 1 (includes: Financial District, Battery Park City, Civic Center, South Seaport, and Tribeca) 84% of residents over 25 years of age hold a college degree, and only 16% attended some college or obtained a high school diploma. This disparity in the education level of adults can spark unique barriers for their children, and become a huge factor in their higher education.

The largest differences between Queens Community District 4 and Manhattan Community District 1 come down to average income, racial demographic breakdown, and English language proficiency. With the decline and projected elimination of dual language programs, students coming from bilingual or native language households face a greater disadvantage when applying to magnet public high schools, including our 9 specialized high schools (Citizens’ Committee for Children, 2016). This barrier tends to target Hispanic and Latinx students because of the language obstacle and lack of access to proper preparation for the competitive high school selection process. Beyond these barriers are physical zones and districts: predominantly White school districts tend to be extremely well-funded compared to Black and Latino dominated school districts (Aqe, 2018). Among these well-funded and predominantly White school districts is Manhattan’s coveted District 2, home to seven of the most expensive zip codes in the country (Veiga, 2020). From elementary schools to high schools, most District 2 schools are known to be heavily selective and favor students that reside in their area. Corona, Queens residents who wish to apply to these schools face severe disadvantages and end up attending their zoned schools. According to an IBO Analysis Report, Queens school districts only receive \$7,341 per pupil (Grades Pre-K to 8) which is the lowest in the city; Manhattan school districts receive \$8,647 per student (Grades Pre-K to 8) which is the second highest in the city, right after the Bronx. This inequity is often ignored when discussing overfunding New York public schools but is also the main culprit in the disparities between educational attainment in Queens versus other boroughs.

The college admissions process is a strenuous time for everyone, but in the midst of grade point averages, standardized test scores, and extracurricular activities, most people fail to consider an important factor in most elite private institution admissions: legacy. As mentioned previously, only 28% of people over the age of 25 residing in Queens Community District 4 (includes Corona, Queens) hold a college degree while 84% of residents over the age of 25 in Manhattan Community District 1 hold college degrees. Universities that consider legacy in their admissions process are among some of the most prestigious institutions in the world from Harvard all the way to Georgetown or Notre Dame. Legacy applicants have quite the measurable edge compared to non-legacy applicants. For example, a study conducted by an economist at Duke University found that legacy applicants were admitted to Harvard at a 34% acceptance rate whilst non-legacy applicants were admitted at a measly 6% acceptance rate (Moody, 2020). Although top 20 institutions are still extremely difficult to gain admission into, legacy is clearly a factor in most selective universities. This is an issue for students in Corona, Queens (and neighboring areas in the community district) because they do not have the same hook that legacy applicants gain simply from being born to specific parents. Due to this inequity, most first generation college students in New York City are forced to attend CUNYs and SUNYs, which are more affordable and better accessible to Queens residents. As much as 44% of all CUNY school graduates are first generation college students (CUNY, 2019), and 36.3% of all CUNY students identify as Hispanic or Latinx (DataUSA, 2017). When compared to Top 20 universities, CUNY schools can be an extremely affordable option to obtain a bachelor’s degree for middle class Queens residents. While having degree holding parents does not guarantee any college acceptance, it surely makes gaining admission to a college easier. The 72% of students residing in Corona that are first generation college students lack the same resources that a student residing in the Financial District whose parents attended a four-year university have access to.

6. Community Safety

In addition to inequities students are facing with the NYC education system, individual neighborhoods within the city face uncertain times of undefined community safety. Queens, the second highest populated borough in NYC, houses diverse neighborhoods that are filled with essential health and social workers. Here the city's continuous redlining has pushed out low income families to the outskirts of Queens and has spiked COVID cases. After the current hikes in rent, decreased salaries, food hikes, and pricey educational centers, families are left crowded in smaller homes at an upward rate of 22%. At the same time, inequality itself may be acting as a multiplier on COVID's spread and deadliness. Research has found that poverty and inequality can exacerbate rates of transmission and mortality for everyone. Unfortunately, COVID has fostered redlining which forced minorities into disease filled neighborhoods like East Flatbush. With this, Queens' education attainment (31%) is lower than the city-wide (37%). Additionally, redlining pushed the asian community out of Queens with spiked taxes and declining opportunities in Elmhurst and Corona. Asian voters are under-represented because their communities sit on top of many legislative partitions, according to AALDEF. Asian communities in Richmond Hill and Elmhurst are split into as many as six assembly segments. It is empirical to promote business and employment as immigrants represent 47 percent of the borough's population, and children under the age of 10 are tripling in population. This new generation is vulnerable to the crumbling infrastructure and society in Corona, Queens and would demand a rise in social worker recruitment. It is evident that on average, Queens does have a rise in homeownership, but areas like East Flatbush, Corona, and Elmhurst see 75% of its population renting and then are forced to move out from rent hikes of utmost 10%. The market is falling in these areas as costs in transaction and sale prices have taken a dip from 6% to 14%.

The current trend in community safety has seen a downward spiral since 2018 for the midterm elections. In Corona, Queens, business transactions whether that be on food, real-estate, or health insurance, have seen large plummets. Specifically, the pandemic created a reality where small businesses are on the brink of collapse. COVID hyperinflated home purchases on the market. Home values plummeted by 14%, leaving families no lee-way in selling homes. This led to many families moving into crowded and unsanitary apartments at increased rates of 22%. As COVID spreads in poor communities, violent crimes surge as supplies run short from the prioritization of the elderly and unpreparedness (Country Health and Ranking, 2019). Roadmaps, crimes have surged with 562.4 assaults compared to the national line of 282.7 assaults. Additionally, robbery and rape cases spiked after the lack supplies and PPE (Niche, 2020). Specifically, the Latinx community was hit hard with the majority of high schools with a large Latinx population facing harassment charges.

Individual lifestyle choices in poorly funded and deprived neighborhoods foster rising issues of community safety. In Corona, the lack of a community hospital leads many without jobs and many residents opting for unsafe measures. The NHIF shows necessary governmental intervention in order to promote a better lifestyle. The Nuffield Health Intervention Ladder shows us that we can intervene at many different levels of our systems to improve health outcomes. The implementation of an educational system and a health center that would actively help communities with high COVID rates and high crime rates, would enable the community to receive more attention from politicians and lobbyists. Corona and Elmhurst are often regarded as 'untouchable' communities that cannot be fixed without much needed government stimuli. Increasingly, hospital executives are pursuing upstream interventions to minimize downstream costs. There is a major push to make healthcare for low-income individuals less reactive and more proactive; hospitals are striving to reach these patients more frequently at less expensive points in the healthcare system (Samuelson, 2017).

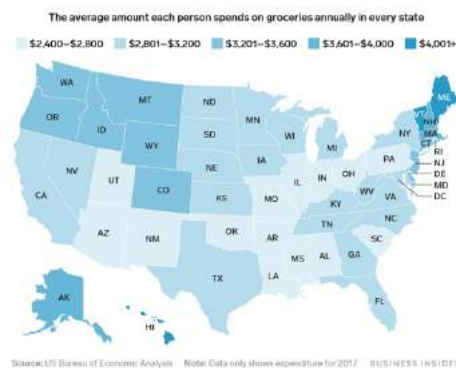


Figure 6. Average annual grocery expenditures per state (US Bureau of Economic Analysis, 2017).

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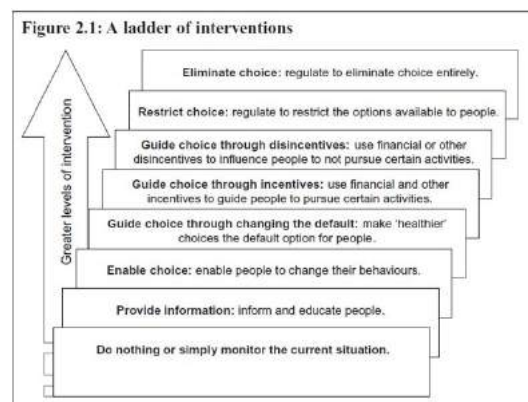


Figure 8. Ways to improve community safety by levels of intervention (Samuelson, 2017).

The 2020 pandemic has hit the Corona, Queens area hard, hampering economic growth across the borough. It has been proven that the major facilitators of growth agglomeration and centrality, can still be used in order to yield the economic return for the productivity of the urban land through the means of healthcare industry (DiNapoli, 2013). The fundamental aspect here would be freeing real estate and bringing in the public sector for the development of property. As the unemployment rates have risen to almost 13.10% as recorded in October of 2020, according to the United States Federal Reserve. This has thereby created a detrimental effect on the economy and its projections. As reports stated, private sector jobs in New York City fell by 545,200 over the year of 2020 to 3,587,700 in November 2020. The losses were widespread and occurred in the areas of leisure and hospitality (-205,500), trade, transportation, and utilities (-86,700), professional and business services (-86,100), educational and health services (-67,500), other services (-33,100) which hampered growth rate of private sector and affected the public sector overly. Looking at the graph below, one can understand, a focus on the health sector needs to effectuate for incurring gains and benefiting the community as a whole.

The venture for the development of the plot would indirectly influence the employment incentives thereby inducing the land for usage beyond the health arena, this is because hospitals

are considered as one of the top employers. The allocation of investments through this project will prove to be evidential for future returns through addition of capital, promotion of services and structuring the incentives. The demographics, efficiency and technology will quantify the forces and increase the revenue generation. Furthermore, usage of public land, development will be subsidized. Amid the pandemic, this will prove to be a great incentive for leveraging resources for community revitalization and a public benefit (Fels Institute, 2020). One can say that by connecting the public health and community resource data, will effectuate the data enabling of Covid-19 testing due to the rise in different variants now, contact tracing, and will further include social needs assessments to determine the needs for food or energy assistance in the areas impacted on a wider scale. This would help one to fill a gap between the community and the public sector that had widened in the pandemic (Lim et al., 2017).. It has been noticed that people are now leaving densely populated areas like New York City and spreading out to suburbs or smaller communities in order to save money amid the time of market share fall. The sales were already slumped before the advent of coronavirus, which further downgraded the supply chains and enabled the shutdown of construction sites (NY Times, 2021). A need to adopt different service models to monetize the existing assets amid the new scenario is needed, this can be possible through the construction of healthcare industry, educational facility, recreational centres, all that will enable the market to leverage a property and enable its construction (Jena et al., 2017). The economic aspect connecting the public sector would help in freeing the real estate sector for the viability of development. The main task here is to have influence over the land use and its development projects. In a city where hospital policies and interests conflict with that of the patients, there is a need for a service facility for the benefit of the public (Eisenberg & Goldenberg, 2021).

New York Employment by Industry in Thousands:								
NAICS Industry	Current Jobs		Current Growth		10 Yr. Historical		5 Yr. Forecast	
	Jobs	LQ	Market	US	Market	US	Market	US
Manufacturing	205	0.3	-0.81%	1.30%	-0.06%	0.89%	-0.00%	-0.01%
Trade, Transportation & Utilities	1,202	0.9	0.83%	0.89%	1.25%	1.11%	0.50%	0.47%
Retail Trade	659	0.9	1.20%	-0.12%	1.60%	0.86%	0.63%	0.37%
Financial Activities	633	1.5	-0.35%	0.97%	0.72%	1.01%	0.02%	0.34%
Government	918	0.9	0.10%	0.44%	-0.02%	-0.01%	0.56%	0.76%
Natural Resources, Mining & Construction	295	0.7	-4.50%	3.06%	2.80%	2.10%	-0.31%	0.24%
Education & Health Services	1,637	1.3	-3.23%	2.22%	3.02%	2.12%	0.39%	0.66%
Professional & Business Services	1,160	1.1	1.96%	2.20%	2.75%	2.64%	0.83%	1.98%
Information	252	1.9	-0.12%	-0.65%	1.37%	0.02%	0.80%	0.56%
Leisure & Hospitality	711	0.9	1.84%	2.50%	-3.69%	2.51%	0.84%	0.60%
Other Services	317	1.1	3.16%	1.30%	1.67%	0.99%	0.46%	0.25%
Total Employment	7,244	1.0	1.60%	1.54%	1.79%	1.49%	0.47%	0.55%

Table 5. Employment in each industry in New York

The next part is a distinction on how a public property would be a great investment. This means focusing on the statistical purview of the investments procured in Queens and other parts of New York City, in the construction of governmental plots. One needs to understand that in a community of immigrants, a public facilitated service with customer insight and financial efficient services spans out in a better way than a corporate model that does not show enough acceleration.

Focusing on immigrants needs to cover the statistical purview of how the investment will prove beneficial to the community (Peri, 2021). Building a community health center wherein the majority of the population is immigrants implies the logic of demand and supply through increase in labor supply. Therefore there is larger availability and more productive capacity, depending on what establishment takes place. The major aspect here is to focus on the revenue generation of a public facilitated plot. The hospital industry has been growing at an annual rate of 2.3%. The revenue of the industry usually depends on demographic changes and reforms, and for Queens, one can say that the current low wages amid the pandemic and the lower purchase cost will enable to effectuate the revenue generation (The Guardian, 2021). Through the statistics, we would be arguing how another hospital is much needed in Queens and will benefit the community at a subsidized cost. And the final take-away from here would be how a public service facility spans out better than a private property.

Why Corona Demographics increase need for Public Facility

Corona and Elmhurst, Queens are very distinct from all the other neighborhoods of NYC due to the sheer amount of pressures that make the creation of a public facility necessary. The first of these pressures is immense population growth with a nearly 50% increase over the past 10 years according to our findings, with the population being 109,000 in the 2010 census (Census Bureau, 2010), increasing to 170,000 as estimated by the 2018 NYC annual report (Community Health Profiles, 2018).

This graph was made using the US Census and NYC estimations mentioned.

This massive population growth was nearly 25 times more than the 2.5% growth of the rest of the city (DCP, 2018). For comparison, Elmhurst hospital, the primary care facility for the area, had 545 beds in 2010 and still has only 545 beds in 2020 (Rothfeld et al., 2020). In addition to its lack of public facility growth, Corona has a median household income of \$50,700 (P2P, 2020) while the rest of NYC has a median household income of \$63,000 (Census Bureau, 2019), a nearly 20% difference. This disparity is largely caused by a few differences, such as the aforementioned lack of health facilities. It is also due to the disparity in education, as Corona also has far lower average educational levels than the rest of the city. College graduation rates are at 28% versus the rest of the city's 43% (NYC Gov, 2018). Corona/Elmhurst also has a poverty rate 35% higher than the rest of the city (27% vs. 20%), pushing the median salary down even further, and increasing the urgency for a public facility (NYC Gov, 2018.) All of these factors provide reasoning for why an additional public facility is crucial in order to better the people of Corona/Elmhurst.

In addition to the aforementioned lack of education in these areas, there is also a lack of necessary skills for economic success. As found in the 2018 NYC service report, 51% of Corona's population lacks proficient English skills compared to only 23% for the rest of the city (DCP, 2021). This correlates with lower incomes too as Spanish speaking adults who lack English proficiency earn \$3,000 per year less than their counterparts (Catholic Charities, 2016). With a nearly 52% Hispanic population, this income disparity is especially evident in Corona, Queens. In addition to low English literacy holding Corona, there is also a low health standard for Corona when compared with NYC and Queens as a whole. According to the 2018 Corona/Elmhurst city status report, only 69% of Corona residents reported themselves as being in good health, compared with 79% for NYC and Queens (DCP, 2021). This mass disparity in health can be combated by creating more public service, specifically recreational facilities, and a hospital, just to mention a few examples. According to a study done in Oregon, there is strong correlation between the health of people within a community and the number of recreational and public service buildings in that neighborhood (Oregon State University, 2010).

In addition to the lack of health and pressures due to lack of public service facilities, there is also a significant lack of skill based education. Corona also has far lower average educational levels than the rest of the city as college graduation rates are at 28% while the rest of the city has a rate of 43% (NYC Gov, 2018). According to a 2018 study conducted by the College Board, bachelor degree holders earn a median salary almost \$25,000 higher than their high school graduate counterparts (Ma, et al. 2020). This lack of education and public facilities that guide students on the right path costs Corona residents their income.

In addition to all the factors that contribute to lower income, there are also a lot of societal and health factors that increase the need for a public service facility. Corona has a teen pregnancy rate of 26 per 1000 while the Queens average is 15 per 1000 (NYC Gov, 2018). Teen pregnancy rates can be decreased through comprehensive sex education and tighter knit communities, both of which are provided by public service facilities.

Benefits of Public Health Care Facilities

Public health care facilities are a force of good within the United States. In 2016, federally-funded community health centers served 25.9 million children and adults—more than one in twelve people—in over 10,400 urban and rural locations. An additional 58 community health centers supported with state and local funding cared for more than 738,000 patients (HRSA, 2021). Public health care facilities offer a wide spectrum of medical help to a broader, diverse population of patients. The demographic and economic profiles of the patients in public health care facilities show the immense need for such facilities in disadvantaged communities. In 2016,

92% of health center patients had income at or below 200% of the federal poverty level, including 70% who had incomes at or below 100% of the federal poverty level or \$20,780 for a family of three in the U.S. in 2018 (ASPE, 2020). Health care facilities are founded to serve communities that need them. A large majority of the patient population represent underprivileged minorities. In 2016, nearly six in ten health center patients were from racial or ethnic minority groups, while only 41% of patients were non-Hispanic White. Hispanics comprised 30% of all patients and Black/African American patients represented 22%. The majority of health center patients were female and working-age adults; however, 31% of health center patients were children under 18, reflecting the important role health centers play in providing accessible care for all children and their families (Rosenbaum, 2018).

The number of public health care facilities and patients who receive care at those facilities have increased rapidly. Since 2000, the amount of health centers has increased from 730 to 1,367 in 2016. At the same time, the number of patients served surged from 9.6 million in 2000 to 25.9 million in 2016 (Rosenbaum, 2018). This shows the growing need and use of health care facilities. Additionally, health care centers serve key patient populations with Medicaid. In 23 states and the District of Columbia, health centers serve at least 15% of the population with Medicaid or Children's Health Insurance Program (CHIP) coverage, and in six states and the District of Columbia, more than one in four people with Medicaid use health centers. Underprivileged patients with Medicaid rely heavily on public health care facilities to serve their medical needs.

In addition to serving minorities and underprivileged members of society, public health centers provide a range of services for their patients. In 2016, health centers reported 104 million patient visits. Of these visits, over 68% were medical care visits, and 14% were dental care visits. In 2010, 76% of health centers offered dental care; by 2016, the share had grown to 80% (Rosenbaum, 2018). In addition to important physical health services, health care facilities also offer vital mental health counseling to help patient's mental health needs. Mental health and substance use disorder services accounted for nearly 10% of all patient visits in 2016. However, over the years, the mix of health center services has changed to reflect both the evolution of the health center program and changing patient needs. The proportion of health centers offering mental health services grew from 73% to 87% over time, while those offering substance use disorder services increased from 20% in 2010 to 28% in 2016 (Rosenbaum, 2018).

In addition to the help they provide their patients, public health care facilities are major employers in low income families. In 2016, health centers employed 207,656 FTE staff. These staff included 12,419 physicians, 60,035 nurse practitioners, physician assistants, nurses, and other medical services personnel, 16,142 dental professionals, 20,497 staff furnishing enabling services, and 10,355 staff providing mental health and substance use disorder services, including treatment for opioid addiction (HRSA, 2021). In 2016, health centers employed 4,535 eligibility assistance workers (HRSA, 2021). Since 2013, health center eligibility workers have assisted more than 12 million community residents with insurance enrollment (HRSA, 2015).

Economic inequities affecting essential needs

Corona, Queens has one of the biggest immigrant populations in NYC. Many of the residents are foreignborn and are not proficient in English. With having such a huge minority and immigrant community, it has brought disadvantages like the lack of access to healthcare and lack of resources. The median household income for residents living in Corona was reported to be \$50,700, which is 16% lower than New York City's median household income. The poverty rate in Corona is 12.9%, which is higher compared to the 11.5% in Queens. The unemployment rate is 3.99% while the labor force participation rate is 68.1% for Corona Residents (NYU Furman Center, 2018). In regards to Corona, there are high rates and amounts of individuals living with pre-existing conditions. Keep in mind, since the majority of Corona residents are immigrants, the reported number of these negative health conditions could be even higher due to many who are uninsured. 36% of Corona residents are uninsured which is the second highest citywide and is much higher when compared to Queens overall, which is 22% and citywide which is 20%. The top 3 most reported deaths facing Corona residents are health diseases (ranked #1, 976 of deaths and death rate its 138.5), cancer (ranked #2, cases of deaths is 788 and death rate its 104.0) and flu (ranked #3, cases its 219 and death rate its 31.6). Many of these deaths are avoidable but due to the amount of uninsured individuals and accessibility to health public services, it results in

having many residents in Corona unable to seek proper help necessary (Bassett MT. Community Health Profiles, 2015). Since 2009 three hospitals in Queens have shut down, leaving Elmhurst hospital as the main primary sources of health service for not just Northwest Queens residents but for many Queens Residents as Parkway Hospital in Forest Hills has closed down due to bankruptcy (NYC Health + Hospitals, 2016) (Pozarycki, 2020). In Corona, Queens 76.3% of residents don't have cars. Exposure to COVID-19 for many of the residents living in Corona, Elmhurst and Jackson heights was mostly likely due to public transportation as many are car free (NYU Furman Center, 2018). Overall, the potential Corona hospital would serve as a golden advantage for not only Corona residents but Queens residents as a whole as it would prevent far transportation, more medical field support, more health public services and it would be extremely helpful to combat the COVID-19 pandemic (as a second wave is possible).

As previously stated, the median household income for residents living in Corona was reported to be \$50,700 in 2018. It's 16% lower than New York City's median household income. Due to the economic inequality challenges that Corona residents are facing, their everyday lives involving housing conditions has been negative. 34.5% of Corona renter households face severely rent burdened in 2018 as the rent continues to increase. Renter households are reported to spend 50% or even more of their income solely on rent in Corona, Queens. It was reported that only 55.5% of rental units were affordable for the 80% of residents living in Corona with having median income. This data is 1% lower than the share in the year of 2010. The homeownership in Corona is 24.0% lower compared to the citywide 32.8% share. Over the years since 2010 the homeownership has decreased by 3.6%. The home loan rate was at 13.5 per the 1,000 properties which includes 1-4 family buildings, cooperative apartments, etc. The refinance loan rate was 5.3 per the 1,000 properties which once again also includes 1-4 family buildings, cooperative apartments, etc. In Corona, 76 properties were filed as mortgage closure and 6.0 mortgage foreclosure actions that were initiated per 1,000 of 1-4 family properties and condominium units. While the rate of mortgage foreclosure actions that were initiated per 1,000 of 1-4 family properties and condominium units was 6 compared to Queens which was 10.4 and the citywide was 9.7 (NYU Furman Center, 2018).

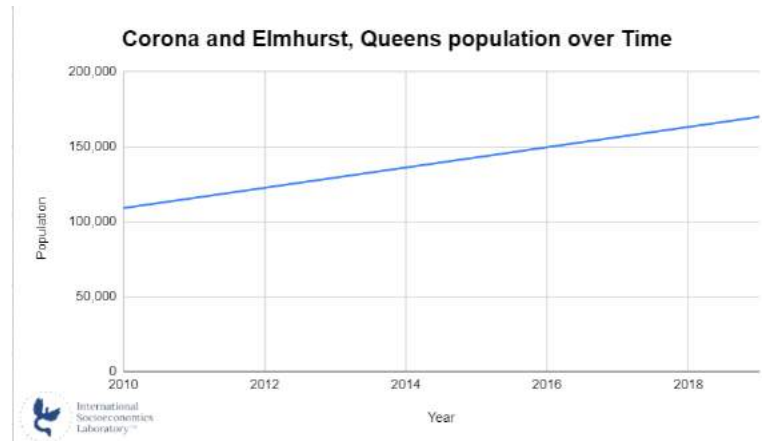


Figure 8. Population growth trends in Corona and Elmhurst

Throughout the COVID-19 pandemic the food insecurity rate increased as rent increased, making it harder for Corona residents. One of the only public services provided to Corona residents were non-profit organizations like NICE which is located in Jackson Heights rather than within the Corona community. 69% of Corona Residents believe their health is excellent, very good or good (Holpuch, 2020). Food insecurity rate has increased within the Latinx community during COVID-19 in communities such as Corona, Elmhurst and Jackson Heights (Acharya, 2020). Since the pandemic 32% of Latinos throughout the United States are facing food insecurity, while in NYC food distribution has increased in Latino communities within Brooklyn and Queens. For example Catholic Charities in Brooklyn and Queens have stated they have given out 20,000 meals which is 40% more than usual (Castano, 2020).

Corona's zone high school is Newtown High School. Newtown High School has a majority population of low-income students. 77% of the student body qualifies for free or reduced cost of lunch. Newtown High School's graduation rate is only 73% compared to the citywide 82% in 2019. During COVID-19 percentages are likely to drop. Newtown High School English language learners is 24% of the school but only 58% of those students will graduate within four years compared to the 68% citywide (Inside School, 2020). Adding on, teen births in Corona are 29.6 per 1,000 girls ages 15-19 and are ranked 17th in the city. The teen birth in Corona is higher when compared to overall Queens which is 18.7 per 1,000 girls ages 15-19 and citywide which is 23.6 per 1,000 girls ages 15-19 (Bassett MT. Community Health Profiles 2015).

Materials and Methods

For this research paper, research was conducted on three different public facilities using a two-step approach: archival and survey research. Archival allowed for a more historical approach, while the survey provided more concise data.

Archival:

By utilizing public and official data from both the federal and state government, an effective amount of information was compiled to help illustrate the situation, people, and general socioeconomic status present in Corona, Queens. Specifically, the information used was collected from the area's 2010 census to help create a foundation for data analysis and the application of the trends found in the survey. With the census data, specific trends were observed and organized such as unemployment, poverty levels, and ethnic backgrounds. Given the recent COVID-19 pandemic, many official reports were released by state governments regarding specific numbers on death tolls and cases by hospital, which were used to compare and analyze existing socioeconomic factors and how they played a role in the virus outbreak in the Elmhurst and Corona areas.

Furthermore, with active databases such as healthdata.org, detailed estimates of factors such as hospital beds, occupancy, and further developed statistical analysis were made accessible. By observing projections and data specific to certain areas, another layer was added to the complexity and substance of the data analysis. Lastly, statistics from credible news sources such as the *New York Times*, were used to compile more niche data that can be further tested and examined by the results from the survey.

Survey:

Additionally, an NYC-based survey was conducted with 409 participants. The purpose and goal of the survey as well as possible future plans of creating a public facility were discussed with prospective participants and informed consent was received. Team members were in charge of distributing the survey to friends and family. The form was anonymous to protect the personal information collected from survey-takers, such as their annual income and zip code. It consisted of mostly multiple-choice questions and was open for around a week.

Multiple techniques were used in reaching out to possible New Yorkers to take the short survey. Social media was the primary form of outreach in order to garner as many voices in the city as possible. There was reach to families, friends, and neighbors to receive the most accurate data. Surveys were conducted via Google Forms to effectively gain the most submissions. It is a platform many people have used across the nation as both the novel coronavirus cases and school closures increase. This has transferred many students and workers to using online platforms such as Google Forms.

Participants were asked a variety of questions regarding their homes and communities. The anonymous survey contained nine personal questions regarding: (1) the borough they reside if they are from NYC, (2) their residing zip code, (3) their age, (4) their race, (5) gross household income, (6) quantity of members residing in household, (7) rent expense, (8) health insurance type, and (9) health expenditure. Participants also rated the desirability and feasibility of creating various types of public facilities on a scale from 0 through 10, with 0 being the easiest and 10 being the most difficult to build or with the highest desirability. These facilities include a medical facility, educational facility, recreational facility, and corporate property or government

building. The desirability along with the feasibility of creating a specific type of public facility were asked because both components must be considered during construction. Google Forms then averaged the data out, leaving a visible majority rule.

The data we received from the survey was then plugged into two separate one-way ANOVA tests, that measure the significant difference between the means of the variables present. The first was to compare facility desirability for each facility among the 173 respondents from Queens, and the second was to compare among all respondents worldwide, 409 in total. In the ANOVA tests, a p-value of $< .05$ indicates that the difference between at least two of the means was significant.

Results

As many may have experienced, healthcare facilities across the country have not been adequately designed to withstand pandemics like COVID-19. When coronavirus hit New York City, people all across the city started comparing the current state of hospitals to that of prisons. Although an extreme comparison is unnecessary, the COVID-19 pandemic brought to light that hospitals under pressure were forming into prisons for the unhealthy.

After eliciting the scenario above, one can argue that more health care facilities are necessary. Creating a healthcare facility in hot spots in New York City would not only be beneficial for civilians in the area, but would essentially be a high reward long term investment.

Based on the figure below the population of Corona, Queens has been increasing at a steady stable rate. With an increase of around 10,000 people every year, the city's population is rising at a stable rate. The impact factor of a healthcare facility has an incredible long term gain.

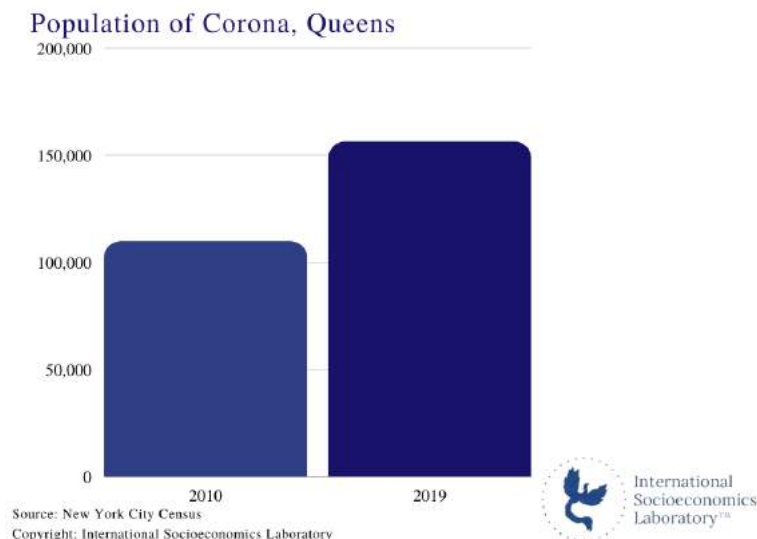


Figure 9. Population of Corona, Queens, 2010 versus 2019

With the onset of the COVID-19, the neighborhood of Corona, Queens has been hit especially hard and is sometimes referred to as the epicenter of the pandemic. While facing some of the highest infection rates, it has also seen a decline in the number of resident healthcare workers. As of 2015, the area of Elmhurst and Corona was declared one of the neighborhoods with the largest decline in healthcare workers as a percentage, totaling up to an approximate decrease of 6.0%, while fellow Queens neighborhoods of Howard Beach and Ozone Park saw the largest decline of 43.1% (Weintraub et al., 2018). Weintraub et al. construed that the reason for such a decline in workers was the proximity of healthcare institutions to public transit. There were not enough

transportation methods within the area in which the healthcare workers were employed. The closest transit from where these Queens medical workers were situated was at least eight blocks away (Weintraub et al., 2018). The installment of a healthcare facility within the designated plot of land located at 111th Street between 43rd and 44th avenue can significantly increase the percentage of healthcare workers in the area, as the issue of public transit will most certainly be accounted for. The closest train station, 111 Street Station along the 7 Train Metro Line, to the 17,500 sq ft. of land would only be 4 minutes away. While it may appear as if it would not amount to much, the significance of having a train station near medical facilities has shown immense rates of growth in terms of healthcare workers. Sticking to Queens, the neighborhoods of Queens Village, Cambria Heights, and Rosedale saw a 308% increase in healthcare workers from 1990-2015 (Weintraub et al., 2018). To put it into perspective, that would amount to several thousands of health care workers, as overall Queens saw an increase of nearly 54,000 between the same period (Weintraub et al., 2018). A common trend among the three neighborhoods was a train station(s) near medical facilities (for example, Queens Village Train Station, Linden Blvd Train Station, and Rosedale Train Station, respectively all located near several medical facilities). These statistics show that constructing a medical facility on the plot of land would indeed be a long term investment; it will have showcase benefits beyond just the pandemic, as it would draw in more healthcare workers to the area, compensating for the percentage loss from years prior.

Along with geography, crime rates serve as a significant incentive for the need to construct a hospital. Between 2015-2019, Queens has experienced increasingly consistent rates of criminal activity. Between those years, Queens saw anywhere between 32,000-35,000 reported crimes in total, with violent crimes being anywhere between 8,800-10,000 and larceny related crimes being anywhere between 23,000-26,100 (NYS Division of Criminal Justice Services, 2019). Additionally, the 110th precinct-the precinct containing Elmhurst & Corona, -accumulated enough reported felony assaults to have the 7th highest reported felony assaults amongst all Queens precincts (100th-115th) in 2019. The reported felony assaults in 2019, 319 felony assaults, was the highest amount recorded since 2002, except 2018, where the reported felony assaults were 328 (NYPD, 2019). The 110th precinct experiences close to 1,450 total reported crimes about the seven major felony offenses. Felony assaults more often than not result in victims needing to be hospitalized. However, the issue is that there is not necessarily a hospital near Corona, Queens. The closest hospital, Elmhurst Hospital, is approximately a 30-minute walk away from Corona. The time it takes to travel to the hospital can be too long relative to the victims' damage. Elmhurst Hospital also has a history of being overcrowded, meaning they may not be able to account for victims of crime in Corona in a realistic amount of time.

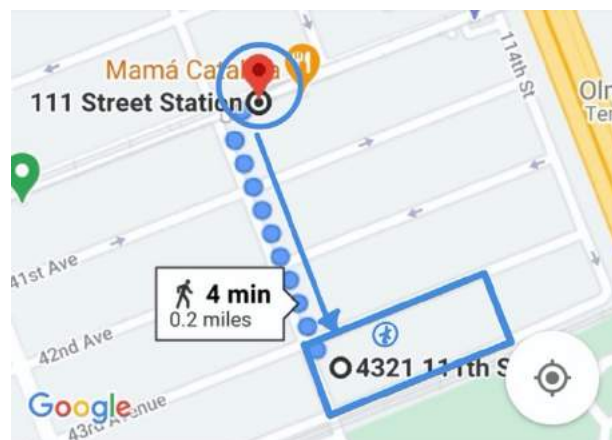


Figure 10. Map of plot of land and nearest public transportation

The need for a medical facility can also be seen through information regarding race and medical coverage and the demographics of Corona, Queens. Corona is known for its diverse racial population. According to the 2010 census, the breakdown of population by race and ethnicity in Corona, Queens was 63.3% Hispanic, 12.7% Asian, 8.4% White, and 13.6% Black/African

American. 1.3% of people in Corona reported being of two or more races, while the breakdown for Alaskan/Native American, Islander, and others were 0.2%, 0% and 0.5%, respectively. In 2019, the breakdown by race was 5% White, 54% Hispanic, 35% Asian, 4% Black/African American, with 2% reporting they were of two or more races. For Islander, Native, and other populations, the percentage reported was 0% (however, this does not imply there are none of these people residing in the area, there may just not be enough for it to constitute to a percent). It is important to note that the demographic data is the growing diversity amongst underrepresented races and ethnicities. The percentage of White individuals saw a decrease, while overall, there was an increase in racial and ethnic diversity. These percentage changes, while they may seem small, actually amount to several thousands considering that in 2010, the population of Corona Queens was 109,695, and increased to approximately 156,074 in 2019. The reason why the increase in racial and ethnic diversity calls for the need of a medical facility is the fact that Hispanics, Africans, and Asians, the populations that are predominantly present in Corona, are also the most likely to become uninsured. Studies have shown that for Hispanics, African Americans, and Asians, the probability of which these populations were to lose their medical insurance just one year after receiving them was .301, .233, and .156, respectively (Sohn, 2017). Additionally, it was reported that in 2014, Elmhurst and Corona saw one of the highest amounts of people uninsured and the third highest uninsurance rate, 34,295 and 22.20%, respectively (Stringer, 2014). Given these statistics, the need for some sort of medical facility, such as a free clinic, is imminent. The diversity within the community of Corona, Queens shows no sign of stopping and in order to compensate for the increasing diversity given the rates of uninsurance, a medical facility within the community will be serviceable.

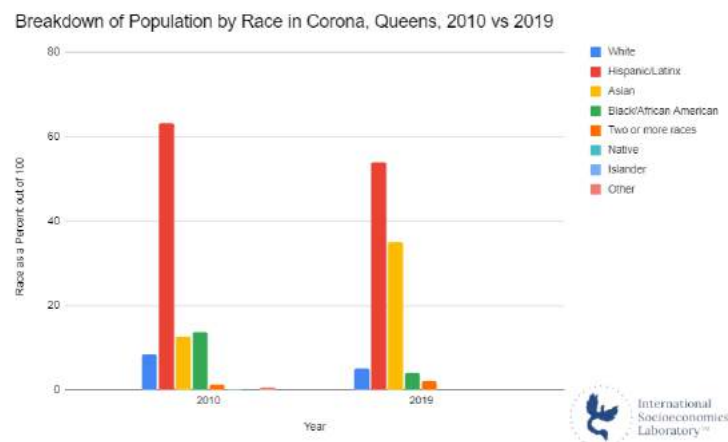


Figure 11. The above graph depicts the breakdown of population by Race in Corona, Queens in 2010 vs 2019.

Before investing in a certain health facility, it is essential to overlook the various types of healthcare facilities and their respective benefits and drawbacks. Some of the numerous types of healthcare facilities are Federally Qualified Health Centers, free health clinics, nursing homes, urgent care clinics, and ambulatory surgical centers. The following sections are broken up into each type of facility. Within each section, it will be separated into the information regarding what each health facility is, the advantages and disadvantages of implementing the particular medical facilities, and the economic implications.

Overview of the Facilities

Federally Qualified Health Centers (FQHCs) and Free Clinics both primarily benefit individuals with limited incomes and no health insurance but do not qualify for Medicare and Medicaid. They are also typically located in underserved areas. When comparing the financial aspects of families within Corona, Queens to the entirety of Queens and all of New York City, it was found that the median household income in the neighborhood is lower than the median household income in Queens (21.5868% less), and also lower than the median household income of New York City as a whole (14.16% less). Furthermore, in 2018, 12.9% of Corona residents were below the federal poverty line. Poverty affects individuals' health because it limits access to daily

necessities such as shelter, clean air and water, utilities, and other important elements in an individual's standard of living. Those who live in underserved areas are more likely to experience poor health conditions due to a combination of factors that present obstacles to health maintenance. Those who have experienced poor health need insurance and healthcare to pay for medical expenses. However, many do not have access. As for Corona, Queens, there seem to be large differences between subsections of the community. In Northeast Corona, where the facility would be located, a larger percentage of people live in poverty, and the average median income is also lower compared to Southwest Corona. 23% of Northeast Corona individuals live in poverty, and the average median income is \$44,674. In contrast, in Southwest Corona, 15% of individuals live in poverty, and the average median income is \$50,874. These disparities ought to be accounted for - creating this facility in this section of Corona would be instrumental in improving the well-being and living situations of those living in Northeast Corona.

Free Health Clinics

Compared to the number of other facilities, there are a lot less free health clinics. Free health clinics are a vital resource for everyone, especially those who do not have access to other healthcare services. These medical facilities offer a wide array of services and resources, including medical, dental, pharmaceutical, optometrical and behavioral. However, a clinic's specific service(s) is entirely dependent on the clinic itself. For example, there are clinics specifically that offer services geared towards sexual intercourse and sex-education. At these clinics, patients can get free pregnancy testing, STD testing, contraceptives, IUDs, and more. The targeted population for these facilities are the low-income, the uninsured, and those that do not qualify for Medicare or Medicaid. Even so, depending on the clinic itself, the patients served may vary. There are free clinics specifically for women and even free clinics that provide services for teenagers. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) gave health professionals the ability to volunteer at these free clinics (Health Resources & Services Administration, 2020). To expand the intended target population, the Affordable Care Act (ACA) was passed in 2010 to extend the ability to become free clinic volunteers to employees, officers, board members and contractors (Health Resources & Services Administration, 2020). Today, free clinics are often run by volunteers from local colleges and communities who want to change their neighborhood positively. To operate, free clinics heavily rely on funding from charitable donations, civic groups, churches and corporations. 58.7% of these clinics do not receive government funding (Antoinette Birs et al., 2016.) Therefore, these clinics heavily rely on the community members themselves and support from typically local organizations.

In the United States, there is an increasing demand for free clinics. In 2017 alone, 52 new free clinics opened nationwide, none of which received any federal funding (National Association of Free and Charitable Clinics, 2016). However, in New York, there is a limited number of free clinics. Free clinics benefit numerous subgroups, such as minorities, under or uninsured individuals, and the working class. Free clinics primarily serve the following groups: Hispanics (31%), Black/African American (31%), White (25%), Asian (11%) and Native American or other (3%) (Simpson & Long, 2007). Many uninsured individuals receive late diagnoses, which can lead to severe health impacts. However, with the establishment of a free clinic, there would be a center provided for uninsured patients, where they would be diagnosed at a more rapid rate. These free clinics would also give the Emergency Department workers less burden, as free clinics will provide equal, serviceable care.

Although free clinics are thought to only benefit those without insurance, they have proven to be beneficial for the majority. With the presence of a free clinic in a community, actual medical emergencies are treated more efficiently as the likelihood of patients clogging emergency rooms is significantly lower. In regards to individuals who do not have health insurance, free clinics provide a multitude of healthcare benefits. In a study evaluating patient experience, incentives, and barriers to optimal medical care at a free clinic, it was found that 40.2% of the participants surveyed that went to free clinics were unemployed, 34.1% were employed with no benefits, 6.1% had seasonal work, and 19.5% were under-employed. Since these participants did not get healthcare benefits from their work, they could not afford to always go to hospitals or medical centers for health issues, largely because of the financial pressure such expenses would place on their budgets. In this aforementioned study, 45.7% of participants had missed work due to illness, and 52.6% said that they were in financial crisis or bankruptcy due to their medical

issues. This puts these people in an endless loop: individuals are unable to consistently attend work because of their medical concerns, taking a major toll on their salary. They are also unable to pay for the treatment necessary for them to recover quickly because they are not earning an adequate salary to pay for those treatments.

Free clinics would help get patients out of this endless loop by providing free primary care services and access to healthcare. Any individual who does not have some form of healthcare may not have it for many reasons, including not being able to afford the Affordable Care Act Marketplace or private insurance. From a free health clinic, patients can learn how to access medical care and get the help they need. In 2008, free medical clinics treated over four million uninsured patients without federal money; 1,200 federally and state-funded community health centers treated an additional total of 7 million patients.

Even outside of these subgroups, free clinics, particularly student-run free clinics, play a critical role in raising the next generation of intelligent doctors and other health professionals. The result of a 2014 study indicated that students involved with student free-clinics had increased knowledge and developed more positive attitudes in the underserved community (Smith et al., 2014). In addition, these students were generally more interested in helping underserved communities and more interested in primary care overall (Smith et al., 2014). All of these traits are essential in not only becoming a good healthcare professional but also an active civilian.

Although investing in free medical clinics appears to have numerous benefits, it is necessary to consider the drawbacks. There has been a 40% increase in demand for free clinics' services (The National Association of Free & Charitable Clinics, 2015). However, the funding for these free clinics has decreased by 20% (The National Association of Free & Charitable Clinics, 2015). The decrease in funding for any medical clinic is exceptionally harmful to the patients--for every dollar lost in funding for health centers, \$11.50 in potential savings is lost overall. In recent years, free clinics, particularly student-run clinics, have been on the rise. In a survey conducted in 2005, only forty-nine U.S. medical schools had student-run free clinics. A survey conducted seven years later reported a drastic increase in popularity, with approximately one hundred medical schools having student-run clinics. There are significant flaws to student-run clinics specifically. According to a study done in 2010, the median number of half-days open per week for student-run clinics was only 1.0, while the median number of half-days open per week for independent clinics was 6.0 (Gertz et al., 2010). In both cases, the median is used instead of the mean because of the high standard deviation. Student-run clinics tend to be open for a shorter time every week than independent ones, decreasing the impact of student-run clinics. Besides, student-run clinics typically have fewer weekly patient visits. Mathematically speaking, given that the median number of half days/week independent clinics are open is six times greater than that of student-run clinics, the weekly patients seen in independent clinics should be six times higher in independent clinics student-run ones. However, this is not the case because the number of weekly patients seen in student-run clinics is significantly lower in student-run clinics with a median of 3.0 patients; meanwhile, the median of weekly patients seen in independent clinics is 36.0 (Gertz et al., 2010). This distribution can be attributed to a lack of productivity due to the lack of experience that most student clinics have.

When analyzing the annual operating budgets of clinics, it was found that the largest budgets were from independent free clinics, \$654,292.90, and the smallest budgets were from student-run free clinics, \$34,300.00 (Gertz et al., 2016). According to a study doing a cost-benefit analysis of nurse-run free clinics, the average annual operating budget was \$387,252.47. The largest expense was staffing full-time nurse practitioners, registered nurses, and clinic managers, \$292,365.72 to run and operate the clinic. Other expenses included hiring unit clerks and patient care assistants, housekeeping services, utilities, telephone/internet bills, postage, medical and drug supplies, maintenance/repair, and professional services, such as counseling (Stillmank et al., 2020). With an annual operating budget of this high, it is important to look at where the funding for free clinics comes from. In 2010, it was found that 58.7% of free clinics did not receive any sort of funding from the government. As a result of this, funding for free clinics came from a variety of different sources, from charitable donations to civic groups, churches, foundations, or corporations.

Federally Qualified Health Centers (FQHCs)

Federally Qualified Health Centers (FQHCs) are community-based health care providers that receive funds from the HRSA Health Center Program to provide primary care services in underserved areas. In the mid-1960s, there were just eight wellbeing habitats in the United States. Since the very inception, the numbers have expanded dramatically. By 2001, 748 wellbeing places were established at 4,128 different service sites to help locales worldwide, and altogether it served roughly 10 million people. In 2011, there were 1,128 wellbeing places considering more than 8,000 provincial and metropolitan conveyance locales in the U.S. also regions. Today, there are 1,400 associations with 11,200 offices serving around 25 million people each year.

Since its inception, there are a total of three types of FQHCs: Community Health Centers (CHCs), FQHC Look-Alikes (FQHCLAs), and FQHC clinics. Community Health Centers (CHCs) are nonprofit public or private organizations that cater to medically underserved communities. FQHCLAs are community-based and have been set-up to meet the requirements of the HRSA Health Center Program. These centers do not receive the funding and are known to provide care services on a sliding fee scale by considering the individual's ability to pay. On the other hand, FQHC clinics are similar to a Free Clinic and are substantially low-cost clinics that serve a medically underserved community. An FQHC clinic has specific reimbursement systems under Medicaid and Medicare. These centers offer services to all the community individuals, whether or not of a patient's ability to pay. FQHCs are known to offer preventive health services and dental and mental health care.

As mentioned above, in regards to the reimbursement system under Medicare and Medicaid rules, FQHCs obtain government funding under Section 330 of the Public Health Service (PHS) Act. The government funding objective is to provide complete essential care services to uninsured and underinsured populaces to guarantee far-reaching care is accessible to all and paying little heed to pay or protection status. Federal medical insurance is known to pay FQHCs based on the FQHC Prospective Payment System (PPS). This is usually catered for restoratively fundamental wellbeing administrations and qualified preventive wellbeing administrations given by an FQHC specialist.

To receive federal funding, FQHCs must meet the following requirements:

- The centers need to be situated in a governmentally assigned medicinally underserved zone. (MUA) or serve therapeutically underserved populaces (MUP)
- Their establishment needs to fulfill the objective of providing comprehensive primary care.
- They need to adjust charges for health services on a sliding fee schedule according to patient income.
- The administration needs to be governed by a community board of which a majority of members are patients at the FQHC.

FQHCs have numerous benefits when it comes to resource mobilization. Firstly, FQHCs receive federal government funding and usually receive up to \$650,000 in newstart money. Furthermore, FQHCs get coverage in medical malpractice through the Federal Tort Claims Act. Under the act, the government generally acts as the center's primary insurer. Moreover, FQHCs are also eligible to purchase medications, both non-prescription and prescription, for the patients through the 340B Federal Drug Pricing Program, in addition to various other federal programs and grants. These centers have also been given access to National Health Service Corporations, the Vaccine for Children program, and NHSC dental, medical, and mental health providers. The government financing for wellbeing focuses has expanded from \$750 million as reported in 1996 to \$2.2 billion, as seen in 2010 (Katz et al., 2011). Despite the expansion, the funding is known to be very limited. The administration usually has few employees and hence pertains to the lack of adequate staff contrary to what a hospital would have.

Also, these centers would mostly be known for serving low-income individuals. The possibility of them being uninsured would make referrals to specialists and prescriptions harder to ensure the viability of the place and the service. Nonetheless, the financial situation would improve in one aspect; it would significantly lower the cost of a medical visit as visits to urgent care usually costs between \$100 to \$150 in NYC (Fay et al., 2019).

Urgent Care

An urgent care clinic is a facility where patients that have a non life-threatening emergency can walk in and receive care. These clinics are typically equipped to provide blood-tests, x-rays, and stitching. Urgent care clinics generally provide access to healthcare when primary care physicians' offices are not available. These facilities usually tend to offer quicker services than an Emergency Room, and are potentially quicker than a visit to the Doctor's office. There are currently over 9,000 clinics in the United States, and around 97% of these urgent care clinics, patients have received care in one hour or less, and around 92% received care in less than half an hour (Finnegan et al., 2020). In addition to their quickness in attending to the problem, they are also less costly. Furthermore, the hours of an urgent care clinic are typically better than those of a standard doctor's office, as most urgent care's have flexible hours during the weekends and late evenings and do not require booking appointments. Given the reliability, low cost, and flexibility of urgent cares, it's safe to say that they are incredibly convenient.

The desire for urgent care clinics has been growing in the past few years, as from 2018 to 2019, the number of urgent care clinics in the United States have increased to a percentage of 9.6%. Furthermore, during the twelve month time period between 2019 and 2020, 26.4% of children attended an urgent care clinic, thereby demonstrating the need for these clinics in a community. On the contrary, urgent care clinics do not seem the most viable option for families that do not have health insurance or have a lower socioeconomic status. It has been proven that the higher income a family makes, or the increased amount of parental education there is, there tends to be more utilization of urgent care clinics. Furthermore, children who have public or private (25.2% and 27.6%, respectively) health insurance tend to go to free clinics more often than children who do not have health insurance (Black & Zablotsky et al., 2020). The information indicates the varied difference based on socioeconomic status and parental education. This serves as a drawback given that we want to aid underserved communities and groups.

In New York City, the average cost of a visit to an urgent care facility will range between \$100 to \$150. This is a much more affordable price than a visit to the emergency room that costs around \$800, regardless it is still a very high price for many Queens residents that suffer from poverty according to New York City's economic standards (Fay, 2019). The cost of establishing and running an urgent care center differs compared to other medical facilities. The cost is based on various factors such as the location of the property that determines cost of property, rent, utility bills, and the number of patients accumulated--which will go towards paying bills and staff. The average price to open an urgent care clinic is expected to range anywhere from \$850,000 to 1.5 million dollars, with most of the money going towards property investment, paying the medical staff, and other various bills that arise after the establishment of the urgent care (Experity, 2020).

Nursing Homes

Nursing homes are medical facilities that specialize in the care for individuals (typically elderly) who suffer from any hindrance or barriers. Most nursing home patients are incapacitated and require assistance with quotidian tasks such as bathing, eating, and moving. Generally, entrance and enrollment into a nursing home are covered by medical insurance such as Medicaid or Medicare, but only if the patient's conditions deem them "medically necessary." New York State has seen such an increase in the senior population as they make up 16% of the total population, or in other words, 1 in 6 New Yorkers is a senior. With a rate of elderly presence at such a high rate there is guaranteed a population boom in Corona, Queens.

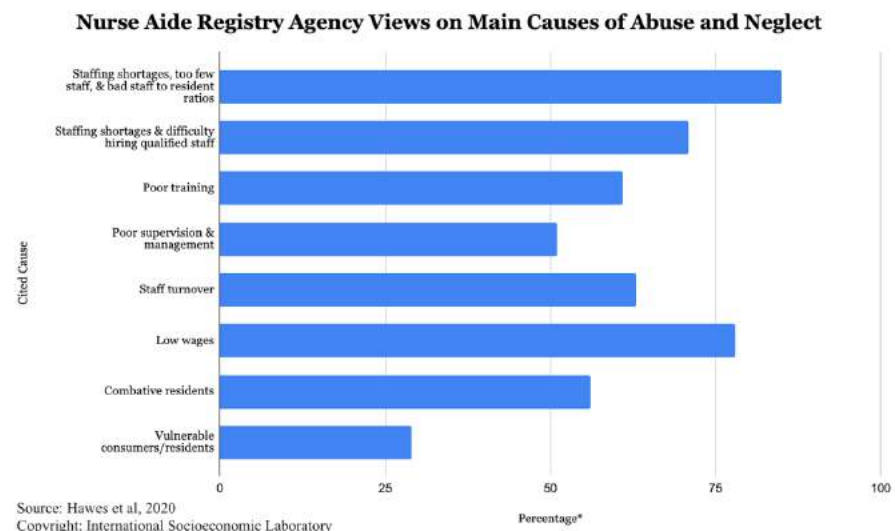
Consequently, there is an incentive to build a nursing home. This facility can effectively cater to a respectable number of seniors currently in desperate need of care. According to the CDC, using ages 16-29 as a control group to see COVID-19 Hospitalization and Death rates by age, individuals above the age 50, the typical age range for patients in nursing homes had seen the highest rates.

The older the age range becomes, the higher the likelihood of hospitalization and death rate. For example, people between 50-64 are four times more likely to become hospitalized due to COVID-19 and 30 times more likely to die than their youthful counterparts. These numbers

increase to 13 times and 630 times for hospitalization and death rates, respectively, for individuals above 85. The nursing home would be able to administer COVID-19 tests and care for patients who suffer from it, significantly since nursing homes typically reduce patients' need to be treated by doctors. Regardless of whether COVID-19 is the diagnosis or issue, elderly individuals will always be more subject to adverse health conditions due to immunodeficiency that comes naturally with age; as such, there is an incentive for nursing homes to exist beyond the scope of the pandemic.

Despite nursing homes providing around-the-clock care for its patients, there are notions that investing in a nursing home may not always be the most feasible decision, as oftentimes, admittance into a nursing home is life-changing and offers a lower quality environment (Bakx et al., 2020). Nursing homes are also said to be restrictive in the lack of individuality and are said to lean more on dependency and passivity (Bakx et al., 2020). In fact, elder abuse is an extremely common sight in nursing homes. According to a national survey, 40% nursing home staff was reported to commit at least a single act of psychological abuse and of the nursing home residents, 36% of them witnessed physical abuse at least once (Pillemer & Moore, 1989). Both of these numbers are eerily high and without a doubt completely unacceptable. Researchers have pointed to the lack of nursing staff as one of the direct causes of abuse and neglect.

The table below is the results of a survey done in 2001 about the main causes of abuse and neglect in nursing homes. The largest cause of abuse and neglect pertain to staff shortages as seen below (Hawes et al., 2001). This is an extremely detrimental drawback because staff shortages in nursing homes would not only cause a higher possibility of abuse and neglect, but also decrease the quality of care patients receive in nursing homes.



The cost of nursing homes can vary depending on the intensity of care necessary for the patient. Admission into a nursing home can be costly given the costs of facility, living, and care intensity, but it may be cheaper depending on whether or not the care provided to a patient at home can be more efficient at a nursing home (Bakx et al., 2020). Additionally, nursing homes may also cost less given the fact that the nursing staff often takes over from other providers, and in turn, ensures that the likelihood of the need for a patient to visit the doctor or hospital declines. On average, a nursing home has anywhere between 500 to 1,300 beds, with each bed costing anywhere between several thousands of dollars (Pillemer & Moore, 1989). A nursing home with a larger size, about 40,000 square feet, would likely accommodate for the number of beds. If on average a bed costs around \$2,500, then it would cost in the range of 1 to 3 million dollars in total. However, given the size of our plot of land, which is roughly 17,500 square feet, the amount of beds we would likely hold would be lower, as an average twin size hospital bed is about 19.5 square feet (this roughly equates to around 900 beds that can fit in the entirety of the plot of land).

There are other facilities, departments, and rooms that would need to be created, meaning there would be a downsizing in beds allowing the affordability to be more sufficient. As for enrollment and staff costs, actual entry is covered by medical insurance programs like Medicaid. Providing wages for staff may also be necessary given that typically, one nurse is assigned to about 30 patients at once, which can prove to be an issue for both parties. A single nurse cannot effectively accommodate for 30 patients, and 30 patients cannot wait on a single nurse to cater for all of them. If the average nursing home nurse receives a salary of around \$60,000 (or more) per year, and the nursing home houses 500 patients, then each patient can be designated their own nurse, which would total \$30,000,000. This cost can be covered by the 1.6% increase in the NYS budget, bringing it up to around 96 billion (up from 92 billion in 2020), as reported by Comptroller. However, 500 nurses likely would not be necessary to begin with, showing that it very well may be feasible for the employment of several more nurses to meet an adequate nurse-patient ratio.

Overviewing Mental Health

There is no doubt that mental health is the cornerstone of an individual's holistic life as instability of one's mental health can lead to the formation or even be the cause of poor dieting habits, poor sleeping habits, poor exercising habits, self-harm, suicide, substance and drug abuse, and more "small habits" that accumulate to poor lifestyles. It is also evident that mental health has a direct correlation with physical health too, which is why it is important to establish a free mental health care clinic.

Higher rates of COVID-19 infections were found in Corona, Queens due to the commonality of pre-existing health issues like diabetes and obesity. Poverty is a major contributor to Corona's unhealthiness, as the poverty rate is 12.9% and there was a median household income of \$54,250 in 2018 compared to the 2018 citywide income of \$64,850 (NYU Furman Center, 2019). One can prove that a link exists between the poverty rate, mental health, and physical health.

It is seen that therapy comes in numerous formats to tackle different issues for each individual efficiently, and several impediments have been introduced because of the pandemic which will not go away with the virus. To help unhealthy individuals, a mental health facility may facilitate support groups to track progress and instill accountability as a community, or host workshops on how to develop healthier diets based on a budget, and even provide individual therapy to aid those suffering from eating disorders. Another form of therapy includes play therapy: engaging in recreational activities as a family can effectively strengthen familial relationships and/or reduce depression and anxiety among young children. Words, followed by consistency in activities, creates the potential to develop healthy habits to establish an overall healthier lifestyle mentally, physically, and financially for the residents of Corona.

Mental Health Clinic

Mental Health Care Provisions:

Mental health clinics provide both long-term and short-term help in a variety of formats. The specific services individuals can receive include referrals, assessments, and individual, family, and group therapies. Mental health clinics can be staffed by a variety of people in the healthcare field: social workers, mental health counselors, psychologists, and psychiatrists. In NYC, typically people up to the age of 18 that have behavioral, mental, and emotional challenges can receive low-cost treatment from the NYC Department of Health (NYC Health, 2020). However for individuals over the age of 18, in the year of 2015, 42.6% of American adults that expressed symptoms of mental illness could not afford mental health treatment and another 27.1% had an unmet need of treatment due to financial circumstances (Johnson, H et al., 2018). In addition, 71.1% of this same demographic had no insurance in 2015. Overall, financial concerns are the biggest impediment for Americans when it comes to registering for treatment at mental health clinics.

The benefits of a free mental health clinic in an underserved community will vary for each individual as people have different strengths and weaknesses, and specific aspects of their lives weigh more than others. How overall quality of life for Queens residents is expected to improve includes a more extraordinary performance at work and school as 19% of NYC students in 2019

have had academic accommodation with the individualized education program. Activities like therapy, support groups, and play therapy, run by a mental health clinic would significantly reduce emotional disturbance. Since educational and career performance are interconnected with socioeconomic status, that aspect would improve too. Lastly, physical health as people would be guided to make better choices and develop healthy habits. Internships are also in high demand for individuals pursuing a doctorate in psychology, social work, sociology, and other related fields. A master's degree is typically the minimum requirement to provide counseling so students in the midst of pursuing a PhD would be more than qualified, and for the interns still pursuing a master's degree, just a supervisor would be needed to listen to recordings of therapy sessions once in a while to make sure everything is going all right.

While mental health clinics run by students happen to be the most cost-effective measure, it also limits the availability because students are not pursuing this activity as a full-time career. Moreover, while a free mental health clinic is a chance for underserved individuals to get the help they need finally, others who are financially comfortable may take advantage of the free resources available and overcrowd the clinic. The disadvantages of free or low-cost mental health clinics are the chance of a decrease in the quality and long wait-lines or long scheduling for appointments. To combat this, there may have to be an establishment of a fee based on the family income of the individual seeking individual therapy as the time of service and interns are already limited. This would be similar to the sliding scale method of payment that some mental health centers accept.

Besides greatly benefiting many minority groups, free clinics would also greatly serve the under or uninsured individuals residing in Corona, Queens. Since free clinics generally serves under or uninsured individuals, it would be beneficial to Corona Queens as in 2014, the Comptroller reported that Corona, Queens tied for the second highest uninsured rate (22.20%), and the third most uninsured patients in New York City (34,295).

Standard

Post Hoc Comparisons - FACILITY

		Mean Difference	SE	t	P _{Tukey}
CORPORATE	EDUCATIONAL	-1.306	0.300	-4.360	< .001
	MEDICAL	-1.757	0.300	-5.865	< .001
	RECREATIONAL	-1.347	0.300	-4.495	< .001
EDUCATIONAL	MEDICAL	-0.451	0.300	-1.505	0.435
	RECREATIONAL	-0.040	0.300	-0.135	0.999
MEDICAL	RECREATIONAL	0.410	0.300	1.370	0.519

Note. P-value adjusted for comparing a family of 4

	DESIRE			
	CORPORATE	EDUCATIONAL	MEDICAL	RECREATIONAL
Valid	173	173	173	173
Missing	0	0	0	0
Mean	5.260	6.566	7.017	6.607
Std. Deviation	3.270	2.659	2.500	2.654
Minimum	0.000	0.000	0.000	0.000
Maximum	10.000	10.000	10.000	10.000

ANOVA - DESIRE ▼

Cases	Sum of Squares	df	Mean Square	F	p
FACILITY	301.958	3	100.653	12.963	< .001
Residuals	5342.000	688	7.765		

Note. Type III Sum of Squares

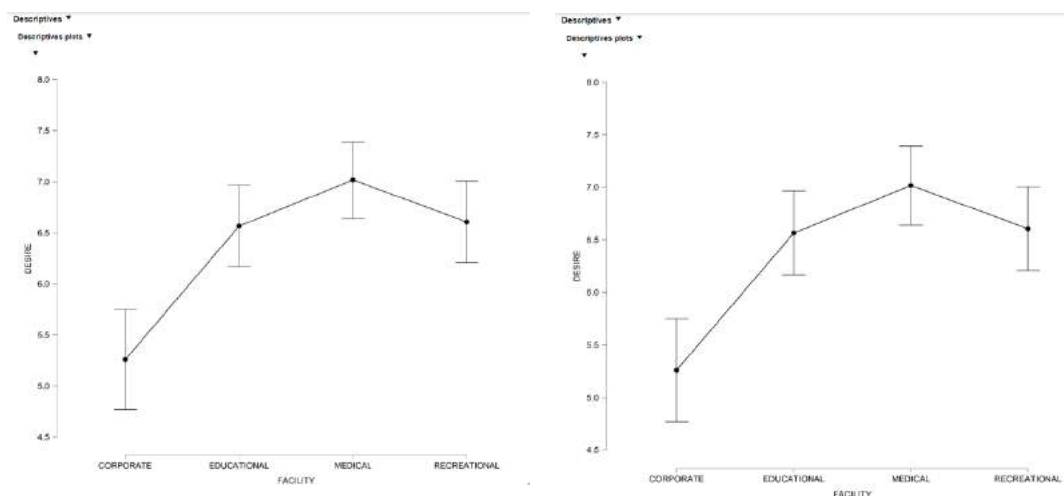


Table 7 : Descriptive statistics for survey data regarding the responses from Queens participants.
Table 8: Post-Hoc Test Results for survey data regarding the responses from Queens participants. (N=173)
Table 9: One-way ANOVA results facility versus desire for survey data regarding the responses from Queens participants.

Figure 13: Visual depiction of descriptive statistics from the survey data regarding responses from Queens participants. Graph shows each facility's mean score +/- standard deviation.

A one-way ANOVA was conducted to determine if the desirability for certain facilities were

Post Hoc Tests

Standard

Post Hoc Comparisons - FACILITY

		Mean Difference	SE	t	P _{tukey}	P _{bonf}
CORPORATE, PROPERTY	EDUCATIONAL	-1.313	0.194	-6.756	< .001	< .001
	MEDICAL	-1.633	0.194	-8.404	< .001	< .001
	RECREATIONAL	-1.775	0.194	-9.134	< .001	< .001
EDUCATIONAL	MEDICAL	-0.320	0.194	-1.648	0.352	0.597
	RECREATIONAL	-0.462	0.194	-2.378	0.082	0.105
MEDICAL	RECREATIONAL	-0.142	0.194	-0.730	0.885	1.000

Note. P-value adjusted for comparing a family of 4

Descriptive Statistics

Descriptive Statistics

	DESIRE			
	CORPORATE PROPERTY	EDUCATIONAL	MEDICAL	RECREATIONAL
Valid	409	409	409	409
Missing	0	0	0	0
Mean	5.005	6.318	6.638	6.780
Std. Deviation	3.159	2.782	2.605	2.528
Minimum	0.000	0.000	0.000	0.000
Maximum	10.000	10.000	10.000	10.000

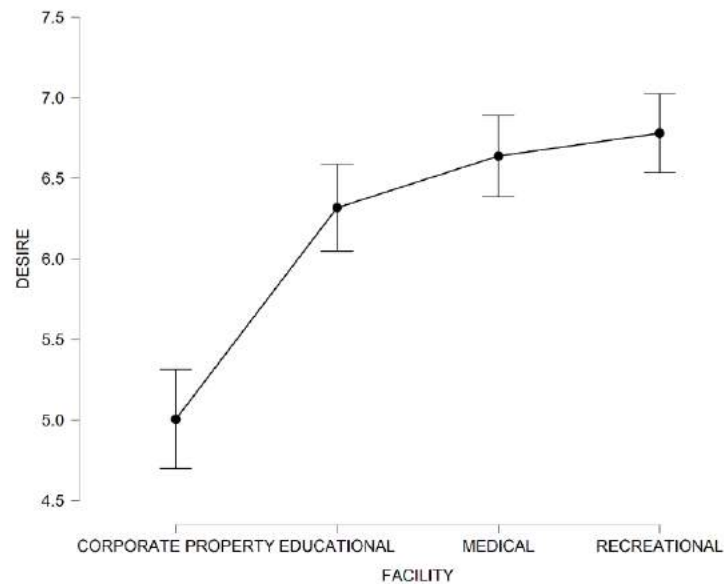


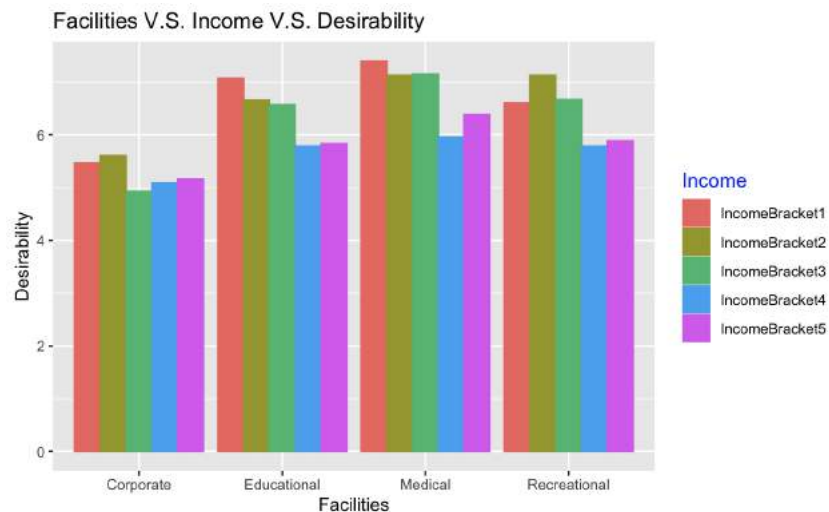
Table 10: One-way ANOVA results facility versus desire for survey data regarding the responses from all survey participants.

Figure 14: Visual depiction of descriptive statistics from the survey data regarding responses from all survey participants. Graph shows each facility's mean score +/- standard deviation.

Table 11: Post-Hoc Test Results for survey data regarding the responses from all survey participants (N = 409).

Table 12: Descriptive statistics for survey data regarding the responses from Queens participants

Another one-way ANOVA was conducted to determine if the desirability for certain facilities were different for the various facilities, however for ALL survey participants this time. Participants were asked to provide a desirability score for four different facilities: medical facility ($n = 409$), educational facility ($n = 409$), recreational facility ($n = 409$) and corporate facility ($n = 409$). The desirability score was significantly different between the different facilities, $F(3, 1632) = 34.766, p < .001$. Desirability score increased from the recreational facility (6.780 ± 2.528), to medical facility (6.638 ± 2.605), to educational facility (6.318 ± 2.782) to corporate facility (5.006 ± 3.159) in that order. Tukey post hoc analysis revealed that the mean difference between several facilities was significantly different; from medical to corporate ($p < .001$), recreational to corporate ($p < .001$) and educational to corporate ($p < .001$).



Further comparison of desirability score of each facility for the Queens participants was done by adding income as a factor. A comparative bar chart was created in order to help visualize how the score varies depending on the participants' income. The income brackets are as follows;

- IncomeBracket1 - \$0 - \$29,999
- IncomeBracket2 - \$30,000 - \$59,999
- IncomeBracket3 - \$60,000 - \$89,999
- IncomeBracket4 - \$90,000 - \$159,999
- IncomeBracket5 - \$160,000+

The comparative bar chart illustrates that amongst all income brackets, the desire for a medical facility remained the highest. The graph also depicts that when income is added as a factor the significant difference between the means of corporate scores and the public facility scores is still upheld. The scores for corporate facilities for each of the brackets are as follows;

- IncomeBracket1 - 5.464286
- IncomeBracket2 - 5.605263
- IncomeBracket3 - 4.924242
- IncomeBracket4 - 5.086957
- IncomeBracket5 - 5.166667

For educational facilities;

- IncomeBracket1 - 7.071429
- IncomeBracket2 - 6.657895
- IncomeBracket3 - 6.575758
- IncomeBracket4 - 5.782609
- IncomeBracket5 - 5.833333

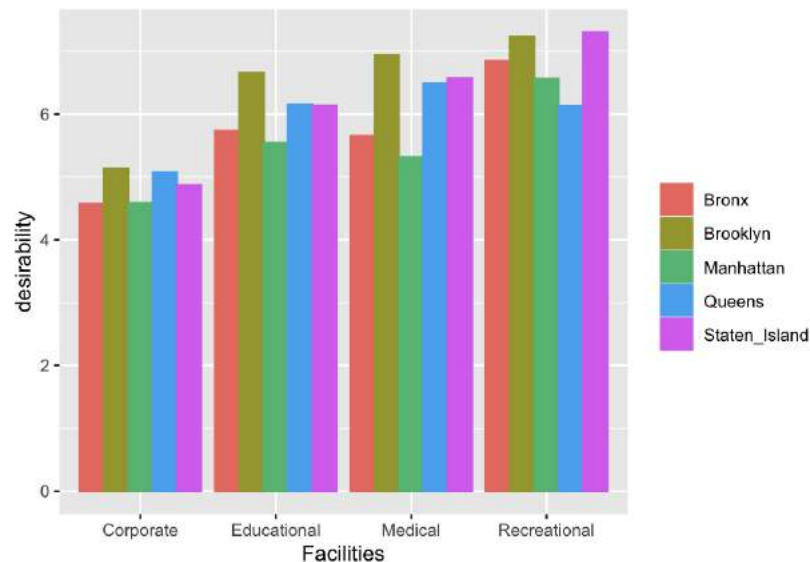
For medical facilities;

- IncomeBracket1 - 7.392857
- IncomeBracket2 - 7.131579
- IncomeBracket3 - 7.151515
- IncomeBracket4 - 5.956522
- IncomeBracket5 - 6.388889

For recreational facilities;

- IncomeBracket1 - 6.607143
- IncomeBracket2 - 7.131579
- IncomeBracket3 - 6.666667
- IncomeBracket4 - 5.782609
- IncomeBracket5 - 5.888889

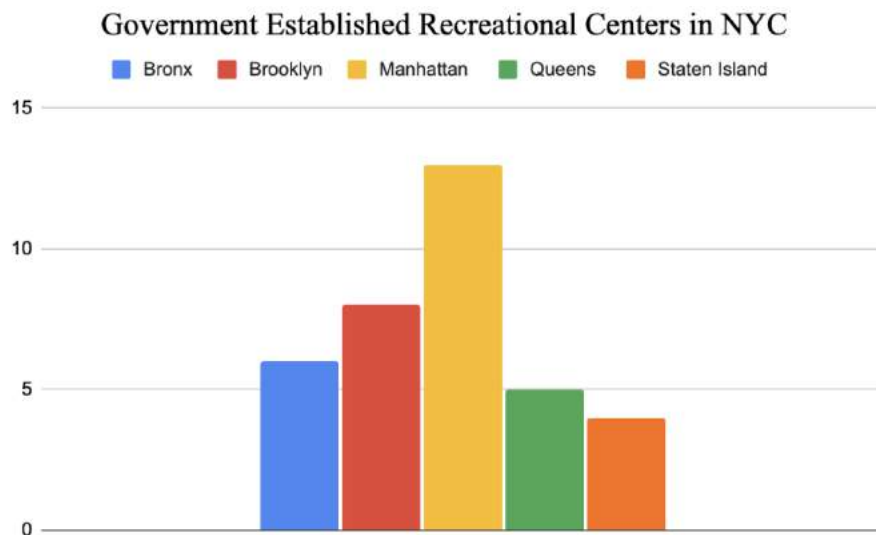
The scores for each of the public service facilities amongst each income bracket were all significantly higher than the corporate facility score amongst each income bracket. In particular, it can be seen that for each bracket for medical facilities, there was a higher desirability score compared to all other facilities.



The comparative bar chart illustrates the desire for the different facilities amongst the 5 boroughs of NYC; Queens, Manhattan, Brooklyn, Bronx, and Staten Island. The graph depicts that once again, the desire for all the public service facilities is significantly greater than the desire for a corporate owned facility; amongst all boroughs the desire for corporate facilities was far less than that of other facilities. Consistent with the ANOVA test between facility score amongst Queens residents, the desire for medical facilities remains the highest compared to the rest for Queens participants. With the exception of Manhattan and the Bronx, the participants' desire for medical facilities was second to their desire for recreational facilities. The data in this bar chart is ultimately consistent with the second ANOVA test run comparing facility desirability amongst all NYC participants; recreational facilities were on average the most popular for several of the boroughs, with the exception of Queens.

A community public facility is an institution that mainly provides the public services of recreation and education to all. In public recreational facilities, oftentimes physical activity is promoted through the various exercise equipment provided. In many government-established recreational centers in New York City, a variety of large athletic services like weight rooms and basketball courts are offered. (NYC Parks, n.d.). With the accessibility of a facility, fitness can be more appealing and pursued by those within the community. Alongside the exercise services, recreational facilities can also offer educational programs aimed toward the youth. By providing a safe environment and learning opportunities, parents can ensure that kids stay out of trouble and instead benefit from the educational and recreational services. Overall, the purpose of public and recreational facilities are to foster positive social development with regard to productivity and health.

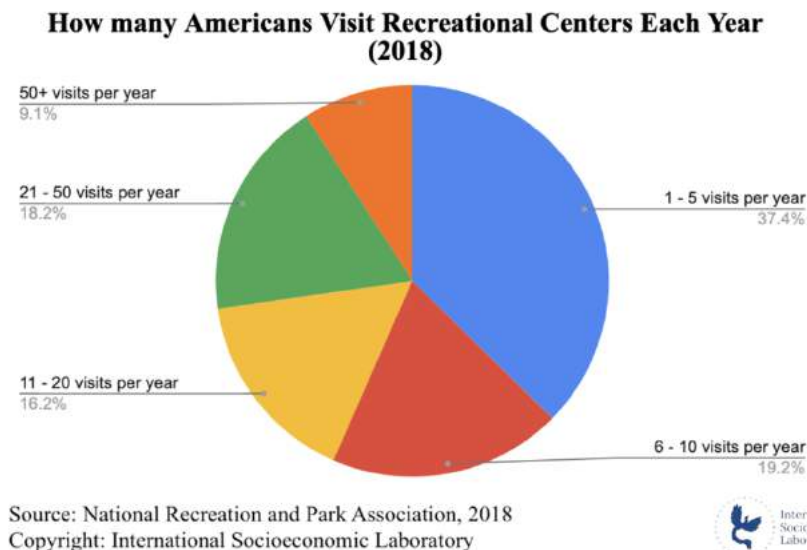
Corona, NY is presently facing general health concerns associated with obesity. Recreational facilities and the resources they offer can help fight the obesity problems going on in the borough right now. Furthermore, children with admittance to parks and offices had diminished pervasiveness of obesity when contrasted to children without access. This proves that recreational facilities have served to help children dealing with their physical health (Alexander, et al., 2013). Libraries also have a chance of serving the youth in many communities. For example, with regards to economic activity, African Americans, Hispanics and those in families with a yearly pay under \$30,000 are bound to state libraries to help individuals secure positions or seek after position preparation (Horrigan, 2015).



Source: NYC Parks

Copyright: International Socioeconomic Laboratory

The graph above represents the amount of government-established recreation centers in the boroughs of New York City. According to the graph, the Bronx is home to six recreation centers while Brooklyn is home to eight, Manhattan thirteen, Queens five, and Staten Island four.



Source: NRPA. (2018). 2018 Americans' Engagement With Parks Report. Retrieved January 08, 2021, from [s://www.nrpa.org/globalassets/engagement-survey-report-2018.pdf](https://www.nrpa.org/globalassets/engagement-survey-report-2018.pdf)

The following chart explains the amount of times Americans had visited their local recreational center in the year of 2018. As shown in the graph, 37.4% of Americans had visited 1 to 5 times per year, however, 19.2% were 6 to 10, 16.2% 11 to 20, 18.2% 21 to 50, and 9.1% were 50+ visits per year.

Overview of Community Public and Recreational Facilities

Recreational facilities can have significant impacts on the communities they are located within. Recreational facilities are known to attract large numbers of people and a great deal of economic action comes from these people. A Frederick Olmsted study of Central Park shows that recreation facilities can obtain more expense income which is expected to counterbalance the expense of creating them. Like schools, these centers provide education (like tutoring services) for students. In addition, recreational centers promote more healthier lifestyles by having walking clubs and/or fitness classes. This means that they provide a good opportunity for many adults/elders to be healthy. They can also increase property values. For instance the parks and recreation development in Philadelphia helped earn \$18.1 million in tax incomes because of increased property estimations (reported by The Trust for Public Land's Center for City Park Excellence). Recreation centers are also a great way to bring communities together by bringing people together to create a good environment for everyone. They also assist with building up a culture of actual prosperity, psychological well-being, and nourishing instruction. The National Recreation and Park Association assesses more than \$150 billion in financial action was produced by neighborhood parks and entertainment offices in 2015, the latest year it announced. This means recreational facilities add to local economies and increase both property value and income. It is also proven that land that is private can generate a greater channel on expense income than open space (Herbert, Rowland & Grubic Inc., 2019).

A downside to opening a recreational facility is that budgeting and funding can be difficult without the support of others. In 2017, NRPA released a study that discovered neighborhood authorities and certain public authorities unreservedly recognize that they target park and

recreation facilities for significant spending cuts when their city, town or province faces an economic emergency (like the current pandemic). When it comes to spending for recreational facilities, there are effects that include: indirect effects, direct effects, and induced effects (Roth, 2020). Opening a public recreational facility in Corona, Queens where there is known to be no hospital near there can be extremely difficult. Taking into consideration the COVID-19 pandemic, many families need facilities that can address their concerns (NYU Furman Center, 2005 - 2021). Although there are many circumstances, hospitals in small boroughs like Corona/Elmhurst can have a huge benefit like hospitals in bigger cities due to the fact that it is a major economic tool and it can help serve citizens if an emergency ever arises (Buckner, 2020). There are many different benefits of building a recreational center in small communities to improve the well being of civilians living there. For example, they will have a huge impact on the youth due to the fact that they provide a safe environment by having many programs, mentorships, and clubs. In addition to this the National Recreation and Park Association states that they provide \$560 million worth of food per year. Recreation centers are the second biggest food supplier for children in the US (Jumpsix2., 2016).

One of the major advantages of building a recreational space in Corona besides helping to improve social development is helping to repair our city's losses during the pandemic. One of the most prevalent systems in our large city is the MTA (Metropolitan Transportation Authority), the means by which most people use to travel within New York. According to the statistics from the MTA, the subway had a daily ridership of about 5.5 million and an annual ridership of about 1.698 billion (MTA, 2019). However, due to the pandemic, these ridership amounts have dramatically decreased, thus decreasing the amount of profits that the MTA earns. In fact during the pandemic, the MTA has had a major loss of about 4.7-5.9 billion dollars in just lost tolls and farebox revenues (Markowitz, 2020). We project that although it would take time, a new public recreational facility would get people to use the MTA more often; thus, trickling more funds into the MTA and helping them rebuild their profits. In addition, this center will most likely get immense recognition because according to Google Maps, there are only eight community/recreational centers in the vicinity of Corona, Queens. This shows that if one were created on this plot, it would most definitely gain attraction, helping city services like the MTA.

Building a recreational center will not only benefit the MTA, but also will positively affect the real estate in the surrounding area. According to the University of Washington, over half of homebuyers state that they would choose to live near a park and open space than anywhere else (open space referring to large areas like recreational centers). These homebuyers are even willing to pay up to 10% more on a home with these amenities (Wolf, 2010). Therefore, the new addition of a recreational center the community will be at an advantage and will become open to more residents moving in and increased real estate prices. In addition, the price of a home that is next to or nearby a park will increase by about 20% in value, inner city homes within a quarter mile 10%, and even the price of a home near a clean empty lot by 17% (Wolf, 2018). These statistics show that even doing nothing with the land we have will increase real estate prices in the area. A recreational center will only provide benefits for the community; in this case, helping the homeowners in the area by increasing the prices of their homes and properties.

Additional benefits that a potential recreational center will provide are increasing general revenue in the city, boosting local businesses and promoting healthier lifestyles. Many recreational centers in Corona have facilities that people can use but rarely have educational programs centered around essential fields such as health. According to HRG Inc, health programs that promote physical activity alongside things like less smoking and better nutrition saved 5 dollars for every 1 dollar invested into the programs and the facility itself (Herbert et al., 2019). This would definitely increase the program's effectiveness in the surrounding neighborhood and its validity since other recreational centers in the area do not have such programs. Furthermore, in 2015, The National Recreation and Park Association estimated that more than 150 billion dollars in economic activity was generated by local parks and recreation facilities. Not only does it help the association but in general, parks and recreation centers offer a place for people to gather. During these gatherings people have the opportunity to spend money at the local businesses in the community, once again helping those who have been heavily affected by the pandemic. This is extremely important and helpful because according to the New York Times, as of August of 2020, over 2,800 local businesses have closed in NYC alone. Local businesses make up the majority of economic activity in the community and by implementing a recreational center in this area, we can help those businesses as well.

Building a recreational or community center on the land will not only benefit the economics of the local area and New York City, but it will also impact the public health and wellness of citizens. As reported by HRG Inc, the Trust for Public Land estimated that the City of Sacramento saves almost 20 million dollars per year for healthcare costs due to the physical activity that occurs in establishments like parks (Herbert et al., 2019). This statistic can be applied to the potential recreational center in Corona because here too, people would jog, bike, and regularly perform other physical activities as well. In addition, a study conducted on Seattle's parks and recreation system in 2011, concluded that the system was able to save Seattle's residents 64 million dollars in medical costs because of the physical activity that happened in the parks and recreation centers (The Trust for Public Land, 2011). Thus, if physical activity programs were also implemented into this potential recreational center, it would save the city an immense amount of money in healthcare services; once again, helping to repair the economy of Corona after the pandemic. While we wait for it to be safe for people to coexist closer in the same facility, we can start building this facility while in the meantime, implementing programs in this potential center that are geared towards physical activity. Furthermore, as stated by the National Recreation and Park Association, parks and recreation centers and agencies are the second largest feeder of children after schools, which is an increasingly important statistic because with schools closed during the pandemic, recreation centers like this could provide meals for children in the community. In fact, parks and recreation agencies served around 560 million meals to children through summer and after-school programs (NRPA, n.d.)

A major aspect of indoor recreational centers is the various exercise equipment provided. With a convenient location and easy access to equipment, civilians may be motivated to indulge in fitness, and thus achieve better health. In a study analyzing the associations between neighborhood recreational facilities and change in exercise, it was found that increased recreational facilities in a neighborhood increased physical activity. (Ranchod, et al., 2014). More establishments would only encourage more people to achieve greater physical fitness. It is common to see a decline in physical activity as one's age increases. However, the study showed that a greater access to recreational facilities slows this down and encourages continued exercise despite aging. With increased fitness at an older age comes better health, which is certainly beneficial in a community. According to data from the study, people of Hispanic and Chinese ethnicities in areas with less recreational facilities were associated with lower rates of physical activity. Corona, Queens is 54% Hispanic; with lacking recreational facility access, physical activity may be lower which is thus an incentive to establish more recreational centers. (U.S. Census Bureau, et al, 2019). Overall, such findings point to a positive fitness stimulation caused by recreational centers, where location convenience seems to play a big role in. However, there is also an economic aspect that makes a recreational center desirable, since they would provide free and low-cost opportunities for fitness. In New York City, it is common to see monthly payments of over \$100 for access to a gym. (Statistic Brain, 2018). The public services of athletic equipment provided by recreational centers would largely reduce this cost due to affordability. This is yet another reason that motivates more people to be healthier and indulge in fitness.

In addition to fostering social development, recreational centers also help develop a more tight knit community. Establishing youth centers like YMCAs, JCCs, and TDYCCs include activities beyond sports, such as mentorship programs, daycare for children, and food centers that help feed people in need. A community like Corona that has been hit hard from the COVID-19 pandemic would benefit from a community center like this. Youths can also take up jobs within these centers and begin to earn money. According to the YMCA, their organization helped teens age 16-24 gain jobs and put them on the track to economic success. The National Bureau of Success, conducted a study on teens in New York City's Summer Youth Employment Program (SYEP) program found that participation increased average earnings and higher probability of employment while decreasing the probability of incarceration (Gelber et al., 2014). In-person contact is crucial after the COVID-19 pandemic is over. It is important for young children to engage in social interactions in order to stimulate social developments. While building a hospital is an idea that will benefit the current needs of the community, a youth center may also benefit this community in the following decade, especially in helping a community trying to mentally recover from the effects of the pandemic.

When a recreational facility is established, it becomes a social hub for the surrounding community, especially for the youth. Facilities seek to administer educational activities and programs targeted toward the youth that strive to provide educational support. (NYC Parks, n.d.). The effect of such programs are often overlooked. A 2017 NRPA study questioned 810 government officials from all 50 states. 98% of the local officials agreed that the facilities induced major social benefits in their communities, a notable benefit being that youth crime was prevented by afterschool programs. (NRPA, 2017). New York City has one of the highest juvenile crime rates in the whole nation. According to a Frontpoint Security report in 2017, 60 of every 100,000 juveniles were arrested for robbery, and 527 of every 100,000 were arrested for larceny. (Woyton, 2019). The establishment of recreation facilities with meaningful activities can act as an effective deterrent of youth crime, and instead lead children down an education-oriented path. The University of Chicago reported a correlation of after school program participation with less drug use, which is a clear example of crime avoidance and keeping the youth safe. (Cunha and Heckman, 2010). Though this effect of recreational facilities may have been successful in the past, it is important to consider the current societal effects of the pandemic. In a time of quarantine, the priority of recreational facilities is questionable when looking at other options such as hospitals. However, the benefits of the facilities on the youth are undeniable, as it provides a safe-space in which they are able to develop healthy habits towards fitness and education. Therefore, the establishment of a recreational center may be valuable when considering the time after the pandemic ends. With less of a focus on medical aid, the social support of the people after such adversity may rise to a priority in communities.

Youth centers also offer programs to help struggling parents during the day if they have young children. Daycares within youth centers care for children while parents work so the children are not left unattended at home. For older kids, parents can leave them at after school programs and pick them up later. While communities recover from COVID-19, people will resume their previous jobs or seek new jobs, so children will be left at home unattended. A recent U.S. census found that 7 out of 38 million children aged 5-14 are left home alone regularly, usually unwillingly (Walker 2016). Kids left at home may exhibit signs of anxiety and fear, especially if they are alone without a sibling. Hence, leaving children at daycare centers can help alleviate problems with social anxiety. Daycare centers of quality have found to prepare children for elementary school by learning about daily routines and chores like hanging up coats. In addition, education for young children is especially important since a lot of brain development occurs at this age. Children's education is not only about learning basic skills- critical social and emotional relationships are established between parents and children, and teachers (Beckneel, 2020). This could benefit the community by helping support families and helping the community recover.

Libraries

Libraries are another type of public facility of importance to a community. Libraries are institutions that require many jobs, which can create economic opportunities for the residents within the surrounding community. Such jobs include Library Director, Archivist, Medical Librarian, Library Technician, and more. In addition, people consider libraries to be an enhanced public institute, meaning that libraries have an effect on where families decide to settle. The presence of a library may convince residences looking for houses near the library. Since students often study at libraries, it would be beneficial for students to stay there after school in order to develop a studious environment. Libraries can also benefit businesses. For example, 8% of businesses reported that a library has had involvement in the success of their business. In addition to benefiting those who visit libraries, shops around the library may take advantage of more people as well, which would stimulate the overall economy in Corona, Queens. Finally, libraries may help contribute to job recruiting and help employers find jobs. Libraries run as a source of information where employers can post ads and employees can post their resumes to seek jobs. Tutoring also may occur in libraries as well, which is a nice place for students to learn. Many libraries have a board where people can apply for jobs. This is a good place for parents looking for part time jobs or a way to make money as a part time job for students.

Through an economic lens, a library can be beneficial to a community for several reasons. The whole purpose of a library is to provide local citizens with a plethora of information for little to no cost. In order to obtain a library card for a government-established New York Public Library, a teen or adult must live in, work/go to school in, or pay property taxes in New York State. Once a card is obtained, then the individual has free access to a wide array of books, documents, databases, and more. (NYPL, n.d.). Rather than spending money to purchase books, citizens can

instead resort to accessing resources temporarily through a library. This is especially desirable for citizens of lower classes that cannot afford to own such resources, as well as students who spend a lot of time reading and utilizing documents. In this manner, libraries serve as public centers of education that promote learning as a free service. Many people often look to live nearby for easy access at a close proximity. Because of this, businesses may be inclined to locate nearby libraries in order to increase citizen spending due to an increase in activity around the hub of a library. (ALA, 2012). In other words, a library may effectively increase the value of surrounding real estate, which is a common effect that is seen when any other type of recreational facility is established.

The establishment of a library in a community marks an enhanced social living. As a facility in which education is promoted for free, there are several social benefits that result. The services offered by NYC public libraries include educational programs, research aid, workshops, meetings, and more (NYPL, n.d.). A library is a place for passionate educators to come together and assist the general public. Citizen literacy is prioritized and technology such as computers are offered to widen one's education and reading ability. In non-pandemic times, libraries have been a location for social interaction in which clubs, reading groups, and even social networking occurs. With a reliable faculty, as well as frequent volunteers, libraries have grown into a safe-space for people of all-ages to come together and learn. The Pew Internet and American Life Project administered a 2013 survey questioning the frequency of library visits for Americans 16 and older. 48% of the group used a public library in some way during the past 12 months (Horrigan, 2019). While it may not be considered a necessity, a library can be seen as a reliable luxury because of the multitude of resources and programs offered to the general public for access at any time. However, considering the effects of the pandemic, it is questionable whether a library establishment should be a top priority. The effects of a public library may be seen as less impactful compared to the health and youth social effects of a recreational center, which is further outshined by the public healthcare benefits of a medical center. Overall, a library is certainly a serviceable facility for a community, but may not be the priority for the community of Corona, Queens as of late.

Establishing libraries may also help the large immigrant population in Corona. As an educational institution, it offers a plethora of education programs for residents. An ESL program for both childrens and adults can help immigrant families integrate into their neighborhood with ease. Especially during COVID-19, government inaction and lack of communication between immigrant citizens has been identified as a plausible cause for Corona being one of the epicenters for COVID-19. To help improve the job prospects for immigrants, English is vital. Introduction of educational programs can help citizens integrate into their community, including youths in their school environment. It has been found that higher language proficiency is correlated with higher job success. This can help the community rebound from the COVID-19 pandemic and help immigrants seek more jobs of higher pay rather than doing lower-wage manual labor jobs.

Recreational center establishment also has major impacts on our environment. The development and redesign of structures utilizes valuable natural resources. In 2007, new single-family home development represented 33% of the development area's worth, and carried tasks to transporters, bookkeepers, engineers, temporary workers, supervisors and entrepreneurs (Saint-Gobain, 2017). It likewise prodded constructing material deals, endorsements of building licenses, and expansions of administrations. While buildings might be good things for our economy, it is terrible for our environment. When facilities are built or destroyed, it interferes and disintegrates soil, disturbs living spaces, exhausts normal assets and pollutes the surrounding air and waters. As indicated by the Sustainable Materials Management: The Road Ahead investigation, of the larger areas in the U.S economy, new single-family home development was perhaps the most naturally difficult (Janjic, 2014). Together, building and development are accountable for 39% of all fossil fuel byproducts on the planet, with operational outflows (from energy used to warmth, cool and light structures) representing 28%. The leftover 11% comes from encapsulated fossil fuel byproducts, or 'forthright' carbon that is related with materials and development measures all through the entire structure lifecycle (Saint-Gobain, 2017). An economical impact of construction is that business owners get more cash-flow, so there is more cash for local wages and compensations (Burger, 2016). To build a facility in a small neighborhood like Corona, NY, there needs to be greater positive effects and less negative effects on the climate.

In order to build a hospital/recreational center, there has to be construction. Construction sites are considered as one of the main sources of pollution on this planet. A study in Gaza Strip showed that the territory is experiencing feeble and decaying biological systems because of restricted normal assets, and absence of ecological issue consciousness (Enshassi, et al., 2014). Framework is indispensable for the improvement of countries, and it is a result of this that the development business is consistently growing. Specialists even gauge that by 2030, the worldwide volume of development yield will increase by 85%. The rate means \$15.5 trillion will be going to infrastructure development. This news is extraordinary for development organizations. This might be an extremely great thing for people in the business world, but construction is also known to play a huge role in global warming; a major world-wide issue faced today. Such development organizations are known to use a massive amount of the planet's energy. Additionally, the worldwide structures area burns through around 36 percent of the world's energy (Afable, et al., 2019). There are also many ways to protect the environment while establishing new buildings, like ensuring the following of the rules that the EPA (Environmental Protection Agency) has set up for many industries to follow. Builders should also think of security measures limiting the exposure of unsafe materials since there is a great amount of dangerous materials used when constructing buildings. Many types of waste products produced while constructing can leave a long-lasting impact on the land. It is recommended to reduce the amount of waste used since it is unfeasible to completely prevent waste while building a project (CoverWallet, 2021). This planet is extremely important for everyone's own well being, and many would not want to put it to risk when building a facility.

The main drawbacks to youth centers is the impact on community through membership fees and desirability. Membership fees may not be affordable in low income communities like Corona, Queens, a neighborhood that is below the federal poverty level. Since recreational centers are public land, the land for these centers is purchased using tax revenue from citizens. As a result, citizens are already paying for the land and should not be charged a membership fee on top of it. However, the reality is that membership fees are still a requirement and discourage people from utilizing recreational centers. These fees usually rise overtime to maximize profit (due to loyal customers, budget shortfalls, etc) and lead to a smaller percentage of people who can afford the membership. As a result, the main purpose of a recreational center being equitable and traditionally affordable will diminish. If low income people are priced out of participating, it defeats the idea of public purpose ownership, and facilities that are meant for everybody in the community to use. Finally, recreation center fees create an incentive for managers to make more resource based decisions to increase customers, which may ignore carrying capacity or what is best for the land pertaining to its natural resources (Helland., 2003).

Another drawback is the current necessity of recreational centers. As of now, a recreational center is not a necessary building, especially since the COVID-19 has stalled all in-person activities. A health facility, or something to benefit the community from the pandemic would be more desired at a time like this. In addition, vaccine distribution is behind the projected schedule, so full in-person activities may have to wait longer before they can utilize these facilities. In addition, there are some well established rec centers in Queens, for example, one in Flushing Meadows Corona Park, so members of the Corona neighborhood may end up not utilizing the center (if built) since they have other options.

Educational Facilities:

An educational facility is legally defined as a building that contains necessary equipment and space for activities that can include physical activities, dancing, cafeterias, media centers, laboratories, etc. Unlike a school facility, an educational facility aims to promote psychological and physical wellness through creative and artistic activities. Such educational-oriented activities have been strongly correlated with the increase of productivity and socialization. These activities allow children and students to learn to establish boundaries, build relationships, as well as develop communication and verbal skills. An educational facility is also able to produce the same parental involvement as that of school facilities through various activities such as chaperoning at field trips, attending events and shows, and getting involved in the child's artistic journey. With an educational facility, the facility can also foster creative innovation and inspire tangible changes in terms of mental and social health.

Prior to investing in a particular educational facility, it is fundamental to take note of the various types of educational facilities and their respective benefits and drawbacks. There are Student Success Centers, English as a Second Language centers, and Child Development Centers. The following sections in the paper are broken up into each type of facility. Each section will be separated into the information regarding what each educational facility is, the advantages and disadvantages of implementing the particular facility, and the economic implications.

Student Success Center

A Student Success Center is a type of facility that uses a holistic approach to provide academic assistance and aid students through their journey of education. This center focuses on strengthening a student's skills and nurtures student activity in their academic life. The role that the center will have is to provide free access to academic support that will ensure student growth, increased cognitive skills, better communication among peers, and success. The services provided by Student Success centers are full-service college counseling, mentoring sessions, tutoring, and career planning. Students who need help with schoolwork or even college applications can receive additional support from this type of center. Student Success Centers require large learning spaces, books and utensils, access to free technology, and trained staff members. There will be three options as to how to implement the centers into the community. First, it is to form established connections with organizations that strive to make tangible change in underfunded communities. *Make the Road New York*, an organization who focuses on expanding educational opportunities across undeveloped and overcrowded schools in New York, has been working with over 17,000 students and 34 participating schools to engage students and mentors in their education in New York City (Make the Road New York, 2020). These established connections give the Student Success Center more credibility and increases popularity within the community. The second option is to become a hotspot for educators and volunteers to receive materials and provide a safe learning space. Continuous shortage of teachers and materials in learning has become an issue for many residents of this area. Their low income and lack of adequate learning devices leave students at a disadvantage towards their education. The implementation of a Student Success Center eliminates this obstacle as volunteers and trained mentors would work with the students to provide the necessary tools for better learning.

Many live in households where devices are shared among family members, background noise is abundant, space is limited, and the WiFi connections are unstable. These factors are difficult to control and limit these individuals from thriving especially during a time of hardship. The use of this educational facility allows access to credible research, internet, books, lessons and advice from mentors. Student Success Centers are filled with reliable counselors and mentors who guide students through college applications and readiness at low costs or even for free. They would also provide resources for testing and lessons that schools in their communities may not give. An educational facility like this becomes an outlet for students of all socioeconomic backgrounds especially low income families. Those unable to afford prep or attend paid classes can find that rigorous education in a Student Success Center.

Implementing a Student Success center in a community allows for better unity among the residents, increased access to resources, readiness for college and school material, and allows for more job opportunities. This type of center is fundamental for less affluent neighborhoods because of all the materials and access to mentors. Lack of adequate classroom supplies and teachers in schools are one the biggest reasons why so many students struggle to excel in school and later on in life. In 2019, 46.3% of 4th grade students who attended schools in Elmhurst/Corona performed at grade level in math, compared to 55.7% in Queens, and 49.4% citywide; 44.3% of Elmhurst/Corona 4th graders performed at grade level in English language arts, compared to 54.5% in Queens, and 49.6% citywide. (NYU Furman Center, 2020). Despite this reality, students and families continue to struggle to receive the proper education they deserve as schools become overcrowded, poorly maintained, face teacher shortages, and continue to show underperformance in academics (Make the Road, 2020). The social benefits of placing a student success center in Corona are prevalent, as a center dedicated to improving the education of the youth will result in better school performance and provide a learning space to receive extra help with studying for classes and learning more about career opportunities.

The educational facility would also aid in social development by providing a positive atmosphere and fostering creative innovations. The environment plays a great role in the effectiveness of the

curriculum, the overall perception of the education, and the quality of teaching and learning (Shrestha et al., 2019). According to RAND, "Students' and teachers' perception of the school climate was correlated with the measures of mental health in both populations." There is a clear distinction between the perception of school climate on mental health, which demonstrates a major concern for students. A study in 2014, by the American Psychological Association (APA), found that teens' reported stress levels far exceed what is considered as normal. Statistics show that students have a stress level (on a scale from 10 points) of 5.4 compared to a 3.9 (considered normal). APA CEO and Executive Vice President Norman B. Anderson, PhD, says, "It is alarming that the teens experience stress so similar to that of adults. It is even more concerning that they seem to underestimate the potential impact that stress has on their physical and mental health.." Researchers and data analysts urge Americans to "provide teens with better support and health education at school and home, at the community level and in their interactions with healthcare professionals" (American Psychological Association, 2014).

A more recent survey conducted by the APA found a similar worsening scenario. This survey brings to light a major source of stress: school. 81% of Gen-Z teens reported that they have experienced negative impacts of the school-closure due to the pandemic; 51% of Gen-Z teens feel like planning for the future is impossible (American Psychological Association, 2020). Emma Adams, PhD, Edwina S. Tarry Professor of Education and Social Policy, explains that loneliness and times of uncertainty are causing stress for adolescents and young adults. As a result, she encourages people to provide social, emotional, and mental health support to help the young generation to thrive on a long term scale. It is undeniable that school is one of the major causes of stress, especially with the added stresses from the pandemic resulting in increased debts, death, and long-term isolation. The addition of a Student Success Center would allow for students to truly receive proper help in schoolwork and utilize a productive learning area to expand their academic goals.

The programs offered in a Student Success Center can help deter at-risk youth from criminal activities and provide a constructive environment. Better access to material, a place to find common ground, expanded research, and engagement with students of similar backgrounds decrease the chances of a school to prison pipeline. Not only that, they also help younger citizens build self esteem as part of their critical development. Eventually, students will be led into productive citizens and workers, thus contributing to the future economic state of NYS (Schanzenbach, 2016). These people would be able to make use of this educational facility to their fullest by creating lasting bonds with the volunteers and mentors all while securing a stable education. This increased number of connections and better access to adequate resources allows for individuals to maintain a clearer focus of education and set a clear path for their future. Employment rates would increase and partnerships with local businesses to supply our facilities would grow exponentially. This, seen as the educational resources, can also drive sales for local shops and small businesses who will benefit from the works of our facility (Mihaly, 2018). This projection will lead to the increase of financial security situations and productivity in Corona, Queens and help transform the community. Furthermore, this facility would provide a gateway to more opportunities, jobs, and internships for the people as they would increase their literacy skills and level of education. A facility for the youth and adults would reap the benefits for a well developed and thriving community - a vision that is for Corona, Queens.

Corona, Queens Education Levels

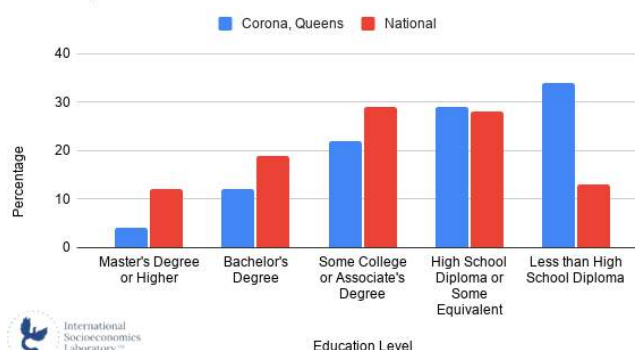


Figure 15: "The various educational levels in Corona, Queens in comparison to a nationwide demographic." (Source) "Corona Demographics and Statistics." Niche.

While a Student Success Center can be highly successful in communities it is evidently clear that the funding and support needed to run this type of center is not as feasible. This is due to the fact that many neighborhoods already have enough schools and centers that are being used. Adding another educational facility to an area that is abundant in schools may not receive the best possible attention and results. There are already over 7 schools in a half-mile radius and it does not help the community that stress levels are unimaginably high. Many existing schools find that it is much easier and cost friendly to keep schools shut down and limit resources especially because of COVID-19. Having the students stay at home and receive their education remotely eliminates the hassle of countless school lunches for hungry students, materials for classroom, running water and soap for bathrooms, and electricity for the lights. Because of this, students of Corona, Queens are constantly fighting a battle between focusing on education and their homelife. Schools are unable to help much with this matter as there is only so much resources they can spare while having enough for their mediocre education. This will take a lot of trust and commitment from the community to truly seek out our educational facility to get the resources, mentors, and research experience.

This also raises the question of getting reliable volunteers, professionals and mentors. The success of this facility is dependent on the widely available resources and mentors for the students. The Student Success Center would have to fund enough willing mentors and professionals who have a set time schedule for when the center can be opened up and available for sessions. Hiring teachers, mentors and counselors has several constraints as payment, times and experience can set the facility back. The Student Success Center aims to be a public and free facility for the community and because of this initiative majority of the funding and time is dedicated to materials and staff. A professional mentor, coach, or counselor will already have fixed fees as many may charge as little as \$500 a month, while others will charge even \$10,000 or more (Art of Mentoring, 2010). The other issue is if they are not employed for pay in this facility and are simply here for volunteering there needs to be set contracts that ensure that we do not face any shortage in staff. Claiming that a Student Success Center is available to all students would directly indicate there are widely available resources such as books, utensils, access to WiFi, lessons and technology. The priority of the center then will be to constantly ensure that materials do not become scarce or too costly as this will force the facility to increase their funding and budget. The expenses that come from supplying the center with enough materials can setback the goal of supporting students that come from lower socioeconomic neighborhoods because of the lack of variety in the center's method of teaching.

Additionally, there is the concern of maintenance and keeping the facility running. Staying in operations means that the Student Success center has to keep running regardless of lack of funds or customers. This center is meant to be the better alternative to high-cost tutoring centers and disorganized after school programs and thus the purpose is to help the students as much as possible. This may not always be the case because of the constant unknown variable such as availability in mentors' schedules, and regulating the WiFi. The center would have to adjust to severe weather complications and situations such as the COVID-19 pandemic which would lead to students of the community to simply turn to online help. This would decrease the popularity and use of the facility and ultimately lead to a shut down. According to New York State Student Success Center, this type of facility is heavily dependent on partner organizations and they manage their resources through funding and pathway projects. The cost alone of running this center would be a struggle to maintain especially if the amount of students admitted is high. The increase in students in this center would require more books, supplies, mentors and maintenance which may not work out in the long run without dedicated funding. Student Success Centers may become repetitive and deemed unneeded in the community because there are enough schools within the area. Many would argue that the time and funding put into running this facility could easily be used to improve hospitals or enrich the after school programs in already existing schools. A brand new center captures the attention of locals only for so long.

There are several economic implications regarding Student Success Centers as funding is a key aspect in ensuring that the facility stays running. New York City's Department of Education is

allocated a budget of \$34 billion. The DOE also has a separate capital budget of over \$17 billion to build new schools, renovate existing schools, and purchase equipment over five years. From kindergarten to 8th grade, an average Queens student is allocated \$7,341 dollars. The Corona Arts and Sciences Academy, a middle school, was given \$6,901,659 for the 2020-21 school year. Since Corona is primarily diverse in culture, many students don't have English as their first language. Just under 300 students requested an English Language Learner program, which merely cost them \$448,097 (New York Department of Education, 2020). Various programs that would propel students of Corona into a better future are implemented in nearby public schools. However, it is not enough. Many students still lack proper education and useful activities. But is that the problem? Corona, Queens have plenty of schools. There are over 5 public schools in Corona and a high school. Regardless, nothing has gotten better. A solution must be found.

Also, the funding required to pay for books, utensils, and lesson plans become costly depending on the number of students admitted into the center. This center is free and because of that, the ones managing this educational institution would have to account for the fact that book costs range from \$100-\$12000 and this is simply based on the quantity of students (Education CostHelper, 2021). To ensure there is not a shortage in materials, the center would have to increase their budget for resources. Gaining popularity and credibility within the community is fundamental in growing the center but this too would also result in high costs to keep the technology and supplies up to date. Naturally, schools within communities spend most of their technology budgets on hardware. Although corporate donations or grants sometimes offset hardware expenses, it's usually the taxpayer who pays for hardware technology in schools. Local taxes pay for tech equipment which would mean the Student Success Center would rely heavily on taxpayers and donations to receive enough money to maintain adequate technology.

Funding for mentors and educational professionals may not be ideal for this community as the goal is to provide free access to better educational resources. In order to maintain this goal, the Student Success Center must focus on hiring volunteers or interns who are willing to work flexible hours in this center with little to no pay. This layout would allow for volunteers to be credited for the hours they put in mentoring students and in return the facility is benefited by not having to pour out heavy costs into paying for qualified teachers. The centers will have to pay for the technologies and the WiFi's in order for the students to be able to use them for free. The students of the centers will be able to go to the centers and use the technologies that they will not be able to use at home in order to do the homework and such. The best selling WiFi's roughly cost \$20, and the best WiFi's will be needed in order for many students to use them in the centers (Free and Low-Cost Internet Options, n.d.). The computers cost \$200 each approximately, so if there is a need of 10 computers, then the computers will cost in total \$2000. This means that, in total, roughly \$2100 will be needed for technology in order for this center to be used in the best way.

English as a Second Language Center

The English as a Second Language centers will support students who need help with their English to become more comfortable in the language. The students will learn in this program about English sentence structures and even the vocabulary itself. Unlike the school ESL curriculums, the centers will be more individualized based on the student's needs and allow for step-by-step in-depth explanations if the students are struggling on a topic covered in the center or covered at school. The centers make sure that, in the long run, the students will end up thriving even if they stop coming to the centers. In case of emergencies, the centers will have multilingual staff who will be able to translate the situation to the students who really do not understand English. The centers will be open during the afternoon of weekdays so that the students can come in to learn or ask for help on homework. Also, the volunteers will be working whenever they can to answer any emails that the students may send, as the email services will be open every day 24/7 in case of emergencies. There will be a few Oxford or Merriam-Webster dictionaries and translation dictionaries in a variety of languages so that the students will be able to find on their own what the English they want to write or understand means, as it is believed that the action of opening up dictionaries will allow for more memorization than just asking another person for help (English Language Learner Programs, n.d.). The centers will be available for students of all grades, from preschoolers or below and all the way up to high schoolers and beyond. Despite their age, they will need a similar amount of help if they come to America for the first time from a different country, and do not know much of the English language. In

conclusion, the centers will be open on afternoons of weekdays, with the emails being open 24/7, with the staff or volunteers, preferably multilingual, to teach and help the students in the centers.

The largest benefit of implementing the ESL centers is that the students will, in the long run, improve so much English that they will be able to listen to lessons and do homework on their own without needing extra help. The special needs of translations and such from ESL may discourage the students or make the students more insecure, but the students are able to overcome these challenges when the students come to the centers. In addition to the major benefits, there are some minor benefits. To begin with, due to the 24/7 email service and the centers being open every weekday, the students do not have to stress over their lack of understanding of the homework assignments given in schools. Without the centers, if the students' parents are not able to speak English, the students will not be able to be certain what the homework assignments are asking of students. Especially in the times of the pandemic when there are asynchronous lessons, the students are not able to directly communicate with the teachers if they have any questions, so the only resource that they will have, excluding the centers, will be the internet, which is not always accurate nor reliable. In addition, with the multilingual volunteers, the students will be able to enjoy talking about subjects unrelated to education and just have a fun time. The students may be stressed out because they are not able to talk in their native languages, and if they really do not know English, they may not be able to talk at all. However, with the volunteers who are multilingual, the students will be able to have a conversation, no matter how small or big, in their native languages which are easier to understand for them.

There are three major drawbacks to the ESL centers planned. The first is that the students may feel uncomfortable coming to the centers because the centers will only be used by students who need help with the English language. Thus, when the students come to the centers, they may feel discouraged and think that they are different and even weird because they need help with the language. However, the benefits outweigh because when the students come to the centers, they will end up learning more of the language than ever before, thus being able to feel more comfortable in the long run. The second is that the volunteers that the center recruits may not be able to speak multiple languages, and it may be hard to find multilinguals even out in the streets. Subsequently, it may be somewhat difficult for the volunteers and staff to respond to emails in the midnight, even if the emails are 24/7. However, people sleep and wake up at very different times, so some may stay awake during the midnight and respond to some of the emails during that time. If that is not possible, it may be possible to set the time limit to until the night, as the ESL students probably will be sleeping around the same time that the volunteers do, as they both are the students at schools as the volunteers.

The ESL centers will not be very hard regarding the economic aspects of building the centers. The only money that the head of the center needs to pay is the building of the center on the lot that the community such as the Department of Education has. The amount of money that often goes out after the building itself is the materials. The centers will buy a few textbooks so that the students can learn from the textbooks on their own to improve on their English language. Also, the dictionaries are needed so that the students will get a quick understanding of what the English vocabularies mean, and be able to memorize the vocabularies quickly. In total for the books, roughly a few hundred dollars will be needed. Counting the most minor costs, some pencils and erasers, as well as looseleaf papers, may be needed in order for the students to learn the English and be able to write it down on their notebooks or papers. Even if the head of the center continues buying the writing utensils, that will only result in a few dollars, and at the most one hundred dollars. Thus, the ESL centers will not be a weight in terms of economic implications, as there will not be much to pay for.

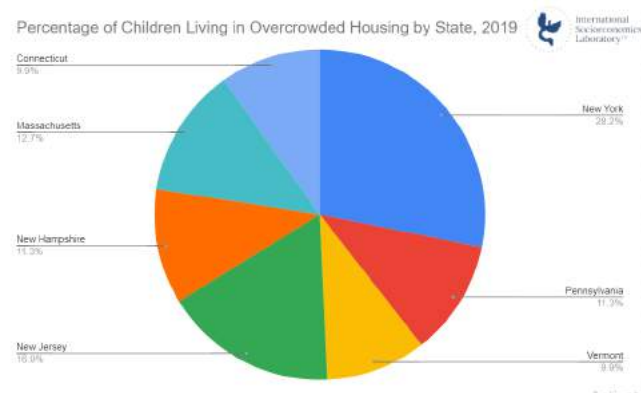


Figure 16: "The percentage of children in overcrowded housing in states near New York during 2019."
(Source) The Annie E. Casey Foundation, Kids Count Data Center.

Having a space for a child to socialize, feel comfortable, and enjoy the companies of their peers and teachers is crucial for the child's mental state and development. In addition, another survey conducted in 2019, showed that in NY, approximately 48% (the highest percentage) of all Latino or Hispanic families have children who live in households with a high housing cost burden (Annie E. Casey Foundation, 2019). Financial circumstances will inevitably affect a child's life and thus a child development center can be a safe haven for children to relax while also exploring creative work. This proves to be beneficial not only for the child, but for the parents as it relieves them of a substantial amount of stress too. A child-development facility produces the same parental involvement as that of school facilities through various activities such as chaperoning at field trips, attending events and shows, and getting involved in the child's artistic journey. Since an educational facility can increase parental involvement and establish better parent-teacher relationships, a positive atmosphere is created by promoting progress through student development. Based on the analysis of schools nearby, a child development facility would greatly impact students in an elementary school. This can be beneficial for their studies because from a young age, a child development facility can leave a positive impact on children in regards to their perception of academics and mental health. The community can optimize the environment through incorporating interactive and low-stress activities centered on team-building exercises and physical education. In addition, parental involvement has been linked with social cognitive development, which, in turn has been linked with academic achievement. By developing a clear relationship between the parents and children on the basis of academics, the community is able to improve a child's future chances of graduating from high school and even college (StackPath, 2018). Thus, a cultivated environment can also foster creative innovations and inspire tangible changes in regards to mental, psychological and physical health.

Some drawbacks for the child development center would include financial funding in terms of finding qualified teachers and social workers. These teachers would need a license from the local state or government; they would also have to understand certain aspects of nutrition, be weary of allergies, practice safety protocols, etc. Furthermore, a well-organized and efficient child development center would require the use of professionals when designing the set space which could be quite cost-heavy. In addition to the economic aspects, there are many federal regulations and laws that require any child facility to be built in a certain way (National Institute of Building Sciences, 2017). This would necessitate the community to get in touch with local government officials and possibly child-development psychologists. There are certain organizations that can also help: GSA Child Office of Child Care, National Children's Facilities Network, National Association for Education of Young Children (NAEYC). Lastly, another drawback would be space and student to teacher ratio. According to the Office of Child Care, there should be 1 teacher for 6-10 preschoolers (ages 3-5) and 1 teacher for 10-12 students (Childcare Gov., n.d.). This would require a substantial amount of healthcare workers, teachers, interns (perhaps), and would require multiple rooms. While considering these rooms, there should also be proper organization especially in terms of preparing for danger and possible emergencies. Emergency exits, stairwells, student mobility and reaction time should all be factors when considering which classrooms should be used by which age group.

When deciding to invest in a child development center, it is fundamental to consider some of the economic implications that come with it. A proper child development center would need to be organized by a child development psychologist, various organizations trained in child care (as mentioned above). However, there are also multiple NYS agencies and governmental organizations that are specialized in these areas and partnering with them can be more cost effective. Another factor that should be considered are the teachers and healthcare professionals that would work there. The average child care teacher earns from \$32,676 to \$54,259 with the median annual salary being approximately \$40,000 (Salary.com, 2020). In addition, materials, food, resources, and maintenance fees are all possible factors that should be considered in a child development center. Nonetheless, an alternative the community can contemplate is working with possible interns and volunteers who are interested in child development and psychology, etc.. With the right government endorsement and proper funding, the child development center can be a great

Discussion

Previous studies evaluating community facilities have tightly focused on very specific parameters, such as economic implications, or interest in a particular building. Although these studies have valuable contributions towards the understanding of these centers, our study precisely aims to develop a current understanding on the need for different types of public service facilities by comparing various parameters of different premises in Corona, Queens.

While each facility has its benefits and drawbacks, it was found that FQHC clinics would be the most beneficial for Corona, Queens. This is because FQHC clinics benefit underserved communities, and considering Corona's demographics, it would greatly aid the uninsured and underinsured individuals. Furthermore, there are numerous recreational centers and education facilities in or near Corona, Queens, but there is a lack of adequate FQHC clinics within Corona compared to other neighborhoods. Under-serviced areas are more likely to have individuals who experience poor health due to a combination of factors that present obstacles to health maintenance, thus alluding to the conclusion that a free clinic would be incredibly beneficial for the community.

Recreational centers provide a public place for residents of Corona to socialize. The issue is that the budget is dependent on the NYC budget because the centers will need multiple resources ranging from books to research website access codes to wifi. By establishing a recreational center in Corona, we contribute economic, social, and public health benefits to the community. For example, educational facilities provide various programs for improved education quality of youth, recreational centers promote healthier lifestyles by including health and exercise programs, in turn helping the youth and elderly in the community. The physical activity in these centers help reduce healthcare costs by major margins. Due to the current pandemic, almost every business and city system has lost tons of money. For example, one of the main systems in our city, the MTA, has lost millions of dollars due to the pandemic. Thus, a recreational center can help the MTA in New York City, increase the prices of real estate in the surrounding area, and increase the revenue of local businesses. Recreational centers also boost morale in the community and create success within the community. According to the YMCA, their organization helped teens age 16-24 gain jobs and put them on the track to economic success. Despite these benefits, there are drawbacks to recreational/youth centers. One of the drawbacks of establishing a recreational center is the limited need for employment compared to hospitals and other medical facilities. Therefore, since it does not create as many jobs as other medical facilities it does not give back to the community as much. In addition, another drawback is the impact on the community through membership fees and desirability. Membership fees are not feasible for low-income communities and discourage them from going to recreational centers. These fees end up serving the needs of the managers and owners instead of the community. Also, as of now, a recreational center is not a necessary building, especially since the COVID-19 has ceased all in-person activities.. Furthermore, vaccine distribution is behind the projected schedule, so people attempting to utilize full in-person activities may have to wait longer before they can utilize these facilities.

Educational centers such as ESL learning centers, SStudent Success Centers, and Child Development centers unite the residents of the community by providing a safe, educational

environment in which students come together to share resources. These facilities would allow for strengthening bonds between members of the community and educators and they directly contribute to an increase in job opportunities and a better life both financially and socially for the children of Corona, Queens. Child Development centers allow social interactions and also a dedicated space for physical education. The development of economically wounded children is crucial for the advancement of the community itself and provides children with a functional, educational, yet approachable space. However, it would require an abundance of trained professionals, as well as, proper volunteers. The economic costs and the need for experienced staff remove educational facilities as the ideal solution. English as a Second Language Learner Centers allows students to learn English, aiming towards the goal of being able to follow lessons in school without help. Nonetheless, in Corona, Queens, the people come from various ethnicities and may benefit the most from other programs than a new facility. In comparison to implementing a healthcare facility, many can argue that educational facilities become overwhelmingly due to the plethora of schools surrounding the community. The community benefits the most from health centers that are widely available because of the large population in this community and the high poverty levels.

A potential health facility that could be built is a nursing home. There is an elderly population of 16% in Queens, so building a nursing home to support them if they need constant medical care would be beneficial to the community. Moreover, nursing homes could help administer the COVID-19 vaccines more quickly for elders, as they are under constant monitoring and watch, and are at higher health risk due to their age. However, there are drawbacks to building a nursing home. Admission to nursing homes can be costly depending on the intensity of care, but it would be cheaper to administer medical care at nursing homes compared to at home. In addition, furnishing a nursing home is quite expensive. A nursing home the size of 40,000 sq ft would cost 1-3 million dollars to furnish beds. Other items would have to be furnished as well, so if beds already take 1-3 million dollars then more money would be required for the rest of the furniture. The land in Finxerunt's possession is only 17,500 ft sq. Finally, nursing homes have been shown to decrease quality of life and individuality in residents, as incidents of physical and psychological abuse have been witnessed. In conclusion, building a nursing home is not a feasible idea.

The FQHC has the main focus of benefiting individuals who have limited incomes, no health insurance, disqualification for Medicare and Medicaid. Corona, Queens has an overall lower median household income compared to the rest of New York, so the residents are in need of better access to healthcare. With the help of the FQHC, obstacles will be eliminated and the community will be unified through FQHC as a medical facility open to the public. Due to low income and the uninsured population, this is very much needed in Corona, Queens. The COVID-19 pandemic hit the area the hardest, and, consequently, hospitals around the community are struggling with having enough beds. The facility would allow non-emergent cases and problems to be addressed, such as through pregnancy testing and flu-shots. In terms of the economic implications, the FQHC, as a nonprofit and tax-exempt organization, can receive grants from the government, the private sector, and donations in addition to Medicare and Medicaid funding.

Furthermore, the FQHC can receive funding from the HRSA Health Center Programs to set up reimbursement systems under Medicaid and Medicare at low-cost clinics. The possible FQHC will be located in Northeast Corona, Queens where there is a larger percentage of individuals living in poverty. Most importantly, the FQHC is very feasible due to the lack of low cost and public health centers in Corona, Queens. The high poverty levels and extreme diversity in this community make it clear that the addition of an FQHC would contribute greatly to prevent the worsening of health in these individuals. Depending on whether the FQHC receives grants from the city, the area of land owned can easily be used to construct this facility. FQHC could be sent the tax-exempt and donations which will be more feasible in terms of use and maintenance.

However, there are a few drawbacks and limitations to the FQHC. The city has to pay for the FQHC to keep the carefree. Consequently, the city may get into debt if the city has to pay for free health care. With all the health care now, the \$1.5 trillion of the federal budget is spent on health care. In this case, the facility may go into debt over the long run due to the high costs that need to be managed and accounted for. This includes payment for the workers, utilities, electricity, and supplies. Since the care in this FQHC is free, the federal budget will be used in large numbers for FQHC alone, thus increasing the amount of budget used in total for health

care. This issue is a problem because the city and country will be in debt more easily, which means that other facilities and infrastructures will not be able to get the funds that they need. Also, because of the FQHC, people will be less motivated to pay for health care. This will make the federal budget be used more for health care, as more people will be seeking free health care. Moreover, depending on how the hospitals will be run, people will have to wait a long time, since many people will be going to the hospital centers.

Another feasible possibility for the plot of land in Corona, Queens is an urgent care center. There are advantages to this option, like easier access to medical facilities and cheaper prices; but the drawbacks outweigh the benefits. The drawbacks include the high prices to build an urgent care facility, the population of medical facilities in the area, and the fact that many people abuse the urgent care system. For an urgent care facility to break even, there has to be an average of about 25 visits; meaning there has to be over 25 visits every day to make a minimal profit (UCC., 2012). But due to the large population of other urgent care facilities, hospitals, and private practices in the Corona, Queens vicinity, it would make it harder for a new urgent care facility to make profitable revenue. Additionally, the prices of a visit to urgent care are relatively lower than visits to the emergency room or private practice. The price of an average urgent care visit is being compared to a trip to the ER regarding a non-emergency because that is what urgent care centers are for: they treat patients who do not need to go to the emergency room but still need medical attention. Although these prices are friendly for a poorer neighborhood like Corona, it leads to unintended consequences like patients abusing the system and overusing the system, leading to increased healthcare costs.

Thus it is apparent that since the COVID-19 outbreak, medical facilities have been in high demand and through research, it has been concluded that the optimal facility is a FQHC. Corona has been one of the hardest-hit communities from the pandemic and this would be a literal life-saver for many. The facility will benefit lower-income families that have been hit hardest by the pandemic in regards to unemployment, and ailments. A FQHC will give the residents of Corona and surrounding neighborhoods a cheaper alternative when considering which medical facility to get treatment as a third of annual income is spent on healthcare for low-income families in America (Karlis et., al 2020). However, the incentive to build a healthcare facility extends beyond the scope of COVID. Corona continues to have an increasingly diverse racial and ethnic makeup as a community, and these medical facilities can serve as a proper answer to the growing diversity. Many studies show that there are misdiagnoses linked to racism. Providing an FQHC in a diverse area may translate to the workers at the FQHC being diverse among themselves, providing a sense of safety and security for the largely underrepresented populations in Corona, Queens. Additionally, over the years Queens as a whole has seen a drastic decrease in the amount of medical facilities present in the neighborhood and constructing a medical facility in an area where there is a relatively low amount of facilities in comparison to other neighborhoods may serve to be beneficial. This is especially true in a neighborhood like Corona where medical facilities such as hospitals have a rather low presence rate.

A source of bias may have come from survey participants. The majority of the team attends one of the nine specialized high schools in New York City. Also, team members were in charge of the survey's distribution, nearly all of survey participants may reside in the Queens-Manhattan area. Race may also be a biased factor, as a 2019 snapshot of specialized high schools indicated that 7 out of 9 specialized high schools had an Asian student majority (New York City Council, 2019). Additionally, many members of the team reached out to close acquaintances which may have led to less diverse results compared to if there had been more outreach to strangers. However, this is justified by the time constraint of the survey. As survey outreach increased, questions from possible participants were asked concerning privacy and what exactly the questions asking about the importance and feasibility of a public facility entailed. Therefore, the quantity and quality of the survey responses may have been slightly affected.

As mentioned previously, another limitation of our study was the time frame. The study may have been completed in an insufficient amount of time to gather enough data that can be representative of a larger population. Additionally, given the time constraint, answers may have varied, especially for questions that respondents may not have known right away, but could have no time to understand what to express. Had there been more time to work with, considering that participants will be able to fully understand these questions, the answers to the survey questions will be more accurate.

The findings of our research can be applied to several future projects. Other researchers can take our same experimental set up but apply it on a much wider scale or apply it to various neighborhoods; while our research was conducted amongst all of NYC, most of the data was concentrated in Queens (N = 173). A future research study can analyze other boroughs in-depth such as Brooklyn, Bronx, Manhattan, and Staten Island. Additionally, we did not list every single type of public service facility; other studies can test the desire for other public service facilities amongst its participants. Future researchers can also focus on other variables and how they factor into the responses by the participants. They can run regression tests to see whether or not the same significance and results are upheld when other variables are taken into accounts, such as medical expenses and income. Our findings also show that in general, most civilians prefer the construction of any public service facilities as opposed to a corporate facility in their neighborhoods; this same trend would likely be upheld amongst several other neighborhoods, however, the preferred type of public service facility would likely vary based on the socioeconomic conditions of the neighborhoods.

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