

# Streets for Recovery: The Economic Benefits of the NYC Open Streets Program



October 2022

NEW YORK CITY



NYC   
**OpenStreets**





**Location:** Quisequya Plaza  
(Formerly Dyckman Open Street)  
**Partner:** Dyckman Gardens



## Letter from Commissioner Ydanis Rodriguez

New York City is the world's greatest city, known for our resilience and endless ability to innovate and reinvent ourselves. Throughout history, our city, a "gorgeous mosaic" of diverse neighborhoods, has come together in the times when we need it most.

The spring of 2020 was among those times, as we tragically lost tens of thousands of our neighbors to COVID-19. As an early international epicenter of the virus, New York City also faced unprecedented economic challenges — as we stayed home, locked down, and maintained physical distance to keep our neighbors safe.

Back then, municipal leaders, advocates, and the City Council began to push for creative solutions to address these challenges. Working collaboratively, NYC DOT created the Open Streets and Open Restaurants programs. Car and truck traffic, which had receded, was replaced with cyclists and pedestrians on dozens of streets. Children played and families enjoyed meals at restaurants and bars, the vast majority of which had never set up seating outdoors.

While Open Streets saved countless businesses, it is also hard to overstate how dramatically the program shifted attitudes. I saw for myself in Upper Manhattan, where I served in the Council until last year and where previous battles over car-free streets melted away as reimagining streets became both a financial and public-health imperative. On a block in Inwood, Dyckman Street between Broadway and Seaman Avenue, six separate restaurants, no longer hindered by the City's sidewalk café permit system, could now set up tables and chairs in the street to meet the demand of those who wanted to safely enjoy a great meal outside, transforming this space permanently into a pedestrian, cyclist and dining space known as *Quisequya Plaza*. The changes were immediately embraced by New Yorkers — diners and business-owners alike.

This detailed report, supported by Bloomberg Associates, is the first comprehensive and empirical look at the economic benefits of Open Streets — and the results are stunning. Through data from the Department of Finance in five different neighborhoods, the report proves what we have all seen with our own eyes for two years: New Yorkers not only love dining outdoors, when given the choice, they prefer to spend their time and money along car-free Open Streets.

I want to offer my special thanks for this ground-breaking report to Janette Sadik-Khan of Bloomberg Associates, whose team supported the research and report development. Janette's tenure as NYC DOT Commissioner a decade ago set the gold standard for re-imagining streets, ideas now copied by cities around the country and around the world. Of course, I always offer thanks to the incredible team within DOT who created and have maintained these programs. Their labor of love keeps the programs thriving.

As the City recovers, the best news about Open Streets and Open Restaurants is that they are here to stay. In communities across the City, the now permanently legislated Open Streets program will continue to grow. In the months ahead, under the leadership of Mayor Eric Adams, we will work closely with the City Council on a permanent Open Restaurants program meets the needs of the City's vibrant communities and economy.

Ydanis Rodriguez





**Location:** Orchard Street  
Open Street  
**Partner:** Lower East Side  
Partnership



## Letter from Former Commissioner Janette Sadik-Khan

As a former Commissioner of the New York City Department of Transportation under Mayor Mike Bloomberg, I have seen the passion, creativity and ingenuity of the people that power this agency as they work tirelessly to provide New Yorkers with safer, more sustainable and more equitable streets.

Since that time, I have helped export many of New York's homegrown transportation innovations to cities across the country and around the globe. From the country's first parking protected bike lane on 9th Avenue to the world-leading scope of the Citi Bike network to data-driven efforts to create safer streets, NYC DOT proves that if we can make it here, they'll make it everywhere.

When the pandemic hit, instead of retreating indoors, NYC DOT once again blazed new territory, rolling out the Open Streets and Open Restaurants programs in record time. From the reimagined 34th Avenue to the new vibrancy on Vanderbilt Avenue, I saw first-hand how these projects provided safe spaces to eat, to exercise and to reengage with our friends and neighbors after so much time apart.

With this study, we've also demonstrated that Open Streets aren't just green solutions; they can keep our small businesses in the black. The five corridors we analyzed were an astounding 20 percent above their previous income levels by last summer, while corridors nearby were down nearly 30 percent. And these Open Streets saw a 10 percent increase in bars and restaurants compared to a 20 percent decrease elsewhere, providing a crucial lifeline for thousands of jobs that New Yorkers everywhere depend on.

Just as we saw with New York's first plazas and bike lanes a decade ago, this data shows once again that when you provide safe, people-centric street designs that don't cater only to automobiles, New Yorkers will vote with their feet, and their wallets.

So today, as the agency works to convert this pandemic-era exercise into a long-term solution for New York City neighborhoods, Mayor Eric Adams, Commissioner Ydanis Rodriguez and the NYC DOT team have shown that this program is an essential part of our economic recovery. While other cities are winding down their own similar programs, New York is poised to ramp up, powered by diverse communities across the five boroughs who have proven that Open Streets are open for business.

Janette Sadik-Khan





**Location:** Ditmars Boulevard  
Open Street  
**Partner:** Ninos AQ

**Open Streets corridors provided a vital boost for restaurants and bars, averaging sales 19% above their pre-pandemic baseline while nearby control corridors were 29% below.**

## Executive Summary

The COVID-19 pandemic profoundly affected many parts of society, including the streetscape and public realm. To provide relief to struggling businesses, and particularly restaurants and bars that could not offer indoor service, governments around the globe took steps to make use of the public realm for recovery. A key part of New York City’s recovery program was the development of an Open Streets program that provided room for social distancing and expanded space for outdoor restaurant dining. This report evaluates the effectiveness of the NYC Department of Transportation’s (NYC DOT) Open Streets program in supporting the restaurant and bar industry in New York City over the course of the COVID-19 pandemic. In particular, the report considers how Open Streets affected sales at restaurants and bars on participating corridors, and how the program affected the survival of firms on those streets.

The report has four key findings:

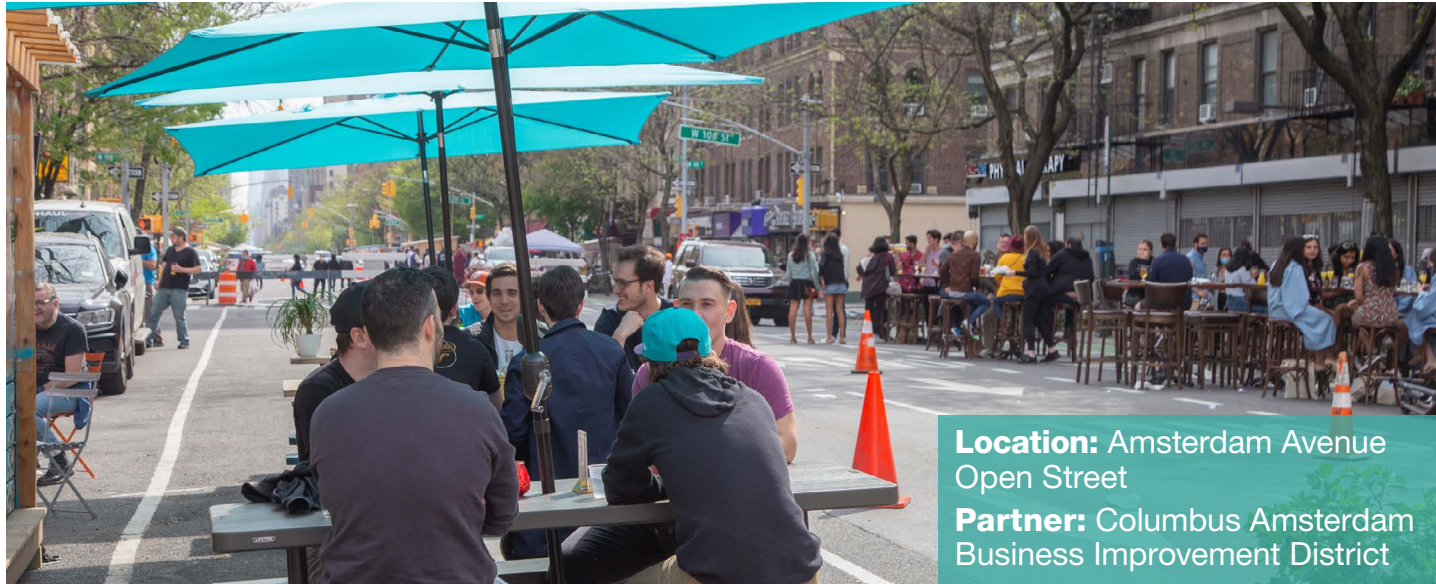
1. **Open Streets corridors significantly outperformed nearby control corridors on three key metrics (sales growth, growth in the number of restaurants and bars, and keeping businesses open)**
2. **Sales growth at restaurants and bars on Open Streets corridors significantly outpaced sales growth in the boroughs that the corridors are in**
3. **On Open Streets corridors, a higher percentage of restaurants and bars were able to stay in business during the pandemic than across the rest of the same borough**
4. **All Open Streets corridors saw faster growth in the number of new restaurants and bars that opened during the pandemic when compared to the rest of the same borough.**

With these findings it is clear that the Open Streets program provided a vital boost to restaurants and bars during the pandemic. Many participants in the program have noted that without Open Streets, their businesses would have very likely closed permanently. Furthermore, the conclusions strongly support the notion that Open Streets provide opportunities for further economic development and supporting both new and longstanding small businesses. Using findings from this report, other research, and the goals set forth in legislation passed in 2021, the NYC Department of Transportation is currently developing a permanent Open Streets program. NYC DOT expects that the success of Open Streets will result in their further expansion across New York City to support neighborhood economic development and community-building.

**Open Streets saw a 10% increase in new businesses during the pandemic while nearby control corridors saw a 20% contraction.**



## Studying the Role of Public Space in Pandemic Response



During the COVID-19 pandemic, New York City streets played a critical role in helping the businesses and communities recover from the devastating effects of the pandemic. In March 2020, New York City’s restaurant and bar industry had to cease offering indoor dining when New York State issued an emergency order to slow the spread of the COVID-19 virus. As health and safety mandates began to allow hospitality and gathering again, the New York City Department of Transportation worked swiftly to develop the Open Streets and Open Restaurants programs in response to this emergency.

Open Streets was initiated in May 2020 to provide more space for New Yorkers to gather and socialize safely outdoors when parks and other public spaces were at capacity. Launched in June 2020, Open Restaurants allowed restaurants and bars to offer outdoor dining on the street and sidewalk, allowing these businesses to serve their patrons safely in well-ventilated spaces and giving them an opportunity to regain a portion of lost sales.

Open Streets and Open Restaurants evolved and grew together over the course of the pandemic with over 100 miles of Open Streets in the first two years and over 12,000 restaurants self-certifying for Open Restaurants. These programs provided a lifeline to the hospitality industry, saving 100,000 jobs and

supporting neighborhoods across the city. Open Streets has continued to evolve as a recovery tool and includes not only outdoor dining, but also space for cultural programming, the ability to socialize safely, and other unique activations that promote the use of streets as public space. When Open Streets are active, restaurants and bars are permitted to expand into the part of the street that would have otherwise been for moving vehicles. With the street closure, restaurants and bars were able to attract more customers by adding more tables and chairs, which translated to greater revenues.

This Streets for Recovery report builds on the metrics and methodology of NYC DOT’s 2013 report, *The Economic Benefits of Sustainable Streets*, and is a timely and significant evaluation of the way in which Open Streets supported the recovery of restaurants and bars during the most challenging phases of the COVID-19 pandemic. The report uses two measures to describe the economic activity of restaurants and bars: first, taxable sales, which provide a measure of overall economic activity for restaurants and bars; and second, the number of tax filers, specifically restaurants and bars open at various points in time over the course of the pandemic.

“We jumped on the Open Streets program in July 2020 as a way to save our small businesses on #TheOther5th. Two years later we are still saving businesses, attracting new businesses and providing much needed public space for our community and visitors to enjoy.”

— Joanna Tallantire,  
Executive Director,  
Park Slope Fifth Avenue BID  
5th Avenue Open Street





## Methodology

The *Streets for Recovery* report looks at the economic recovery of restaurants and bars in New York City in areas where NYC DOT implemented Open Streets, and compares data from tax filings of restaurants and bars on those corridors to filings on similar corridors without Open Streets. NYC DOT developed this study in collaboration with Bloomberg Associates, which provided technical expertise; Bennett Midland, which performed the data analysis and conducted stakeholder interviews; and the NYC Department of Finance, which provided summaries of sales tax data while protecting the anonymity of individual filers' records.

The spread of COVID-19 and the consequent shutdowns were felt across New York City, yet the social and economic impacts of the pandemic manifested differently across the City's boroughs and communities. To account for these differences, the performance of restaurants and bars contained within Open Streets was compared against the performance of restaurants and bars on nearby comparably sized and similarly constituted streets (the "control" corridors) that were not Open Streets.

When selecting corridors for neighborhood-level analysis, a few factors were considered. First, a key consideration was the presence of an Open Streets corridor in proximity to a similar commercial corridor that was not participating in the program. Control corridors needed to be similar to the Open Streets in a number of ways—including length, number of restaurants and bars, number of traffic lanes, distance to public transit, and pre-pandemic economic trends. Also, for a more accurate analysis of the economic impact, only the "Full Closure" Open Streets that have been participating since the first quarter of the study period were selected.

The control corridors all had low participation in the Open Restaurants program. To confirm the role of Open Streets

in driving sales growth and the retention of businesses, the study also compares performance on Open Streets against similar corridors in the same neighborhood that had high participation in the Open Restaurants program (but were not in Open Streets).

The report evaluates three key metrics over the first 18 months of the pandemic:

- **Sales growth at restaurants and bars**
- **Change in the number of restaurants and bars**
- **Survival of restaurants and bars**

These metrics are based on state tax collection data that was collected and aggregated by the NYC Department of Finance. Every bar and restaurant in New York State reports on and remits sales tax to the State. The records of these returns form a highly granular picture of local economic activity that can be assessed block by block and is a more sensitive measure of economic activity than most publicly available data sources.

The study period for the analysis is from March 1, 2020 through August 31, 2021, which aligns with six quarters of sales tax reporting to the Department of Finance and covers the first 18 months of the pandemic's impact on New York City. To contextualize study period trends, the study team also collected sales tax data for the three years prior to the COVID-19 pandemic, from March 1, 2017, to February 29, 2020. The study used average quarterly taxable sales from this baseline period as a point of comparison for analysis.

To protect the privacy of business owners, the study was also designed to maintain the anonymity of all restaurants and bars, by requiring that study areas had at least ten tax filers in each quarter and only using aggregate revenues for the study.



**“The Open Street has been very helpful for a lot of struggling restaurants on Pell Street. I hope that we can expand it to more days in the future.”**

— **Kevin Cheng,**  
Owner, Sichuan Hot Pot  
Pell Street Open Street



## Neighborhoods for Analysis

To capture the impact of Open Streets across New York’s diverse neighborhoods, the study looked for Open Streets on commercial corridors throughout the city that could be matched with control corridors meeting the characteristics described before. All corridors needed to have enough restaurants and bars for summary information provided by Department of Finance to adequately protect the anonymity of individual filers. Using this approach, five Open Street corridors were selected for analysis across three boroughs. Nearby control corridors that did not participate in Open Streets, but shared similar characteristics, were selected for analysis and comparison:

- **Astoria, Queens – Ditmars Boulevard between 33rd Street and 36th Street** (Control Corridor: Ditmars Avenue between 28th Street and 33rd Street)
- **Chinatown, Manhattan – Pell Street between Bowery and Mott Street, Doyers Street between Pell Street and Bowery** (Control Corridor: Bowery between Grand Street and Chatham Square)
- **Koreatown, Manhattan – E 32nd Street from Broadway to Madison Avenue** (Control Corridor: West 36th Street between 6th Avenue and Madison Avenue)
- **Park Slope, Brooklyn – 5th Avenue between Union Street and 4th Street** (Control Corridor: 7th Avenue between Union Street and 4th Street)
- **Prospect Heights, Brooklyn – Vanderbilt Avenue between Atlantic Avenue and Park Place** (Control Corridor: Flatbush Avenue between Dean Street and 8th Avenue)



“The initiation and implementation of the Open Streets Program is the main factor why Bricolage is still open. The significant added income resulting from The Open Streets program lifted Bricolage above the red line which enabled us to hire new staff, pay our bills and remain functioning. It is totally clear to us that without Open Streets, Bricolage would have shut down its doors last year.”

— Miro Gal,  
Owner, Bricolage  
5th Avenue Open Street





“The economic success of the Vanderbilt Avenue Open Street is only the most quantifiable result of bringing residents and business together to create new public space on Prospect Heights’ main street. The strong sense of community that has been fostered among residents, visitors and businesses on open weekends has been truly transformative for the neighborhood’s identity.”

— Gib Veconi  
Chair, Prospect Heights Neighborhood Development Council  
Vanderbilt Avenue Open Street



## Findings Overview

The study results show that New York City’s Open Streets program had a positive impact on the economic recovery and growth of the restaurant and bar industry.

During the first 18 months of the pandemic, the city’s restaurant and bar industry suffered enormous losses. Citywide sales dropped more than 50% in the first three months of the pandemic (more than 70% in Manhattan), and many businesses closed during the lockdown phase of the pandemic, when restaurants were not allowed to offer seated dining. With the combination of Open Streets in May 2020 and Open Restaurants the next month, sales began to recover, but trends varied widely across the city. By the summer of 2021 (June to August 2021), restaurant and bar sales in Manhattan were still 22 percent below the pre-pandemic level, while sales in the outer boroughs had recovered more strongly, with sales up six percent in Brooklyn and Queens.

But as the study shows, it was the Open Streets corridors that recovered most quickly. Sales at restaurants and bars on Open Streets grew faster than the average restaurant in the same borough; but the contrast is most clear when Open Streets are compared with control corridors in the same neighborhoods. Open Streets corridors were an average of 19% above their pre-pandemic baseline while control corridors were 29% below, a difference of nearly 50%. The charts on the following spread present comparisons for each of the studied Open Streets.

**In every case, restaurants and bars on Open Streets saw a much faster sales growth than on the control corridors.**



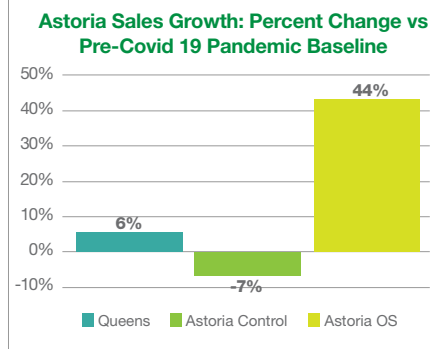
**Location:** Amsterdam Avenue Open Street  
**Partner:** Columbus Amsterdam Business Improvement District





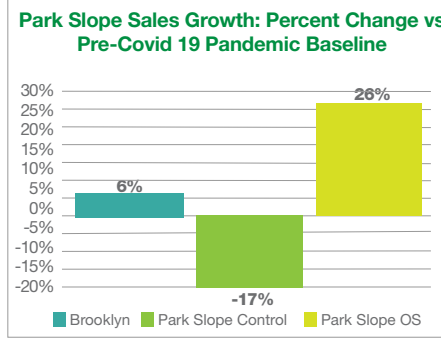
“I started biking in NYC during the COVID-19 pandemic, and wide, car-free paths like the Vanderbilt Avenue Open Street provided a safe place to gain confidence as a bicyclist. The Open Street has also made Vanderbilt Avenue’s cafes and restaurants a regular part of my week: both along rides to other parts of the city and as a destination for relaxing with friends.”

— Liz Denys,  
Cyclist and Brooklyn Resident  
Vanderbilt Avenue Open Street



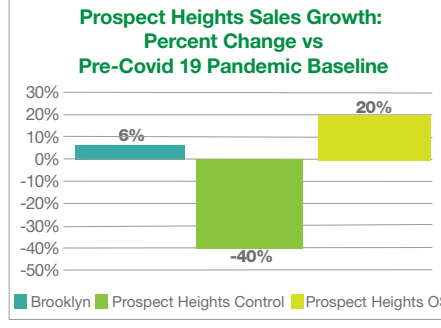
**Astoria:**

Compared to pre-COVID 19 pandemic taxable sales, the Open Street corridor in Astoria, Queens saw a 44% increase in taxable sales. The Open Street corridor outperformed both the borough, which saw a 6% increase from its baseline, and the control corridor, which experienced a 7% decrease in taxable sales when compared to its baseline.



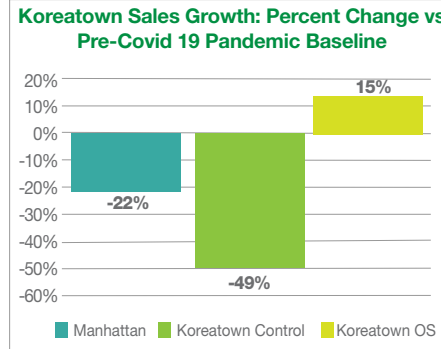
**Park Slope:**

Compared to pre-COVID 19 pandemic taxable sales, the Open Street corridor in Park Slope, Brooklyn saw a 26% increase in taxable sales. The Open Street corridor outperformed both the borough average, which saw a 6% increase from its baseline, and the control corridor, which experienced a 17% decrease in taxable sales when compared to its baseline.



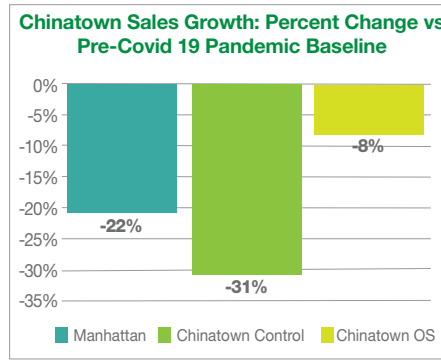
**Prospect Heights:**

Compared to pre-COVID 19 pandemic taxable sales, the Open Street corridor in Prospect Heights, Brooklyn saw a 20% increase in taxable sales. The Open Street corridor outperformed both the borough, which saw a 6% increase from its baseline, and the control corridor, which experienced a 40% decrease in taxable sales when compared to its baseline.



**Koreatown:**

Compared to pre-COVID 19 pandemic taxable sales, the Open Street corridor in Koreatown, Manhattan saw a 15% increase in taxable sales. The Open Street corridor outperformed both the borough, which saw a 22% decrease from its baseline, and the control corridor, which experienced a 49% decrease in taxable sales when compared to its baseline.



**Chinatown:**

Compared to pre-COVID 19 pandemic taxable sales, both the borough, Open Street, and control corridor in Chinatown, Manhattan experienced a decrease in taxable sales. However, the Open Street corridor experienced less of a decrease, at 8%, when compared to both the borough and control corridors, which decreased by 22% and 31%, respectively.

Study period: baseline (March 1, 2017 to February 29, 2020), COVID-19 pandemic (March 1, 2020 to August 31, 2021)





“Doyers Street and Pell Street are some of the most historic alleys of Chinatown and if it were not for NYC DOT’s Open Streets program, the small mom-and-pop eateries would not have been able to deploy new expanded safe outdoor dining options. We are so pleased that the activations have resulted in a new dynamic street life that many merchants requested.”

— Wellington Chen,  
Executive Director,  
Chinatown Business  
Improvement District  
Doyers and Pell Street  
Open Streets

To confirm that these differences were not simply due to the presence of Open Restaurants, the study also evaluated trends on nearby corridors with high participation in Open Restaurants. In three out of five cases, restaurant and bar sales grew significantly faster on Open Streets than on nearby corridors with high Open Restaurant participation. In the other two cases, the Open Streets and comparison corridors had similar levels of sales growth. These results confirm the important role that Open Streets played in supporting the restaurant and bar industry during the pandemic.

Open Streets not only saw stronger recovery in terms of sales volume, they also helped businesses survive the pandemic. The Department of Finance was able to track the number of pre-pandemic businesses that were still filing tax returns in the summer of 2021. In Brooklyn, the two studied Open Streets retained 88% of pre-existing restaurants and bars, compared with 80% on the control corridors. The Queens Open Street had a similar performance, retaining 92% of pre-existing businesses, compared with 82% on its control corridor. And in Manhattan, the Chinatown and Koreatown Open Streets retained 86% of pre-existing businesses, compared with just 67% on the control corridors. These suggest the importance of Open Streets in not only preserving economic activity but encouraging economic livelihoods.

Percent Change in Pre-Pandemic Filer Retention		
	Control Corridors	Open Streets Corridors
Brooklyn	81%	88%
Manhattan	67%	86%
Queens	82%	92%

Study period: baseline (March 1, 2017 to February 29, 2020), COVID-19 pandemic (March 1, 2020 to August 31, 2021)



**Location:** Doyers Street  
Open Street  
**Partner:** Chinatown Business  
Improvement District

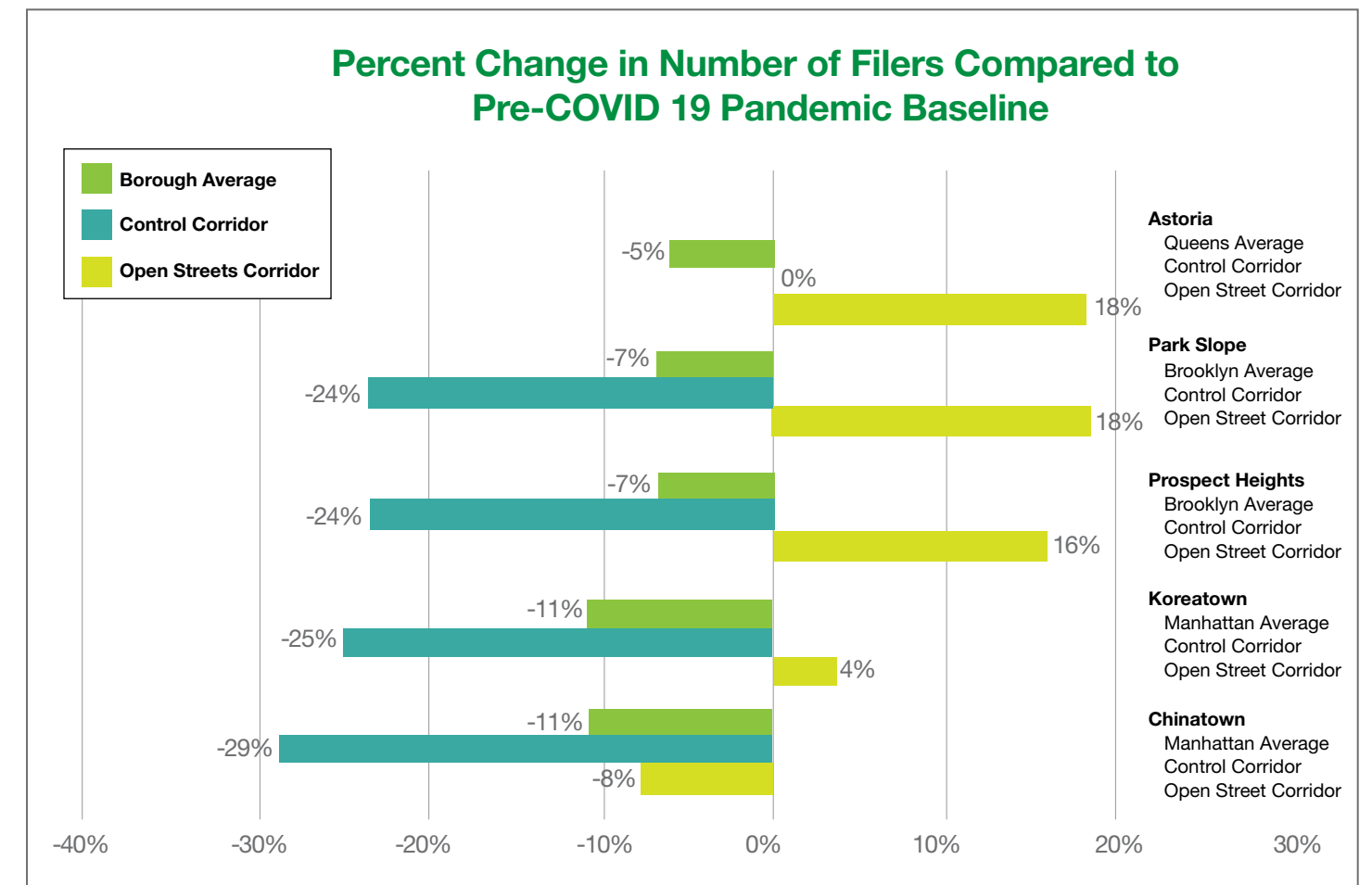




“In spring 2020, things were looking very dire for my craft beer bar BierWax on Vanderbilt Avenue. The only glimmer of hope appeared when there was talk about applying for Open Streets on Vanderbilt Avenue. The application was approved quickly, and the street closure program became single-handedly responsible for saving our bar. It was incredible to see the outpouring of support from our community. Sales solidly bounced back! I am fully confident to say that we would be closed now if Open Streets did not come to Vanderbilt Avenue.”

— Chris Maestro,  
Owner, Bierwax  
Vanderbilt Avenue Open Street

Finally, Open Streets fostered stronger growth in new establishments. All Open Streets saw a faster increase in the number of restaurants and bar businesses (after subtracting out closures of businesses) than on control corridors or across the same borough. For example, Park Slope’s Open Street on 5th Avenue saw an 18% increase in restaurants and bars, compared with a 24% drop on 7th Avenue and a 7% drop across all of Brooklyn.



Study period: baseline (March 1, 2017 to February 29, 2020), COVID-19 pandemic (March 1, 2020 to August 31, 2021)

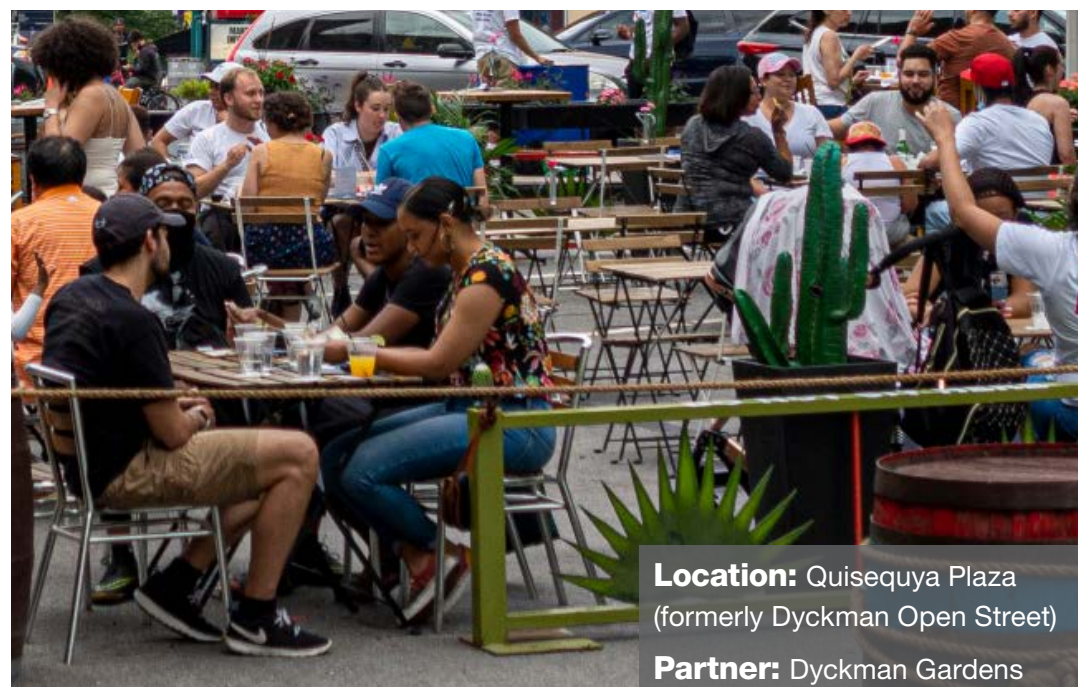
The Chinatown and Koreatown Open Streets retained **86%** of pre-existing businesses, compared with just **67%** on the control corridors. These suggest the importance of Open Streets in not only preserving economic activity but preserving economic livelihoods.



## Conclusion and Looking Forward

NYC DOT's mission is to provide for the safe, efficient, and environmentally responsible movement of people and goods in the City of New York and to maintain and enhance the transportation infrastructure crucial to the economic vitality and quality of life of our primary customers, City residents. With this mission in mind and in close collaboration with New Yorkers across the city, NYC DOT created the largest Open Streets program in the country in response to the COVID-19 pandemic. As this report details, the people-centered approach of the Open Streets program delivers numerous economic benefits and delivered a resilient safety net during this global crisis. When we make more space on the city's 6,300 miles of streets for people to walk, bike, sit, and gather we increase the value of one of our most ubiquitous public resources.

As New Yorkers look beyond the pandemic, the value of city streets as public space remains strong. In May 2021, the legislation to make Open Streets a permanent program in New York City was passed by the New York City Council. This legislation codifies the Open Streets program as part of the City's administrative code. Through a permanent Open Streets program, NYC DOT has created a venue for engagement with New Yorkers about the value of their neighborhood streets and a way to test ideas and translate success into tangible designs. Open Streets is an open dialog about the value of city streets and how best to transform these public spaces at a greater scale, with a diversity of design and management tools, and across more equitable geographies than ever before. The co-benefits of Open Streets are numerous and will continue to evolve and center people to promote safe and accessible transportation, economic development, support schools, and provide new ways for New Yorkers to enjoy cultural programming and build community.





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### **DOT Study Team (in alphabetical order):**

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## Works Cited

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**Partner:** Lower East Side  
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