

Open Restaurants in New York



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Cover photo is original work by authors.

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Executive Summary

New York City's Open Restaurants outdoor dining program began in June 2020. This municipal program has transformed the streets and sidewalks of the city. Today, more than 12,000 cafes, bars, and restaurants use sidewalk and/or parking lane space to serve customers. But, of even greater importance, Open Restaurants has made outdoor dining more accessible to residents, visitors, and small businesses in neighborhoods across New York City's five boroughs.

Open Restaurants has especially fostered the growth of outdoor dining beyond the established restaurant corridors of Manhattan. This report compares New York City's old Sidewalk Café outdoor dining program with its replacement: Open Restaurants. It highlights how Open Restaurants has led to new outdoor dining opportunities outside Manhattan, in communities that had no prior outside dining, and in communities of color and low-income neighborhoods as well. The findings of this report are striking:

- The four outer boroughs collectively had 30% of the city's pre-pandemic Sidewalk Cafés. They now have 51% of Open Restaurants.
- Communities of color have doubled their share of New York City's outdoor dining establishments under Open Restaurants (*41% of Open Restaurants located in Community Districts with majority-nonwhite populations, up from 20% of pre-pandemic Sidewalk Cafés*).
- Low-income communities have nearly doubled their share of New York City's outdoor dining establishments under Open Restaurants (*31% of Open Restaurants located in Community Districts with a median household income of \$60,000 or less, up from 17% of pre-pandemic Sidewalk Cafés*).
- The 17 Community Districts that had no outdoor dining under the Sidewalk Café program in June 2020 now have outdoor dining under the Open Restaurants program.

This remarkable growth in communities across the city would not have been possible under New York City's pre-pandemic Sidewalk Café program. Under that program, cafes, bars, and restaurants seeking outdoor seating had to undergo a lengthy review process and pay steep revocable consent fees, assuming their zoning allowed it. The disproportionate regulatory burden concentrated outdoor dining in a limited number of Manhattan neighborhoods, where more businesses had the organizational and financial resources to obtain a Sidewalk Café license.

Open Restaurants has also generated considerable opposition, stemming from serious concerns about noise, safety, and sanitation. The debate that has arisen over who and what occupies the sidewalk curb demonstrates the central role public space plays in the lives of New Yorkers. It also emphasizes how critical it is that New York City's municipal government recognize the competing

values raised by outdoor dining.

This report recommends that New York City's municipal government build upon Open Restaurants and recognize that greater citywide access to outdoor dining is one of the unanticipated benefits that has emerged from the Covid-19 pandemic. Outdoor dining has helped save jobs in the restaurant industry. It has fostered a new pattern of activity on our streets and sidewalks that has strengthened local communities and their economic vitality. New York City should learn from the experience of the past two years with Open Restaurants as it considers outdoor dining in all neighborhoods as a permanent part of the city's streetscape. To achieve that goal, this report offers four policy recommendations for permanent outdoor dining:

1. Create a streamlined permit application process
2. Limit permit fees so small establishments can participate in outdoor dining
3. Allow year-round outdoor dining
4. Produce more free-to-all public outdoor space by streamlining the Street Seats program

Key Findings

By lowering regulatory barriers, Open Restaurants greatly enhanced the diversity of neighborhoods where New York City outdoor dining occurs.

% Share of Citywide Outdoor Dining in...	Sidewalk Cafés <i>June 2020</i>	Open Restaurants <i>July 2022</i>
...Outer Boroughs	30% →	51%
...POC-majority Community Districts*	20% →	41%
...Lower-income Community Districts**	17% →	31%

*New York City Community Districts with a population less than 50% "White alone."

**New York City Community Districts with a median household income of \$60,000 or less.

Introduction

The New York City Open Restaurants program was created in response to mandated business closures arising from the Covid-19 pandemic. On March 16, 2020, then Governor Andrew Cuomo restricted New York's cafes, bars, and restaurants to takeout and delivery service to minimize the spread of the virus.¹ Takeout and delivery revenues were not sufficient for many establishments to survive, with rent, insurance, and taxes still in place, along with steep fees from third-party delivery apps.^{2, 3, 4}

In April 2020, consumers nationally spent 50% less on food prepared outside the home relative to December 2019,⁵ and restaurant employment declined by 70% relative to April 2019.⁶ Industry experts predicted that as many as a third of restaurants nationally would close in 2020.⁷ New York City stood to lose thousands of its cafes, bars, and restaurants. With them would go cherished neighborhood gathering places that generate jobs, not only for waiters and line cooks, but for the entire economic ecosystem underlying drinking and dining out: produce, seafood, and meat wholesalers, restaurant supply stores, delivery workers, and others.

New York City's Covid-19 case count waned in the spring of 2020, but indoor dining was still prohibited. Public officials believed that the risk of Covid transmission was too great to resume indoor dine-in service. Many New Yorkers, though, had begun hanging out on sidewalks outside of cafes, bars, and restaurants with takeout food and drink.⁸ Months of lockdown had deprived people of face-to-face interaction, and the demand for social contact through eating and drinking was powerful. Cafes, bars, and restaurants, facing serious financial hardships, sought to meet that demand while also mitigating Covid-19 transmission.

On June 18, 2020, then Mayor de Blasio announced the start of the Open Restaurants program that would run until Labor Day.⁹ The program end date was then extended to October 31, 2020,¹⁰ before being made permanent.^{11, 12} As of this writing, the city has yet to fully identify the details of the permanent program but has passed into law a citywide zoning text amendment that removed zoning prohibitions on outdoor dining on the sidewalk.¹³

Since the start of Open Restaurants, over 12,000 New York City cafes, bars, and restaurants have added outdoor seating, and many more New Yorkers have enjoyed it.

Despite the program's widespread popularity, it has also generated substantial opposition. Open Restaurants, after all, was initiated as an emergency response to the Covid-19 pandemic. Outdoor dining opponents have been active in media,¹⁴ public meetings,¹⁵ and the courts, including a suit recently resolved by a state appeals court decision that allowed rulemaking for permanent outdoor dining to move forward.¹⁶ The sustained effort by outdoor dining opponents demonstrates how important the sidewalk and street space are to the lives of New Yorkers.

The Open Restaurants program has difficulties, but adopting municipal policy that would significantly curtail outdoor dining would be unwise. While the city should adopt measures to address concerns regarding public health, safety, and noise with intelligent regulations and enforcement, it should recognize the considerable achievements of the Open Restaurants program, chief among them greatly expanded access to outdoor dining outside of Manhattan. Maintaining that expanded access for small businesses and customers alike should be a public priority.

Sidewalk Cafés to Open Restaurants: Comparing Location Data

Prior to the Open Restaurants program, New York City did have outdoor dining, but it was quite limited. The predecessor to Open Restaurants, the pre-pandemic Sidewalk Café outdoor dining program, had only about 1,000 total permit holders and applications in progress when Open Restaurants started.¹⁷ Compare that to the over 12,000 businesses participating in outdoor dining today under Open Restaurants (Figure 1).¹⁸

New York City went from 1,000 to over 12,000 establishments with outdoor dining almost overnight. Pandemic-induced and economic necessity drove and continues to drive local cafes, bars, and restaurants to move outdoors to survive. If the Sidewalk Café program's obstacles - a lengthy review process and steep revocable consent fees - were still in place, fewer establishments would have been able to access outdoor dining. New York City would have experienced a far greater loss of its cafes, bars, and restaurants and the jobs they provide.

Under the old Sidewalk Café program:

1. Restaurants had to be in designated zoned areas.¹⁹ *Open Restaurants only has site restrictions, such as no outdoor dining structures in front of bus stops.*²⁰
2. Geographically eligible applicants were required to abide by a lengthy review process involving the Department of Consumer Affairs (DCA),²¹ the City Council, Borough President, and local Community Board. Approvals were needed from DCA and the City Council (and for "Enclosed" Sidewalk Cafe applicants, the Department of City Planning).^{22,23} Assuming all legal deadlines are followed, the entire process could take approximately six months. However, even a minor mistake could delay an application by many weeks.²⁴ *Open Restaurants applicants, by contrast, are granted permits through an application and self-certification process without lengthy public review.*²⁰

3. Permit holders were subject to “revocable consent” fees - essentially, rent paid annually to use the sidewalk. These fees could range into the tens of thousands of dollars, depending on the applicant’s address and Sidewalk Café square footage.²⁵ Permits could be revoked at any time by the city - that is, the city’s consent to use the sidewalk could be revoked. *While Open Restaurants permits may also be revoked at any time, there are no revocable consent fees. If ordered to remove their outdoor dining structure, the financial impact is limited to the cost of removing the structure and lost future earnings.*

The Sidewalk Café program required applicants to comply with extensive regulations and to often pay high fees for space that could be taken away at any time. Sidewalk Cafés were largely concentrated in middle- and upper-income Manhattan neighborhoods, where more cafes, bars, and restaurants had the resources to comply with regulatory processes and pay license fees.

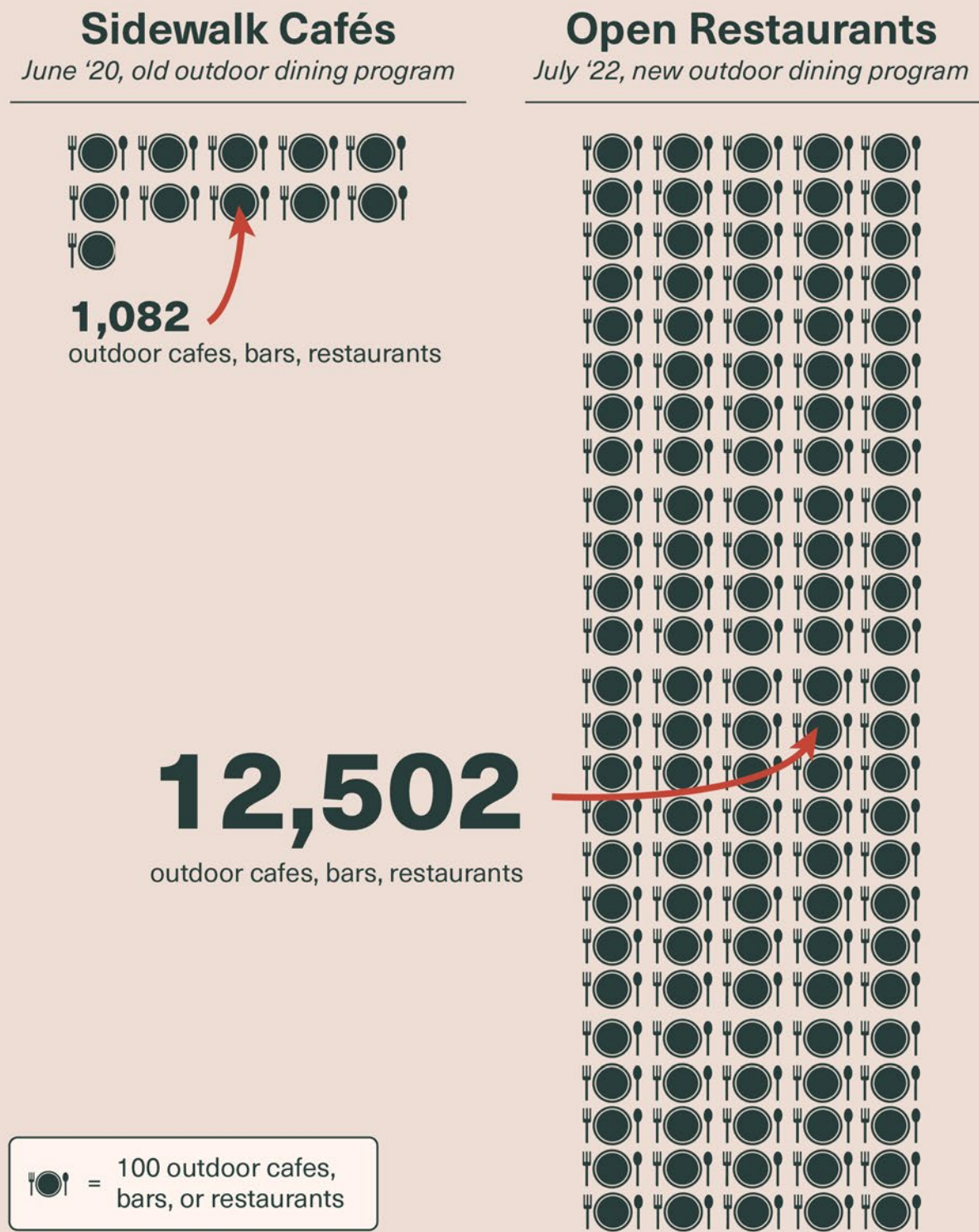
By contrast, the relative freedom of the Open Restaurants program has allowed outdoor dining in New York City to be implemented by cafes, bars, and restaurants across the city. This report pairs Sidewalk Café and Open Restaurants location data with public demographic data. The data sources and methodology behind these findings can be found in Appendix A. The data are striking:

- Outdoor dining is now more evenly distributed across the five boroughs (Figure 2). The four outer boroughs collectively only had 30% of the city’s pre-pandemic Sidewalk Cafés. They now have 51% of Open Restaurants. (See Appendix B for a by-borough breakdown.)
- Communities of color have doubled their share of New York City’s outdoor dining under the Open Restaurants program (Figure 3). The share of Open Restaurants in Community Districts with a majority population of people of color is 41%, up from 20% of pre-pandemic Sidewalk Cafés.
- Lower-income neighborhoods have nearly doubled their share of New York City’s outdoor dining under the Open Restaurants program (Figure 4). The share of Open Restaurants in Community Districts with a median household income of \$60,000 or less is now 31%, up from 17% of pre-pandemic Sidewalk Cafés.
- Outdoor dining has reached the 17 Community Districts that had none under the pre-pandemic Sidewalk Café program (Figure 5).

By lowering regulatory barriers, the Open Restaurants program has led to outdoor cafes, bars, and restaurants in a greater number of New York City neighborhoods. Outdoor dining now reaches a more economically and ethnically diverse set of businesses and communities.

Figure 1: New York City’s outdoor dining scene has grown 12-fold, practically overnight

Open Restaurants program allows more cafes, bars, and restaurants to participate in outdoor dining, boosting small business employment and revenue.



Sources: NYC Open Data: Sidewalk Cafe Licenses and Applications; NYC DOT ArcGIS Experience Builder Map: NYC Open Restaurants

Figure 2: New York City outdoor dining has deconcentrated out of Manhattan under Open Restaurants program

Open Restaurants program allows more cafes, bars, and restaurants to participate in outdoor dining, especially those outside established restaurant corridors in Manhattan.

Sidewalk Cafés

June '20, old outdoor dining program

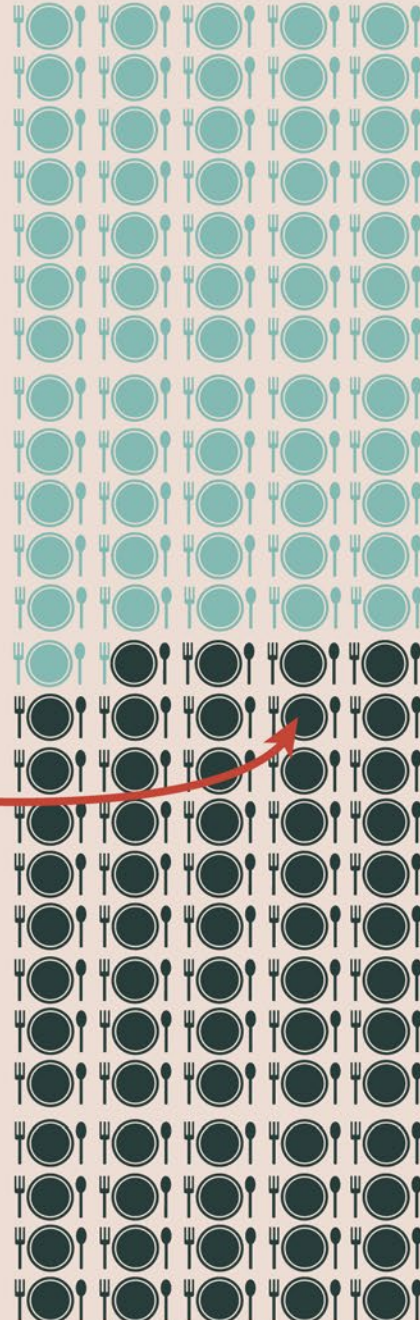


30%

of outdoor dining in
outer boroughs*


Open Restaurants

July '22, new outdoor dining program



51%

of outdoor dining in
outer boroughs*

 = 100 outdoor cafes,
bars, or restaurants

*The Bronx, Brooklyn, Queens, and Staten Island.

Sources: NYC Open Data: Sidewalk Cafe Licenses and Applications; NYC DOT ArcGIS Experience Builder Map: NYC Open Restaurants

Figure 3: Majority-POC Community Districts doubled their share of outdoor dining under Open Restaurants program

Open Restaurants program has unlocked outdoor dining opportunities in communities of color, where fewer small businesses were able to participate previously.

Sidewalk Cafés

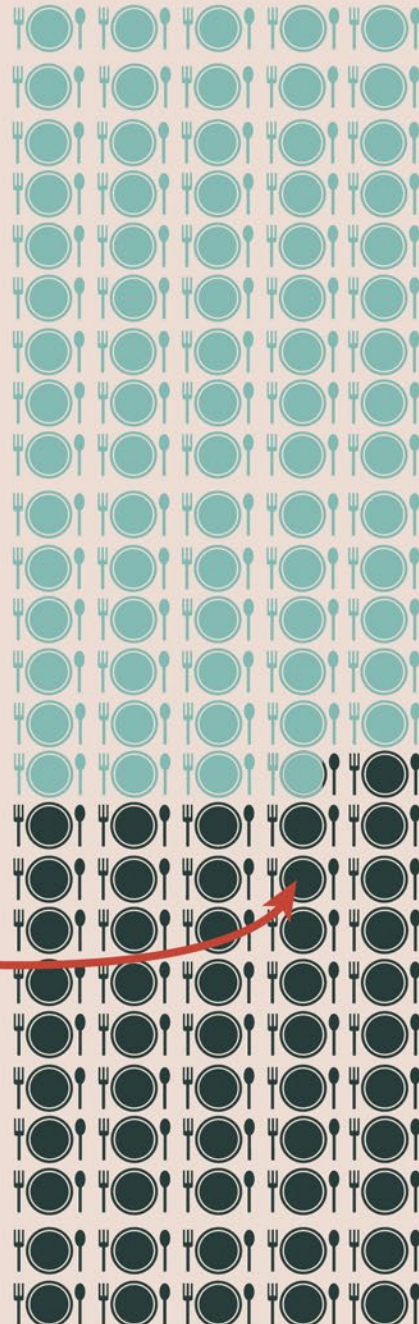
June '20, old outdoor dining program




20%
of outdoor dining in
majority-POC Community Districts*

Open Restaurants

July '22, new outdoor dining program



41%
of outdoor dining in
majority-POC Community Districts*

 = 100 outdoor cafes,
bars, or restaurants

*Community Districts with populations less than 50% "White alone."

Sources: NYC Open Data: Sidewalk Cafe Licenses and Applications; NYC DOT ArcGIS Experience Builder Map: NYC Open Restaurants;
2015-2019 American Community Survey 5-Year Estimates, Race

Figure 4: Low-income Community Districts doubled their share of outdoor dining under Open Restaurants program

Open Restaurants program has unlocked outdoor dining opportunities in Community Districts with median household incomes less than \$60,000.

Sidewalk Cafés

June '20, old outdoor dining program

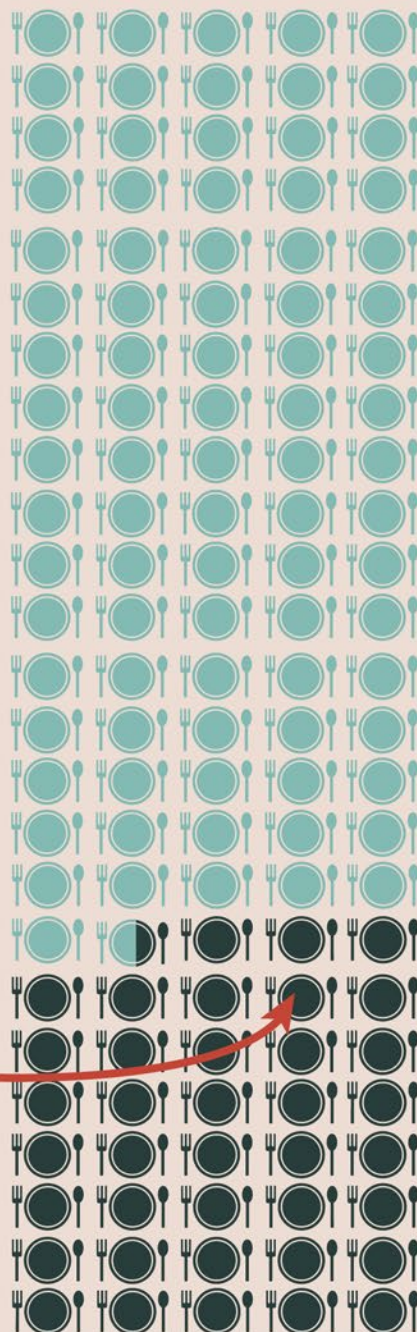


17%

of outdoor dining in Community Districts where median household income <\$60k


Open Restaurants

July '22, new outdoor dining program



31%

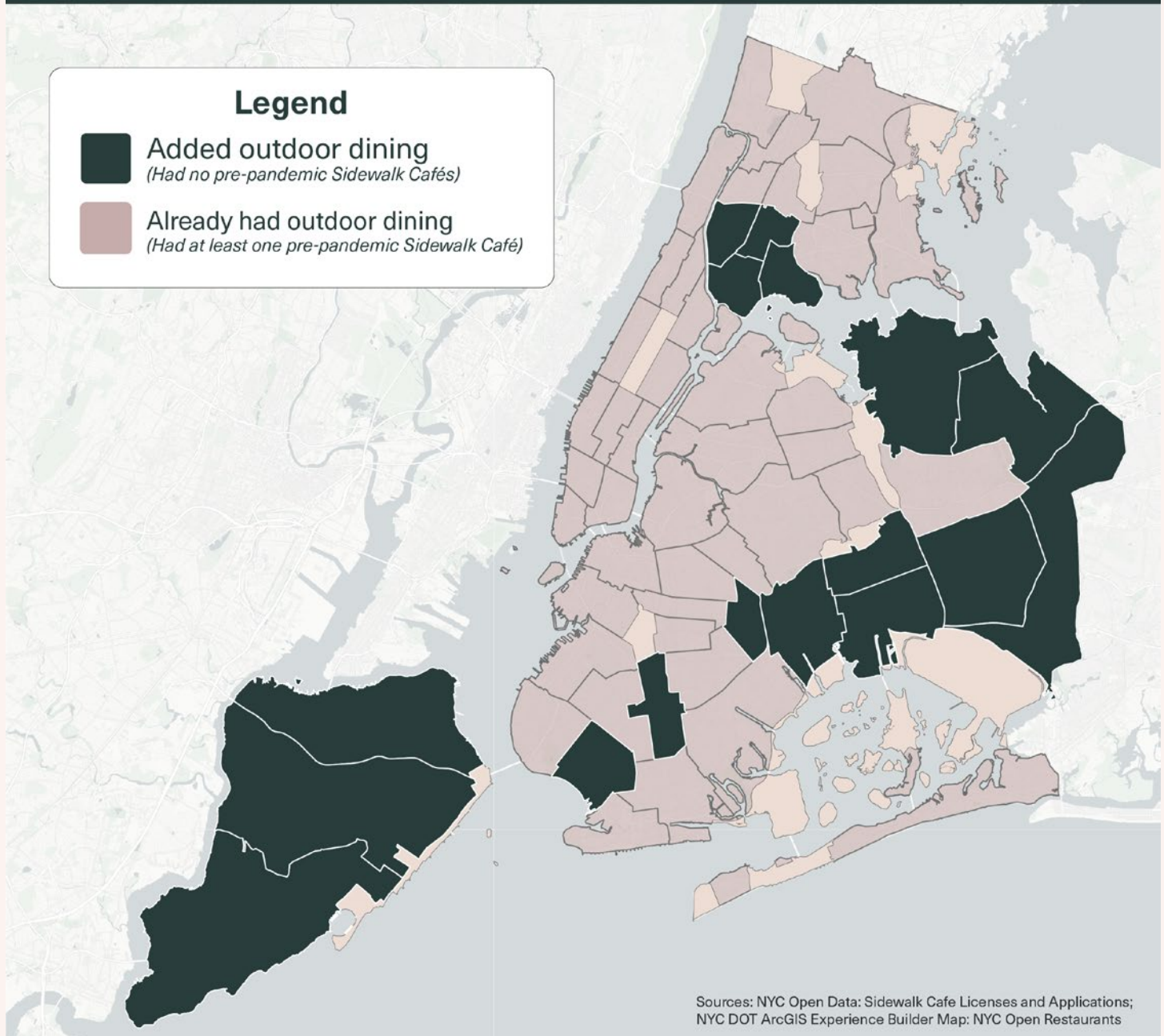
of outdoor dining in Community Districts where median household income <\$60k

 = 100 outdoor cafes, bars, or restaurants

Sources: NYC Open Data: Sidewalk Cafe Licenses and Applications; NYC DOT ArcGIS Experience Builder Map: NYC Open Restaurants; 2015-2019 American Community Survey 5-Year Estimates, Median Household Income in the Past 12 Months (in 2019 inflation-adjusted dollars)

Figure 5: Open Restaurants program brought outdoor dining to the 17 New York City Community Districts without it

The time consuming review process and high fees of the pre-pandemic Sidewalk Café program had previously kept outdoor dining out of 17 of NYC's Community Districts.



Policy Recommendations

New York City's municipal government should strengthen the emergency outdoor dining program as it becomes permanent, building upon its notable success: greater access to outdoor dining beyond the borough of Manhattan compared to the pre-pandemic Sidewalk Café program. This report proposes policy recommendations to be considered in any permanent program.

1. Create a streamlined permit application process

New York City's pre-pandemic Sidewalk Café program was burdened with a monthslong review process, putting cafe, bar, and restaurant applicants before multiple panels and agencies before they could secure permission to put out some tables and chairs. The regulatory purpose was well-intended and understandable. Public space is scarce in New York City, and gathering community input can, in theory, provide policymakers with better information. Yet a six-plus months-long review process for an individual business seeking to place tables and chairs outdoors is in effect a barrier to entry for many cafes, bars, and restaurants - especially those serving disadvantaged communities.

The city council and New York City Department of Transportation (DOT) should consider an approach modeled after the Sidewalk Café and Street Patio programs of Austin, Texas. Their review process is centralized in one agency, only calling in additional city agencies when the applicant's design or location warrants it.²⁶ Keeping the review process short and efficient puts less strain on small business owners who might not otherwise have the resources to apply for an outdoor dining permit.

2. Limit permit fees so small establishments can participate in outdoor dining

If a private actor like a restaurant wants to use public space for private gain, the city should charge for the use of that space. The question then is, how much should the city charge? While this report does not provide a specific answer or formula, the New York City DOT should consider several factors in a pricing policy:

1. New York City DOT's price should encourage rather than preclude small businesses from participating in outdoor dining.
2. New York City has allowed the private use of public space on a citywide scale since 1950, when overnight on-street car parking was first made legal.²⁷ The city should consider to what extent it wishes to promote another private use: outdoor dining by cafes, bars, and restaurants that add to street life and create jobs.

3. Under outdoor dining, the city is not leasing public space in the same fashion a private landlord leases their space. Cafes, bars and restaurants are not guaranteed the use of space throughout their entire outdoor license term, as the city may revoke consent at any time. Pricing should reflect that risk.
4. Pricing for curb space should not be per outdoor dining license, but per square foot, as was the case under the old Sidewalk Café program. This enhances fairness, and pricing would more accurately reflect the impact of outdoor cafes, bars, and restaurants.
5. Pricing should reflect neighborhood socioeconomic conditions. The pricing scheme should not repeat a mistake of the pre-pandemic Sidewalk Café program and charge higher prices for all neighborhoods in Manhattan below 96th Street, which lumps low-income neighborhoods like Chinatown and the Lower East Side with high-income neighborhoods like Tribeca and SoHo.²⁵

3. Allow year-round outdoor dining

Outdoor dining will be a viable investment for a greater number of cafes, bars, and restaurants if they are able to utilize outdoor setups year-round. Yet the current draft legislation for the permanent program bans roadway cafes from November 1st to March 31st, requiring restaurants to store outdoor dining setups during half of the year.²⁸ This is not practical for the many cafes, bars, and restaurants in New York City without abundant extra space for storage. Establishments that can afford the storage space will face another cost: leaving their outdoor dining investments idle for months. This will put roadway dining out of reach for many more. Neighborhoods unable to use sidewalk space for outdoor dining (e.g., those with narrow sidewalks, like much of Chinatown) stand to be de facto excluded from outdoor dining entirely. Banning roadway cafes for half of the year will serve to reestablish some of the old inequalities present under the old Sidewalk Cafe program.

To actually allow more cafes, bars, and restaurants the option of outdoor seating, outdoor dining on the sidewalk and roadway should be permitted year-round.

4. Create more free-to-all public space by streamlining the Street Seats program

In a July 2021 presentation to Manhattan Community Board 3 regarding permanent outdoor dining, Carolyn Grossman-Meagher from New York City's Department of City Planning stated that: "We think that the most successful versions of [outdoor] cafes are those that activate but don't privatize

the street environment and allow for access to the street for other uses like emergency and utility work when needed.”²⁹

The city should extend that principle - that “the most successful versions of cafes are those that activate but don’t privatize the street environment” - towards the creation of additional pleasant, free-to-all public spaces to sit and socialize. It should do so by reducing barriers to participation in its Street Seats program.³⁰

Under the Street Seats program, a restaurant or other sponsoring company/organization can apply to the New York City DOT to use the parking lane fronting their business to create seating areas open to the public. Seating cannot be restricted to customers, and a sign designating the area as public space must be prominently displayed. No rent is charged by the city to applicants, though applicants are responsible for the seating areas’ construction and upkeep.

In exchange for maintaining enjoyable public space, Street Seats participants benefit from having an attractive public seating area next to their business. Customers can take food and drink purchased inside and enjoy it outdoors, and passersby are drawn in by the activity outside. Businesses who participated in the 2011 pilot of Street Seats reported increased revenues after their installation, and their neighbors received new public outdoor space to socialize.³¹

Yet participation in Street Seats was low even before Open Restaurants allowed bars and restaurants to restrict outdoor seating areas to customers. In 2019, there were only 24 program participants.³² As of August 2, 2021, there were only 38 participants in Street Seats, 30 of whom are branches of the Brooklyn Public Library.³³ That’s less than 1 setup for every 200,000 residents of New York City.

Regulations have limited participation in the Street Seats program. The Street Seats review process takes approximately half a year, and is subject to a veto by the applicant’s Community Board.³⁰ The review process is disproportionate for seating, and hinders the production of pleasant outdoor public space. The review process should be streamlined.

When the city institutes its permanent outdoor dining program, it should also encourage the production of additional Street Seats by continuing its existing policy of not charging rents for them. Some restaurants may still view excluding non-customers from their seating area as worth the cost of rent for outdoor dining space. But others, especially those whose businesses do not rely on table service, may view an additional seating area that their customers and others can take advantage of, as enough. In exchange, New Yorkers will have more public space to connect and socialize with each other.

Conclusion

Open Restaurants played a vital role in supporting New York City in the darkest months of the Covid-19 pandemic. It allowed restaurants to survive, and with it, restaurant employment. It also provided a setting for social interaction after months of quarantine, contributing to the physical and mental well-being of New Yorkers. The popularity of outdoor dining has continued even during declines in Covid-19 infection rates and deaths. For visitors, residents, and workers in New York, outdoor dining is much more than an escape from the health risks of indoor dining - it is a vital element in New York City's quality of life. New York City sidewalks and streets are more than just a part of transportation infrastructure - they are intrinsic elements of the city's social infrastructure as well.

Outdoor dining reinforces the historic legacy of food's importance to New York City's social fabric, and the pattern of redefinition and change in where and how New Yorkers eat.^{34, 35, 36} This history dates back to when Delmonico's opened in the 1820s, offering dining as a relaxed, leisurely activity at a time when most establishments abided by a philosophy of "feed as many people as possible, as quickly as possible."³⁷ Moreover, New Yorkers are not afraid of food in unconventional places. For instance, before it closed, Acuario Cafe served Dominican food in the freight hallway of a Midtown office building for over 25 years.³⁸

The expansion of outdoor dining is one of the great innovations that has emerged from the pandemic. As New York City moves towards permanent outdoor dining, it should support and expand the success of the Open Restaurants program. With intelligent and informed public policies, outdoor dining can and should be made accessible in all of New York City's neighborhoods.

Appendix A: Data Sources/Methodology

This report has two main data sources:

1. New York City Open Data: Sidewalk Café Licenses and Applications¹⁷
2. The New York City Department of Transportation map with Open Restaurant locations¹⁸

Sidewalk Café Methodology

The New York City Open Data portal contains a dataset of all Sidewalk Café licensees and applications-in-progress prior to the start of the Open Restaurants program. Applications in progress up until June 2020, the start of Open Restaurants, are included to be conservative. The assumption is that the applicant would have received the license but for the pandemic.

We were interested in determining unique licensees and applicants at distinct locations. To eliminate any applications for say, different types of Sidewalk Cafes (unenclosed, small unenclosed, enclosed) at the same address, we excluded any duplicates with the same address in R. The R-markdown file for that procedure is replicated on the next page.

Open Restaurants Methodology

The ArcGIS Experience Builder map published by the New York City DOT publishes Open Restaurants location data both on a citywide and Community District level. To access the Community District-level data, click the map icon in the upper left corner of the map, and then select the Community District(s) of interest to determine the number of Open Restaurants in each. We used that procedure to determine the number of Open Restaurants in each Community District as of July 10, 2022. *Note: as of December 2022 (if not earlier), it appears that the functionality to select Community Districts on New York City DOT's interactive map was disabled. However, users can still select outdoor dining establishments within Community Districts by drawing selection polygons in the shape of Community District boundaries.*

Comparisons

Now that the number of Sidewalk Cafes and Open Restaurants was known for each Community District, that data could be joined to other Community District data. We joined the Sidewalk Café and Open Restaurants data to public demographic data. While demographic data is not available on the Community District level, it is available for Census Bureau-designated Public Use Microdata Areas (PUMAs), which approximate Community Districts. Using PUMA data is standard for New York City Community Districts (e.g., it is the same practice used by the New York City Department of City Planning). The following demographic data sources were used:

- American Community Survey 2015-2019 5-Year Estimates for all New York City PUMAs: Race³⁹
- American Community Survey 2015-2019 5-Year Estimates for all New York City PUMAs: Median Household Income in the past 12 months (in 2019-inflation adjusted dollars)⁴⁰

We then used Excel to find the Community Districts that had no Sidewalk Cafes but now

have Open Restaurants. We also computed how many Sidewalk Cafes were and Open Restaurants are in majority-people of color Community Districts (that is, less than 50% "White alone"), and in Community Districts with a median household income of \$60,000 or less.

Sidewalk Cafés: R-markdown file

This is an R markdown file to count the number of Sidewalk Cafe licensees within each of New York City's Community Districts. To be conservative, establishments that had pending applications at the onset of the COVID-19 pandemic are included. Duplicate applications from the same address are dropped.

The Sidewalk Cafe license data used was retrieved on February 2, 2022 from the NYC Open Data portal here: <https://data.cityofnewyork.us/Business/Sidewalk-Caf-Licenses-and-Applications/qcdj-rwhu>

First, load packages.

```
library(tidyverse)
library(janitor)
```

Then, load CSV.

```
scafes_raw <- read_csv("Sidewalk_Caf_Licenses_and_Applications.csv",
  col_types = cols(BUILDING = col_character(),
    ZIP = col_character(), DOHMH = col_character(),
    COMMUNITY_DISTRICT = col_character(),
    CITY_COUNCIL_DISTRICT = col_character())) %>% clean_names()
```

The dataset did not recognize that the Mulberry Street Bar (176 1/2 Mulberry Street) is within Manhattan Community District 2, defaulting to a zero value. Make the correction. "102" is the code for Manhattan Community District 2.

```
#Determine which cell contains the string "MULBERRY STREET BAR LLC"
mulberry <- which(scafes_raw == "MULBERRY STREET BAR LLC", arr.ind = TRUE)
mulberry

##      row col
## [1,] 887   3
```

#Save version distinct from raw dataframe

```
scafes_mulberry <- scafes_raw

#Change the Community District value for the Mulberry Street Bar's row.
Community Districts are in the 17th column of the dataframe. Make sure that the
Community District code inserted is a string, consistent with the rest of the column.
scafes_mulberry[887, 17] = "102"
```

Then, drop Sidewalk Cafe licensees and applicants with duplicate street addresses. The resulting dataframe will contain unique locations of Sidewalk Cafes.

```
scafes_no_dupes <- distinct(scafes_mulberry, building, street, city, state,
  zip, .keep_all = TRUE)
```

Then, summarize the resultant dataframe by community district. Note: some Community Districts will not have any Sidewalk Cafes.

```
scafes_by_cd <- group_by(scafes_no_dupes, community_district) %>%
  count(vars = community_district)
```

Then, export the table containing the number of Sidewalk Cafes in each Community District as a CSV.

```
write_csv(scafes_by_cd, "scafes_by_cd.csv")
```


Appendix B: Boroughs' Share of Citywide Outdoor Dining

Figure 6: By-borough breakdown, citywide share of pre-pandemic Sidewalk Cafés vs. Open Restaurants

Borough	Sidewalk Cafés <i>(N=1,082 as of June 2020)</i>	Open Restaurants <i>(N=12,502 as of July 2022)</i>
Manhattan	70.0%	48.9%
The Bronx	2.3%	5.4%
Brooklyn	16.1%	24.5%
Queens	11.6%	19.7%
Staten Island	-	1.5%

Sources: NYC Open Data: Sidewalk Cafe Licenses and Applications; NYC DOT ArcGIS Experience Builder: NYC Open Restaurants

Appendix C: Endnotes

- 1 Sutton, R. (2020, March 16). *Cuomo announces Tri-State restaurant and bar shutdown starting Monday night*. EATER New York. <https://ny.eater.com/2020/3/15/21180713/restaurant-bar-shutdown-nyc-coronavirus>
- 2 Debter, L. (2020, March 19). *Coronavirus lockdown sends New York City eateries into 'survival mode'*. Forbes. <https://www.forbes.com/sites/laurendebter/2020/03/19/coronavirus-lockdown-sends-new-york-city-restaurants-into-survival-mode/?sh=5598f1b95fc5>
- 3 Carmellini, A., Colicchio, T., Meyer, D., Robbins, M., Samuelsson, M., & Saper, A. (2020, March 24). *Will we have an America without restaurants?* The New York Times. <https://www.nytimes.com/2020/03/24/opinion/coronavirus-restaurants-danny-meyer.html>
- 4 Rana, P. (2020, April 1). *Coronavirus lockdowns prompt smaller restaurants to rethink delivery*. The Wall Street Journal. <https://www.wsj.com/articles/coronavirus-lockdowns-prompt-smaller-restaurants-to-rethink-delivery-11585743246>
- 5 Kowitt, B., & Lambert, L. (2020, July 21). *The coronavirus pandemic is dramatically changing the way Americans eat*. Fortune. <https://fortune.com/2020/07/21/us-consumer-spending-food-dining-out-restaurants-coronavirus-pandemic-lockdown/>
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