

The Future of Open Streets, New York City

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Abstract

The COVID-19 pandemic necessitated rapid adjustments to New York City's public spaces, leading to the implementation of the Open Streets program by the NYC Department of Transportation (DOT). This program transformed streets across the city into pedestrian-friendly zones by limiting vehicular traffic and providing much-needed outdoor space for residents to walk, bike, and socialize safely. While successful in some areas, the program faced significant challenges. These included equity issues, insufficient connectivity, inadequate length and operating hours of Open Streets, and poor maintenance and management. Open Streets were initially unequally distributed, benefiting wealthier, predominantly white neighborhoods more than others. Furthermore, many Open Streets lacked continuous networks, were too short, and were not operational for enough hours, diminishing their potential impact. Maintenance issues, such as ineffective barriers and signage, often led to drivers' non-compliance, compromising pedestrian safety. To improve the program, the report recommends transitioning successful Open Streets into permanent redesigns under DOT established programs, expanding the program to more areas, and addressing equity and maintenance issues. The DOT should invest in robust barriers, prioritize quality over quantity in Open Street designations, and extend the length of Open Streets to create a cohesive network. Funding for community groups managing Open Streets is also crucial to ensure their sustainability and success. The report highlights case studies including University Place, Avenue B, Restaurant Row, Broadway, Pearl Street, and Pleasant Avenue, illustrating potential redesigns that could enhance pedestrian and cyclist experiences. The future of Open Streets lies in learning from the initial rollout, addressing its shortcomings, and leveraging community partnerships to create vibrant, safe, and equitable public spaces for all New Yorkers.

Keywords: New York City, COVID-19 pandemic, Open Streets program, pedestrianization, public spaces, equity, community engagement, street redesign

INTRODUCTION

The COVID-19 pandemic overhauled much of society in a matter of weeks, if not days, in the spring of 2020. New York City's streets were no different. With almost all indoor activities temporarily ceasing in March, New Yorkers quickly turned to the city's outdoor public spaces—first parks, but soon streets—to find badly needed space to walk, bike, socialize, and relax in a socially distanced manner. To respond to this, after much prodding from the City Council and my office, the New York City Department of Transportation (DOT) rolled out the “Open Streets” program, which gave New Yorkers dozens of miles of extra street space, largely by pedestrianizing and prohibiting all but local traffic on select streets.

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Received Date: April 24, 2024
Accepted Date: September 11, 2024
Published Date: September 30, 2024

Citation: Aarti Mehta. The Future of Open Streets, New York City. International Journal of Urban Design and Development. 2024; 2(2): 16–31p.

Where successful, Open Streets have-- seemingly out of thin air-- given New Yorkers more open space to walk, bike, scooter, dine, read, socialize, and even enjoy impromptu concerts. The Open Streets program stands out as one of the most significant recent instances of the city implementing a broad tactical urbanism initiative (Lydon, M., & Garcia, A. 2015) [1] Streets from the Lower East

Side to Inwood were quickly transformed into Open Streets that prioritized residents' movement, health, and leisure over traffic. This represents a departure from the city's usual operating process, which typically involves months or years of discussion and predictions before making a final decision. Through this new process, the city was able to quickly roll out potential improvements and track how communities responded to these changes. In most cases, residents flocked to the Open Streets and greatly appreciated the additional open space. In particular, vibrant Open Streets include Pleasant Avenue in East Harlem and Dyckman Street in Inwood. In one case, a new community group, the Loisaída Open Streets [2] Community Coalition, was formed to help manage Avenue B Open Street in the East Village. New Yorkers are fortunate enough to live near successful (Open Streets Progress Report) [3]. Open Streets has received great benefits from DOT. However, most Open Streets have been far from being successful. While some streets have become valuable neighborhood amenities, the unfortunate reality is that many others in the Open Streets program have encountered various problems and have not achieved their full potential. Discussions with local stakeholders involved in the Open Streets program, complaints to my office, and research into other reports discussing Open Streets both in NYC and in other cities in the U.S. have shown three main areas for improvement: equity, vision, and maintenance.

Now that New York City is in a much different place than it was in the spring of 2020, it is time for the DOT and the City as a whole to engage in an honest accounting of the Open Streets program. We must move forward with an improved program that offers community streets to cater to what they need today.

OVERVIEW OF OPEN STREETS

Equity

The selection and implementation of the Open Street program started inequitably. A month after the Open Streets program's debut, only 16% of Black New Yorkers lived within walking distance of an Open Street, compared to 39% of White New Yorkers. Additionally, households with an income of more than \$200,000 are 50% more likely to live near Open Street (Dept of Transportation, 2020) [4]. Major changes are required to make the program more equitable.

One of the greatest shortcomings of the program was its initial ban on programming on Open Streets, thus depriving communities of using the space to provide vital services to their neighbors. Though later overturned by the Mayor, this policy delayed the ability of Open Streets to deliver essential goods, such as food, personal protective equipment, and COVID-19 testing.

Vision

A main criticism of many of the lackluster Open Streets is that they are too short in length, fail to connect to other Open Streets, and are not open for enough hours of the day. According to Transportation Alternatives, in July, half of citywide Open Streets were .16 miles long or shorter, and Open Streets averaged just .22 miles (Dept of Transportation, 2020) [4]. Today, Open Streets in Manhattan average only .18 miles in length (NYC DOT Open Street Locations, 2020) [5] and still fail to connect. This failure to create a true network of connected Open Streets denies pedestrians and cyclists the contiguous paths of Open Streets. Importantly, this failure also means that the program cannot support the COVID-19-induced boom in bicycling, which is especially problematic given the deficiencies in DOT's recent "pop-up bike lane" program. The University Place case study below serves as a prime example of this failure. While residents have advocated for the full length of University Place to be redesigned into a bike greenway for years, DOT instead only designated it as an Open Street on Sundays from 8:30 am to 1:30 pm, which has led to several issues.

Maintenance and Management

One of the most common reasons for the failure of Open Streets thus far has been inadequate barriers and signage delineating Open Streets. Residents on Open Streets across Manhattan have commonly

reported to my office the issue of drivers not respecting Open Streets and driving through them at high speeds, endangering pedestrians, and sometimes even children biking and scootering on the street. This problem has become so frequent on some Open Streets that pedestrians no longer feel safe using the street, thus leading to DOT's eventual removal of the street from the Open Street program. Additionally, some Open Streets have struggled to continue after their barriers have been destroyed by reckless drivers and have not been replaced quickly enough. Because of these issues, the DOT's overall map of Open Streets is more impressive than the actual on-the-ground conditions, while a street may officially be listed by the DOT as an Open Street; in reality, most residents living in the area may not even be aware of this.

Despite these challenges, the Open Streets program has undeniably been a major success and should be sustained indefinitely. The Department of Transportation should regard the original program, which was rapidly launched during a highly challenging time, as a valuable foundation for future enhancements should take lessons learned from both successful and unsuccessful Open Streets and now apply them to a new and revised Open Streets program. Insights from current streets could help inform the selection of new streets, the removal of poorly selected streets, and a potential permanent redesign of successful Open Streets utilizing the DOT's Street redesign toolbox (shared streets, play streets, pedestrian plazas, and protected bike lanes, for example).

The following are three case studies that visualize how DOT could build off its current work by taking lessons learned from these streets and revising and redesigning them: It is important to note that these visuals are not meant to be formal proposals for DOT or local communities to consider for application. All streets face various local challenges. I hope that these visuals inspire community members to think about the many options they can choose from to improve and build upon their current Open Streets in consultation with the DOT.

University Place: Neighborhood Greenway

University Place residents have long attempted to make the street more pedestrian- and bike-friendly, given its proximity to New York University, Washington Square Park, Union Square, residential and commercial buildings, and an abundance of local businesses. In 2019, the Manhattan Community Board #2 formalized this request in a resolution, and one block became a shared street that year. For this reason, University Place was also an early inductee in the Open Streets program, but residents and local stakeholders soon declared it a failure. The eight-block stretch operates on Open Street for only five hours a week. During the short span that pedestrians and cyclists must enjoy Open Street, cars routinely drive down the block, unaware of the Open Street designation because signage and barriers are insufficient.

DOT can work with the community to resolve these problems by embracing the calls from the community board and residents to expand space for pedestrians and cyclists by limiting access to vehicles (CB2 Manhattan Community Board) [6]. DOT could look at a full redesign of the street, currently, which is a two-lane, one-way street with parking on both sides. As requested, bike greenways are a potential solution. The DOT could expand the sidewalk and install a two-way protected bike lane, leaving sufficient room for one moving vehicle lane. The expanded sidewalk would provide extra space for the heavy pedestrian congestion seen throughout the day but could also be used for additional outdoor dining spaces. The delivery of goods to businesses could be accommodated by loading zones on the side streets adjacent to University Place. According to Janet Liff, a long-time resident and member of Community Board 2, and an advocate for a redesigned University Place, "The Community Board has already requested a greenway connecting the two parks. We are just waiting on a plan from the DOT." The university has all the makings of a successful and vibrant street that could favor pedestrians and cyclists, and its failure in the Open Streets program should signal the need to commit to a street design that favors pedestrians and cyclists full-time, not for a few hours once a week (Figure 1).

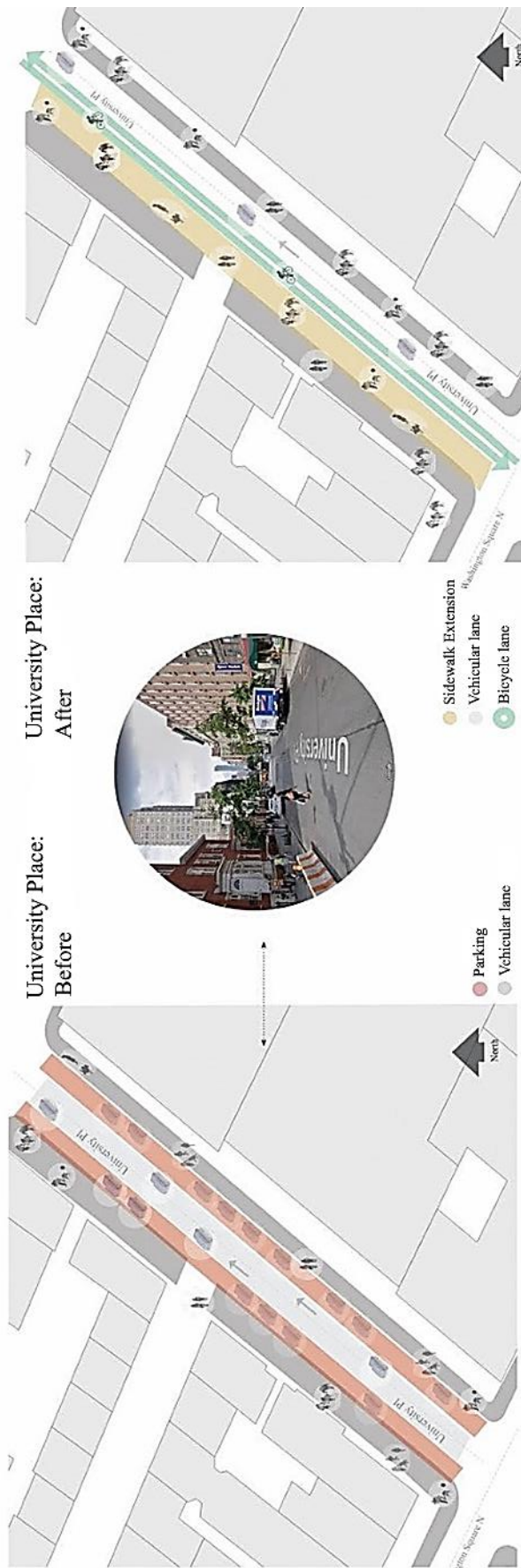


Figure 1. One potential redesign of University Ave could favor cyclists and pedestrians, as residents have demanded for the last few years.

Avenue B: Neighborhood Slow Zone

Like University Place, Avenue B has seen years-long advocacy for street redesign, especially as residents anticipate pedestrians and cyclists will use the street more once the East River Park closes for flood mitigation reconstruction. For these reasons, the DOT quickly designated Avenue B between the 6th and 14th Streets as an Open Street last spring. While Avenue B has been more successful than University Place-- largely because Avenue B is an Open Street every day from 8 am to 8 pm-- it still has struggled with several operational issues. Speeding and reckless drivers using Open Street, inadequate or destroyed barriers, and maintaining emergency access to the local firehouse are all issues that threaten the viability of Avenue B Open Street.

These issues prompted local residents to form the Losaida Open Streets Community Coalition (LOSCC), which took over the management of the Open Street from the local NYPD precinct. With little outside assistance, LOSCC has ensured that Open Street remains a neighborhood amenity by spending its own time, money, and resources to repair damaged signs and barriers and address emergency access issues. Without their intervention, especially repositioning the Open Streets barriers to maintain emergency vehicle access, this Open Street would likely have fled and been removed from the program by the DOT, like many other poorly performing streets around Manhattan. According to John Blasco, a founding member of the LOSCC, “The Open Streets program on Avenue B has provided families and members of our community, who have cooped up at home for months, with the space to be out and about safely. Although there are many challenges to Avenue B, such as drivers speeding through Avenue and FDNY needing access, which has reconfigured our layout, community members are dedicated to this program and understand the need to maintain open space (Figures 3–5). We only want this program to continue and expand.”

There is a clear neighborhood interest in retaining many of the benefits of Open Streets for pedestrians and cyclists, especially in light of the upcoming East River Park closure. Currently, two-way streets have one moving vehicle lane in each direction, two parking lanes on each side, and generally narrow sidewalks. Therefore, one street redesign option, as seen in Figure 2, that could work for the community and consider the FDNY’s need for emergency access could be an expansion of the sidewalk on both sides of the street (with some flexible space left for deliveries and outdoor dining) with a limitation of through-traffic through the installation of “Right Turn Only” lanes and signs every few blocks. This would make for a “traffic lite” street, which would allow local traffic and still be comfortable and safe enough for cyclists without the need for a designated bike lane; speed bumps could also be added to slow vehicles further. The “Right Turn Only” restrictions would not apply to bicycles and, importantly, emergency vehicles, thus ensuring their access is not obstructed. The design as a whole would expand the currently narrow sidewalks on Avenue B, meet the need for safe cycling space, retain local traffic and deliveries, and ensure emergency access to the local firehouse.

Restaurant Row

Prior to COVID-19, Restaurant Row (West 46th Street between the 8th and 9th Avenues) relied heavily on the nearby theater crowd and major food events, including the Taste of Times Square. Since the street was included in the DOT’s outdoor dining program (known as ‘Open Streets: Restaurants’), the street now allows outdoor dining in the parking lane and has quickly become a pedestrian oasis. Open Streets have rapidly become a crucial support for restaurants by allowing them to expand their outdoor seating areas. While this approach has been largely successful for restaurants, nearby residents say the street needs to better balance the needs of diners and non-diners. There is a desire to ensure that businesses have the space they need to operate and that pedestrians and cyclists have enough space to move about in the street.

Row restaurant is a narrow street with a narrow sidewalk, two parking lanes, and one moving vehicle lane, as shown in Figure 6. Permanently turning the block into a pedestrian plaza with an expanded year-round outdoor dining (Figure 7) would meet the needs of businesses, pedestrians, and cyclists.

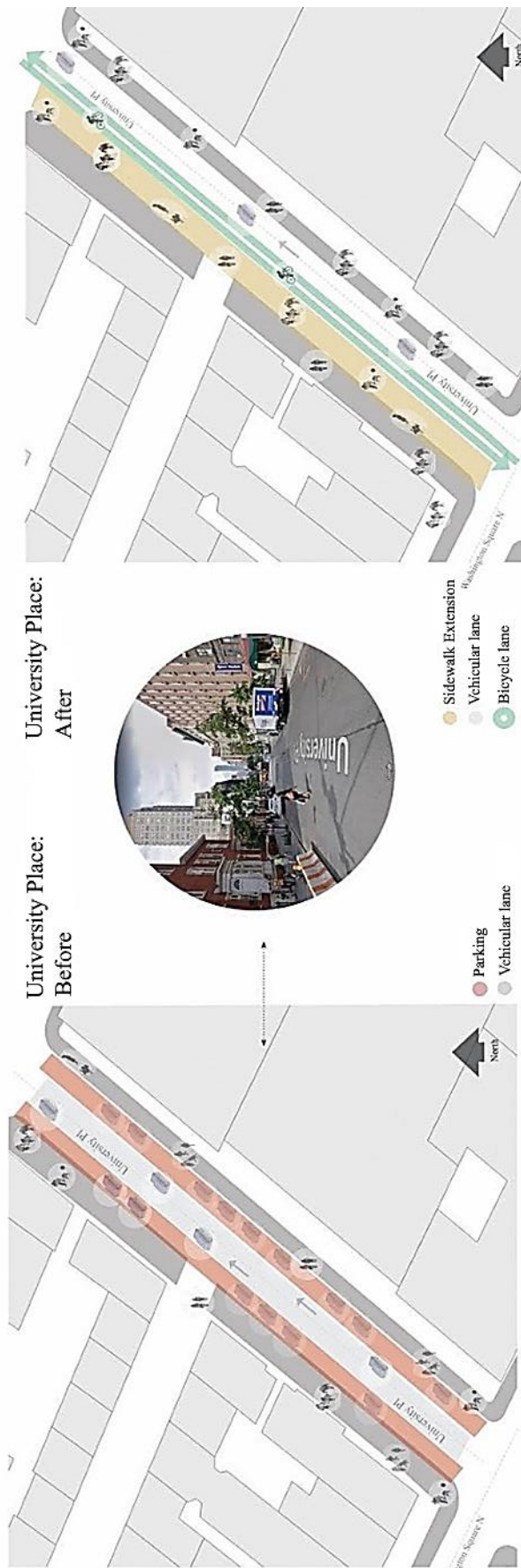


Figure 2. One potential redesign for Avenue B could expand space for pedestrians, make bicycling more comfortable, and still provide the vehicular access that the local firehouse requires.



Figure 3. Members of Leyton orient supporters cricket club (LOSCC) reposition barriers to demarcate Open Street.



Figure 4. Members of LOSCC fix and beautify damaged Open Streets barriers.



Figure 5. Residents roll through the newly expanded public space on Avenue B.

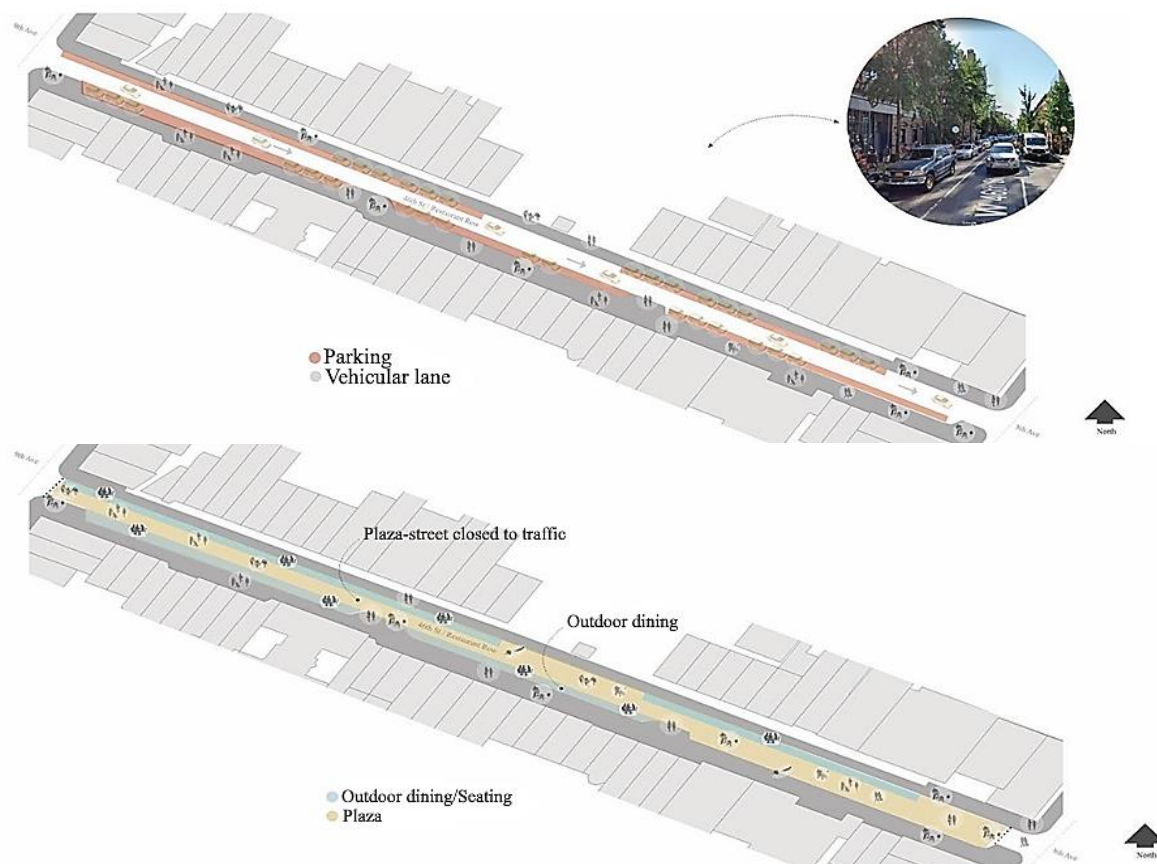


Figure 6. One potential redesign for Restaurant Row could expand space for pedestrians while keeping the newly added space for restaurants that have made the street so vibrant.

While the ‘Open Streets: Restaurants’ program generally allows businesses to expand seating into the traffic lane, residents and stakeholders could look at leaving the former traffic lane space solely for pedestrians and cyclists. This would allow businesses to still use the extra outdoor dining space in the former parking lanes while still giving the street the Restaurant Row feeling that has driven its recovery thus far. The community could also look at replicating this idea on other portions of 46th Street to continue to expand pedestrian space in this pedestrian-heavy district, which would create a contiguous pedestrian.

Broadway: Bike Greenway with Added Pedestrian Space

Thirty-three blocks along Broadway are currently Open Streets, including Broadway between the 36th and 41st streets. The corridor, as a whole, has long been targeted for pedestrian and cyclist improvements. This stretch currently has sidewalk extensions and plazas, a buffered bike lane, two parking lanes, and a moving vehicle lane. Pre-COVID, these six blocks featured a frenzy of activity as they sat in the heart of Midtown, connected to Times Square to the north, and were adjacent to dense clusters of offices, retail, and restaurants. They are also near some of the busiest subways and Citi Bike stations in New York and are often plagued by heavy traffic.

For these reasons, Broadway seemed to be a likely spot for an Open Street, but it has also struggled since its inclusion in the program. At the beginning of the pandemic, when pedestrian volumes were low, the issues on Open Street arguably could have been split between the low pedestrian volumes and vehicles, disregarding the barricades on Open Street. However, as pedestrian traffic in the area increases, a new issue has emerged: vehicles exploit the Open Streets program's exemption for local traffic access and drive through designated pedestrian zones. With pedestrian volumes rising in Midtown as offices reopen and both cyclist and vehicular volumes increase, there is an opportunity to plan (Bikes and Pedestrians, 2022) [7].

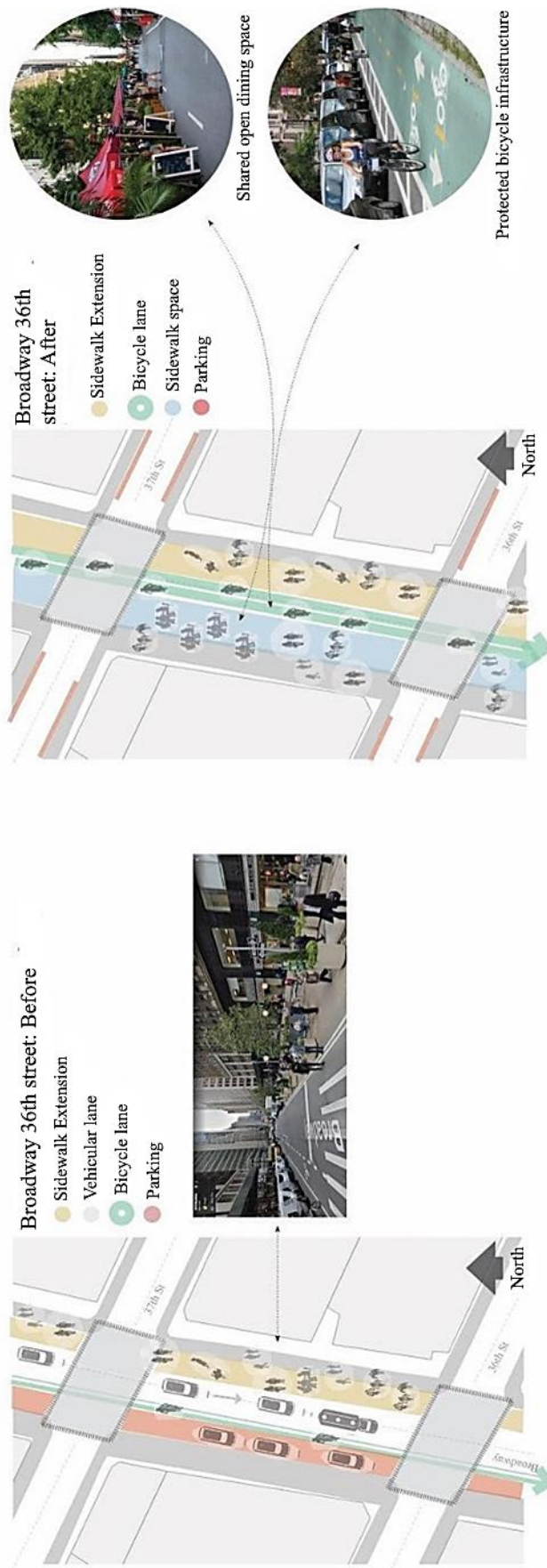


Figure 7. Broadway's Open Street has struggled with vehicles flouting local traffic regulations. Making the streetcar free and expanding space for cyclists and pedestrians could be one successful option.

One option (Figure 7) is to remove vehicles entirely from the Broadway in Midtown and install sidewalk extensions and a two-way bike lane. The increased pedestrian space would be more inviting for office workers, while the protected bike lane would turn Broadway into an important network corridor, connecting cyclists from the Upper West Side and north to portions along Broadway down to Union Square and areas farther south. Where necessary, loading space could be designated on side streets adjacent to Broadway so that businesses can still access deliveries, and additional sidewalk space could be used for outdoor dining.

Pearl Street: Shared Neighborhood Space

Like many other streets previously discussed, Pearl Street's designation as an Open Street in the Financial District was a response to the ongoing demand for increased pedestrian space. Before the pandemic, narrow streets were often congested with pedestrians, vehicles, and bicycles because of the area's density of office buildings, restaurants, retail stores, and subway lines. Despite some maintenance challenges, the Open Street Initiative has been successful. The Department of Transportation should consider adopting a similar approach, such as a shared street model, for permanent redesign.

Transforming Pearl Street into a shared street permits local traffic at reduced speeds, as shown in Figure 8. This concept, successfully implemented by the DOT in other parts of the city, would improve bicycle safety and create a more inviting environment by slowing vehicle traffic without requiring dedicated bike lanes. It would also expand pedestrian space by integrating streets and sidewalks, thus enhancing pedestrian safety and comfort on low-traffic, slow-speed streets. Pearl Street can serve as a prototype for similar streets in Lower Manhattan. Reducing the number of parking spots would allow room for outdoor dining, Citi Bike docks, planters, and public seating, although some spots could remain to allow local businesses to receive deliveries. In many respects, this shared street would operate similarly to the existing Open Street, transforming Pearl Street into a more inviting and serene space for users but with lasting enhancements.

Pleasant Avenue: Community Hub

Pleasant Avenue (between East 118th and 120th Streets) stands out as one of the most successful Open Streets in the city, significantly expanding open spaces for residents, aiding in the delivery of essential services, and enhancing community cohesion during its relatively short period as an Open Street (Figure 9). Initially, Pleasant Avenue was not selected for this designation; however, after sustained advocacy from the local community and my office, it was ultimately chosen.

One complaint lodged against the Open Streets program was that, at the outset, it banned programming on Open Streets, merely focusing on expanding pedestrian space. This overlooked the potential of programming to bring together communities and provide essential services to residents. Thankfully, the Mayor later reversed this policy via executive order, paving the way for Pleasant Ave.'s success. After Pleasant Avenue was designated as an Open Street, local organizations, including Uptown Grand Central (BID formation, 2020) [8] the Pleasant Village Community Garden, and residents of Wagner Houses involved in the Mayor's Action Plan for Neighborhood Safety (MAP), effectively utilized the newly available space to provide residents with essential services. These services included access to healthy food, personal protective equipment (PPE), COVID-19 testing, and flu shots (Figures 10 and 11), and established the space as a community meeting place by hosting weekly movie nights, community art-making sessions, and organizing other programs that, in part, were born out of MAP's efforts to reduce gun violence in the community by enlivening streets (Figures 12 and 13). While these efforts were key to making Pleasant Ave., one of the most successful Open Streets in the city, they were also costly for these organizations: DOT only provided approvals, and NYPD only provided barriers. Uptown Grand Central Director Carey King estimated that it would cost just \$10,000 to maintain the Open Streets at Pleasant Ave. and East 101st Street, the two sites managed by the organization.

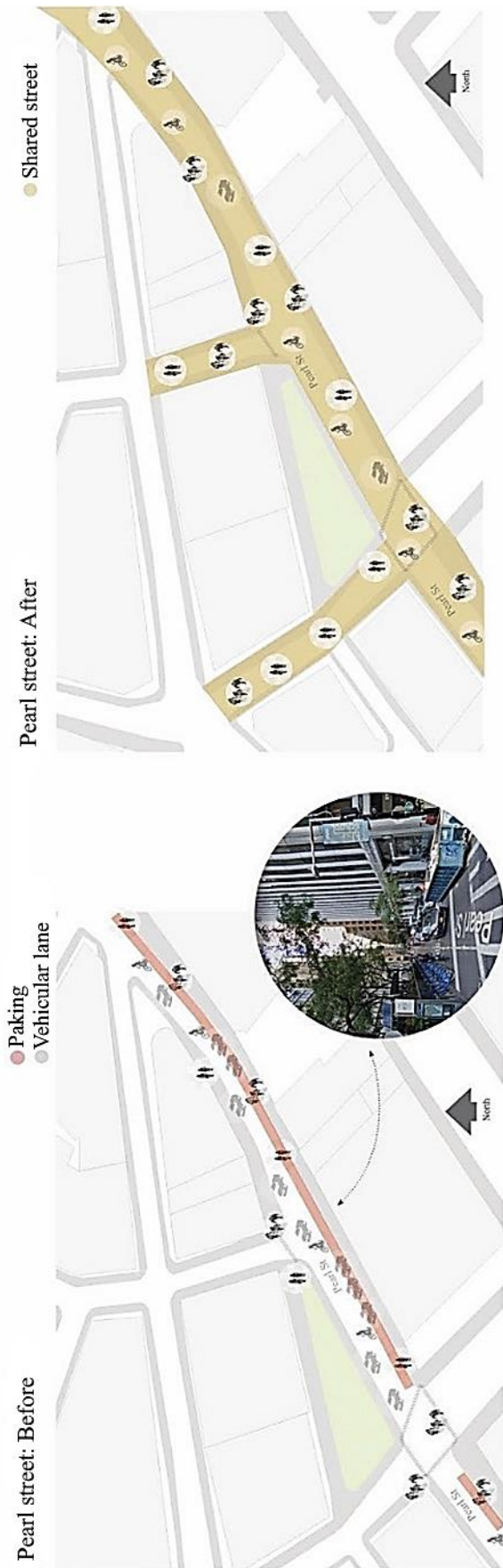


Figure 8. One potential redesign for Pearl Street, and many other similar streets in the Financial District, could expand pedestrian space and make the street more comfortable for cyclists through the creation of a shared street, which would still allow a few vehicles at slow speeds.

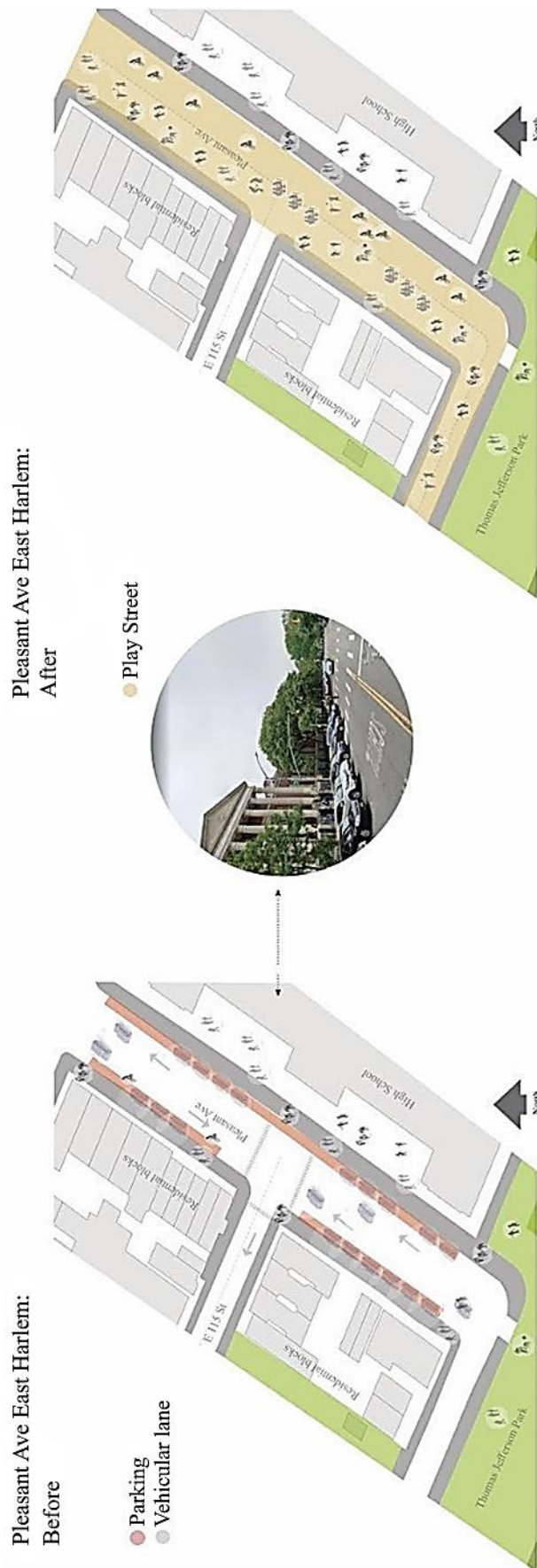


Figure 9. One potential redesign of Pleasant Ave could expand open space for residents and particularly school children by creating a shared (play) street, which could feature playground equipment and other seating and transition well into other greenspaces and schools in the area.



Figure 10. Activities and programming like the Bike powered slushie machine.



Figure 11. Barricade painting Pleasant Ave.



Figures 12. Community table Movie night on Pleasant.



Figure 13. COVID-19 testing and flu shots.

The DOT should work with the community to build off the major successes achieved by Open Street. A shared (play) street—expanded farther south to East 114th Street—would continue this successful

community programming, create space for outdoor classes for nearby schools, and blend the connection between the street and the neighboring Thomas Jefferson Park. Playground equipment can be added to the shared streets for children and nearby schools. Like the Pearl Street shared street, this concept would still allow for slow local traffic and local deliveries. A Pleasant Ave. Shared Street would amplify the positive effects of this already immensely successful Open Street.

RECOMMENDATIONS

Incorporate Effective Open Streets into DOT's Existing Redesign Framework

Although some Open Streets have faced maintenance challenges, others have been highly successful. The case studies and illustrations above show how DOT can build existing sites by transitioning them into the agency's standardized redesign program and incorporating potential improvements based on the program's success over the last few months. This step would also help alleviate some of the Open Street program issues pertaining to maintenance and barriers.

Make the Open Streets Program Permanent and Expand It

DOT's Open Streets program has been a major success because of its ability to rapidly expand temporary open spaces, something not previously done in New York. Despite some mixed results, communities should be able to keep their Open Streets as is or upgrade them as part of the DOT's other redesign programs, as mentioned above.

The DOT could also potentially use the Open Streets program as a temporary community engagement tool. When DOT is looking to make changes to a street—especially those relating to pedestrians, cyclists, and outdoor dining—the agency could quickly and temporarily turn the street into an Open Street to alert residents to the possible street changes being discussed and to get residents to think about how or if their street could be reinvented. Information about community meetings can be posted on Open Street barriers using QR codes or website links directing residents to online community engagement forums.

Correct Outstanding Program Issues Pertaining to Equity, Vision, Maintenance, and Management

The DOT must continue to address issues related to equity, vision, maintenance, and management that residents, advocates, and elected officials have attracted attention to. Transitioning Open Streets into DOT's traditional redesign programs should help with maintenance and management issues. For streets that continue to function as Open Streets, DOT should invest in heavier, less moveable barriers that it can distribute to community groups rather than relying on the NYPD's barriers.

DOT should also look at improving the program by refocusing to look more deeply into the quality of each Open Street instead of just the quantity of total Open Streets. Rather than designating hundreds of one- or two-block stretches as Open Streets, the agency should spend more time identifying a smaller number of Open Streets that could extend to several blocks at a minimum. This was successfully done in Oakland, California, where a small number of Open Streets extend across many blocks and connect (Oakland Slow Streets, 2020) [9]. Oakland has a large number of total miles of Open Streets, and importantly, it has a network in which pedestrians and cyclists can walk and ride along.

The process of identifying longer Open Streets would also enable DOT to expand the types of neighborhood partners it works with beyond Business Improvement Districts. While BIDs are certainly worthy partners, an emphasis on working with them to create Open Streets favors communities where BIDs have a significant presence. Lower-income and non-white neighborhoods are less likely to have BID. One of the great advantages of the Open Streets program is that it offers cost-effective ways to create additional safe spaces for bicycle travel and socially distanced pedestrian activities. Overemphasis on working with BIDs makes it more difficult to distribute these benefits evenly.

The Pleasant Ave. Open Street should serve as an example worth emulating. While the Open Street did not open at the program's outset, DOT was eventually able to find an excellent partnership with Uptown Grand Central and MAP at Wagner Houses, amongst other notable partners. The agency should spend the extra time required to find quality neighborhood groups to manage Open Streets to produce a smaller number of high-quality, well-connected locations.

Ensure Adequate Funding for Community Organizations Managing Open Streets

In many instances, the Department of Transportation has delegated the management of the Open Streets program to local community organizations. This can be a strong strategy for some areas, as local organizations are likely to know how to best plan and program streets, but this also raises funding challenges for these organizations. For example, to outfit and program the immensely successful Pleasant Ave. Open Street (and East 101st Street Open Street), Uptown Grand Central spent nearly \$10,000 of its funds on local program partners and youth volunteers to manage barricades and banners. Without Uptown Grand Central's support, Pleasant Ave would not have succeeded. The DOT must recognize the integral role that local partners play in managing and programming Open Streets and adequately fund them (New York City's Open Streets) [10].

CONCLUSION

The Open Streets program, initiated by the New York City Department of Transportation in response to the COVID-19 pandemic, represented a bold shift in urban space management. By transforming streets into pedestrian-friendly zones, the program provided vital outdoor spaces for walking, biking, and socializing during social distancing. While the program achieved notable success, such as enhancing public space and fostering community engagement in some areas, it also faced significant challenges.

Implementing Open Streets has revealed disparities in equity, connectivity, and maintenance shortcomings. The initial distribution favored affluent and predominantly white neighborhoods, while many Open Streets were too short, lacked continuous connections, and had inadequate operating hours. Maintenance issues, including ineffective barriers and signage, often lead to non-compliance and compromised pedestrian safety.

To address these issues and enhance the program's effectiveness, the report recommends several key actions. First, successful Open Streets should be transitioned into permanent redesigns under the DOT's established programs. Expanding the program to cover more areas and address equity and maintenance concerns is essential. Investments in robust barriers and focus on quality over quantity in street designations are crucial. Furthermore, providing adequate funding to community organizations managing Open Streets is necessary for their sustainability and success.

The report includes case studies of University Place, Avenue B, Restaurant Row, Broadway, Pearl Street, and Pleasant Avenue, each illustrating potential improvements and successful elements. The future of Open Streets depends on leveraging insights from past experiences to develop a more integrated, equitable, and well-maintained public space network. By leveraging community partnerships and addressing the program's shortcomings, DOT can build on its initial successes to create vibrant and accessible public spaces for all New Yorkers.

REFERENCES

1. Lydon M, Garcia A. Tactical urbanism: short-term action for long-term change. Washington (USA): Island Press; 2015. DOI: 10.5822/978-1-61091-567-0
2. Streets LO. GoogleGoogle [Online]. Sites.google.com. Available from: <https://sites.google.com/view/loisaidaopenstreets/home>
3. Open Streets progress report [Online]. Transportation Alternatives. Available from: <https://www.transalt.org/open-streets-progress-report>

4. Dept of Transportation. Open Streets locations [Online]. Cityofnewyork.us; 2020. Available from: <https://data.cityofnewyork.us/Health/Open-Streets-Locations/uiay-nctu>
5. NYC D, Streets O. Open Streets [Online]. Available from: <https://www.nyc.gov/html/dot/html//pedestrians/openstreets.shtml>
6. CB2 Manhattan Community Board – Manhattan Community Board [Online]. Cbmanhattan.cityofnewyork.us. Available from: <https://cbmanhattan.cityofnewyork.us/cb2/>
7. Bikes and pedestrians [Online]. NYC Mayor’s Office of Climate and Environmental Justice; 2022. Available from: <https://climate.cityofnewyork.us/subtopics/bikes-and-pedestrians/#:~:text=In%202020%2C%20in%20response%20to>
8. BID formation [Online]. Harlem, East Harlem, UPTOWN. Available from: <https://uptowngrandcentral.org/bid-formation>
9. Oakland slow streets [Online]. City of Oakland: USA. Available from: <https://www.oaklandca.gov/projects/oakland-slow-streets>
10. The unrealized potential of New York City’s Open Streets [Online]. Transportation Alternatives. Available from: <https://transalt.org/reports-list/the-unrealized-potential-of-new-york-citys-open-streets>