Public Life & Urban Justice in NYC’s Plazas

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Gehl Studio is an urban design and research consultancy with expertise in the fields of architecture, urban design, landscape architecture and city planning. Gehl addresses global trends with a people-focused approach, utilizing empirical analysis to understand how the built environment can promote well-being. Gehl’s work is based on the human dimension – the built environment’s effect on social interaction between people. We consider lively and widely used public spaces to be vital keys to quality of life in cities and to overall wellbeing.

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J. Max Bond Center on Design
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J. Max Bond Center on Design for the Just City at the Bernard and Anne Spitzer School of Architecture at the City College of New York, believes that design can have a positive impact on urban reform in our nation’s cities. Founded in 2011, the Bond Center is dedicated to the advancement of design practice, education, research and advocacy in ways that build and sustain resilient and just communities, cities and regions.

Transportation Alternatives

Transportation Alternatives’ mission is to reclaim New York City’s streets from the automobile and to promote bicycling, walking, public transit. With 100,000 active supporters and a committee of activists working locally in every borough, T.A. fights for the installation of infrastructure improvements that reduce speeding and traffic crashes, save lives and improve everyday transportation for all New Yorkers.

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Executive Summary

Our collaboration and this study starts with a simple question: can the design of public space have a positive impact on public life and urban justice? This report, ‘Public Life and Urban Justice in NYC Plazas’, is the culmination of an 18 month collaboration between Gehl Studio, the J. Max Bond Center and Transportation Alternatives to develop, investigate, measure and evaluate how New York City’s Public Plaza Program and seven of its recently implemented plazas contribute to quality public life and greater social justice. The NYC Plaza program is a unique initiative that has leveraged community support to create 61 plazas across the city. The economic benefits of the program are widely documented, but little is known about how these places perform for people in terms of the quality of public space and robustness of public life.

We developed a unique values-based indicator framework with 74 distinct metrics designed to not only understand traditional economic measures of success, but the ways in which the design, design process and ongoing management of these spaces effects issues of equity, access, connectivity, choice, diversity, ownership, participation, inclusion, beauty, health, creative innovation, and public space and life. While there are 74 unique metrics, there are a few key simple ones, such as who uses the plazas, when they spend time there, and what activities they partake in.

This report describes our study motivations, methods of data collection and analysis, key comparative findings, individual plaza findings, and recommendations for plaza improvements and further development and use of the indicator tool.

Overall, regarding plaza performance, we found that the plazas uniformly provide choice, access, transit connectivity, participation, creative innovation, and beauty. When plazas are in primarily residential areas, they are mostly visited by the local community living within a two mile radius, support meeting or recognizing new people, and generate a high rate of a sense of ownership. To a lesser extent, the analysis revealed that not all plazas have more than moderate levels of diversity, inclusion, and social connectivity. These measures in particular revealed varying degrees of positive public life relative to social interaction, activities, and gender, ethnic and generational diversity. With regard to equity, the hardest value to measure design’s impact on, the study showed the addition of plazas improved equitable distribution of initial capital resources, increased neighborhood access to open space, and that users of the plaza seemed to equitably mirror the population of the local neighborhood. However, there was less than equitable funding for ongoing maintenance, management and programming, which was directly related to the overall wealth of the plaza neighborhood.

Findings related to the usefulness of the indicator framework tool revealed that in order to assess public life and social and spatial justice, observational surveys and intercept surveys (actually talking to users of the plaza) were essential to collecting an accurate assessment of the plaza’s impact. Collecting this data effectively required manpower and multiple visits to the plazas to assemble a useful sample size from which to draw conclusions.

This report concludes by offering recommendations to the Mayor’s Office, the NYCDOT, DCP, HPD, DOHMH, and plaza management organizations about ways plaza implementation, funding, design, and programming might evolve to achieve even greater improvements to public life and urban justice. An assessment of the current indicator framework and ways it could be improved for broader use by cities and communities is also provided.

Gehl

PSPL Methodology is based on two core indicators:

JMBC

The Just City Methodology, is based on eleven core indicators:

How can we mesh these indicators together to study connections between public life, public space, and urban (social and spatial) justice?

How can we understand who benefits from new public spaces?
Introduction
The NYC Plaza Program

Over the past seven years, the NYC Department of Transportation has partnered with community organizations to create new public plazas in neighborhoods lacking open space across the city.

Today, there are 61 plazas in all five boroughs. The plazas range in size from 3,000 square feet to 50,000, and in location, from the wealthiest NYC neighborhoods, such as the Meatpacking district in Manhattan, to some of the poorest, such as New Lots in East New York, Brooklyn.

- Started in 2008 with flagship Greenlight for Midtown projects along Broadway.
- In 2009, the program expanded citywide and became available to community groups that could demonstrate local support.
- Community groups apply to the NYC DOT and must demonstrate local support and ability to maintain and operate the space.
- The plaza program receives long-term funding from PlaNYC 2030, NYC’s long-range plan released in 2007. This covers initial implementation and furnishings by the Department of Transportation (DOT). Community organizations are responsible for ongoing maintenance and operational costs.

The plaza program reclaims existing street space, and makes it space for all to use.
Measuring Urban Change

How do we measure the social impact of 55 new public plazas and the reclamation of 400,000 square feet of road space for public use?

In less than a decade, the paradigm for New York City’s roads transformed in a way that it had not since vehicles were invented over 100 years ago.

In 2007, Gehl conducted its first ‘Public Space Public Life’ survey in NYC. The findings were integrated into the NYCDOT’s ‘World Class Streets’ report and led to a range of public space interventions, from new cycling infrastructure to pedestrian plazas on formerly vehicular streets.

In 2010, the City began studying the impacts of these spaces, primarily with a focus on economic impact on sites in central business districts. Key metrics included economic vitality [sales tax receipts, commercial vacancies], user satisfaction, and the number of users.

While rising property values and retail sales demonstrated the economic success of these reclaimed spaces, there was a lack of information on the social impacts. For example, at Pearl Street Plaza in Lower Manhattan, retail sales increased by 172%, but there was a lack of data collected to demonstrate improvements to residents’ or plaza users’ quality of life.

Precedents for Measuring Urban Change

JMBC reviewed existing methods to measure impact and change in cities:

PlaNYC Sustainability Indicators Sustainability
This program was launched in 2007 and establishes a set of 29 sustainability indicators, largely seeking to measure environmental systems, such as air quality, waste supply and waterways, energy, and climate change.

Gross National Happiness Index Human Wellbeing
This survey-based program was launched in 2010 and is used by the Bhutan government to assess human wellbeing, quality of life and other non-economic aspects of wellbeing within the country.

Transactions Transformations Translations | Social Movement
Launched in 2011 this program establishes a set of 10 participation and social movement building indicators. Each one of those indicators has a ‘transaction’ (quantitative) and a ‘transformation’ (qualitative) subcategory.

CEOs for Cities | Vitality
Launched in 2006 and revised in 2012. It establishes a set of indicators that seek to measure how urban leaders can focus on making cities more connected, innovative and talented. The goal is to encourage investment in a city’s distinctive assets.

Public Realm Impact Studies in NYC Have Found...

Traffic (2000-2010)
- 2.4% decline in citywide traffic volumes
- 5% less motor vehicle registrations
- 10% growth in bus and subway ridership (2000-2010)

Mode Share (2000-2010)
- 13% increase in commuter cycling

Safety (2000-2010)
- 30% fewer traffic fatalities
- 50% less speeding on major arterial roads (2000-2010)

Public Support
- 66% of New Yorkers support bike lanes
- 72% support bike share

Increased Retail Sales
- +172% on Pearl Street, Brooklyn (compared to 18% borough wide)
- +49% 3 years after installation of the 9th Ave cycle track (16x the borough growth rate of 3%)
- +14% at businesses fronting new seating areas

Reduced Commercial Vacancy Rates
- +49% after Union Square was extended for pedestrians and cyclists

Increased Sales along Protected Bus Lanes
- +72% for small businesses in the Bronx

Source: NYCDOT, 2010-2013

Source: Design for the Just City, Draft Report on Summary of Findings, JMBC 2013
Evaluating Impact

Who benefits from these urban changes?

While the impacts of the NYC Plaza Program appear positive, they don’t tell the entire story of how the reclaimed spaces are being used and by whom. They do not help understand how the plazas relate to - if at all - other conditions in the city, such as income disparity and growing inequality.

To understand if public space design can promote more equitable access to social, cultural, and economic opportunities, a clear, easy to use method to measure and evaluate who feels invited to new public spaces, or who doesn’t, how the spaces are used, and what types of economic or social opportunities they foster is needed.

At the same time that NYC is creating a new model for how to re-purpose urban streets, it’s becoming one of the most polarized cities in the world in terms of quality of life disparities between rich and poor. Yet the impact of design and its affect on the spatial manifestation of these disparities remains largely understudied.

New York has its first new mayor in 12 years. De Blasio’s election victory reflects enthusiasm for a progressive leader bold enough to flag income disparity and affordability as New York’s most pressing issues.

This study builds on the momentum of both Bloomberg’s transportation and public space programs and de Blasio’s goals to develop projects via a more inclusive, equitable process. This study creates an indicator framework tool to better understand connections between design and social and spatial justice.
Why Study Public Space, Public Life, and Urban Justice

How can the plazas serve as case studies for how to measure the impacts of new public space on public life and urban justice?

This study looked at seven sites: two in Manhattan, two in Queens, and three in Brooklyn. They range in size from 3,800 to 40,000 square feet and in how they began: Corona Plaza was a 5-year community organizing initiative, while Diversity Plaza was led by a few committed residents. In Brooklyn, Zion Plaza is maintained by a dedicated local BID, and New Lots Plaza by a small business owner. Flatiron and Meatpacking - in Manhattan’s central business district - are well funded. They all are in neighborhoods that lack open space.

The study plazas were chosen for their diversity in location, size and local population and as a way to understand how movement, use, activity and the demographics of plaza visitors and passersby varied despite geographic and socio-demographic differences.

While the diversity of the plaza sites makes 1:1 comparisons difficult, it allows for an evaluation of how perception and use are similar or different despite socio-economic and geographic differences, as well as variation in plaza history and management structure.
Core Research Agenda

How does reclaimed street space - in the form of NYC public plazas - impact urban justice?

NYC’s population is growing. So is the gap between rich and poor. At the same time, public space is being reshaped through a people-first lens. Community groups have protested public space out of fear that it will accelerate neighborhood change and exacerbate disparities. How can we investigate the relationship between public space improvements, neighborhood change, and who benefits?

Can the impact of public space on quality of life be measured?

Can an improved public realm perform economically and support the social needs of communities?

Who benefits from public space improvements?

Urban Justice Research Agenda

Are reclaimed streets providing more equitable distribution of open space?

Do new spaces promote greater diversity of users and choices of outdoor activity?

Are public places facilitating greater transit and social connectivity?

Can improved access to public space promote greater neighborhood health and wellness?

Can these spaces deepen a sense of community participation, belonging and ownership by residents, businesses, and stakeholders?

Do the new spaces inspire creativity and improve beauty in the neighborhood?
Methods
A Combined Research Approach

By applying Gehl Studio’s method of design ethnography and the J. Max Bond Center’s ‘Just City’ values, this project seeks to answer whether the impact of design on urban justice can be measured.

The JMBC Just City values were used as the overarching indicator framework. Within each value, a combination of public life (how people use space and who they are), public space (quality and design of the space) indicators and urban justice indicators (human health, economic, civic, culture, aesthetic, and environmental wellbeing) were included.

The combined approach looks in more detail at not only what’s happening in a space, but at who is there and how access, use, movement, and ownership differs depending on design, geography, and local socio-economic demographics.

Four methods were used to observe functionality, conditions, and behavior: intercept surveys, observational surveys, desktop research, and interviews. We engaged directly with users about their experience, researched the local socio-demographic and land use context, and interviewed plaza stakeholders and managers to understand the history and goals of each plaza.

Gehl & JMBC Project Indicators & Measurement Frameworks

PUBLIC SPACE

- Land Use
- Mobility Patterns
- Plaza Design
- Plaza Edge
- Cost
- Seating Opportunities
- Quality Criteria
- Commute Time & Rates
- Ownership
- Social Connectivity
- Who: Income
- Who: Race/Ethnicity
- Beauty
- Creative Innovation
- Health and Wellness

PUBLIC LIFE

- Pedestrian Volumes
- Age
- Gender
- Safety
- Time Spent Outside
- Stewardship

URBAN JUSTICE

- Equity
- Choice
- Access
- Connectivity
- Diversity
- Ownership
- Participation
- Inclusion / Belonging

* Metrics added for this project
JMBC Urban Justice Indicators

JMBC has assembled a collection of metrics, both social and spatial, designed to evaluate the ways the design of the built environment affects six wellbeing indicators – health, economy, civics, culture, ecology and environmental design.

For the purpose of evaluating urban justice and the public realm, JMBC has selected the following values for this indicator framework tool:

1. **Equity.** Designing for equity in the public realm examines how the plaza increases the overall amount of accessible open space for the neighborhood and if its costs and operating budgets are structured on par with other plazas in the city.

2. **Ownership.** Designing for ownership measures how the plaza promotes one’s belief that the space belongs to their neighborhood and an individual sense of stewardship for the plaza’s activities and upkeep.

3. **Choice.** Designing for choice examines whether users and the community have multiple options and flexibility for what they do in the plaza and how they configure the plaza for different activities.

4. **Access.** Designing for access measures whether the plaza can be easily and safely entered without physical obstruction or restrictive regulation, how people get there, and if access to amenities changed or increased.

5. **Connectivity.** Designing for connectivity measures if the plaza is sufficiently connected to varied modes of transportation and amenities. It also measures whether the plaza users feel connected to one another, forming exchanges and/or relationships between one another.

6. **Diversity.** Designing for diversity measures whether the plaza offers a range of activities and program options that reflect the cultures of its neighborhood and/or users. It also measures whether the plaza attracts a diverse population of users.

7. **Participation.** Designing for participation examines how people use the plaza and frequency of use. It examines whether area residents are engaged in the plaza’s design, programming, management and upkeep.

8. **Inclusion and Belonging.** Designing for inclusion & belonging looks at how the plaza improves one’s sense of being accepted regardless of difference, and a feeling of safety.

9. **Beauty.** Designing for beauty measures whether the plaza elevates the physical aesthetics of the neighborhood.

10. **Creative innovation.** Designing for creative innovation examines whether the plaza deploys unique and creative solutions to address the deficit of active open space in the neighborhood.

11. **Health and Wellness.** Designing for Health and Wellness measures if the plaza provides active and passive outdoor activities that help improve human health conditions.

Gehl Public Life, Public Space Indicators

For 40 years, Gehl has used the public space, public life survey to study what people do in public (how they move, where they stay) and how the physical environment influences their behavior.

The following are the metrics Gehl has used to study the relationship between life and form in public space.

**Public Life**
- Age: Children, Adults, Seniors
- Gender: Men, Women

**Public Space**
- Movement: Pedestrians, Cyclists
- Activity: Stationary (sitting, standing), Active (exercising, playing)

**Physical Conditions**
- Barriers to walking or cycling (i.e. obstacles on sidewalks)
- Distribution of space (how wide are the sidewalks? The streets? Are there bus lanes or cycle tracks?)

**Quality of the Design:**
- Protection, Comfort and Delight
  - How is the space protected from traffic, crime or unpleasant sensory experiences?
  - How comfortable is it in terms of being able to hear, talk and see?
  - How much opportunity exists for delight and joy?
See Appendix A for full list of metrics.
Data Collection Methods

1. Desktop Research
   A number of sources were used to collect data on demographics, residential and worker population, land use and open space, political and community boundaries, police precincts, and community facilities.

2. Observational Surveys
   Pedestrian count and stationary activity surveys collected detailed information on where people walk, activities they engage in, and age and gender. Data collectors also assessed the quality and condition of outdoor seating, paving materials, nearby facades, and other qualitative factors that affect the public realm.

   Surveys were done on a weekday and weekend day, between 8am-8pm, in October 2014.

3. Intercept Surveys
   The intercept survey gathered information from users about demographics, perception and use of the plaza, and reactions to the Just City values.

   489 surveys were collected at the seven plazas. Surveys were done on a weekday and weekend day, between 8am-8pm, in October 2014.

4. Interviews with Plaza Managers
   Questions covered programming, operational budgets and funding sources, management structure, maintenance costs, staff makeup, civic participation, neighborhood and business conditions, security and safety, and rules and regulations.

   Interviews were conducted during the plaza study site selection phase, in September 2014, and in the spring of 2015 to share preliminary findings and gather additional information. The Neighborhood Plaza Partnership was an instrumental resource in setting up preliminary meetings with plaza managers.
Plaza Study Areas & Surveys Collected

For the seven plazas studied, data was collected at the Census tract level and included tracts with centroids within the half-mile buffer around the plaza. This was considered the typical catchment area by plaza managers we spoke to and is also a 10-minute walk from the plaza.

Plaza Neighborhood Boundaries

Intercept Surveys Collected

Total Surveys collected, all plazas: 489

- Income: 29% of respondents made $0-14,999, 34% made $15,000-$49,999, 20% made $50,000-$59,999 and 16% $100,000 or more.
- Gender: 40% of respondents to the intercept surveys identified as Female and 59% as Male. Less than 1% of respondents identified as Other.
- Race: Survey respondents were predominantly white at 41%, or Hispanic/Latino at 28%. 13% were Asian, 14% were Black/African American. Less than 5% were Two/More Races.
- Age: Survey respondents were predominantly 25-44 years old at 47%, followed by 45-64 years old at 29%. Few surveys were collected from children 0-14 years old and seniors 65+.
- Language: 84% of the intercept surveys were collected in English and 16% in Spanish.

Surveys were collected on a weekday and weekend day, between 8am-8pm, in October 2014.

Timeline

- Site Selection & Background Research: Summer 2014
- Methodology Development: Fall 2014
- Surveying and Field Work: Winter 2014
- Data Analysis: Spring 2015
- Follow-up Interviews: Summer 2015
- Key Findings and Synthesis: Fall 2015
- Presentation of Findings: Report
Findings
Summary of Findings

The following chapter outlines key findings from the analysis. While the findings at each plaza are unique, there were many shared trends across the plazas. This chapter outlines findings related to the plazas overall and key findings for six of the seven plazas.

In summary, the research found that plazas are neighborhood destinations that local residents feel passionately about. At the Queens and Brooklyn plazas, the majority of visitors were from within a 2 mile radius, and a majority reported living in the neighborhood for 15-20 years. The Manhattan plazas studied have a wider catchment area, with Flatiron serving people from around the City and Meatpacking serving many tourists. This was particularly interesting in light of one of the questions driving this research: who benefits from these new open spaces, existing residents or newcomers?

Whether local or not, the majority of respondents told us the plazas are ‘theirs’. Men and women alike said they improve the appearance of the area and make it safer.

While many of the plazas are located adjacent to subway or bus stations, and are places that people walk through during their commutes, they also appear to be places where people enjoy spending time. And, the stickiness of a place does not depend on the quality of the space, as demonstrated by Flatiron and Corona. These two plazas have the greatest exposure to vehicle or subway noise and air pollution, but also the highest rates of activity, as compared to Zion and Meatpacking, which have the highest design quality, but lower rates of use. It appears that the value of these new open spaces is so great that even non-perfect environmental conditions make them important community assets.

While the plazas do not necessarily facilitate racial/ethnic diversity and are fairly homogeneous, they do serve as a platform to meet or recognize new people and connect with others, especially at the plazas in residential areas. 80% of respondents at Corona reported meeting or recognizing new people, while less than 20% did at Meatpacking.

There are some major similarities between the plazas - walking activity at Corona in Queens rivals that at Manhattan’s Flatiron. Yet while the number of people using these two plazas is similar, their maintenance budgets are not, and Corona Plaza has a fraction of Flatiron’s annual budget. This results in challenges to maintain the cleanliness of the space and setup furniture consistently. One might ask, if these challenges were addressed would the plazas in residential areas be able to invite for even more people and public life?
Summary of Findings

1. Equitable Beginnings but Financial Challenges Thereafter

Indicator
Equity
Public Life
Public Space
The plazas are equitable in that they increase open space, serve the local community and start off with the same implementation funds and design palette. But challenges arise from operations funding coming from the local community.

2. People Choose to Visit, and Have Choices of Activity

Indicator
Choice
Public Life
Public Space
Choice measured by the public life of the plaza found that plazas are ’stickier’ – more people stay relative to the number that walk by – on the weekends, indicating that people choose to visit when they have free time. Thousands of people walk through them daily too.

3. Inviting, Open and Accessible Retreats in the City

Indicator
Access
Public Life
Public Space
Access measured by accessible design and to new land uses or neighborhood services was high for all plazas. Plaza edges are free from barriers, provide high visibility for pedestrians and create direct connections to adjacent land uses, such as retail or transport.

4. Plazas are Physical, but not Always Social Connectors

Indicator
Connectivity
Public Life
Public Space
The plazas support high transportation connectivity, but uneven social connectivity, which is higher in the outer borough plazas than in the Manhattan plazas.

5. Different People & Places but Plazas not That Racially Diverse

Indicator
Diversity
Public Life
Public Space
NYC’s residential patterns are segregated by race/ethnicity and the plazas reflect this. While racial/ethnic homogeneity at the plazas where visitors are local matches citywide patterns, it is less clear why there is a match at the Manhattan plazas, which attract people from the entire City or from outside of NY.

6. Plazas have Shared Worth and Value

Indicator
Ownership
Public Life
Public Space
People want to take care of their plazas. While intercept surveys don’t necessarily reflect what people would do, they indicate that people feel a sense of stewardship and ownership for the plazas, across the board.

7. Good Plaza Use Seven Days A Week

Indicator
Participation
Public Life
Plazas create a place for locals to participate in their community, on a regular basis.

8. Who Is In The Plaza and Who Is Not

Indicator
Inclusion & Belonging
Public Life
Inclusion and Belonging measured by demographic inclusion in the plaza relative to neighborhood demographics found plazas to support income diversity.

9. Plazas are Considered Attractive Places in the City

Indicator
Beauty
Public Space
Beauty measured by the aesthetics of design features found very high levels of satisfaction - across demographics - with the overall appearance of the area.

10. A Temporary Intervention with Long Term Impacts

Indicator
Creative Innovation
Public Space
The plaza program is an innovative new public space appropriation program led by city government, that engages local partners in developing open space in their neighborhoods.

11. Spaces for Healthy Living

Indicator
Health & Wellness
Public Life
Public Space
Plazas increase the amount of time people spend outside, but to understand more direct impacts on health, a longitudinal study is necessary.
Plazas Surveyed

Manhattan

Meatpacking Plaza
Location
Meatpacking / West Village
Intersection of Gansevoort Street, Little West 12th Street, Greenwich Street and 9th Avenue
Size District Population
18,488 sq. ft. (DOT) 146,491
Design Features
• Large white planters sponsored by Theory
• Bollards
• Folding chairs: white
• Tables
• Cobblestone street
Local Partner & Maintenance
Meatpacking Improvement Association (MPIA), Meatpacking District Initiative (MPDI)

Meatpacking District located between E 22nd Street and W 25th Street along Broadway and 5th Avenue
Size District Population
45,000 sq. ft. (DOT) 143,051
Design Features
• Plaza spans three blocks with four segments
• Standard DOT planters
• Non-standard silver metal tables, chairs, and trash cans
• Citibike station
• Four kiosks: three food and one information
Local Partner & Maintenance
Madison Square Park Conservancy, Flatiron/23rd Street Partnership BID

Flatiron Plaza
Location
Flatiron District located between E 22nd Street and W 25th Street along Broadway and 5th Avenue
Size District Population
6,000 sq. ft. (DOT) 185,667
Design Features
• Standard tables, chairs, umbrellas, planters, and rock bollards
• Subway station
• Surrounded by small, independent stores
Local Partner
Social Uplift and Hope Initiatives (SUHI), CB3
Maintenance
SUHII and Neighborhood Plaza Partnership (NPP)

Queens

Diversity Plaza
Location
Jackson Heights, 37th Road between 73rd and 74th Streets
Size District Population
13,500 sq. ft. (DOT) 137,879
Design Features
• Standard tables, chairs, umbrellas, planters, and rock seats
• Subway station lets out into plaza
Local Partner
Queens Economic Development Corporation (QEDC), CB4
Maintenance
Queens EDC and NPP

Corona Plaza
Location
Corona, Roosevelt Avenue Service Road between National & 104th Streets
Size District Population
50 ft
Findings
Plazas Surveyed
Plazas Surveyed

Brooklyn

New Lots Triangle

Location
East New York, at the intersection between Livonia Ave and New Lots Ave

Size | District Population
--- | ---
3,800 sq. ft. (DOT) | 146,530

Design Features
- Standard umbrellas, planters, and rock seats
- Subway station lets out into plaza
- Surrounded by small, independent stores

Local Partner
New Lots Avenue Triangle Merchants Association, Inc., CB5

Maintenance
New Lots Avenue Triangle Merchants Association, Inc.

Zion Triangle

Location
Brownsville, between E New York Ave and Pitkin Ave

Size | District Population
--- | ---
6,500 sq. ft. (DOT) | 126,002

Design Features
- Standard umbrellas, planters, and rock seats
- Bordered by NYCDPR Zion Triangle Park on the west side
- Brownsville Charter School adjacent to the plaza

Local Partner
Pitkin Avenue BID, NYC DPR, CB16

Maintenance
NYC DPR, Pitkin Avenue BID

Putnam Plaza

Location
Clinton Hill / Bedford Stuyvesant, between Cambridge Pl, Grand Ave and Fulton St.

Size | District Population
--- | ---
14,000 sq. ft. (DOT) | 118,910

Design Features
- Standard umbrellas, planters, and rock seats
- String lights
- Plaza features a "green street"

Local Partner
Fulton Area Business Alliance (FAB), CB2

Maintenance
FAB
Neighborhood character around the plazas

Plaza neighborhoods vary from majority residential – around New Lots Triangle – to majority commercial and mixed use at Flatiron Plaza.

Corona Plaza is in a residential area, but is still adjacent to retail.

Zion Triangle is adjacent to a school and senior housing.

Outer borough plazas are surrounded by residential land use. But all plazas are adjacent to retail, except for Zion, which is adjacent to a school and park.
Neighborhood character around the plazas

Most plazas are adjacent to public facilities, even in residential areas.
When people move in the plazas

Afternoons are busy!
Walking rates are the highest in the afternoons, between 12 -6pm.

Are people using the plazas to eat lunch or relax after work or school?

In the weekend the rates varied from 0 at Zion and New Lots to 1,670 at Diversity

Flatiron has the highest daily average. Corona has the highest peak

Walking rates are the highest in the afternoons, between 12 -6pm.

Weekday Pedestrian Flow

Diversity Plaza, low morning activity

Diversity Plaza, high afternoon activity

Flatiron
Corona
Diversity
Meatpacking
Putnam
Zion
New Lots

Average: 847
What people do in the plazas

Lots of standing and sitting. Some commercial activity and waiting for transit. Very little play and activity.
Key Findings

01 Equitable Beginnings but Financial Challenges Thereafter

02 People Choose to Visit and Have Choices of Activity

03 Inviting, Open and Accessible Retreats in the City

04 Plazas are Physical, but Not Always Social Connectors

05 Lots of Different People and Places, but Most Plazas not That Racially Diverse

06 Plazas have a Shared Worth and Value

07 Plazas Are Used Seven Days a Week, Mostly Visited and Managed by Locals

08 Who is in the Plaza and Who is Not

09 Attractive Places in the City

10 A Temporary Intervention with Long Term Impacts

11 Spaces for Healthy Living
The plazas are equitable in that all have increased open space, serving the local population and were seeded with the same amount of public implementation funds and design palette. But equity is challenged by the fact that maintenance budgets are born solely by the fundraising capacities of the local management organizations. Similarly, plaza operational budgets do not equitably correspond to the volumes of pedestrian use. For example, Corona Plaza in Queens has a similar volume of visitors to Flatiron in Manhattan, but has a fraction of the operations budget.

Equity measured by demographic equity showed that the proportion of visitors using the plazas reasonably mirrored the race, gender and income demographics of the neighborhood. Some exceptions included neighborhood plazas that attracted more men than women, destination plazas (in Manhattan’s Central Business District) that seem to attract higher numbers of young people and people with incomes below $24,999. The Manhattan plazas also attracted a higher rate of people with incomes less than $50,000. Seniors and children at the plazas were under-represented when compared to neighborhood Census data.

Equity measured by the distribution of open space found that the addition of the plaza increased the amount of open space in the neighborhood, but only by less than 0.30 percent in most all cases. However, no neighborhood has an open space/people density above the recommended standard of 2.5 acres/1,000 people, and so while the plazas do create more open space, all neighborhoods could benefit from even more. Yet, quantity of open space is only one way to evaluate. The quality of the space can be more of an indicator of use than size. While open space requirements are important, more attention needs to be paid to the quality of neighborhood open spaces.

Equity measured by capital investment raises an interesting debate about whether it is equitable for the implementation and on-going maintenance costs of the public realm to be born by the public sector, shared by the public and private sector or absorbed independently by each neighborhood. All plaza implementation is 100% funded by the City of New York, however, the Manhattan plazas, given their access to corporate sponsors, were able to contribute additional funds to the initial implementation costs. All plazas bear 100% of their own maintenance costs, even though the plazas are still under public ownership.

Pedestrian Volume and Operations Budgets

<table>
<thead>
<tr>
<th>Plaza</th>
<th>Area</th>
<th>Operations Budget</th>
<th>Number of People</th>
<th>Time of Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flatiron</td>
<td>45,000 sq. ft.</td>
<td>$375,000 (2014)</td>
<td>PEAK 2486</td>
<td>00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1637</td>
<td>1624</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1479</td>
<td>1186</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1552</td>
<td>1048</td>
</tr>
<tr>
<td>Corona</td>
<td>13,500 sq. ft.</td>
<td>$65,000 (2014)</td>
<td>PEAK 3477</td>
<td>00</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1670</td>
<td>1552</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1186</td>
<td>1142</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>810</td>
<td>810</td>
</tr>
</tbody>
</table>

Pedestrian volumes at Corona Plaza, a neighborhood plaza just off of the 103 St/Corona Plaza 7-line stop, were comparable to those of Flatiron Plaza, a major transit hub. Peak hour of pedestrian volume at Corona surpassed Flatiron by almost 1,000 people. Corona however has only 17% of the Flatiron budget.
People Choose to Visit, and Have Choices of Activity

Choice measured by the public life of the plaza found that plazas are 'stickier' — more people stay relative to the number that walk by — on the weekends. This indicates that people choose to spend time at the plazas when they have free time. Higher walking rates in the plazas during the afternoons, between lunch and commuting hours, indicate they also play a role in the 'necessary' activities of people's lives: having lunch during the workday, picking kids up from school, or commuting.

Choice measured by public space design found that plazas with furniture, such as seats set-up consistently, and those near busy bus stops, such as New Lots, had more people staying.

Choice measured by design flexibility and public space was found to be very high for all plazas. All plazas are designed with a higher percentage of movable furnishings rather than fixed elements, making the spaces adaptable for multiple passive and active activities.

Even the smallest plaza, 3,000 sq. ft., can accommodate a yoga class of 166-250 people measured at 1 person per 12-18 sq. ft.

Choice measured by programming was also found to range from high to moderate for the plazas studies. The number of programmed events ranged from 12-50 during roughly 6 months of the year. This, coupled with the number of unplanned or unprogrammed activities, provides visitors with a high range of choices.

It is possible that programming leads certain groups to feel more invited than others, such as women or men, but more research is needed.

The warmer months see a much higher rate of programming options than the winter time.

<table>
<thead>
<tr>
<th>Programming Volume, 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN</td>
</tr>
<tr>
<td>1-2 events / month</td>
</tr>
<tr>
<td>2-5 events / month</td>
</tr>
<tr>
<td>5+ events / month</td>
</tr>
<tr>
<td>* info not available</td>
</tr>
</tbody>
</table>
Accessible design is about physical, barrier-free access, and access to amenities is about access to services. Access measured by accessible design and to new land uses or neighborhood services and public space was found to be high for all plazas. The edge conditions of the plaza were free from barriers, provided high visibility for pedestrians and created more direct connections to adjacent land uses, such as retail or transport. Most plazas had very high levels of active retail edge conditions, while a couple, such as Zion and Putnam, were adjacent to a school or park.

Access measured by user accessibility and public life was also found to be high given that all neighborhoods have a high density of residents and/or workers within a 10 minute walk of the plaza. The plazas are also accessible 24 hours a day, 7 days a week.

Investigation into pedestrian and bicyclist injuries two years prior and two years after plaza installation indicate either no change or slight reduction in pedestrian and bicyclist injuries. We were unable to obtain data about how overall vehicular traffic volumes have changed.

Plaza Edge Conditions, Transit Stops and Community Facilities

How did you get to the plaza?

68% walked to the plazas

Findings
The plazas support high transportation connectivity across the board, but uneven social connectivity, which is higher in the outer borough plazas than in the Manhattan plazas.

The plazas make walking to transit or local shops more direct, and they foster meeting or recognizing other people, which could increase opportunities to build social capital. This is important since both long commute times and lack of social capital (defined as ability to connect and develop social connections with others in the community [by social scientists such as Robert Putnam]) have recently been tied to less upward mobility (‘Where is the land of opportunity?’, Raj Chetty et al., 2014).

Connectivity measured by transportation connection was high for all the plazas with all having access to subway and/or bus lines within a 5-minute walk. The large majority of users primarily reached the plazas by walking.

Connectivity measured by interpersonal connections varied across the plazas. The neighborhood plazas saw more interpersonal connectivity than the Manhattan destination plazas, measured by the number of people that either made new acquaintances or began to recognize the same people in the plaza. Of the plazas with high interpersonal connectivity, there was little difference found between the personal connections made by age and gender, but slight differences by race/ethnicity and income.

Across plazas, people-of-color were more likely to recognize/know more people in the neighborhood, due to the plaza. Note: the plazas that had majority white visitors — Meatpacking & Flatiron — aren’t “neighborhood” plazas; they attracted more visitors than locals, which could influence less connectivity.

Connectivity measured by interpersonal connections varied across the plazas. The neighborhood plazas saw more interpersonal connectivity than the Manhattan destination plazas, measured by the number of people that either made new acquaintances or began to recognize the same people in the plaza. Of the plazas with high interpersonal connectivity, there was little difference found between the personal connections made by age and gender, but slight differences by race/ethnicity and income.

Even plazas with low activity rates - such as Putnam - foster social connections.

People with lower incomes met or recognized new people at a higher rate.
Almost a 1:1 match in the race/ethnicity of plaza visitors compared to nearby residents.

NYC’s residential patterns are segregated by income and race/ethnicity and the plazas reflect this. While racial/ethnic homogeneity at the plazas where most users are local reflects these citywide patterns, it is less clear why this is the case at the Manhattan plazas, which attract people from the entire City (which is very diverse) or from outside of NY. This could be due to the demographics of the local worker populations or of tourists. While the plazas may not bring people of different races/ethnicities together, they do support income and gender diversity, with many users earning less than the plaza neighborhood median incomes at all plazas studied.

Race/Ethnicity at the Plazas compared to the Neighborhoods

<table>
<thead>
<tr>
<th>Plazas</th>
<th>Neighborhoods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flatiron Plaza</td>
<td>Flatiron</td>
</tr>
<tr>
<td>77%</td>
<td>71%</td>
</tr>
<tr>
<td>Meatpacking Plaza</td>
<td>Corona Plaza</td>
</tr>
<tr>
<td>69%</td>
<td>85%</td>
</tr>
<tr>
<td>Diversity Plaza</td>
<td>Corona</td>
</tr>
<tr>
<td>62%</td>
<td>85%</td>
</tr>
<tr>
<td>Corona Plaza</td>
<td>Putnam Plaza</td>
</tr>
<tr>
<td>85%</td>
<td>42%</td>
</tr>
<tr>
<td>Zion Triangle</td>
<td>Putnam</td>
</tr>
<tr>
<td>74%</td>
<td>41%</td>
</tr>
<tr>
<td>New Lots Triangle</td>
<td>Zion</td>
</tr>
<tr>
<td>60%</td>
<td>84%</td>
</tr>
</tbody>
</table>

In focus: two extremes

U.S. Census Bureau, American Community Survey 2009-2013; Five-year estimates and Gehl/JMBC Plaza Intercept Survey 2014
Income Diversity - plazas appear to foster more income diversity than their neighborhoods.

Diversity measured by user demographics varied between neighborhood and destination plazas. There was a wide representation of all types of people by race, income, age and gender in all plazas. However, the destination (Manhattan) plazas were diverse in terms of age, gender and income, but not by race/ethnicity. Adjacent land uses – especially retail shops – may influence who feels invited to spend time in the plazas. For example, Corona and Diversity are surrounded by businesses catering to certain cultures (Hispanic/Latino and Southeast Asian, respectively) and Meatpacking and Flatiron are surrounded by landmarks such as the Flatiron Building or Meatpacking district – and high-end retail, such as Eataly or Theory – that may be more attractive to tourists and wealthier visitors. Both destination and neighborhood plazas were diverse by income.

Income at the Plazas compared to the Neighborhoods

Plazas

<table>
<thead>
<tr>
<th>Plazas</th>
<th>$0 - $14,999</th>
<th>$15,000 - $49,999</th>
<th>$50,000 - $99,999</th>
<th>$100,000 +</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flatiron Plaza</td>
<td>29%</td>
<td>10%</td>
<td>26%</td>
<td>25%</td>
</tr>
<tr>
<td>Meatpacking Plaza</td>
<td>26%</td>
<td>20%</td>
<td>19%</td>
<td>31%</td>
</tr>
<tr>
<td>Diversity Plaza</td>
<td>19%</td>
<td>19%</td>
<td>12%</td>
<td>25%</td>
</tr>
<tr>
<td>Corona Plaza</td>
<td>26%</td>
<td>19%</td>
<td>29%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Neighborhoods

<table>
<thead>
<tr>
<th>Neighborhoods</th>
<th>$0 - $14,999</th>
<th>$15,000 - $49,999</th>
<th>$50,000 - $99,999</th>
<th>$100,000 +</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flatiron</td>
<td>57%</td>
<td>19%</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Meatpacking</td>
<td>50%</td>
<td>17%</td>
<td>24%</td>
<td>9%</td>
</tr>
<tr>
<td>Diversity</td>
<td>31%</td>
<td>28%</td>
<td>33%</td>
<td>25%</td>
</tr>
<tr>
<td>Corona</td>
<td>38%</td>
<td>39%</td>
<td>31%</td>
<td>30%</td>
</tr>
</tbody>
</table>

In focus: two extremes

U.S. Census Bureau, American Community Survey 2009-2013, Five-year estimates and Gehl/JMBC Plaza Intercept Survey 2014

Findings
Seniors and children were under-represented in all plazas. Manhattan destination plazas were more diverse by gender.

Diversity measured by design diversity found that the design elements of the plazas provided a variety of places to sit, gather, or stand.

Diversity measured by programming diversity was moderate in most cases. Several plazas host events that cater to general audiences rather than events that are more specific to neighborhood demographics, such as programs for children, seniors or celebrating cultural heritage. Exceptions to this can be found in the neighborhood plazas that had high numbers of heritage cultural programming.

### Diversity of Annual Programming
#### 2014 Events/Activities

<table>
<thead>
<tr>
<th>TYPE</th>
<th>AUDIENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flatiron</td>
<td></td>
</tr>
<tr>
<td>Meatpacking</td>
<td></td>
</tr>
<tr>
<td>Diversity</td>
<td></td>
</tr>
<tr>
<td>Corona</td>
<td></td>
</tr>
<tr>
<td>Putnam</td>
<td></td>
</tr>
<tr>
<td>Zion</td>
<td></td>
</tr>
<tr>
<td>New Lots*</td>
<td></td>
</tr>
</tbody>
</table>

Male: 73%  Female: 58%

Corona had more women in the plaza than in the neighborhood. Diversity and Putnam had a higher rate of men than live in their respective neighborhoods. The others were fairly balanced.

<table>
<thead>
<tr>
<th>Neighborhood</th>
<th>Plaza</th>
<th>Difference in gender between plaza visitors and the neighborhood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corona</td>
<td>58%</td>
<td>Male 73%</td>
</tr>
<tr>
<td>Diversity</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td>New Lots</td>
<td>50/50</td>
<td></td>
</tr>
<tr>
<td>Zion</td>
<td>75%</td>
<td></td>
</tr>
<tr>
<td>Putnam</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>Meatpacking</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Diversity measured by design diversity found that the design elements of the plazas provided a variety of places to sit, gather, or stand.

Diversity measured by programming diversity was moderate in most cases. Several plazas host events that cater to general audiences rather than events that are more specific to neighborhood demographics, such as programs for children, seniors or celebrating cultural heritage. Exceptions to this can be found in the neighborhood plazas that had high numbers of heritage cultural programming.
Ownership measured by informal ownership was high—most people said “this is my plaza.” More informal ownership was felt at the neighborhood plazas than the destination plazas, and visitors were least likely to believe the plaza belonged to them, suggesting that the plazas share a strong identity to their local neighborhood and residents.

Ownership measured by neighborhood residential home ownership was found to be on average with borough and New York City home ownership rates. However, for the neighborhood plazas, residential tenure in the neighborhood was high, ranging from 2-28 years for local respondents (local defined as resident who shares a home zip code with the plaza and 5-26 for all respondents).

Ownership measured by formal structures of ownership and management was high for all plazas in that all had either locally based formal or volunteer organizational structures for managing the plazas. In most cases, local business owners led these organizations, with some resident participation.

People want to take care of their plazas. While intercept surveys did not necessarily reflect what people would do, they did indicate that people feel a sense of stewardship for the spaces. For example, when asked how they would respond to a large piece of trash in the plaza, the majority said they would pick it up, across the board.

Across all incomes, visitors responded “Absolutely Yes.” However, lower-income respondents answered at a higher percentage to Absolutely Yes than higher income respondents, indicating those with lower-incomes have a slightly higher sense of ownership than those with higher incomes.

Additionally, higher income respondents indicated “No, just visiting or traveling through” at a higher rate.

**Findings**

**Sense of stewardship**

What would you do if you saw a large piece of trash in your plaza?

**Sense of ownership**

Is this plaza Your plaza?

Ownership is high even though just 3% of people surveyed told us they participated in the plaza planning process.
The more local they are, the more often they visit.

The majority of locals at the outer borough plazas visit daily or weekly. In Manhattan, the plazas are well used, but are visited primarily by people from the greater New York area (Flatiron) or outside of the City (Meatpacking).

Participation is measured by user activity, both the amount of time spent and frequency of time spent in the plaza. Manhattan destination plazas tended to be used weekly, monthly or rarely.

By income, those with lower incomes tended to use the plaza more frequently (daily, weekly) than those with higher incomes. By gender, female users indicated they used the plaza slightly less frequently than the male users. By age, a difference was not observed. By race/ethnicity, a determination was not made.

For time spent in the plazas weekday afternoons and weekends were the most popular, followed by weekday mornings and weekday afternoons.

By age, younger users preferred weekends to weekdays and older users weekdays to weekends. By race/ethnicity and income, a difference was not observed.

High rates of participation in the plazas did not correspond to the highest rates of design quality. Using the Gehl quality criteria all the plazas have quality design, but a few are still exposed to traffic and noise – such as Flatiron and Corona. Despite this, those two plazas have the highest rates of people walking by and using them.

Participation measured by neighborhood participation in management was high in the neighborhood plazas. However, residents of the neighborhood did not volunteer at or staff the destination plazas. All plazas had high participation by area business owners and/or operators.

Participation measured by how design enables activity was high for most plazas. All plazas allowed for several kinds of activities, both active and passive, because of the flexible layouts of the spaces and various options for creating different seating and gathering configurations. The plazas had no signage restricting activity.

High rates of activity aren’t the only measure of success. Some plazas with lower activity rates – such as Putnam – have higher rates of frequent visitors, indicating their value as a community asset and place to spend time outside, regularly.
Inclusion and Belonging measured demographic inclusion in the plaza relative to the neighborhood demographics. The neighborhood plazas tend to be more racially inclusive than the Manhattan destination plazas and the Manhattan destination plazas were more income inclusive than the neighborhood plazas. When differences were looked at by time of day, there was no difference observed by income, gender, or race. By age, younger users preferred the weekends to the weekdays; older users preferred weekday afternoons.

The plazas also had reasonably good lighting levels, although several plaza users wanted to see more pedestrian or storefront lighting. Only one plaza had a surveillance camera and most plazas reported adequate levels of police or security presence.

The plazas improved the perception of safety equally among men and women, and among all races.

Overall, the plazas are well lit at night and improve perceptions of safety in the neighborhoods where they are located.

"Has this plaza increased how safe you feel in this area?" by Race

"Has this plaza increased how safe you feel in this area?" by Gender
Attractive Places in the City

Beauty measured by the aesthetics of design features found very high levels of satisfaction, with most respondents saying the area’s overall appearance had improved since the plaza’s construction. The levels of satisfaction were similarly high across different demographic categories of age, income, gender and race/ethnicity.

Beauty measured by appearance of the plaza was not as overwhelmingly positive, as some plazas had low marks for cleanliness. Some plazas also saw more improvements to adjacent storefront appearance than others, but overall appearance of the public realm improved.

Aesthetic Impact
Does the plaza improve the appearance of the area?

Level of Cleanliness

Key:
- No opinion
- No
- Yes

60% said Tables/Chairs or Flowers/Planters Made Plazas Attractive
A Temporary Intervention with Long Term Impacts

The DOT is taking innovative steps to reclaim street space for people.

The plaza program creates opportunities for the city to act as a facilitator and invite community organizations to co-create new public spaces in their neighborhoods.

The program allows street space to be re-purposed and reclaimed in a way that seemed impossible just ten years ago.

Yet the program is a work in progress, and there are funding challenges.

The fact that people report high levels of ownership and positive reaction to the plazas supports the need for more funding. The plazas are quick, interim interventions - additional funding could help to make sure they live on beyond the life cycle of interim materials and can host the programming that invites for all living in a neighborhood.

Pearl Street Triangle Plaza, DUMBO

What would you like to see in this plaza?

40% said there are creative or innovative things about the plazas

Photo: Stine Ilum

Findings
Spaces for Healthy Living

Plazas increase the amount of time people spend outside.

Health and Wellness measured by activity levels (active versus passive) was found to be low to moderate, with people predominately sitting, standing, or passing through. Outside of the occasional programmed event promoting physical health and fitness, all plazas were passive spaces.

Health and Wellness measured by health demographics of plaza users was found to be generally high. Neighborhood health conditions however varied between the Manhattan plazas and outer borough plazas. Outer borough plazas suffered from lower health indexes with higher rates of diabetes, obesity, heart disease. Asthma rates were also higher in New Lots and Zion than in other plaza areas.

Currently there is no data available to track the relationship between the plazas and resident health. This data would have to be longitudinally tracked (over multiple years) to be able to make a connection to the plazas and human health.

Survey of Annual Programming, 2014
Active versus Passive Programming

Plazas in areas with the least amount of open space - Diversity and Corona - have the most dramatic response to time increased time spent outside.

Has this plaza increased the time you spend in public space?

Interviews with Plaza Managers, April 2015

<table>
<thead>
<tr>
<th>Flatiron Plaza</th>
<th>Meatpacking Plaza</th>
<th>Diversity Plaza</th>
<th>Corona Plaza</th>
<th>Putnam Plaza</th>
<th>Zion Triangle</th>
<th>New Lots Triangle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive</td>
<td>Active</td>
<td>Passive</td>
<td>Active</td>
<td>Passive</td>
<td>Active</td>
<td>Passive</td>
</tr>
<tr>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

Findings

Plazas in areas with the least amount of open space - Diversity and Corona - have the most dramatic response to time increased time spent outside.
Specific findings for the New Lots Triangle Plaza are not included as the project team was unable to interview the plaza manager and many changes have taken place at the plaza since the study was conducted.
MEATPACKING DISTRICT PLAZA

STRONG SUPPORT FROM LOCAL SPONSORS
The plaza is consistently supported by commercial sponsors that provide programming, contribute to creating custom designed furniture, and attract visitors, both local and international. (Equity, Diversity, Ownership, Beauty)

SUPPORTS BUSINESSES, NOT RESIDENTS
The plaza’s core mission is to support nearby commercial entities; a difference from the other plazas studied. (Participation)

CLEAN, QUALITY SPACE
The plaza is very well maintained. (Beauty)

VISITORS HAVE DIVERSE INCOMES
Plaza users have a wider range of incomes than the predominantly high-income neighborhood residents. (Diversity)
MAGNET FOR NYC VISITORS

This 45,000 sq. ft. plaza is one of the busiest, with visitors from across NYC, and over 40,000 pedestrians on nearby 5th Ave. (Connectivity)

STRONG PARTICIPATION

High volumes of use can be attributed to a location near high profile commercial & park destinations and frequent programming by the BID. (Participation)

EQUITABLE DEMOGRAPHICS SERVED

The plaza attracts an equitable range of users by gender, age, and income though the local population is primarily wealthy & white. (Equity)

SOCIAL CONNECTIVITY BY INCOME

Individuals who earn low to moderate incomes recognize and make more social connections in the plaza than those with higher incomes. (Connectivity)

PLAZA SPURS NEARBY INVESTMENT

The plaza was part of many real estate changes and city initiatives to reinvigorate Broadway and attracted new businesses.
FEW WOMEN & LOCAL RESIDENTS

Consistent pedestrian traffic and use, but a lack of consistent female visitors & residents from the plaza zip code. (Diversity, Inclusion/Belonging)

RICH CULTURAL PROGRAMMING

Frequent ethnic festivals and programs that raise awareness about the Asian populations residing in the neighborhood. (Choice, Diversity)

HIGH RATE OF INTERRACIAL & INTERNATIONAL INTERACTIONS

The plaza was identified as a unique place for cultural co-mingling. (Connectivity, Inclusion/Belonging)

MANAGEMENT OVERBURDENED WITH UPKEEP

Volunteer organizations managing the plaza are under-resourced, which impacts the appearance of the plaza. (Equity, Beauty)

MOST PASS-THROUGH; RATHER THAN STAY

Low "stickiness" revealed that a higher proportion of people walk through than stay and linger. (Connectivity, Participation, Inclusion/Belonging)
WELL USED BY LOCALS
Majority of visitors to the plaza are from within 2 miles of the space. (Participation)

STRONG SENSE OF LOCAL OWNERSHIP
Residents and local organizations are extremely active in programming, and benefit from discounted permitting fees. (Participation)

PLAZA NEEDS MORE TLC
A high-volume of visitors means the plaza furniture is well used, and needs attention and repair. Yet this is the only plaza studied that has invested in a public bathroom. (Beauty)

IMPROVED COMMUTER EXPERIENCE
The plaza is a local transit hub. Observation and interviews found that commuters rest before travel, and are greeted by their families in the afternoon. (Access)

LOTS OF CHILDREN
The plaza had the highest rate of children playing compared to all surveyed, but still a lower proportion than live in the area. (Inclusion/Belonging)
Findings

O P P O R T U N I T Y  T O  B E  M O R E  V I S I B L E

Only plaza surveyed not directly adjacent to or across from a subway, and was in the least dense neighborhood, which may contribute to lower usage rates. (Access)

I N C R E A S E D  S A F E T Y

A majority of users reported an increased perception of safety in the neighborhood since the plaza creation. (Inclusion/Belonging)

D E L I G H T F U L  L O C A L  G E M

Strong sense of beauty, ownership, & participation from area residents, especially in warmer seasons. Plaza was one of the best maintained in the study. (Beauty)

W H E R E  T O  S I T?

The plaza is adjacent to a NYC Parks site that offers many benches in the shade, which appeared to be more appealing than movable seating in warmer months. (Choice)


Rates of children in the plaza peak on weekday afternoons, when the adjacent school lets out. Zion had highest rate of kids, of Brooklyn plazas. (Inclusion/Belonging)
**PUTNAM PLAZA**

**PEOPLE STAY & CHILL**

The plaza did not have the highest volume of use, of all studied, but it did have one of the highest rates of frequent - daily or weekly - use. (Participation)

**A SPACE FOR OLDER MEN**

The majority of those observed in the plaza were senior men. And the plaza has served as a place for seniors and the BID to connect and even organize to keep a senior center open. (Inclusion/ Belonging, Connectivity)

**HIGH LEVELS OF COMMUNITY OWNERSHIP**

Programming in the plaza is supported and guided by local organizations for a variety of age groups, including children. (Choice)

**WOMEN FEEL SAFER**

The survey revealed that high volumes of women, in particular, feel a stronger sense of safety in and around the plaza area. (Inclusion/Belonging)

**INCREASED OUTDOOR TIME**

58% said the plaza increased time spent outdoors. (Health & Wellbeing)
Recommendations
Overview

The goal of our collaborative study was to determine how NYC plaza’s were performing for people and the relationship between public space and public life with issues of social and spatial injustice. Gehl and JMBC developed an indicator framework tool to evaluate the performance of seven NYC reclaimed streets converted to public plazas.

We have outlined a set of recommendations for the NYC Plaza Program and the actual framework methodology, based on core findings revealed by the new measurement tool. These recommendations can inform the plaza program structure and funding; future plaza improvements and investments; further development of the measurement tool; and how the city and local communities could adopt and use such a tool.

Overall, the plazas support many elements of urban justice. There is also room for improvement and many plaza managers could use more financial and operational support. Nonetheless, due to the dedication of these same managers, the plazas are well cared for and loved, they are functioning as new neighborhood open spaces that serve local residents and visitors, and they are providing a platform to engage with one’s community and spend more time outside.

As the current de Blasio administration works to fulfill OneNYC’s goals and make the city a more equitable place to live, plazas – implemented and planned - should be prioritized. As this report has shown, the public realm can be a great equalizer in cities and can be one of the few civic assets where public life can flourish and urban justice can thrive.

The following pages outline recommendations for the local plaza management organizations and the Mayor’s Office; the Departments of Transportation (DOT), City Planning (DCP), Housing, Preservation and Development (HPD), Health and Mental Hygiene (DOHMH), Community Affairs Unit (CAU), and Cultural Affairs (DCLA).

Recommendations: Citywide

1. Incorporate people and behavior metrics into citywide planning initiatives (including Urban Justice Framework & Indicators)

Mayor’s Office; HPD; DCP; DOT; DOHMH

OneNYC is a symbol of the administration’s focus on creating a more equitable, inclusive New York. We believe you measure what you care about, and that to ensure people from all walks of life are prioritized across agencies, metrics that focus on urban justice, public life, and public space should be integrated into the city’s existing evaluation methods. The 11 urban justice values, 30 indicators and 74 metrics used in this study can be applied to evaluating the impact of projects large and small - from privately funded public realm improvements to citywide initiatives, such as Vision Zero and the Mayor’s affordable housing plan. In terms of the plazas, city agencies should work with local plaza managers to collect data that helps measure local success criteria and evaluate plazas.
## Recommendations: Plaza Program

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>2. Provide more funding and operational support (Equity)</th>
<th>3. Align support for new and existing plazas with the Mayor’s affordable housing agenda (Access)</th>
<th>4. Identify how plazas can further reduce traffic crashes and support Vision Zero (Connectivity)</th>
<th>5. Leverage plaza support and creation with Building Healthy Communities initiatives (Health &amp; Wellbeing)</th>
<th>6. Provide additional support to plaza managers to diversify programming &amp; foster civic engagement (Inclusion/Belonging, Participation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mayor’s Office; DOT; OneNYC</td>
<td>Mayor’s Office; DOT; DCP; HPD</td>
<td>Mayor’s Office; DOT; Advocates</td>
<td>DOT; DOHMH; CAU, Mayor’s Office</td>
<td>Mayor’s Office; DOT; DCLA</td>
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The current plaza funding model does not perform the same across all communities. For plazas to reap the same benefits, certain local partners need long-term public support, especially those managing plazas located in under-resourced communities. The $5.6 million allocated to plazas in OneNYC is a great start to address differences in how the public-private partnership works in different neighborhoods, but to support all plazas in low income communities, more financial support is needed. An opportunity to apply for more maintenance funding could be created that is similar to the plaza application process.

Plazas increase open space in neighborhoods and create opportunities for people to meet and recognize new people. Plaza implementation can be aligned with OneNYC and citywide affordable housing goals, which may increase neighborhood density.

Overlay a map identifying affordable housing initiatives with maps showing a lack of open space and plaza opportunity sites. Prioritize plaza implementation and support for existing plazas in areas that will see increased residential density to ensure access to open, public space, and that lack access to transportation. An inter-agency task-force should be formed to implement this analysis.

Those surveyed said the plazas improve perceptions and feeling of safety in the plaza area.

This presents an opportunity to align plaza implementation with vision zero initiatives to calm traffic and improve safety. Conduct a study to identify how plazas actually might improve safety and help to reduce crash rates on adjacent and nearby streets. In turn, this could help identify locations that can advance support for Vision Zero goals.

Survey responses revealed that the plazas led people to spend more time outside than they would have before the plaza’s creation. In some cases, the plazas were also used to support healthy activities, such as yoga and aerobics classes, or adjacent farmers markets.

To further support these healthy activities and behaviors, leverage plaza creation and programming with DOHMH’s building healthy community initiatives to reduce activity related illness rates, such as diabetes. Work with local community groups and residents to identify health related programming they are interested in and how the most health-vulnerable communities can be invited to spend time in the plazas.

Plazas create opportunities for people to recognize or meet new people, and to spend more time outside in their communities.

Additional support could be provided in the form of a targeted needs assessment, which could help plaza managers be attuned to the evolving needs of the community and be more capable to respond to it, such as with events that further allow them to diversify programming and invite for a broader range of resident participation in the plazas.
Next Steps: Integrating Urban Justice and Public Life into Decision-Making Processes

A tool that uses metrics tested by JMBC and Gehl could be used to better assess impact on urban justice and how to optimize municipal investment

Movements seeking to achieve greater equity, sustainability, resiliency and livability are on the rise. Government agencies, design practitioners and philanthropists in particular are working to develop programs that address these aims, but also evaluate the impact of interventions.

Our goal in creating a new framework of indicators and metrics was to push the envelop on the evaluation of design’s impact on urban justice and robust public life.

We believe the values inherent in justice and public life are not always adequately acknowledged or examined by the existing sustainability and resiliency measurement frameworks. Often these frameworks focus on “the numbers” and not the first hand experiences of the user or beneficiaries of the designed space. The pilot indicator framework developed by the Gehl / JMBC partnership blends these two approaches to provide a more accurate story about how social and spatial dynamics inform urban justice and public life values.

During this project, the pilot framework was successful in the following ways:

- Rooted the evaluation in a set of values rather than material outcomes;
- Blended both experiential and quantifiable data through secondary, observational and intercept survey, and interview methods; and
- Blended metrics that examined economic, health, civic, cultural, environmental, and design and well-being indicators.

Challenges and areas where the tool and methodology could be further refined were also observed:

- The data collection methods used - such as intercept and observational surveys - require hundreds of hours of manpower to administer;
- The data collection methods require a large sample size to make informed conclusions;
- Some secondary data was unavailable and/or not available across multiple years to identify change over time; and
- Going forward, JMBC would prefer that the values selected to frame the indicator framework be selected by the city or community to best align its context to the urban justice conditions most critical to address.

Despite this, governments and communities can benefit from having access to this indicator framework as a way to both be “diagnostic” - to benchmark and understand current conditions and performance of public space - as well as “projective” - to provide information that informs goals for future intervention.

At the local neighborhood level, the diagnostic data can leverage positive outcomes to secure additional funding, support from community partners, and promote greater use by community members.

At the government level, the data can be helpful in demonstrating the impacts of quality of life investments to overall neighborhood improvement. The positive outcomes can be leveraged with municipal investments in the public realm, affordable housing and transit to secure new public/private partnerships that promote inclusive and equitable neighborhood growth.

We are also hopeful that the tool and findings from this kind of evaluation process can aid governments, designers and community change agents in developing design interventions and processes that embed the aspirations of greater urban justice into the outcomes of public space design.
Appendix A

Study Methods
Project Metrics
The data collected by the surveys was a jumping off point for understanding the social justice implications and parameters of New York City’s plazas.

Method: Intercept Surveys

Why do people use or walk through the plaza? What’s their perception of the plaza and it’s impact on the neighborhood? Who uses the plaza, and when?

Delved into inclusion/belonging and public life while questions like “Since the plaza opened, do you recognize or know more people in the neighborhood?” related to social connectivity, as well as public life.

Over the course of a weekday and weekend, intercept surveys were done at all seven plazas, simultaneous to the observational surveys. The survey questions, both multiple choice and free response, reflected one or an intersection of the Just City and public space, public life values.

Surveys were printed in English and Spanish. Surveyors tried to collect as many surveys as possible, either by filling out the form with someone or having them complete it independently.

Challenges included not being able to conduct surveys with people who did not speak English or Spanish, unless the surveyor was conversant in another language. Controls for surveyor bias were not implemented so randomization was limited to users who were willing to speak to the surveyors. Surveying of users under the age of 18 was also limited since it required a supervising adult to be present.
Method: Intercept Surveys

Sample survey sheet

1. Do you identify as Male / Female / Other? (circle)
2. Age (circle)
   0 to 14 years
   15 to 24 years
   25 to 44 years
   45 to 64 years
   65 +
3. What is your home zip code? 11372
   a. How long have you lived there?
4. Are you a homeowner / renter / homeless / other? (circle)
5. What race or ethnicity do you identify with? Bengali
6. Highest Education Degree Obtained (circle one)
   Primary School
   High School
   Bachelor's / Other Professional Degree
   None of above
7. Income Range (circle one)
   ≤$20,000
   $20,000 to $36,999
   $37,000 to $49,999
   $50,000 to $74,999
   ≥$75,000
8. Typically, I am in this plaza (circle all that apply)
   Weekday Mornings
   Weekday Afternoons
   Weekday Evenings
   Weekends
9. How did you get to the plaza? (circle)
   Walk
   Bicycle
   Subway
   Bus
   Taxi
   Car
10. Did you participate in the planning and design process for the plaza? Y/N
    Did I know I could (circle)
    If Yes, what were some of your ideas incorporated into the plaza?
    If No, why not?
11. Does the new plaza improve the appearance and your opinion of the area? Y/N
    No Opinion (circle)
    If Yes, which physical features contribute most?
    Flowers / Planter
    Sidewalks / Chairs
    Benches / Seating
    Other
    If No, why not?
12. If you were in the plaza and saw a large piece of trash, what would you do? (check)
    a. Pick it up and throw away
    b. Search for a maintenance worker
    c. Do nothing / Ignore
    d. Other
13. Has this plaza increased how safe you feel in this area? (circle)
    Greatly
    Somewhat
    Can't Tell
    Not At All
14. What's the greatest impact this plaza has had on the area? (circle)
    Good Impact
    Bad Gaps
    Need for more ideas
    Other
15. Do you suffer from any health or respiratory challenges? (circle)
    Asthma
    Obesity
    Diabetes
    Other
    If Yes, how do you think the plaza could improve these conditions?
16. How has this plaza increased the time you spend in public space? (check)
    a. Greatly
    b. Somewhat
    c. No difference

17. Before the plaza was created, where did you primarily spend time outdoors? (circle all that apply)
    Front Stoop
    Backyard / Sidewalk
    Trails
    Vacant Lot
    Sidewalk
    Street
    Alley
    Park / Plaza
    Waterfront
    Didn't spend time outdoors
    Other
18. Since the plaza opened, do you recognize or know more people in the neighborhood? (check)
    a. Yes, I recognize a few faces, but have not talked to anyone
    b. Yes, I have made a few acquaintances
    c. Yes, I have made many new friends
    d. No, I don't recognize or know more people from the neighborhood
19. Are there any things you think are creative or innovative about this plaza? Y/N
    No.
    a. Ideas for what else to see:
    b. Tips or use cases / plaza
    c. Transportation

Gehl Studio & J. Max Bond Center
**Method: Observational Public Life, Public Space Survey**

How do people use their streets? What activities do people engage in? What barriers might inhibit walking or socializing in public?

The Public Space Public Life Survey is a unique observational field survey technique Gehl Architects developed to identify how to create or enliven public spaces. The survey quantifies how people use and interact with places in cities. It creates an opportunity for city leaders to include people oriented data in the planning and design process to make their needs visible and to consider how existing human behavior can inform strategies to make a place more livable, walkable and inviting to all.

As part of the survey, pedestrian count and stationary activity surveys are used to examine detailed information on where people walk and what they do when stationary. Using this technique, data collectors also assess the quality and condition of outdoor seating, the quality of paving materials, construction-related impacts and other qualitative factors that affect the public realm. Results from the survey help to provide a snapshot of public life over two typical days.

Observational surveys were done over two days, between 8am - 8pm, in October 2014, on the same days as the intercept surveys. Surveyors worked in four hour shifts to collect data on movement and activity in and around the plazas.

The surveyors help to provide a snapshot of public life over two typical days.
Method: Desktop Research

How does what people share in intercept surveys and their observed behavior compare to local Census and demographic information?

Desktop research was done to place the survey data into a plaza-neighborhood, borough, and citywide context.

A plaza neighborhood was defined as the area within a half mile of the plaza (about a 10-minute walk) and what plaza managers expressed as the typical catchment area.

Data was collected at the census tract level and neighborhood data was collected for census tracts within the half-mile radius around the plaza. Where it was not possible to collect data at the census tract level, data was collected at the community district or zip code level.

A number of sources were used to collect data on demographics, residential and worker population, land use and open space, political and community boundaries, police precincts, and community facilities.

When sufficient information was not available new data was created using open source resources. This was the case when obtaining a more accurate analysis of open space in the neighborhood, such as to include public property owned by the NYC Department of Parks and Recreation, NYC Housing Authority, privately-owned publicly-accessible parks and open space, waterfront parks, and community gardens.

A sample of sources:
- U.S. Census Bureau, American Community Survey 2009–2013, Five-year estimates;
- U.S. Census Bureau, American Community Survey 2006–2010;
- Five-year estimates, Special Tabulation for Census Transportation Planning;
- NYC Department of City Planning 2014 Pluto Data;
- NYU Furman Center, 2014 State of the City’s Housing & Neighborhoods;
- New York City Department of Health and Mental Hygiene, 2006 Community Health Report; and
- NYC Department of Parks and Recreation 2015 Directory of Parks Properties as well as others.

ARC GIS and Microsoft Excel were used to compare intercept and observational survey data with Census information and other neighborhood data sets.
Method: Interviews with Plaza Stakeholders

How was the plaza started? What are the goals of the space? Who is involved with programming and maintaining the plaza?

A series of interviews were conducted with plaza stakeholders and managers to understand the plaza sites at the outset of the project and to obtain reactions to initial findings and gather additional information.

Questions covered programming, operational budgets, funding sources, management structure, maintenance costs, staff makeup, civic participation, the surrounding neighborhood and businesses, security and safety, and rules and regulations. For the full set of questions, please refer to the associated section in the Appendices.

The interviews revealed the unique characteristics of the plaza’s physical and intangible environments.

The interviews also brought insight into why and how these seven neighborhoods organized to reclaim street space, the challenges they faced in the process, and how the plazas and their associated management, have impacted other community issues, such as health, access, and ownership.

Challenges

Project staff were unable to coordinate meetings with Agha M. Saleh, Executive Director, SUKHI New York (Management Group for Diversity) and Eddie Di Benedetto, New Lots Avenue Triangle Merchants Association President (Management). Interviews were conducted during the plaza study site selection phase, in September 2014, and in the spring of 2015 to share preliminary findings and gather additional information. The Neighborhood Plaza Partnership was an instrumental resource in setting up preliminary meetings with plaza managers.

Stakeholder Interviews

- Laura Hansen, Executive Director, Neighborhood Plaza Partnership SEPTEMBER 2014 & APRIL 2015
- Ricardi Calixte, Deputy Director, Queens Economic Development Corporation (Management for Corona) SEPTEMBER 2014 & APRIL 2015
- Shekar Krishnan, Friends of Diversity Plaza (Stewardship for Diversity) APRIL 2015
- Lauren Danziger, Executive Director, Meatpacking Improvement Association (Management for Meatpacking) APRIL 2015
- Daniel Murphy, Pitkin Avenue Business Improvement District (Zion) SEPTEMBER & APRIL 2015
- Phillip Kellogg, Executive Director and Victoria Bonds, Community Liaison, Fulton Area Businesses Alliance (Management for Putnam) APRIL 2015
- Jennifer Brown, Executive Director, Scott Kimmins, Director of Operations, and Julie Sophonpanich, Planning and Marketing Manager, Flatiron 23rd Street Partnership (Management for Flatiron) APRIL 2015
- Emily Weidenhof, NYC Plaza Program Director, Division of Transportation Planning & Management // Public Space, NYC Department of Transportation SEPTEMBER & MAY 2015
## Equity

### A. Individual’s perception of value
- Increase in sq ft of open space, by the plaza

### B. Equitable distribution of open space
- Source of capital funds, public vs. private contributions
- Capital costs per average weekend/weekday plaza user volumes
- Average annual operations costs
- Source of funds for operations

### C. Equitable access + use of human + funding capital
- Source of capital funds, public vs. private contributions
- Capital costs per average weekend/weekday plaza user volumes
- Average annual operations costs
- Source of funds for operations

### D. Equitable demographics
- Users by race relative to neighborhood + borough demographics for each plaza
- Users by age relative to neighborhood + borough demographics for each plaza
- Users by income relative to neighborhood + borough demographics for each plaza
- Plaza management staff demographics mirror or differ from neighborhood demographics

### E. Equitable design
- Equitable distribution of design elements

## Choice

### A. Design flexibility + adaptability
- Quantity of moveable furniture + fixed furniture
- % of space devoted to moveable furniture elements versus fixed furniture elements
- How does the overall size (total SF) + dimensions contribute to or restrict the types of activities that can be hosted on the plaza
- Plaza protection from the climate

### B. Program choices: Informal + formal activities
- Average number of programmed events per year
- % age of active versus passive programmed events
- Types of activities people are engaged in, how this varies across the day, + on weekdays versus weekends

## Access

### A. Accessible design
- Assessment of barriers near access points, such as fences, gates, bollard, Jersey barriers, etc.
- Quality of plaza ADA accessibility, including adequate curb cuts + paving materials

### B. User accessibility – number of people who have convenient access
- Number of residents within a 10 minute walk of the plaza
- Number of workers within a 10 minute walk of the plaza
- Restrictions on hours

### C. Pedestrian accessibility
- Adjacent vehicular traffic volumes
- Change in pedestrian injuries + cyclist injuries before + after plaza construction

### D. Access & adjacency to other land uses
- Types of adjacent land uses
### CONNECTIVITY

#### A. Transportation Connectivity (Including Volumes of Walking + Biking)
- Proximity to subway
- Proximity to bus
- Proximity to bike lanes
- Proximity to public modes of transportation relative to user volumes for weekday + weekend + land use
- How users get to the plaza
- Walking volumes in the plaza
- Biking volumes in the plaza
- Walking + biking in the plaza by age
- Walking + biking in the plaza by gender
- Age + gender of people walking + biking in the to the age + gender of people who live in the neighborhood

#### B. Interpersonal Connectivity
- Social recognition of others by race
- Social recognition of others by age
- Social recognition of others by income
- Social recognition of others by home zip codes
- Proximity to public modes of transportation relative to user volumes

### OWNERSHIP

#### A. Neighborhood Ownership
- Rates of residential ownership
- Housing tenure

#### B. Formal Plaza Ownership
- Plaza ownership and management structure
- % of management staff living in the neighborhood

#### C. Informal Plaza Ownership
- Users feeling of ownership – “Is this plaza yours? by age
- Users feeling of ownership – “Is this plaza yours? by race
- Users feeling of ownership – “Is this plaza yours? by income
- Users feeling of ownership – “Is this plaza yours? by housing tenure in the neighborhood

#### D. Design Diversity
- Diversity of plaza elements furnishing + planting: DOT versus non-DOT elements

### DIVERSITY

#### A. Individual’s Perception of Value

#### B. Demographic Diversity
- Neighborhood diversity by age, race, income, gender, + tenure
- Plaza diversity by age, race, income, + tenure
- Plaza diversity by zip code of origin
- Plaza diversity by housing tenure in neighborhood
- Diversity of people walking + biking by age + gender

#### C. Design Diversity
- Diversity of plaza element furnishing + planting: DOT versus non-DOT elements

### PARTICIPATION

#### A. Individual’s Perception of Value

#### B. User Activity Participation
- Time spent in the plaza by age
- Time spent in the plaza by race
- Time spent in the plaza by income
- Time spent in the plaza by zip code of origin
- Frequency of use by age
- Frequency of use by race
- Frequency of use by income
- Visitor volumes on the weekend versus weekday

#### C. Participation in Operations
- Residents + business owners who participate in formal event programming
- Residents + business owners who participate in management organization

#### D. Design Facilitating Active Engagement
- Density of use weekend vs. weekday
- Number of options for sitting
- Amount of people accommodated in space available for group activities
- Presence of signage with rules about allowable activities
- Presence of multi-lingual signage

#### E. Rate of Visitors that Stay in Plaza -- “Stickness”
- Rates of activity in plaza compared to pedestrians walking through
INCLUSION + BELONGING

A. Individual’s Perception of Value
B. Demographic Inclusion + Belonging
- Plaza demographics compared to neighborhood + borough demographics
- User zip code of origin
- Presence of multi-lingual signage
C. Design Facilitates Inclusion + Belonging
- Presence of police
- Presence of gates, fences, + locks
- Lighting levels – street lights + storefront illumination
- Posted rules that restrict certain activities – in general + by age
D. Inclusion + Belonging Through Public Safety
- Safety – Do you feel more safe in the neighborhood? by age
- Safety – Do you feel more safe in the neighborhood? by race
- Safety – Do you feel more safe in the neighborhood? by gender
- Change in crime rates before + after plaza installation

BEAUTY

A. Individual’s Perception Value
B. Design Features
- Has the physical appearance of the neighborhood changed, sorted by age
- Has the physical appearance of the neighborhood changed sorted by gender
- Has the physical appearance of the neighborhood changed sorted by race
- Has the physical appearance of the neighborhood changed sorted by income
- Has the physical appearance of the neighborhood changed sorted by housing tenure in the neighborhood
- What design features contributed to beautification, sorted by age
- What design features contributed to beautification, sorted by housing tenure in the neighborhood
C. Appearance
- Level of cleanliness: low, medium or high
- Has the appearance of adjacent uses changed since the plaza opened – storefront improvements, signage, lighting, other
- Edge conditions – storefronts, sidewalks, street plantings, lighting, building condition

HEALTH + WELLNESS

A. Time spent outdoors
- How has this plaza increased the time you spend in public space? by age
- How has this plaza increased the time you spend in public space? by race
- How has this plaza increased the time you spend in public space? by income
- How has this plaza increased the time you spend in public space? by housing tenure in neighborhood
- Are there any things you think are creative or innovative about this plaza?
- Ideas for what else to see
B. Plaza Activity
- # Children playing
- # Adult physical activities
C. Human Health
- User reported health conditions by race
- User reported health conditions by income
- Neighborhood obesity rates
- Neighborhood asthma rates
- Neighborhood heart disease rates

CREATIVE INNOVATION

A. Impact
- Design – Which physical features contribute most? sorted by age
- Design – Which physical features contribute most? by race
- Design – Which physical features contribute most? by income
- Design – Which physical features contribute most? by housing tenure in neighborhood
- Are there any things you think are creative or innovative about this plaza?
- Ideas for what else to see