Public Life & Urban Justice n NYC's Plazas

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Toni L. Griffin Esther Yang Anastassia Fisyak Cesar Mesias **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.

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

111 John Street, Suite 260 New York, NY 10038 **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. This work involved many interviews and conversations with people working directly with NYC's public plazas. We are grateful to the many people who met with us and shared their insight.

NYC Public Plaza Managers

Ricardi Calixte, Queens Economic Development Corporation (Corona Plaza) Shekar Krishnan, Friends of Diversity Plaza (Diversity Plaza) Lauren Danziger, Meatpacking Improvement Association (Meatpacking Plaza) Daniel Murphy, Pitkin Avenue Business Improvement District (Zion Plaza) Phillip Kellogg & Victoria Bonds, Fulton Area Business Alliance (Putnam Plaza) Jennifer Brown, Scott Kimmins, & Julie Sophonpanich, Flatiron 23rd Street Partnership (Flatiron Plaza)

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Thank you to the Surdna Foundation and Transportation Alternatives via the Summit Foundation for their generous support and making this work possible.

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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 valuesbased 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.

The Just City Methodology, is based on

Gehl

PSPL Methodology is based on two core indicators:

Equity Public Access Urban Choice Space Justice Connectivity Public Health & Wellbeing Life Diversity Ownership Participation Beauty Inclusion/ Belonging How can we mesh these Creative Innovation 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?

JMBC

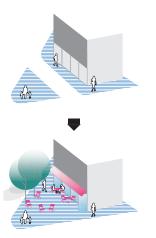
eleven core indicators:

Introduction

The NYC Plaza Program

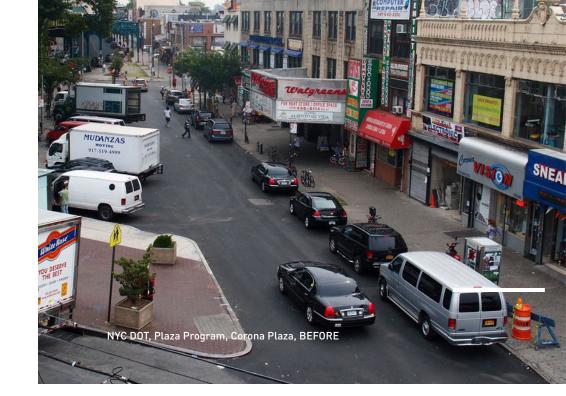
Over the past seven years, the NYC Department of Transportation has partnered with community organizations to create new public plazas in neighborhoods lacking open space across the city.

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.



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

- 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.
- For more information visit the NYC DOT Plaza Program website: http://www.nyc.gov/html/dot/html/ pedestrians/nyc-plaza-program. shtml



NYC DOT, Plaza Program, Corona Plaza, AFTER

The plazas are implemented quickly, are highly visible, and often cost less than \$100,000 to install.

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.







Measuring the Street: New Metrics for 21st Century Streets

Impact studies to date have demonstrated how public space can support economic growth and make streets safer from crashes, but they have not explored how design impacts urban justice and robust public life.

Precedents for Measuring Urban Change

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

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.

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.

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.

Created 40 years ago, this program is guided by principles of observation and survey work. It aims to collect peopleoriented data regarding public space design and use.

Source: Design for the Just City, Draft Report on Summary of Findinas. JMBC 2013

Public Realm Impact Studies in NYC Have Found...

- 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

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

Public Support bike lanes

- 66% of New Yorkers support • + 73% for small businesses in
- 72% support bike share

- +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

Decreased Commercial Vacancy

• - 49% after Union Square was extended for pedestrians and cyclists

the Bronx

Source: NYCDOT. 2010-2013

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.



This study builds on the metrics identified in PlaNYC to measure urban change, and on the more recent goals outlined in One New York. which focuses more directly on an equitable NY.

From Bloomberg's PlaNYC







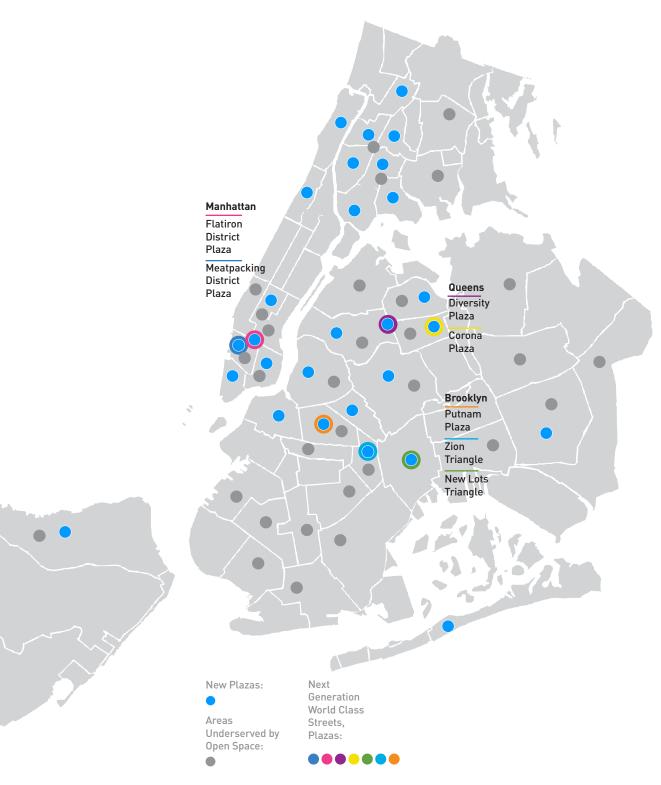
Why Study Public Space, Public Life, and Urban Justice

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 sociodemographic 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

AESTHETICS
 CLIMATE
 HUMAN SCALE

 PROTECTION
 VEHICULAR TRAFFIC
 CRIME
 SENSORY

 COMEODT

COMFORT

DELIGHT

- WALKING • STAND / STAY
- SITTING
- LOOKING
- HEARING / TALKING
- PLAY

Public Life

Pedestrian Volumes

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

URBAN JUSTICE

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

- Ownership
 - Social Connectivity
 - Who: Income
 - Who: Race/
 - Ethnicity *

- - Beauty
 - Creative Innovation
- Health and Wellness

Methods

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
- Senior

Gender

- e Men
- Women

Movement

PedestriansCyclists

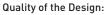
Activity • Stationary (sitting,

Public Space

- standing)
 Active (exercising,
- Active (exercising playing)

Physical Conditions

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



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?



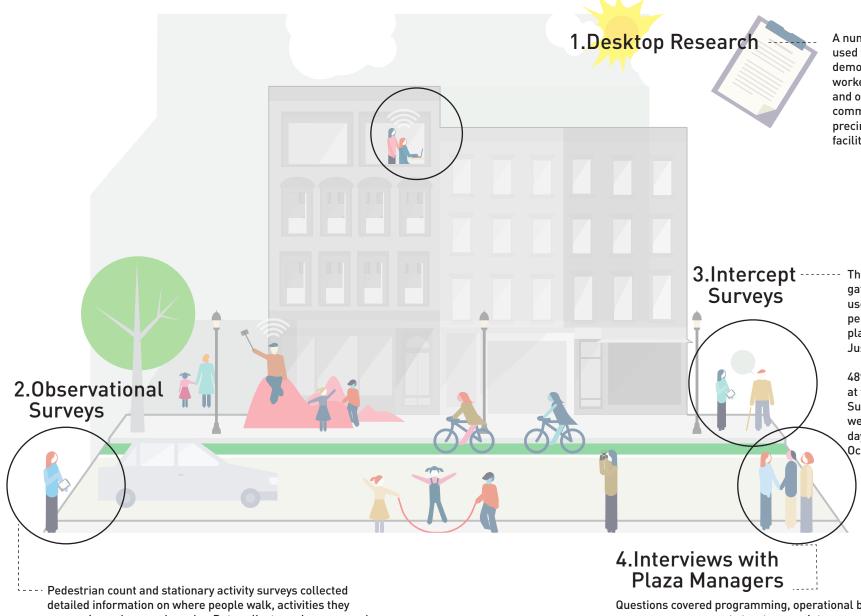
Gehl / JMBC Combined Indicator Framework

- Intercept Survey	Intercept Survey	
🛑 Desktop Research	Desktop Research Observational Survey	
EQUITY		
Individual's Perception of Urba	an Justice Value	
Distribution of Open Space		•
Access and Use of Human and	d Funding Capital	•
Demographics		• •
Design		•
CHOICE		
Individual's Perception of Urba	an Justice Value	• •
Design Flexibility and Adaptab	pility	••
Program Choice: Informal and	d Formal Activities	• •
ACCESS		
Individual's Perception of Urba	an Justice Value	••
Accessible Design		•
User Accessibility: # of People	e with Convenient Access	••
Pedestrian Accessibility		••
Access and Adjacency to Othe	r Land Uses	•
Individual's Perception of Urba	an Justice Value	••
Transportation Connectivity		••
Interpersonal Connectivity		••
Individual's Perception of Urba	an Justice Value	• •
Demographic Diversity		••
Design Diversity		•

Individual's Perception of Urban Justice Value	• •
Neighborhood Ownership	
Formal and Informal Plaza Ownership	•
PARTICIPATION	
Individual's Perception of Urban Justice Value	•
User Activity	
Participation in Operations	•
Design Facilitating Active Engagement	•
Rate of Visitors that Stay in Plaza: "Stickiness"	•
INCLUSION & BELONGING	
Individual's Perception of Urban Justice Value	•
Demographic Inclusion & Belonging	• • •
Design Facilitating Inclusion & Belonging	
Public Safety	•
BEAUTY	
Individual's Perception of Urban Justice Value	•
Design Features	
Appearance	
Individual's Perception of Urban Justice Value	•
Impact	
HEALTH & WELLNESS	
Time Spent Outdoors	
Plaza Activity	
Human Health	•

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Data Collection Methods



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.

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.

 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.

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

Timeline

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

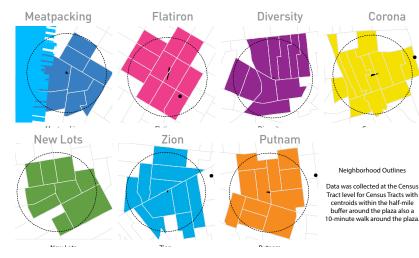
was considered the typical catchment area by plaza managers we spoke to and is also a 10-minute walk from the plaza.

Surveys were collected on a weekday

October 2014.

and weekend day, between 8am-8pm, in

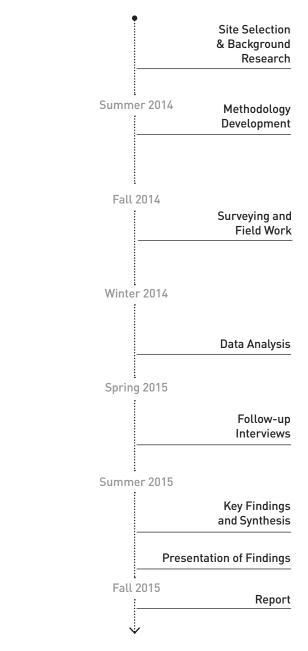
Plaza Neighborhood Boundaries



Intercept Surveys Collected

Total Surveys collected, all plazas: 489

Income	Gender	Language 84% of the intercept surveys were collected in English and 16% in Spanish.	
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.	40% of respondents to the intercept surveys identified as Female and 59% as Male. Less than 1% of respondents identified as Other.		
Age	Race	Quantity	
Survey respondents were	Survey respondents were	Meatpacking: 80	
predominantly 25-44 years	predominantly white at 41%,	Flatiron: 150	
old at 47%, followed by	or Hispanic/Latino at 28%.	Diversity: 75	
45-64 years old at 29%. Few	13% were Asian, 14% were	Corona: 112	
surveys were collected from	Black/African American.	Zion: 34	
children 0-14 years old and	Less than 5% were Two/More	New Lots Triangle: 18	
seniors 65+.	Races.	Putnam: 20	



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 2mile 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 public 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

Equitable Beginnings but Financial

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.

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. People Choose to Visit, and Have Choices of

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.

Different People & Places but Plazas not That Racially Diverse

Indicator Diversity

Public Life

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.

Inviting, Open and Accessible Retreats in

Indicator Access Public Life **Public Space**

the Citv

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.

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.

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.

A Temporary Intervention with Long

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.

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.

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.

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





50 ft

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 (not standard DOT)

- Large white planters
 sponsored by Theory
- Bollards
- Folding chairs: white
- Tables
- Cobblestone street

Local Partner & Maintenance

Meatpacking Improvement Association (MPIA), Meatpacking District Initiative (MPDI)

Flatiron Plaza

Location

Flatiron 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

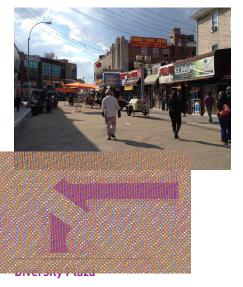
Design Features

- 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

Queens



Location

Jackson Heights, 37th Road between 73rd and 74th Streets

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 (SUKHI), CB3

Maintenance

SUKHI and Neighborhood Plaza Partnership (NPP)



Corona Plaza

Location

Corona, Roosevelt Avenue Service Road between National & 104th 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

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.





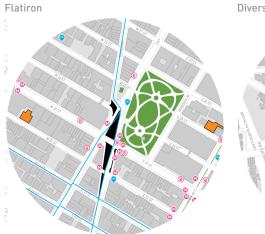
Zion Triangle is adjacent to a school and senior housing.



42

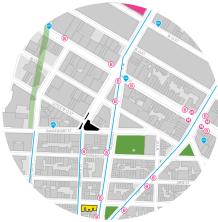
Neighborhood character around the plazas

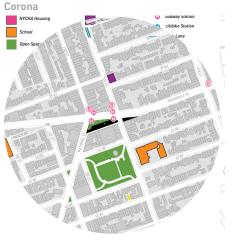
Most plazas are adjacent to public facilities, even in residential areas.









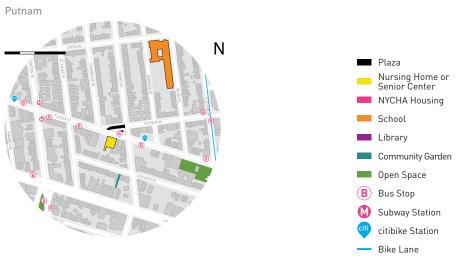




New Lots Triangle is at the entrance to the 2 train.



In Manhattan's CBD, many trains and buses are adjacent to Flatiron Plaza.



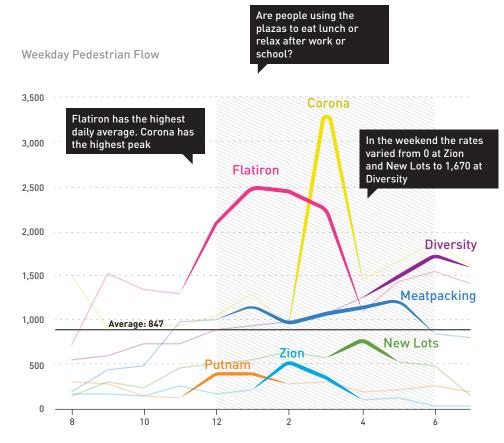
Zion

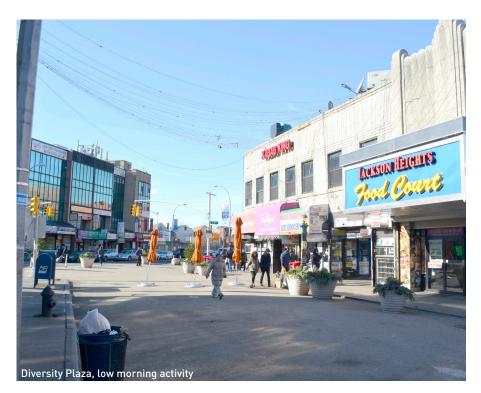
New Lots



When people move in the plazas

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







What people do in the plazas

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





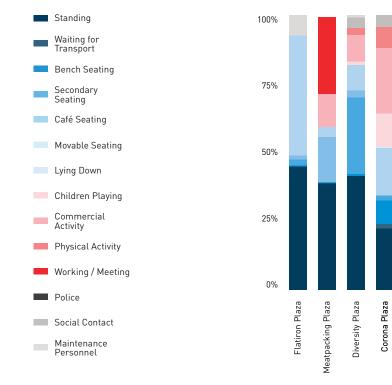












New Lots Triangle

Putnam Plaza

Zion Triangle

Key Findings

Equitable Beginnings but Financial **Challenges Thereafter**

People Choose to Visit and Have Choices of Activity

Inviting, Open and Accessible **Retreats in the City**

Social Connectors

Diverse

Plazas are Physical, but Not Always

Lots of Different People and Places,

but Most Plazas not That Racially

Plazas have a Shared Worth and Value

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

Who is in the Plaza and Who is Not

Attractive Places in the City

A Temporary Intervention with Long Term Impacts

Spaces for Healthy Living

01 Equitable Beginnings, Financial Challenges Thereafter



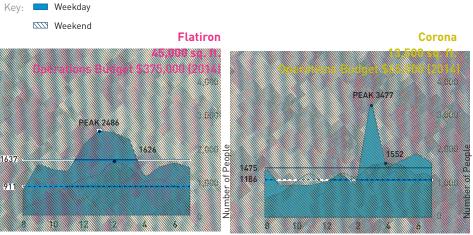
The plazas are equitable in that all have increased open space, serving the local population and were seeded with the same amount of public implementation funds and design palette. But equity is challenged by the fact that maintenance budgets are born solely by the fundraising capacities of the local 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.





Time of Day

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.

Time of Day

D2 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.



At some plazas, people primarily walk through (New Lots Triangle).





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.

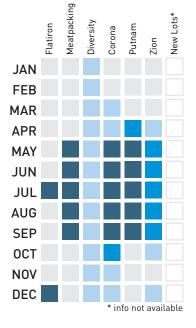
Choice measured by **programming** was also found to range from high to moderate for the plazas studies. The number of programmed events ranged from 12-50 during roughly 6 months of the year. This, coupled with the number of unplanned or unprogrammed activities, provides visitors with a high range of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

Programming Volume, 2014







An Inviting, Open and Accessible Retreat in the City

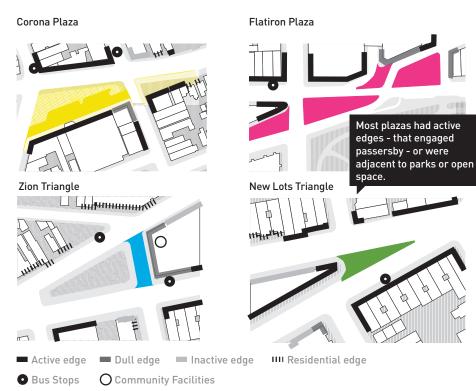


Accessible design is about physical, barrier-free access, and access to amenities is about access to services.

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

Plaza Edge Conditions, Transit Stops and Community Facilities



within a 10 minute walk of the plaza. The plazas are also accessible 24 hours a day, 7 days a week.

Access measured by **pedestrian accessibility** and **public life/public space** was assessed relative to how freely pedestrians could access the plaza, free from vehicular conflicts. Most people surveyed walk to the plazas. 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.

How did you get to the plaza?







Even plazas with

low activity rates

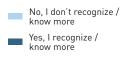
The plazas support high transportation connectivity across the board, but uneven social connectivity, which is higher in the outer borough plazas than in the Manhattan plazas.

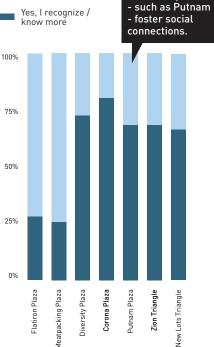
The plazas make walking to transit or local shops more direct, and they foster meeting or recognizing other people, which could increase opportunities to build social capital. This is important since both long commute times and lack of social capital (defined as ability to connect and develop social 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.

Since the plaza opened, do you recognize or know more people in the neighborhood?





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.

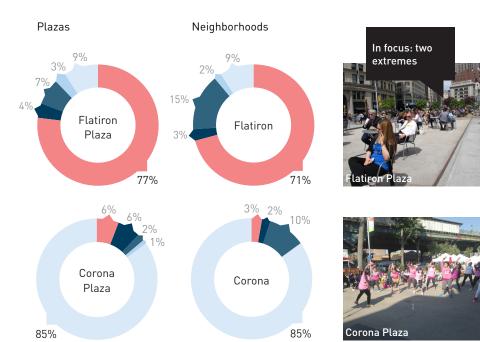


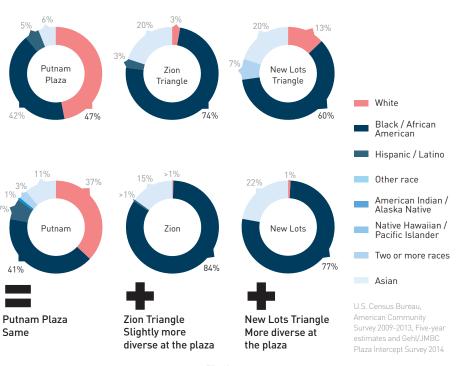
Lots of Different People & Places, But Most Not that Racially Diverse



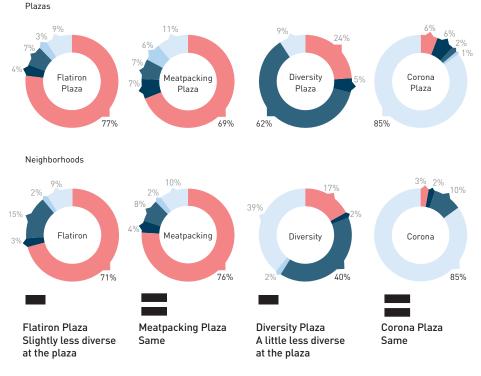
Almost a 1:1 match in the race/ethnicity of plaza visitors compared to nearby residents.

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



Lots of Different **People & Places**



shops - may influence who feels invited

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

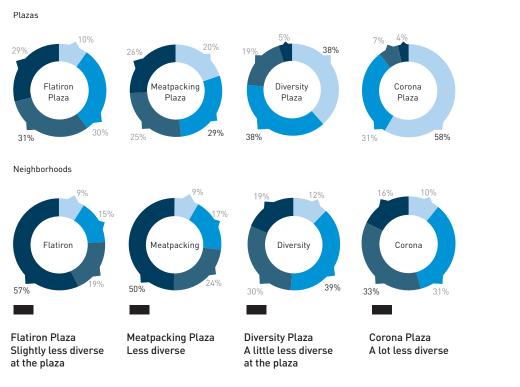
neighborhood plazas were diverse by

to spend time in the plazas. For example,

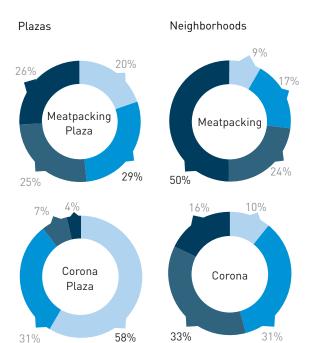
Income Diversity - plazas appear to foster more income diversity than their neighborhoods.

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

Income at the Plazas compared to the Neighborhoods



income.

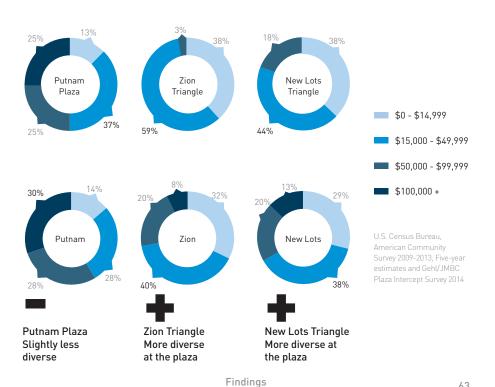




In focus: two

extremes

Meatpacking



05 Lots of Different People & Places

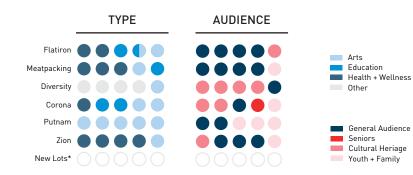


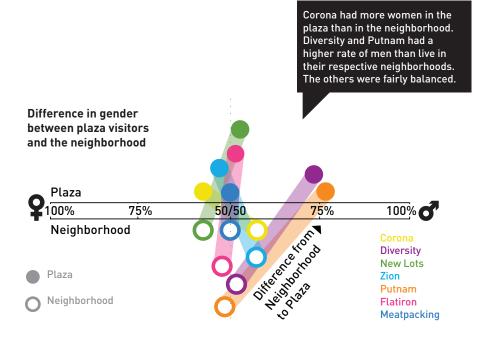
Seniors and children were underrepresented in all plazas. Manhattan destination plazas were more diverse by gender.

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









Plazas Have a Shared Worth and Value



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.

Sense of stewardship

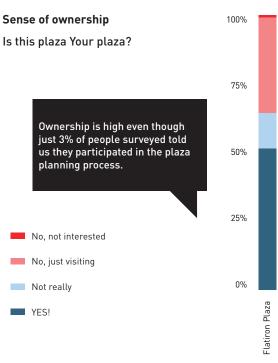
What would you do if you saw a large piece of trash in your plaza?

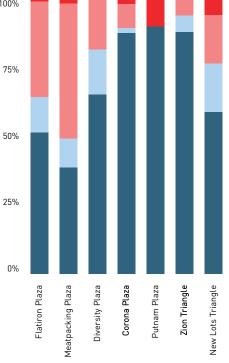
However, for the neighborhood plazas, residential tenure in the neighborhood was high, ranging from 2-28 years for local respondents (local defined as resident who shares a home zip code with the plaza and 5-26 for all respondents.

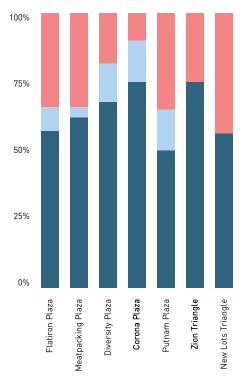
Ownership measured by formal structures of ownership and management was high for all plazas in that all had either locally based formal or volunteer organizational structures for managing the plazas. In most cases, local business owners led these organizations, with some resident participation.

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.







Search for maintenance Pick it up! (if not too dirty)

Good Plaza Use Seven Days a Week



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.

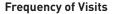
Participation measured by **neighborhood participation** in management was high in the neighborhood plazas. However, residents of the neighborhood did not volunteer at or staff the destination plazas. All plazas had high participation by area business owners and/or operators.

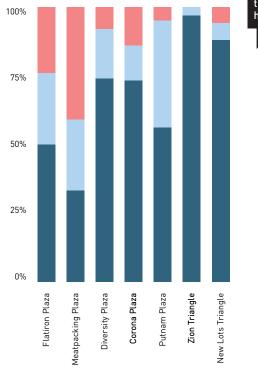
Participation measured by how **design enables activity** was high for most plazas. All plazas allowed for several kinds of activities, both active and passive, because of the flexible layouts of the spaces and various options for creating different seating and gathering configurations. The plazas had 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.





The more local they are, the more often they visit - neighborhood plazas have higher rates of frequent visitors.

> Visitors with the lowest and medium incomes visit the most frequently, while those with the highest incomes visit the least

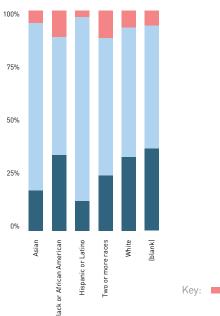
Daily / Weekly

Who is in the Plaza and Who Is not



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.

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



Inclusion and Belonging **measured by design elements** that promote safety found little to no evidence of fences, gates or other physical barriers that prevented users from freely moving in and around the plazas.

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.

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

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

Not at all 📃 Greatly / Somewhat 💻 Can't tell

Plaza Lighting

Corona Plaza







100%

75%

50%

25%

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.

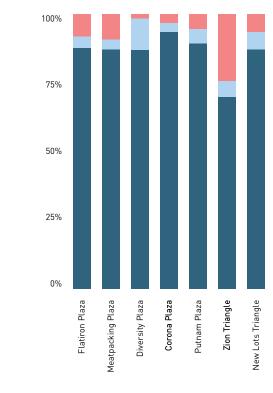
60% said Tables/ Chairs or Flowers/ Planters Made Plazas Attractive

Level of Cleanliness

Meatpacking						
Flatiron						
Diversity						
Corona						
New Lots						
Zion						
Putnam						
low			medium	high		
				Ī		
0 D		C C				
Street Debris Overflowing Garbage Gar		Some Street Debris Garbage Medium to Full Gar		No Street Debris Garbage Frequently Emptied		
Clogged Street Gutter		Plantings in Fair (Plantings in Good Condition		
Debris in Planter	-	-		-		
Plantings in Poor Conditio	n					
High Levels of C	leanliness					
in Meatpac			ow Levels o			
			Cleanlines			
			in New Lot			
		Jatelle	Triangl			
	1 2 7 million ()	and the second se	CONTRACTOR OF STREET			

Aesthetic Impact

Does the plaza improve the appearance of the area?





10 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.

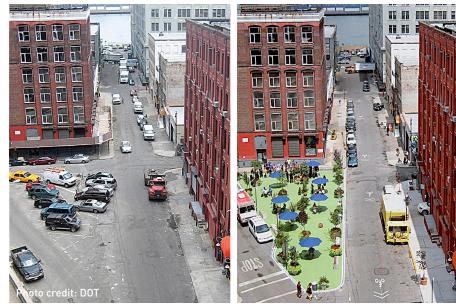
The program allows street space to be re-purposed and reclaimed in a way that seemed impossible just ten years ago. Yet the program is a work in progress, and there are funding challenges.

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

74



What would you like to see in this plaza?



Spaces for Healthy Living



Plazas increase the amount of time people spend outside.

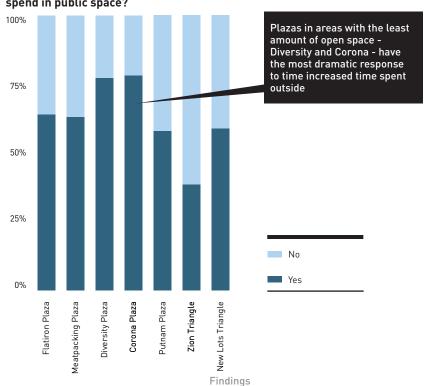
Health and Wellness measured by activity levels (active versus passive) was found to be low to moderate, with people predominately sitting, standing, or passing through. Outside of the occasional programmed event promoting physical health and fitness, all plazas were passive spaces.

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.

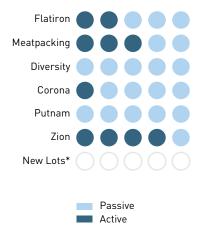
Currently there is no data available to track the relationship between the plazas and resident health. This data would have to be longitudinally tracked (over multiple years) to be able to make a connection to the plazas and human health.

62% said the plaza increased time spent

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



Survey of Annual Programming, 2014 Active versus Passive Programming



Interviews with Plaza Managers, April 2015

Plaza Specific Findings

- Meatpacking Plaza
- Flatiron District Plaza
- Diversity Plaza
- Corona Plaza
- Zion Triangle Plaza
- Putnam Plaza

New Lots

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

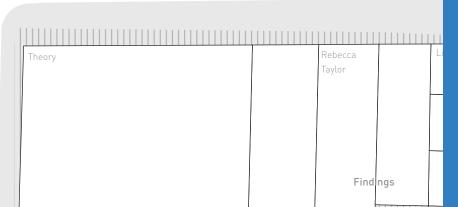
LITTLE WEST 12TH ST

In LW12

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The Raven





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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

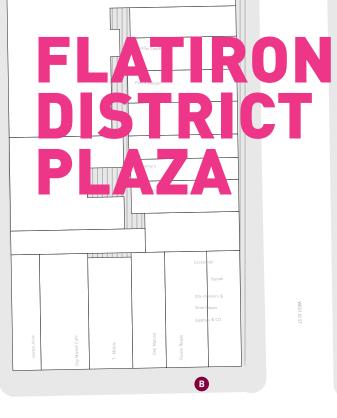
The plaza's core mission is to support nearby commercial entities; a difference from the other plazas studied. (Participation)

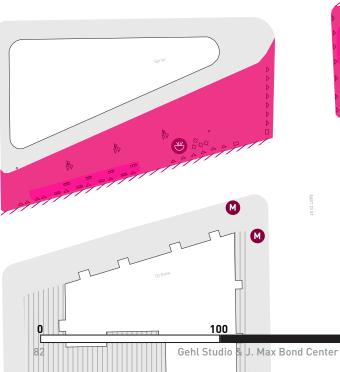
CLEAN, QUALITY SPACE

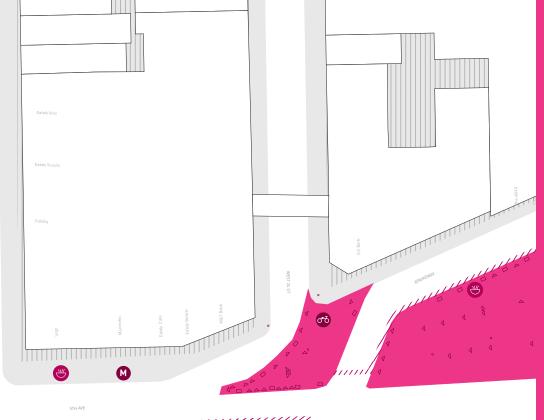
The plaza is very well maintained. (Beauty)

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

The plaza was part of many real estate changes and city initiatives to reinvigorate Broadway and attracted new businesses.

DIVERSITY PLAZA



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

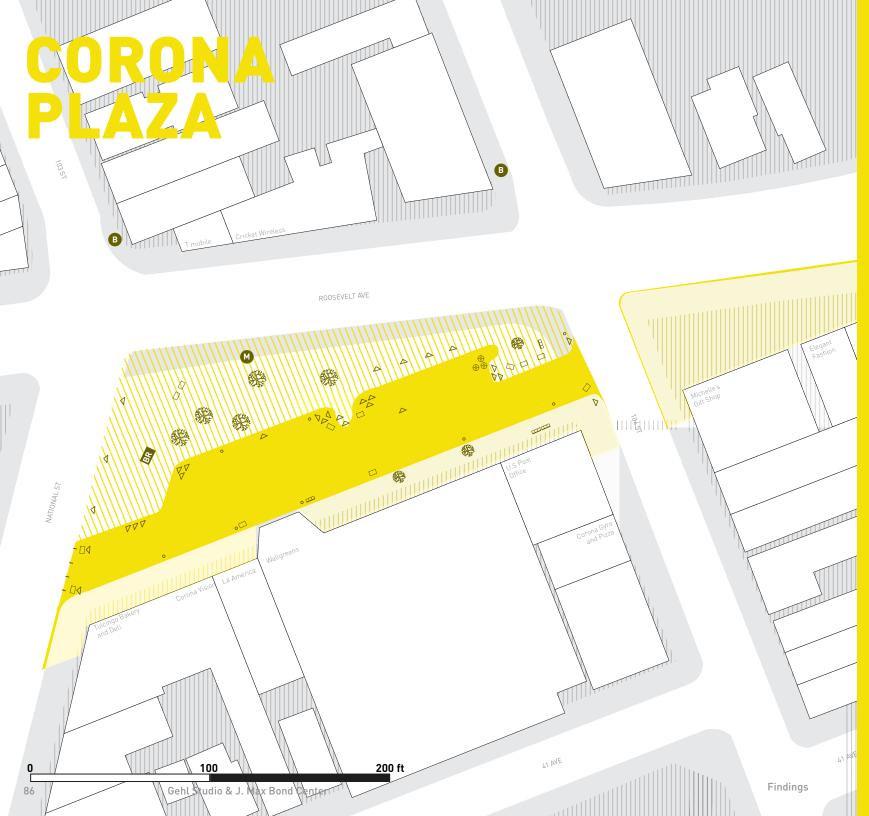
The plaza was identified as a unique place for cultural co-mingling. (Connectivity, Inclusion/Belonging)

MANAGEMENT OVERBUR-**DENED 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)

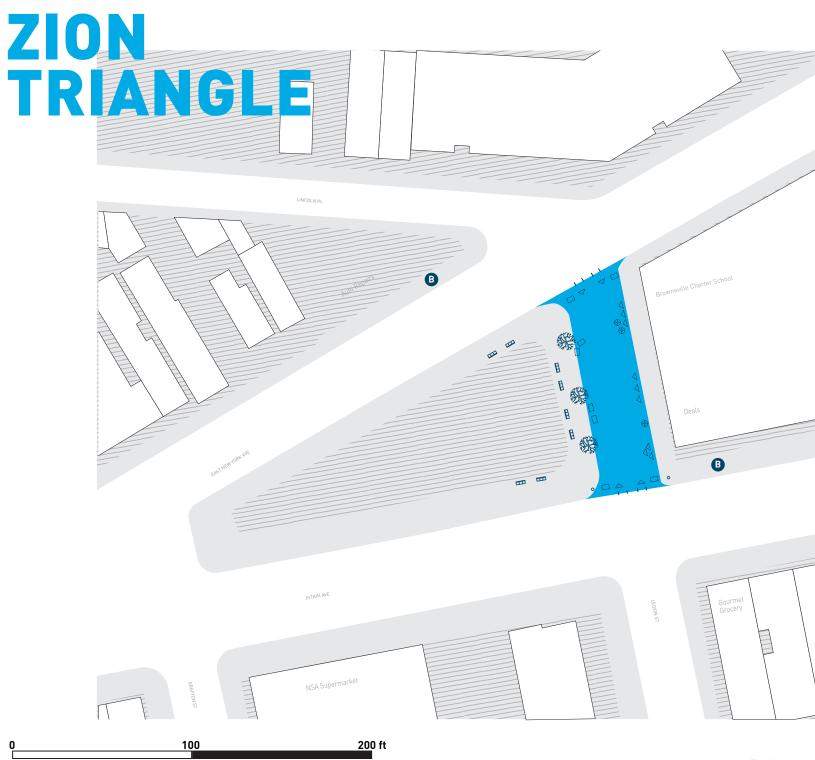
IMPROVED COMMUTER EXPERIENCE

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)

.....



OPPORTUNITY TO BE MORE VISIBLE

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)

INCREASED SAFETY

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

DELIGHTFUL LOCAL GEM

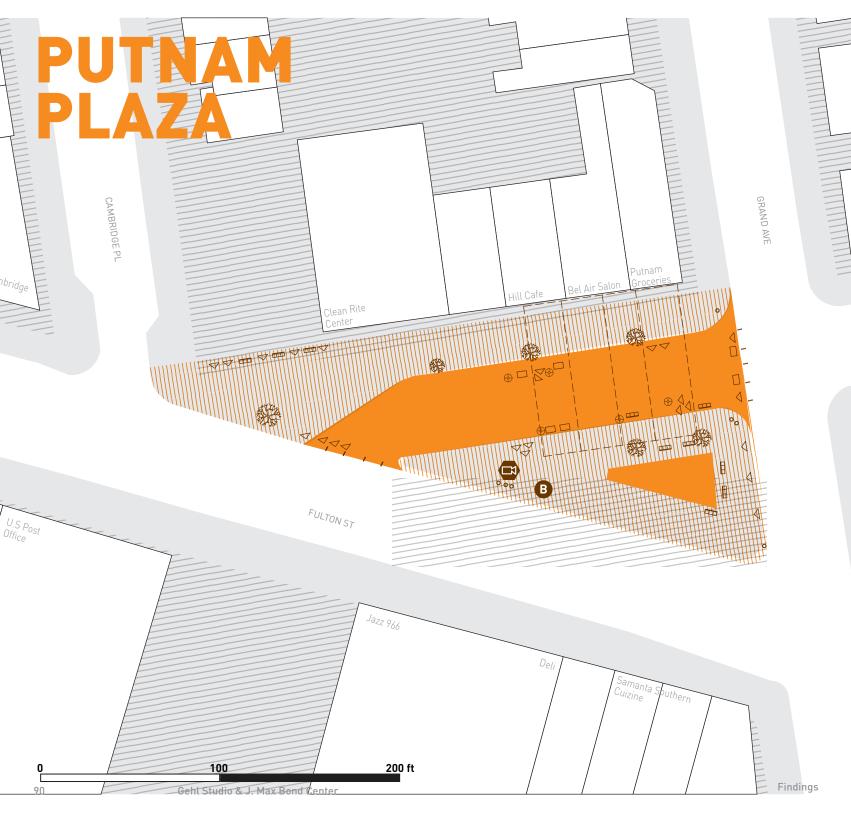
Strong sense of beauty, ownership, & participation from area residents, especially in warmer seasons. Plaza was one of the best maintained in the study. (Beauty)

WHERE TO SIT?

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)

A PLACE TO PLAY, WEEKDAY AFTERNOONS

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)



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

ΡU

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

Recommendations: Citywide

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). 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

2. Provide more funding and operational support (Equity)	3. Align support for new and existing plazas with the Mayor's affordable housing agenda (Access)	4. Identify how plazas can further reduce traffic crashes and support Vision Zero (Connectivity)	5. Leve suppor with Ba Commo (Healt) DOT; D Mayor's
Mayor's Office; DOT; OneNYC	Mayor's Office; DOT; DCP; HPD	Mayor's Office; DOT; Advocates	
The current plaza funding model does not perform the same across all	Plazas increase open space in neighborhoods and create opportunities	Those surveyed said the plazas improve perceptions and feeling of	Survey that the to spen

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.

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 interagency task-force should be formed to implement this analysis.

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.

verage plaza ort and creation Building Healthy *nunities* initiatives th & Wellbeing)

DOHMH; CAU, r's Office

responses revealed e plazas led people nd 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 healthvulnerable communities can be invited to spend time in the plazas.

6. Provide additional support to plaza managers to diversify programming & foster civic engagement (Inclusion/Belonging, Participation)

Mayor's Office; DOT; DCLA

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 atuned 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 wellbeing 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.



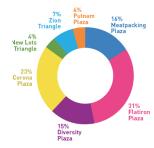
Study Methods

Project Metrics

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?

Intercept surveys collected Where did we collect them:



The intercept survey tool enabled our team to collect first hand plaza user data on how the plaza performed in several areas of urban justice, public life, and design. Using 20 guestions, the survey collects data on demographics, access, participation, ownership, inclusion/belonging, beauty, creative innovation, health, and wellness.

Questions like "How has this plaza impacted your perception of safety in the neighborhood?" 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.

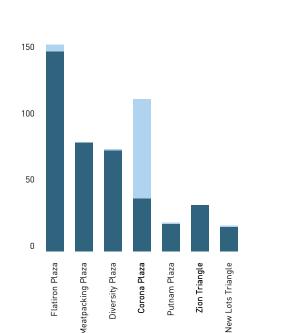
Over the course of a weekday and weekend, intercept surveys were done at all seven plazas, simultaneous to the observational surveys. The survey questions, both multiple choice and free response, reflected one or an intersection of the Just City and public space, public life values.

The surveys also collected feedback on people's reaction to the Just City values. On the front cover of the survey, respondents were asked to define one of the five Just City values: equity, inclusion/belonging, beauty, participation, and diversity. 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.

English vs. Spanish Speakers

200



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. Spanish

English



Method: Intercept Surveys

Sample survey sheet

1. Do you identify as Male / Female/ Other? (circle) 8. Typically, I am in this plaza (circle all that apply) When: 2. Age (circle) O to 14 years 45 to 64 years 15 to 24 years 65 + vears 25 to 44 years 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 Masters High School PhD Bachelors / Other Professional Degree None of above 7. Income Range (circle one) \$0 to \$14,999 \$75,000 to \$99,999 \$100,000 to \$149,999

\$15,000 to \$34,999 \$35,000 to \$49,999 \$150,000 or more \$50,000 to \$74,999

Weekday Mornings Weekday Afternoons Weekday Evenings Weekends Frequency: Daily Weekly Every few months Rarely (once a year) 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 / Didn't know I could (circle) If Yes, what were some of your ideas incorporated into the plaza?

If No, why not? I have been have only one year

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 Tables / Chairs Boulder Seating Brayel Pavement Umbrellas Others Eld Wrayers If No, why not?

12. If you were in the plaza and saw a large piece of trash what would you do? (check) □ If not too dirty, pick it up and throw away Search for a maintenance worker Nothing / lanore □ 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? Good impact. Gratherine, Good sales showing ideas. 15. Do your suffer from any health or respiratory challenges? Y/N (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) Greatly (5 hours or more per week) □ Somewhat (0.5 - 3 hours per week) □ No difference 17. Before the plaza was created where did you primarily

spend time outdoors? (circle all that apply) Front Stoop Backyard / Sideyard Trails Vacant Lot Sidewalk Street Alley Park / Plaza Waterfront Didn't spend time outdoors Other not applicable

18. Since the plaza opened, do you recognize or know more people in the neighborhood? [check] □ Yes, I recognize a few faces, but have not talked to anyone □ Yes, I have made a few acquaintances Wes, I have made (insert #) 60 new friends □ 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 / Not Sure a. Ideas for what else to see: Trees on two ends of plaza Transpor Jahm



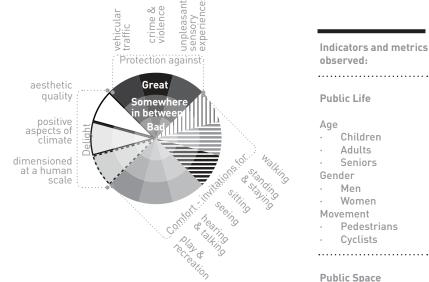


Intercept surveys were conducted in English and Spanish, and a few in Hindi. at the seven plazas. 489 surveys were collected.

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?

Quality Criteria

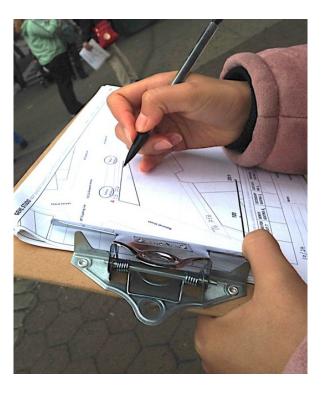


The Public Space Public Life Survey is a unique observational field survey technique Gehl Architects developed to identify how to create or enliven public spaces. The survey quantifies how people use and interact with places in cities. It creates an opportunity for city leaders to include people oriented 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 gualitative factors that affect the public realm. Results from the survey help to formulate strategies for improving streets as public spaces, and can serve as a baseline against which future projects can be compared.

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.



Indicators and metrics observed:

Public Life

Age

Children

Adults

Seniors

Gender

- Men
- Women
- Movement
- Pedestrians
- Cvclists

Public Space

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?)

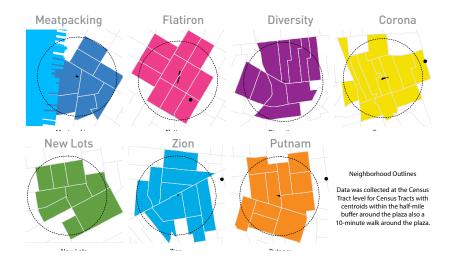
Quality of the Design: Protection, Comfort and Delight

How is the space protected from traffic or noise; how comfortable is it in terms of being able to hear. talk and see: and how much opportunity for delight and joy exist?

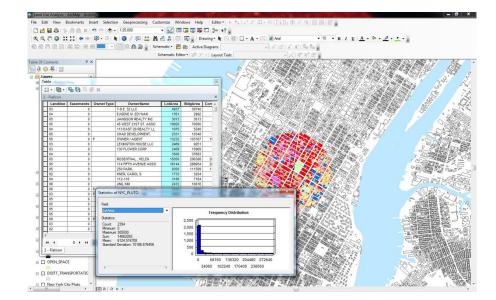
Method: Desktop Research

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

Plaza Neighborhood Boundaries



Data was collected at the Census Tract level for Census Tracts with centroids within the halfmile buffer around the plaza, also a 10-minute walk around the plaza and what plaza managers identified as the typical catchment area.



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

Desktop research was done to place the survey data into a plazaneighborhood, 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 halfmile 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, privatelyowned 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.

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

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- 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

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- 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

Project Values, Indicators & Metrics

A. DESIGN FLEXIBILITY + ADAPTABILITY

- QUANTITY OF MOVEABLE FURNITURE + FIXED
 FURNITURE
- % OF SPACE DEVOTED TO MOVABLE
 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 PROTECTECTION 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

A. INDIVIDUAL'S PERCEPTION OF VALUE

B. EQUITABLE DISTRIBUTION OF OPEN SPACE

• INCREASE IN SQ FT OF OPEN SPACE, BY THE PLAZA

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

ACCESS

A. ACCESSIBLE DESIGN

- Assessment of barriers near access points, such as fences, gates, bollard, jersey barriers, etc.
- QUALITY OF PLAZA ADA ACCESSIBLITY, 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

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

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 SOCIAL RECOGNITION OF OTHERS BY FREQUENCY OF USE
- Proximity to public modes of transportation relative to user volumes

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

- Users feeling of ownership is this PLAZA YOURS? BY ZIP CODE OF ORIGIN
- Opportunities for residents + workers to shape decisions about plaza design, programming and/or operations
- Opportunities for residents + workers to volunteer in operations of the plaza
- Sense of stewardship would you pick up trash? by age
- Sense of stewardship would you pick up trash? by race
- Sense of stewardship would you pick up trash? by zip code of origin
- Sense of stewardship would you pick up trash? by housing tenure in the neighborhood

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

- RESIDENTS + BUSINESS OWNERS WHO PARTICIPATE IN VOLUNTEER EFFORTS
- NUMBER OF COMMUNITY ENGAGEMENT EFFORTS BY MANAGEMENT FOR RESIDENT INPUT + DECISION MAKING

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 --"STICKINESS"

 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

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?
- DEAS FOR WHAT ELSE TO SEE .

M 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 GENDER
- TIME SPENT IN PLAZA BY AGE
- TIME SPENT IN PLAZA BY RACE
- TIME SPENT IN PLAZA BY INCOME
- TIME SPENT IN PLAZA BY GENDER

Β. ΡΙ Δ7Δ ΑCTIVITY

- # 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

* 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 RACE

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



