DESTINATION STATION

TRANSFORMING BUS STOPS THROUGH COMMUNITY OUTREACH

PROJECT FOR
PUBLIC
SPACES

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Cover image: Fordham Road & Grand Concourse

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INTRODUCTION

How can bus stops be more than portals to pass through?

The broad answer: develop a sense of place that strengthens the connection between people and the bus stops they use. In practice, this means seamlessly incorporating bus stops into people's daily routines.

Specifically, bus stops can be located near an array of food options, retail establishments, and services, allowing riders to cluster their errands around convenient hubs. They can be easily accessible on foot and via bikeshare or scooter, and close to parks, libraries, and other community destinations. They can include shelters, seating, and arrival information to make waiting riders comfortable. Surrounding street geometry can actively incorporate bus lanes and pedestrian safety, and network-wide considerations can keep the buses running efficiently.

To fulfill the promise of buses as an equitable, sustainable, and efficient mode of transit, this type of ideal bus stop must become a reality for every person living in a city. Project for Public Spaces' emerging Portals to Places program aims to do just that.

The idea of bringing placemaking to transit stations is not new to us; Project for Public Spaces began encouraging transit agencies to think beyond the station in 2007. While the principles of great stations—walkability, mix of destinations, good management, and so on—are timeless, the transit context has changed considerably over the past decade. Ride-hailing apps, like Uber

and Lyft, and micro-mobility options, such as bikeshare and electric scooters, are expanding. For the first time in years, transit ridership in the United States is declining, but buses remain an unsung hero, often disportionately serving people with lower incomes and people of color.

To understand today's reality, Project for Public Spaces spent several months riding bus lines, observing bus stops, and surveying those waiting there about what they would like to see at and around their bus stops. In brief, we found that people who ride the bus do in fact visit surrounding destinations (most frequently food stores), tend to feel neutral about the condition of their bus stops, and desire improved bus service and stop infrastructure.

The results of our study are particularly important because for the first time in decades, the New York City Metropolitan Transit Authority (MTA) is embarking on a system-wide redesign. Borough by borough, the MTA is "taking a holistic, blank-slate approach," reevaluating how each bus route and stop can best serve New Yorkers. Other cities, including Miami, Austin, and Los Angeles are undertaking similar redesigns, understanding that a comprehensive approach can avoid the unintended consequences that piecemeal fixes often produce.

In developing these redesigns, transit agencies tend to make and justify their decisions based on ridership, traffic patterns, and community input. But what is often missing is the crucial rubric of place. People use and value destinations around their bus stops, and these destinations can make bus stops nodes of convenience and community life.

Understanding bus stops as clusters of activity informs an important element of network redesigns: consolidation. This is a complicated issue and Project for Public Spaces does not intend to take sides or oversimplify the debate. When done with care, however, removing redundant, closely-spaced bus stops can dramatically increase bus speeds, despite marginally increasing walking distance for some people. By both placing bus stops amidst a density of destinations and developing destinations amidst good transit infrastructure, agencies and advocates can maximize the positive impacts of consolidation while mitigating any negative results. Put plainly, when a bus stop is on the same block as your favorite cafe, bagel shop, gym, and park, you may be more willing to walk an extra two minutes to get there.

To contribute to agencies' bus stop siting practices, Project for Public Spaces has developed a participatory process. We distilled our survey experience, along with our archives of engagement techniques, into a framework—a democratic, place-based approach to locating, consolidating, and improving bus stops. This framework is not a substitute for a transit agency's careful studies of ridership and route efficiency, but instead supplements their focus on movement with a closer look at the places where that movement stops.

Waiting for the Select Bus at Fordham Road & Grand Concourse

METHODOLOGY

RESEARCH AND STOP SELECTION

In carrying out our research, we followed one of Project for Public Spaces dictums: the community is the expert. Riders are the best sources of information for the stops they regularly use, and our work aspires to improve the quality of their lives and commutes. So we undertook a new process that would both draw from and add to Project for Public Spaces' long history of participatory planning (see sidebar). This involved riding buses, observing stops, and surveying riders on how they experience stops and the surrounding destinations.

New York City was our study area for two reasons: it is where Project for Public Spaces is located, and it has the nation's highest bus ridership. Both factors enabled us to be as thorough as possible in our research.

We began the process by riding the most heavily used bus routes in the outer boroughs of New York City from end to end: the Bx12 Select Bus Service in the Bronx, the Q58 in Queens, and the B6 and B46 Select Bus Service in Brooklyn. Then, we chose one stop from each route to conduct a deeper investigation, based on the following criteria:

In addition to our on-site surveys and observations, we conducted extensive background research. Internally, we reviewed past projects on transit-oriented development, station design and activation, and community engagement strategies. One particularly helpful document for the last is a toolkit of methods Project for Public Spaces created for the Federal Transit Administration. Externally, we read publications on range of topics, from national bus ridership trends to best practices in bus stop design to city-specific network redesign plans.

▶ **Low-income community**

▶ **Bus route and stop with high ridership and usage**

▶ **A mix of current and potential uses as allowed by zoning**
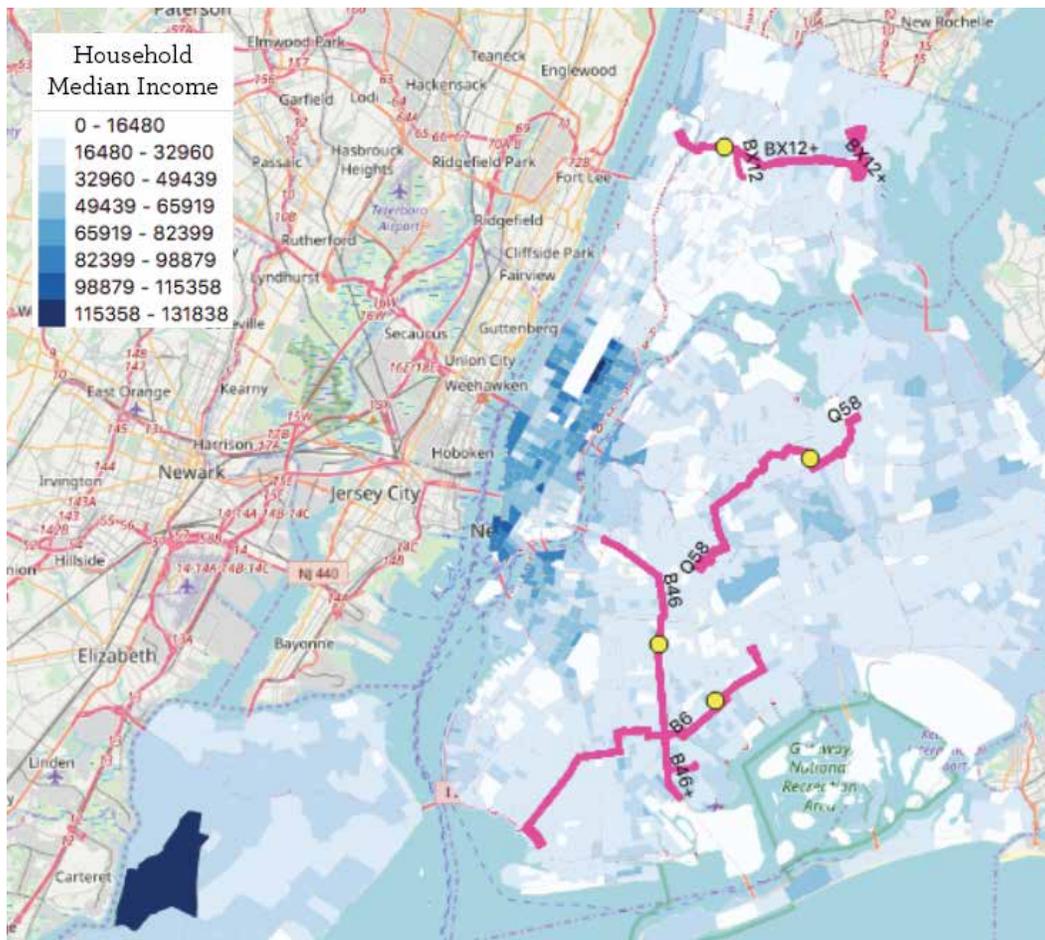

Map shows household median income overlaid with the bus routes we rode and the stops we selected

FORDHAM ROAD & GRAND CONCOURSE
BRONX

Fordham Road & Grand Concourse is a busy hub, where several different bus lines converge with the B, D, and 4 trains. Vehicular and pedestrian traffic is heavy. The surrounding area is zoned as commercial, with an abundance of large clothing and shoe retailers. We observed a fairly balanced mix of passengers arriving at the stop via foot, bus, and subway. Of the 27,521 residents of the census blocks within a 0.25-mile radius of the stop, 71.1% are Hispanic/Latino, and 20.6% are Black (Population FactFinder).
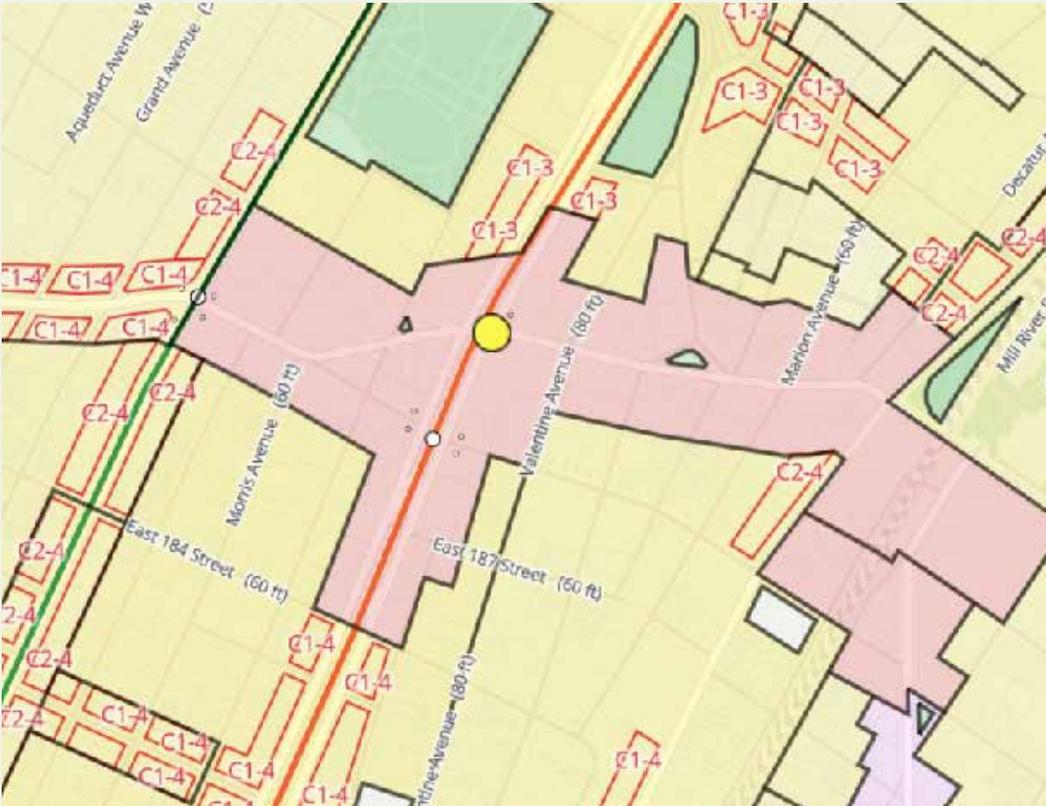
Map shows residential and commercial zoning and the 4, B, and D subway lines

108TH STREET & VAN CLEEF STREET

QUEENS

108th Street & Van Cleef Street is quieter than Fordham Rd, located at a five-point intersection in Corona. The southbound stop is adjacent to a public school, and the northbound stop abuts a small overgrown parcel that has been for sale for years. Zoning is residential with a commercial overlay. Most people surveyed lived nearby and arrived on foot. 18,238 people live in the census blocks within a 0.25-mile radius of the stop, of whom 76.6% are Hispanic/Latino and 10.3% are Asian (Population FactFinder).

Map shows residential zoning with commercial overlays and nearby Flushing Meadows-Corona Park

EASTERN PARKWAY & UTICA AVENUE

BROOKLYN

Eastern Parkway & Utica Avenue is a lively transit hub in Crown Heights, where the 2, 3, 4, and 5 trains meet several bus lines, including the B46 SBS. In addition to the frequent buses running along Utica Ave, there are many "dollar vans" - private transit operations that fill in the gaps of the bus network. The proliferation of buses, dollar vans, and automobiles along the rather narrow street lead to congestion and jockeying. There is a mix of food and retail nearby, with an informal vending market in the public space between the subway and bus stations. There are 23,061 residents in the census blocks within a 0.25-mile radius of the stop; 77.6% are Black and 12.2% are Hispanic/Latino (Population FactFinder).

Map shows residential and commercial zoning, along with the 2, 3, and 4 subway lines and Lincoln Terrace Park

ROCKAWAY PARKWAY STATION

BROOKLYN

Rockaway Parkway Station is the eastern terminus of the L subway line. Many commuters transfer immediately from the L to the nearby bus lines and vice versa. The surrounding part of the Canarsie neighborhood is lower-density residential with a commercial overlay, where there are a number of food and retail options. There is also a large municipal parking lot for commuters. 8,370 people live in the census blocks within a 0.25-mile radius; 77.4% are Black, 9.7% are Hispanic/Latino, and 8.2% are White (Population FactFinder).

Map shows residential, commercial, and manufacturing zoning around the L train terminus

SURVEY

We visited each stop twice, for approximately 1.5 hours each time, during the morning and evening commutes, from roughly 9am to 10:30am and 4pm to 5:30pm. Although midday and weekend hours would have provided beneficial data, we were time-constrained and prioritized obtaining consistent data over the two-month period. While there, we verbally conducted a 2-5 minute survey using Google Forms with as many passengers as possible. About half of the people we asked to speak with agreed; the other half were not interested. Rates of agreement tended to be lower in the evening and at Fordham Rd & Grand Concourse. We asked questions in English and Spanish, depending on rider preference, and surveyed a total of 124 people.

The questions were:

▶ **How did you get here?**

▶ **How long did it take you to get here?**

▶ **What places do you usually visit around here?**

▶ **What would you like to do if it were more convenient?**

▶ **How comfortable does this bus stop feel?**

▶ **What could make the area better?**

As our survey process progressed, we made slight revisions to the questions for clarity. We also removed two questions (do you use the bus stop on weekends? and why this bus stop?) because they were not providing relevant data during our specific survey periods. For the last round of surveys, which took place at 108th St & Van Cleef St in Queens, we introduced an additional element to the survey by showing participants photographs while asking Question 6 to spark ideas that were more in line with the scope of the survey. Images included bikeshare, a fruit stand, public art, and games. We had originally intended to gather input unaffected by our suggestions, but decided to experiment as the process went on. 108th and Van Cleef offered the right venue for this experimentation because it had a lower volume of riders, which allowed one of us to ask questions while the other presented the images on an iPad. While we cannot make a universal recommendation on whether or not to use this visual technique, we found it important to use general and open-ended photos to spark the imagination of participants.

108th & Van Cleef: the quietest stop

FINDINGS & ANALYSIS

1. There are destinations near bus stops that are vital to people's daily routines.
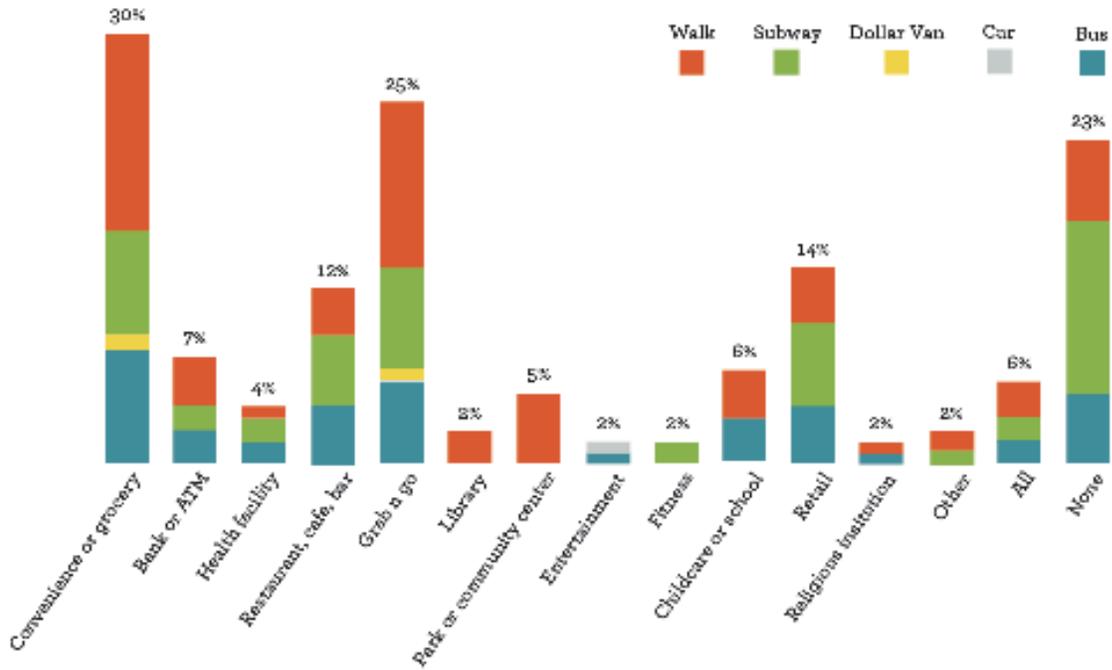
We are all busy people. We have places to go and things to do, and usually not enough time in a day to accomplish everything. When asked about what destinations they visited in the area surrounding the bus stop, 76% of people said they visited another destination on this trip. Places like grocery stores (29%), and "grab-n'-go" food and coffee establishments (26%)—the two most-visited types of destinations—appear to be a key part of people's daily routines, reducing the number of additional trips that people have to take to meet their daily needs. For people who arrived at the bus stop on foot, and who presumably live nearby, community-oriented destinations, such as religious institutions, libraries, parks, and community centers, were especially important.

However, a significant portion (24%) responded by explaining that they did not visit any destinations in the area and that they were simply getting to where they needed to go. These people were usually disembarking from one mode of transit (either another bus or a subway) and waiting to transfer to another bus to their final destination.

Pedestrians cross the street and interact with vendors at Eastern Parkway & Utica Avenue

What places do you visit around here?

Legend: Walk (orange) · Subway (green) · Dollar Van (yellow) · Car (gray) · Bus (teal)

Percentages by destination:
- Convenience or grocery: 30%
- Bank or ATM: 7%
- Health facility: 4%
- Restaurant, cafe, bar: 12%
- Grab n go: 25%
- Library: 2%
- Park or community center: 5%
- Entertainment: 2%
- Fitness: 2%
- Childcare or school: 6%
- Retail: 14%
- Religious institution: 2%
- Other: 2%
- All: 6%
- None: 23%

The density of destinations around bus stops determines how transit fits into people's daily lives!

2. A large majority of people were neutral (not satisfied or dissatisfied) about their bus stop.

When asked how comfortable the bus stop felt, the large majority of participants responded that it was "fine" or "okay", coded as a three on a scale of one to five, with one being not comfortable and five being very comfortable. People explained that they used it out of necessity and convenience. Many were accepting of the condition of the bus stop and surrounding area as standard. One participant responded by saying the bus stop was "fine," and rhetorically asked, "what makes a bus stop not fine?"

How comfortable does this bus stop feel?

| 10%	8%	44%	16%	9%
1	2	3	4	5
Uncomfortable		Neutral		Comfortable
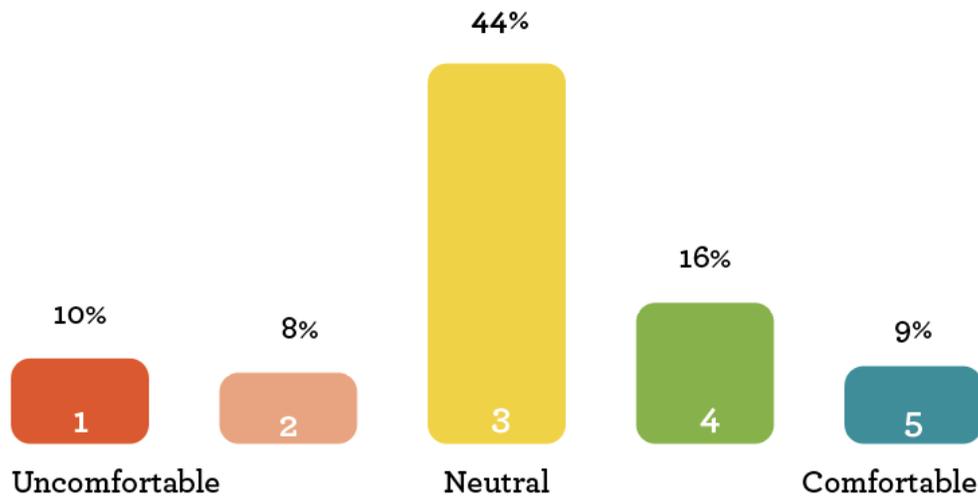
3. **Respondents usually focused on infrastructure and amenities, and the functioning of the greater bus network during conversations about bus stops.**

Upon further probing, respondents varied in their answers when asked, "What could make this area better?" Often people inadvertently provided a response to this question when asked for an explanation of why a stop felt particularly comfortable or uncomfortable. For the findings below, the open-ended responses to both questions were reviewed and synthesized into distinct (though interrelated) categories. It is also important to note that participants were not asked about the overall bus network, but many responded with comments about the network; this could indicate that participant thoughts about the network were actually underreported.

The majority of respondents (59%) commented on the bus stop itself—infrastructure and amenities such as shelters, shade, seating, and cleanliness—while many others (46%) mentioned the larger bus network—timeliness and speed of buses and over-crowding at bus stops. A significant number of people (18%), in keeping with the previous question on comfort, responded that the area is fine or good, and they would not change or improve anything.

> *For more information on bus stop and street design, see Transit Center's* Sorry to Superb *and NACTO's* Transit Street Design Guide*.*
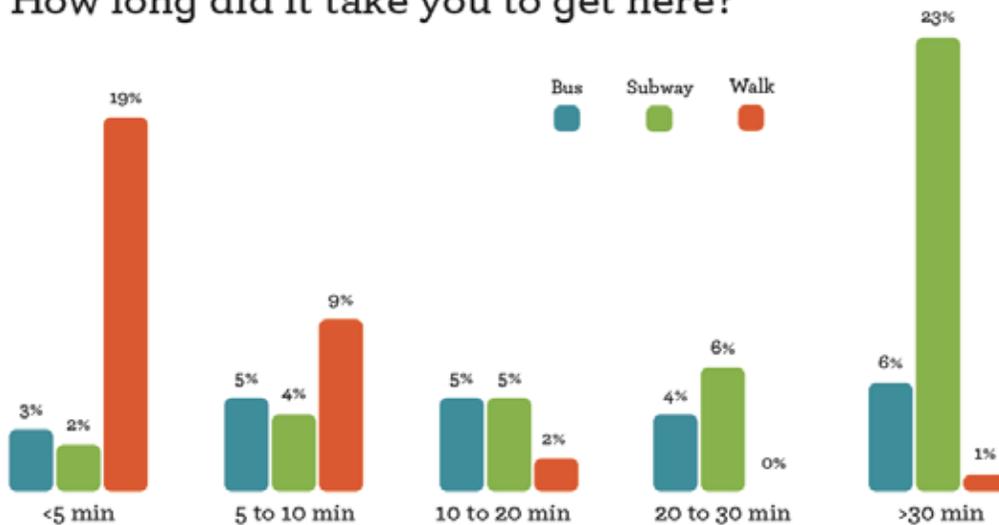
What could make this area better?
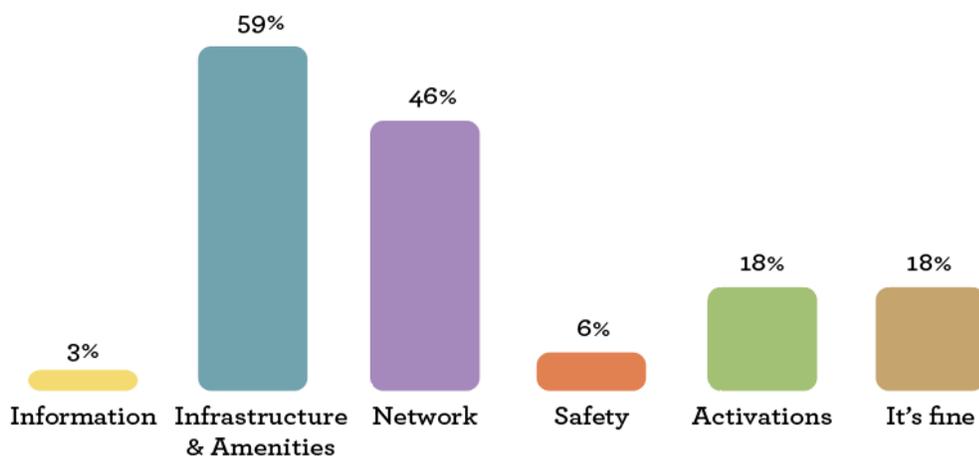
4. **People who walked to the bus stop arrived in the least amount of time, while subway riders tended to take the longest amount of time. Bus riders were more evenly distributed.**

Perhaps unsurprisingly, travel time was closely linked to mode of transit. The vast majority of people who walked arrived in ten minutes or less, while most subway riders had travelled for more than 30 minutes. Travel times of people who rode a different bus to the bus stop were more varied. These data suggest that people prefer the subway for longer-distance travel, walking for short connections, and the bus for everything in between.

From a placemaking point of view, this distinction in modes of travel has implications on destinations around bus stops, and the familiarity riders have with given areas. Many of those who walked to the stop live or work in the immediate neighborhood and visit surrounding destinations. Subway riders, on the other hand, are coming from farther away and may be just passing through without a reason to visit surrounding destinations. Buses bring some of both.

How long did it take you to get here?

Bus   Subway   Walk

	<5 min	5 to 10 min	10 to 20 min	20 to 30 min	>30 min
Bus	3%	5%	5%	4%	6%
Subway	2%	4%	5%	6%	23%
Walk	19%	9%	2%	0%	1%

5.

At most stops, multiple modes of transit and pedestrians competed with one and other for road and sidewalk space.

At certain bus stops, there was an added layer of multimodality. Most notably, at Eastern & Utica Avenue in Brooklyn, dollar vans (small private vans or cars that offer short rides at low prices parts of Brooklyn along specific routes) competed with buses, private vehicles, and rideshare for road space. Participants commented that the hectic traffic pattern and congestion created distress and feelings of insecurity for pedestrians. Many people had ridden the dollar van to the bus, and then boarded the bus to their final destination.

> Improved bus service and expanded micromobility options, such as bikeshare and scooters, could replace private vehicular trips and ease congestion. Further research is needed to determine the extent to which people would welcome such a shift.

A person biking amidst the dollar vans at Eastern Parkway & Utica Avenue

6. Opinion was divided on the presence of other people at bus stops; many felt safe and comfortable with the high volume of other people, while others considered the stops overcrowded.

Respondents were divided when discussing the volume of other people in and around their bus stop. Many felt a greater sense of comfort and security due to the high number of people in the area. One interviewee summarized by saying that "this is not a lonely bus stop," and thus she felt comfortable there.

Other participants, however, said that they were uncomfortable because of overcrowding, and that they would prefer fewer people be waiting for and riding the bus. We believe that this indicates that there is a happy medium—a range between the number of people that it takes for others to feel safe in the area and the number that makes it feel overcrowded and uncomfortable.

Additional research could determine the "goldilocks" number of waiting passengers and how best to achieve it.

People and retail along Utica Ave

7. **Photo surveys can inspire transit riders to imagine a better bus stop, but also carry a risk of bias.**

At the bus stop in Queens, participants were shown a set of inspirational photos of potential improvements to bus stops before they were asked the final interview question, What could make the area better? The photos were largely well-received, which suggests that people often do not consider what is truly possible at a bus stop in terms of comfort and convenience.

However, it is important to acknowledge the bias that sharing examples of amenities can impose on participants. The presentation of these images had the predicted effect of skewing the answers that respondents gave to the question by including those elements pictured or simply selecting a photo that they liked best. For example, one of the pictures included in the series depicts a bike and bikeshare system. Few if any respondents who were not shown photos mentioned bikes as micro-mobility, while respondents who were shown the photo commented that they would utilize a bikeshare (Citibike) to either replace or supplement their bus ride. This exercise revealed an important disassociation between modes of transit in people's minds; when people are riding a bus, they are not thinking about alternative transit modes until they are suggested to them.

Future research could be conducted on how to mitigate bias caused by showing riders images while still inspiring them to think beyond the underwhelming facilities they may be accustomed to.

People's answers to "what could make this area better" changed significantly after they were shown inspirational photos like these.

FRAMEWORK

FOR PARTICIPATORY TRANSIT STOP CONCEPTION

Pulling from our survey experience, plus PPS's deep archives of engagement techniques, we have developed a democratic framework for bus stop siting. While the results of our survey are specific to New York City, we intend the framework to be applicable to any city considering a bus network redesign. Similar to participatory budgeting, we recommend a standardized process to elicit recommendations directly from the community to inform the consolidation process, working closely with local partners.

In order to make the most of stop consolidation, transportation agencies need to rethink community engagement and create a space for broader and deeper participation. The process outlined below goes beyond the research conducted for this specific project, and draws on the principles that Project for Public Spaces has developed, utilized, and advocated for over many years, in order to create a set of recommendations for applying placemaking to major transit nodes. It is important to remember in every context to first research and understand the current conditions, and then to engage with the experts— the community—to determine how best to adapt the steps below to the local context.

The final product of this process is a place-based layer that can be used in conjunction with other elements, like zoning, demographics, or transit network data, to best uphold critical adjacencies - the grouping of key destinations within close proximity to one and other - that make great transit stops.

Below is a one-page overview, followed by a deeper dive.

DESTINATION STATION

Transforming bus stops through community outreach

PHASE I: RESEARCH

Understand current conditions

- Research and ride heavily used bus routes, focusing on marginalized areas
- Understand demographics, zoning, and opportunities

PHASE II: ON-SITE OUTREACH

Talk to transit users

- Select a set of representative bus stops
- Administer a survey to transit users during different times of the day and days of the week

PHASE III: WORKSHOPS

Facilitate in-depth conversations

- Conduct dot-mapping exercises with transit users to identify key destinations in their neighborhood
- Make a map of challenges and opportunities
- Guide community-led discussions on how to locate and improve transit stops

The result is a place-based layer that can be used alongside other elements — like demographic, zoning, and transit network data — to uphold the mix of key destinations that make great bus stops.

PHASE 1: RESEARCH

No matter the circumstances, extensive background research should be the first step in any process to engage the community about transit stops. This research could look slightly different depending on the context of the project at hand, but the goal of this phase should be to gather as much information as possible on community makeup, zoning, and existing ridership routes and stops. The following are recommended steps to complete during the research phase of this process:

1. If a bus system is in existence at the time of the project, **determine the most heavily utilized bus routes in different geographical areas of the city**. If a transit system does not exist, conduct research on demographics, income, vehicular travel, zoning, heavily used areas, etc. in order to gain a holistic understanding of the community.
   a. **Pay special attention** to those neighborhoods outside of the central city with less access to transit systems, those that are low-income, communities of color, or otherwise marginalized.
2. **Ride the most heavily utilized bus routes from start to finish during the AM and PM commute hours**.
   a. **Observe current activity and conditions,** making note of those stops that are most densely populated (large numbers of people embarking/disembarking from the bus, walking on the sidewalk, utilizing another mode of transit, etc.)
   b. During these rides, **talk to riders** to gain information on critical adjacencies.

Result: A deep understanding of the current conditions of the area of focus.

PHASE 2: ON-SITE OUTREACH

The recommendations of this phase are intended to provide advocates with the tools necessary to plan, execute, and analyze site-specific information that can then be used to inform decisions on transit nodes. In contrast to the next phase (Workshops), this on-site outreach will capture a wider audience, including both people who do not live in the neighborhood but are bus stop users and community members who would not ordinarily go out of their way to attend a longform workshop. The following are recommended steps to complete during the on-site outreach phase of this process:

1. If a transit network is in place, **select a representative set of existing bus stops** based on the prior research phase of this process. If bus stops do not exist, utilize an overlay of different datasets collected during the previous phase to select neighborhoods where a new transit line would be both feasible and beneficial.
2. **Administer the survey** (p. 13) during different times of the day and different days of the week, based on observed usage and need. Baseline outreach should occur during the morning and evening commute times on weekdays. Additional surveys would be helpful during the midday period, late nights, and weekends. Questions can be added or removed from the survey as necessary to cater to the individualized needs of the community at hand.
3. **Analyze the results of your engagement**, paying particular attention to patterns that emerge in destinations that are heavily used by community members.

Result: Site-specific data from community members that can be used to inform thinking around transit nodes.

PHASE 3: WORKSHOPS

After conducting background research and initial surveys, it is important to take a deeper dive into how people use bus stops and their surrounding destinations. This typically involves workshops or focus groups, where members of the general public are invited to assemble at a location for an extended period of time (ranging from 20 minutes to 2 hours) and share their thoughts. Workshops can take many forms and should be ultimately designed by people familiar with the local community and transit agency. But there are a number of techniques honed by Project for Public Spaces that can be incorporated into a workshop to collect information on destinations and bus stop placement.

1. **Bring everyone to the table.** In order to get realistic, helpful data on a bus system, workshops must include a representative sampling of the local population. Community meetings tend to over-represent those with strong opinions and free time. Conscious efforts, then, must be made to reach a wider audience. Recommendations include:
   a. **Make the workshops convenient.** Generally, workshop locations should be as close to the study area as possible and accessible by transit. Hold workshops at a variety of locations and times—especially off work hours—to suit diverse needs.
   b. **Partner with community leaders for outreach.** Public housing associations, churches, community centers, libraries, schools, and many other institutions may be able to spread the word. Simply posting an announcement online and expecting people show up is almost never sufficient.
   c. **Ensure that attendance is logistically and financially feasible.** Consider providing on-site childcare, free food, and transit vouchers.
   d. **Build on existing workshops.** If an agency is already holding open houses to gather input for bus network redesigns, incorporate activities focusing on placemaking and destinations. Do not organize a separate workshop unless it is necessary.
3. **Gather spatial information through dot maps.** Print out large aerial maps of the study area and ask participants to place dot stickers on destinations they regularly visit. Encourage people to write the name of the destination on the sticker. Differently colored dots can correspond to different types of destinations (such as food, retail, public institution, etc.).

4. **Mark the routes that people take to bus stops.** Ask participants to draw a line on a map showing how they tend to get to the stop. To maintain anonymity, do not expect people to indicate their exact origin, which will often be their home. Rather, use the closest major intersection to their origin as the starting point. This exercise can be very valuable in aligning stops with peoples' walking patterns and ensuring that the trip to the bus stop is safe and pleasant.

5. **Ask people where they need bus stops.** Again using aerial maps, simply ask participants to place dots where bus stops would be most helpful for them. Limit the number of dots per person in a way that corresponds to the agency's standard of bus stop spacing. Before this exercise, participants should be briefed on how an overabundance of bus stops in a given area slows the system down for everyone. There is always a chance that people will simply cluster stops around their homes, but the data should be useful in aggregate if enough people participate.

6. **Discuss the exercises.** Leave room for a semi-structured discussion on why people visit certain destinations, what destinations are missing, and why certain bus stop locations are popular or unpopular. Be sure to take copious notes; this type of qualitative data is often equally important to the spatial and quantitative data collected in other steps.

7. **Make a digital map** that allows participants to zoom in and out and place markers at key locations. Disseminate this tool as widely as possible—via email, social media, and slips of paper—both before and after the workshops. The online format may be able to reach people who do not currently ride the bus or attend workshops, a secondary audience whose participation could increase the number of new riders. (Please note that the primary audience should almost always be current riders. Do not court new riders at the expense of loyal current ones.)

Result: Spatial data layers plus qualitative descriptions on how people use the areas surrounding bus stops. Transit agencies should use these layers to supplement their data on ridership and street capacity. When the layers conflict, revise stop location, street geometry, zoning, etc. to make them better align.

Dot maps are an excellent, tactile way to engage people in bus stop placemaking

CONCLUSION

Bus stops are important portals through which people move about the city and gain access to opportunity. While much attention is paid to system-wide performance, the stops themselves—and the areas nearby—are often overlooked. People spend a great deal of time at and around bus stops, so improving these places can go a long way to improving quality of life. When key destinations are clustered near bus stops, both people's daily routines and the transit systems as a whole can become more pleasantly efficient. To make such well-sited bus stops a reality, Project for Public Spaces encourages agencies and advocates to use, build upon, and share our participatory framework.

In the long process of equitably and sustainably reshaping our cities, seamlessly integrating bus stops into the communities they serve is a critical step.

Everyone has the right to live in a great place. More importantly, everyone has the right to contribute to making the place they already live great.
                                        - Fred Kent

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