

# The Need for Public Bathrooms

An analysis of public bathrooms in New York City and abroad. Best practices, design typologies, guidelines, and how we can build more of them in our cities.



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# About This Book

This booklet highlights the importance of public bathrooms in the public realm, especially in improving public health and promoting human rights. We summarize research compiled over the course of a year from our readings, interviews, meetings, and analysis related to public bathrooms.

We hope this booklet will serve as a resource for citizens, advocates, architects, urban planners, elected officials, government agencies, local business owners, and others to understand the benefits of public bathrooms, in the hope that we can increase the number of available facilities in our city.

## **Forefront Fellowship**

This booklet was produced by Julie Chou, Kevin A. Gurley, and Boyeong Hong in 2020 as part of the 2018-2019 Forefront Fellowship at the Urban Design Forum.

The 2018-2019 Forefront Fellowship explored how to design shelters and shape the public realm to turn the tide on homelessness in New York City. In the first phase of the fellowship, Fellows partnered with the New York City Department of Homeless Services to visit shelters, interview stakeholders, and draft guidelines on how to design homeless shelters across the city. In the second phase, Fellows worked with community-based organizations to develop independent projects to support people experiencing homelessness.

The views expressed here are those of the authors only and do not reflect the position of the Urban Design Forum.

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# Background

## The Need for Public Bathrooms

Accessible, clean, and safe public bathrooms are a necessity in a city as large, dense, and diverse as New York. Like housing, public bathrooms are a basic need, a human right, a public health concern, and a necessary piece of urban infrastructure. This project proposes design, finance, and maintenance solutions for the City of New York to provide public bathrooms across the five boroughs.

Access to public bathrooms is not a new issue in New York. Four City administrations and numerous advocacy groups, including the Urban Justice Center and Picture the Homeless, have been trying to expand New Yorkers' access to public bathrooms.

Past initiatives have continually stalled. What are the barriers to providing clean and safe public bathrooms?



In 2018, Picture the Homeless, a New York-based advocacy organization, began the “Free to Pee” campaign to push the City of New York to install the fifteen automatic public toilets the city has had in storage since 2006.

## Public Bathrooms Are an Integral Part of the Public Realm

The public realm and its amenities are essential to the health and livability of a city. The public realm is defined as “the space around, between and within buildings that are publicly accessible, including streets, squares, parks, and open spaces.” These spaces are usually connected through urban systems such as transportation, retail corridors, and plazas. As a whole, the public realm supports and facilitates urban dynamism and social interaction. Providing requisite amenities in the public realm creates the foundation for a well-functioning and flourishing urban citizenry.

Public amenities are resources, facilities, or benefits continuously offered to the public for their use and/or enjoyment. Common examples include playgrounds, street furniture, water fountains, and community centers. Considerations of public amenities focus predominantly on these recreational or aesthetic amenities. Bathrooms—our most basic need—are often forgotten.

## Historical Background

Historically, “public” bathrooms referred to restrooms created in noncommercial public spaces for people who did not yet have a toilet in their home. One of the earliest public bathrooms in the United States was one built in Astor Place in New York City in 1869. It would be one of the first in a fast-growing, immigrant city where access to a toilet in residences was considered a luxury.

By the 1930s, with Robert Moses as the Parks Commissioner, the city increased the number of public bathrooms, and also built up an impressive network of public pools and showers for public usage. In a single year, the

administration was able to renovate 145 city comfort stations. Many of these facilities, such as public pools and showers at city beaches, are still open and enjoyed by many New Yorkers and visitors. However, in the decades following World War II, particularly in the 1970s through the 1990s, many of the public bathrooms were closed.

The 1970-1980s were a particularly challenging time for the City of New York as it faced significant budget shortfalls. After narrowly avoiding bankruptcy in the 1970s, the city was required to make harsh budget cuts. Public bathrooms were shuttered. While many public bathrooms suffered from these budget cuts, an increase in crime, vandalism,



Under Robert Moses, the City of New York increased the number of public bathrooms significantly. In 1934 alone, 145 comfort stations around the city were renovated.

sexual activity, and drug use exacerbated their closing. As maintenance costs increased and public perception waned, public bathrooms were no longer desired amenities for investment by the City.

*I usually go to Penn Station and Madison Square Park for the bathrooms. It's all about the service. I used to go there and relax. I have been to drop-in centers, including Main Change and the NYC Rescue Mission, but it feels safer on the street than in a shelter.*

—Interview with someone living on the street near Penn Station, December 2018.

The responsibility of maintaining public bathrooms fell increasingly on local businesses and property owners. In the 1980s, the city's Department of City Planning began the Privately Owned Public (POPS) program that offered real estate developers bonus floor area or waivers in exchange for providing and maintaining public bathrooms in their public spaces. Around 14 public bathrooms were created during this time.

In 1990, a group of homeless people sued the City of New York and the Metropolitan Transportation Authority for lack of access to public bathrooms. The lawsuit brought to light the persecution, shame, and physical pain that homeless people experienced for not being

able to find a bathroom to urinate or defecate. As a result, the city formed the Public Toilets Working Group a year later, and in 1992, six sidewalk toilets from Europe were installed in Manhattan with approval by Mayor Dinkins for a four month test period. Monitored by attendants, they were used over 40,000 times and were considered a success. The City was planning to order 100 toilets and install them across the five boroughs by 1994. However, complications from the City's extensive land use review, pushback from accessibility advocates, and sorting out the contract with one bidder stalled the deal for years. It was not until 2006, under Mayor Bloomberg that a deal was made that included 20 automated public toilets in a massive \$1.4 billion dollar street furniture contract. To date, only five of these toilets have been installed.

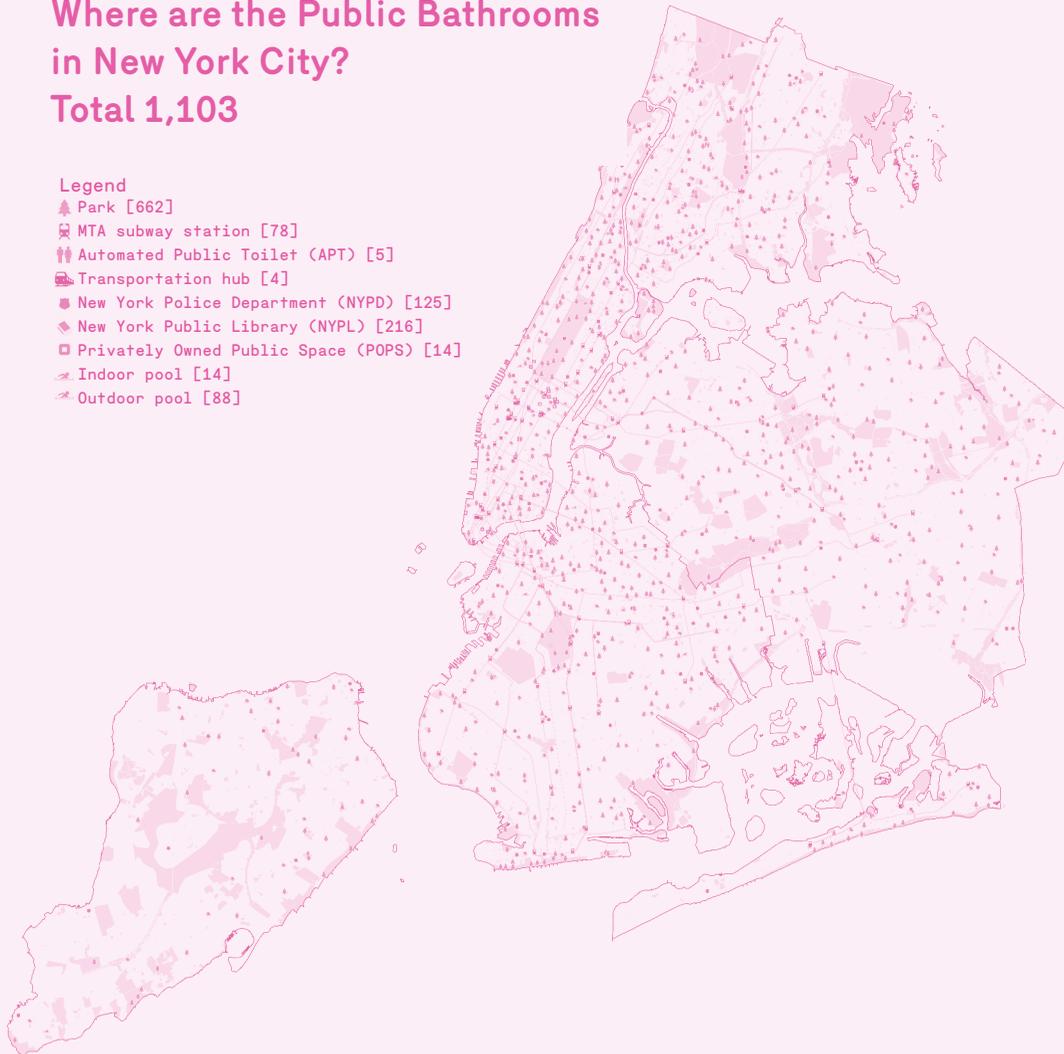
The availability of public bathrooms has not increased significantly since the 1970s crisis. We believe the city has not truly recovered from this era, both in stigma around public bathrooms, but also in rebuilding the large network of public bathrooms it once had. Despite growth in the city's population, economy, and tourism, public bathroom conditions have changed very little.

# Design Typologies

## Where are the Public Bathrooms in New York City? Total 1,103

### Legend

-  Park [662]
-  MTA subway station [78]
-  Automated Public Toilet (APT) [5]
-  Transportation hub [4]
-  New York Police Department (NYPD) [125]
-  New York Public Library (NYPL) [216]
-  Privately Owned Public Space (POPS) [14]
-  Indoor pool [14]
-  Outdoor pool [88]



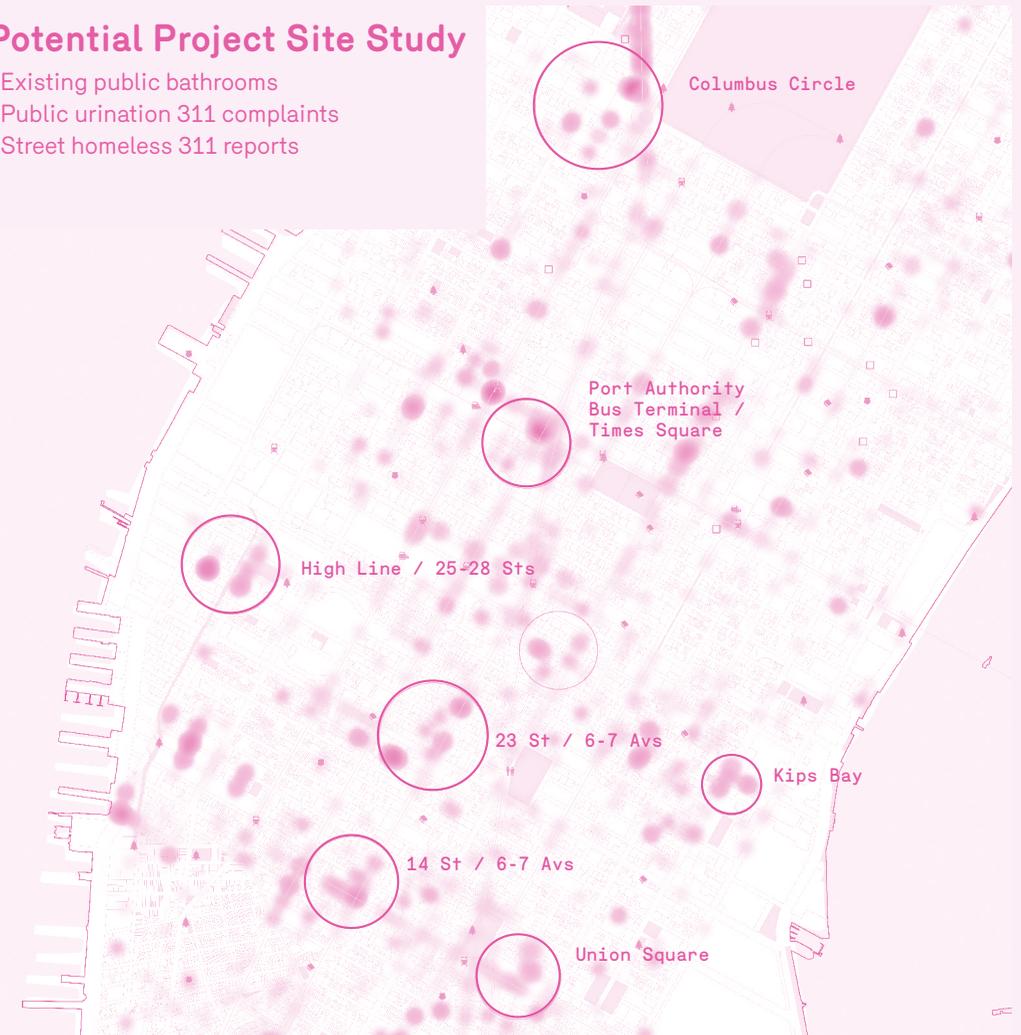
The Need for Public Bathrooms

We have developed a typology for categorizing public bathroom designs currently present in New York and other major cities. We hope this analysis of distinct bathroom types can serve as a menu of options to make the appropriate choice for diverse sites around the city.

As of 2019, there are 1,103 public bathrooms around New York City. However, only two of these are open 24/7, creating a serious problem for anyone looking for a bathroom late at night.

## Potential Project Site Study

- Existing public bathrooms
- Public urination 311 complaints
- Street homeless 311 reports



Design Typologies

As an example area, we look at potential project sites in Midtown around clusters of need. This map shows 311 reports of public urination and street homeless population, as well as existing public bathrooms.

# COMFORT STATIONS



**Locations:**  
662 parks around the city



**Hours:**  
Parks:  
Sunrise-1am  
Playgrounds:  
8am-Dusk



**Ownership:**  
NYC Department of Parks and Recreation



**Cleanliness:**  
Poor

Many are poorly maintained and irregularly cleaned



**Usage:**  
High

Usage varies, but parks are popular amenities



**Costs:**  
High

\$2k-\$5k/sq. ft. for construction



## Green Central Knoll Playground Comfort Station, Brooklyn

Opened: 2019  
Total Funding: \$3,796,000  
Timeline from Design to Construction: 5 years

### What We Propose

We propose that NYC Department of Parks and Recreation (DPR) look into standalone pre-fabricated toilets, such as automatic public toilets, to reduce construction costs.

We propose the City consider public-private partnerships for comfort stations to lower costs for construction and maintenance.

We propose that DPR work with the community to keep facilities intact and/or create a neighborhood volunteer program.

We propose that DPR consider keeping some comfort stations open for extended hours to increase the number of public bathrooms available at night, and hire attendants for many sites. Attendants at comfort stations can ensure higher cleanliness and safety.

### Locations

New York has over 1,700 public parks. 662 of these feature public bathrooms, known as comfort stations.

Comfort stations are distributed throughout the five boroughs.

### Case Study

According to Susan Watts at the NYC Comptroller's Office, among the 1,428 NYC Parks bathrooms, nearly 400 bathroom features such as sinks, toilets, and changing tables were damaged or missing during a regular inspection in 2019. Over 50 "hazards" that could present a risk to bathroom users, such as exposed wires or noxious odors, were also identified. In nine Community Districts, more than a quarter of NYC Parks bathrooms were deemed "unacceptable."



### STRENGTHS

#### Locations:

- Comfort stations are distributed equally throughout the city, making them a very accessible resource.

#### Cleanliness:

- Generally, comfort stations are cleaner than other public bathrooms such as subway station bathrooms. This helps make them a more dignified option.

#### Design:

- Architects selected by NYC's Design Excellence Program have designed bathrooms that are thoughtful and aesthetically pleasing.

### WEAKNESSES

#### Access and Safety:

- Public bathrooms in playgrounds may have restrictions for adults with no children.
- Some bathrooms are located deep inside the park with limited lighting.
- Not open 24/7 and some are not open year-round.

#### Bathroom condition:

- Bathrooms with urinals tend to have trash accumulated, causing water overflows.
- Broken sink faucets and broken handles on paper towel dispensers impede usage.
- Some comfort stations experience significant vandalism. The presence of bathroom attendants could dissuade vandalism.

# MTA SUBWAY STATIONS



**Locations:**  
78 out of 472 total subway stations



**Hours:**  
5 am-midnight



**Ownership:**  
MTA New York City Transit



**Cleanliness:**  
Low

Most are poorly maintained and not very clean



**Usage:**  
Varies

Some are very busy, others unused



**Costs:**  
Moderate

Costs include repair, cleaning, and station staffing



**Church Av station (F and G lines), Brooklyn**  
This station bathroom features a fairly standard bathroom design for the subway. This is not a major transfer point, so the bathroom is more lightly used.

## What We Propose

We propose that MTA New York City Transit (MTA NYCT) consider opening formerly closed station bathrooms. Recent projects like the Enhanced Station Initiative project, which renovated stations throughout the subway system, serve as a good example of how station bathrooms could be rebuilt, renovated, and reopened.

We propose that MTA NYCT and DCP consider public-private partnerships to fund and maintain new bathrooms. New construction could consider Transit Bonuses in exchange for bathrooms.

## Locations

- Subway station bathrooms are distributed fairly well throughout the city. They form an important part of the city's public bathroom network.

## Cleanliness/Maintenance

- They are sometimes regarded as unsafe and undesirable spaces, but there are examples of successful, clean, and safe bathrooms in stations such as 34 St-Hudson Yards, Times Sq-42 St, Fulton St, and the Second Avenue Line stations on the Upper East Side.

## Hours

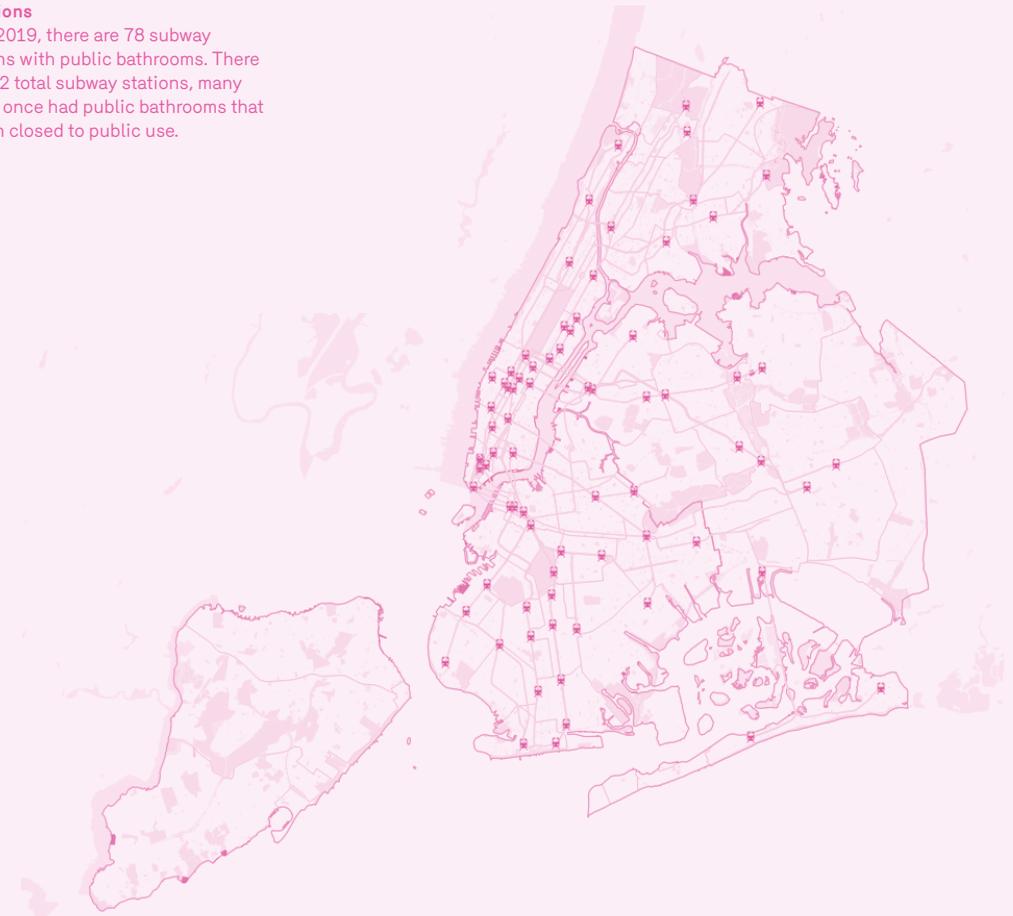
- Hours are limited, generally from 5am to midnight, despite 24/7 subway service.

## Precedents

- The Times Square Subway Station bathrooms were built in 2004 by Boston Properties in exchange for development rights. Full time attendants are provided by Boston Properties to monitor and clean the bathrooms.

## Locations

As of 2019, there are 78 subway stations with public bathrooms. There are 472 total subway stations, many which once had public bathrooms that remain closed to public use.



## STRENGTHS

### Locations:

- Subway station bathrooms are dispersed throughout the city, creating a well balanced network of public bathrooms.

### Potential for growth:

- Many subway stations have closed bathrooms that could be rebuilt, renovated, and reopened for public use. The subway is the veins of New York; having public bathrooms in more subway stations would create significant impact.

## WEAKNESSES

### Access and Safety:

- Although many station bathrooms are heavily used, some are located in quiet, less transited areas of stations, which create a sense of unsafety.
- Some bathrooms may be magnets for crime and greater surveillance may be needed.

### Cleanliness and maintenance:

- Many bathrooms are poorly maintained and dirty.
- Many bathrooms lack basic amenities such as soap and toilet paper, creating undesirable conditions.

# AUTOMATIC PUBLIC TOILETS (APT)



**Locations:**  
Five plazas and sidewalk areas in four boroughs



**Hours:**  
Year-round  
8am-8pm



**Ownership:**  
NYC Department of Transportation



**Cleanliness:**  
High

Self cleaning. Single user design keeps usage low



**Usage:**  
Moderate/Varies

Many serve up to 90 people daily, but others are not well known to the public.



**Costs:**  
Low

\$175k-500k to install  
\$40k/year to maintain (Paid for by private company)

## Siting

- Footprint: 6'7" x 11'.
- Required 8 ft. clearance in front and 5 ft. on other three sides. Required to be 10 ft. from fire hydrants.
- Siting challenges have included finding sites with required sidewalk clearances and utility connections as well as acquiring approvals from community boards and the Public Design Commission.

## Safety

- To close doors, the toilet has a weight sensor of a maximum of 550 pounds and a minimum of 45 pounds. The minimum is to protect children from getting trapped.

## Usage costs

- 25 cents for 15-minute period of privacy before the doors pop open. A warning light and alarm go off when there are only three minutes left.

## Cleaning

- Automatic, 90-second self-cleaning process after each user. A sweeping arm sprays water with disinfectant over the toilet, then blows heat to dry it.
- Maintenance worker cleans and locks the toilet every night.



## Corona Plaza APT, Queens

Opened: 2008

Inside the public plaza adjacent to the 7 Line. Used 7,771 times a year (average of 21 times per day).



## Plaza de las Américas, Manhattan

Opened: 2016

Part of OneNYC Plaza Equity Program. Next to popular grocery store and farmer's market.

## What We Propose

We propose that APTs be kept open 24/7.

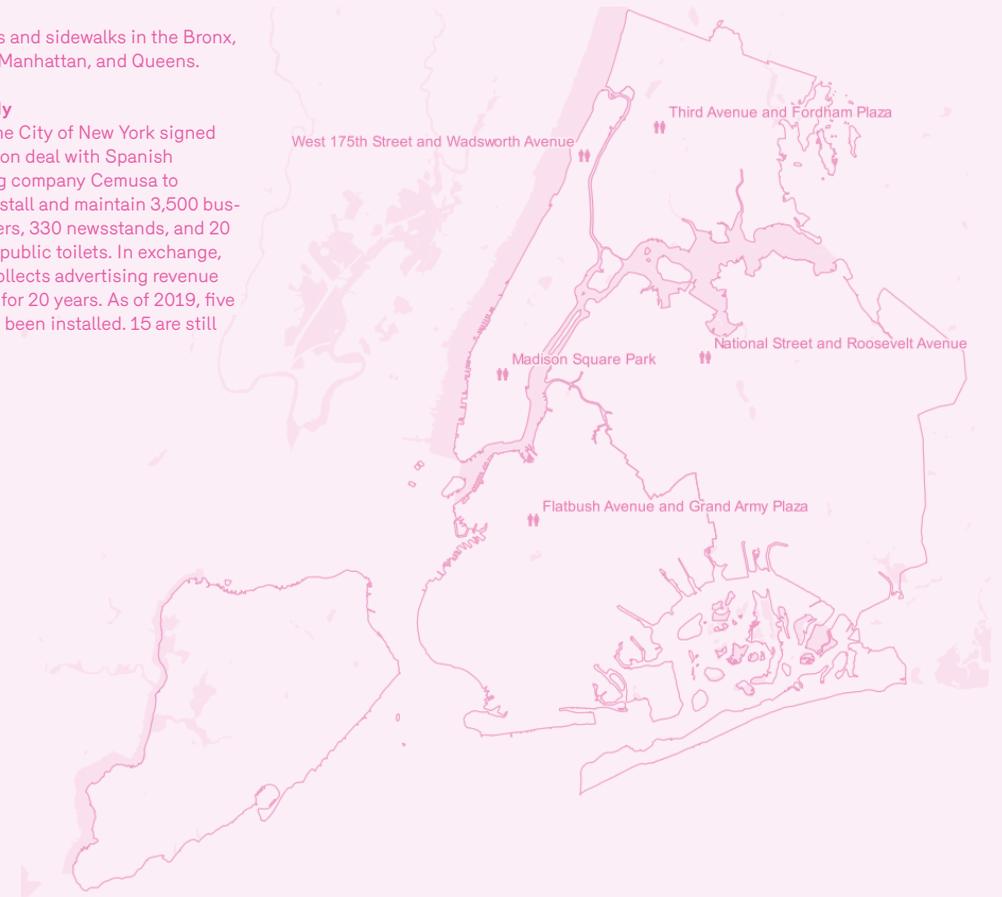
We propose that APTs be included in future NYC Department of Transportation plaza redesigns as part of the Plaza Program.

## Locations

Five plazas and sidewalks in the Bronx, Brooklyn, Manhattan, and Queens.

## Case Study

In 2006, the City of New York signed a \$1.4 billion deal with Spanish advertising company Cemusa to provide, install and maintain 3,500 bus-stop shelters, 330 newsstands, and 20 automatic public toilets. In exchange, Cemusa collects advertising revenue from them for 20 years. As of 2019, five APTs have been installed. 15 are still in storage.



## STRENGTHS

### Access:

- Location in public plazas is convenient and pedestrian friendly.
- Fully ADA accessible.

### Operations:

- Heated in the winter.
- Cost effective to maintain as private companies can pay for the installation and maintenance as identified in NYC with the contract with Cemusa.

## WEAKNESSES

### Design:

- Some neighborhoods as well as the Public Design Commission have stated that the toilets do not match the surrounding building style.

### Operations:

- Toilets may become clogged so self-cleaning is limited. The bathrooms are maintained twice daily.
- Automated functions can cause toilet to breakdown and be out of order for extended periods of time.
- The APT needs to be hooked up to phone and plumbing lines.
- Underground obstructions and property disputes could stall plans.

# PRIVATELY-OWNED PUBLIC SPACES (POPS)



**Locations:**  
14 POPS in Manhattan



**Hours:**  
Varies, 7am-11pm, M-Sa, 11am-7pm, Su & Holidays



**Ownership:**  
Private land owners and management companies



**Cleanliness:**  
High

Generally fairly clean and well maintained



**Usage:**  
High

Many are well known and used by the public



**Costs:**  
Low

Costs covered by developer for development rights or bonuses



## 875 Third Avenue, Manhattan

Built: 1980, Total square footage: 28,620 sq. ft. Includes two restrooms and a security guard. Not ADA accessible and in poor condition. Needs repair.

### What We Propose

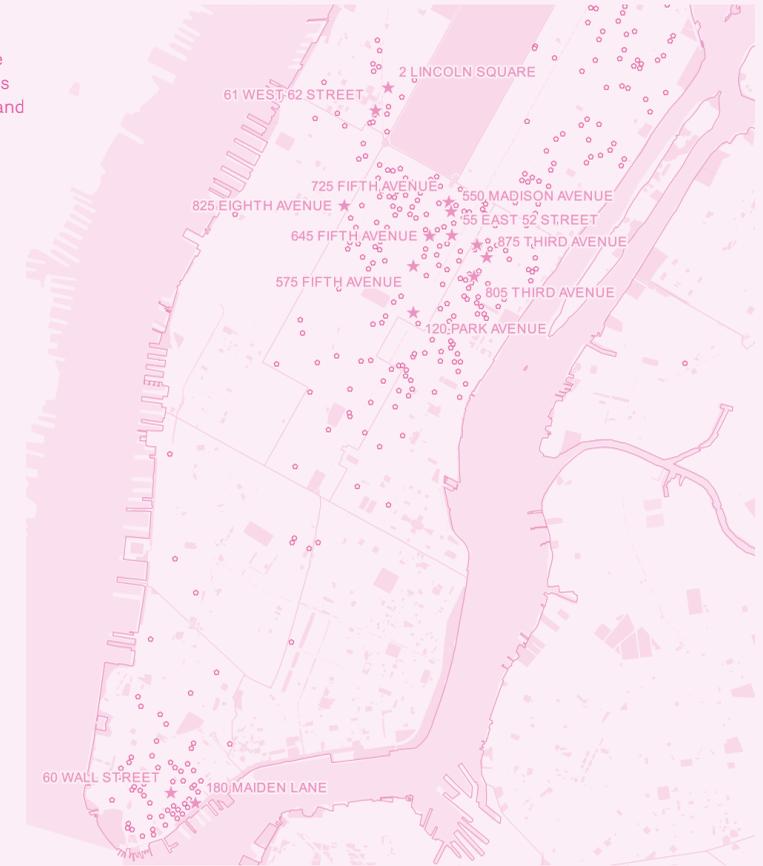
We propose that public bathrooms be required in all POPS that are greater than 10,000 s.f. Currently, POPS this large are required to provide food amenities; public bathrooms are a logical complement to this use and the general, public use of the development.

We propose that NYC Department of City Planning provide incentives, such as additional floor area, to developers providing public bathrooms.

We propose that signage outside bathrooms be required indicating they are open to the public.

### Locations

Located within 14 POPS out of 550 total POPS in the city. All 14 of these are in high-density, high-wealth areas of Manhattan, particularly Midtown and the Financial District.



### Background

- POPS program started in 1961 to provide more public space in the city. As of 2019, New York has 3.8 million sq. ft. of POPS.

### Locations

- Only 14 out of 550 POPS have a public bathroom. Most of these were built in the 1980s as part of large high-rise construction projects.

### Amenities

- On-site security guard is required as part of the POPS program, which increases the sense of safety. Plazas greater than 10,000 sq. ft. must provide food service as an amenity, per the zoning resolution. This also helps bring more foot traffic to the bathrooms and increases their visibility.

### STRENGTHS

#### Access and Safety:

- Open year-round.
- Most are attractive and feel safe. POPS are required to have security guards.

#### Operations:

- Developers cover cost of construction, cleaning, and maintenance.
- Most are well maintained and nicely designed.

### WEAKNESSES

#### Siting:

- Most POPS are located in the central business districts of Manhattan and not in the outer boroughs, limiting its potential outside Manhattan.
- The POPS program relies on new tower construction.

#### Access:

- Some bathrooms are locked and need a security guard to open them.

# PUBLIC POOLS AND SHOWERS



**Locations:**  
88 outdoor and 14 indoor pools around the city



**Hours:**  
M-S 11am-7pm  
Outdoor pools open only in the summer



**Ownership:**  
NYC Department of Parks and Recreation



**Cleanliness:**  
High

Generally fairly clean and well maintained



**Usage:**  
High

Well known and used by city residents



**Costs:**  
Low

Existing facilities and maintenance costs already covered by DPR



## Astoria Park Pool, Queens

Opened: 1936

In the summer of 2015, more than 182,000 people used Astoria Park Pool and its facilities.



## Crotona Park Pool, Bronx

Opened: 1936

Located in the center of the Bronx, Crotona Park Pool is very popular in the summertime.

### What We Propose

We propose that NYC Department of Parks & Recreation explore how other cities use public pools to provide showers for people that are homeless and partner with non-profits to help run this program. Showers are a critical need for the 3,500 individuals living on the streets and the 114,085 students that are homeless in NYC.

### Locations

In New York, there are currently 88 outdoor pools and 14 indoor pools. All pools feature public bathrooms and public showers. The pools are open to all in the city.



### Access

- Great resource for all in the city.
- Provide safe and clean showers and bathing spaces.
- Free for New Yorkers.

### Existing Infrastructure

- Pools are an existing infrastructure that people already use for free during the summer season. Opening the pool facilities for the general public to use the public bathrooms and showers could be a benefit for those living on the streets.

### Precedents

- In cities such as Seattle and Berkeley, public pools have set aside certain hours of the week year-round to provide showers and restrooms for children and families experiencing homelessness.

### STRENGTHS

#### Access

- Free access to showers, a rarity in the city.

#### Design

- Attractive design of Cool Pools NYC programs, featuring wall art, lounge chairs, umbrellas, and plantings.

#### Maintenance

- High standard and regulated inspections.
- Facilities are actively maintained and monitored daily, ensuring a safe and clean environment.

### WEAKNESSES

#### Limited open dates

- Free outdoor pool facilities are only operated during the summer season.

#### Security

- Facilities provide locker space, but no sturdy lock.
- Communities may be concerned that pools are being used by the homeless. People that are homeless may also feel stigma using the showers when people are using the pool for recreation. Specific hours can be set aside devoted to a shower program for those who need showers.

# DROP-IN CENTERS



**Locations:**  
5 in New York:  
MN 2, BK 1,  
BX 1, and SI 1



**Hours:**  
24/7  
or  
7:30am-8:30pm



**Ownership:**  
NYC Department  
of Homeless  
Services and  
nonprofits



**Cleanliness:**  
High

Generally fairly  
clean and well  
maintained



**Usage:**  
Moderate

Some facilities  
are very busy and  
well used



**Costs:**  
Moderate

Existing facilities  
but overall high  
operational  
expenses



## The Living Room, Bronx

Near the 6 train at Hunt's Point Avenue, this is a busy location in the Bronx that features public bathrooms and showers and is open 24/7.

Inside The Living Room, there is a front desk where staff direct patrons to the showers and bathrooms.

### What We Propose

We propose that all drop-in centers have 24/7 bathrooms with signage outside indicating that a free public bathroom is available inside.

We propose the city provide more drop in centers and consider ones serving women and youths specifically so that these vulnerable populations are able to access services, bathrooms and shower.

### Locations

The city has five drop-in centers, and they are located in all five boroughs of the city. Two are open 24/7, one in Manhattan and the site in the Bronx, and three have limited hours of operations.



### STRENGTHS

#### Cleanliness:

- Drop-in centers are staffed and regularly maintained. Staff are available to assist those who come in, as well as for operations and maintenance of bathrooms and showers.

#### Safety and Security:

- There is no front door requirement to screen out people regardless of their housing history. However, sites are staffed with security personnel.

### WEAKNESSES

#### Limited hours:

- Only two drop-in centers are open 24/7, which reduces the number of available bathrooms at night. Only five drop-in centers are available citywide.

#### Costs:

- High staffing needs increase operations costs.

#### Unattractiveness:

- Due to the institutional atmosphere and environment, people feel hesitant to walk in, particularly for bathroom and shower purposes.

# BUSINESS IMPROVEMENT DISTRICTS (BID)



**Locations:**  
Primarily in Manhattan, mostly Midtown



**Hours:**  
7am-10pm typically, varies by season



**Ownership:**  
Local property owners



**Cleanliness:**  
High

Generally fairly clean and well maintained



**Usage:**  
High

Well known and used by city residents



**Costs:**  
Low

Costs are covered by private funding



## Bryant Park, Manhattan

The park and comfort station opened in 1934 and the comfort station was renovated in 1988 and 2017. The bathrooms at Bryant Park are one of the most renowned public bathrooms in New York City. They are extremely popular, clean, and loved by residents and visitors. The Bryant Park Corporation manages the bathrooms.

### What We Propose

We propose that the City consider providing more public bathrooms with attendants, as BIDs have found that they increase the use of the bathrooms and are reasonable in costs. We also propose more public-private partnerships to open and manage new public bathrooms.

We propose that BIDs work with NYC SBS to train security and maintenance personnel on sensibilities to the homeless population in their districts.

## Bryant Park Corporation

### Funding and Partnership

- With a \$7 million annual budget, this city-owned park is supported entirely through private revenue from a variety of sources, including corporate sponsorships.
- 315 sq. ft. Beaux Arts-style comfort station.

### Costs

- \$300,000 renovation (\$889/sq. ft.) in 2017, which took three months to complete.
- Maintenance is \$271,000 annually, which includes: \$27,000 for a lot of single-ply toilet paper, \$14,160 for fresh flowers, and \$25,000-\$30,000 in annual salaries for full-time attendants.

### Public Usage

- 1.2 million visitors in 2016, and 3,266 visitors daily.
- The demand for this bathroom is high. Lines can grow to 40 people or more.

# 34th Street Partnership

### Siting

Two Automatic Public Toilets (APTs) were installed in 2001 in both Herald and Greeley Squares. However, they were both subsequently closed in 2008. The APTs were replaced with bathrooms with attendants in 2009.

### Public Usage

The APTs had 28,000 visits in the first year (2001), but this dropped to fewer than half by 2007. The APTs were replaced with “a quality deluxe manual restroom experience.”

### Staffing and Costs

Having attendants at bathrooms was cited as making people feel safe. The bathrooms were staffed by attendants paid between \$8.50 to \$12.70 an hour. Attendant costs were cited as being similar to maintenance costs for APTs.

### Maintenance

The bathrooms were inspected, mopped and scrubbed about 15 to 25 times a day by bathroom staff.



## Greeley Square, Manhattan

Opened: 2001, closed in 2008

This Greeley Square toilet opened in 2001, but was later closed and replaced by a bathroom with a full-time attendant. As of 2019, these are under renovation and are slated to reopen in 2020.

### STRENGTHS

#### Maintenance and Cleanliness:

- Full-time attendant means the bathrooms are safe, well-maintained, and cleaned regularly throughout the day, making them an attractive bathroom for all.

#### Design:

- Automatic faucets, soap dispensers, and dryers.
- Self-flushing toilets with automatic toilet seat covers.
- Large porcelain tiles used in the Bryant Park bathroom have proven to be more durable and, with the reduction of grout area, easier to keep clean. This bathroom also features attractive interior ceilings, art, flower bouquets, and classical music, which make it an attractive and unique experience.

### WEAKNESSES

#### Limited hours:

- While the Bryant Park bathrooms are open until 10pm, they are not open 24 hours a day. In areas like Midtown, there is a need for public bathrooms overnight.

#### Limited funding:

- Many BIDs may not be able to build, fund, and maintain public bathrooms in their districts because of their limited budgets.

# RETAIL AND PRIVATE BUSINESSES

		
<b>Locations:</b> Retail and private businesses	<b>Hours:</b> Usually during business hours	<b>Ownership:</b> Private businesses
		
<b>Cleanliness:</b> High	<b>Usage:</b> High	<b>Costs:</b> Low
Generally fairly clean and well maintained	People living on the streets may feel unwelcome	Increased cleaning costs offset by public subsidies

## Description

- Since 2009, London has a program called the Community Toilet Scheme, which pays retailers an annual stipend to open up their bathrooms to the public.
- The rest of the United Kingdom has a similar program called Use Our Loos and Germany and Switzerland has a program called the Nette Toilette, which translates into the Nice Toilet.
- They are typically located at areas with high pedestrian traffic and include restaurants, bars, cafes, retail stores, and supermarkets.
- Stores are paid a stipend that ranges from \$650 to \$2,000 a year depending on number of hours and days of week the store is opened.
- The number of toilets in the United Kingdom has dropped 40% in the last 20 years. Instead of the government opening up new toilets, this program provides public bathrooms in a cost effective way.
- The government maintains public liability insurance for this program.



- Retailers place a sign or sticker on their storefront to indicate that their bathrooms participate in the program and are open to the public. The city also has street signage that directs people to retailers participating in this program.
- The Community Toilet Scheme and Use our Loos also partners with the Great British Toilet Map so people can locate the nearest public bathroom on their smart phones. The map details over 10,000 public bathrooms including both city operated bathrooms and private retailers opening up their facilities to the public.

**What We Propose**  
We propose that NYC Department of Small Business Services study this program and work with business improvement districts around the city to offer a similar program to local retailers.

Screenshot from the Great British Toilet Map showing a nearby retailer in London participating in the Community Toilet Program with hours of operation, amenities and type of facility.

## STRENGTHS

- Far more public bathrooms are open to the public through this initiative, at less cost to the local government.
- Some people may not like to be seen directly entering a bathroom in a public place, but are more comfortable using bathrooms in shops or cafes.
- The scheme involves local businesses in the local area and the public bathrooms are locally owned.
- May increase profits for businesses and can be a win-win situation.

## WEAKNESSES

- Facilities are open only when the business is open.
- The business owner has the right to deny bathroom use in exceptional circumstances. This means that the toilets are not public in the same sense that city-owned public bathrooms are public.
- Older people may not always feel comfortable going into bars and restaurants. They may prefer anonymity when using public bathrooms.
- Not appropriate everywhere and may provide only a partial solution to the adequate provision of public bathrooms.

# Design Guidelines

Public restrooms can be clean, healthy, and dignified facilities. We encourage operators to consider the following recommendations to achieve cost effectiveness, ease of maintenance and cleanliness, safety, and design excellence.



## COST EFFECTIVENESS (CE)

1. Consider public bathrooms in new large-scale developments or reactivate closed bathrooms in existing infrastructure.
2. Encourage local business improvement districts to build and maintain public restrooms in order to attract more visitors to an area.
3. Create advertisements on the side of public bathrooms to generate income for the operator.
4. Promote job creation for the maintenance of public restrooms as a means of benefiting local neighborhood economies.
5. Create a volunteer system to make sure public bathrooms are properly maintained.
6. Charge for the use of automated toilets if necessary.



## EASE OF MAINTENANCE & CLEANLINESS (MC)

1. Use unisex stalls so individual toilets can be cleaned or repaired without closing facility.
2. Choose vandal-resistant hardware and tamper proof screws.
3. Install a tap and floor drain for power washing and provide a maintenance closet that includes a hose for cleaning.
4. Establish a monitoring and evaluation plan for maintenance. Bathrooms should be cleaned frequently depending on how often they are used. Minimum daily cleaning should be provided.
5. If attendants are not feasible, provide a two-way communication button that people can use to report issues to a central location.
6. Use materials that are hard to break and can be cleaned if tagged with graffiti, such as stainless steel for doors and fixtures.
7. Provide a waste basket next to the toilet so people don't throw things into the toilet.
8. Consider installing a sharps disposal, primarily in areas with high transient activity due to increased drug activity. The sharps disposal is a hole above the hand rail marked with the biohazard symbol.
9. Provide hands-free faucets, soap dispensers, hand driers, and self-flushing toilets with automatic toilet seat covers.
10. Replace ceramic tiles with more durable porcelain tiles.



## SAFETY (SF)

1. Protect users, especially children, from inappropriate contact with strangers in “gang toilets” by providing individual, direct-entry stalls.
2. Design doors to ensure privacy and safety: full-length doors with a 1.5-2” gap at the bottom and a lock that authorities can open from the outside in emergency.
3. Activate surrounding area with retail, information kiosks, food carts, street performers, bus stops, or parking pay stations.
4. Use blue light to make it difficult for intravenous drug users to find a vein.
5. Provide attendants whenever possible to create a feeling of safety, maintain cleanliness, assist people if needed, and create a personal experience.
6. If attendants are not possible, consider using virtual attendants that can observe use with overhead cameras outside restroom doors. They can dispense toilet tissue remotely and control the amount of time a user stays inside. In case of an emergency, sensors can detect no movement inside and can call for help.
7. Provide emergency buttons: one waist-high, the other toward the floor, in case someone falls. Provide a yellow button to reach an operator.
8. Ensure automated public toilets have floor sensors with weight allowances of a maximum of about 550 pounds and minimum of 45 pounds. If not met, the doors will not close. The minimum weight allowance prevents small children from getting trapped inside.
9. Use translucent panels and glazing so that bathrooms can light up the street at night and act as a lantern in dark public spaces.



The Need for Public Bathrooms

## DESIGN EXCELLENCE (DE)

1. Create bathrooms that are attractive, incorporating historical artifacts, artwork and text in design. Get community members and local artists involved in the design.
2. Create a “bathroom of the year” award to raise the bar on the design of bathrooms. Bathroom winners have also been known to have an increase in business.
3. Use materials for wall and floor finishes that are attractive, durable, and long lasting, such as stone tiles. Provide sealer on stone that is vandal resistant.
4. Make the bathroom a welcoming destination by providing music or fresh flowers.
5. Provide natural light whenever possible to ensure spaces are well lit.
6. Ease the flow of users by using unisex stalls.
7. Plan for bathrooms that can function year-round and 24 hours a day, seven days a week.
8. Use directional signage to bathrooms and provide external signage listing hours and a number to call for maintenance. Provide print and web-based information to complement signs.
9. Use larger tiles to reduce the amount of grout between them and the scrubbing needed to keep them clean.
10. Sustainability—Use LED fixtures and low flow faucets and fixtures.
11. Accessibility—Provide clearances and access for people with mobility, hearing and vision impairment.
12. Monitoring—Map and rate public bathrooms through an app similar to Yelp to elevate stewardship.



## NEW TECHNOLOGIES (NT)

1. Increase the number of automated fixtures to increase cleanliness and reduce wear and tear, such as hands-free faucets, soap dispensers, hand driers, self-flushing toilets, and automatic doors.
2. Include advertisements within public bathrooms to increase revenue to offset maintenance costs. For example, screens with advertisements can be installed on top of urinals, hand driers, or in front of toilets.
3. Maintain the facilities often and provide staff whenever possible for safety and cleanliness. However, this can be expensive. Costs can be reduced by have a centralized security surveillance system, such as installing cameras outside of bathroom entrances. This could help monitor the flow of people in and out of the bathroom and discourage vandalism, crime, or acts of violence.
4. In order to achieve cleanliness, install intercoms and buttons for bathroom users to notify a centralized maintenance facility for needed cleaning or replacement of items such as toilet paper or soap.

# Conclusion

## Conclusion

New York City has a public bathroom crisis. There is a clear need for public bathrooms but our existing public bathroom infrastructure is not meeting this need. We want our legislative bodies to know that public bathrooms are a need, and not an option.

We call on the City to launch a Public Bathrooms Plan that would create quality public bathrooms to meet the needs of all New Yorkers. We recommend that the mayor form an interagency effort to study and address the need for public bathrooms in a multi-prong effort using various public bathroom types.

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## REFERENCES

- "2019 City Park Facts." Trust for Public Land, n.d. <https://www.tpl.org/2019-city-park-facts>.
- Aaron, Brad. "Trottenberg Announces Plaza Equity Program at Plaza De Las Americas Reveal." Streetsblog NYC, November 23, 2015. <https://nyc.streetsblog.org/2015/11/23/trottenberg-announces-plaza-equity-program-at-plaza-de-las-americas-reveal/>.
- Bernbaum, Marcia, and George Olivar. "The Public Restroom Bill Passes: DC Is on Its Way to More Clean, Safe Public Restrooms." Greater Greater Washington, December 18, 2018. <https://ggwash.org/view/70231/washington-bathroom-bill-passes-dc-on-its-way-to-more-clean-safe-public-restrooms>.
- Burgess, Rebekah, and Mariana Mogilevich. "Cataloging Comfort." Urban Omnibus, May 2, 2018. <https://urbanomnibus.net/2018/05/cataloging-comfort/>.
- Chan, Sewell. "\$1.4 Billion Deal for Bus-Stop Toilets Nears Approval." The New York Times, May 12, 2006. <https://www.nytimes.com/2006/05/12/nyregion/12toilets.html>.
- "City of Seattle Invests in Restrooms, Laundry and Shower Access for People Experiencing Homelessness." seattle.gov. City of Seattle, n.d. [https://www.seattle.gov/Documents/Departments/Homelessness/Hygiene-1-pager-FINAL\\_2\\_16\\_003\\_facts.pdf](https://www.seattle.gov/Documents/Departments/Homelessness/Hygiene-1-pager-FINAL_2_16_003_facts.pdf).
- Diaz, Mario. "Tiny \$2 Million Dollar Public Bathroom Opens in Brooklyn Park." PIX11, July 6, 2017. <https://pix11.com/2017/07/06/tiny-2-million-dollar-public-bathroom-opens-in-brooklyn-park/>.
- Discomfort Stations: The Conditions and Availability of NYC Parks Bathrooms, Discomfort Stations: The Conditions and Availability of NYC Parks Bathrooms § (2019). <https://comptroller.nyc.gov/reports/discomfort-stations-the-conditions-and-availability-of-nyc-parks-bathrooms/>.
- Dugger, Celia W. "In New York, Few Public Toilets and Many Rules." The New York Times, May 21, 1991. <https://www.nytimes.com/1991/05/21/nyregion/in-new-york-few-public-toilets-and-many-rules.html>.
- Dwyer, Jim. "With Few Public Toilets, New York Has No Place to Go If You Have to Go." The New York Times, March 17, 2016. <https://www.nytimes.com/2016/03/18/nyregion/with-few-public-toilets-new-york-has-no-place-to-go-if-you-have-to-go.html>.
- "Find a POPS." Privately Owned Public Space (APOPS). Municipal Art Society. Accessed January 29, 2020. <https://apops.mas.org/find-a-pops/>.
- "Find Your Flush," n.d. <https://wp.nyu.edu/findyourflush/tag/toilet/>.
- Glass, Jeremy. "10 Manhattan Subway Station Bathrooms Reviewed." Thrillist, September 24, 2018. <https://www.thrillist.com/lifestyle/new-york/mta-nyc-subway-station-bathrooms>.
- Green Central Knoll Comfort Station Construction. New York City Department of Parks & Recreation, n.d. <https://www.nycgovparks.org/planning-and-building/capital-project-tracker/project/7087>.
- Holder, Sarah. "D.C.'s Downtown Was a Public Bathroom Desert. That Could Soon Change." CityLab, December 21, 2018. <https://www.citylab.com/equity/2018/12/washington-dc-where-bathroom-homeless-law-toilet-business/578587/>.
- Hu, Winnie. "A Public Restroom Fit for Brooke Astor Gets an Upgrade." The New York Times, April 5, 2017. [https://www.nytimes.com/2017/04/05/nyregion/bryant-park-restroom-renovation.html?\\_r=1](https://www.nytimes.com/2017/04/05/nyregion/bryant-park-restroom-renovation.html?_r=1).
- Jaffe, Eric. "A Hands-Free, Self-Cleaning Bathroom for Transit Stations." CityLab, February 17, 2015. <https://www.citylab.com/transportation/2015/02/a-hands-free-self-cleaning-bathroom-for-transit-stations/385549/>.
- Kaminer, Ariel. "Sunday in the Park, Feeling Nature's Call." The New York Times, April 16, 2010. <https://www.nytimes.com/2010/04/18/nyregion/18critic.html>.
- Kirby, Jen. "Why You Can't Go Here: NYC's Perpetual Public-Toilet Problem." New York, February 19, 2016. <http://nymag.com/intelligencer/2016/02/why-you-cant-find-a-public-toilet-in-nyc.html>.
- Lee, Felicia R. "The Homeless Sue for Toilets in New York." The New York Times, November 1, 1990. <https://www.nytimes.com/1990/11/01/nyregion/the-homeless-sue-for-toilets-in-new-york.html>.
- Lee, Jennifer. "New Yorkers, You May Be Excused: A Pay Toilet Opens." The New York Times, January 10, 2008. <https://cityroom.blogs.nytimes.com/2008/01/10/a-pay-toilet-opens-no-need-to-hold-everything/>.
- McCreary, Carol. "PHLUSH Design Principles." Public Hygiene Lets Us Stay Human. Accessed January 29, 2020. <https://www.phlush.org/public-restroom-planning/public-restroom-design-principles/>.
- Mohamed, Sarah. "City Maintains Shower Program for Homeless." The Daily Californian, August 25, 2011. <https://www.dailycal.org/2011/08/25/city-maintains-shower-program-for-homeless/>.
- Newman, Andy. "Flush-Forward Is Out. Hand-Scrubbed Is In." The New York Times, December 10, 2009. <https://cityroom.blogs.nytimes.com/2009/12/10/flush-forward-is-out-hand-scrubbed-is-in/>.
- Newman, Andy, and Ana Fota. "Subway Bathrooms: Are They as Bad as You Think?" The New York Times, March 27, 2019. <https://www.nytimes.com/2019/03/27/nyregion/subway-bathrooms.html>.
- Ramirez, Eddy. "A Toilet Stop in Times Sq.? Just Ask to Be Buzzed In." The New York Times, July 22, 2004. <https://www.nytimes.com/2004/07/22/nyregion/a-toilet-stop-in-times-sq-just-ask-to-be-buzzed-in.html>.
- Roberts, Karen. "Bryant Park Deals in Fun This Summer." Lohud, June 30, 2017. <https://www.lohud.com/story/entertainment/2017/06/30/city-daytrip-bryant-park-attracts-couples-kids/432337001/>.
- Roberts, Sam. "In 9 Years of Work, Just 3 Public Toilets Go Live." The New York Times, March 11, 2014. <https://cityroom.blogs.nytimes.com/2014/03/11/in-9-years-of-work-just-3-public-toilets-go-live/>.
- Stossel, John. "The \$2 Million Bathroom." Press Connects, July 28, 2017. <https://www.pressconnects.com/story/opinion/columnists/2017/07/28/million-bathroom/104085168/>.
- The Provision of Public Toilets, The Provision of Public Toilets § (2008). <https://publications.parliament.uk/pa/cm200708/cmselect/cmcomloc/636/636.pdf>.
- Triangle, Sarina. "Finding a Public Toilet in NYC Still Difficult 10 Years into Program Launch." AMNY, February 5, 2018. <https://www.amny.com/news/new-york-public-toilets-1-16544793/>.
- Vanderkam, Laura. "Parks and Re-Creation." City Journal, 2011. <https://www.city-journal.org/html/parks-and-re-creation-13401.html>.

## IMAGE SOURCES

City of New York and its departments  
MTA New York City Transit  
Michelle Young and Christopher Delsingier,  
Untapped Cities  
The New York Times  
Picture the Homeless  
Urban Omnibus  
Google Maps Streetview  
Gail Knight  
The Great British Public Toilet Map  
DO Media  
Medium.com  
Wikipedia  
National Public Radio (NPR)  
Sdelaipotolok.ru  
DNAInfo.com  
CBS Austin  
Turquoiseislandscm.blogspot.com  
Associated Press  
Charlotte Observer  
Metro Magazine  
Young Projects  
Deadprogrammer.com  
Londonist.com



