Public Life Data – 2018 Study

**Keywords**  
About: Public life, public space, sidewalks, streets, vibrancy, pedestrian counts, people moving, people staying, transportation, survey, SDOT

**Abstract**

The City of Seattle Department of Transportation (SDOT) is providing data from its first Public Life Study, which was conducted between July and September 2018. The study consisted of measuring the number of people using public space and the types of activities present on select sidewalks across the city. This is the first ever large-scale public life survey of Seattle and the first City-run study using the Gehl Institute’s [Public Life Data Protocol](https://gehlinstitute.org/wp-content/uploads/2017/09/PLDP_BETA-20170927-Final.pdf).

This dataset consists of three component spreadsheets that comprise the results of SDOT’s 2018 Public Life Study:

1. **2018\_Public\_Life\_Locations:** provides details on the sites selected for the study, including various attributes to allow for across-site comparisons.
2. **2018\_Public\_Life\_People\_Moving:** provides data on people moving through space, including total number observed, gender breakdown, and group size.
3. **2018\_Public\_Life\_People\_Staying:** provides data on people staying still in the space, including total number observed, demographic data, group size, postures, and activities.

**Background**

The Gehl Institute defines public life as the “activity that takes place in everyday public spaces—on streets, in parks and plazas, and in spaces between buildings.” Public life consists of all the interactions in public spaces, whether they are necessary (e.g., walking to work) or recreational (e.g., watching a street performer). As such, public life can take many forms, such as eating at a street café; reading on a bench; window shopping; or talking to others while waiting for a bus. The types of activities and number of people engaging in public life in various areas can illuminate the degree to which a community is livable, social, and prosperous.

One of the most important settings for public life is our streets and sidewalks. As the department in charge of managing and planning for the use of our streets and sidewalks, the Seattle Department of Transportation (SDOT) has a keen interest in how people use these public spaces. By studying public life in a variety of urban neighborhood contexts, we can collect people-centered data that measures how our streets and sidewalks are used and how the vibrancy of these public spaces changes over time. It will help us understand—and hopefully address—the race and social justice issues attendant to the way we invest in and use the right of way as public space.

**Methodology**

*Study Objectives*

A public life study is a type of research that focuses on measuring human activity and characterizing how public space is used by people moving through or staying still within a specific study area. This research effort collected data to measure public life across Seattle and therefore was designed to capture the activities present in a broad array of urban contexts. The study focused on collecting data relevant to SDOT’s guiding values for the role of the right-of-way as a vibrant public space, as identified in the Move Seattle Strategic Plan, Comprehensive Plan, Pedestrian Master Plan, and Streets Illustrated. Study objectives include:

* Understand who is using public space
* Understand the types of activities present in public space
* Understand how social the public space is
* Understand the degree to which people engage in commercial activity in public space
* Understand the degree to which available pedestrian infrastructure provided in public space is utilized

*Data Collection Schedule*

For the 2018 study, all data were gathered through observational methods collected at multiple time periods across multiple days for each of the 108 sites included in the study. Based on best practices of public life data collection established by Jan Gehl and utilized by the City of San Francisco[[1]](#footnote-1), we collected observational data using the following schedule: For each site, observations were collected at 8 different time periods across two weekdays (variable) and one weekend day (always Saturday). The observations are collected within specific time windows, coinciding with anticipated peak usage: morning (weekdays only), mid-day, and evening. Data were collected on a scheduled to understand typical public space usage, so they were not collected on holidays, holiday weekends (Labor Day), or when there were anticipated activities in the right-of-way (e.g., construction, special events, festivals).

For instance, a typical data collection schedule for a study location looked like this:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | SUN | **MON** | **TUES** | WED | THURS | FRI | **SAT** |
| **MORNING** |  | **8 – 10 AM** | **8 – 10 AM** |  |  |  |  |
| **MID-DAY** |  | **12 - 2 PM** | **12 - 2 PM** |  |  |  | **12 - 2 PM** |
| **EVENING** |  | **4 – 6 PM** | **4 – 6 PM** |  |  |  | **4 – 6 PM** |

*Data Collection Protocol*

Within each of the above data collection windows, the following data were collected for each site:

1. People moving observations (group size) – 10 minutes
2. People moving observations (gender and ability status) – 10 minutes
3. People staying observations – 20 minutes
4. Current conditions

**Data structure**

It is important to note that the two datasets with observational data (2018\_Public\_Life\_People\_Moving and 2018\_Public\_Life\_People\_Staying) are structured in different ways and should be analyzed with these different structures in mind, as described below.

|  |  |  |
| --- | --- | --- |
|  | **2018\_Public\_Life\_People\_Moving** | **2018\_Public\_Life\_People\_Staying** |
| **Description** | Data on people moving through space, including total number observed, gender breakdown, and group size. | Data on people staying still in the space, including total number observed, demographic data, group size, postures, and activities. |
| **What each record represents** | One row represents a summary of the total number of people observed moving through the study area in one 10-minute observational period.  All records with Row\_ID=1 represent the 10-minute people moving count with group size data.  All records with Row\_ID=2 represent the 10-minute people moving count with gender and mobility status data.  Each Survey\_ID (data collection shift) for each site has two records for these two data collection periods (indicated by the value in the Row\_ID column). | One row represents the data collected on one person observed staying still during the 20-minute observational period.  As such, the number of entries attributed to each Survey\_ID (data collection shift) at each site is variable based on the number of people observed during the 20-minute period. |
| **Calculating total counts per data entry shift** | Since each record is already a summary of number of people observed moving through the study area, use Row\_Total for counts. | To calculate the number of people observed within each 20-minute data collection shift, add the Row\_Total fields for each unique data collection shift (using Location\_ID and Survey\_ID). If Row\_Total=0, there were no people observed during this data collection shift. |

**Data notes**

The public life data were collected via in-person observation, and thus the time periods observed represent a sample of time to be interpreted for illustrative purposes. It is important to note that this data does most likely not mirror all public life activity at any given time. It is also worth noting that the observational methods are not entirely objective in nature, so some categories should be interpreted with this in mind, such as demographic data. Although demographic information is collected for people recorded in this study, the study did not collect personally identifiable information. This study completed a Privacy Assessment through the City of Seattle IT Department.

**Purpose**

This dataset has been published by the Seattle Department of Transportation of the City of Seattle and **data.seattle.gov**. The mission of **data.seattle.gov** is to provide timely and accurate City information to increase government transparency and access to useful and well organized data by the general public, non-governmental organizations, and City of Seattle Employees.

Specifically with respect to the Public Life dataset, SDOT is providing these spreadsheets to encourage the public to explore the data to understand public life dynamics, determine local community needs, and leverage the data to advocate for built environment changes. SDOT hopes that data will catalyze conversations around the importance of public life—and pedestrian infrastructure to support it.

**Access constraints**

The data is publicly available and accessible.

**Use constraints**

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**Point of contact**

Departmental first line point of contact. This is usually the departmental PIO or delegate and serves as triage for incoming questions. The business owner/technical owner would be second point of contact for a specific dataset.

Information should contain:

*Department: Seattle Department of Transportation (SDOT)*

*Name: Susan McLaughlin*

*Business phone: 206-733-9649*

*Mailing address:*

*Fax number:*

*Business hours:*

**Credits**

City of Seattle Office of the Chief Technology Officer (OCTO), data.seattle.gov staff

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**Entity**

2018 SDOT Public Life Study

**Attributes**

**2018\_Public\_Life\_Locations**

|  |  |  |
| --- | --- | --- |
| **COLUMN** | **DATA TYPE** | **DESCRIPTION** |
| Location\_ID | text | Unique identifier to link tables to indicate the block face site where data was collected |
| Location\_Country | text | Country that the survey location is based within |
| Location\_Region | text | State, county, or municipal boundary of the location |
| Location\_City | text | Name of the city that the survey location is based within. |
| Location\_Geometry | JSON | Line or Polygon that describes the geometry of the location |
| Location\_Name\_Primary | text | Official, specific name of the survey location |
| Location\_Name\_Secondary | text | Secondary or specifying name of the survey location |
| Location\_Subdivision | text | Indication of whether an area is a subdivision of a single survey location |
| Element\_Key | text | Unique identifier for the city street segment where the survey location is located |
| Transit\_Stop\_Present | text | Indication of whether there is a transit stop located in the survey location |
| Neighborhood\_Type | text | Urban Village designation at the survey location |
| Neighborhood | text | Neighborhood of survey location |
| Location\_Character | text | Primary character of the survey location's immediate surroundings |
| line\_typology\_vehicular | text | Typology of the space assigned for vehicles that the line geometry intersects, as defined by Streets Illustrated. |
| area\_typology\_category | text | Typology of the space defined within the area geometry |
| area\_typology\_subcategory | text | Typology of the space defined within the area geometry (more detail) |
| Average\_number\_Commercial\_Seats | number | Average number of commercial seats present at study location during observation periods |
| Average\_number\_Public\_Seats | number | Average number of public seats present at study location during observation periods |

**2018\_Public\_Life\_People\_Moving**

|  |  |  |
| --- | --- | --- |
| **COLUMN** | **DATA TYPE** | **DESCRIPTION** |
| Unique\_ID | number | Unique identifier |
| Study\_ID | text | Name of study |
| Location\_ID | text | Unique identifier to link tables to indicate the block face site where data was collected |
| Survey\_ID | text | Indicates the shift in which the data was collected |
| Day\_of\_Week | text | Indicates the type of day the data was collected in (weekend or weekday) |
| Time\_of\_Day | text | Indicates the time of day the data was collected in: morning (8-10am), midday (12-2pm), and evening (4-6pm) |
| Date | Date (yyyymmdd) | Exact date of the survey count |
| Start\_time | time (hhmm) | Exact time that the survey count started |
| End\_time | time (hhmm) | Exact time that the survey count ended |
| Conditions | text | Indicates if anything out of the ordinary took place at the specific time of the survey count that may have impacted the results |
| Weather | text | Perceived whether condition on the specific survey location |
| Temperature | number | Official temperature measured in the survey location at the time of the survey |
| Surveyor | text | Name of the person or entity collecting the survey data |
| Row\_ID | number | Unique identifier for each row of people surveyed. Links simultaneous counts of different components.  All records of Row\_ID=1 represent the 10-minute people moving count with group size data.  All records of Row\_ID=2 represent the 10-minute people moving count with gender and mobility status data. |
| Row\_Total | number | Indicates the number of people assigned by the Row\_ID |
| Male | number | People who are perceived by surveyors as male |
| Female | number | People who are perceived by surveyors as female |
| Gender Unknown | number | People who are perceived by surveyors as non-binary or whom the surveyors do not feel comfortable assuming the gender of. Infants and toddlers may fall in this category. |
| Total\_Supported\_or\_Assisted | number | People who use a mobility assistance device (e.g., wheelchair, walker, chain) |
| GroupSize\_1 | number | People who are traveling as a single person |
| GroupSize\_2 | number | People who are traveling in a pair of people |
| GroupSize\_3 | number | People who are traveling in a small group of 3 people |
| GroupSize\_4 | number | People who are traveling in a small group of 4 people |
| GroupSize\_5 | number | People who are traveling in a small group of 5 people |
| GroupSize\_6 | number | People who are traveling in a small group of 6 people |
| GroupSize\_7 | number | People who are traveling in a small group of 7 people |
| GroupSize\_8 | number | People who are traveling in a small group of 8 people |
| GroupSize\_9 | number | People who are traveling in a small group of 9 people |
| GroupSize\_10+ | number | People who are traveling in a small group of at least 10 people |
| Notes | text | Comments that may serve to clarify the content of the survey data |

**2018\_Public\_Life\_People\_Staying**

|  |  |  |
| --- | --- | --- |
| **COLUMN** | **DATA TYPE** | **DESCRIPTION** |
| Unique\_ID | number | Unique identifier |
| Study\_ID | text | Name of study |
| Location\_ID | text | Unique identifier to link tables to indicate the block face site where data was collected |
| Survey\_ID | text | Indicates the shift in which the data was collected |
| Day\_of\_Week | text | Indicates the type of day the data was collected in (weekend or weekday) |
| Time\_of\_Day | text | Indicates the time of day the data was collected in: morning (8-10am), midday (12-2pm), and evening (4-6pm) |
| Date | Date (yyyymmdd) | Exact date of the survey count |
| Start\_time | time (hhmm) | Exact time that the survey count started |
| End\_time | time (hhmm) | Exact time that the survey count ended |
| Conditions | text | Indicates if anything out of the ordinary took place at the specific time of the survey count that may have impacted the results |
| Weather | text | Perceived whether condition on the specific survey location |
| Temperature | number | Official temperature measured in the survey location at the time of the survey |
| Surveyor | text | Name of the person or entity collecting the survey data |
| Row\_ID | number | Unique identifier for each row of people surveyed. Links simultaneous counts of different components. |
| Row\_Total | number | Indicates the number of people assigned by the Row\_ID |
| Group\_Size | number | Indicates the group size of individual included in Row\_ID |
| Male | number | People who are perceived by surveyors as male |
| Female | number | People who are perceived by surveyors as female |
| Gender\_Unknown | number | People who are perceived by surveyors as non-binary or whom the surveyors do not feel comfortable assuming the gender of. Infants and toddlers may fall in this category. |
| White | number | People who are perceived by surveyors as white or caucasian |
| BlackAfricanAmerican | number | People who are perceived by surveyors as black or African American |
| AmericanIndian\_AlaskanNative | number | People who are perceived by surveyors as American Indian or Alaskan Native |
| Asian | number | People who are perceived by surveyors as Asian |
| NativeHawaiian\_PacificIslander | number | People who are perceived by surveyors as Native Hawaiian or Pacific Islander |
| Latino | number | People who are perceived by surveyors as Latino or Latina |
| Multiple\_Races | number | People who are perceived by surveyors as multiple races |
| Race\_Unknown | number | People who the surveyor does not feel comfortable assuming the race of |
| Age\_0-4 | number | People who are perceived by surveyors as infants, toddlers, (often in strollers, or baby carriers), as  well as small children |
| Age\_5-14 | number | People who are perceived by surveyors as young children who could be in elementary school, or  middle school |
| Age\_15-24 | number | People who are perceived by surveyors as high school through college age |
| Age\_25-44 | number | People who are perceived by surveyors as young adults who look older than college age |
| Age\_45-64 | number | People who are perceived by surveyors as middle aged adults, mid/late career, not yet retired |
| Age\_65+ | number | People who are perceived by surveyors as retired, older adults |
| Standing | number | Standing freely in space. They can either be staying still or pacing yet remaining in a small area, unassisted (by wheelchair, etc.), without leaning on anything. |
| Leaning | number | Standing while leaning against an object or building, typically in a leisurely way. |
| SittingFormal\_Public | number | Sitting down on something designed as public seating (benches, picnic tables, etc.). |
| SittingFormal\_Commercial | number | Sitting on furniture that is owned by a commercial establishment. Sitting is typically accepted after a purchase of goods or food, or with the intent of purchasing goods or food. Typically, this is sidewalk café seating. |
| SittingFormal\_Private | number | Sitting on furniture intended for seating, but which is privately owned, where the right to sit cannot be purchased by an exchange of goods or money. This can be a chair or a bench in someone’s front garden, furniture that people have brought themselves into public space and which they will take with them upon leaving the public space, or objects intended for sitting on which provide heavy support like a stroller or a wheelchair. |
| SittingInformal | number | Sitting in places not primarily designed for seating, like on the ground, street fixtures, planter, curb, or step. This can include squatting down in space. |
| Lying | number | Lying down on any surface, awake or asleep |
| Mobility\_Assistance\_Device | number | Anyone supported by a mobility device. Wheelchairs, canes, walkers, seeing eye dogs, white canes, and if they’re being assisted by another person (do not count infants/children being carried in this category). |
| CommercialActivity\_Providing | number | Selling food or goods in an established/legal (formal) setting or in a self-constructed/illegal (informal) setting. Person doing backend activities related to commercial activities, like a waiter busting tables, a person loading commercial goods, or a person setting up a commercial stall. |
| CommercialActivity\_Buying | number | In the process of buying foods and goods. Both the person performing a transaction, and the people queuing are counted as buyers. |
| CommercialActivity\_Observing | number | A person who is participating in a commercial situation, without being either a provider or a buyer/shopper in the moment of the survey, is counted as participating by being an observer. This could be a person browsing the produce at a market stall, but who has not yet committed to making a purchase, either by an exchange of money or by queuing up to making a transaction of money. |
| Eating/Drinking | number | Engaged with consuming food or drinks, either by being in the process of preparing for consumption, being mid-consumption, or post-consumption. |
| Talking | number | Conversing with another person at any tone of voice. |
| CulturalActivity | number | Performing, observing, or participating in cultural activities of artistic, communal, political, or religious character (e.g., outdoor movie, food festival, political rally, music, religious gathering, dance). |
| UsingElectronics | number | Engaging with technology, electronics, and digital gadgets in either an introverted (e.g., listening to audio via headphones, conversing on a phone, or reading/writing/playing/working on a computer) or extroverted fashion (e.g., listening to audio via speakers, photographing the surroundings, or interacting with screens in the public realm). Any digital gadget may be included in this category, including but not limited to watches, phones, tablets, and laptops. |
| ActiveRecreation | number | Exercising or playing, either informally or in formally designated areas. |
| PassiveRecreation | number | Includes a variety of activities associated with recreational activities typically occurring in place, including: people watching, playing cards, being affectionate with others, reading/writing, creating art (e.g., draining, painting) for personal use or purposes, resting, relaxing, and hanging out. |
| WaitingTransportation | number | Waiting for transportation, whether it is public (e.g., bus, streetcar), private (e.g., car), or commercial (e.g., taxi or rideshare such as Uber, Lyft). |
| CivicWork | number | Working to upkeep or take care of the public spaces. This could include fixing potholes, sweeping the street, directing traffic, or helping others directions. |
| Smoking | number | Smoking any type of object or substance, whether legal or illegal. Only people visibly smoking should be registered in this category. Some surveys may also categorize people smoking in the activity “Disruptive – intoxicated” if the person smoking is also influenced by the smoked substance to a degree that may cause other people inconvenience or discomfort. |
| DisruptiveActivity\_Aggressive | number | Displaying abusive behavior towards another person or to no one in particular. The behavior can be verbal, physical, or other. The behavior must be assessed as abusive or highly uncomfortable within the context of the survey location. |
| DisruptiveActivity\_Intoxicated | number | Visibly ingesting alcohol or drugs in an unsanctioned context, depending on the survey location. Showing clear signs of uncontrolled intoxication such as slurred speech, unfocused eyes, aggressiveness, etc. |
| LivingActivities | number | Encamping, lying, or sleeping in an undesignated camping/sleeping location, like on the street or in a square. This type of activity is typically associated with homelessness, and can be recognized by the accompaniment of most personal belongings.  Engaged in otherwise private sanitary activities within the public realm. Could be urinating or showering in full or partial visibility of others, in areas that are not designated for these types of activities. This category covers any kind of informal behavior related to sanitary purposes that do not typically take place in public. |
| Soliciting | number | Can include begging for food or money, campaigning, or sex work. |
| Notes | text | Comments that may serve to clarify the content of the survey data |

**Provided by**  
Metadata provided by Ellie Smith (SDOT), and reflects the fields in the [Public Life Data Protocol](https://gehlinstitute.org/wp-content/uploads/2017/09/PLDP_BETA-20170927-Final.pdf).

1. http://default.sfplanning.org/Citywide/publicspace/docs/SFDCP\_PLS\_StandardsManual.pdf [↑](#footnote-ref-1)