Seattle Department of Transportation

PUBLIC LIFE STUDY

2018 Summary Report

Seattle
Department of
Transportation

ACKNOWLEDGEMENTS

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2018 PUBLIC LIFE STUDY – EXECUTIVE SUMMARY

OVERVIEW

Public spaces have the potential to improve the city's health, prosperity, and happiness. The Seattle Department of Transportation (SDOT), in a first for any municipal transportation agency in the country, has completed a systematic collection of public life data to measure how people use our streets and sidewalks. Under contract to SDOT, data collection was completed by Urban Design 4 Health, Inc. By studying public life in a variety of urban neighborhood contexts, we now have people-centered data to: help us understand what makes a successful public space; evaluate urban designs and interventions; better equip us to make public realm investment decisions; compare public life trends across neighborhoods; and measure SDOT's core value of vibrancy.

The 2018 study consisted of collecting data on 108 block faces across 38 different neighborhoods.

What is public life?
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."

What is a public life study?
A public life study is a type of research conducted through observational methods 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.

What is the Public Life Data Protocol (PLDP)?
The PLDP establishes a standardized way of classifying and measuring observational data related to activity in the public realm to allow for comparisons across different cities and regions.

FINDINGS

1. The largest number of people were observed in Seattle's densest neighborhoods, but there was variability in activity depending on neighborhood, day of the week, and time of day. On average across the sites surveyed, there were 197 people moving and 22 people staying on our sidewalks on an hourly basis. The busiest neighborhoods included Commercial Core, Denny Triangle, Pioneer Square, Belltown, and South Lake Union. Some lower density neighborhood commercial districts—including Capitol Hill, Ballard, West Seattle Junction, Alki, and Pike/Pine—had nearly as many people staying still as some neighborhoods within the downtown urban center. Overall, urban centers had significantly more people during weekdays, while urban villages and other neighborhoods outside of urban villages were busier on weekends.

KEY METRIC:

197 hourly average – people moving

22 hourly average – people staying (optional activities)

2. One-in-ten people moving ends up staying still on our sidewalks. Sites with a high "linger factor" (this ratio of people moving to people staying) indicate areas with elevated levels of existing public life vibrancy. Sites' linger factor varied from 1% to 42%, but the highest were observed in the lowest density neighborhoods (13% linger factor), compared to 8% in the downtown urban center.

KEY METRIC:

9% linger factor

3. People's activities on sidewalks are varied, with most people engaging in social, extroverted behavior. The most common activity observed across the entire study was people talking to others (47%), which is a promising figure given the City of Seattle's interest in fostering social spaces in the right-of-way. Other numbers that are indicators of positive uses of public space include commercial activity (25%), eating/drinking (20%), and passive recreation (17%). Overall, 56% of people observed engaged in extroverted behavior, compared to 35% in introverted behavior. Weekend activities were more extroverted (67%) as compared to weekdays (55%).

KEY METRIC:

56% extroverted behavior

13 people engaged in extroverted activity (hourly average per site)

4. Data suggest that some of our public spaces are not inviting to women, youth, and older adults. For the study as a whole, females, youth (less than 15 years old), and older adults (over 65 years old) were underrepresented as users of public space when compared to Census data. Promisingly, the proportion of public space users who are people of color closely reflected local demographics. Documenting who uses our public spaces can help us understand how they invite or attract different user groups and can illuminate how friendly, safe, and inviting these spaces are perceived to be by the public.

KEY METRIC:

Of people staying:

41% female

33% people of color

4% youth (<15 years old)

6% older adult (65+ years old)

5. Only one-in-four public space users who linger on our sidewalks ended up sitting down in provided seating. The most common posture documented was standing (61%), followed by sitting in provided seating (28%). In total, 11% of people staying still were leaning or sitting on items that are not intended to be used as a seating (known as sitting informally), which indicates a significant demand for additional seating. This was particularly prevalent in the downtown urban center, where six people per hour on average were either leaning or sitting informally, which was three times the study-wide average. By documenting people's postures, public life data can help elucidate where the supply of seating provided does not meet demand.

KEY METRIC:

Hourly average per site:

14 people standing

6 people sitting in provided seating

2 people sitting informally or leaning

PUBLIC LIFE DATA
SDOT is providing access to the public life data to encourage the public and researchers to explore the data. SDOT released the complete datasets using the Public Life Data Protocol format through the Socrata Open Data Portal and has also published an interactive dashboard. These can be accessed from our webpage.

WHAT'S NEXT?
SDOT's public life data program intends to make this type of data collection standard practice on an annual basis, subject to available resources. By collecting longitudinal data, we can better assess how public life changes over time, particularly as it related to population growth, land use changes, and infrastructure investments. We plan to continue to explore ways to institutionalize this type of data collection by developing action plans and using the data to inform the prioritization of public realm improvements.

FOR MORE INFORMATION
Visit our webpage for more information on the study or contact us at SDOTpubliclife@seattle.gov.

INTRODUCTION

The Seattle Department of Transportation (SDOT), in a first for any municipal transportation agency in the country, has completed a systematic collection of public life data on city streets. With nearly a third of Seattle's land devoted to streets, sidewalks, and other transportation-related public space, these spaces have the power to improve the city's health, prosperity, and happiness. Especially now, at a time of population growth and increasing density, the City must grapple with the challenge of maintaining livability with the growing demands on limited right-of-way. There is a unique opportunity to build and foster public spaces that provide a setting for socializing, recreation, building community, and supporting economic development. This study set out to measure how our sidewalks are currently being used to meet these desirable functions, and to benchmark trends compared to other cities and over time. While similar studies have been completed on a project basis, this is the first effort to systematically collect people-centered data across the entire city using the Public Life Data Protocol.
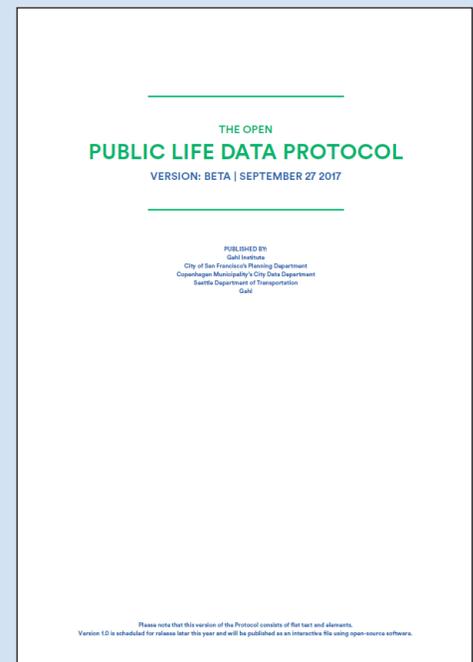
BACKGROUND

WHAT IS PUBLIC LIFE?

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 can illuminate the degree to which a community is social, livable, and prosperous.

WHY DO WE WANT TO STUDY PUBLIC LIFE?

One of SDOT's core values is vibrancy. According to the Move Seattle Strategic Plan, "a vibrant city is one where the streets and sidewalks hum with economic and social activity, where people meet and shop and enjoy the beautiful city we live in…." As the department in charge of managing and planning for the use of our streets and sidewalks—one of the most important settings for public life—SDOT has a keen interest in how people use these public spaces. In the past, we have not focused data collection specifically on understanding public life, but rather on other aspects of our transportation system related to

Public Life Data Protocol

The Public Life Data Protocol (PLDP) establishes a standardized way of classifying and measuring observational data related to activity in the public realm. The PLDP was developed by a group of stakeholders experienced with public life studies, including the Gehl Institute, Gehl, the Municipality of Copenhagen, the City of San Francisco, and the Seattle Department of Transportation. The PLDP establishes a set of metrics for understanding public life, and with their clear specification, allows for standarized measurement across the world. Ultimately, the PLDP aims to allow for more people to collect public life data and share that data to build a dataset for comparison across cities and regions.

THE OPEN
PUBLIC LIFE DATA PROTOCOL
VERSION: BETA | SEPTEMBER 27 2017

PUBLISHED BY:
Gehl Institute
City of San Francisco's Planning Department
Copenhagen Municipality's City Data Department
Seattle Department of Transportation
Gehl

Please note that this version of the Protocol consists of flat text and elements.
Version 1.0 is scheduled for release later this year and will be published as an interactive file using open-source software.

mobility, like vehicular traffic counts. Currently, SDOT has no standardized way of measuring or benchmarking our progress toward making Seattle a city with vibrant streets and sidewalks. It is important that SDOT begin collecting data on activity within the public realm that provides insight into how, and by whom, public space is used and how this usage aligns with what is considered healthy and desirable. For instance, SDOT has an interest in designing and stewarding environments that are used by people of all ages and races and that foster social interaction.

By studying public life in a variety of urban neighborhood contexts, we were able to collect people-centered data that measures how people use our streets and sidewalks and how vibrancy changes over time. This will help us understand what makes a successful public space, evaluate designs and interventions, better equip us to make public realm investment decisions, compare public life across neighborhoods, and measure and benchmark SDOT's core value of vibrancy.

WHAT IS A PUBLIC LIFE STUDY?

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. A public life study provides insight into how design, activation, social behavior, built environment, and urban form all influence activity in public space. A better understanding of those factors directly supports our efforts to make public spaces that people enjoy using.

A public life study typically answers one or more of the following questions about public spaces:
- **How many** people are there, either staying still or moving through?
- **Who** is there, by gender, age, etc.?
- **Where** are people lingering?
- **What** activities are people engaging in?

METHODOLOGY

Over three summer months (July through mid-September 2018), SDOT collected data through observation on Seattle's sidewalks in 38 different neighborhoods across the city.

RESEARCH OBJECTIVES

This research effort was designed to capture the activities present in a broad array of urban contexts, focusing on data points 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. The key study objectives were to understand:
- who is using public space
- the types of activities present in public space
- how social the public space is
- the degree to which available pedestrian infrastructure provided in public space is utilized
- the degree to which people engage in commercial activity in the public space

SITE SELECTION

The scale for data collection was the sidewalk of a single "block face," which essentially means one side of a street from one intersection to another. For the 2018 study, SDOT selected study areas based on where one would anticipate high levels of public life vibrancy and social activity. SDOT developed an approach to neighborhood and site selection that prioritized sites with:
- High levels of residential and land use density;
- Relatively even geographic distribution across the seven City Council Districts; and
- High proportion of people of color populations.

The site selection approach resulted in a total of 108 block faces to study across 38 different neighborhoods. A full list of sites can be found in Appendix A and Appendix B includes a detailed description about how these sites were selected.

	People Moving	People Staying Still	Current Conditions
Research questions	How many people walk on this sidewalk? Who walks on the sidewalk?	How many people stay still on the sidewalk? Who stays still on the sidewalk? What are people doing on the sidewalk?	What are the current weather conditions? What seating is currently available? Are there any notable events happening that could affect public life?
Study area	Screen line	Entire block face	Entire block face
Length of time	20 minutes	20 minutes	~5 minutes

DATA COLLECTION

All data were gathered exclusively through observational methods, focused on three types of data collected: people moving, people staying still, and current conditions. People moving counts elicits data related to how relatively active a block face is from a mobility perspective, while people staying counts speak more to how well the space attracts users and encourages them to linger. Detailed descriptions of how these data were collected can be found in our 2018 Guide for Data Collectors.

Each of these types of data were collected by trained surveyors using tablets during multiple time periods for each of the 108 sites included in the study. The data acquisition effort, including managing the surveyors and developing the tablet-based data entry process was completed by Urban Design 4 Health, Inc. The data collection schedule was developed based on best practices of public life data collection established by Jan Gehl and utilized by the City of San Francisco. For each site, observations were conducted at eight different time periods across two weekdays (variable) and one weekend day (always Saturday). Field staff collected data within specific observation time windows, coinciding with anticipated peak usage: morning (8-10am), mid-day (12-2pm), and evening (4-6pm). The study aimed to understand typical public space usage, so field staff did not collect data on holiday weekends (e.g., Labor Day) or when there were anticipated activities in the right-of-way (e.g., construction, special events, festivals).

STUDY LIMITATIONS AND HOW TO INTERPRET RESULTS

To maximize the number of sites included in the study, data were collected during a sample of time during the observation windows, rather than a full survey of all activity across multiple hours and days. The data should thus be interpreted as illustrative and not perfectly representative of all public life activity present at any given time.

While the Public Life Data Protocol was used to guide the study design to make clear, objective distinctions between various data categories to reduce field staff subjectivity, it is ultimately impossible to eradicate all forms of bias in a study of this nature. For instance, demographic data collected through observational methods—such as gender, age, and race/ethnicity—is less reliable than self-report data collected through surveys because people do not always present these demographic categories in ways that can be reliably and accurately recorded through observation. Ideally, in-person observations would be supplemented with intercept surveys to validate the observational findings. In future years, SDOT hopes to include intercept surveys in the study design for public life studies to validate demographic data and understand user perceptions of public space.

KEY FINDINGS

1. The largest number of people were observed in Seattle's densest neighborhoods, but there was variability in activity depending on neighborhood, day of the week, and time of day.

Page 13 shows a map with average hourly volumes of people moving and people staying, summarized to the neighborhood level. We saw the highest volumes of people in Seattle's densest neighborhoods—including Commercial Core, Denny Triangle, Belltown, and South Lake Union—as would be anticipated. However, it was striking to see that some neighborhood commercial districts—including Capitol Hill, Ballard, West Seattle Junction, Alki, and Pike/Pine—had nearly as many people staying still as some neighborhoods within the downtown urban center, even though the number of people passing through was lower on average.

Site-level data can be found in Appendix A to understand the variation in volumes across the 108 sites.

Summarizing this further, it is worth investigating trends based on neighborhood type. Per the City of Seattle's Comprehensive Plan, urban centers and urban villages are designed to accommodate the city's population growth, with a higher concentration of jobs, residences, and large transit investments. In these highly dense areas, the logic would follow that we would see most activity in the urban centers, particularly those in the downtown urban center, and less in each successive level of land use density, including other urban centers outside of downtown, and urban villages. Neighborhoods that are not designated as either an urban center or urban village were included in the study as an additional comparison point (indicated as "outside neighborhoods" in this report) because they are known to be vibrant commercial districts. The map on pg 14 illustrates where these neighborhood types are located, with the darkest colors representing the densest neighborhoods.

We found that this relationship between density and public life activity was generally true, with some exceptions. Most notably, the urban centers outside of the city center—University District, Ravenna, and Northgate—trailed the other urban centers in terms of number of people moving (157 per hour on average, which is less than the study-wide average of 197), and had the least number of people staying on average for all neighborhood types (only 4 people per hour on average compared to the study-wide average of 22). Interestingly, outside neighborhoods had more activity than urban villages on average.

ACTIVITY OF PEOPLE MOVING AND PEOPLE STAYING

hourly average: people moving (orange)

- Bitter Lake Village 19
- Lake City 42
- Northgate 66
- Crown Hill 23
- Greenwood-Phinney Ridge 85
- Wedgwood 64
- Roosevelt 71
- Bryant 26
- Ballard 263
- Wallingford 108
- Ravenna 37
- Fremont 194
- University District 323
- Magnolia 101
- Madison Park 146
- Upper Queen Anne 159
- South Lake Union 301
- Capitol Hill 307
- Uptown 156
- Madison-Miller 67
- Belltown 247
- Denny Triangle 565
- Pike/Pine 247
- Commercial Core 896
- First Hill / 12th Ave 136
- 23rd & Union-Jackson 56
- Pioneer Square 307
- Chinatown/ID 241
- Alki 192
- North Beacon Hill 113
- Mount Baker 89
- West Seattle Junction 183
- Columbia City 121
- Georgetown 117
- Othello 44
- South Park 68
- Rainier Beach 14
- Westwood - Highland Park 20

197 overall average

hourly average: people staying (green)

- Bitter Lake Village 0
- Lake City 7
- Northgate 5
- Crown Hill 1
- Greenwood-Phinney Ridge 9
- Wedgwood 5
- Roosevelt 1
- Bryant 8
- Ballard 28
- Wallingford 11
- Ravenna 3
- Fremont 23
- University District 6
- Magnolia 13
- Madison Park 20
- Upper Queen Anne 16
- South Lake Union 25
- Capitol Hill 30
- Uptown 11
- Madison-Miller 16
- Belltown 33
- Denny Triangle 33
- Pike/Pine 24
- Commercial Core 47
- First Hill / 12th Ave 10
- 23rd & Union-Jackson 19
- Pioneer Square 30
- Chinatown/ID 30
- Alki 28
- North Beacon Hill 7
- Mount Baker 12
- West Seattle Junction 28
- Columbia City 11
- Georgetown 11
- Othello 4
- South Park 7
- Rainier Beach 0
- Westwood - Highland Park 1

22 overall average

Note: People staying counts does not include people waiting for transportation to better account for optional or recreational use of public space and to control for varying site-level conditions (e.g., if a transit stop was present or not).

ACTIVITY OF PEOPLE MOVING AND PEOPLE STAYING BY NEIGHBORHOOD TYPE

	hourly average: people moving	hourly average: people staying
Downtown Urban Center	451	35
Center City Urban Center	229	20
Urban Center	157	4
Urban Village	103	11
Outside Neighborhood	108	14
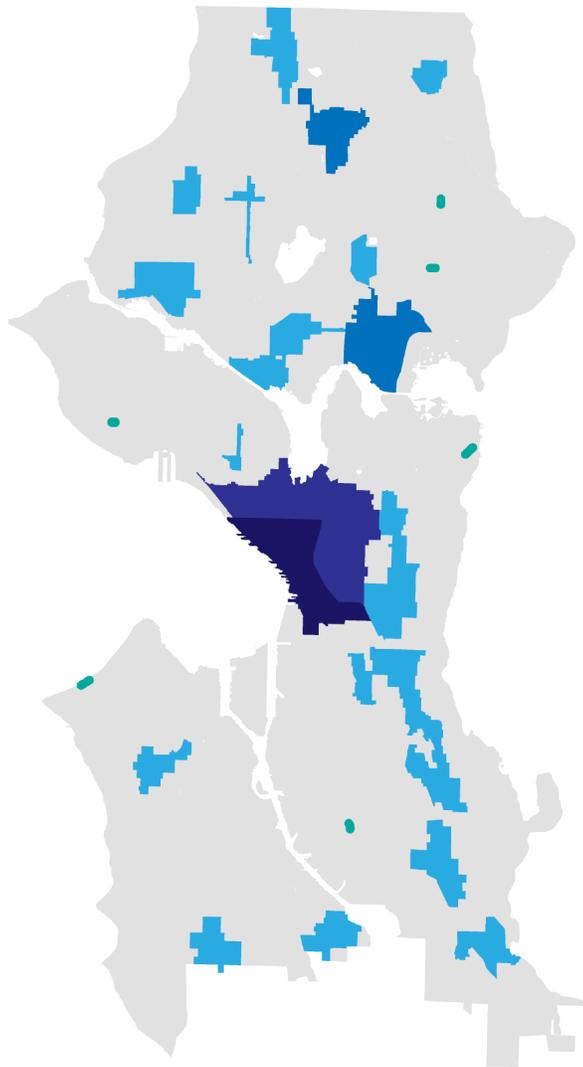
Downtown Urban Center
Belltown, Chinatown/ International District, Commercial Core, Denny Triangle, Pioneer Square
20 sites total

Center City Urban Center
Capitol Hill, First Hill/12th Ave, Pike/Pine, South Lake Union, Uptown
20 sites total

Urban Center
Northgate, Ravenna, University District
10 sites total

Urban Village
23rd Union/Jackson, Ballard, Beacon Hill, Bitter Lake Village, Columbia City, Crown Hill, Fremont, etc.*
46 sites total

Outside Neighborhood
Alki, Bryant, Georgetown, Madison Park, Magnolia, Wedgwood
12 sites total

*Remaining urban villages included the study: Greenwood Phinney Ridge, Lake City, Madison Miller, Mount Baker, Othello, Rainier Beach, Roosevelt, South Park, Upper Queen Anne, Wallingford, West Seattle Junction, and Westwood Highland Park

On average, activity volumes were similar for the mid-day (12-2pm) and evening (4-6pm) time periods, while much less activity was observed during the morning time period (8-10am), as shown below. Weekdays were also observed to be slightly more active than weekends overall, which had 7% fewer people observed moving and 3% fewer people observed staying.

ACTIVITY OF PEOPLE MOVING AND PEOPLE STAYING BY DAY OF WEEK AND TIME OF DAY

hourly average: people moving

197 overall average

Weekday	225
Weekend	208
Morning (8-10am)	129
Mid-day (12-2pm)	214
Evening (4-6pm)	224

↓ **7%** fewer **people moving** observed on weekends **overall**

hourly average: people staying

22 overall average

Weekday	25
Weekend	24
Morning (8-10am)	15
Mid-day (12-2pm)	24
Evening (4-6pm)	25

↓ **3%** fewer **people staying** observed on weekends **overall**
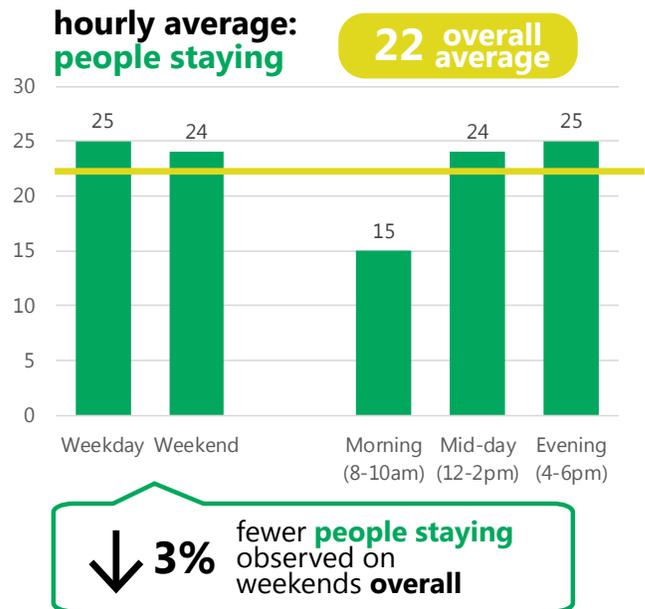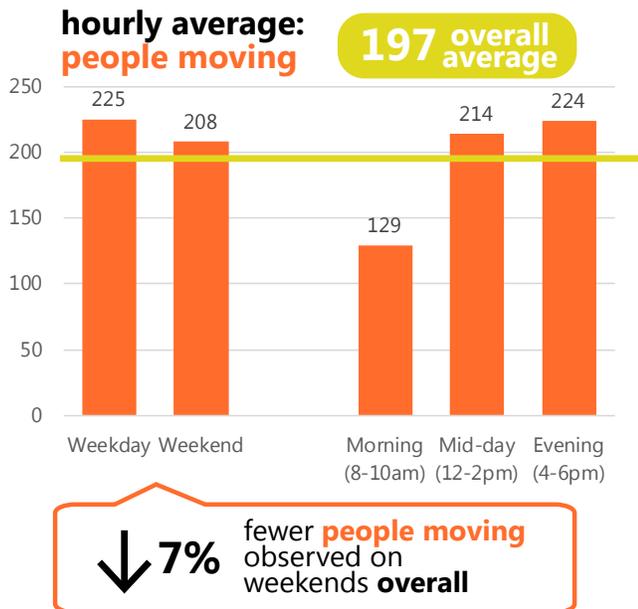
However, there were some large variations based on neighborhood type. For instance, both urban villages and outside neighborhoods had much more activity on weekends, while all neighborhoods with urban center designation saw much less activity on weekends. Most strikingly, outside neighborhoods had a 73% increase in people moving and 61% increase in people staying as compared to the weekday time periods, which points to the fact that these neighborhood commercial areas potentially cater to recreational weekend users most and do not have the employment base to attract the same number of people during the week.

ACTIVITY TRENDS ON WEEKENDS COMPARED TO WEEKDAYS BY NEIGHBORHOOD TYPE

neighborhood type	people moving	people staying	
● Downtown Urban Center	-20%	-15%	↓ **fewer** people observed on weekends
● Center City Urban Center	-16%	-8%	
● Urban Center	-32%	-15%	
● Urban Village	+17%	+4%	↑ **more** people observed on weekends
● Outside Neighborhood	+73%	+61%	

2. One-in-ten people moving ends up staying still on our sidewalks; sites with a high "linger factor" (this ratio of people staying to people moving) indicate areas with elevated levels of existing public life vibrancy.

Overall, of all the people observed moving through the study areas, 9% stayed still for reasons other than waiting for transportation. This proportion—known as the "linger factor"—is a good indicator of how successful any particular area is at attracting and retaining users who stay still for non-necessary purposes; this linger factor likely speaks to the area's aesthetic appeal, commercial opportunities, infrastructure to support public life, and perceived comfort and safety by users.

The site-level linger factor varied from 1% (BEA1) to 42% (BRY2), which can be found in Appendix A. On a neighborhood level, we saw the highest linger factor in local neighborhood commercial districts with a relatively small number of people moving through, including Bryant and Madison Miller. When summarized by neighborhood type, sites in outside neighborhoods had the largest linger factor at 13% on average, followed by urban villages at 11%; this suggests that lower density neighborhoods are most successful at encouraging people to linger on sidewalks.

Interestingly, the linger factor did not vary substantially based on the day of week nor time of day, meaning activity is relatively proportional and consistent across days.

LINGER FACTOR BY NEIGHBORHOOD TYPE

9% overall average

Average by neighborhood type:

Neighborhood type	Linger factor
Downtown Urban Center	8%
Center City Urban Center	9%
Urban Center	3%
Urban Village	11%
Outside Neighborhood	13%

neighborhood average: *linger factor*

Bitter Lake Village* **1%**

Lake City **13%**

Northgate **7%**

Crown Hill* **2%**

Greenwood-Phinney Ridge **11%**

Wedgwood **8%**

Roosevelt* **2%**

Bryant **30%**

Ballard **10%**

Wallingford **10%**

Ravenna **9%**

Fremont **12%**

University District **2%**

Magnolia **13%**

Upper Queen Anne **10%**

South Lake Union **8%**

Madison Park **13%**

Capitol Hill **10%**

Uptown **7%**

Belltown **13%**

6%

Madison- Miller **24%**

Denny Triangle **5%**

Pike/Pine **10%**

Commercial Core

First Hill / 12th Ave **8%**

23rd & Union-Jackson **12%**

10% Pioneer Square

Chinatown/ID **12%**

Alki **15%**

North Beacon Hill **6%**

Mount Baker **13%**

West Seattle Junction **15%**

Columbia City **9%**

Georgetown **9%**

Othello **9%**

Westwood – Highland Park* **4%**

South Park **10%**

Rainier Beach* **0%**

9% overall average

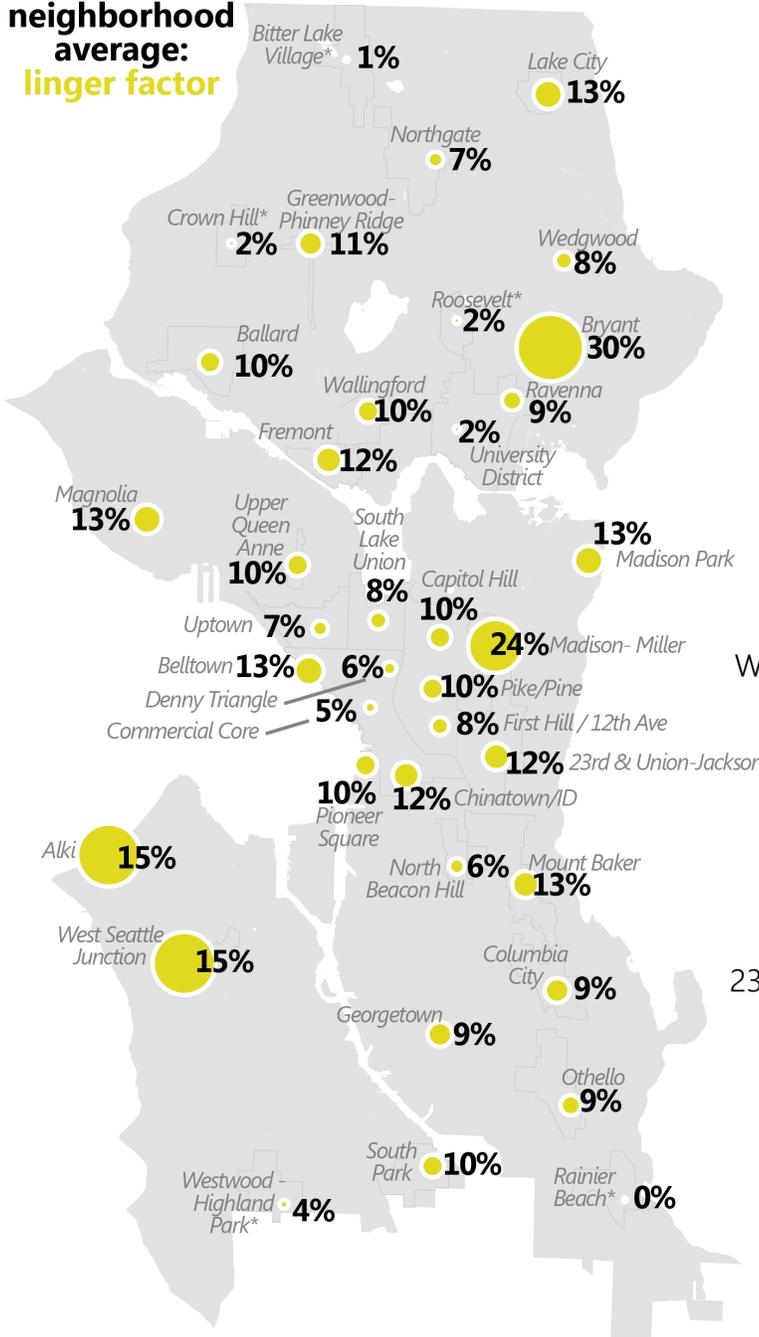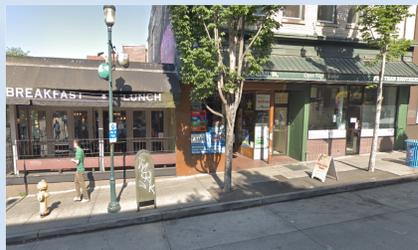| Highest Linger Factor	Lowest Linger Factor
Bryant (30%)	Rainier Beach* (0%)
Madison Miller (24%)	Bitter Lake Village* (1%)
Alki West Seattle Junction (15%)	University District Roosevelt* Crown Hill* (2%)
Belltown Lake City Mount Baker Magnolia Madison Park (13%)	Westwood-Highland Park* (4%)
	Commercial Core (5%)
23rd & Union-Jackson Chinatown/ID Fremont (12%)	Denny Triangle Beacon Hill (6%)
	Uptown Northgate (7%)

*Fewer than 20 people were observed staying still across all sites in these neighborhoods.

Case Study: Linger Factor

To illustrate how the linger factor functions as a good indicator of vibrancy, it is worth looking at an example of two study areas: one block in the University District (University Way NE between NE 42nd St and NE 43rd St, west side) and one block in Pioneer Square (1st Ave S between S Washington St and S Main St, west side).

Based on local conditions, one would expect activity to be similar on these blocks. Both are located in active commercial districts, have high population density, and were observed to have very high people moving counts. However, there is a sharp difference in linger factor due to the fact that the University Way NE block only observed three people staying still during the entire study period, compared to 94 on 1st Ave. Teasing out the reasons for these diverging linger factors is an interesting exercise and should have us looking critically at the local public space infrastructure to see how well it facilitates non-mobility uses of the right-of-way. For instance, the 1st Ave S site had 28 commercial seats available to patrons, which influenced use of this space, with 43% of all observed staying still on this block face sitting in those seats; the University Way NE site, on the other hand, had no commercial nor public seats provided on this block face. This is just one factor of invariably many that influence the use of public space.

	University Way NE *University District*	**1st Ave S** *Pioneer Square*
People moving - hourly average	432	415
People staying - hourly average	0	35
Population density (# people per acre)	56	34
Number of businesses on block face	19	8
Number of seats (commercial)	0	28
Percent traveling in groups	57%	49%
LINGER FACTOR	**0%**	**8%**

3. People's activities on sidewalks are varied, with most people engaging in social, extroverted behavior.

The most common activity observed across the entire study was people talking to others (47%), which is a promising figure given the City of Seattle's interest in fostering social spaces in the right-of-way. Other numbers that are indicators of positive uses of public space include commercial activity (25%), eating/drinking (20%), and passive recreation (17%) which is a general catch-all for hanging out and enjoying yourself, including reading, writing, or people watching. It is promising to see a diversity of activities in the right-of-way instead of a single use; this can mean the public space is varied, vibrant, and interesting, thus encourages more people to linger and take part in it.

Activity — Percent of people engaged:

Talking to others — 47%
- Downtown Urban Center: 48%
- Center City Urban Center: 43%
- Urban Center: 26%
- Urban Village: 50%
- Outside Neighborhood: 61%

Using electronics — 29%
- Downtown Urban Center: 27%
- Center City Urban Center: 36%
- Urban Center: 43%
- Urban Village: 26%
- Outside Neighborhood: 24%

Commercial activity — 25%
- Downtown Urban Center: 22%
- Center City Urban Center: 22%
- Urban Center: 20%
- Urban Village: 27%
- Outside Neighborhood: 50%

Waiting for transportation — 24%
- Downtown Urban Center: 19%
- Center City Urban Center: 33%
- Urban Center: 58%
- Urban Village: 22%
- Outside Neighborhood: 4%

Eating / drinking — 20%
- Downtown Urban Center: 21%
- Center City Urban Center: 17%
- Urban Center: 10%
- Urban Village: 18%
- Outside Neighborhood: 40%

Passive recreation — 17%
- Downtown Urban Center: 17%
- Center City Urban Center: 18%
- Urban Center: 12%
- Urban Village: 19%
- Outside Neighborhood: 14%

Smoking — 7%
- Downtown Urban Center: 9%
- Center City Urban Center: 7%
- Urban Center: 6%
- Urban Village: 6%
- Outside Neighborhood: 3%

Legend:
- All sites
- Downtown Urban Center
- Center City Urban Center
- Urban Center
- Urban Village
- Outside Neighborhood

<5% of people were recorded doing the following activities: Living in public (3%), Civic work (2%), Active recreation (2%), Soliciting (1%), Cultural activity (<1%), and Disruptive activity (<1%).

As a way of classifying and simplifying the types of use of public space, we categorized activities as either extroverted behavior (talking to others, commercial activity, or cultural activity) or introverted behavior (engaging in activities by oneself including using electronics, eating/ drinking, active recreation, smoking, or waiting for transit). Overall, 56% of people observed engaged in extroverted behavior, compared to 35% in introverted behavior. However, there is a wide variability by site and neighborhood, as displayed below. This underscores the fact that not all sites serve the same social function, with some being spaces to engage with others, while others function as more solitary spaces where people keep to themselves.

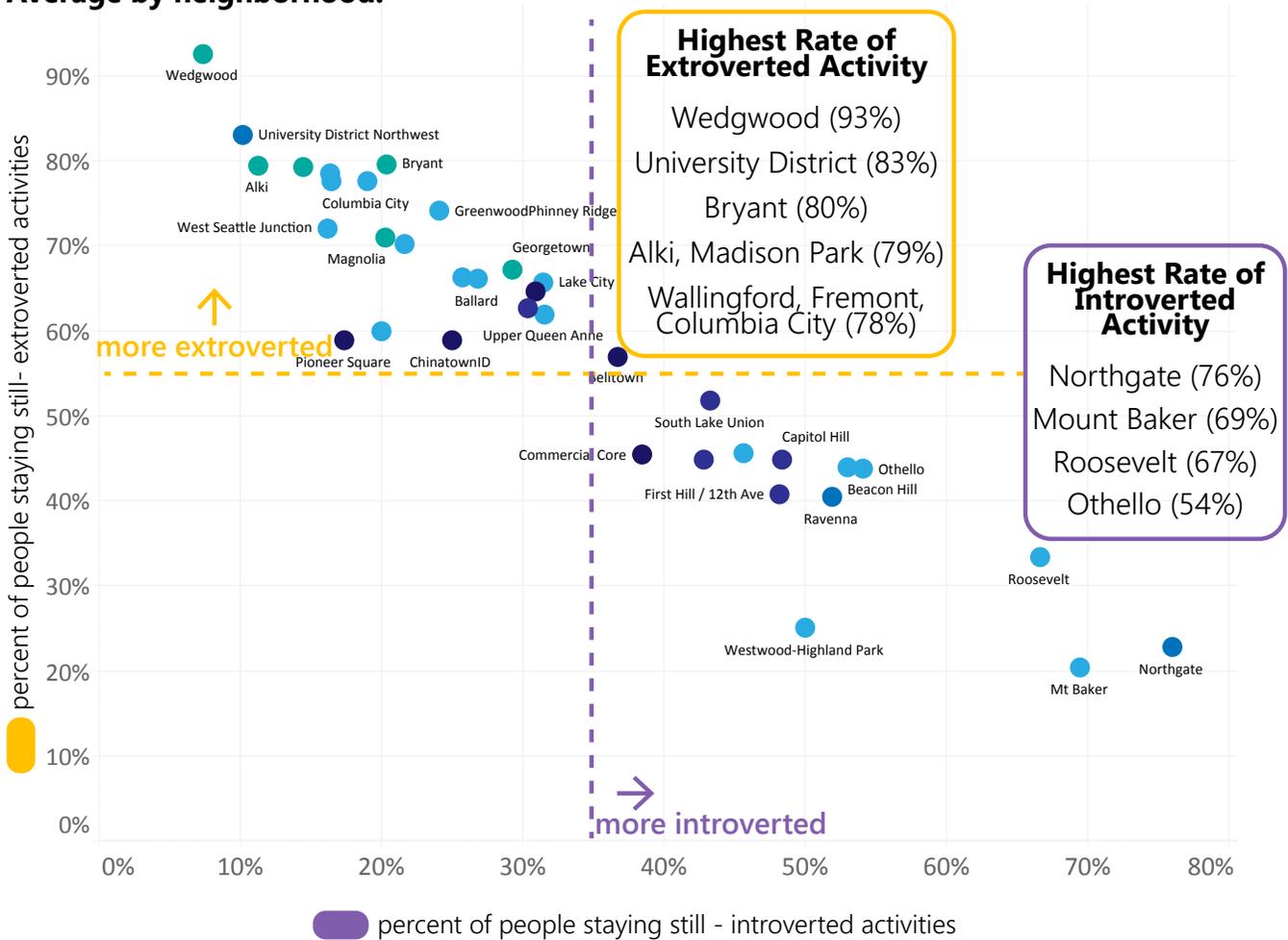## EXTROVERTED AND INTROVERTED ACTIVITIES BY NEIGHBORHOOD

Extroverted activity: activities that require engaging with others, including talking, commercial activity, or cultural activity.

56% overall average

Introverted activity: activities undertaken alone including using electronics, active recreation, smoking, or waiting for transit.

35% overall average

Average by neighborhood:

Highest Rate of Extroverted Activity

Wedgwood (93%)

University District (83%)

Bryant (80%)

Alki, Madison Park (79%)

Wallingford, Fremont, Columbia City (78%)

Highest Rate of Introverted Activity

Northgate (76%)

Mount Baker (69%)

Roosevelt (67%)

Othello (54%)

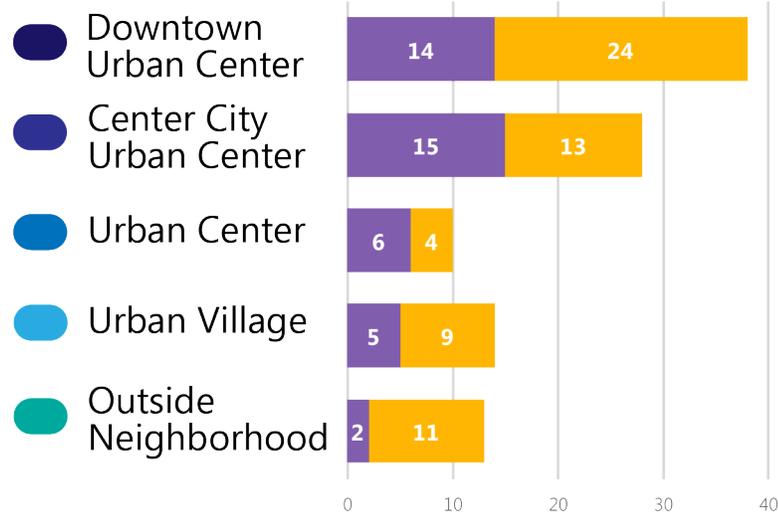percent of people staying still - introverted activities

Sites in the downtown urban center neighborhoods had the largest amount of extroverted activity with 24 people per hour on average observed; center city neighborhood sites and outside neighborhood sites followed with 13 and 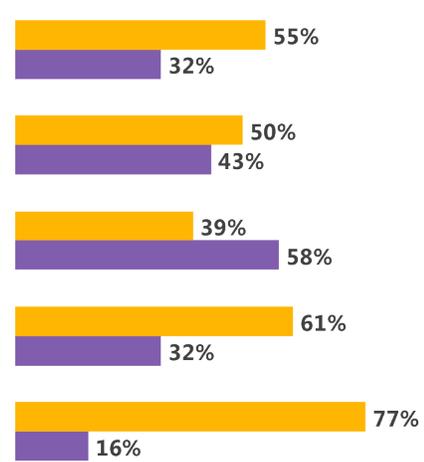11 people per hour, respectively. However, compared to overall activity observed, outside neighborhoods were observed to have the highest proportion of extroverted activity (77%), while urban centers outside of the center city had the lowest (39%).

Number of people engaged in extroverted and introverted activity (hourly average)

- Downtown Urban Center
- Center City Urban Center
- Urban Center
- Urban Village
- Outside Neighborhood

Neighborhood	Introverted	Extroverted
Downtown Urban Center	14	24
Center City Urban Center	15	13
Urban Center	6	4
Urban Village	5	9
Outside Neighborhood	2	11

(x-axis: 0, 10, 20, 30, 40)

Proportion of all activity: extroverted and introverted

Neighborhood	Extroverted	Introverted
Downtown Urban Center	55%	32%
Center City Urban Center	50%	43%
Urban Center	39%	58%
Urban Village	61%	32%
Outside Neighborhood	77%	16%

Overall, we found that weekend activities were more extroverted (67%) as compared to weekdays (55%). This is further supported by the fact that people both stayed in groups and moved in groups in much higher rates on weekends compared to weekdays.

PEOPLE MOVING AND PEOPLE STAYING IN GROUPS (2+ PEOPLE) BY DAY OF WEEK

	Weekday	Weekend
People moving	38%	63%
People staying	43%	59%

Public Life Studies and Homelessness

Societal inequities are frequently on full display in our public spaces, and therefore were inevitably captured in this study. The activity "Living in public" was included in this study to understand how many people undertake necessary life activities, like sleeping, encamping, or bathing in the right-of-way. Overall, the proportion of people observed engaging in this activity was low (3%), and the impact was felt most acutely in Pioneer Square where 46% of all people engaged in that activity were observed. The PLDP is designed to capture only the activities taking place at the time of data collection and not make assumptions about the socioeconomic or housing status of any user of public space.

4. Data suggest that some of our public spaces are not inviting to women, youth, and older adults.
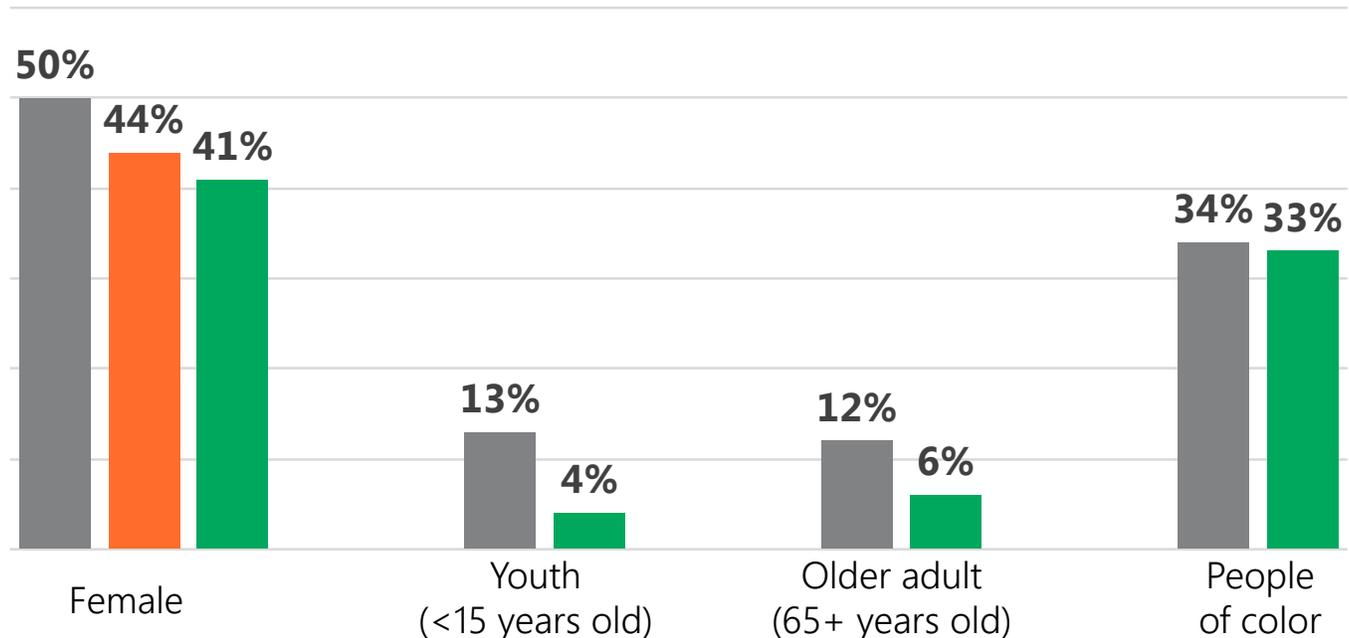
Documenting who uses our public spaces can help us understand how they invite or attract different user groups. Ideally, we would see the demographic makeup of the public space users (e.g., gender, age, race/ethnicity) match the local demographics, as measured by the census (2016 American Community Survey 5-year estimate). In those cases where user groups are not proportionally represented—particularly for vulnerable or marginalized groups—questions should be asked about how friendly, safe, and inviting these spaces are perceived to be by the public.

For the study as a whole, females, youth (less than 15 years old), and older adults (over 65 years old) were underrepresented as users of public space when compared to Census data, as demonstrated below. The presence of women can be a good proxy indicator for sense of safety, while the presence of a diversity of ages is an indicator of age-friendly or inclusive design.

On the other hand, the proportion of public space users who are people of color did closely reflect local demographics. This is promising because it indicates that in general our public spaces do not seemingly exclude individuals from traditionally underserved populations.

DEMOGRAPHICS OF OBSERVED PUBLIC SPACE USERS AND CENSUS DATA

Local resident demographics (Census data)
compared to people moving* and people staying

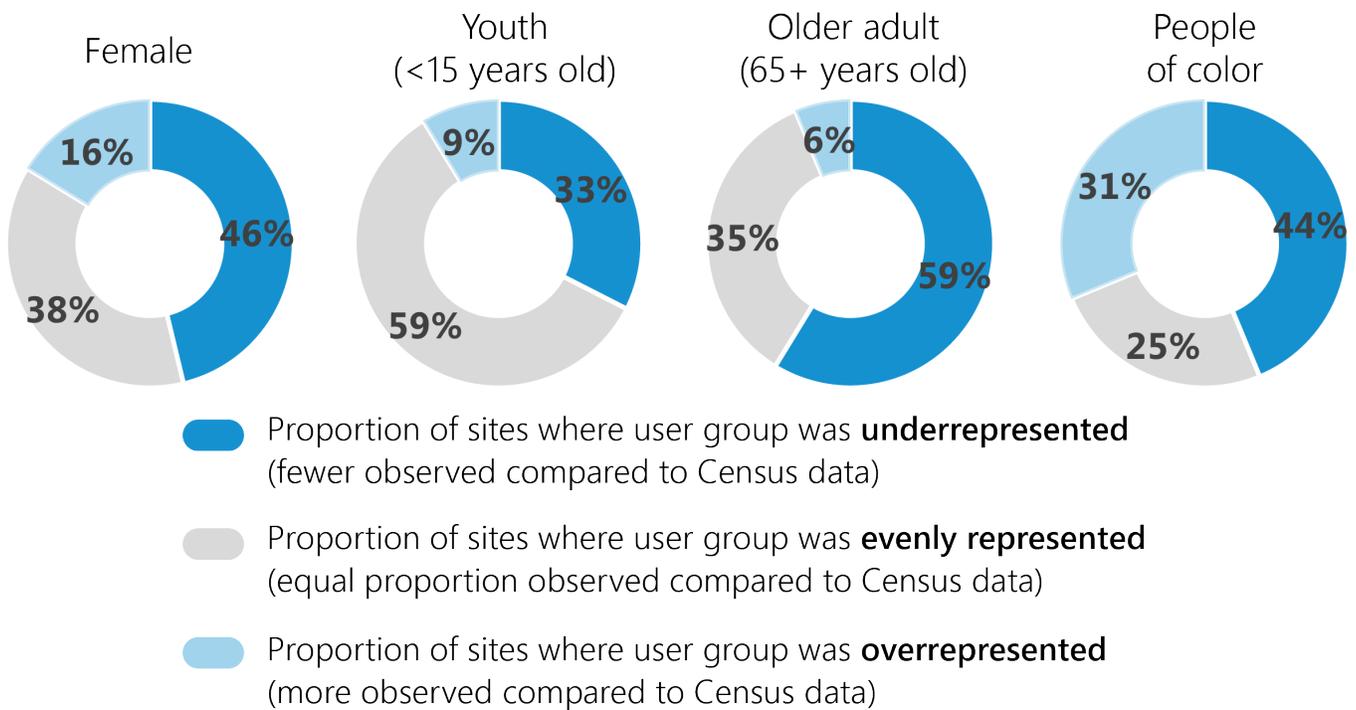|	Female	Youth (<15 years old)	Older adult (65+ years old)	People of color
Census	50%	13%	12%	34%
Moving	44%			
Staying	41%	4%	6%	33%

* Demographics of people moving counts consisted only of gender breakdown.

However, it is worth noting that some sites had larger discrepancies between local demographics and the user profiles when compared more closely to the local census tract. The image below indicates the degree to which users of the space represented local demographics on a site-by-site basis. For instance, while the proportion of public space users who were people of color overall across the study closely reflected the demographic breakdown of the city (33% compared to 34%), there was a wide variation in representation on a site-level. In fact, only 25% of all sites surveyed were evenly proportional to the local demographics (defined as being within 5% of the local census tract demographics), while the remainder either underrepresented (44% of sites) or overrepresented (31% of sites) people of color. One example of this was in Columbia City, where 59% of the local census tract consists of people of color, yet they represented only 31% of all people staying still in the study.

PROPORTION OF SITES THAT REPRESENT LOCAL DEMOGRAPHICS

Female
16%
46%
38%

Youth (<15 years old)
9%
33%
59%

Older adult (65+ years old)
6%
35%
59%

People of color
31%
44%
25%

Proportion of sites where user group was **underrepresented** (fewer observed compared to Census data)

Proportion of sites where user group was **evenly represented** (equal proportion observed compared to Census data)

Proportion of sites where user group was **overrepresented** (more observed compared to Census data)

The outlier sites that either underrepresent or overrepresent vulnerable populations should be considered closely in the future for determining what factors at play affect the degree to which a space is perceived to be safe, inviting, and inclusive.

Case Study: Proportion of Users Who are Female

Below is an example of two block faces with similar average people moving and staying volumes, yet divergent social conditions observed. Blanchard Street between 6th Ave and 7th Ave (site DEN2) had a small proportion of females moving on the block face (34%), and an even smaller proportion that stayed still in the space (11%). In fact, this site was the most male-heavy sites and least age-diverse sites of all studied. While the linger factor on this block was higher than average (15%), the activities observed were more introverted than most sites, dominated by smoking and using electronics. It is insightful to compare this site to one in West Seattle Junction (California Ave SW between SW Alaska St and SW Oregon St, site name WES1) with similar activity volumes. In contrast to Blanchard St, this site had a healthy gender balance for both people moving and staying, had a diversity of ages represented in their sidewalk users (which also reflects local demographics), and fostered pro-social activities. While we cannot at this point make broader statements about the relationship between the proportion of females observed and other attributes of public space usage, it is clear in this case that the even gender breakdown on California Ave SW is one indicator that it is a healthy public space that encourages lingering and facilitates social interaction.

		Blanchard St *Denny Triangle*	**California Ave SW** *West Seattle Junction*
Percent female	People moving	34%	50%
	People staying	11%	46%
Percent age diversity (<15 and 65+ years old)		1% (8% Census)	25% (27% Census)
People moving – hourly average		233 (32% fewer people on weekend)	153 (88% more people on weekend)
People staying – hourly average		32 (64% fewer people on weekend)	38 (33% more people on weekend)
Linger factor		15%	25%
Percent extroverted activities		30%	80%
Most common activities		smoking (62%) using electronics (55%) talking to others (25%)	talking to others (68%) commercially engaged (66%) passive recreation (22%)

5. Only one-in-four public space users who linger on our sidewalks ended up sitting down; by documenting people's postures, the data can help elucidate where the supply of seating provided does not meet demand.

By measuring how people orient their bodies in public space, we can understand the degree to which facilities meet the needs OF people staying still in space. For instance, if there are a large number of people standing, leaning, or sitting informally on items that are not intended to be used as a seating, such as a curb or bollard, this indicates that there may be demand for more seating.

The most common posture documented was standing (61%), followed by sitting in provided seating (28%); of those sitting in provided seating, 57% sat in public seats, 35% in commercial seating (where payment is expected in exchange for the seat, such as a restaurant sidewalk café), and 7% sat in their own personal seat (this typically means they were supported by a wheelchair or walker).

In total, 11% of people staying still were leaning or sitting informally, which indicates a significant demand for additional seating. This was particularly prevalent in the downtown urban center, where six people per hour on average were either leaning or sitting informally, which was three times the study-wide average. It is also worth noting that 29% of people sitting informally or leaning in this area were engaged in passive recreation (a catch all term for hanging out, relaxing, or people watching), which is much higher than the overall average study-wide (17%). This emphasizes the importance of considering potential infrastructure investments where that activity is the highest.

POSTURES OBSERVED OF PEOPLE STAYING STILL

All sites

11%
28%
61%

By neighborhood type
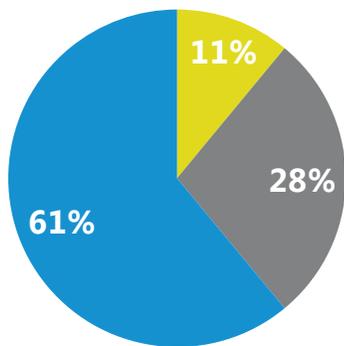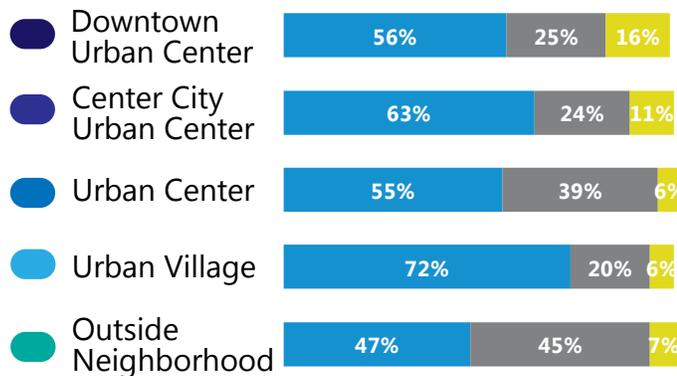
Neighborhood	Standing	Sitting in seating	Leaning or sitting informally	Average number of seats per site
Downtown Urban Center	56%	25%	16%	15
Center City Urban Center	63%	24%	11%	16
Urban Center	55%	39%	6%	10
Urban Village	72%	20%	6%	8
Outside Neighborhood	47%	45%	7%	16

■ Leaning or sitting informally   ■ Sitting in seating   ■ Standing

There were nine sites where at least 25 people were documented as leaning or sitting informally, all of which were located in either the downtown urban center or center city urban center.[1] Each of these sites were high volume locations for people moving and people staying, but had very little seating provided, especially when compared to the study area as a whole (see table below). The discrepancy in seating given the high volumes is likely directly related to the high number of informal postures observed; sites exhibiting these dynamics are ripe for additional study related to potential future pedestrian infrastructure investments.

COMPARISON OF SITES WITH HIGH INFORMAL POSTURES AND STUDY AVERAGE

	Sites with high informal postures	Study average
People moving (hourly average)	491	197
People staying (hourly average)	63	22
Linger factor	18%	9%
Average number of seats available	4	10
Average seat occupancy	58%	23%

[1]PIO1 (N=55), CID4 (N=47), COM1 (N=33), CAP3 (N=31), COM3 (N=31), BLT1 (N=29), PIK3 (N=28), COM2 (N=27), AND CAP1 (N=26).

DATA AVAILABILITY

SDOT is providing access to the public life data 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 and adjacent land uses to support it. We are eager to share the data not only to those interested in Seattle, but also to the larger international community looking to adopt the Public Life Data Protocol into their city planning practices to allow for comparisons, collaboration, and knowledge sharing.

SDOT released the complete datasets using the Public Life Data Protocol format through the Socrata Open Data Portal, which can be accessed from our webpage.

APPENDIX A: SITE-LEVEL DATA

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
ALK1	ALKI AVE SW BETWEEN MARINE AVE SW AND 59TH AVE SW	SE	Alki	Outside neighborhood	215	27	13%	76%
ALK2	ALKI AVE SW BETWEEN 57TH AVE SW AND 58TH AVE SW	SE	Alki	Outside neighborhood	168	29	17%	83%
BAL1	NW MARKET ST BETWEEN 22ND AVE NW AND BALLARD AVE NW	N	Ballard	Urban Village	339	7	2%	76%
BAL2	NW MARKET ST BETWEEN BALLARD AVE NW AND 24TH AVE NW	N	Ballard	Urban Village	332	10	3%	82%
BAL3	BALLARD AVE NW BETWEEN NW VERNON PL AND 20TH AVE NW	SW	Ballard	Urban Village	173	45	26%	64%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
BAL4	BALLARD AVE NW BETWEEN NW MARKET ST AND 22ND AVE NW	NE	Ballard	Urban Village	206	48	23%	63%
BEA1	S LANDER ST BETWEEN 16TH AVE S AND 17TH AVE S	N	Beacon Hill	Urban Village	39	12	30%	69%
BEA2	BEACON AVE S BETWEEN S LANDER ST AND S MCCLELLAN ST	E	Beacon Hill	Urban Village	186	2	1%	21%
BLT1	3RD AVE BETWEEN VIRGINIA ST AND LENORA ST	E	Belltown	Downtown Urban Center	426	31	7%	32%
BLT2	BELL ST BETWEEN 2ND AVE AND 3RD AVE	N	Belltown	Downtown Urban Center	231	43	19%	74%
BLT3	2ND AVE BETWEEN BATTERY ST AND WALL ST	E	Belltown	Downtown Urban Center	108	6	5%	40%
BLT4	4TH AVE BETWEEN VIRGINIA ST AND LENORA ST	E	Belltown	Downtown Urban Center	223	51	23%	87%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
BLV1	LINDEN AVE N BETWEEN N 130TH ST AND N 135TH ST	E from 130th north to 1st mid block crosswalk	Bitter Lake Village	Urban Village	18	0	2%	100%
BLV2	LINDEN AVE N BETWEEN N 130TH ST AND N 135TH ST	E from 135th south to signalized crosswalk	Bitter Lake Village	Urban Village	20	0	0%	
BRY1	NE 65TH ST BETWEEN 32ND E AVE NE AND 34TH AVE NE	N	Bryant	Outside neighborhood	21	3	14%	88%
BRY2	NE 65TH ST BETWEEN 31ST AVE NE AND 32ND E AVE NE	N	Bryant	Outside neighborhood	32	13	42%	78%
CAP1	BROADWAY BETWEEN HARRISON ST AND REPUBLICAN ST	W	Capitol Hill	Center City Urban Center	561	33	6%	28%
CAP2	15TH AVE BETWEEN HARRISON ST AND REPUBLICAN ST	W	Capitol Hill	Center City Urban Center	271	57	21%	68%
CAP3	E JOHN ST BETWEEN BROADWAY AND 10TH AVE E	S	Capitol Hill	Center City Urban Center	284	5	2%	20%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
CAP4	E OLIVE WAY BETWEEN E HOWELL ST AND DENNY WAY	NW	Capitol Hill	Center City Urban Center	113	24	22%	83%
CID1	S JACKSON ST BETWEEN 5TH AVE AND 6TH AVE	S	Chinatown/ID	Center City Urban Center	242	33	14%	51%
CID2	MAYNARD AVE S BETWEEN S KING ST AND S WELLER ST	E	Chinatown/ID	Downtown Urban Center	221	23	11%	60%
CID3	S KING ST BETWEEN 5TH AVE AND 6TH AVE	N	Chinatown/ID	Downtown Urban Center	350	26	7%	72%
CID4	S JACKSON ST BETWEEN 12TH AVE S AND RAINIER AVE S	S	Chinatown/ID	Downtown Urban Center	152	37	25%	57%
COL1	RAINIER AVE S BETWEEN S FERDINAND ST AND S HUDSON ST	E	Columbia City	Urban Village	72	9	13%	76%
COI2	RAINIER AVE S BETWEEN S EDMUNDS ST AND S FERDINAND ST	W	Columbia City	Urban Village	171	12	7%	79%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
COM1	JAMES ST BETWEEN 3RD AVE AND 4TH AVE	S	Commercial Core	Downtown Urban Center	236	29	12%	24%
COM2	PIKE ST BETWEEN 1ST AVE AND 2ND AVE	S	Commercial Core	Downtown Urban Center	1388	71	5%	58%
COM3	3RD AVE BETWEEN PIKE ST AND PINE ST	W	Commercial Core	Downtown Urban Center	908	41	5%	37%
COM4	1ST BETWEEN UNIVERSITY ST AND UNION ST	W	Commercial Core	Downtown Urban Center	1053	48	5%	68%
CRO1	HOLMAN RD NW BETWEEN 14TH AVE NW AND 13TH W AVE NW	SE	Crown Hill	Urban Village	21	0	2%	
CRO2	NW 85TH ST BETWEEN 15TH AVE NW AND MARY AVE NW	S	Crown Hill	Urban Village	26	0	1%	
DEN1	VIRGINIA ST BETWEEN 8TH AVE AND 9TH AVE	SE	Denny Triangle	Downtown Urban Center	484	11	2%	47%
DEN2	BLANCHARD ST BETWEEN 6TH AVE AND 7TH AVE	SE	Denny Triangle	Downtown Urban Center	233	34	15%	30%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
DEN3	7TH AVE BETWEEN LENORA ST AND VIRGINIA ST	SW	Denny Triangle	Downtown Urban Center	1145	55	5%	81%
DEN4	6TH AVE BETWEEN BLANCHARD ST AND LENORA ST	SW	Denny Triangle	Downtown Urban Center	396	32	8%	79%
FHT1	9TH AVE BETWEEN ALDER ST AND JEFFERSON ST	SW	First Hill / 12th Ave	Center City Urban Center	141	20	14%	43%
FHT2	BROADWAY BETWEEN MARION ST AND COLUMBIA ST	W	First Hill / 12th Ave	Center City Urban Center	158	13	8%	37%
FHT3	MADISON ST BETWEEN TERRY AVE AND BOREN AVE	NW	First Hill / 12th Ave	Center City Urban Center	170	5	3%	47%
FHT4	12TH AVE BETWEEN E BARCLAY CT AND E JAMES CT	E	First Hill / 12th Ave	Center City Urban Center	75	4	6%	45%
FRE1	N 34TH ST BETWEEN FREMONT AVE N AND TROLL AVE N	N	Fremont	Urban Village	279	31	11%	82%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
FRE2	FREMONT AVE N BETWEEN FREMONT PL N AND N 36TH ST	W	Fremont	Urban Village	110	16	14%	69%
GEO1	12TH AVE S BETWEEN S HARNEY ST AND S VALE ST	E	Georgetown	Outside neighborhood	72	14	19%	64%
GEO2	AIRPORT WAY S BETWEEN S DORIS ST AND S NEBRASKA ST	SW	Georgetown	Outside neighborhood	163	8	5%	73%
GPR1	GREENWOOD AVE N BETWEEN N 85TH ST AND N 87TH ST	E	Greenwood / Phinney Ridge	Urban Village	81	7	9%	61%
GPR2	GREENWOOD AVE N BETWEEN N 85TH ST AND N 87TH ST	W	Greenwood / Phinney Ridge	Urban Village	89	9	10%	73%
GPR3	GREENWOOD AVE N BETWEEN N 84TH ST AND N 85TH ST	E	Greenwood / Phinney Ridge	Urban Village	70	6	9%	69%
GPR4	GREENWOOD AVE N BETWEEN N 74TH ST AND N 75TH ST	W	Greenwood / Phinney Ridge	Urban Village	99	15	15%	85%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
LAK1	LAKE CITY WAY NE BETWEEN NE 123RD ST AND 31ST AVE NE	SE	Lake City	Urban Village	16	1	7%	50%
LAK2	LAKE CITY WAY NE BETWEEN NE 125TH ST AND NE 127TH ST	NW	Lake City	Urban Village	69	10	14%	70%
MAG1	W MCGRAW ST BETWEEN 32ND AVE W AND 33RD AVE W	N	Magnolia	Outside neighborhood	78	10	13%	70%
MAG2	W MCGRAW ST BETWEEN 32ND AVE W AND 33RD AVE W	S	Magnolia	Outside neighborhood	125	16	13%	71%
MAM1	E MADISON ST BETWEEN 23RD AVE E AND 24TH AVE E	NW	Madison Miller	Urban Village	30	2	8%	9%
MAM2	19TH AVE E BETWEEN E REPUBLICAN ST AND E MERCER ST	E	Madison Miller	Urban Village	104	29	28%	82%
MAP1	E MADISON ST BETWEEN 41ST AVE E AND 42ND AVE E	NW	Madison Park	Outside neighborhood	173	26	15%	84%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
MAP2	E MADISON ST BETWEEN MCGILVRA N BV E AND E BLAINE ST	NW	Madison Park	Outside neighborhood	120	13	11%	71%
MTB1	33RD AVE S BETWEEN S SPOKANE ST AND RAINIER AVE S	E	Mt Baker	Urban Village	52	18	34%	29%
MTB2	RAINIER AVE S BETWEEN S FOREST ST AND M L KING JR WAY S	W	Mt Baker	Urban Village	127	6	5%	17%
NOR1	5TH AVE NE BETWEEN NE NORTHGATE WAY AND NE 105TH ST	E; between NE 105th St to driveway north of public library	Northgate	Urban Center	18	3	14%	12%
NOR2	NE NORTHGATE WAY BETWEEN 5TH AVE NE AND 8TH AVE NE	S; between 5th Ave NE and driveway midblock	Northgate	Urban Center	114	7	6%	27%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
OTH1	M L KING JR ER WAY S BETWEEN S MYRTLE ST AND S OTHELLO ST	E	Othello	Urban Village	36	5	13%	47%
OTH2	M L KING JR ER WAY S BETWEEN S MYRTLE ST AND S OTHELLO ST	W	Othello	Urban Village	51	4	7%	43%
PIK1	BROADWAY BETWEEN UNION ST AND PIKE ST	E	Pike/Pine	Center City Urban Center	118	5	4%	43%
PIK2	10TH AVE BETWEEN PIKE ST AND PINE ST	W	Pike/Pine	Center City Urban Center	341	70	21%	87%
PIK3	BROADWAY BETWEEN PIKE ST AND PINE ST	W	Pike/Pine	Center City Urban Center	302	9	3%	36%
PIK4	PINE ST BETWEEN SUMMIT AVE AND BELMONT AVE	N	Pike/Pine	Center City Urban Center	228	11	5%	33%
PIO1	2ND AVE EXT S BETWEEN S MAIN ST AND S WASHINGTON ST	SW	Pioneer Square	Downtown Urban Center	162	48	29%	46%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
PIO2	S JACKSON ST BETWEEN 2ND AVE S AND 2ND AVE EXT S	S	Pioneer Square	Downtown Urban Center	333	7	2%	58%
PIO3	1ST AVE BETWEEN S WASHINGTON ST AND S MAIN ST	W	Pioneer Square	Downtown Urban Center	415	35	8%	71%
PIO4	2ND AVE BETWEEN YESLER WAY AND JAMES ST	E	Pioneer Square	Downtown Urban Center	319	31	10%	65%
RAI1	57TH AVE S BETWEEN RAINIER AVE S AND S FLETCHER ST	E	Rainier Beach	Urban Village	23	0	0%	
RAI2	RAINIER AVE S BETWEEN 54TH AVE S AND 56TH AVE S	S	Rainier Beach	Urban Village	6	0	6%	
RAV1	25TH AVE NE BETWEEN NE BLAKELEY ST AND NE 54TH ST	W	Ravenna	Urban Center	54	4	8%	36%
RAV2	25TH AVE NE BETWEEN NE 54TH ST AND NE 55TH ST	W	Ravenna	Urban Center	20	0	0%	33%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
RAV3	25TH AVE NE BETWEEN NE BLAKELEY ST AND NE 54TH ST	E	Ravenna	Urban Center	41	5	13%	45%
RAV4	25TH AVE NE BETWEEN NE 54TH ST AND NE 55TH ST	E	Ravenna	Urban Center	35	3	10%	44%
RSV1	NE 65TH ST BETWEEN ROOSEVELT WAY NE AND 12TH AVE NE	N	Roosevelt	Urban Village	85	2	2%	50%
RSV2	ROOSEVELT WAY NE BETWEEN NE 63RD ST AND NE 64TH ST	W	Roosevelt	Urban Village	57	1	1%	0%
SLU1	POINTUS AVE N BETWEEN HARRISON ST AND THOMAS ST	W	South Lake Union	Center City Urban Center	81	4	5%	50%
SLU2	TERRY AVE N BETWEEN HARRISON ST AND REPUBLICAN ST	E	South Lake Union	Center City Urban Center	375	46	12%	69%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
SLU3	FAIRVIEW AVE N BETWEEN HARRISON ST AND REPUBLICAN ST	E	South Lake Union	Center City Urban Center	302	23	8%	27%
SLU4	HARRISON ST BETWEEN WESTLAKE AVE N AND TERRY AVE N	S	South Lake Union	Center City Urban Center	445	26	6%	62%
SOP1	14TH AVE S BETWEEN DALLAS AVE S AND S CLOVERDALE ST	W	South Park	Urban Village	71	8	12%	74%
SOP2	14TH AVE S BETWEEN S CLOVERDALE ST AND S DONOVAN ST	W	South Park	Urban Village	66	5	8%	64%
TUJ1	E UNION ST BETWEEN 20TH AVE AND 21ST AVE	N	23rd & Union / Jackson	Urban Village	57	6	10%	44%
TUJ2	S JACKSON ST BETWEEN 23RD AVE S AND 25TH AVE S	N	23rd & Union / Jackson	Urban Village	55	8	14%	47%
UNI1	UNIVERSITY WAY NE BETWEEN NE 42ND ST AND NE 43RD ST	W north from 42nd to crosswalk	University District Northwest	Urban Center	432	1	0%	67%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
UNI2	UNIVERSITY WAY NE BETWEEN NE 42ND ST AND NE 43RD ST	E north from 42nd to crosswalk	University District Northwest	Urban Center	432	2	0%	0%
UNI3	NE 43RD ST BETWEEN BROOKLYN AVE NE AND UNIVERSITY WAY NE	S from The Ave Westward to the alley	University District Northwest	Urban Center	113	9	8%	96%
UNI4	NE 42ND ST BETWEEN UNIVERSITY WAY NE AND 15TH AVE NE	N	University District Northwest	Urban Center	306	11	3%	89%
UPT1	QUEEN ANNE AVE N BETWEEN REPUBLICAN ST AND MERCER ST	W	Uptown	Center City Urban Center	213	12	6%	36%
UPT2	TAYLOR AVE N BETWEEN JOHN ST AND DENNY WAY	E	Uptown	Center City Urban Center	108	6	6%	41%
UPT3	MERCER ST BETWEEN 5TH AVE N AND TAYLOR AVE N	N	Uptown	Center City Urban Center	223	15	7%	73%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
UPT4	1ST AVE W BETWEEN W REPUBLICAN ST AND W MERCER ST	W	Uptown	Center City Urban Center	78	9	11%	22%
UQA1	QUEEN ANNE AVE N BETWEEN W BOSTON ST AND MCGRAW ST	W	Upper Queen Anne	Urban Village	114	22	19%	59%
UQA2	QUEEN ANNE AVE N BETWEEN BLAINE ST AND HOWE ST	W	Upper Queen Anne	Urban Village	204	11	5%	68%
WAL1	N 45TH ST BETWEEN DENSMORE E AVE N AND WALLINGFORD AVE N	N	Wallingford	Urban Village	100	7	7%	74%
WAL2	N 45TH ST BETWEEN DENSMORE E AVE N AND WALLINGFORD AVE N	S	Wallingford	Urban Village	136	9	7%	84%
WAL3	N 45TH ST BETWEEN BURKE AVE N AND MERIDIAN AVE N	S	Wallingford	Urban Village	65	11	16%	79%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
WAL4	N 45TH ST BETWEEN WOODLAWN AVE N AND DENSMORE AVE N	N	Wallingford	Urban Village	133	17	12%	77%
WED1	35TH AVE NE BETWEEN NE 86TH ST AND NE 87TH ST	W	Wedgwood	Outside neighborhood	84	9	11%	92%
WED2	35TH AVE NE BETWEEN NE 85TH ST AND NE 86TH ST	W	Wedgwood	Outside neighborhood	45	1	2%	100%
WES1	CALIFORNIA AVE SW BETWEEN SW OREGON ST AND SW ALASKA ST	E SW Alaska St north to midblock crosswalk	West Seattle Junction	Urban Village	153	38	25%	80%
WES2	CALIFORNIA AVE SW BETWEEN SW OREGON ST AND SW ALASKA ST	E SW Oregon St south to midblock crosswalk	West Seattle Junction	Urban Village	147	20	14%	89%
WES3	CALIFORNIA AVE SW BETWEEN SW OREGON ST AND SW ALASKA ST	W SW Alaska St north to midblock crosswalk	West Seattle Junction	Urban Village	203	29	14%	63%

Site Name	Location	Side of street	Neighborhood	Neighborhood Type	Hourly average - people moving	Hourly average - people staying (non-transportation)	Linger factor	Extroverted activity
WES4	CALIFORNIA AVE SW BETWEEN SW OREGON ST AND SW ALASKA ST	W SW Oregon St south to midblock crosswalk	West Seattle Junction	Urban Village	229	24	11%	55%
WHP1	DELRIDGE WAY SW BETWEEN 17TH AVE SW AND SW ROXBURY ST	SW	Westwood Highland Park	Urban Village	26	1	4%	0%
WHP2	DELRIDGE WAY SW BETWEEN 17TH AVE SW AND SW ROXBURY ST	NE	Westwood Highland Park	Urban Village	15	0	3%	

APPENDIX B: SITE SELECTION METHODOLOGY IN DETAIL

NEIGHBORHOOD SELECTION

SDOT used the City's urban village strategy as a framework for considering neighborhoods for inclusion in this study. Urban centers and urban villages are designed to accommodate the city's population growth, with a higher concentration of jobs, residences, and large transit investments. In these highly dense and rapidly changing neighborhoods in particular, it is critically important that our streets and sidewalks serve a public space function to ensure livability for residents and visitors. Because not all vibrant commercial districts are located in urban centers and urban villages, a select number of neighborhoods that fall outside of these designated areas were also included in the study.

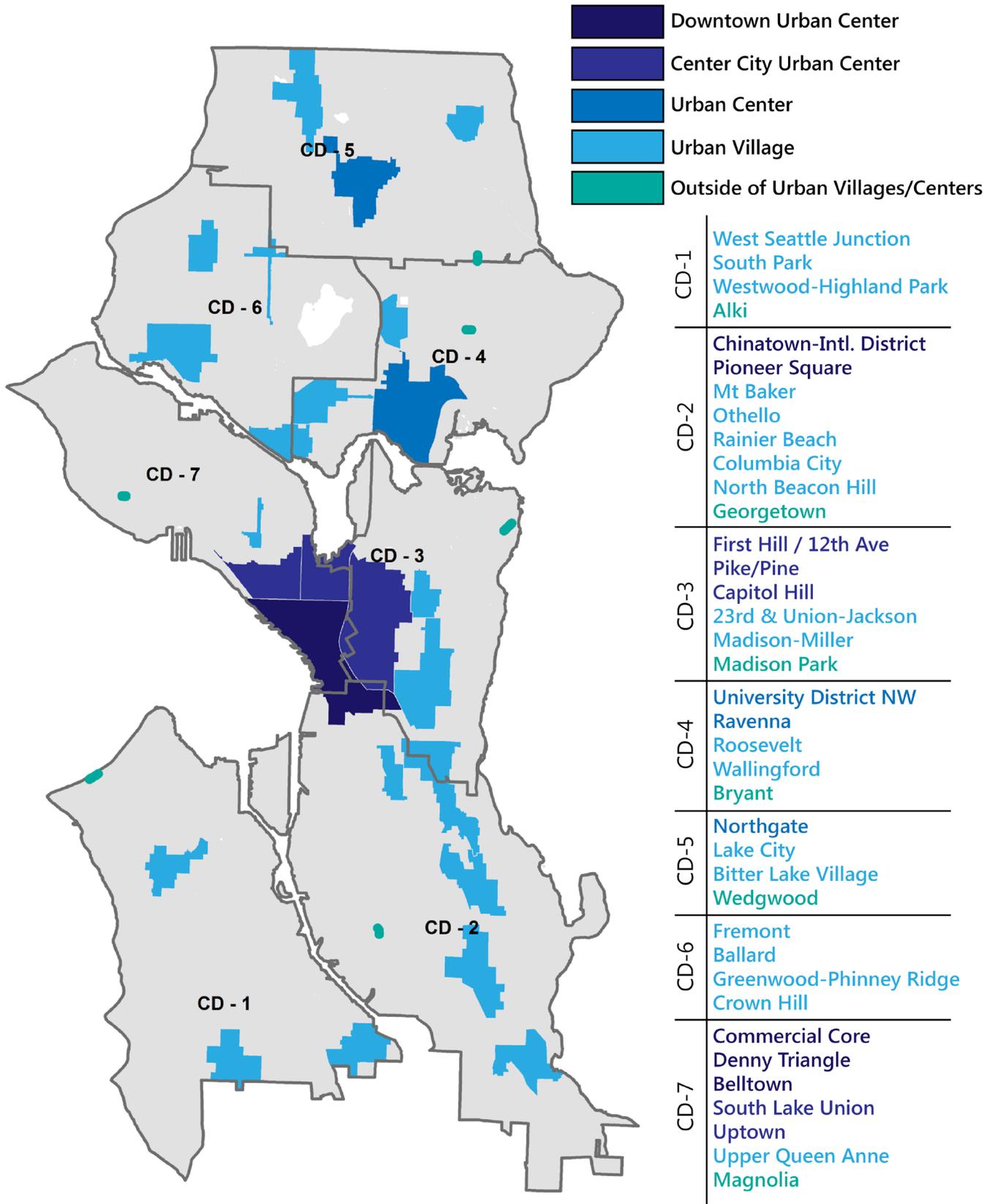In determining neighborhoods for the study, SDOT staff went through a selection process highlighted below.

FACTOR	DECISION FOR INCLUSION IN STUDY
Density	Include all Urban Centers and Hub Urban Villages
Equity/RSJ	Include Urban Villages with highest proportion of people of color (defined as at least 60% of population, which is double the citywide average of 30%)
Geographic distribution	Ensure representation of neighborhoods across the entire city by selecting from each of the seven Council Districts: • Two Urban Villages (if two weren't already selected based on above allotment) • One neighborhood outside of an Urban Center or Urban Village, where appropriate[2]

In selecting these neighborhoods for each Council District, the following factors were considered:
- Equity/RSJ: Priority for Urban Villages with a higher proportion of people of color
- Existing survey data: Priority for Urban Villages where an SDOT Neighborhood Business District Survey had been recently completed or where surveys are planned for 2018 to provide self-report demographic data as a comparison to observational methods

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[2]In one case (Council District 6), the commercial districts outside of designated Urban Centers and Urban Villages were deemed inappropriate for this study due to their incongruity with other study areas. In those cases, the current urban context would not illicit comparable data due to differences in urban form and adjacent land uses. For those Council Districts, an additional Urban Village was chosen for inclusion in the study as an alternative.

See map below of selected neighborhoods.

Legend:
- Downtown Urban Center
- Center City Urban Center
- Urban Center
- Urban Village
- Outside of Urban Villages/Centers

CD-1
West Seattle Junction
South Park
Westwood-Highland Park
Alki

CD-2
Chinatown-Intl. District
Pioneer Square
Mt Baker
Othello
Rainier Beach
Columbia City
North Beacon Hill
Georgetown

CD-3
First Hill / 12th Ave
Pike/Pine
Capitol Hill
23rd & Union-Jackson
Madison-Miller
Madison Park

CD-4
University District NW
Ravenna
Roosevelt
Wallingford
Bryant

CD-5
Northgate
Lake City
Bitter Lake Village
Wedgwood

CD-6
Fremont
Ballard
Greenwood-Phinney Ridge
Crown Hill

CD-7
Commercial Core
Denny Triangle
Belltown
South Lake Union
Uptown
Upper Queen Anne
Magnolia

DISTRIBUTION OF SITES BY NEIGHBORHOOD

Once neighborhoods were selected, the following scheme was developed to distribute the appropriate number of sites to each neighborhood, with a focus on prioritizing site allocation in the densest, most active neighborhoods:

- 4 block faces for urban centers (13 neighborhoods)
- 4 block faces for urban villages with highly active commercial areas[3] (4 neighborhoods)
- 2 block faces for all other neighborhoods (21 neighborhoods)

BLOCK FACE SITE SELECTION

To identify block faces to study, SDOT approached site selection in two different ways, described below. A full list of selected block faces can be found in Appendix A.

Outside of the Center City/Downtown

First, SDOT used a data-driven approach for the neighborhoods outside of the downtown and center city. To begin, SDOT only considered block faces that are located:

- On either an Urban Village Main or an Urban Village Neighborhood street type as defined in Streets Illustrated, which are intended to be the streets within urban villages with the most activity and pedestrian-oriented infrastructure; and
- Within a Pedestrian-Designated Zone (as defined in SMC 23.34.086), where pedestrian-oriented activities are prioritized within commercial districts and land use regulations establish conditions conducive to public life.

Block faces that meet both of these criteria were then prioritized based on the number of customer-facing businesses located on each block face. The number of businesses per block face serves as a proxy for anticipated public space vibrancy, with the assumption that with more foot traffic on a block, there is more potential for public life. Data on customer-facing businesses was developed using business license data in GIS and verified in Google Maps Street View.

Inside the Center City/Downtown

Second, a process-driven approach was taken for the 10 neighborhoods within the center city/downtown. Many of the neighborhoods within the center city/downtown do not have Pedestrian-Designated Zones that would allow for the same analysis used above. Additionally, the center city/downtown neighborhoods tend to have uniformly high levels of activity and land use density within their boundaries, which creates a challenge for prioritizing a limited number of block faces in each neighborhood. Thus, SDOT opted for another approach to selecting block faces by leveraging the knowledge and active engagement of the Imagine Greater Downtown Public Realm Task Force.

For each neighborhood, SDOT posed four key questions related to dimensions influencing public life:

- Safety – Which blocks do people tend to avoid? Which blocks have the highest number of crimes, as reported by SPD?
- Passive activity – On which blocks do people linger, window shop, sit, etc.?
- Active Use –Which blocks experience high numbers of pedestrian through-movement?
- Infrastructure – Which blocks have transformative transit or other infrastructure project planned?

The Imagine Greater Downtown Public Realm Task Force reviewed an SDOT staff-developed list of proposed sites for the center city neighborhoods to answer these questions. Task Force feedback was incorporated for this final proposal.

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[3]Highly commercial active areas are defined as those areas with at least 80 customer-facing businesses in their 10 most active block faces.

APPENDIX C: DEFINITION OF TERMS

The terms used throughout the report are defined below, using the standardized definitions from the Public Life Data Protocol.

PEOPLE STAYING – ACTIVITIES

TERM	DEFINITION
Talking to Others	Conversing with another person at any tone of voice.
Using Electronics	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.
Commercially Engaged	This includes three different forms of commercial activity: • Selling or providing: 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. • Buying: In the process of buying foods and goods. Both the person performing a transaction, and the people queuing are counted as buyers. • Observing: 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	Engaged with consuming food or drinks, either by being in the process of preparing for consumption, being mid-consumption, or post-consumption.
Hanging Out	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.

TERM	DEFINITION
Smoking	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.
Living in Public	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.
Cultural Activity	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).
Waiting for Transportation	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).
Active Recreation	Exercising or playing, either informally or in formally designated areas.
Civic Work	Working to upkeep or take care of the public spaces. This could include fixing potholes, sweeping the street, directing traffic, or helping others directions.
Disruptive Activity (Aggressive)	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.
Disruptive Activity (Intoxicated)	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.
Soliciting	Can include begging for food or money, campaigning, or sex work.

PEOPLE STAYING – POSTURES

TERM	DEFINITION
Standing	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.
Sitting – commercial seating	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.
Sitting – public seating	Sitting down on something designed as public seating (benches, picnic tables, etc.).
Sitting – private seating	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.
Sitting informally	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.
Leaning	Standing while leaning against an object or building, typically in a leisurely way.
Lying	Lying down on any surface, awake or asleep
Using mobility assistance device	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).

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