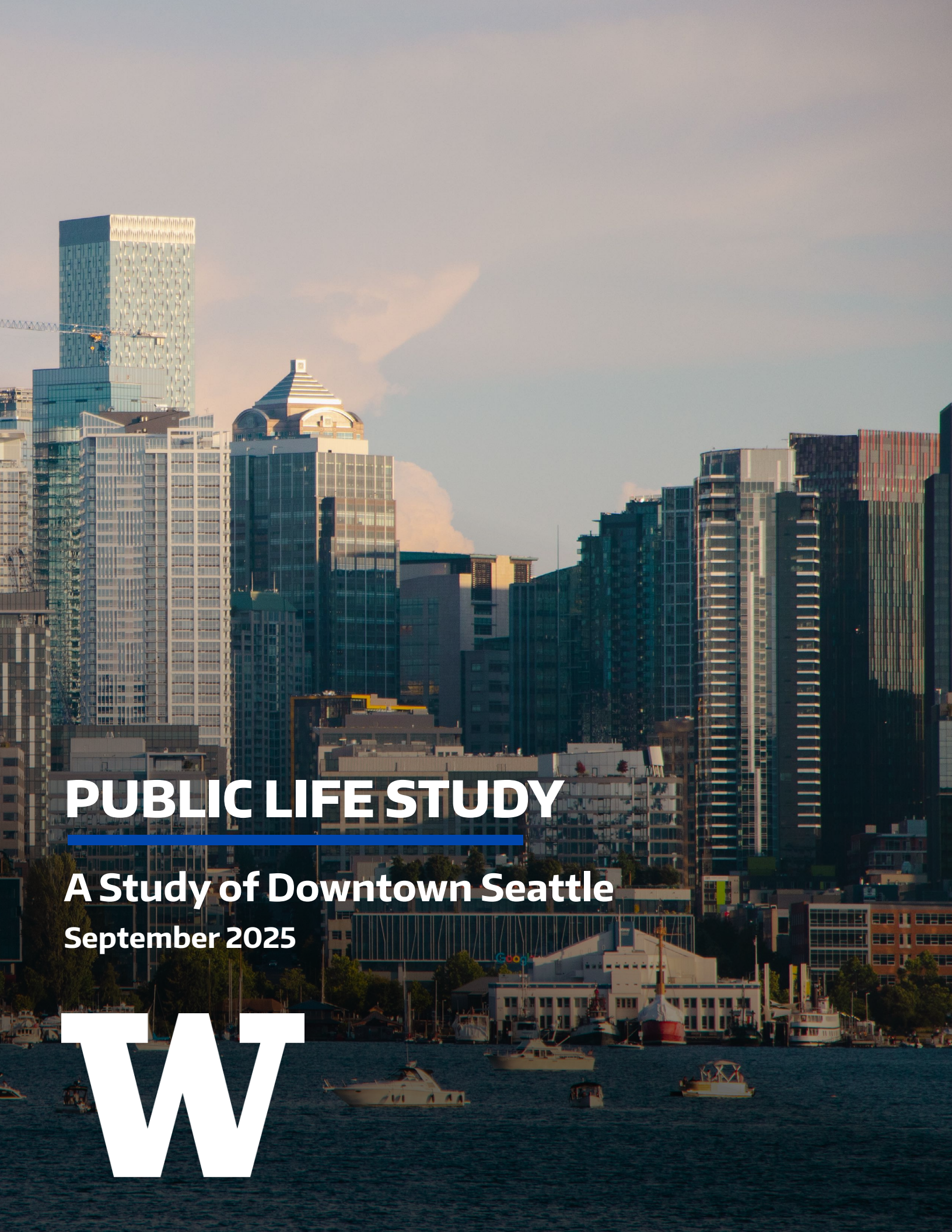

PUBLIC LIFE STUDY

A Study of Downtown Seattle

September 2025

The city engineering department in 1928 extended downtown's Second Ave, slicing through Fortson Square... to create a direct route to the railroad stations.

--- Inscripted on pavers at Fortson Square

It's Pike Place, not Pike's Place!

--- Common correction by locals

Nowhere else in Seattle has more to offer, in such a walkable footprint.

---Alliance for Pioneer Square

ACKNOWLEDGMENTS

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Partnership

We extend our sincere thanks to the outstanding team at the Seattle Department of Transportation for their partnership on this project. In particular, we are grateful to Patrick Pirtle, Senior Public Space Planner; Alex Hagenah, IT Portfolio Planning Advisor; and Joshua Gawne, Urban Designer, for their collaboration and expertise. We look forward to continuing to co-develop training, knowledge, and methodologies for data collection and analysis in support of the City of Seattle's Public Life project.

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Pike Place Market, Image credits: University of Washington Visual Asset Collection

As Seattle prepares to host the 2026 FIFA Men's World Cup, student teams from the University of Washington's Spring 2025 URBAN 576/CET 586 class worked with the Seattle Department of Transportation to study how people move through and use downtown's streets and public spaces.

By observing activity and gathering data at key locations, we created a snapshot of today's public life—information that will help the city plan safe, welcoming, and vibrant spaces for residents and visitors during the World Cup and beyond.

INTRODUCTION

CHAPTER 1

In 2026, Seattle will welcome the world as one of the host cities for the FIFA Men's World Cup. The event will bring hundreds of thousands of visitors to the region, concentrating activity in the downtown core where matches, fan zones, and cultural events will unfold. This extraordinary scale of movement will test the city's transportation systems and public spaces. To prepare, Seattle needs a clear picture of how people currently use streets, sidewalks, and gathering areas, how they respond to improvements, and how those patterns might shift during major events.

This project addresses that need by documenting non-motorized transportation (NMT) patterns and public life in downtown Seattle. Guided by the Seattle Department of Transportation's (SDOT) Public Life Assessment framework—developed with Gehl Architects—our work captures both the quantity and quality of public space use. The method not only counts how many people move through an area but also records who stays, what they do, and how the environment supports their activities.

In the first week of the spring quarter, teams completed SDOT's Public Life Assessment training, learning standard protocols for observation, data collection, and coding. This training informed our work plan and ensured that our data could integrate seamlessly with other city-collected information. The alignment with SDOT's standards also means our findings will be directly useful for event planning, operational strategies, and public space improvements.

Over a two- to three-week period, teams conducted fieldwork at several downtown locations. Using the Public Life app, teams recorded the number of people moving and staying per hour, documented postures, activities, demographics, and travel modes, and tracked variations by time of day and day of week. Teams also documented the physical setting, including intersection maps, block faces, sidewalk widths, tree canopy, planting strips, posted street speeds, and the number of curb cuts or driveways.

Once collected, the data was analyzed to reveal movement trends and activity patterns, including linger factor (the ratio of staying to moving), as well as the role of design features in shaping public life. Teams then produced graphics to communicate findings to a range of audiences. These visuals were designed to make the data accessible, whether the reader is a transportation planner, community advocate, or event organizer.

This report combines the work of multiple four-person teams into a single structure, allowing location-specific results to be compared and synthesized. Our findings aim to help SDOT, city leaders, and community partners plan for the World Cup—and beyond—by ensuring downtown remains safe, vibrant, and welcoming for residents and visitors alike.

Fortson Square, Image credits: Authors (2025)

FORTSON SQUARE

CHAPTER 2

Introduction

This public life study was conducted through CET 586: User and Design Considerations for Pedestrian and Rolling Mobility taught by Rachel Berney at the University of Washington - Seattle. In partnership with the Seattle Department of Transportation, students engaged in a process of data collection and analysis of public life at Fortson Square in Pioneer Square, Seattle.

To guide this study, we focused on the following key questions:

- How busy is Fortson Square throughout the day and week? How many people move through vs. linger in the space at different times?
- Who uses Fortson Square, and in what ways? Considering movement modes, activities, and any observable demographic patterns)
- How can Fortson Square be improved to support public life? With an eye toward the upcoming FIFA World Cup 2026 influx and the ongoing plaza redevelopment

FIFA World Cup study

- 350 m from N-S fan route (Link Light Rail: Intl District + Pioneer Square) Lumen Field
- Fortson Square for FIFA World Cup 26
- Last-pause before and after match

In large part, this survey and analysis aims to provide useful insight for two primary purposes. First is the FIFA World Cup to be hosted by Seattle in 2026. Given its location in the Pioneer Square neighborhood, and its proximity to the Stadium district, Fortson Square will experience a higher increase in volume of visitors from the 750,000 visitors that the city expects. The position of the square, directly adjacent to the Pioneer Square LINK Station and a bus transit hub, mean it is all the more likely to be encountered as visitors take advantage of public transit to attend games. The implications of this public life study then, is to provide insight that may inform urban activation interventions to prepare for the influx of visitors.

Fortson square redevelopment - ongoing

https://www.seattle.gov/transportation/projects-and-programs/programs/urban-design-program/fortson-square-redevelopment

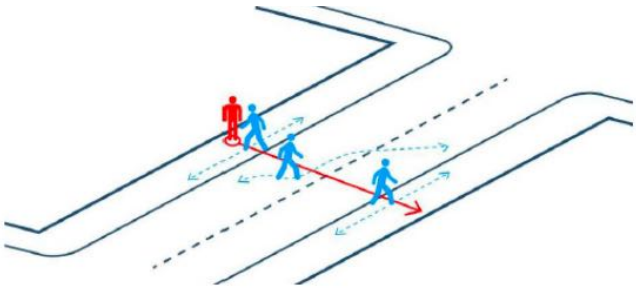
Second is the ongoing redevelopment plan underway at time of the study. Fortson Square redevelopment project. In a partnership with Jones + Jones, the SDOT is coordinating with Chief Seattle Club to remake the public space into a "gathering circle", renamed as Vi HIlbert Commons. These designs aim to make the square an inclusive and culturally relevant space.This public life study has further implications as a benchmark against which the effects of the renovation can be compared, as a 'before and after'. This data set can also be used to evaluate the proposed redevelopment based on the existing habits and trends of current public life.

Methodology

We employed SDOT's standard public life data collection method aligned with the Public Life Data Protocol (Gehl Institute, 2017). Observers conducted directed on-site counts of "moving" and "staying" people in Fortson Square during structured 20-minute periods in the morning, afternoon, and evening, on both a typical weekday and a weekend (April 21-22, 26, 28-29, and May 3, 2025)

The 20-minute counts were extrapolated to create hourly estimates for analysis. This process involved summing the 10-minute moving mode counts with the 10-minute moving perceived demographics (gender and age) and then multiplying the total by 3. The multiplication factor of 3 is derived from the fact that 1 hour equals 60 minutes. To extrapolate from a 20-minute count, we multiply by 60/20, which equals 3. Similarly, with the staying data, since it is already measured in 20-minute intervals, we also multiply by 3 to obtain the hourly estimates for staying.

Figure 2-1: Data collection diagram



For the moving observation, we recorded the number of people passing the designated line with a 10-minute count for movement mode, as well as a 10-minute count for perceiving their gender and age, as shown in the figure.

Table 2-1: Schedule Table

	SUN	MON	TUES	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

In addition, we observed individuals staying in the designated area by recording their gender, age, posture, and activity, along with the groups of people who were together, over a 20-minute period.

Our team brought a multi-disciplinary lens to the analysis. The transportation engineering lead focused on movement patterns and infrastructure implications, ensuring data accuracy and technical soundness. The urban design analyst examined the site's spatial context and qualitative observations, linking physical features to behavior. The urban planning recommendations led to the evaluation of social dynamics, policy context, and future needs to formulate actionable recommendations. Together, we synthesized quantitative counts and qualitative insights into a comprehensive narrative of Fortson's Square's public life.

We also observed other contextual factors (weather, adjacent events) qualitatively. All data was collected ethically without interfering with public use. Table 2-2 summarizes the observation schedule and conditions.

Figure 2-2: Data Collection info

	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

Study Area Description

Fortson Square is a small, triangular public space located at the southeast corner of 2nd Avenue South and Yesler Way in Seattle's historic Pioneer Square neighborhood. The study area includes three distinct zones:

- Yesler Right-of-Way (ROW) – the east-west sidewalk along Yesler Way
- 2nd Avenue South ROW – the north-south sidewalk along 2nd Avenue
- Interior Plaza – the paved central space framed by both streets

Each segment was observed independently to capture differences in movement, lingering, and use patterns. The square sits at the convergence of several key city layers—historic street grid, transit networks, and active social services—making it an ideal site to assess how design and context shape public life.

The site is approximately 350 meters from the fan

Month	Day	Day of Week	Weather	Temperature (F)	Noise Level	Maintenance & Cleaning	Events happening	Final thoughts	Notes
April	21	weekday	Light Clouds	47	2	3			
April	21	weekday	Light Clouds	55	2	3			
April	21	weekday	Sun Shaded	52	2				
April	21	weekday	Sun Shaded	52	2	2			
April	21	weekday	Sun Shaded	55	3	4			
April	21	weekday	Sun Shaded	55	4	2		Not much public use of space. Fairly trafficked intersections	
April	22	weekday	Sun Exposed	60	2	2	Roadwork/Construction - noise, diversions		
April	22	weekday	Sun Shaded	60	2	2	Roadwork/Construction - noise, diversions		
April	22	weekday	Sun Shaded	60	3	2			
April	22	weekday	Sun Shaded	45	4	4	Roadwork/Construction - noise, diversions;Other:S-dot removing 2 trees in Fortson square		
April	22	weekday	Sun Shaded	54	3	2			
April	22	weekday	Sun Shaded	55	4	2			
April	26	weekend	Sun Exposed	59	2	3			
April	26	weekend	Sun Exposed	59	3	3			
April	26	weekend	Sun Shaded	59	3	3			
April	26	weekend	Sun Shaded	60	4	4			
April	28	weekday	Heavy Clouds	46		4	Emergency - car crash, fire, illness;Other:A couple fire trucks pass		
April	28	weekday	Heavy Clouds	48	4	4			
April	28	weekday	Light Rain	55	3	2		Several lingering folks moved away once I arrived	Smoking SOMETHING
April	28	weekday	Light Rain	50				Raining a bit harder than 4 pm;Input:Raining harder than 4 pm	
April	29	weekday	Light Clouds	55	3	3			
April	29	weekday	Light Rain	55	2	3			
May	3	weekend	Heavy Clouds	54	2	3			
May	3	weekend	Sun Shaded	55	2	2			
May	3	weekend	Sun Shaded	60	2	2			Popular place to spend time on a nice day. Many wheelchair users, especially building residents. Lots of smoking and drinking. Mixture of residents and neighbors.

Table 2-2: Observation Table

walk corridor connecting the Link Light Rail stations to the stadiums, which makes Fortson a potential "last pause" or transition space during major public events like the 2026 FIFA World Cup. Its current footprint includes informal seating edges, remnant tree wells, and adjacent curb ramps, but lacks cohesive pedestrian infrastructure or wayfinding.

Site Context & Current Conditions

The immediate surroundings of Fortson Square include a supportive housing building, a medical clinic, a nonprofit office, and a public parking lot. These uses contribute to a daily mix of pedestrians: local residents, service users, commuters, and visitors.

Curb cuts and driveways interrupt pedestrian continuity along both Yesler and 2nd Ave—there are three visible curb cuts within one block of the square, affecting walkability and safety. A protected bike lane runs adjacent to the square on 2nd Avenue, increasing multimodal flow.

The tree canopy, once a defining comfort element, was recently removed during SDOT maintenance operations. The square now lacks significant shading, which was noted by observers as a possible deterrent to lingering. The pavement condition varies: smooth concrete along 2nd, textured brick in the plaza, and patched asphalt near the corners.

Accessibility features are partially present: curb ramps are installed at crosswalks, but grading and slope variations may present challenges to wheeled users. Observers noted informal use of seating ledges and perimeter zones, but no dedicated furniture or shade structures exist.

The site functions mostly as a movement corridor on weekdays but transforms into a more social or lingering space on weekends and evenings—especially in the plaza segment.

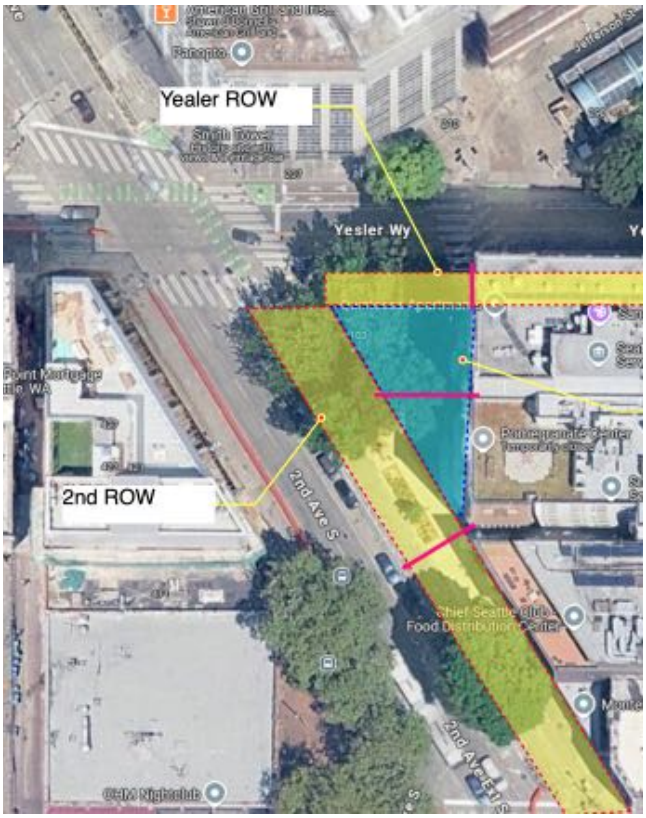


Figure 2-3: Observation Site Map

Data Overview

How busy is Fortson Square

To gauge Fortson Square's vitality, we first looked at the overall volumes of people moving through vs. staying in the space. Our observations show that Fortson Square is primarily a thoroughfare; on average, about 183 people per hour passed through ("people moving"), while only about 13 people per hour stopped and stayed in the space ("people staying"). In other words, roughly every 14 people walking or rolling by, only 1 person is lingering. This imbalance reflects the site's current role as a transit corridor rather than a destination. We also found notable differences by day of week: weekday usage was lower than weekend, especially for those staying. On the weekday observed, there were ~15% fewer pedestrians moving through compared to the weekend day, and a striking ~43% fewer people lingering in the space.

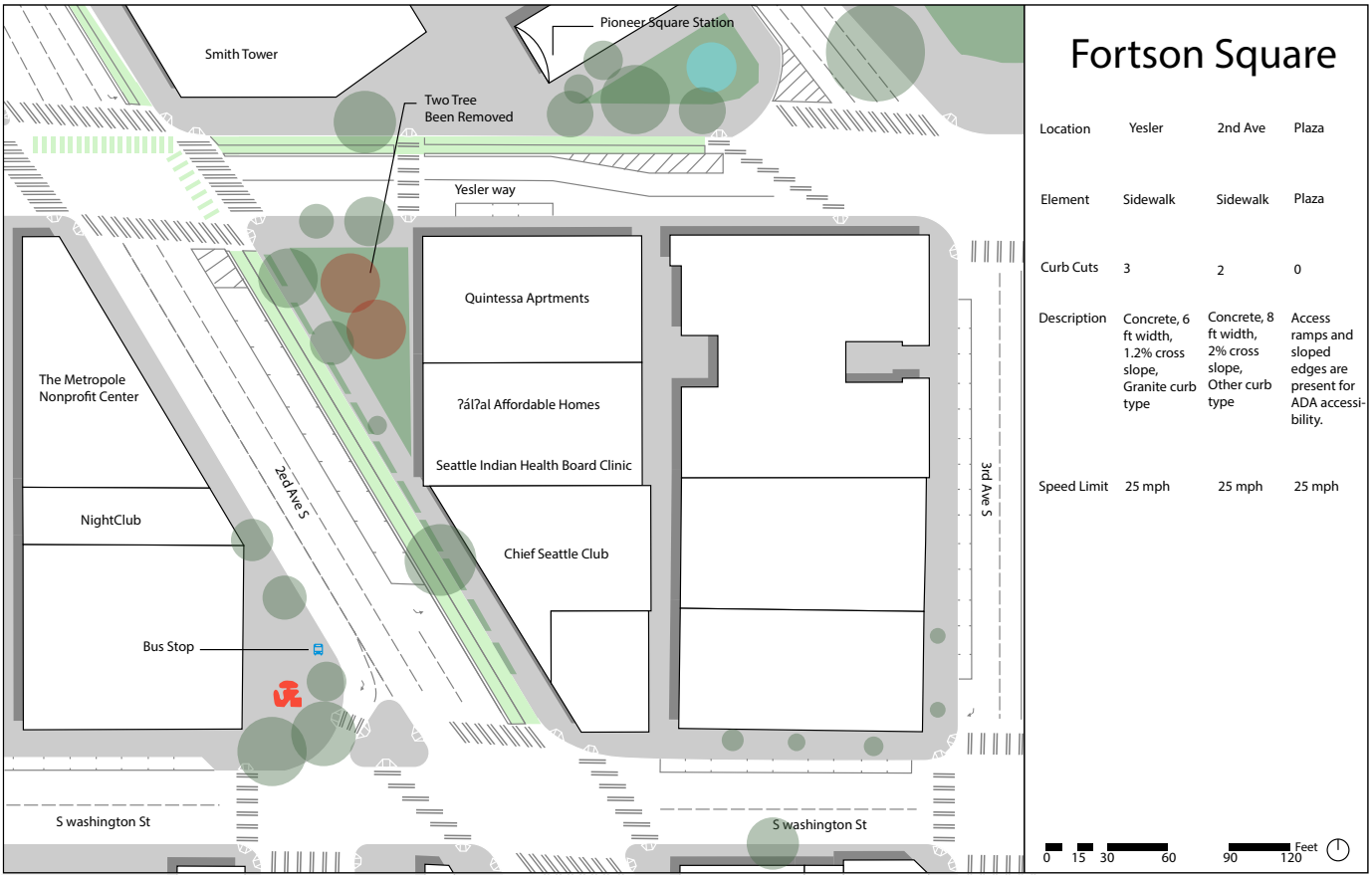


Figure 2-4: Detailed Site Map

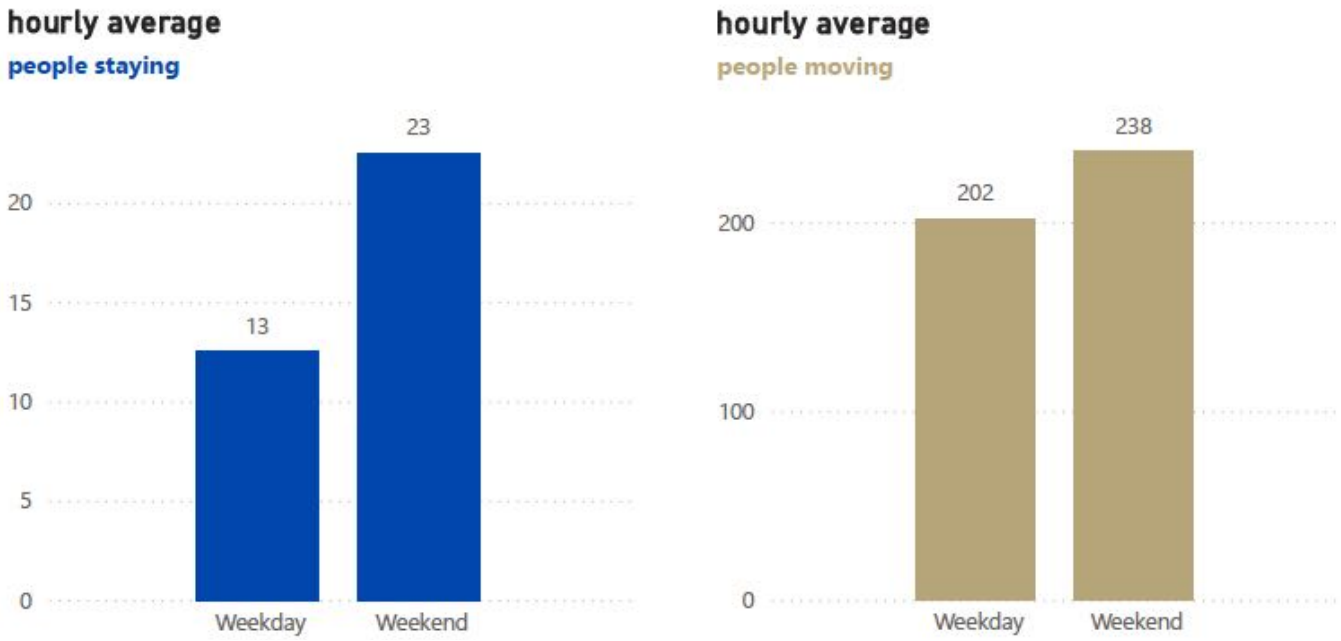


Figure 2-5: Average people moving VS staying in Fortson square, weekday VS weekend.

Linger Factor

The "linger factor" (the ratio of staying to moving users) illustrates this: overall, Fortson Square's linger factor hovers around 7-8% on weekdays, compared to ~19% in the evening on weekends (Table 2-3 below). This suggests that weekends, particularly weekend evenings, see relatively more social use of the plaza, whereas it functions almost entirely as a pass-through corridor.

Figure 2-5 provides a summary of a comparison of average hourly counts of moving and staying people, and how these differ on weekdays and weekends. The average hourly people moving was about 202 per hour on the weekday vs. 238 per hour on the weekend in our location (hence ~15% difference on the weekday), while the average number of people staying was around 13 per hour on the weekday vs. 23 per hour on the weekend (~43% drop on weekdays). The linger factor accordingly was ~6% on the weekday and ~10% on the weekend overall. While these absolute numbers are modest, they mask significant peaks and troughs at specific times and locations, which we explore next in detail.

Mobility Analysis

People moving through the space

Fortson Square sees a steady flow of pedestrian movement throughout the day, with patterns differing by time of day and by segment of the site. Below, we break down the movement data into time of day trends, spatial distribution, and mode of travel.

Time of Day Patterns - When do people pass through?

Weekday pedestrian volumes followed typical downtown patterns, busiest in the morning, with lighter traffic in the morning and tapering in the evening. On our observed weekday, the extrapolated counts were about ~223 people/hour in the morning (8-9 am) vs. ~199 people/hour at lunchtime (12-1 pm) and ~183 people/hour in the evening. In contrast, the Saturday counts showed a different profile; the weekend afternoon was extremely busy, we counted an extrapolated ~331 people/hour passing through during the 1-2 pm slot. Interestingly, weekend evening movement dropped to around 145 people/hour, lower than the weekday evening level. This indicates that by Saturday night, the area quieted down considerably.

Overall, the peak pedestrian flow observed was on a weekend afternoon (~330 people/hour), while the lowest was on a weekend evening (~145 people/hour). Fortson Square thus experiences pronounced surges of movement during weekend midday periods. During those peak times, the sidewalks along Yesler and 2nd were busy enough to feel active and well-trafficked, whereas during off-peak (weekday and weekend evening), the area felt relatively empty aside from the occasional passerby. The variability suggests that any design interventions should consider these temporal differences, e.g., providing capacity for large flows at rush hour or event surges, while also addressing the perceived emptiness and safety during quieter times.

Time of Day	Average Hourly Staying		Average Hourly Moving		**Linger Factor**	
	Weekday	Weekend	Weekday	Weekend	**Weekday**	**Weekend**
Morning	16		223		**7.17%**	
Afternoon	8	18	199	331	**4.02%**	**5.44%**
Evening	14	27	183	145	**7.65%**	**18.62%**

Table 2-3: Linger Factor

Figure 2-6 illustrates the movement trends across dayparts for both the weekday and weekend, showing how the midday spike on Saturday far exceeds any other period. The evening contrast is also noteworthy; weekday evening commutes keep the foot traffic at a moderate level, whereas Saturday evening sees a lull after the day's main activities.

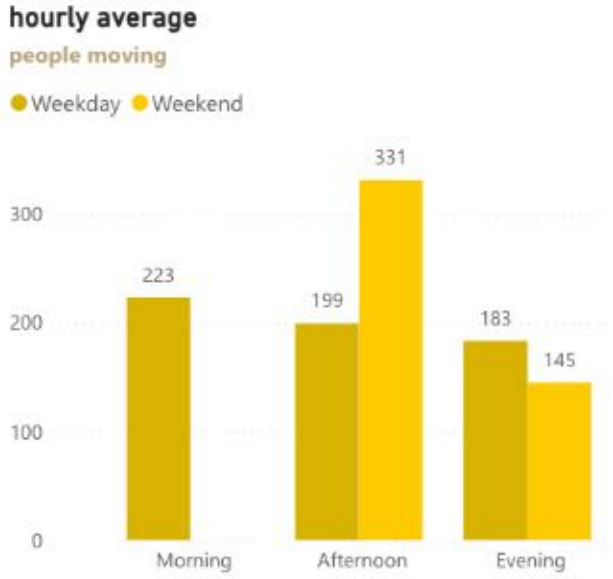


Figure 2-6: People Moving - Average Hourly Count by Time of Day (Weekday vs Weekend).

Spatial Distribution - Where do people move?

Because Fortson Square includes two street frontages and an interior plaza, we tallied movement on each segment to see which paths are most used. The 2nd Ave S right-of-way has the highest people moving of the three segments, with an average of ~180 people per hour along it. This makes sense, 2nd Ave S is a primary north-south route through downtown and includes not only pedestrians but also a steady stream of cyclists using the protected bike lane that runs adjacent to the plaza. The Yesler Way sidewalk saw a moderate flow, averaging around 139 people/hour. Yesler is a major east-west corridor (connecting transit hubs and waterfront elevators), but its foot traffic was a bit less than 2nd Ave, likely because some pedestrians cross the street before the plaza or because the parallel Occidental Mall a block east attracts some of the footfall. Finally, the interior plaza path (diagonally through Fortson Square) carried the lowest movement volume, about 95 people/hour on average. Many people simply stayed on the sidewalk perimeters rather than cutting through the middle, especially when the plaza was sparsely populated.

These figures highlight that Fortson Square's edges do the heavy lifting for movement, functioning as busy sidewalks, whereas the interior is underutilized for circulation (except by those intentionally passing through the plaza). Figure 2-7 shows the approximate moving flows by segment. This spatial pattern reinforces the idea that Fortson Square currently acts mainly as part of the street network rather than as a distinct place; people stick to the edges and keep moving.

Mode of Travel - Pedestrians vs. Wheels

Who are the "people moving" through Fortson Square? The vast majority were pedestrians on foot, but we also observed notable numbers of people on wheels, primarily bicyclists using the bike lane, and a few on e-scooters or other micromobility modes. From our counts, approximately 80% of movers were walking and 20% were using some form of micro-mobility (bike, scooter, etc.). The presence of the 2nd Ave bike facility means cyclists frequently ride past Fortson during peak weekend midday, for example, we saw dozens of cyclists per hour mixed into the flow. This mix of pedestrians and micro-mobility users is an important characteristic of Fortson Square's context. It implies that any redesign must carefully accommodate multimodal traffic, ensuring cyclists have safe passage while pedestrians feel comfortable. We noted that the bike lane is well-defined, but at busy times, pedestrians occasionally spilled over, and conversely, a few cyclists rode onto the plaza to navigate around others. Clear separation and sightlines will be key in future designs to manage these interactions.

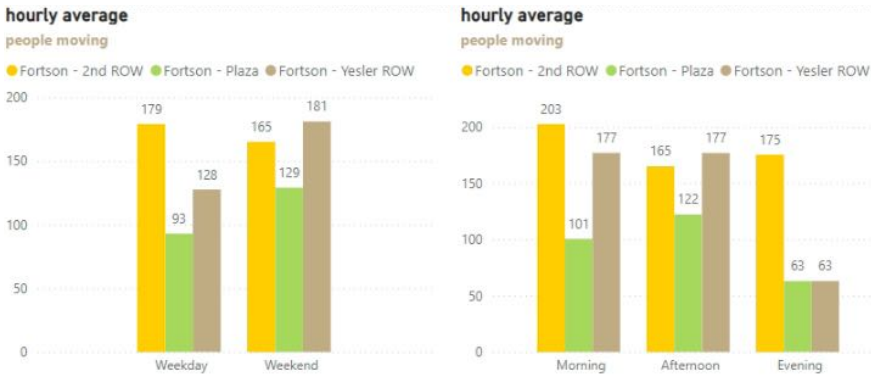


Figure 2-7: Movement of each segment by Time of Day (Weekday vs Weekend).

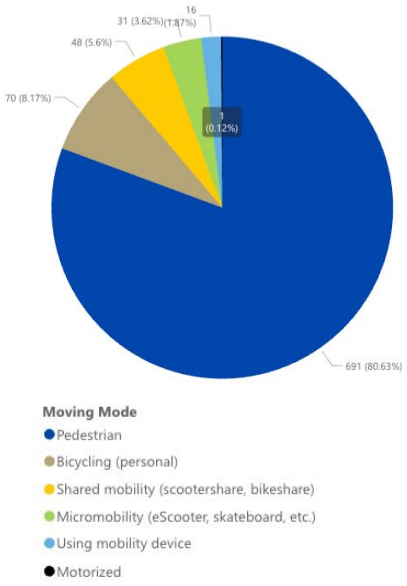


Figure 2-8 Movement Mode Split

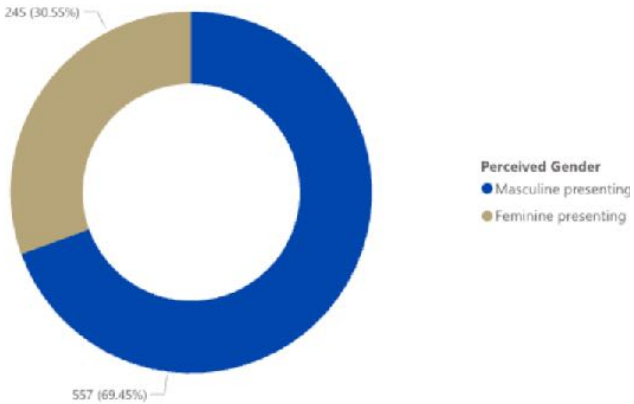


Figure 2-9 Perceived Gender for Movers

Demographically, while our formal counts did not capture detailed demographics, we anecdotally observed a gender imbalance among people moving through, appearing to skew male. This might relate to the area's perceived safety and the presence of dominantly male unhoused individuals. It raises the point that women and more vulnerable pedestrians may avoid the space, which is a consideration for security improvements.

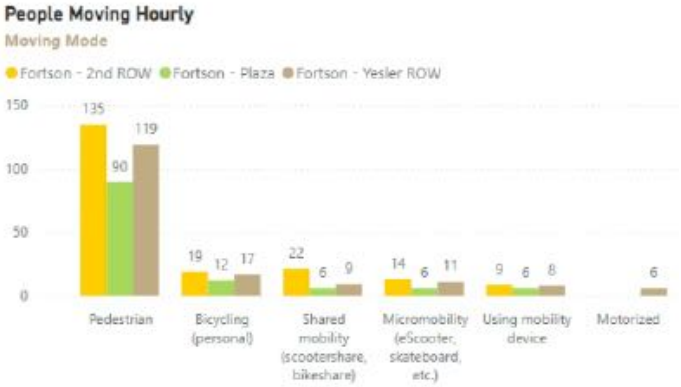


Figure 2-10 People Moving by Mode for each site

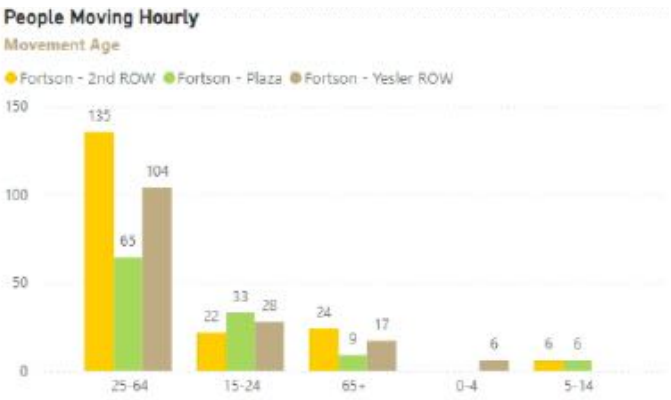


Figure 2-11 Hourly People Moving by Mode for each site

Stationary Analysis

People Staying in the Space

Although Fortson Square is mostly used in motion, we did observe people engaging in various stationary activities, from pausing briefly to socializing with friends. This section examines how many people stay, where and when they do so, and what they do while there. Overall, stationary use was low, but it reveals clues to what the space could support if better equipped.

When and where do people stay?

Timing: Stationary counts, like movement, varied by time of day, with weekends far outpacing weekdays in lingering activity. On the weekdays we studied, at most 16 people/hour were observed staying (that was during the morning period), and as few as 8 people/hour at midday. In contrast, the weekend saw higher numbers, 27 people/hour staying on Saturday evening (our peak) and 18 people/hour in the afternoon. Interestingly, the weekend evening had the highest stationary count even as movement dropped off, which led to a surge in the linger factor to about 18.6% in that period. This suggests that on Saturday night, a small group of people chose Fortson Square as a place to hang out or rest, even though fewer pedestrians overall were around, the plaza became a "conversation pit" for those who remained. Meanwhile, weekday daytime linger counts were very low. During weekday lunch, for example, only a handful of individuals were staying (often just 1 or 2 at any given moment in the 20-minute sample, extrapolated to ~8 people/hour). In summary, weekday Fortson Square offers little to entice people to stay, while weekend evenings see the plaza's modest "peak" of sociality.

Location: Where do people choose to stay within Fortson Square? Our segment breakdown shows that the interior Plaza area attracted the most stationary activity, averaging about ~16 people/hour (on the weekday), in contrast to the sidewalk edges, which had fewer stayers. The Yesler Way side had the least staying (only ~7 people/hour on average), likely because it is a narrow sidewalk with a steep

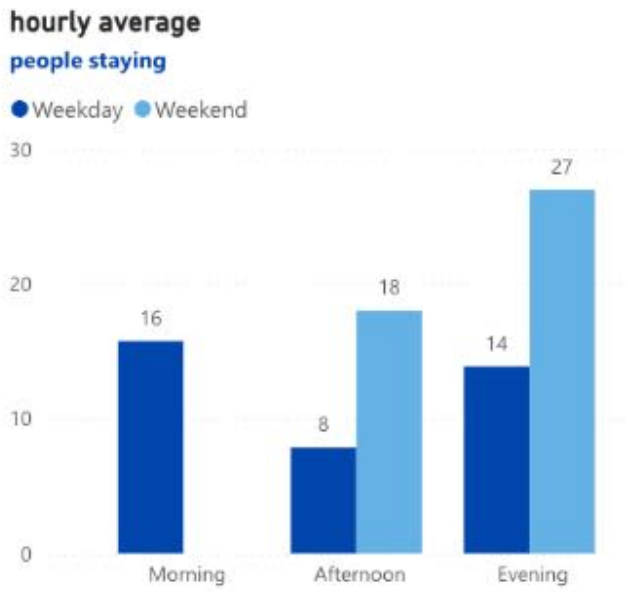


Figure 2-12 People Staying - Average Hourly Count by Time of Day (Weekday vs Weekend).

slope and no seating, mostly used for walking. The 2nd Ave side saw around ~11 people/hour staying, some of whom were possibly waiting at the street corner or leaning on bikes. However, the interior plaza, despite its shortcomings, was the primary area where people who chose to linger would do so. We commonly observed individuals or small groups on the concrete steps in front of the building near the plaza area, using them as makeshift benches. For instance, on Saturday evening, several people sat on the wide stairs at the plaza's northwest corner (near Yesler), chatting and drinking beverages. On Saturday afternoon, a few tourists stood looking for the wayfinding. These sightings underscore that the plaza space itself has latent demand for seating and gathering. People want to pause there, but the environment does not support it well (they resort to sitting on the ground or steps). What are people doing when they stay?

What are people doing when they stay?

Our observational protocol also categorized the stationary activities and postures of people in Fortson Square. Despite the low numbers, it is informative to see how people use the space when they do stop. The most common stationary activities

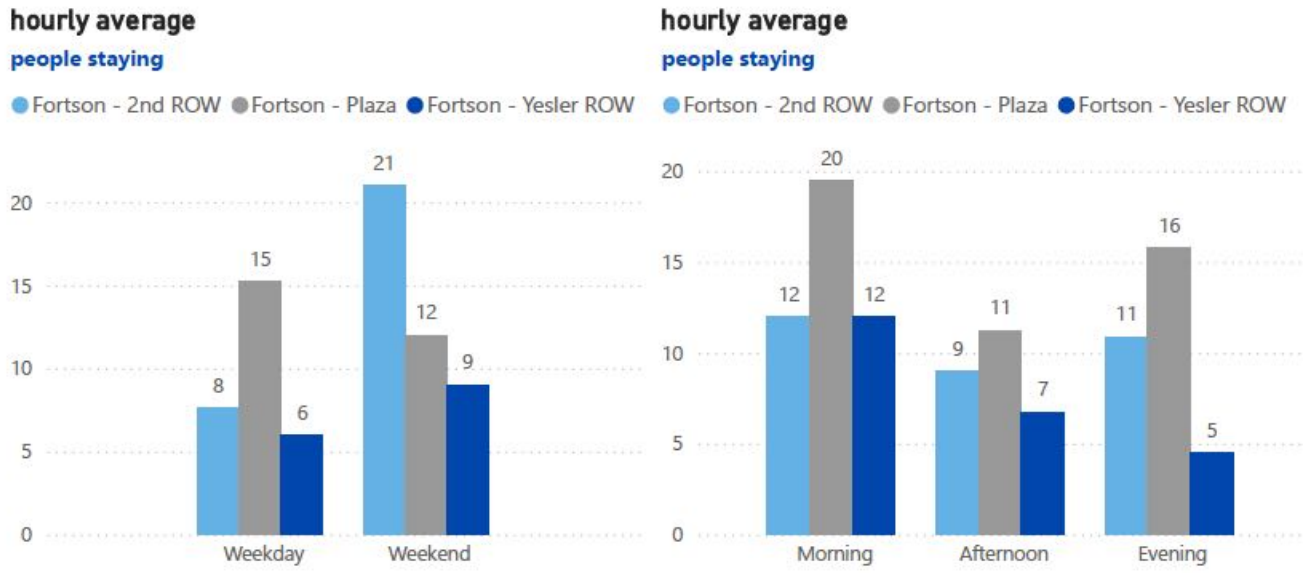


Figure 2-13 Stayers of each segment by Time of Day (Weekday vs Weekend).

observed were "socializing (talking to others)" and "passive recreation", such as people watching or relaxing. For example, on the weekend evening, about three distinct groups were noted: one group of friends chatting, a couple having a snack, and an individual just standing and observing passersby (possibly waiting for someone). Passive use, like sitting quietly, scrolling on a phone, or just resting, was frequent, especially for solo individuals. We also saw a few instances of people eating/drinking. No organized activities were noted during our snapshots, and given the plaza's small size and lack of programming, this is not surprising.

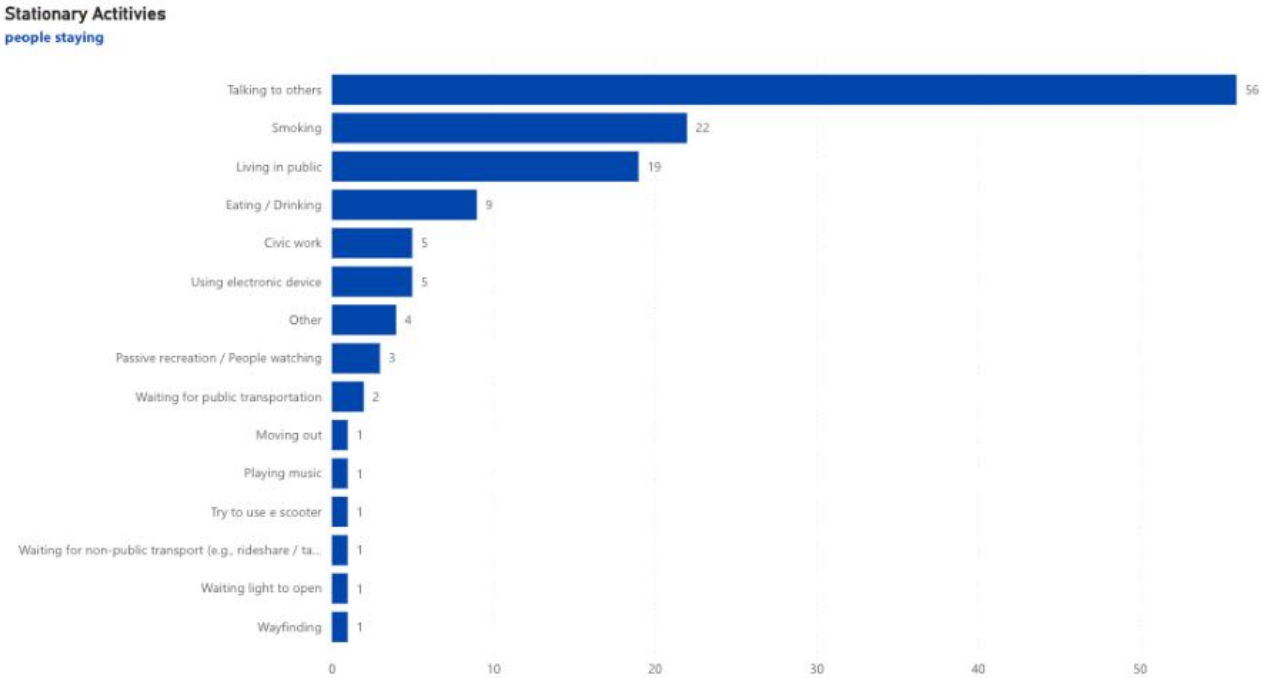


Figure 2-14 Stationary Activities

In terms of stationary posture, a majority of those staying were perching rather than fully sitting comfortably. We estimate roughly 42% of stayers were standing (e.g., chatting in a group or waiting), while 58% were perching (sitting public, sitting informal, leaning, sitting commercial), and those sitting were almost exclusively on the ground or on the hard steps (as there are no chairs). This tells a clear story: Fortson Square lacks comfortable places to sit, and yet some users still try to make do (by sitting on the ground), indicating a real demand for seating. Nobody was observed lying down during our short observation windows, though we are aware that at very late or very early hours, the plaza sometimes is used as a camping spot by homeless individuals. During our study times, however, we did not witness that; everyone staying was engaged in an active posture (standing, sitting, or leaning).

Another notable qualitative observation was group size: most people who lingered did so in small groups of 2-3 or alone. The plaza did host a couple of larger groups (4 people), likely friends meeting before heading elsewhere. This suggests that with better amenities, Fortson Square could serve as a meetup spot or a place to socialize in smaller groups, especially during events.

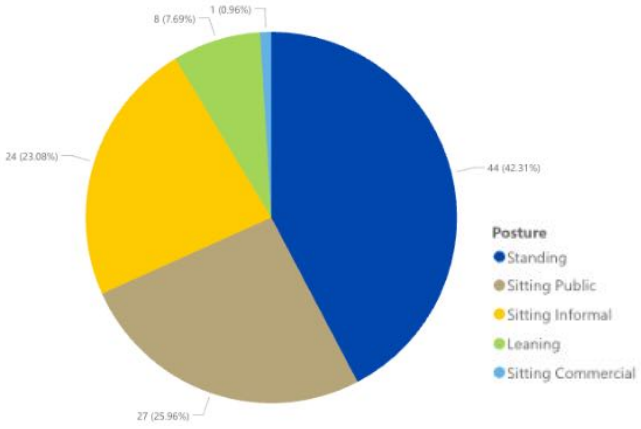


Figure 2-15 Stationary Postures

Who is staying?

When we look at who chooses to linger in Fortson Square, a clear pattern emerges across both age and gender. In terms of age, the majority of stayers fall into the 25-64 bracket: across our three observation segments, we recorded 9 hourly stays on the 2nd Ave ROW, 15 on the plaza itself, and 7 on the Yesler Way in this age group. Residents aged 65 and older accounted for a much smaller share, while young adults (15-24) were rare stayers (3 per segment). This tells us the space is most appealing to working-age adults, with less uptake by seniors or youth.

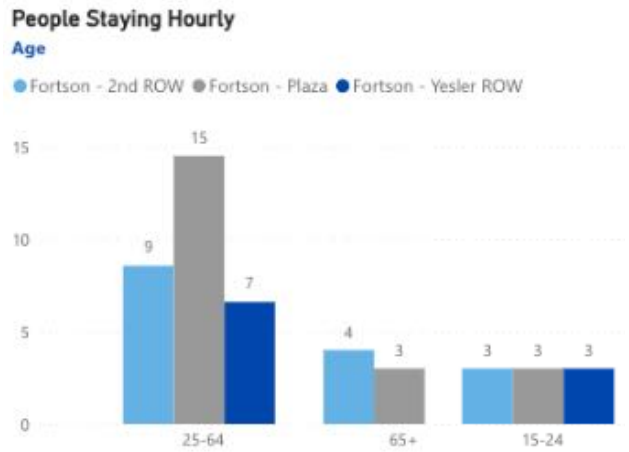


Figure 2-16 Stayers Age

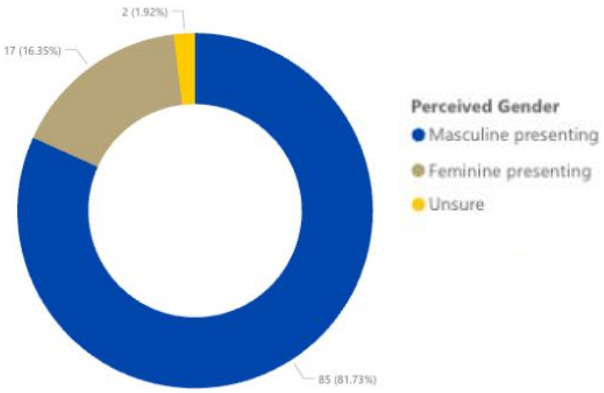


Figure 2-17 Perceived Gender for Stayer

Perceived gender data reinforce an even stronger imbalance: 82% of all stayers were identified as masculine-presenting, compared to 17% feminine-presenting and a mere 1.9% uncertain. In other words, fewer than one in five lingerers appeared to be women or non-binary individuals. Combined, these findings suggest Fortson Square's current furnishings, lighting, and programming are resonating primarily with working-age men. If we

want to broaden appeal, to seniors, youth, and feminine-presenting visitors, we will need targeted design and activation strategies (more comfortable seating, better lighting, and family-friendly amenities) to make the plaza feel welcoming to everyone.

Stationary Maps

On weekdays (red dots), stayers are sparse and scattered mainly along the plaza's northern edge (near Yesler Way) and the concrete steps at the plaza tip—suggesting only a handful of people pause there, usually en route to work or transit. In contrast, weekend stayers (blue dots) cluster tightly in the plaza's central triangle, especially just south of the kiosk and around the low planter walls—a strong sign that the plaza interior becomes the go-to gathering spot on Saturdays.

Breaking that down by time of day, morning lingerers (green) appear exclusively along the plaza's outer sidewalk edges—likely commuters grabbing a quick rest—while afternoon stayers (teal) begin to spill into the plaza interior. It is evening (pink) when the densest cluster forms squarely inside the triangle, confirming our quantitative finding that weekend evenings are the "stickiest" period.

Finally, the posture map shows how people occupy those spots: "Sitting Public" (blue dots) hug the wide stone steps on the plaza's west side, whereas "Sitting Informal" (purple) dots appear in small groups perched on planter walls or directly on the brick pavers. "Standing" users (red) are more evenly spread along the sidewalks, and a handful of "Leaning" observations (orange) line up against railings and signposts on 2nd Ave S. Together, these spatial insights tell us exactly where to add comfortable benches and shade sails (in the plaza core) versus where to maintain clear pedestrian thoroughfares (along the edges) to support both movement and lingering.

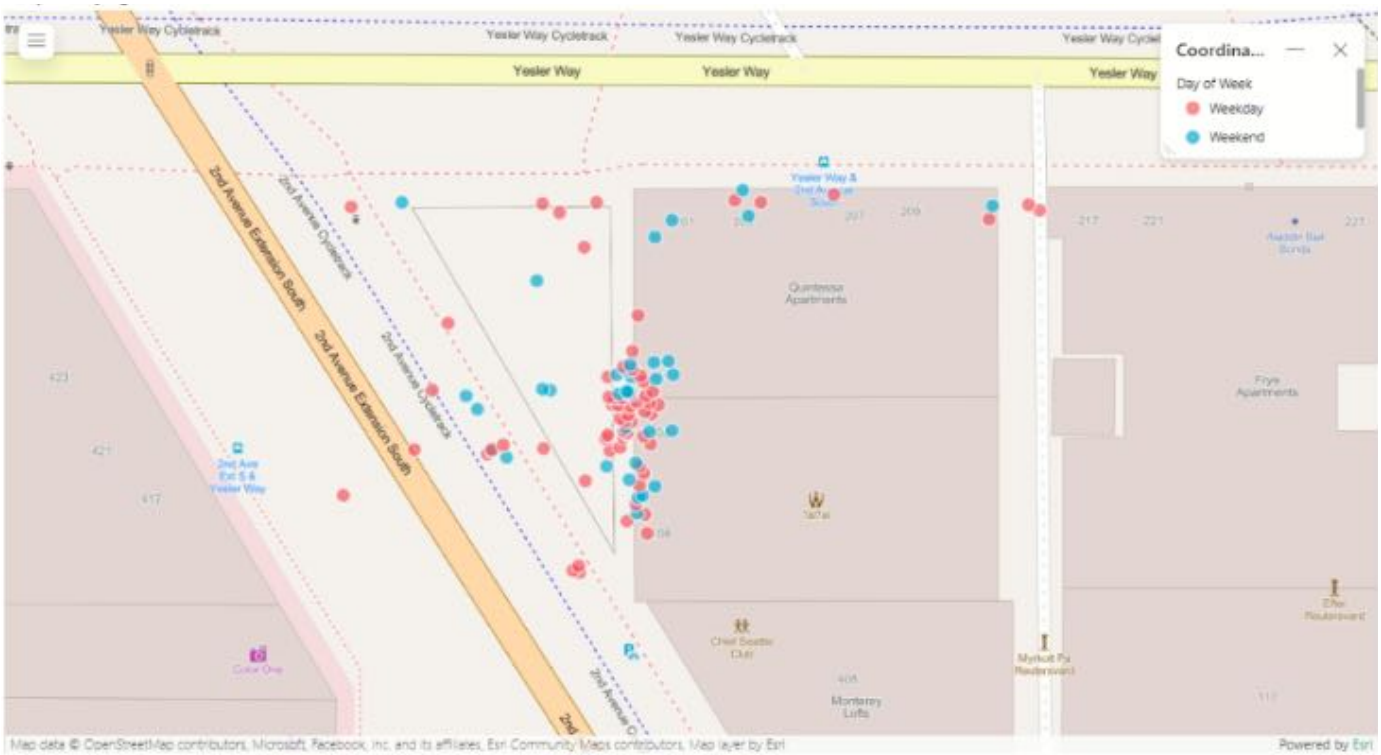


Figure 2-18 People staying by day of week in spatial

Figure 2-19 People staying by time of day in spatial

Figure 2-20 People staying by posture in spatial

Observations + Conclusions

Fortson Square is an urban space where the characteristics of public life mirror the urban form itself; pulsing between motion and pause. The confluence of two major rights of way and the resulting plaza that sits in the remnants of open space is a place that many pass through, but many linger. Throughout the week both 2nd and Yesler are popular multimodal corridors and experience regular pedestrian + non-motorized traffic. The combination of bordering residential uses with some informal public seating make the plaza a place where residents and neighbors find themselves spending time throughout the day. By the weekend, linger counts increase overall, and particularly see an increase on weekend evenings. The notable gender imbalance, especially in correlation with increased nighttime use raises questions of safety. The implications of urban activation in Fortson square has the potential to make a high impact on public life, culturally significant place-making and pedestrian + non-motorized transportation.

2018 Benchmark Comparison

Comparing our data to the SDOT 2018 Public Life Study Report we can see how busy Fortson Square is compared to the rest of Seattle. Table 2-4 highlights the most interesting takeaways, identifying an significant increase in people moving over the weekend, a decrease in people staying over the week. Weekday evenings in particular have seen a jump in an over 2 times increased linger factor. This demonstrates that the place has gotten more efficient at moving higher volumes of people, is possibly less desirable for lingering during the week, but has strengthened as a site of public leisure for local communities.

Metric	Seattle 2018 Avg	Fortson	Δ
People Moving (wknd)	197/hr	**238/hr**	+21%
People Staying (wkday)	22/hr	**13/hr**	-41%
Linger Factor (wknd eve)	9%	**18.6%**	×2.1

Table 2-4: Linger Factor of 2018 and 2025

Suggestions

In consideration of the ongoing redevelopment project and World Cup planning effort, here are a few suggestions based on the takeaways from this public life study. Interventions to Fortson Square need to focus on creating an easily traverseable, safe, recognizable and welcoming atmosphere in order to overall improve as a functional public plaza. Enhancements to infrastructure should support lingering and social activities to meet observed demand. Thoughtful improvements to the landscape including integration of plantings, public art, shade structures, may enhance comfort and aesthetics. Flexible seating arrangements should be added to foster social interaction and accommodate various group sizes.

Evaluating the current redevelopment plans shows much promise for a positive transformation soon to come to Fortson Square. Working with the Chief Seattle Club, this project is prioritizing voices and values of Indigenous Americans closely tied to the historic and present day dynamics that shape formerly known as Fortson Square. Its future as Vi HIlbert Commons highlights this square's characteristics as a sort of "front gate" into the city from the stadiums. Intentionally designed as the first native-focused public space in Pioneer Square, the proposal features a circular plaza with amphitheatre-like tiered seating specifically designed as a cultural performance space. Various planters with native plants organize the site, anchored by the centerpiece: a 25' Welcome Figure. With promise to be completed before the World Cup, the impact on public life will surely be evident, and interesting to document, observe, and compare to this study as the 'before and after'.

Fortson Square for FIFA World Cup 26

In 2026, Seattle will host several FIFA World Cup matches at Lumen Field, just a stone's throw from Fortson Square. Our analysis suggests that Fortson Square could play a significant role during this global event, if properly managed and enhanced. The plaza lies only ~350 meters off the main expected fan walking route connecting transit stations (Light

Rail at International District and Pioneer Square) to the stadium . It is positioned to serve as an ideal "last stop" or meet-up spot for fans on their way to matches and a place to linger afterward. We already observed a +21% higher weekend foot traffic in 2025 compared to 2018 , and we can expect far greater surges on actual match days – possibly hundreds of pedestrians per hour streaming by. Without intervention, most will simply hurry through. But with some planning, Fortson Square could be leveraged as a welcoming gateway to Pioneer Square for international visitors.

However, there are challenges: our findings on gender imbalance and nighttime emptiness raise safety and perception issues for visitors unfamiliar with the area . Imagine a family from abroad walking through Pioneer Square at night after a game – if Fortson Square is dark, empty, or populated only by a few wary individuals, it could diminish their sense of safety. Improving lighting and visibility in the plaza and ensuring a friendly presence (perhaps volunteer greeters or police patrols during events) will be crucial. Another consideration is the mix of pedestrians and cyclists; during World Cup events, many casual walkers may not be aware of the bike lane, so clear delineation and crowd management will be needed to prevent accidents. On the positive side, Fortson Square's redesign – which will be completed before 2026 – offers the chance to incorporate World Cup readiness: for instance, flexible open space for pop-up vendors or fan activities, signage in multiple languages welcoming visitors, and durable finishes that can handle large crowds. The planned Indigenous welcome figure carving could become a memorable landmark that fans notice and interact with. By enhancing Fortson Square now, Seattle can ensure it becomes a highlight on the fan route – a place to pause, take photos, learn about local culture, and maybe grab a snack from a food truck – rather than just an overlooked triangle on the way to the stadium.

In summary, Fortson Square will face unprecedented foot traffic and international scrutiny during World Cup 2026, making it imperative that the space be safe, inviting, and able to accommodate "standing room only" crowds. Our recommendations in the next section incorporate this future lens alongside the everyday improvements needed.

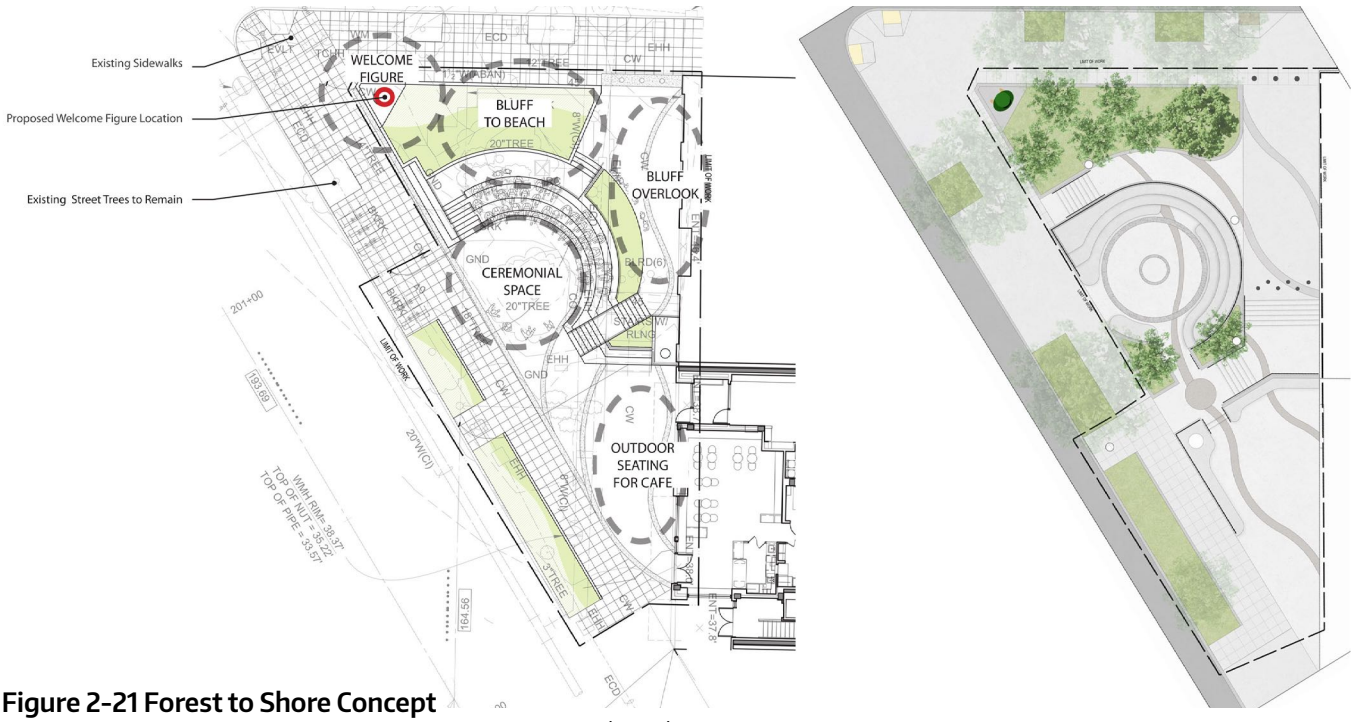


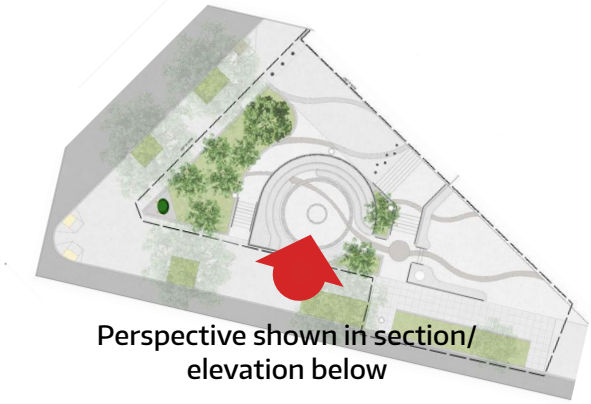
Figure 2-21 Forest to Shore Concept
Source: Fortson Square Renovation Plan, Jones+Jones (2023), P12

Forston Square Redesign Analysis

To transform Fortson Square from a pass-through corridor into a lively public place, we recommend design interventions that encourage lingering and social activities while maintaining clear circulation routes. These align with the community-led design vision (e.g. gathering circle concept) and our specific observations of how people use (or avoid) the space.

Add diverse, comfortable seating (benches, flexible commercial, informal ledges) to meet observed demand.

The single most impactful change would be to introduce ample seating options. We recommend a mix of benches with backs, movable café-style chairs, and informal seating ledges integrated into the plaza's edges. Seating should cater to individuals and small groups (e.g., some benches for 2-3 people, some longer benches or seat-walls that allow groups of 4-5). During our study, many people stood or sat on the ground; providing actual seats will meet this observed demand. Where possible, orient seating to face inward to the plaza and outward for people-watching along the sidewalk. Include a few leaning rails or high-top tables for quick perching (beneficial during events for those who want to stand and snack). By diversifying seating, Fortson can accommodate a range of uses – a quick lunch, a chat among friends, or a rest for an elderly passerby. Layout note: In the redesign plans, seat walls and benches could define the new circular plaza perimeter, and perhaps seating could be built around the base of the welcome figure art for viewing.



Perspective shown in section/ elevation below

Figure 2-22 Conceptual Site Elevation
Source: Fortson Square Renovation Plan, Jones+Jones (2023), P17

Enhance Lighting and Safety Features

To address nighttime safety (critical for World Cup evenings and general use), install bright, uniform pedestrian-scale lighting throughout the plaza. Decorative pole lights or in-ground LED lights can both improve visibility and highlight the new cultural features (for example, uplighting the welcome figure sculpture at night for a dramatic effect). Improved lighting will help mitigate the safety concerns we noted (especially for women or visitors after dark). We also recommend low landscaping and possibly removing or modifying any hiding spots to improve natural surveillance. A well-lit, open plaza will feel much safer and more inviting in the evening, converting Fortson from a space people avoid at night to one they might comfortably use. For World Cup and other events, the city could also deploy temporary security or ambassadors in the square to guide and assist visitors – making the most of the improved physical lighting and sightlines.

All these design improvements aim to support lingering without impeding circulation. The pathways along Yesler and 2nd should remain clear and direct for commuters (with textured paving or markings guiding movement). The central gathering areas with seating should be offset just enough so that through-walkers aren't forced to zigzag, but close enough that a passerby can easily veer over to sit if they choose. By implementing these changes, Fortson Square will better balance its dual role as both city infrastructure and social hub.

Data Collection & Ongoing Evaluation

Finally, we recommend continuing to collect data and feedback to ensure Fortson Square's success over time. Our study provides a pre-intervention baseline; it will be important to measure changes after the redesign and during major events to adapt management strategies. Two key aspects are highlighted:

Conduct Intercept Surveys for Demographics & User Insights

While our observational method gave us counts and inferred behaviors, we lacked direct demographic data (age, gender, resident vs. tourist, etc.) and detailed user opinions. We propose implementing an intercept survey on-site during various times (especially after the new design is in place and during events). A short survey administered by volunteers or via QR code can capture who is using the space and their experiences. For example, questions can cover the respondent's age group, gender, purpose of visit (passing through vs. intentional stop), frequency of use, perceived safety, and suggestions for improvement. This would help validate and enrich our observed gender imbalance and ensure the space is inclusive to all . Survey data, combined with observational counts, can guide adjustments (like if women still feel unsafe, ramp up lighting or programming; if older adults aren't using the space, consider more age-friendly seating, etc.).

Improve and Broaden Observation Data Recording

We also recommend enhancing the way public life data is collected for more nuance. For future counts, add fields for context – for instance, note if an unusual event is occurring (like a game) directly in the data, or allow observers to input brief text descriptions of activities that don't fit predefined categories . Our experience showed some activities (e.g., someone doing an impromptu dance or selling something informally) might be missed if rigid categories are used. By adding an "Other activity (describe)" field in the data protocol, and an "observer notes" section for qualitative impressions, SDOT can capture richer information. Additionally, consider using digital tools or sensors to supplement manual counts during extremely busy events (World Cup days) to accurately gauge crowd sizes and flows. Continuing regular public life counts post-redevelopment (perhaps annually each summer) will monitor progress: Are more people staying now? Has linger factor improved? This ongoing evaluation creates a feedback loop to fine-tune management of Fortson Square and share lessons with other public spaces.

In short, pair design interventions with data interventions. Just as the space is being redesigned, the approach to understanding its use should evolve. By gathering survey feedback and detailed

2nd Avenue in Downtown Seattle, Image credits: Authors (2025)

observational data, the city and community can ensure Fortson Square meets the needs of all users – locals and tourists, women and men, weekdays and weekends – and can course-correct as necessary.

Conclusion

Fortson Square's story is one of latent potential. Our study revealed a place that is extremely well-located – capturing streams of people moving through Seattle's urban core – yet it currently fails to invite those people to slow down and connect with the space. The data show a space used 14:1 for movement over staying; the observations show people craving basic amenities like a seat or a sense of safety that would allow them to linger. With a major redesign underway and global events on the horizon, now is the critical moment to rewrite Fortson Square's narrative. If the recommendations outlined here are carried forward, we envision Fortson Square becoming a beloved "pause point" in the urban fabric. In doing so, it will not only serve the daily needs of commuters and neighbors, but also stand as a symbol of how thoughtful urban design and planning can turn an underused corner into a dynamic public realm success story.

KING STREET STATION

CHAPTER 3

Introduction

This project contains the collection and analysis of public life data from four study locations within and surrounding King Street Station in Downtown Seattle. The report has been prepared by one of five teams participating in a public life data collection project organized between the Seattle Department of Transportation (SDOT) and the course URBAN 576/CET 586, taught by Professor Rachel Berney in the College of Built Environments at the University of Washington.

The main focus of URBAN 576/CET 586 is pedestrian and non motorized travel in urban environments, including walking, biking and other forms of rolling. Viewing and discussing local, national and international examples of how the built environment affects the ability and desirability of non motorized transit was a major component of the class. This course helped to inform the data collection of this project by giving the researchers a framework for assessing spaces' success in being accessible and conducive to pedestrian travel, all lessons that we applied in our observations at King Street Station and the formation of the following report.

King Street Station is located on Jackson Street, between 3rd and 4th Ave South. The Station serves a variety of commuters, visitors and other travellers on Amtrak trains and Thruway intercity buses and the Sounder commuter rail, providing connections to local buses, the Link Light Rail and Sound Transit commuter rail. Constructed in 1906, the Station features a three story brick and granite terminal with a waiting room and a twelve story clock tower. The clock tower is home to ARTS at King Street Station, an arts and culture space created and maintained by the Office of Arts and Culture in tandem with SDOT.

The four study areas included the Sounder entrance off of South Jackson Street, the Plaza in front of the North Entrance to the Station also on South Jackson Street, the section of South King Street outside of the West Entrance to the Station, and the South Plaza of the Station. The Sounder Entrance is a small stairway from the train tracks up to a narrow access point off of the Jackson Street sidewalk on the North side. This corridor does not have any seating or resting opportunities, and is mostly utilized during Sounder trail arrivals by moving travellers exiting the Station. The Station Plaza has planter boxes ringed by bench seating, providing seating opportunity and some shade. Both of these study areas are on an elevated street level above the Stations train tracks and platforms, so users accessing the trains have to descend to them, while the following two areas are level with the train tracks and platforms.

The data was collected using an application, the Public Life App, from the Gehl firm after access was granted to team members by SDOT. Each of the five team members signed up for multiple observation time slots, then went to the site(s) in question and used the application to record public life activity. Data collected included movement and stationary counts, movement modes, general age and gender demographics, and stationary posture and activity among other factors. The data collection methodology will be discussed more in detail later in this report. This data will help provide a deeper understanding of how this area is used by the public, and help to identify possible improvements within Seattle's urban public spaces.

Our group chose to frame the representation of the data in this report based on a leading question: How is King Street Station used differently on weekdays compared to weekends? Based on the differing schedules of the trains servicing the station, as well

as the varied demographics and reasons for travel of the people using them, the observed activity and usage of King Street varies by time of week. The Sounder is primarily a commuter train that runs frequently during weekday rush hours but only for select events on the weekends, while Amtrak has greater service on the weekends. These differences affect the movement of pedestrians and travellers through the study areas in question, and prompted us to represent the findings with this in mind.

Methodology

The goal of our data gathering was to measure activity in public places. Data gathering methodology was determined by SDOT, using software developed by Danish urban design firm Gehl. Each site was tracked over blocks of two hours; three blocks on weekdays (Monday and Tuesday) and two blocks on Saturdays. On weekdays, the blocks were 8 & 9 AM, 12 & 1 PM, and 4 & 6 PM. Only the 12 & 1 PM and 4 & 6 PM blocks were measured on Saturdays.

Four study areas around King Street Station were determined by SDOT and inserted into the Gehl app for easy reference, allowing researchers to easily locate study areas and determine where to be. The app had separate sections for each of the four areas, so one researcher could do one 2-hour block of one study area at a time. Additionally, a line was drawn in each study area for the assessment of people moving. The locations and names of the study areas are found in the map below.

Each hour, a total of 40 minutes of data collection were done, with 20 minutes dedicated to people staying, and 20 minutes dedicated to people moving. Collecting data for people staying was done in one 20-minute block, where the app would have the person taking measurements input the location, activity, posture, and perceived age and gender of the person. For location, the input was anywhere in the study area based on a point on a map. For activity, the options were: Talking to others; Using electronic device; Waiting for public transportation; Waiting for non-public transport (e.g., rideshare / taxi); Engaged with commerce (selling / buying); Eating / Drinking; Passive recreation / People watching; Smoking; Engaged in cultural activity (performer / watching); Exercise; Play; Reading / Writing; Chance encounter; Civic work; Taking care of child / children; Waiting in line; Disruptive; Pet care or play; Wayfinding; Living in public; Other. Additionally, multiple activities could be selected. For posture, the options were: Standing; Sitting commercial; Sitting public seating; Sitting informal; Lying down. For age groups, the options were: 0-4; 5-14; 15-24; 25-64; 65+. For gender, the options were: Masculine presenting; feminine presenting; gender non-comforming presenting; unknown. Additionally, people could be designated as being in groups.

At the end of the people staying task, the researcher would be asked to report the weather conditions at the time of the study, temperature, level of maintenance/cleaning, level of noise, and any events happening. For weather conditions, the options were: heavy clouds; light clouds; sun - shaded; sun - exposed; light rain; heavy rain; other. Additionally, the researcher would be asked to report the approximate temperature in fahrenheit. For level of maintenance/cleaning, the options were any integer (whole number) on a scale of 1-5, where 1 meant "very dirty and cluttered," and 5 meant "clean and organized." For noise level, the options were any integer on a scale of 1-5, where 1 meant "quiet," and 5 meant "extremely noisy." For events, the options were: Communal - performance, block party, artists; Political/religious - rallies, preaching; Commercial - food trucks, vendors, markets; Emergency - car crash, fire, illness; Roadwork/Construction - noise, diversions. Researchers were given a text box to add details and could select more than one category of events.

Collecting data for people moving was split into two 10-minute blocks for a total of 20 minutes. In both cases, people would be counted as they travelled across a certain line in the study area. The line for this can be seen in the map of the study areas; it is the yellow line, with one line found in each study area. In one block, people would be counted based on age and gender. The options given were: feminine presenting 0-4; masculine presenting 0-4; feminine presenting 5-14; masculine presenting 5-14; feminine presenting 15-24; masculine presenting 15-24;

feminine presenting 25-64; masculine presenting 25-64; feminine presenting 65+; masculine presenting 65+. In the other block, people would be counted based on mode (how they were moving). For mode, the options were: pedestrian; bicycling (personal); micromobility (escooter, skateboard, etc.); shared mobility (bikeshare, scootershare); using mobility device; supported (stroller). People in cars were not counted in either block.

Limitations

This project only demonstrates a measurement of actual activities done by people in the study areas. It does not measure subjective factors, such as (expressed) reasons why people counted in the study chose to engage in their chosen activity in the study area, or use a certain mode of transport. The study also did not measure race of those counted in the study, nor did it measure the clothing of those counted in the study (such a measurement could provide a hint as to what the people were doing beyond the public space itself). The ability of this study to paint a full picture of the use of public spaces was hindered by the limited hours of the study, and the possibility of human error, possibly exacerbated by the fact that a data point could not be deleted or modified once entered. The use of AI technology in the future may lead to more comprehensive and accurate data.

Team Assumptions

Going into this project knowing that we would be observing the areas around a train station heavily serviced by commuter trains, the assumption of our team was that the majority of observed activity would revolve around the arrival and departure of these trains. Depending on the area of the station we were observing, this activity would take different forms, whether that be travellers entering or exiting the station to continue on foot, calling a rideshare or taxi, or heading to a nearby bus or light rail station. We also assumed that numbers would be highly restricted on weekends, when commuter trains do not run.

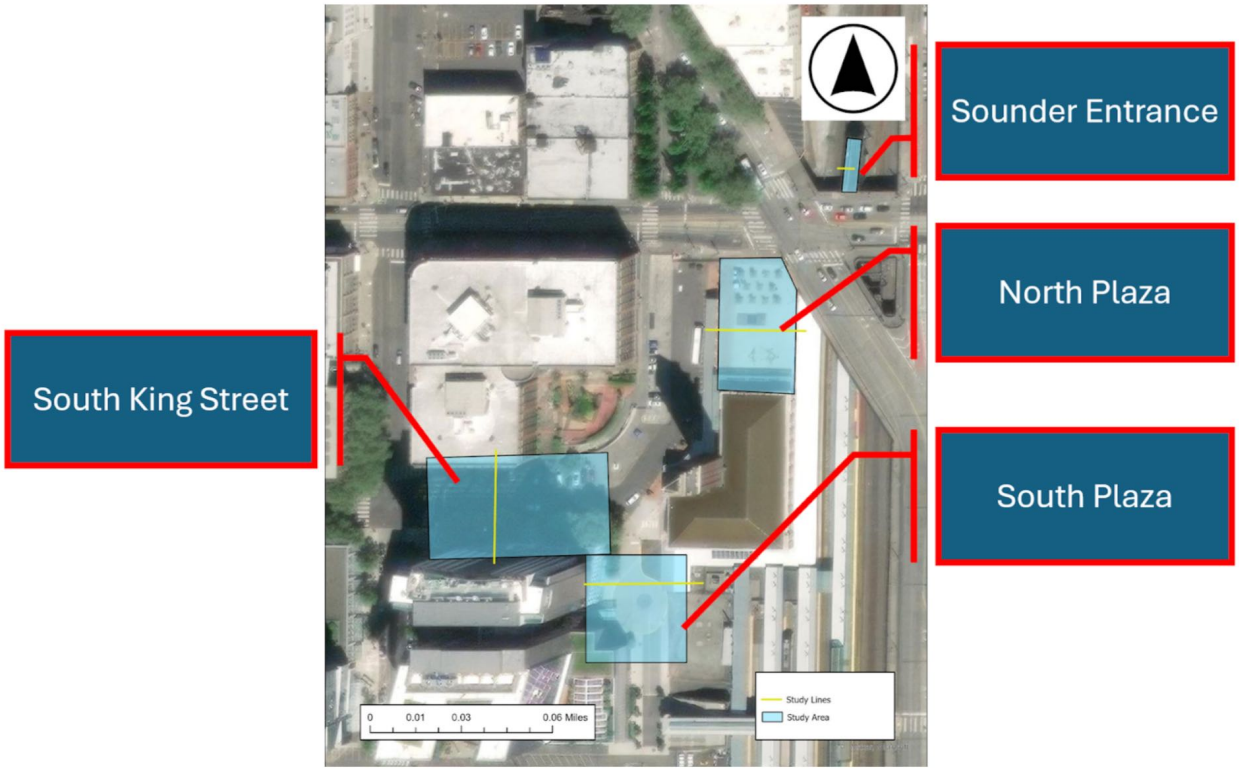


Figure 3-1: Study area map provided by SDOT, with labels of specific observation sites labeled.

Figures and Maps

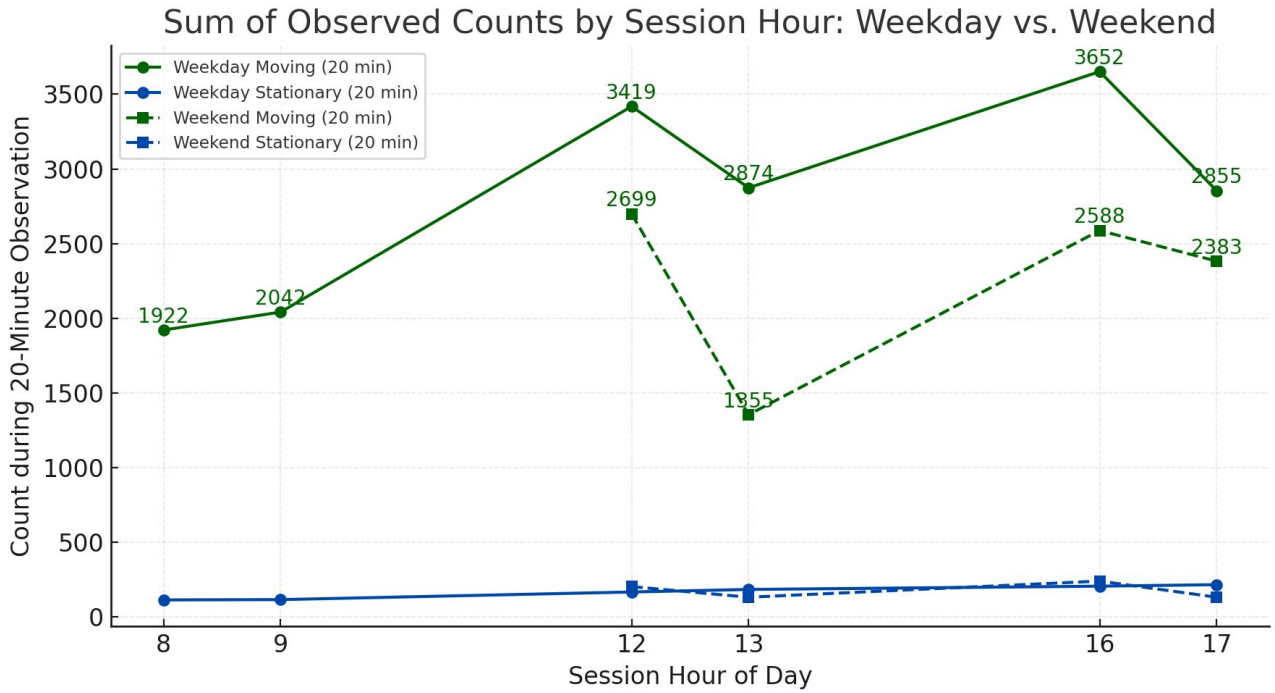
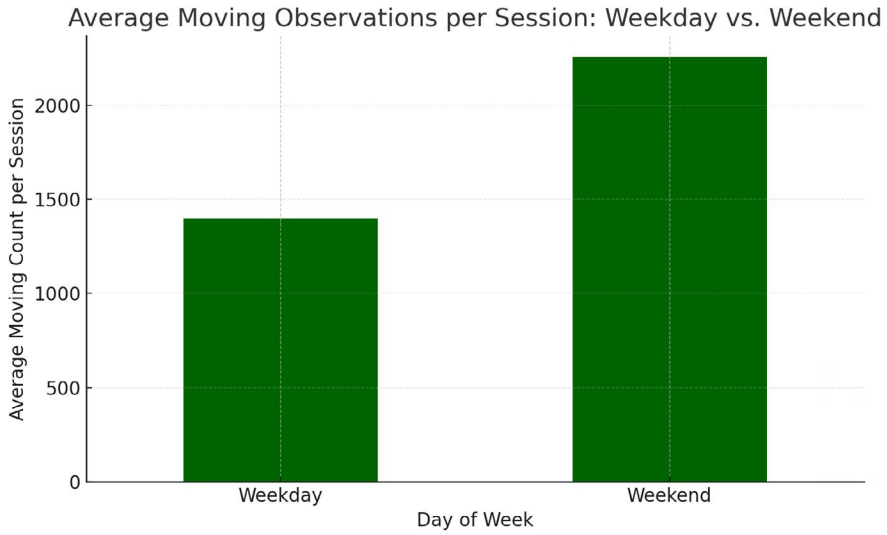


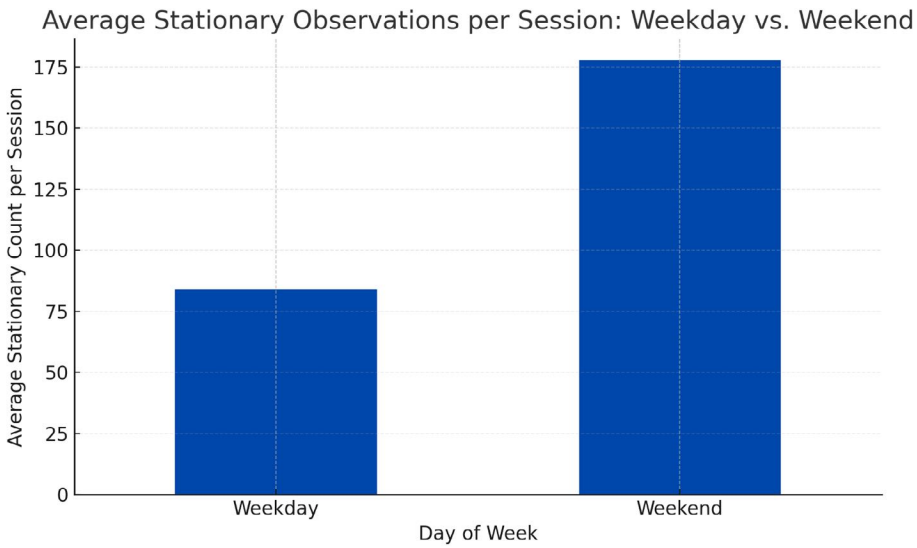
Figure 3-2: Sum of Observed Counts by Session Hour

This chart plots the total number of moving (green markers/lines) and stationary (blue markers/lines) observations recorded during each 20-minute observed session, with solid lines representing weekdays and dashed lines representing weekends. It shows that moving volumes peak around midday (12 PM) and late afternoon (4 PM) on both weekdays and weekends, while stationary counts remain much lower by comparison. The key takeaway is that King Street Station is a place of movement. Note: Data were not collected on weekend mornings.



This bar chart compares the mean number of moving observations recorded in each 20-minute session on weekdays versus weekends, showing that weekend sessions saw approximately 2,300 moving counts on average versus about 1,400 on weekdays. It accounts for the fact that no weekend morning sessions were conducted, so it reports "per-session" rather than "per-day" averages.

Figure 3-3: Average Moving Observations per Session



This bar chart contrasts the average number of stationary observations per 20-minute session on weekdays (around 85) with weekends (around 180). By using "per-session" averages, it ensures that missing weekend morning data do not skew the comparison. This shows that more people lingered during weekend sessions.

Figure 3-4: Average Stationary Observations per Session

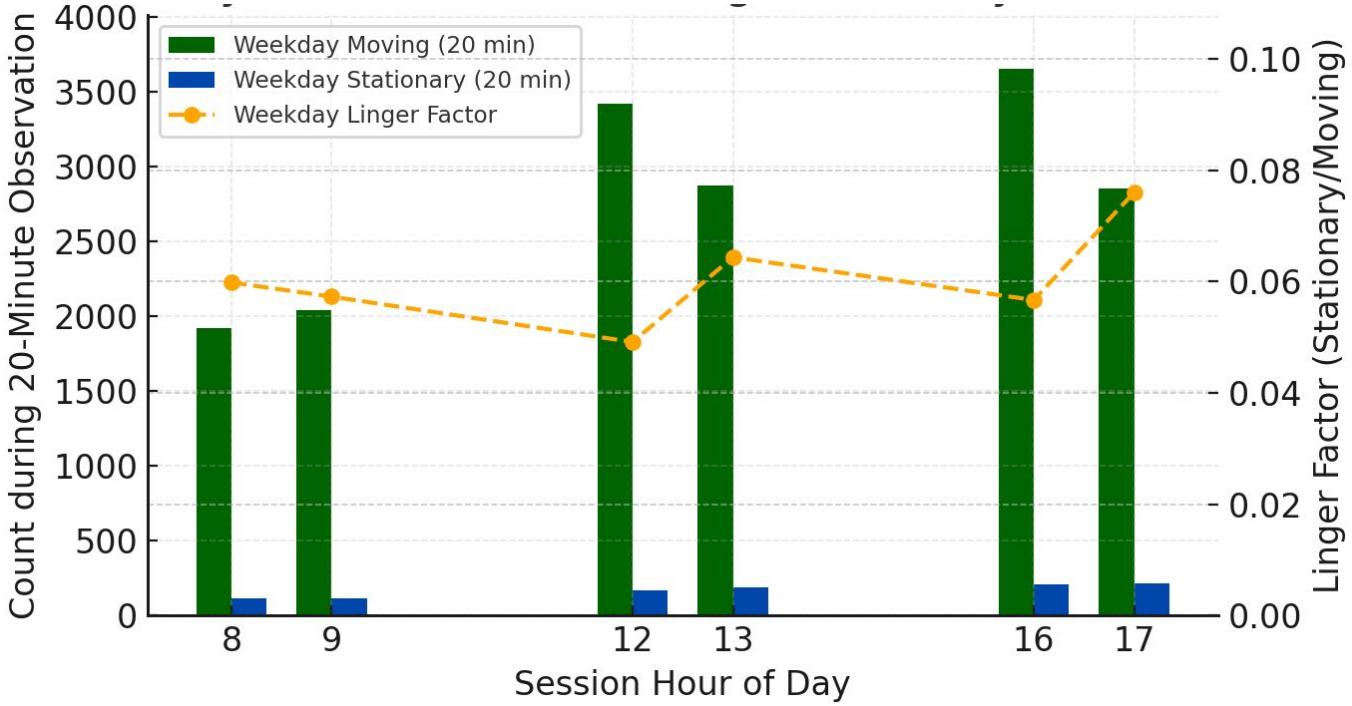


Figure 3-5: Sum of Counts & Linger Factor - Weekday

This bar-and-line chart shows, for each 20-minute observation session (8 AM, 9 AM, 12 PM, 1 PM, 4 PM, 5 PM), the total number of moving (green) and stationary (blue) people recorded on weekdays, with the orange dashed line representing the linger factor (stationary/moving). It highlights how movement volume and lingering behavior remain somewhat consistent. The Linger Factor is very low.

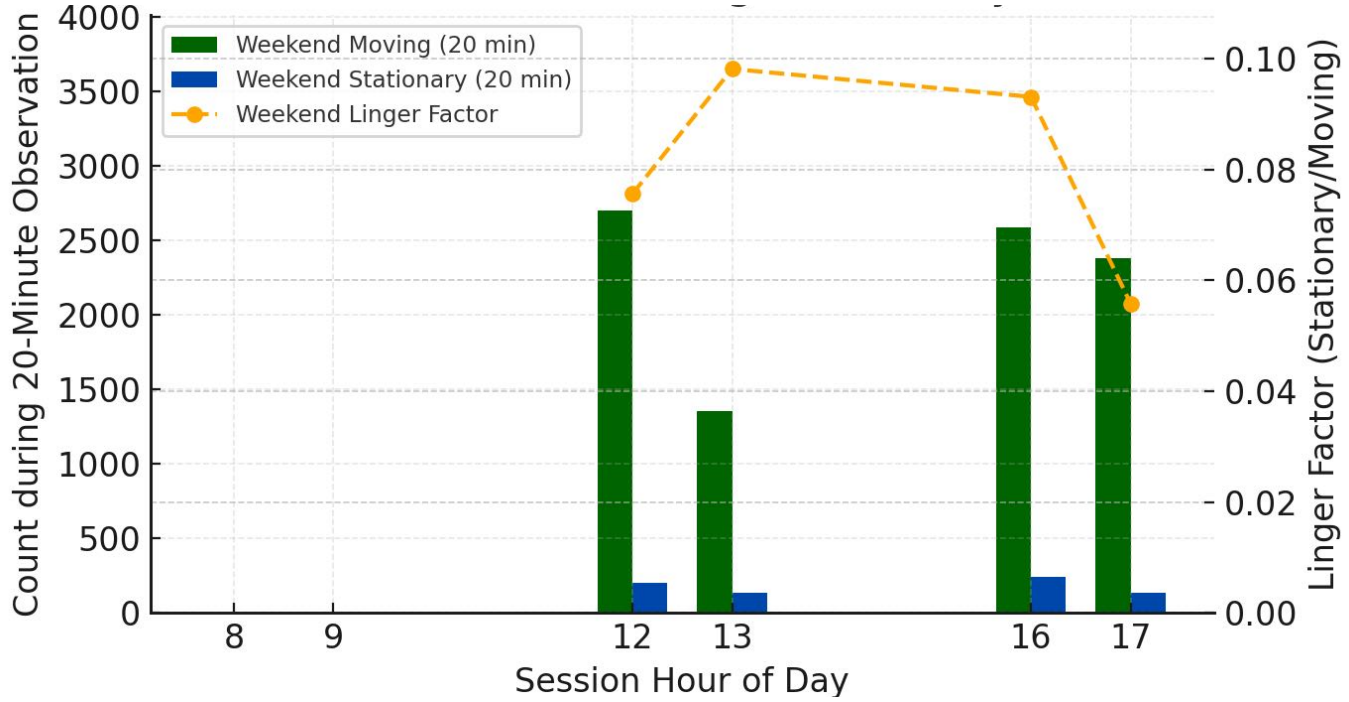


Figure 3-6: Sum of Counts & Linger Factor - Weekend

Similar to the weekday version, this chart depicts weekend counts per 20-minute session, with moving in green, stationary in blue, and the orange dashed line showing the linger factor. Because no observations were made in the weekend mornings, the chart focuses on the afternoon and evening sessions. Compared to the weekday chart, this shows higher per-session volumes and slightly higher linger rates compared to weekdays.

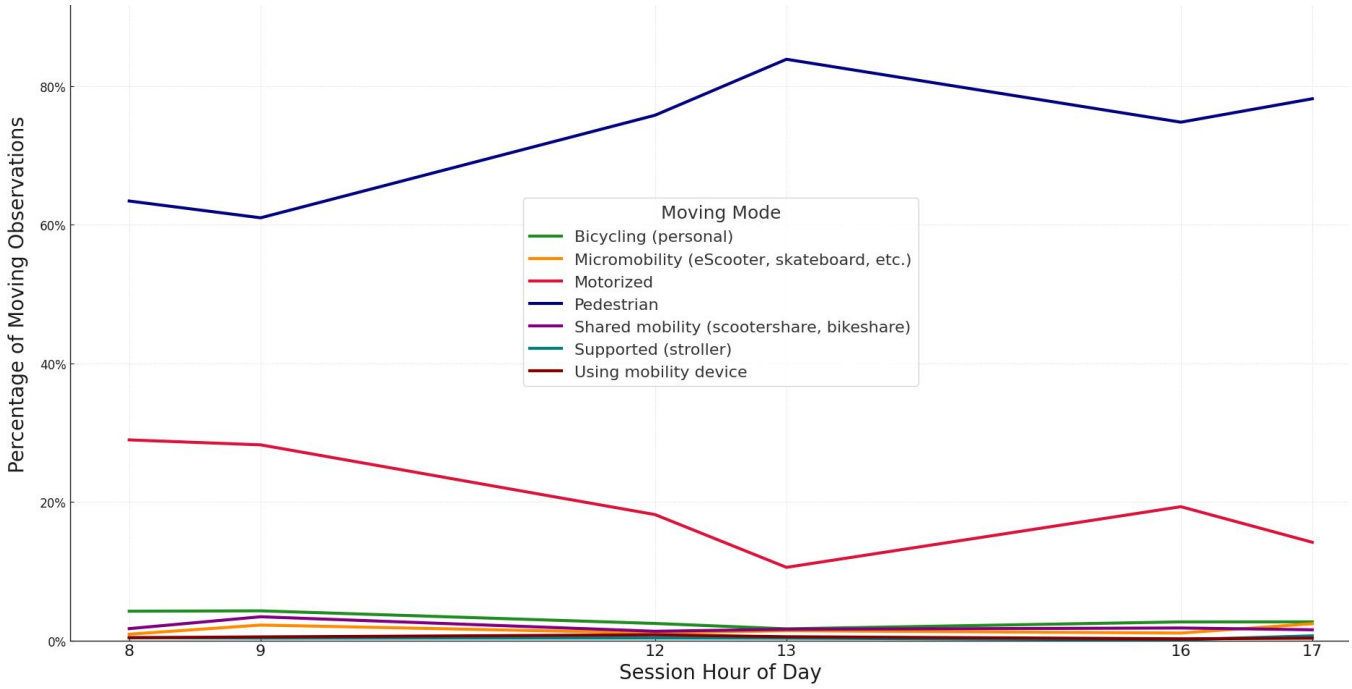


Figure 3-7: Moving Mode Share by Session Hour: Weekday

This line chart shows the percentage share of each travel mode among all moving observations at each weekday session hour, with the y-axis representing percentage. It reveals how the composition of travel modes shifts across the day. Pedestrian mode share is by far the most dominant, with motorized and micromobility coming in at second and third. This reflects that many people around King Street station are going to/from another mode of transportation.

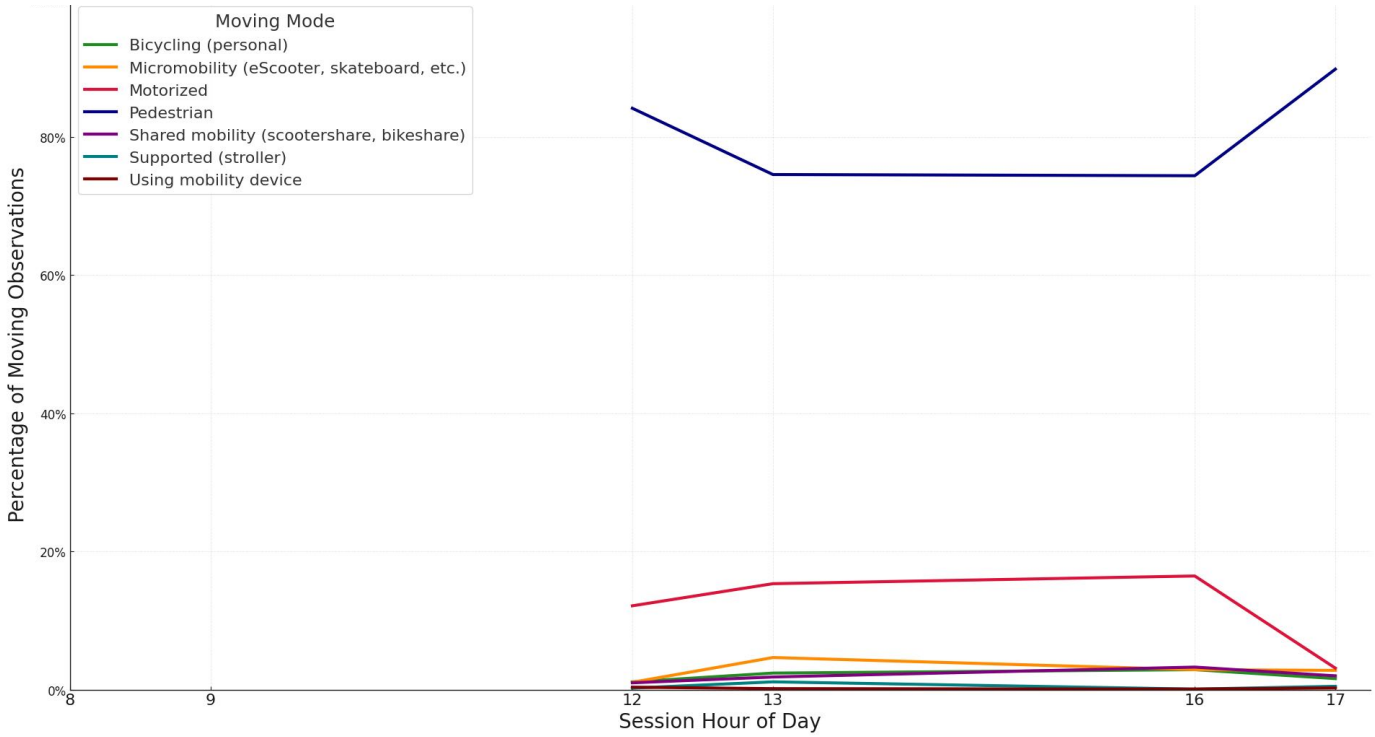
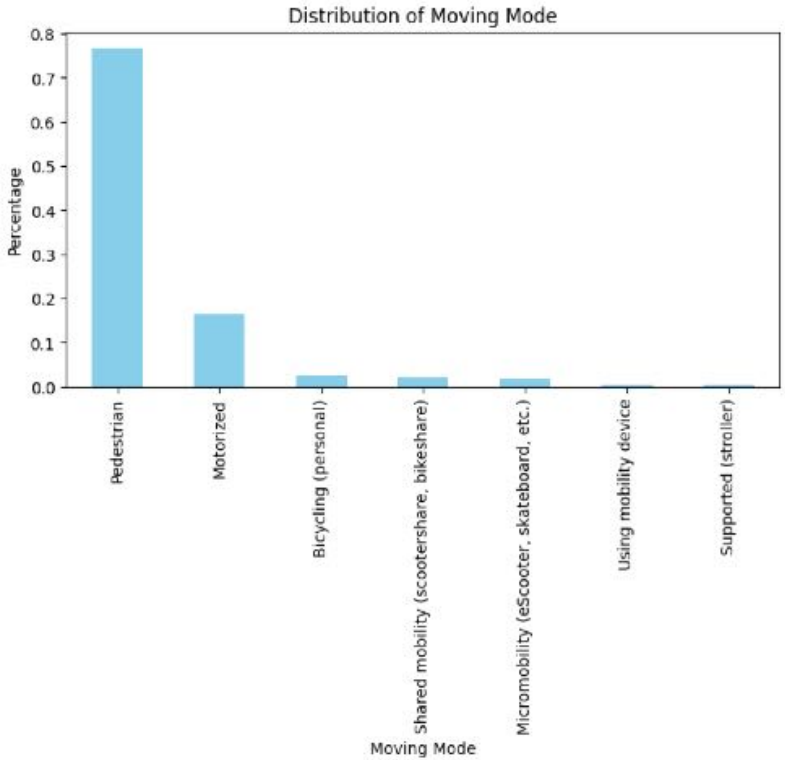


Figure 3-8: Moving Mode Share by Session Hour: Weekend

This line chart, similar to the weekday chart, displays mode-share percentages for weekend moving observations at each session hour. It shows that while pedestrian trips still dominate by far, certain modes (like motorized or micromobility) comprise a slightly larger share of overall moving activity than on weekdays.



This bar chart shows the distribution of mode of transportation across all observations on all days. This shows that about 75% of all observations were of pedestrians.

Figure 3-9: Distribution of Moving Mode

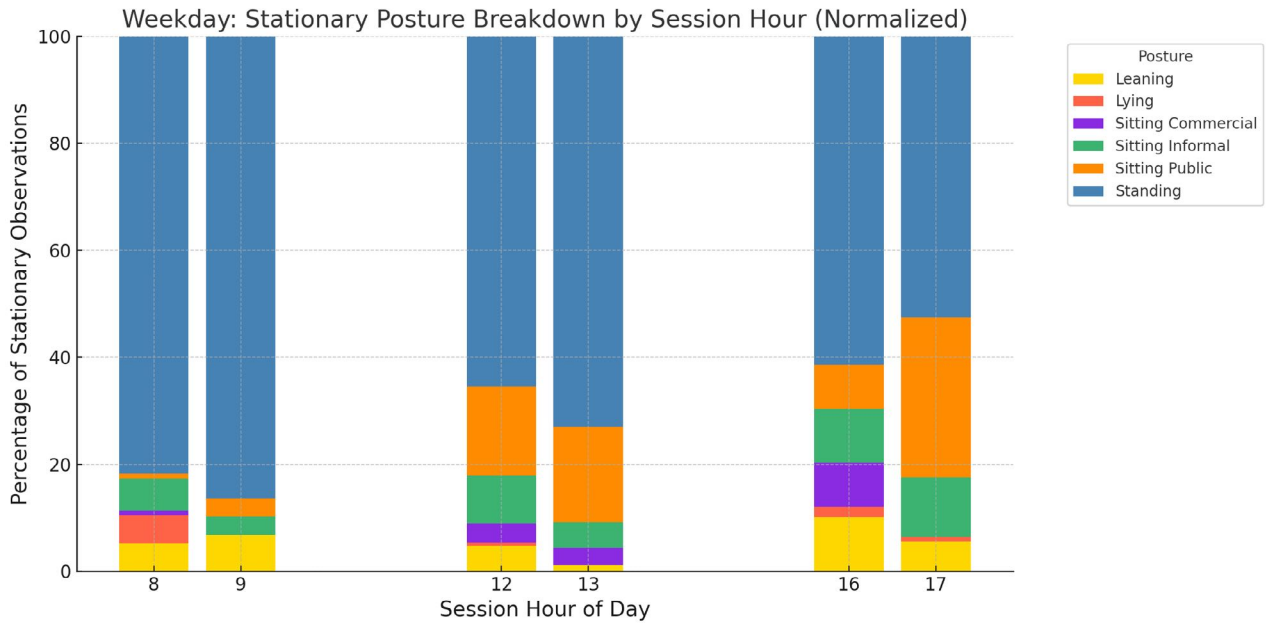


Figure 3-10: Stationary Posture by Session Hour - Weekday

This normalized stacked bar chart presents the percentage distribution of stationary postures (Standing, Sitting Public, Sitting Informal, Sitting Commercial, Leaning, Lying) for each 20-minute session on weekdays. It illustrates that standing is overwhelmingly the dominant posture in the morning sessions, but by afternoon and evening, public and commercial seating become more prevalent.

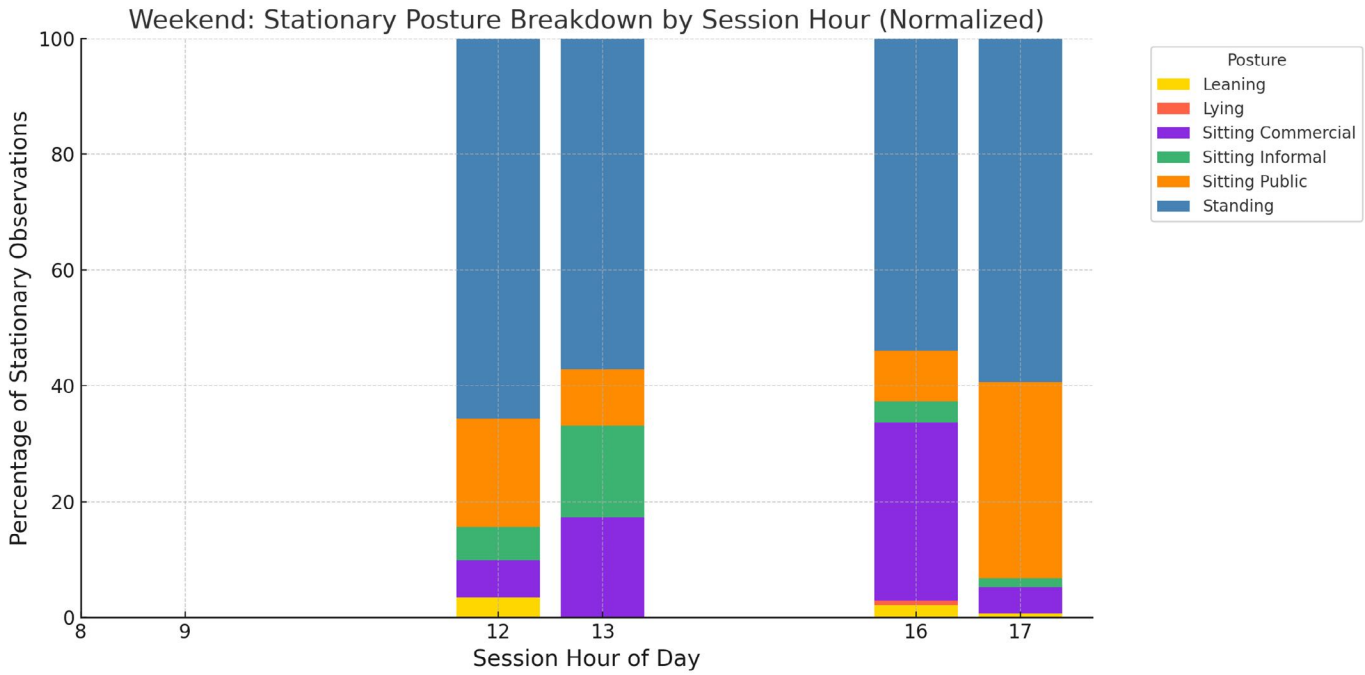


Figure 3-11: Stationary Posture by Session Hour - Weekend

This normalized stacked bar chart shows posture percentages for stationary observations during weekend sessions. It highlights that standing still dominates in all sessions. However, compared to the weekday chart, public commercial seating and informal sitting occupy a larger share.

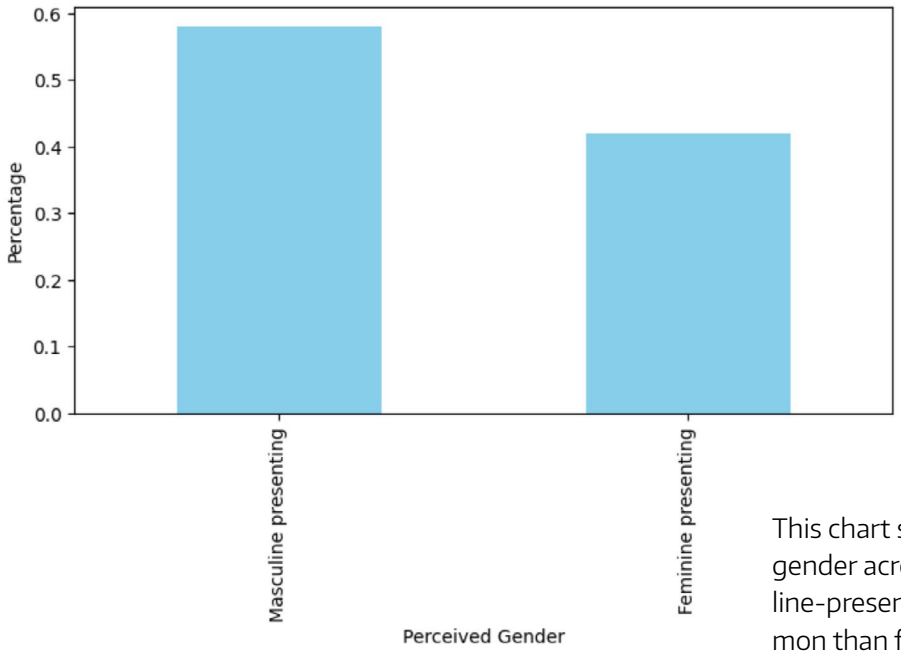


Figure 3-12: Distribution of Perceived Gender

This chart shows the distribution of perceived gender across all observations on all days. Masculine-presenting people are somewhat more common than feminine-presenting people. This may be partly reflective of the ridership demographics of the Sounder commuter rail service.

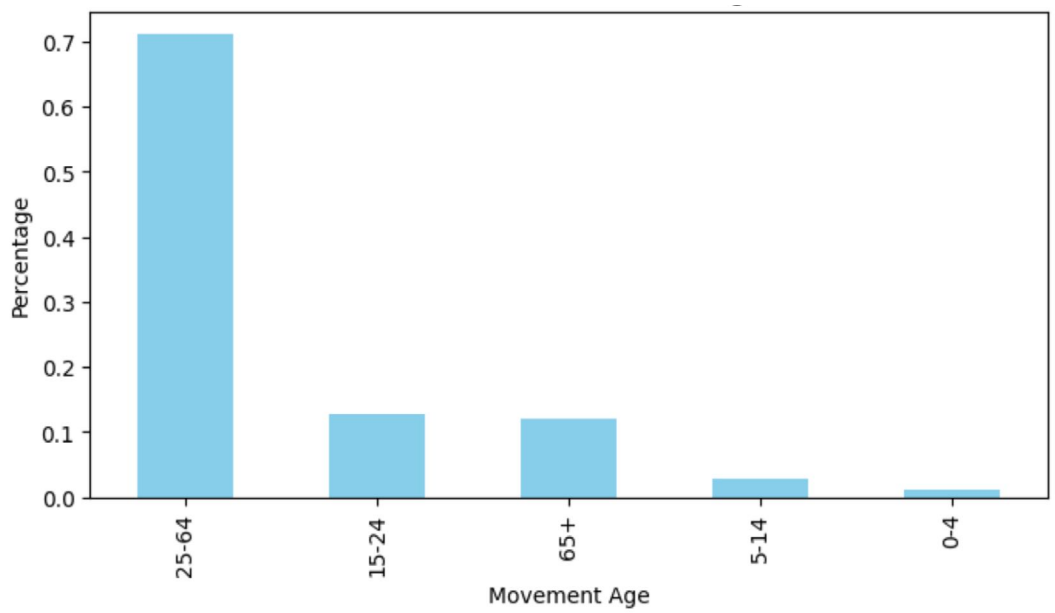


Figure 3-13: Distribution of Movement Age

This chart shows the distribution of perceived age across all observations on all ages. Working-age people (25-64) were by far the most common. This may also be reflective of the commuter rail and other transportation/commute modes in the area.

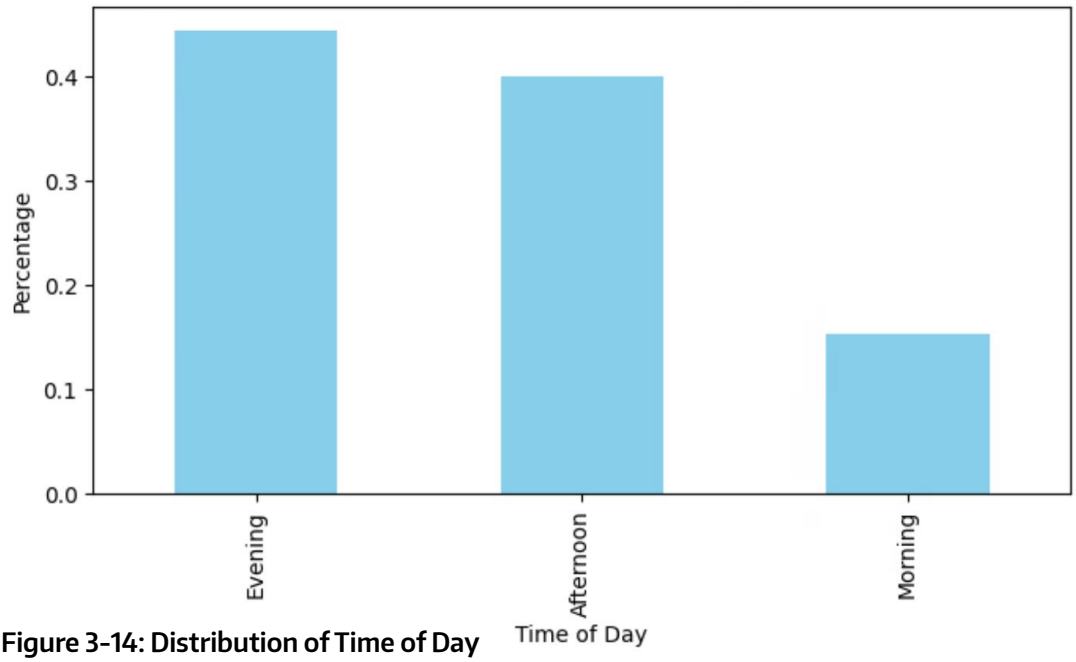


Figure 3-14: Distribution of Time of Day

This chart shows the distribution of the time of day across all observations on weekdays. Weekends were excluded as there were no data collected on weekend mornings. The morning has the lowest share of the observations. This is likely because the morning collection sessions were 9am, and 10am, whereas the Sounder rail service largely runs earlier than that - the morning peak commute times of the service are between 6:30-8:45am.

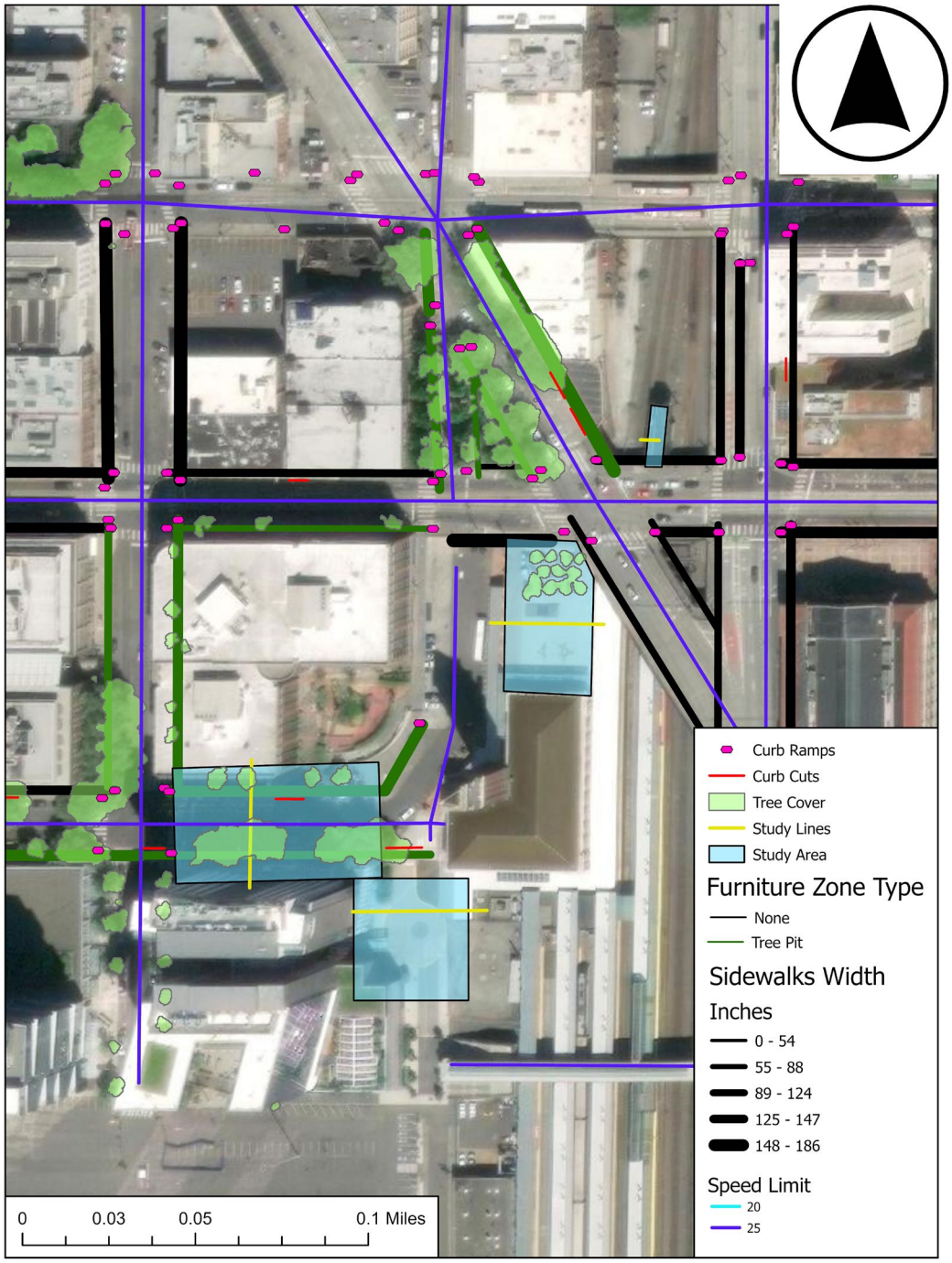


Figure 3-15: Study Area Information

This map shows all the study areas with the curb ramps, driveways, tree cover, sidewalk width, speed limit, and if the roadway has trees in the furniture zone. The only study area with a roadway is South King St, this area has a speed limit of 20 MPH, tree cover from the trees in the furniture zone, 6ft wide sidewalks, and one driveway that goes into the King County office building. The only other study area with identified information in it is King Street Plaza as it has tree coverage in the tree pits on the North end of the plaza.

Figure 3-16: Sounder Entrance Posture

This map shows the posture of people staying in the space who are all standing near the entrance to the staircase down to the platform.

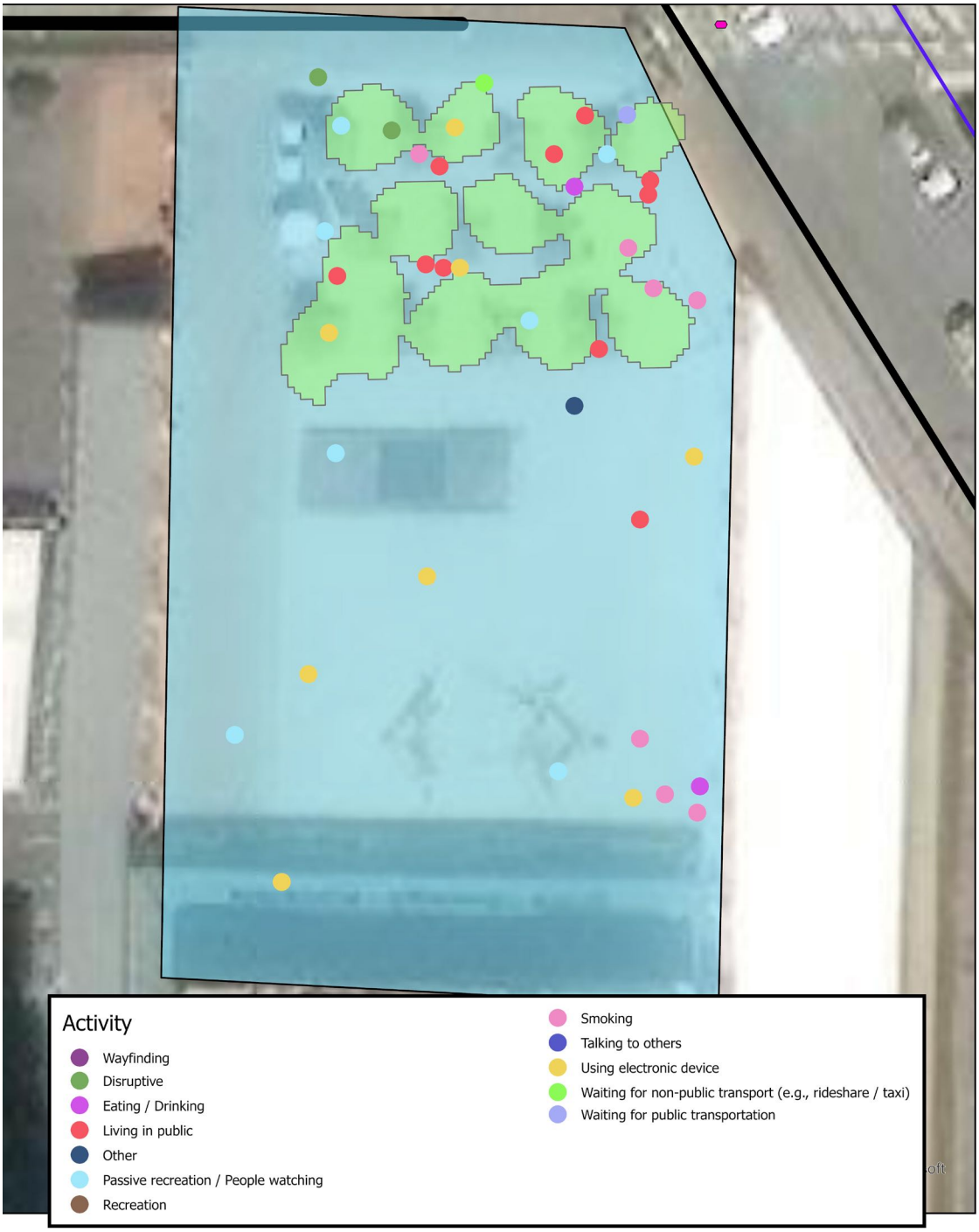


Figure 3-17: King Street Station Plaza Posture

This map shows the mix of posture in this study area, on the south end most people were standing and at the north end most people were sitting at the provided planter box seating.

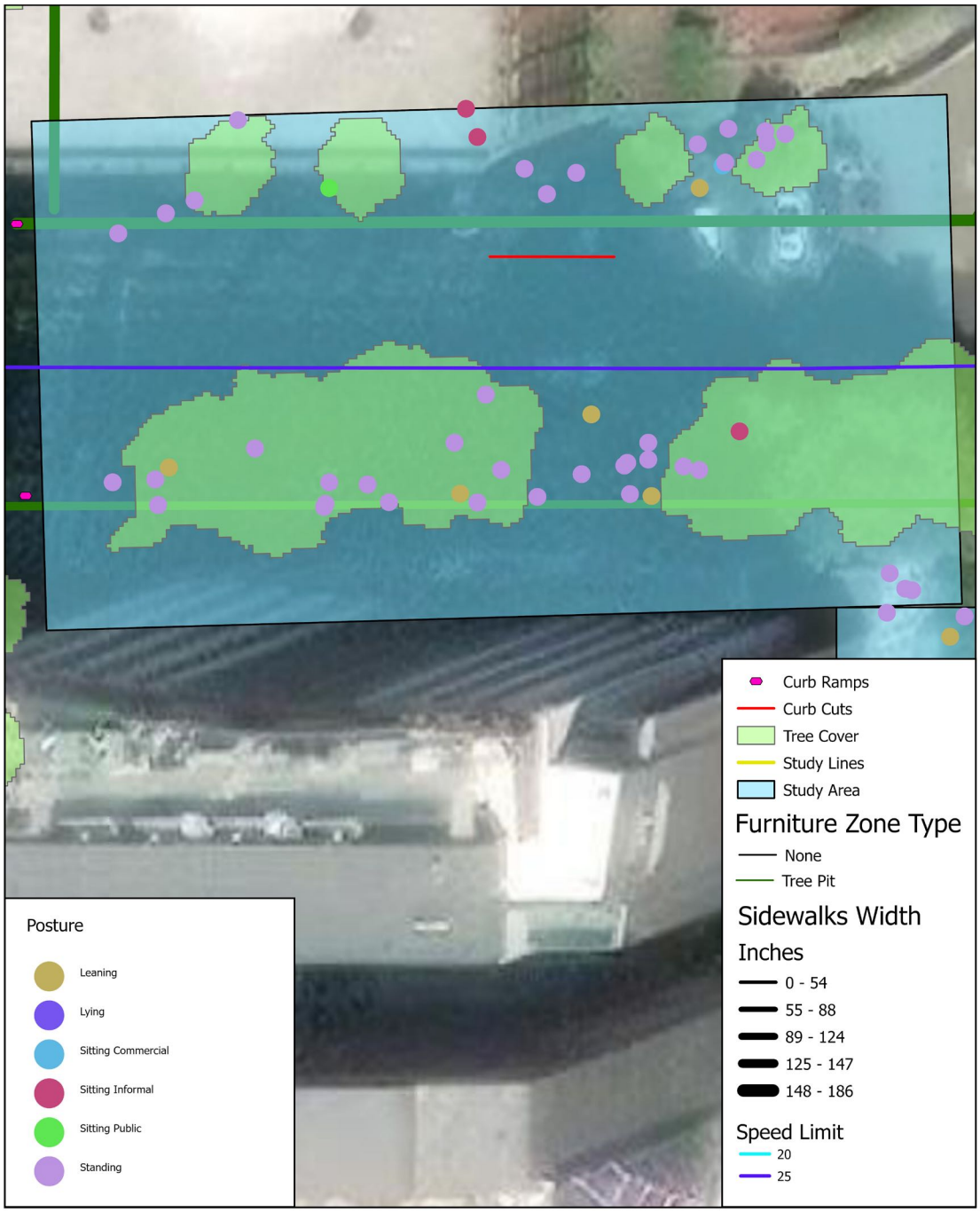


Figure 3-18: South King Street Posture

This map shows the posture of people staying in the space who are all standing near the entrance to the staircase down to the platform.

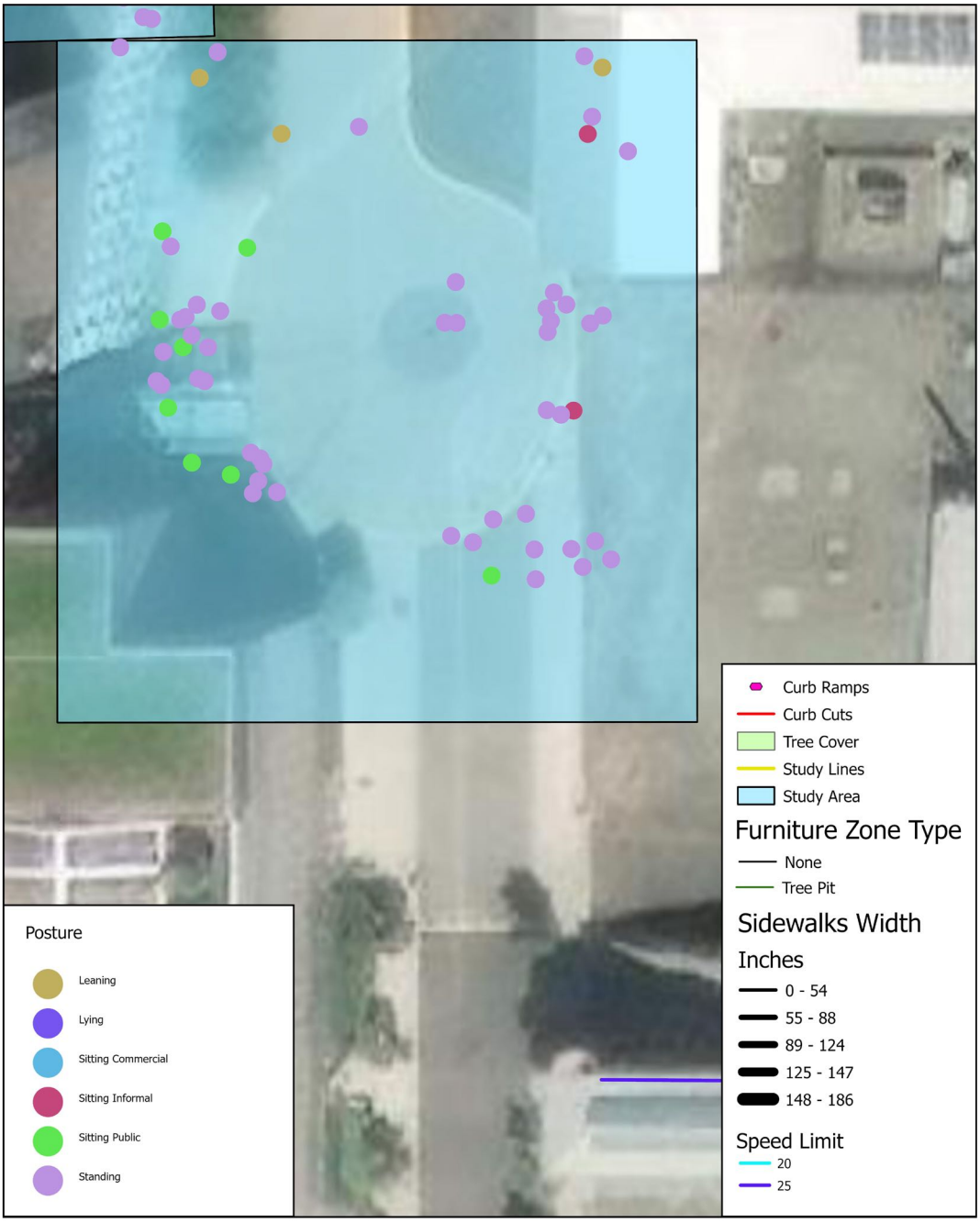


Figure 3-19: South Plaza Posture

This map shows people standing around the roundabout with some people sitting on the provided planter seats on the west side of the study area

Figure 3-20: Sounder Entrance Activity

This area consists of mostly people waiting for public transportation at the top of the stairs and some people watching at the south end of the Study area.

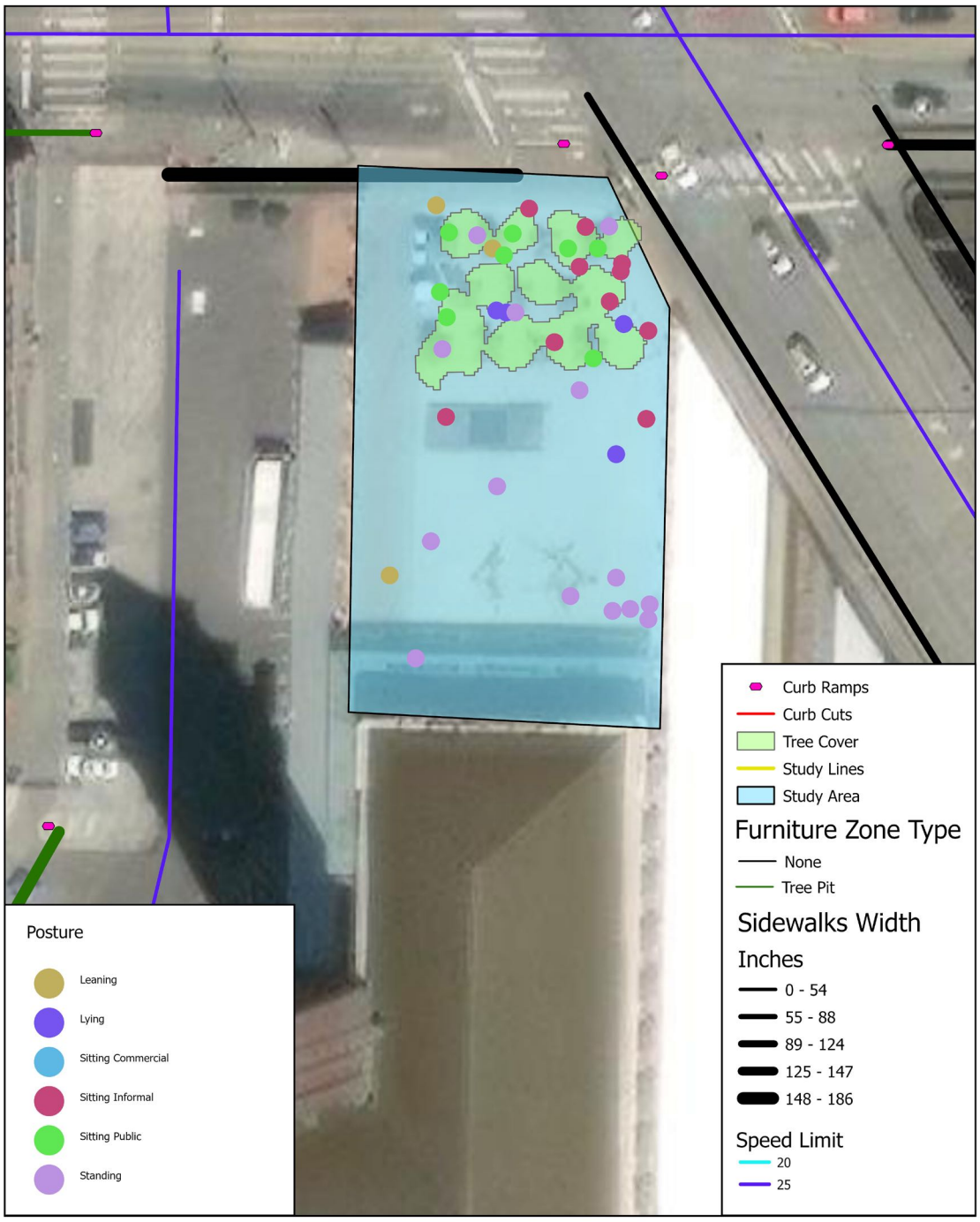


Figure 3-21: King Street Station Plaza Activity

This area has a wide range of activities, the south east corner has a cluster of people who smoked there, some people watching that took place in the middle of the plaza, and by the benches there was some being disruptive and living in public.

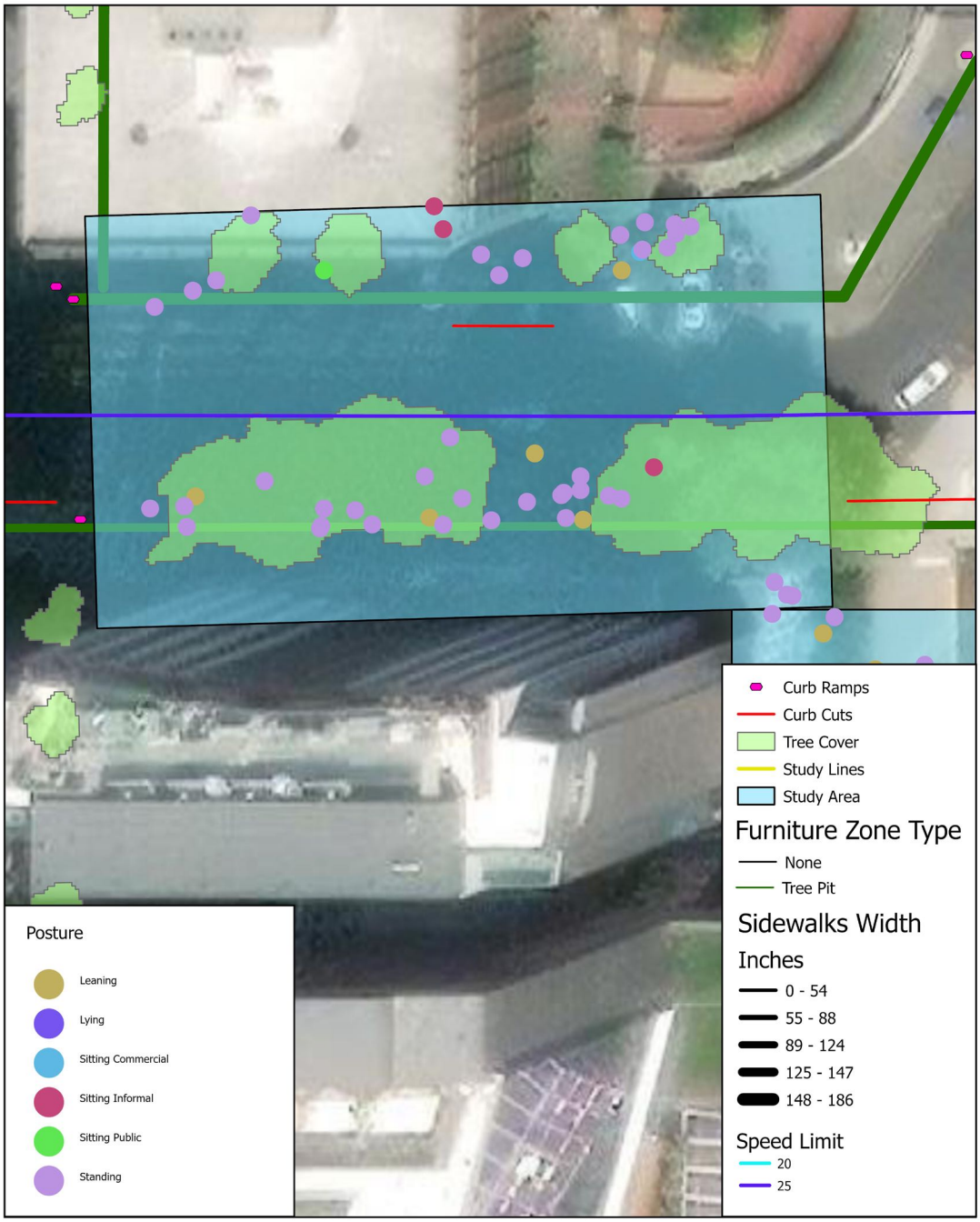


Figure 3-22: South King Street Activity

There is a concentration of people waiting for non public transportation or using electronic devices at the south end inform of the hotel entrance, and on the north side of the street there is a cluster of smoking near the staircase and electronic device usage.

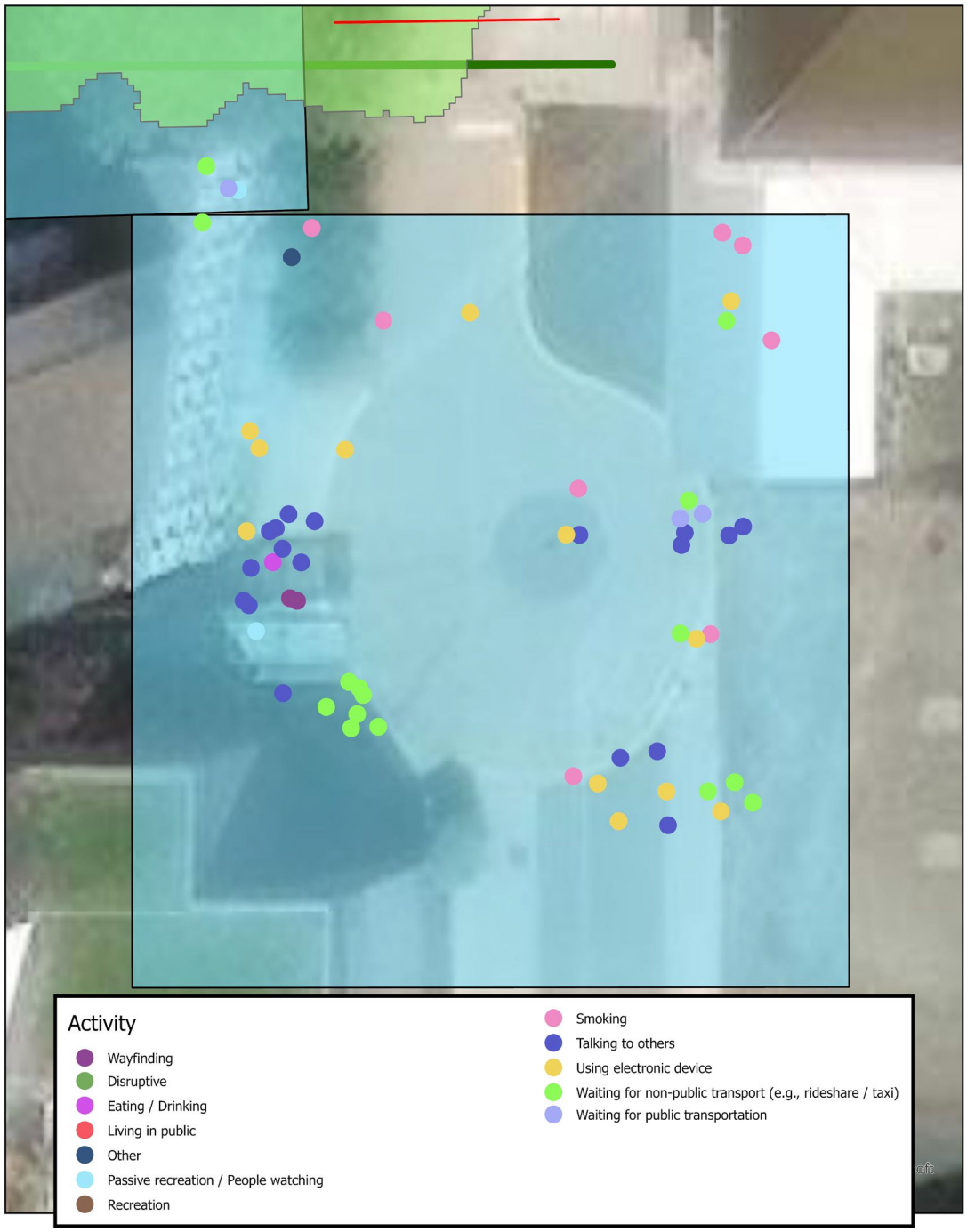


Figure 3-23: South Plaza Activity

The biggest cluster activity is waiting for non-public transportation in front of the hotel entrance on the West side. At the seating area just to the north of the hotel entrance there are a lot of people talking to others in that area. And on the East side of the roundabout there are a lot of people talking, using electronic devices, and smoking.

Takeaways & Recommendations

King Street Station is overall well designed and equipped to move pedestrians, especially commuters, efficiently across multiple modes. The station is designed for transient users, and our observations reflected this, with higher spikes in activity reflecting train arrivals and departures. People staying usually seem to be waiting for rideshare or other transit connections, and the spaces designed for sitting are generally underutilized.

The main takeaways from this data collection process confirmed our group's initial assumptions. Most of the study areas experienced much higher volumes of pedestrian traffic in relation to train arrivals and departures. Given the nature of King Street Station as a travel hub, much of the observed stationary activity seemed to be waiting, either for a train, for a taxi or rideshare.

While not incredibly well utilized by the public, at least during the study times of this group, the Station Plaza is well equipped with plentiful seating and some shaded areas. The addition of a time board that is visible from the Plaza could make it a more inviting place to sit for travellers waiting for their train. As it currently stands, if someone were to arrive early for their train and were to find a place to sit and rest, the Plaza would not be as appealing an option as the interior of the station where they could remain informed about their trip.

The South King Street and South Plaza area saw a good deal of pedestrian activity, especially those waiting for automobile transportation, but is less equipped with seating areas or opportunities to rest. The planter boxes and benches that do exist in the South Plaza might be used by Station employees or security, but not as frequently by the travellers entering or exiting the station. The Sounder Entrance experienced large volumes of moving traffic when trains arrived, but is not conducive to lingering or staying.

Based on our observations, King Street Station is overall well designed and equipped to move pedestrians, especially commuters, efficiently across multiple modes. Even though we did not see many people lingering or staying, this could be expected given that the main function of the station is to be a transient place which people move through, either to take a train or move to further transit or last mile connections.

Public Space at King Street Station, Image credits: Authors (2025)

OCCIDENTAL AVENUE

CHAPTER 4

Introduction

For this study, Occidental Avenue South was divided into five distinct areas within the Stadium District of Downtown Seattle: Occidental North, Central North, Plaza, Central South, and South. Our team, the Occidental Ocelots, consisted of first and second-year graduate students in the Master's program of Urban Design and Planning. The members include Mar Sanchez Castillo, Melaina Harris, Elliot Falinski, Hannah Autrey, and William Harris. As the largest team in this course, we were tasked with analyzing the public life of Occidental Ave South, starting from the intersection with South King Street to South Royal Brougham Way. To the west lies Lumen Field, which hosts professional women's soccer with Reign FC and men's soccer with Sounders FC, as well as NFL football with the Seahawks. To the south is T-Mobile Park, the home of the Seattle Mariners baseball team. This is significant because, outside of game days and events, this area tends to be quite empty, as will be illustrated throughout this public life analysis. This public life study was conducted in collaboration with SDOT in preparation for Seattle hosting the 2026 FIFA World Cup.

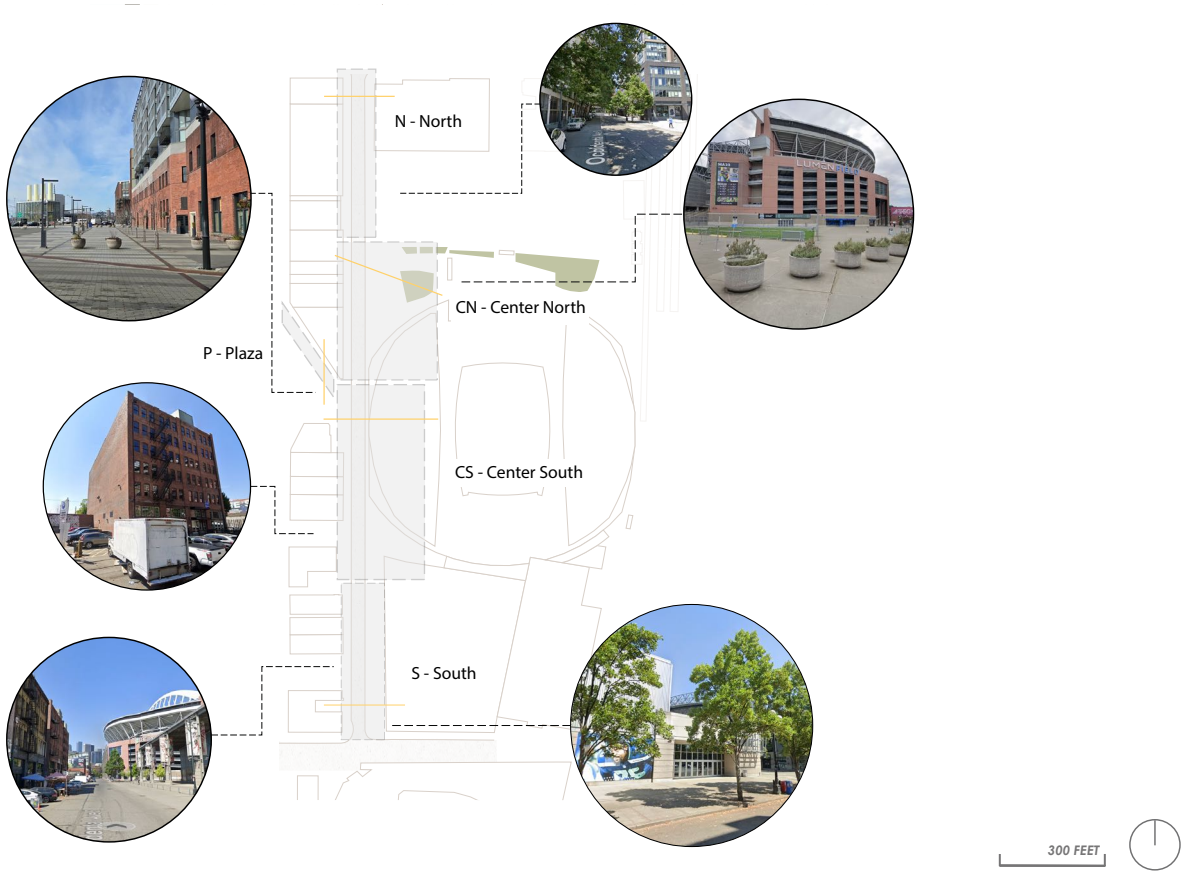


Figure 4-1: Occidental Ave - Public Life Study Observation Areas

Study Area

Most trees are located at the entrances into Occidental Ave, with a large gap in the middle and around the Lumen Field.

Throughout Occidental Street the drivable street remains at 24 feet, however parking constantly shifts from one side to the other with the new sidewalk becoming planting or plain. However, sidewalks are not always permanent with two spaces on the Western N/S walk disappearing entirely for short but notable periods of time. In terms of the walkable widths of sidewalks, 5 feet is the smallest space due to the encroaching stadium, while 12 to 16 feet remain the standard.

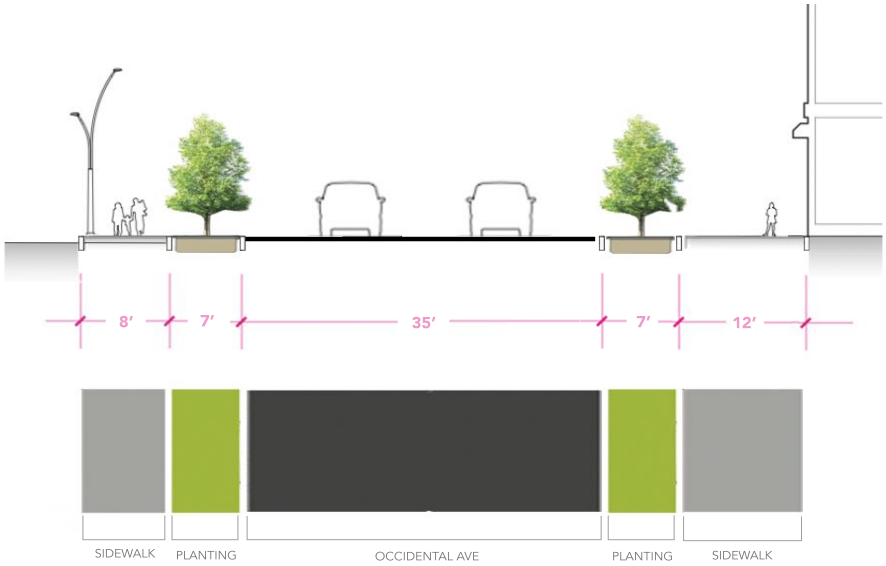


Figure 4-2: Occidental Ave - Average Street Section

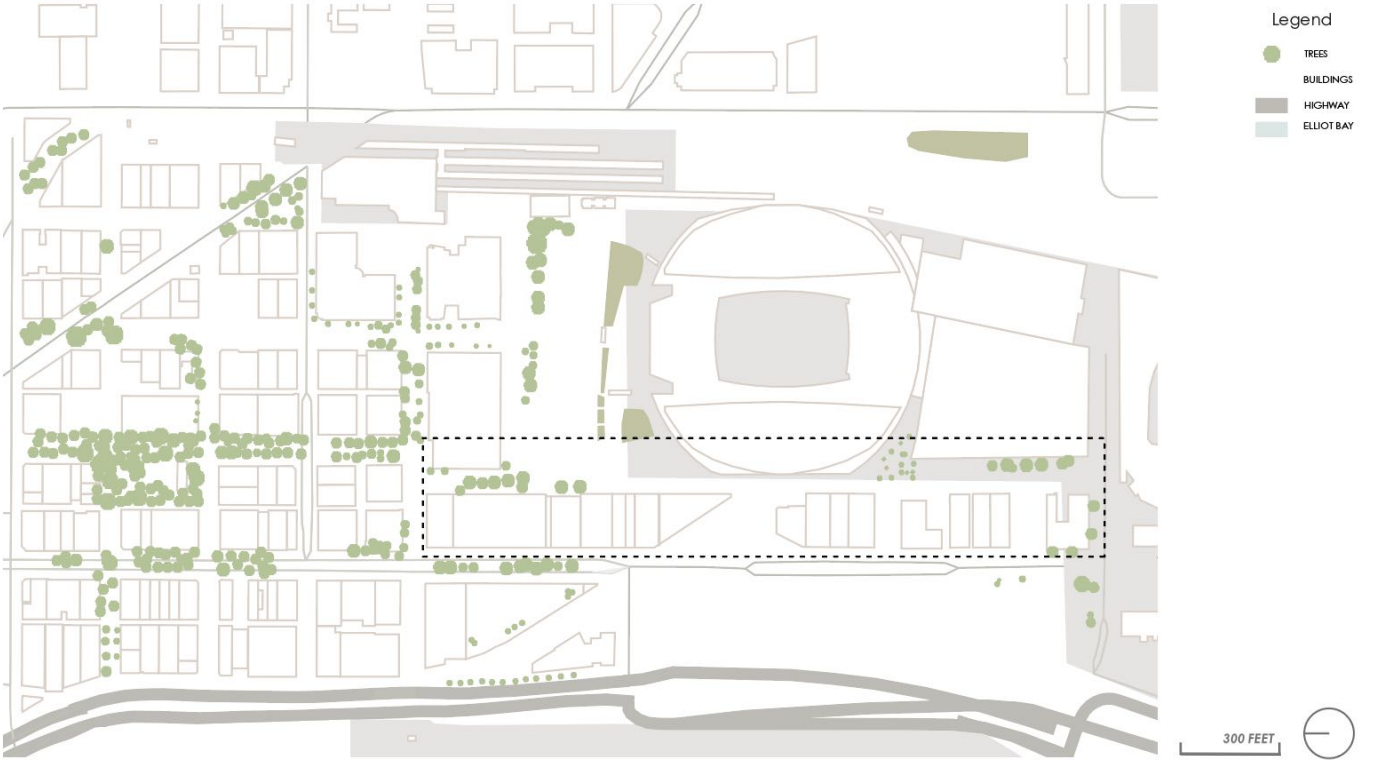


Figure 4-3: Occidental Ave - Tree Canopy

Methodology

To complete this project, the team was given access to a Gehl data collection platform, The Public Life App, by SDOT. We were allocated 40 time slots to observe. Weekdays observed were Monday & Tuesday while on the weekends only Saturdays were observed. The time slots on the Weekdays were 8am to 10am, mid-day from 12pm to 2 pm, and evening from 4pm to 6pm while on the weekend, only the 12pm to 2pm and the 4pm to 6pm time frames were recorded.

At each of our 5 sites, we conducted one 20-minute observation of people staying, one 10-minute observation of perceived age/gender, and one 10-minute observation of modal use. During these observation windows, we would stand at the centerline of each of the sites, recording how many times that line was crossed and by whom.

The first count centered around counting the mode of transit, which consisted of motorized, pedestrian, bicycling (personal), shared mobility (rental bikes/ scooters), micromobility (e-bikes, skateboards), using a mobility device, and supported (strollers).

The second count centered on the count of individual pedestrians by perceived gender (feminine or masculine presenting) and perceived age group (0-4, 5-14, 15-24, 25-64, 65+).

To present our analysis, we put the results of the data collection through an application called PowerBI, and formatted the data by using the "Slicer" tool. We divided up our collected data into the sections of the 5 locations on Occidental: North, Central North, Plaza, Central South, and South. We also added a second slicer to see the difference on weekdays versus weekends. To find the linger factor, we measured the stationary activity compared to gender, as well as the activity and age. Refer to each locations stationary data to see the linger factor for the site.

Site 1 (Stadium - N)	Mon (4/28)	Tues (4/22)	Sat (5/3)
Morning (8-10 AM)	Hannah 4/28	Hannah 4/29	
Mid-Day (12-2 PM)	Hannah 4/28	Mar 4/22	Melaina 5/3
Evening (4-6 PM)	Elliot 4/21	Melaina 4/22	Hannah 5-3

Site 2 (Stadium - CN)	Mon (4/28)	Tues (4/22 & 4/29)	Sat (4/26)
Morning (8-10 AM)	Hannah 4/28	Hannah 4/29	
Mid-Day (12-2 PM)	Hannah 4/28	William 4/29	Hannah 4/26
Evening (4-6 PM)	Elliot 4/21	Melaina 4/29	Melaina 4/26

Site 3 (Stadium - Plaza)	Mon (4/21 & 28)	Tues (4/22)	Sat (4/26)
Morning (8-10 AM)	Mar 4/28	Mar 4/22	
Mid-Day (12-2 PM)	Elliot 4/21	Mar 4/22	Hannah 4/26
Evening (4-6 PM)	Elliot 4/21	Melaina 4/22	Melaina 4/26

Site 4 (Stadium - CS)	Mon (4/21 & 28)	Tues (4/22 & 4/29)	Sat (4/26 & 5/3)
Morning (8-10 AM)	Mar 4/28	Mar 4/22	
Mid-Day (12-2 PM)	Elliot 4/21	William 4/29	Hannah 4/26
Evening (4-6 PM)	Elliot 4/21	Melaina 4/29	William 5/3

Site 5 (Stadium - S)	Mon (4/28)	Tues (4/22 & 4/29)	Sat (decide the specific date)
Morning (8-10 AM)	William 4/28	Mar 4/22	
Mid-Day (12-2 PM)	Elliot 4/21	Mar 4/22	Melaina 5/3
Evening (4-6 PM)	Elliot 4/21	William 4/29	William 5/3

Table 4-1: Observation Time Table

The design and formatting was subject to SDOT's preference. When learning about how to use the PowerBI software, our group definitely concurred with Patrick Perdle's definition of it being an "extremely powerful," way to present data. To choose the variables shown on each graph, we chose the most compelling figures to display that show relation with each other, i.e. gender & time of day, gender & type of transportation, age & type of transportation, etc.

Limitations

Some of the limitations we faced included the one-week long observation period which was hard to balance with classes and prior commitments. This was the largest site to cover with 5 separate observation areas which made it hard to get accurate staying and moving counts in the hours leading up to a Mariners baseball game or other event at Lumen Field or WaMu Theater. Additionally, it was difficult to know how to classify vendors setting up street booths - are they counted as staying or moving, are they pedestrians and also motorized users or are they just not counted? We ended up counting all vehicles, even deliveries for vendors, and only counting the people who visited the establishments as staying. The influence of sporting events on the space cannot be overstated as in a matter of 15 minutes the crowd can go from a trickle of people to a flood that is too numerous to count. Additionally, while the perceived age categories were broad, it was difficult to differentiate between the 5-14 and 15-24 age groups at times. We also saw some limitations with perceiving gender without resulting to gender essentialism - where do you draw the line on how masculine or feminine someone is presenting? Finally, it does not appear that our in-app notes were available after the data collection for future reference.

Public Life Assessment

Summary of Key Findings

The highest pedestrian counts were observed in Central North, with 1,602 on weekdays and 3,966 on weekends. This trend indicates a significant increase in pedestrian and shared mobility activity during the weekends compared to weekdays. Notably, weekend evenings were the busiest time, with a vast majority of those counted being pedestrians.

Across all areas, the majority of observed individuals were between the ages of 25 to 64 years. However, weekends also saw a notable increase in the number of children and teenagers. In terms of weekday versus weekend activity, Occidental North had more similar counts, while Occidental South displayed the most contrasting numbers.

During the weekdays, the highest number of people lingering was observed in Occidental Central South. The main activity they engaged in was standing, and the majority presented as masculine. The most commonly observed behaviors included sitting (commercial, informal, or public), standing, and leaning. The use of commercial seating was particularly prevalent in the Occidental North and South sites, likely due to the abundance of private outdoor seating areas provided by restaurants in those areas.

North

The north area is directly next to an arterial and saw the highest motorized counts, but had an influx of pedestrians in the hours leading up to a Mariners game, usually on weekend evenings.

This site had the least difference between weekdays and weekends, allowing us to infer a steady count at all times. This was surprising, as it was next to the highest counted site - Central North.

Also of significance was the proximity of the North area to the adjacent construction site, During our observation, the same construction workers crossed the line multiple times. Depending on the total duration of the construction project, this could be considered normal or an anomaly, Also of note is that the site hosts and is in proximity to apartment buildings. One resident of said apartments is a wheelchair user who crossed the line of observation multiple times while walking his dog; this man accounted for all of the wheelchair mobility counts in this area.

Central North – CN

During the study period, Central North had the highest activity count out of all 5 sites, reaching 3,966 people observed on the weekend. The graphs below show this breakdown in detail. Interestingly, the number of motorized and pedestrian movements recorded on weekdays was relatively equal, particularly in the afternoon. However, on weekend afternoons, we observed a significantly higher number of pedestrians.

Central North resembled other sites in that most individuals observed were between the ages of 25 and 64 years old. Notably, there was a higher number of young adults aged 15 to 24 on weekends compared to weekdays. This increase is likely attributed to sporting events, as many young adults attended with their parents and other adults. A high number of seniors above the age of 65 were also counted on weekend afternoons. During the weekdays, young adults were more commonly observed in the afternoons.

In Central North, a notable contrast was observed in the data regarding stationary activities and gender. During weekdays, all individuals observed in this area presented as masculine. They were seen sitting, with many using electronic devices. Public seating, such as the picnic tables near the small grass patch by the entrance to Lumen Field, was predominantly utilized. This location offers less private seating compared to the southern strip of Occidental.

A noteworthy trend emerged with feminine-presenting individuals, who were found to linger in the area more frequently on weekends than on weekdays. During weekends, people were more likely to interact and socialize with one another. Those staying in Central North were observed talking, smoking, riding scooters, or waiting in line.

Plaza

Westward adjacent to Occidental Avenue the plaza is used as a crossing point several times over compared to those who stay. With a maximum number of three people partaking in a singular activity (using an electronic device) while the second highest number is two, either being smoking or eating, and all other categories with only one to zero recorded instance. This data reveals that the plaza during typical hours serves no particular purpose or community. The data in the moving mode category tells that throughout the day it gets busier the later it gets and the typical passerby is a working age man.

Central South – CS

In Central South, there was a stark contrast in the total number of pedestrian counts during the weekdays, with the highest number of pedestrians and the least number of motorized travel during the evenings. During the mornings and afternoons, the numbers of motorized and pedestrian travelers were more similar. Weekends were more popular overall, with the highest counts for pedestrians, bicycling, shared mobility, and microbility. The breakdown of moving modes by time of day for weekdays and weekends is shown in the graphs below.

It was not surprising to find that most of the observed individuals were aged between 25 and 64 years old on both weekdays and weekends. However, there was more age variability during the weekend afternoons and evenings. During these times, a small number of young adults aged 15 to 24 and children aged 5 to 14 were present, while there was a slightly higher number of seniors over 65 in the afternoons.

In line with observations from our other sites, over 50% of the individuals observed were masculine presenting. Notably, the majority of people staying in Central South were also masculine presenting, both on weekdays and weekends. Central South had the highest number of visitors engaging in eating and drinking activities during both weekdays and weekends, likely due to the abundance of outdoor street eateries in the area. During the weekends, young adults aged 15 to 24 were frequently seen socializing, eating, drinking, and waiting in line.

South

In the south area, there were more cyclists and micro mobility users in the mornings compared to the afternoons and evenings. Shared mobility increases

in the evenings and there is also less vehicular traffic in the evenings, but more pedestrian traffic during the same time. The south site had the lowest number of people counted on a weekday, but the highest counts on the weekends. This site also showed the biggest difference between weekdays and weekends. There appears to be a significant correlation between higher counts and Mariners game days, or events at Lumen Field. The space is significantly more activated in the hours leading up to an event and on weekends. In the right of way, there are temporary vendor booths and streateries set up for event days, providing a space for people to stay and congregate in what is otherwise a thoroughfare.

Key Recommendations

Our recommendations focus on enhancing the pedestrian experience on Occidental Ave. The space currently lacks basic infrastructure, which limits the pedestrian feel of the space. The first recommendation is to improve sidewalk conditions and fill the gaps to create a continuous path. Along with this, installing lighting to bring more comfort and safety to the area. We also recommend expanding the seating options, partnering this with local business involvement, to create a space for gathering and lingering. Also, many parts of the street, especially the plaza, lack shading and could be uncomfortable for people passing through. These improvements, with considerations to slow down car traffic, will elevate the space and create a more inviting area for pedestrians.

Proposed Vision

Using a model and renders from Elliot's master's thesis study the proposed expansion of the existing pedestrian corridor (within the plaza area). Noted from the automobile category from the various movement sections cars and buses pass through the northern section more than the southern half of Occidental Avenue. Changing this section of the street into a pedestrian corridor allows for the continued use of emergency, construction, and vendor vehicles. However, it creates a truly spectacular experience allowing foot traffic, cyclists, and those with disabilities ease of movement to either stadium. Additionally, pocket parks, plazas, and new buildings could create a more permanent community.

Conclusion

Activity on Occidental ave varies based on weekday or weekend, with event days surging with activity. We saw the most notable activity at Stadium Central North with the highest count at 3,966 users. This area also had the highest number of seniors and shared mobility. Stadium North also had reportedly high numbers of foot traffic. Stadium Central South has the highest number of young adults, possibly due to the green space available. We also noticed the plaza had a low number of people lingering in the space, which we believed was due to the lack of shade and seating. Lastly, the South Zone had the highest weekend activity in comparison to week days due to the vendors in the area. To conclude, Occidental mainly serves as an event space, and lacks the necessary infrastructure to sustain pedestrian use for everyday life.

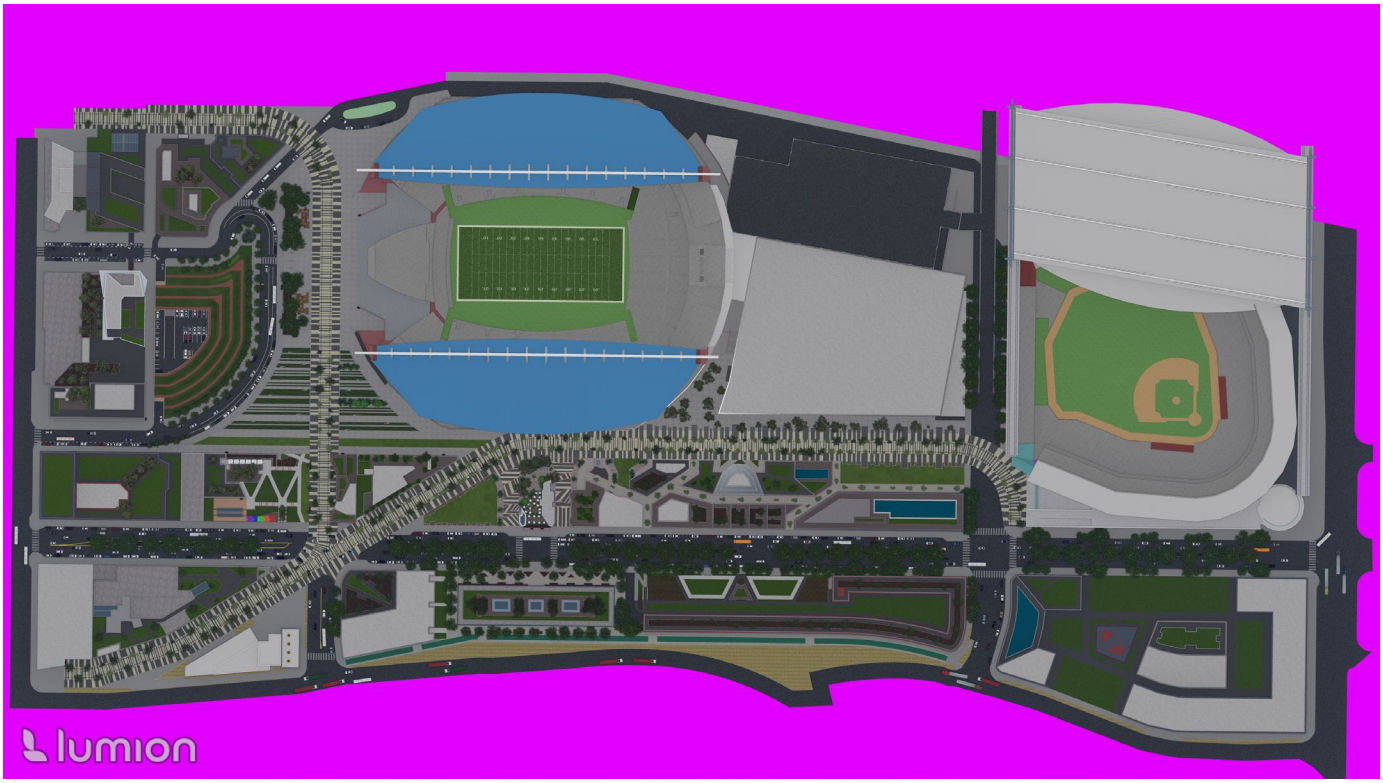


Figure 4-4: Occidental Ave - Proposed Vision Overview; Source: Elliot Falinski

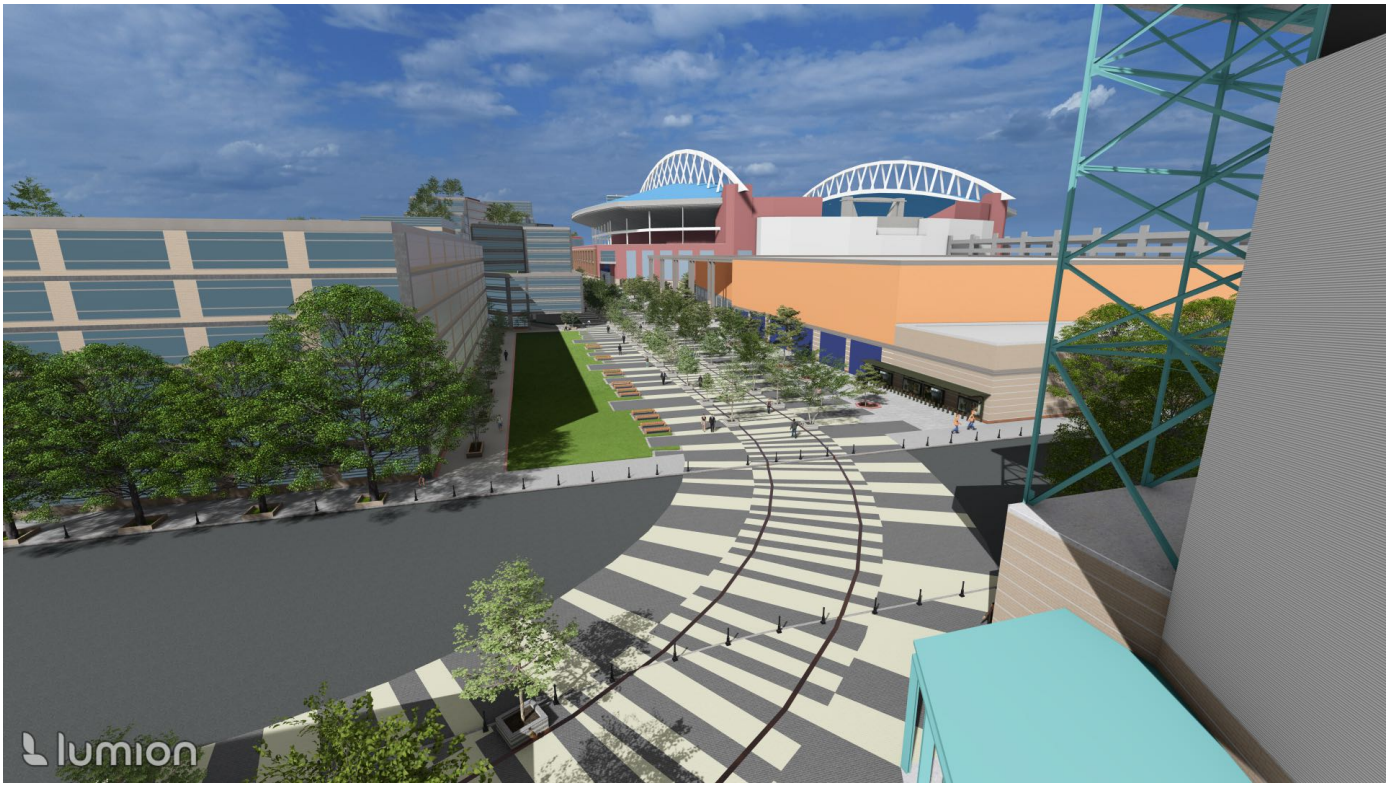


Figure 4-5: Occidental Ave - Looking North from T-Mobile Park; Source: Elliot Falinski

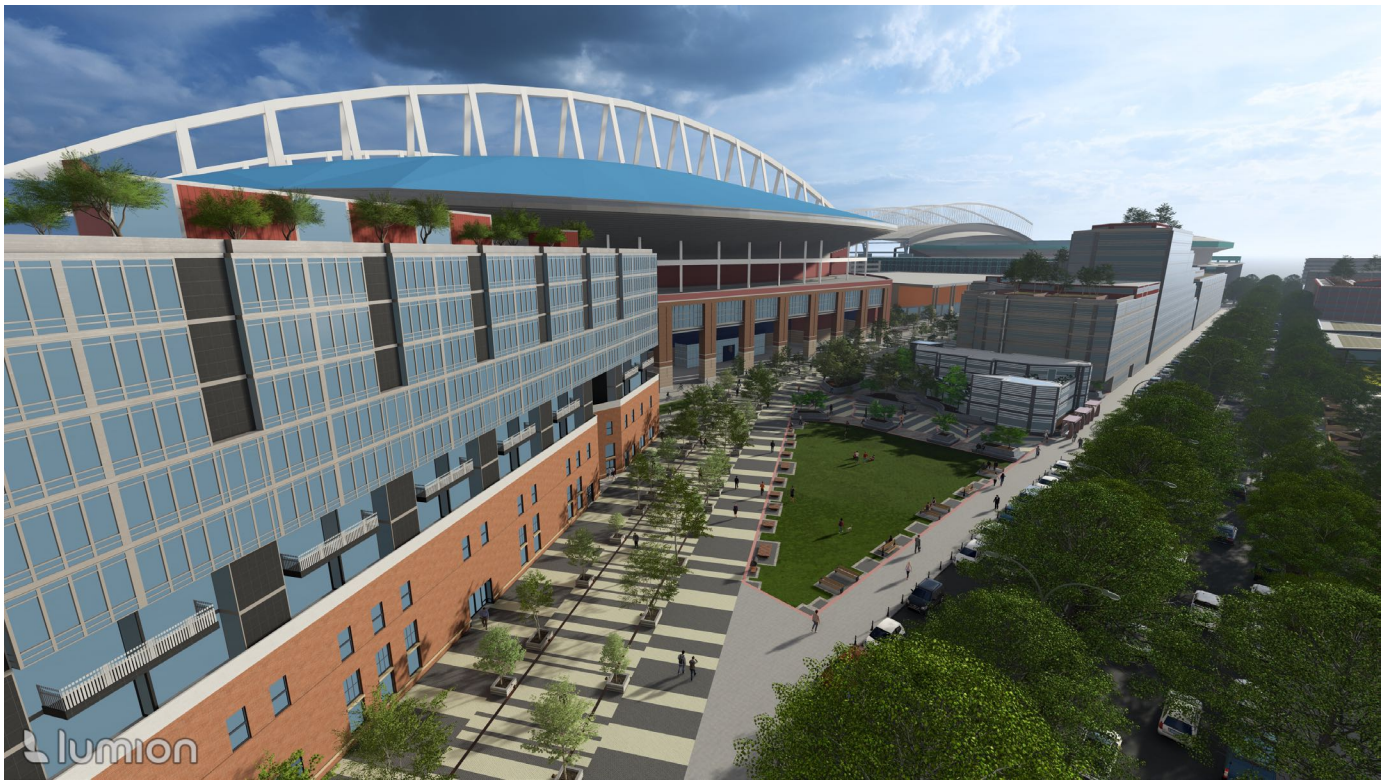


Figure 4-6: Occidental Plaza; Source: Elliot Falinski

Figure 4-7: Pedestrianized Occidental Ave - Looking South to T-Mobile Park; Source: Elliot Falinski

PIKE STREET

CHAPTER 5

Introduction

This report presents a comprehensive analysis of public life field data collected by the Pike Street Observers (University of Washington graduate students engaged in Dr. Rachel Berney's CET 586 class, focused on pedestrian and rolling mobility design and characteristics) for the Seattle Department of Transportation (SDOT) along the Pike Street corridor between 1st Avenue and 3rd Avenue—an artery that will form a critical pedestrian spine during the 2026 FIFA World Cup and other forthcoming civic events. Guided by the team's approved work plan, the study pursues three inter-related objectives:

1. Quantify pedestrian volumes and other multimodal characteristics across different times of day and days of the week, establishing a baseline against which SDOT can measure future growth and street-design performance.
2. Document streetscape conditions and public-realm behaviors; from seating choices to spontaneous social interactions—in order to pinpoint design features that either invite or inhibit lingering.
3. Detect temporal patterns that clarify how the corridor's role shifts from weekday commute conduit to weekend festival street, information essential for calibrating curb-management, event programming, and safety resources ahead of large-scale gatherings.

By translating observations into actionable insights on flow, linger activity, demographics, and comfort/use of public space, the analysis equips SDOT and other agencies with an evidence-based roadmap for extending Pike Place vibrancy outward, safeguarding pedestrian capacity, and crafting a welcoming experience for locals and global visitors alike.

This report utilizes techniques for studying public life data, developed in large part by Gehl Architects and pioneered by agencies such as SDOT in the years leading up to the COVID pandemic. This methodology continues to evolve, but generally public life studies seek to understand (SDOT, 2018):

- Who is using public space?
- What types of activities are present in public space?
- How social is the public space?
- To what degree is available pedestrian infrastructure provided in public space being utilized?
- To what degree do people engage in commercial activity in the public space?

More information can be found at https://www.seattle.gov/transportation/projects-and-programs/programs/urban-design-program/public-life-program.

Figure 5-1: People enjoying public life on a successful pedestrian street (Photo credit: Justin Belk)

Context

Study Area Description

Located between Seattle's primary north-south transit spine and its historic retail corridor/market, this Pike Street study area captures a uniquely intense slice of public life in downtown. The area, shown to the right, is a two-block area divided into four subareas for more detailed study - the 100 block (divided east/west shown in the top of Figure 5-2) and the 200 block (to be studied by the north face and the south face, split by Pike Street itself as shaded in the bottom of Figure 5-2). Each of the subareas (or sites) is bisected by the north/south screens lines across which movement volumes were counted (the 100 block as two separate screens for the west and east portions individually and the 200 block has a single screen used by both the north and south block faces (or sites).

This study area is within easy walking distance of Westlake Station, the Pike-Pine retail district, and the waterfront stairways that descend toward the new Elliott Bay promenade. Surrounding land use is a dense mix of mid-rise offices, ground-floor convenience retail, quick-service restaurants, and transit facilities, with four King County Metro RapidRide stops flanking the curb lanes on 3rd Avenue. Sidewalks range from roughly 14 ft on the northeast corner—constrained by building setbacks—to more generous 18 ft frontages on the southwest side where Pike Street terraces gently downhill.

Street trees appear intermittently (average spacing ≈40 ft), and shallow planting strips protect segments of the south curb from vehicular encroachment. Besides one curb cut on the north face of the 200 block to access a parking garage, there are two curb cuts in Pike Street between 2nd and 3rd Ave and also between 1st and 2nd Ave to serve the alleyways that bisect the city blocks.

Figure 5-2: Study Area (Source: SDOT)

The posted speed along 3rd Avenue is 25 mph, yet frequent bus stops and two signalized crosswalks naturally calm traffic. The south end is bounded by an all-pedestrian signal phase connecting to Pike Place Market. Together, these spatial and operational conditions create a high-volume pedestrian environment ideal for serving both continuous through-movement and lingering street-level activity.

Study Area Information

The following table presents key information about the sites, including sidewalk widths, posted speed limits, curb cuts, and planting details. Additionally, the accompanying figures illustrate the street layouts and include photographs of the study area.

Table 5-1: Inventory of Physical Attributes

	Pike - 100 W	Pike - 100 E	Pike - 200 N	Pike - 200 S
Sidewalk width (ft)	32	24	11.2	11.4
Tree canopy present / #	Yes / 4	Yes / 4	Yes / 5	Yes / 3
Planting strip width / type	No traditional strip; separated tree wells (8 ft) & movable planter pots*	No traditional strip; separated tree wells (8 ft) & movable planter pots*	2-3 ft vegetated bike-lane buffer with ground plantings	4-6 ft planting strip
Posted speed	NA/Pedestrian street (unposted)	Shared Street Design (unposted)	25	25
Curb cuts / driveways (#)	1	1	2	1

Method note: measurements gathered via Google Maps (and Google Earth) Measuring tools; canopy counts based on ≥4" DBH trees within curb-to-building frontage.

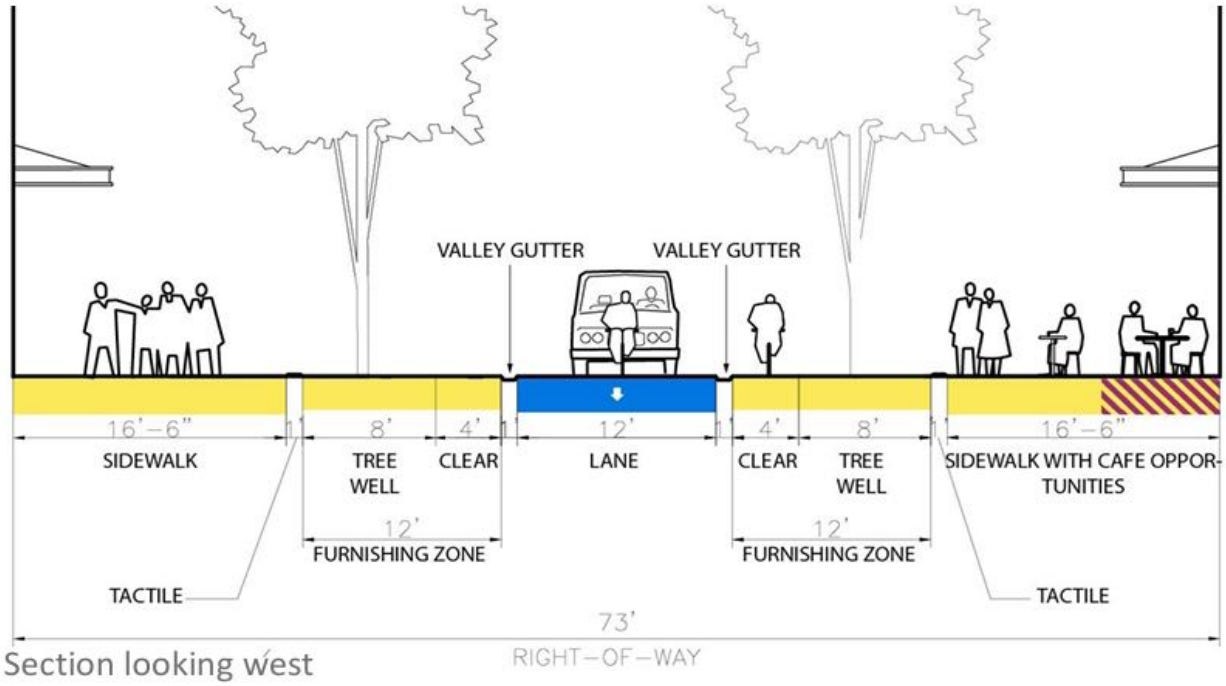


Figure 5-3: Pike 100 Block Typical Section (Source: SDOT/Waterfront Seattle)

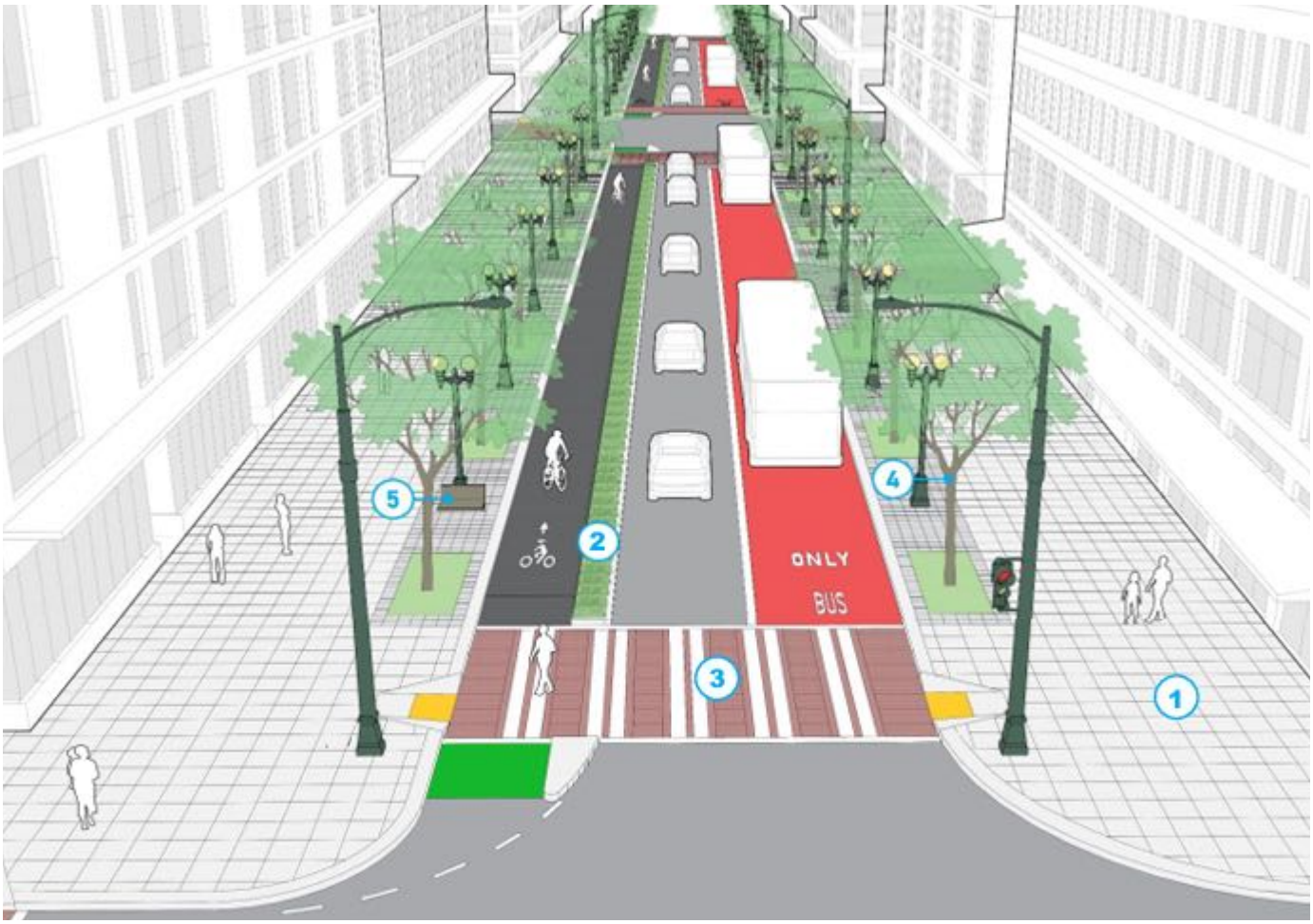


Figure 5-4: Pike 200 Block Typical Section (Source: SDOT/Waterfront Seattle)

Figure 5-5: Pike 100 Block -- Looking West (Photo credit: Justin Belk)

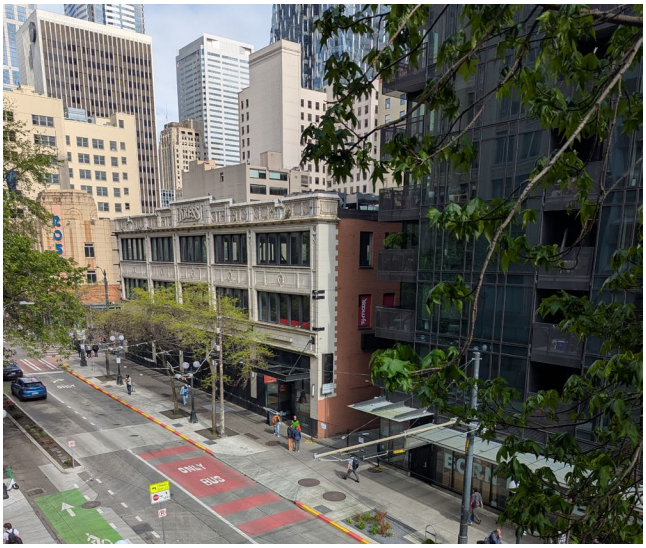


Figure 5-6: Pike 200 Block -- Looking East (Photo credit: Justin Belk)

Figure 5-7: Some Notable Land Use Mixes in Study Area Vicinity (Source: SDOT)

Local Land Use and Nearby Attractors

Characteristics of the greater downtown area surrounding the study area are described earlier in this section, but more information on the land use, right-of-way amenties, and activities adjacent and within the study area is discussed briefly here.

There is a variety of businesses and land use activity along the facade of this public space as indicated in Figure 5-7 above.

In addition to Target anchoring the 100 block, smaller retail stores are clustered on the western end near Pike Place Market. And the 200 block has other name-brand retail such as KUHL (midway) and Walgreens (on the eastern edge).

West of the Walgreens is a multi-story parking garage that provides the only curb cut in the study area that is not public alley access. The remaining frontage to 200 block east of KUHL includes the Spice King restaurant and some building vacancies.

There are more restaurants and eateries on the 100 block (only 1 vacancy) where they benefit from either their own outdoor seating and/or public seating that is more plentiful the closer one gets to Pike Place Market.

Above some of the storefronts are offices and limited overnight/sleeping occupancy, such as the Green Tortoise Hostel.

Overall, the two blocks have an abundance of land uses represented as well as capacity for more commercial activity.

Within the boundaries of the curb, the two streets themselves have seen a signficant amount of investment from the City of Seattle and its partners.

Both blocks have benefitted from ongoing improvements related to the Pike Pine Streetscape and Bicycle Improvement Project/Renaissance (Packer, 2017 & SDOT/Waterfront Seattle, 2021). The 200 block represented a textbook multimodal street, very much in line with SDOT's vision (as shown in Figures 5-5 and 5-6 above) and National Association of City Transportation Officials (NACTO) guidance.

And even though the 100 block has lost its bicycle lanes, the street has been newly rebuilt into a "People Street", with half of it fully closed to motorized vehicles (see Figure 5-8 below). In addition to the hardscape pedestrianization, the 100 W block benefits from frequent programming staffed by the Downtown Seattle Association (DSA).

This programming offers a mix of passive amenities (e.g. more tables, formal seating, 'fun seating'/ interactive seating, and 'connect'4'in-a-row and other games, etc.) as well as active programming (e.g. activities, music, etc.).

Anecdotally, this mix of multimodal and pedestrianized streets, retail fronts, and Pike Place Market access encourages a high degree of pedestrian intensity and offers a vibrant tourism and shopping experience while still serving local and commuting activities well.

More information about the Pike Pine Renaissance can be found at https://waterfrontseattle.org/waterfront-projects/pike-pine-renaissance.

Figure 5-8: Pedestrianization and active programming for Pike 100 - W (Photo Credit: Justin Belk)

Public Life Assessment

Data Collection and Processing

Field work followed the protocol outlined in the work plan. Two-person observer teams used SDOT's Public Life mobile app to log every pedestrian, stationary person, vehicle, and curb activity that crossed a predefined "screen line". Observers completed eight two-hour shifts—08-10 AM, 12-2 PM, and 4-6 PM on Monday and Tuesday, plus Saturday 12-2 PM and 4-6 PM slots—ensuring coverage of both commute peaks and weekend retail periods. Each pair rotated roles (primary counter vs. quality checker) midway through the shift; this built-in redundancy let any tally mismatches be reconciled immediately on-site and flag questionable entries inside the app. After each session the raw .csv export from the app was appended to a master Excel workbook where simple data-integrity checks (duplicate timestamps, blank mode fields, out-of-range posture codes) were run. Cleaned tables were then pulled into Power BI, where we created data analysis expression (DAX) measures for hourly volumes, linger factor, and categorical proportions, and built interactive visuals that drive the descriptive statistics and temporal-trend analyses presented in the sections below.

Moving/Flow Metrics

To calculate the total number of people moving per hour, we used the "subject_id" column, which contains data related to "Moving Mode" and "Perceived Gender". It is worth mentioning that all subject IDs in this dataset are unique.

To compute the total number of people staying per hour, the "subject_id" column was also used. However, in this case, the data for distinct IDs were filtered to account for each stationary person potentially having multiple staying records. Individuals were only counted once. The results are presented in the following figures.

As can be seen from Figure 5-9 below, both afternoon and evening moving counts were higher than mornings, with the peak occurring around the midday/afternoon 12-2 PM period. Additionally, the 100 block of Pike Street experiences nearly double the moving volumes of the 200 block. What is not shown is weekend period volumes, but they were

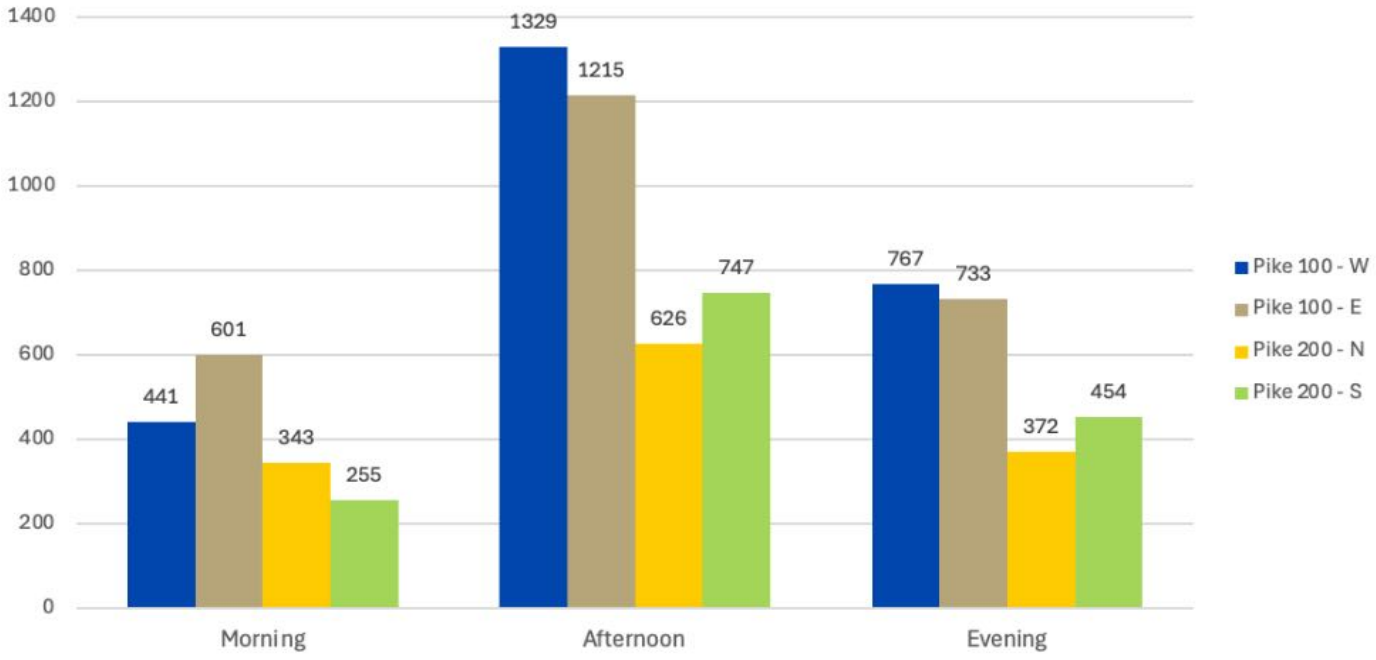


Figure 5-9: Moving Volumes per Time of Day (Weekday) by Site

more consistent than the weekday fluctuations and matched the volumes of weekday evening periods.

Weekend volumes:

- 700-800 people per hour for 100 block of Pike;
- 300-400 people per hour for 200 block of Pike.

The contrast between each block underscores how Pike Place Market's draw and the dense cluster of cafés, souvenir shops, and transit stops near 1st Ave anchor pedestrian demand at the west end of the corridor. In other words, traveler density on Pike Street is less a uniform "corridor effect" than a gradient with a significant drop occuring once a pedestrian crosses 2nd Avenue.

Additionally, see Figure 5-10 below illustrating the predominance of pedestrian mobility over other modes. Table 5-2 focuses on the quanitity of non-pedestrian modes.

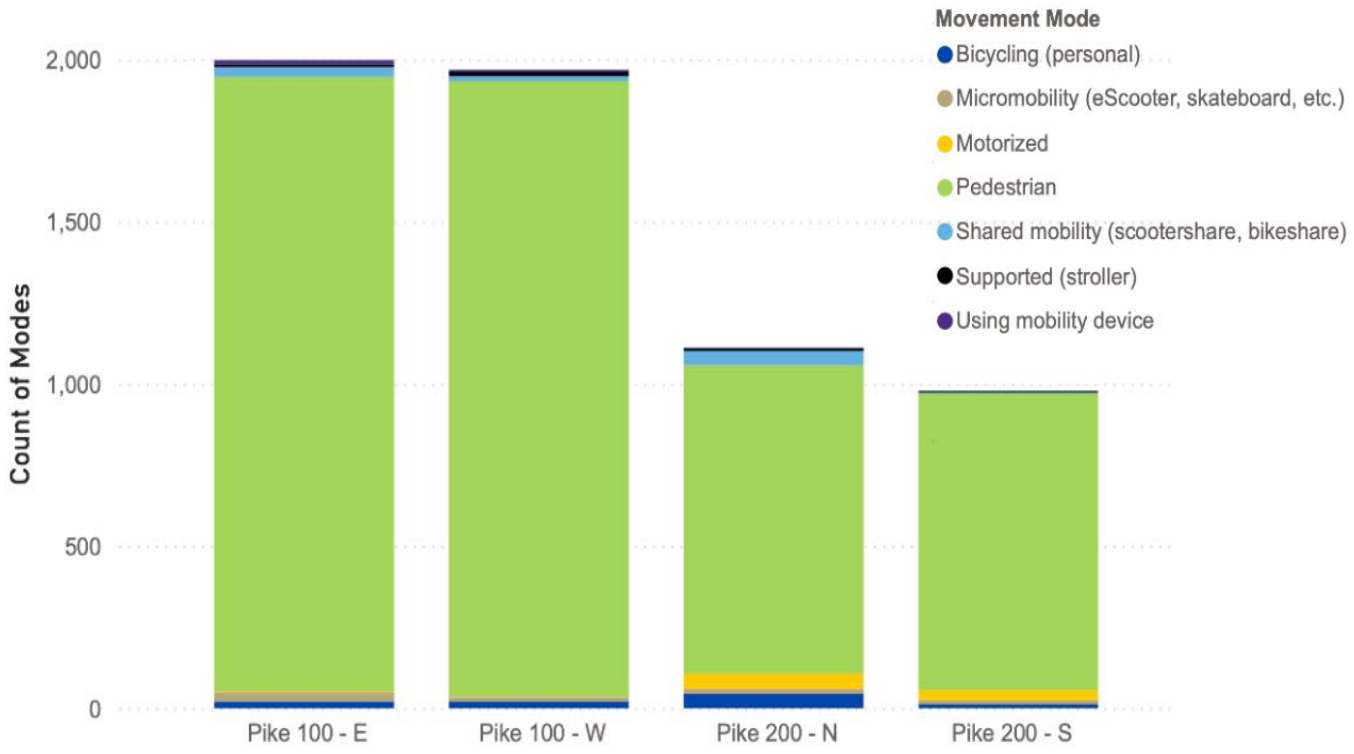


Figure 5-10: Moving Volumes by Mode (Weekday) by Site

	Shared Mobility	Micromobility	Bicycle	Total (non-pedestrian)	All Modes
100 - W	11	10	16	37	1500
100 - E	23	22	15	60	1530
200 - N	32	11	34	77	743
200 - S	2	9	10	21	794

Table 5-2: Moving Volumes by Mode (Weekday) by Site

Staying/Activities Metrics

Overall, the majority of individuals staying on every block face were standing, but at Pike 100 - W there was a large number of people spending time sitting as well. Most of these individuals were sitting on public seating. There was also a measurable number of individuals that sat both formally and informally on the Pike 100 East block. The abundance of seating and other amenities on the 100 block enables more non-standing postures than on the 200 block where no formal seating is provided.

In addition to posture, further differences among each site can be seen across demographic categories and in what activities people are engaged.

Notably in Figure 5-11, social engagement was higher on the 100 block compared to the 200 block, and again this can be attributed to the increased pedestrianization and activation on the 100 block. Chance encounters were more likely to occur where people are more encouraged to stay.

The differences between each block is further illustrated by the geographic distribution of staying postures as show in Figure 5-12.

The next page offers further discussion on how these behaviors are interrelated.

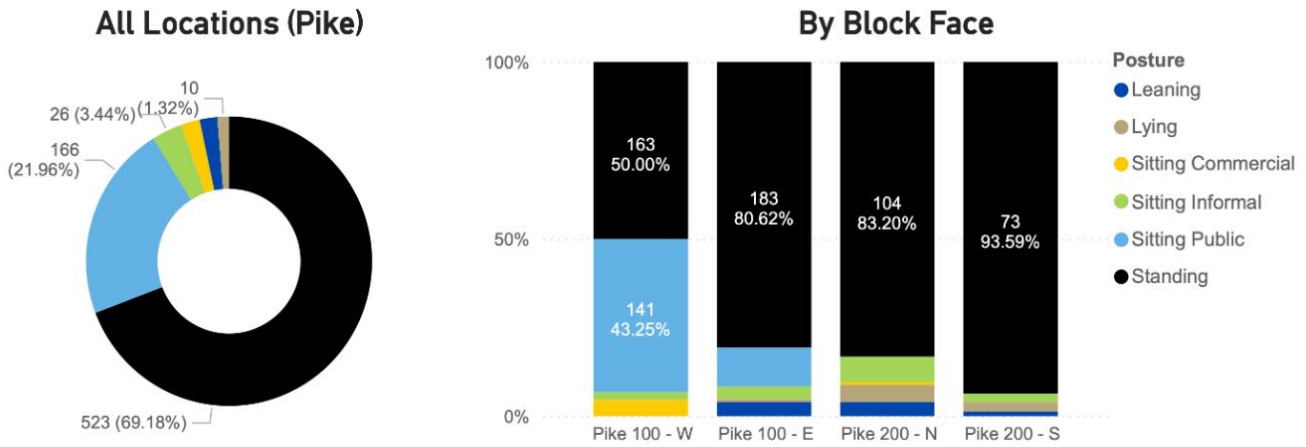


Figure 5-11: Staying Postures Overall and by Site

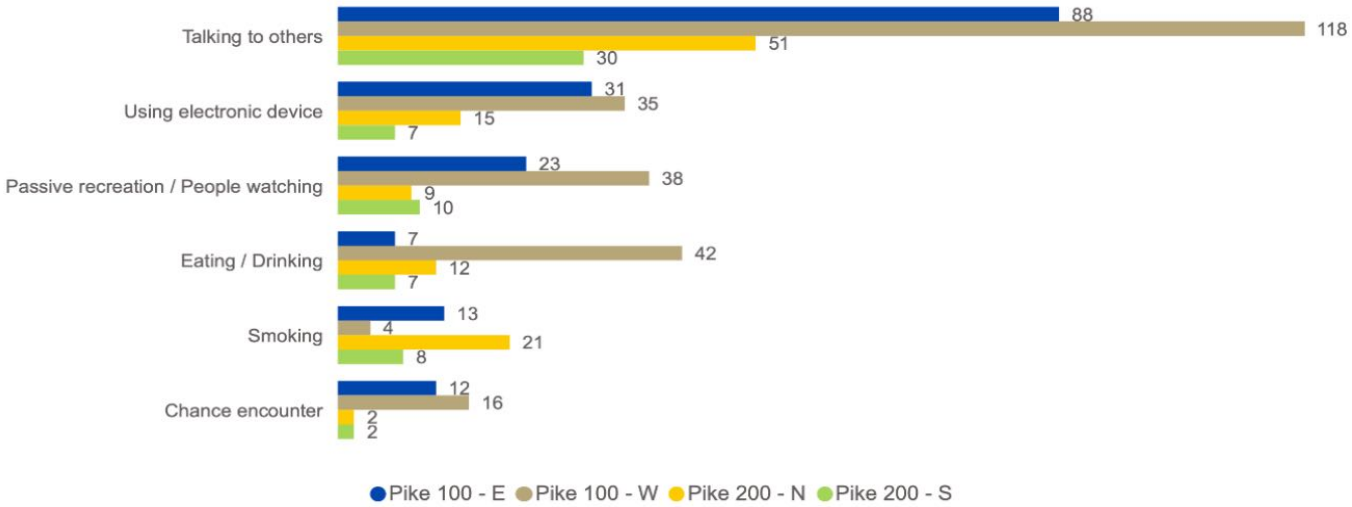


Figure 5-12: Staying Activities by Site

The distribution of staying data shows that there is a high concentration of people sitting within the public seating provided in the west side of the Pike 100 block (example in Figure 5-13) and at the east side of the Pike 100 block in front of the Target (benches only). Where there is less seating provided along the northeast corner of the Pike 100 block, there is considerably less staying activity.

On the 200 block, there is comparatively little staying activity. There is no public seating provided on this block so most of the staying activity is standing. However, there were a few individuals sitting, leaning, or lying down on this block. There is also a high concentration of people standing and talking with others on the northeast corner of the block.

This disparity in seating amenities likely contributes to observed demographic differences as well. Gender differences are shown in Figure 5-14. Even though movement data indicated women tend to outnumber men on the weekends, it appears that feminine presenting individuals are less likely to stay at any time of the week.

Figure 5-13: Typical Public Seating (foreground) and Commerical Seating (background); (Photo credit: Justin Belk)

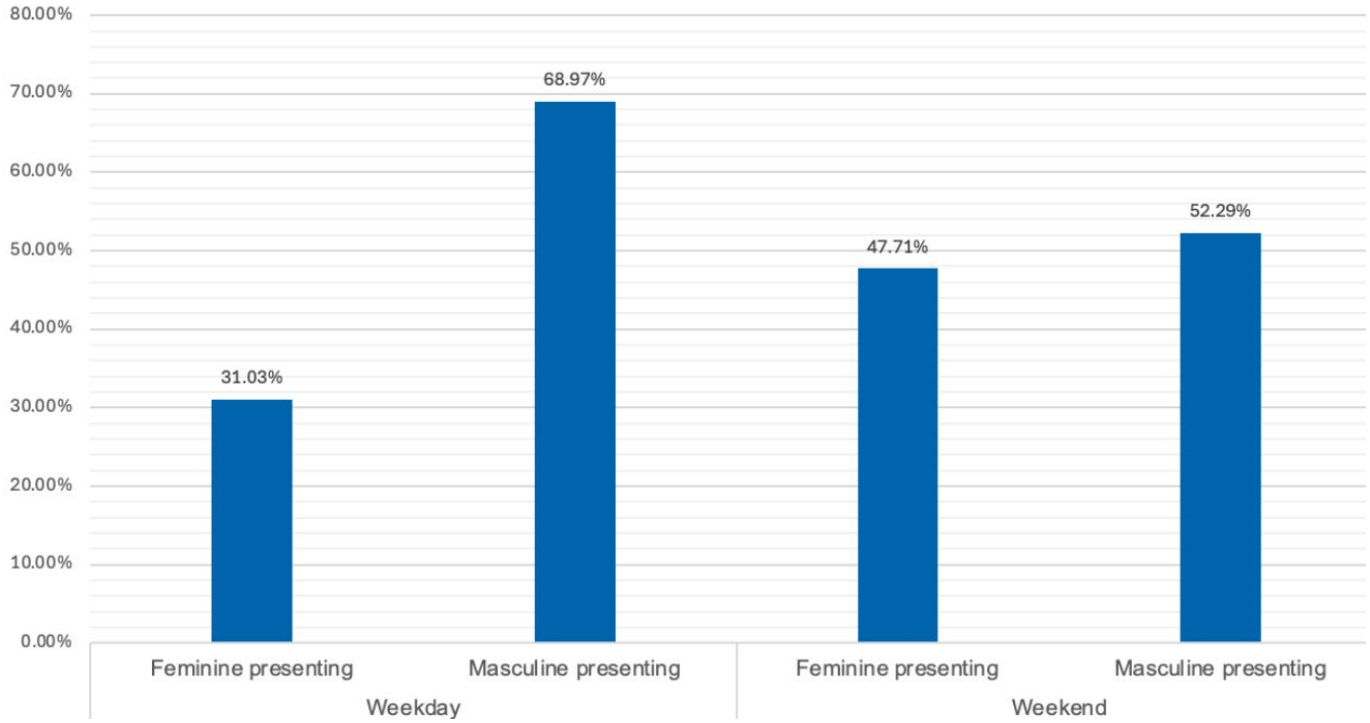


Figure 5-14: Gender Differences Among Staying Individuals

Further, Figure 5-15 shows the proportion of staying at each site by age group. The oldest age group is better represented at Pike 100 - W where sitting is encouraged. Similarly, the younger age groups are more likely to be present where seating is provided.

This encouragement to stay can also inform the trends. While "talking s" was the primary staying activity on every block face in the study, Pike 100 - W was still overrepresented when normalizing for volumes.

Additionally, Pike 100 - West was unique in the number of people that were eating and drinking. This is not only due to the increased restaurants, but also the due to the public seating and tables provided and the outdoor private seating. Passive recreation was also much more common in areas that had public formal/informal seating. This seating also allowed for more opportunities for chance encounters.

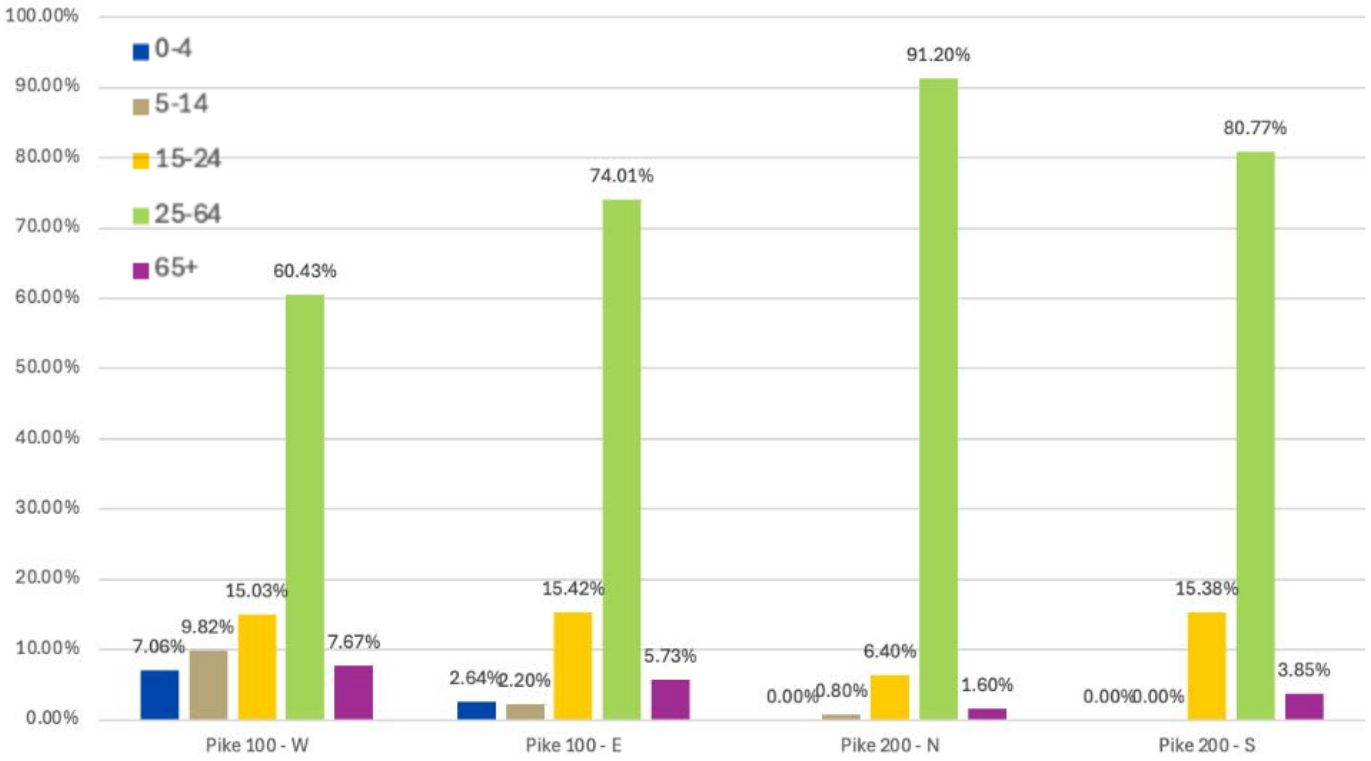


Figure 5-15: Staying by Age by Site

Standing Locations

Sitting Commercial (Purple) and Sitting Informal (Green) Locations

Sitting Public Locations

Leaning (Orange) and Lying (Yellow) Locations

Linger Factor

Linger factors calculated on Pike were relatively low when compared to 8% in the downtown core from SDOT's 2018 public life study. However, the hourly average of people staying was quite high. The low linger factor is more a result of the exceptionally high hourly moving counts.

Table 5-3: Linger Factor by Site (and Total)

	Moving per Hour	Staying per Hour	Linger Factor
Pike 100 - W	1500	122	8%
Pike 100 - E	1530	85	6%
Pike 200 - N	743	47	6%
Pike 200 - S	794	29	4%
Pike Average	1142	71	6%

While the numbers can tell a trend over time, they do not provide the full story. Observations make it clear that the 100 block has reasons to linger and the 200 block less so.

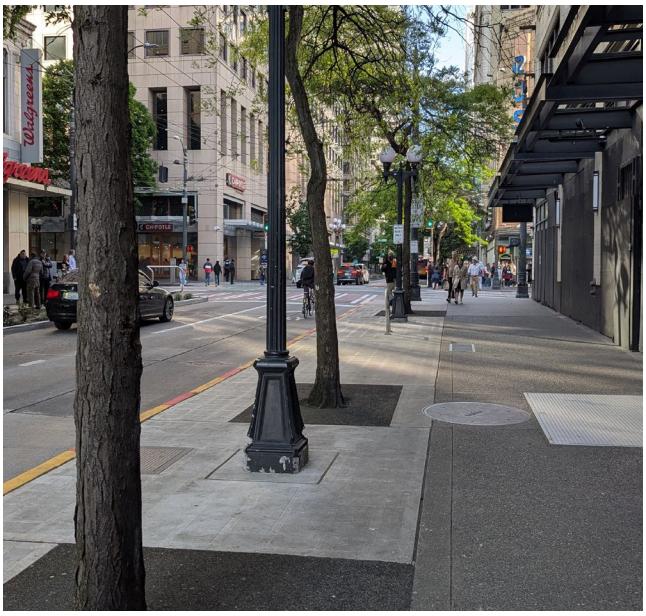


Figure 5-16: Lack of lingering activity at the 200 block (except some standing crowding at Walgreens) (Photo credit: Justin Belk)

Figure 5-17: Lingering activity at the 100 block (Photo credit: Justin Belk)

Conclusion & Recommendations

A Tale of Two Blocks

The study affirms a sharp west-to-east attenuation of public-life intensity. Every variable—flow volume, linger factor, seated activity, cultural busking—peaks on the Pike 100 sidewalks and many fall by roughly half one block uphill. This gradient is not merely a function of distance from the waterfront; it is amplified by frontage quality and program:

- Pike 100 offers nearly continuous active façades, generous 24–32 ft sidewalks, benches, and panoramic views that support both movement and staying.
- Pike 200 retains the same ROW width, yet office loading bays, blank walls, and a seat-less furnishing zone discourage discretionary lingering, relegating the block to a commute-and-queue corridor.

Implication: Extending Pike Place vibrancy eastward requires more than sidewalk resurfacing; it demands active ground floors, micro-retail, and seating elements that incentivise people to decide to spend time.

Walking and Complete Streets

Walking represents > 94 % of all movements in every time slice, underscoring Pike Street's role as Seattle's signature pedestrian spine. Nonetheless, other modes matter strategically:

- Personal bikes and shared scooters spike at the 2nd Ave protected bike-lane interface, hinting at suppressed east-west demand.
- Motorised two-wheelers and delivery vans appear in low numbers but cluster temporally (off-hours), shaping curb conflicts.

Implication: Policy should protect an 8–10 ft clear pedestrian way but also formalise micromobility parking east of 2nd Ave. A painted advisory bike lane between 2nd & 1st could absorb scooter users now defaulting to the sidewalk. Or otherwise, commitment to buildout of the bikeways that parallel and complement this demand might be an effective way to shift these conflicts (understanding that pedestrianization removed a key connection on Pike between 1st and 2nd Avenues).

Different Peaks/Different Audiences

This street is trying to be different things to different people, and that is to be expected in a diverse city center. Bimodal peaks are evident: although the weekend peaks are similar to weekday evenings in volume, there are different customers on the weekend versus the weekday, and in turn, there are differences throughout the periods of the weekday itself.

What is more evident and more important to address, is that there is a gap in demographics indicating room for improvement in how everyone is served.

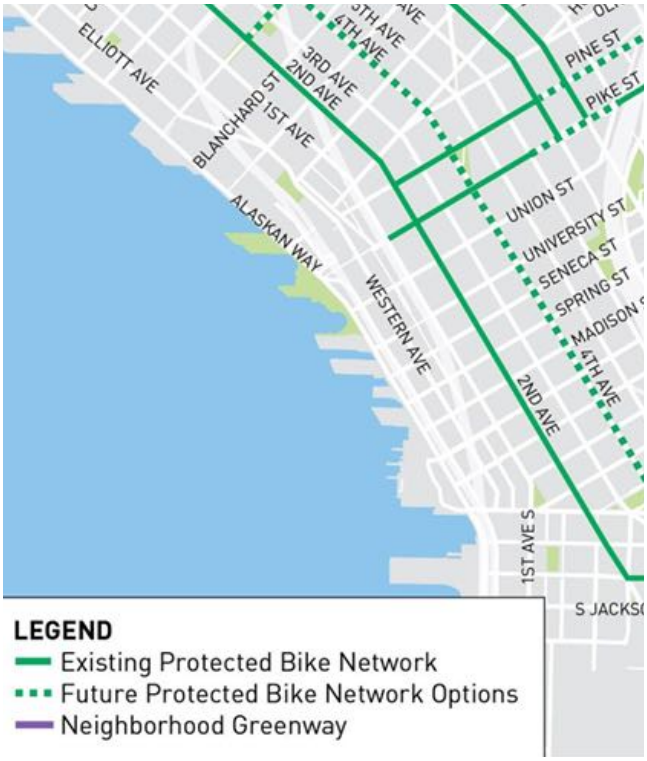


Figure 5-18: Bikeways to/from the waterfront are limited beyond 2nd
(Source: SDOT/Waterfront Seattle)

Gender balance is reasonable overall at certain times of day, and west of 2nd Ave (≈ 48–52 % feminine) it can be equal in general, but east of 2nd Avenue there is a sharp decline in the proportion of feminine-presenting individuals who choose to be there during weekday peaks.

Further, children and seniors constitute a healthy 25 % of weekend flow on Pike 100, yet remain below 15 % uphill—indicating another inclusivity gap.

Implication: Design drivers for these disparities are clear: seating, activation, and perceived safety. Where benches, buskers, and eyes-on-the-street exist, diversity can follow. This reinforces the need for basic amenities like lighting and possibly innovative social-safety interventions that are flexibility and adaptable as this block changes over time.

Recommendation 1 – Staying for all

Provide amentities for staying on the Pike 200 block

Encourage more staying among women, children, and elderly.

There is not a clear way to guarantee the vibrancy of the 100 block and Pike Place itself. It may take time for supportive land use to establish itself given the transitionary nature of the 200 block.

But given the relative success of the pedestrian-friendly and activated spaces towards the waterfront and the coming FIFA World Cup that requires the inevitable focus on areas closer to sports venue for major investment and improvement, there is likely still room to try something for the 200 block of Pike that is both low-cost (and low risk) and effective until more focus and investment comes (Culture Connector Streetcar, for instance).

Some strategically-placed seating that masquerades as public art (or complements public art) could both place opportunities for resting/staying while shifting standing activities out of the way of storefronts and busy corners, optimizing both busy game-day pedestrian flow and documented staying demand (and closing demographic gaps).

There is already a proposed water/wave theme to promote Pike Pine identity (SDOT/Waterfront Seattle, 2021). Evoke the image of cyclists in the protected bike lane riding uphill as a kind of salmon migration upstream and place some marine animal themed furniture (not full benches per se). Playground companies already manufacture whale/fish-shaped seesaws and bouncy seats. Take a note from them to provide spot seating that is playful and speaks to whimsy. This may or may not be effective, but if not, then try another strategy until there are enough restaurants (park food trucks in the fenced off alley curb cuts) again to support outdoor cafe seating and other activated spaces.

Recommendation 2 – Going for all

Provide space for bicycles and micromobility

Given the success and intensity of pedestrian activity on the 100 block, make it clear where bikes and scooters should go while passing through the area.

Also, clearly delineate shared-mobility/micromobility parking/staying zones throughout the corridor.

Limitations

- Observer subjectivity in perceived age/gender.
- One-week snapshot may not capture seasonal variability.
- App GPS drift along canyon formed by tall buildings.
- Seasonality: Data were collected in spring; winter rain and summer festivals could alter patterns.
- Observer bias: Perceived age and gender coding carry ± error; supplement with intercept surveys.
- Dynamic land uses: Future construction at the Pike Pine Renaissance or waterfront overhaul may inflate flows; continuous monitoring is essential

Some of these limitations and the sheer volumes of pedestrians lend themselves to an automated counter solution for further studies.

A well-trained AI solution via a camera with computer vision could both capture multiple mode volumes accurately and also classify behaviors and demographics better than trained human observers.

PIONEER SQUARE

CHAPTER 6

Introduction

The purpose of this Public Life Study is to measure activity in Seattle's public spaces. Seattle Department of Transportation (SDOT) aims to understand the nature and dynamics of people moving through and staying still in public spaces. The study includes collecting data related to the volumes of people, the types of people, location differences, activity differences, and amount of time spent in public spaces in Pioneer Square. Exploring how people use public spaces helps identify opportunities for public space design and activation improvements that would benefit the public.

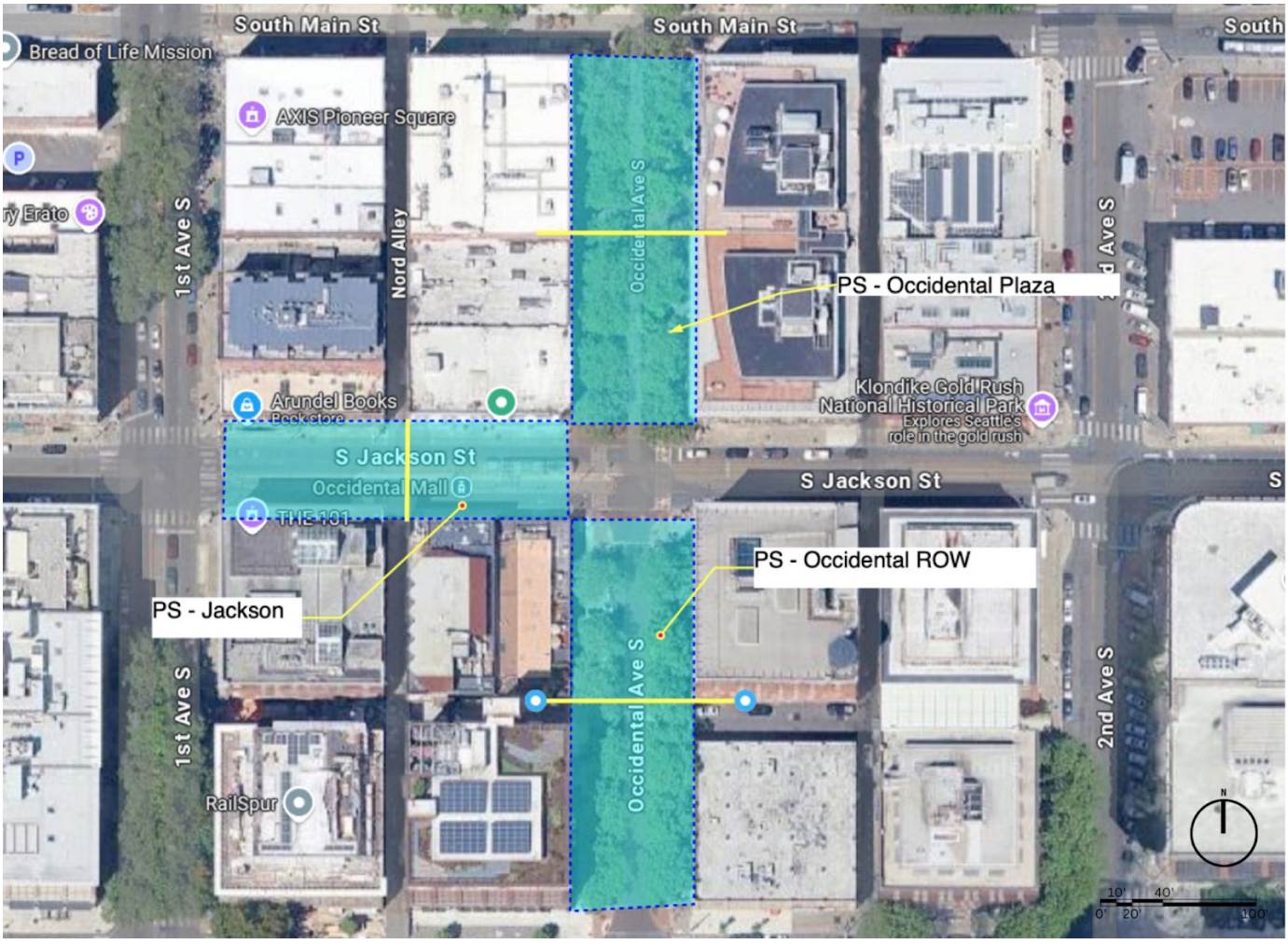


Figure 6-1: Public Life Study Observation Locations; Source: Seattle Department of Transportation

Figure 6-2: View of Occidental ROW
Source: Sarah Whitney

Figure 6-3: View of Occidental Plaza
Source: Sarah Whitney

Figure 6-4: View of South Jackson Street
Source: Sarah Whitney

Pioneer Square is a historic neighborhood located in the urban core of Seattle, WA, known for its pre-1930s architecture, restaurants and bars, art galleries, event spaces, and proximity to sports-related attractions. The neighborhood and the rest of the city of Seattle occupy the traditional land of the Coast Salish people. Pioneer Square was one of Seattle's first neighborhoods and holds major historical significance for the city and the region (The Pioneer Square Collective, n.d.). The district hosts a variety of land uses, such as residential, commercial, office, municipal, and mixed-use, and serves as a vibrant area of the city.

Figure 6-1 shows the study area located within Pioneer Square and outlines the three study sites. Sites are clustered at mid-block in three of the street segments immediately adjacent to the intersection of Occidental Ave S and S Jackson St. Occidental ROW, Occidental Plaza, and Jackson are located south, north, and east of the intersection, respectively.

Occidental ROW is a quieter car-oriented street with some offices, shops, restaurants, and a hotel. Occidental Plaza is the most traffic-calmed of the three sites, with the entire street segment elevated to the same grade as the sidewalk. Shops line most of the ground-floor facade, including art galleries, a coffee shop, a restaurant, an event space, and doorways to the historic Underground. Jackson is a street segment that serves as a busier traffic arterial street and houses the southern terminus for the First Hill Streetcar, along with a couple shops and events spaces. Figures 6-2 ~ 6-4 show snapshots of each of these street segments. Facing north, the image of Occidental ROW shows its wide sidewalks and curbside parking, similar to a typical car-oriented Seattle side-street. The north-facing view of Occidental Plaza shows the traffic-calmed space lined with trees and shops within historic buildings. Finally, the south-facing view of Jackson Street shows the approximate midpoint of the study area.

Understanding form characteristics such as the existing sidewalk widths and the quantity of curb cuts are useful for considering how these may impact pedestrian behavior in the study sites. The same is true for the posted speed limit, the quantity

Table 6-1: Comparison of Site Characteristics

	Occidental ROW (Site 1)	Occidental Plaza (Site 2)	Jackson (Site 3)	Total
Sidewalk Widths	19 feet (near car parking), 27 feet (near curb cuts at the end of the street)	19 feet (between building and tree line), 75 feet (across the entire plaza)	12 feet	N/A
Speed Limit (Not Posted)	25 mph	25 mph (pedestrians only from 11 - 6 AM)	25 mph	N/A
Quantity of Trees	12 (6 on west and east side)	16 (8 on west and east side)	0	28
Quantity of Sidewalk Planting Strips	0 (only trees)	0 (only trees)	0	0
Quantity of Curb Cuts	8 curb cuts (2 on each corner)	4 curb cuts (2 north and 2 south), 2 driveways (middle)	2 driveways (middle)	12 (14 including driveways)

of trees, and the quantity of sidewalk planting strips. Table 6-1 shows this information for form characteristics by site.

Methodology

The study uses the Public Life App to collect Public Life data. This is a cloud-based app created by Gehl that enables surveyors to collect anonymous, non-personal behavioral data that is then used to analyze study sites. Data are collected on specific days of the week (shown in Table 6-2): three time slots on Mondays and Tuesdays, and two time slots on Saturdays.

Surveyors are to remain neutral to the activities of the street. This means that surveyors must depict activity as accurately as possible without influencing the behavior of others, they must be discreet, and yet they must be fully engaged in the environment in which they are performing the observation. Surveyors stay out of the way of activity and choose a location in view of a cross-section of the whole street with a good vantage point.

People Moving

SDOT studies how people move through a public space to try and answer two specific questions: 1) How many people walk on this sidewalk; and 2) Who walks on the sidewalk? The data collection methods used by SDOT for the moving component of the study focus on observing who is moving through a given location and what mode they're using.

Moving data is collected in two different sessions conducted over 10 minutes: moving mode, and moving gender and age. For both of these data collections, the surveyor stands in the midpoint of the study site and collects data based on people crossing a line of sight across the entire public space (shown for each study site as the yellow lines in Figure 6-1). For the mode count within the people moving data collection, the surveyor keeps a tally of every person crossing their line of sight using the following modes: walking, bicyclists, mobility device, bike share, micromobility (scooter, skateboard), supported (stroller, pushed wheelchair), and motorized vehicle. For the age + gender data collection within the moving data, this same line of

Table 6-2: Observation Schedule

Site 1 (Occidental ROW)	Monday	Tuesday	Saturday
Morning (8-10 AM)	Sarah Whitney (4/28/25)	Laura Baddeley (4/29/25)	
Mid-Day (12-2 PM)	Laura Baddeley (4/28/25)	Tony Charvoz (4/29/25)	Sarah Whitney (4/26/25)
Evening (4-6 PM)	Gareth Jiang (4/28/25)	Gareth Jiang (4/22/25)	Tony Charvoz (5/3/25)
Site 1 (Occidental Plaza)	**Monday**	**Tuesday**	**Saturday**
Morning (8-10 AM)	Sarah Whitney (4/28/25)	Laura Baddeley (4/29/25)	
Mid-Day (12-2 PM)	Laura Baddeley (4/28/25)	Tony Charvoz (4/22/25)	Sarah Whitney (4/26/25)
Evening (4-6 PM)	Laura Baddeley (4/21/25)	Gareth Jiang (4/22/25)	Sarah Whitney (4/26/25)
Site 3 (Jackson)	**Monday**	**Tuesday**	**Saturday**
Morning (8-10 AM)	Laura Baddeley (4/28/25)	Sarah Whitney (4/29/25)	
Mid-Day (12-2 PM)	Gareth Jiang (4/28/25)	Tony Charvoz (4/22/25)	Tony Charvoz (5/3/25)
Evening (4-6 PM)	Gareth Jiang (4/21/25)	Gareth Jiang (4/22/25)	Tony Charvoz (5/3/25)

sight is used to count all people outside of motorized vehicles (pedestrians, cyclists) based on perceived age and gender. Age is divided into five categories: 0-4, 5-14, 15-24, 25-64, 65+. Combined with perceived gender as male and female, there are ten total categories for this moving data collection on which counts are tallied.

People Staying

The Staying portion of the study aims to answer the following three questions related to stationary activity in public spaces: 1) How many people stay still on the sidewalk; 2) Who stays still on the sidewalk; and 4) What are people doing on the sidewalk? Studying how people spend time in our city's built environment by observing who is there and what they are doing provides valuable insight for how public spaces may be made even better for residents and visitors.

The entire street segment of the study site is observed during data collection for People Staying, consisting of a 20-minute observation period. This data collection follows this methodology in this order:

Location: a spatial point is selected on the map of the study area to indicate where the staying person/ group is located

Gender: Perceived gender of the person is selected from the options of female, male, gender non-conforming, and unknown

Age: Perceived age of the person is selected from the same options as available for the People Moving data collection

Posture: The posture of the person staying in the study area is selected from the below options

- Standing: a person standing in one place
- Sitting Commercial: People sitting at tables, benches, or chairs designated for a commercial business such as a restaurant or cafe
- Sitting Public Seating: People sitting on city-maintained or seating provided by a public space such as parks, public plazas, or transit stops

- Sitting Informal: People sitting in places not specifically designated for seating, such as staircase steps, blocks, pedestals, and bollards
- Lying Down: People laying in horizontal orientation on any surface

Activities: what people are doing as they're staying in the study area is documented by selecting all applicable activities from the following options:

- Talking to others
- Using electronic devices
- Waiting for public transportation
- Waiting for non-public transport (e.g.,ride share/ taxi)
- Engaged with commerce (selling/ buying)
- Eating/ Drinking
- Passive recreation/ People watching
- Smoking
- Engaged in cultural activity (performer/ watching)
- Exercise
- Play
- Reading/ Writing
- Chance encounter
- Civic work
- Taking care of child/ children
- Waiting in line
- Disruptive
- Pet care or play
- Wayfinding
- Living in public
- Other

The app has a function that documents people spending time in groups, using an option to duplicate the data collected across multiple people.

Current Conditions

Data collected on the current conditions within study sites aims to answer the following three questions: 1) What are the current weather conditions; 2) What seating is currently available; and 3) Are there any notable events happening that could affect public life? Data on current conditions are collected through the post-task questionnaire. This portion of data collection includes filling in data on weather, temperature, maintenance and cleaning in the study area, noise level in the study area, and events observed happening nearby. Additionally, photos are taken to document what the surveyor sees during data collection, capturing surroundings and anything else notable about the study area at that time.

Assumptions

The team held the following assumptions regarding the public life study:

- Observers will follow observation protocol.
- Observers will record all activity to the best of their ability.
- The data collected is a snapshot, which can be extrapolated to identify trends of public life within the area.
- Public life data will inform recommendations and considerations.

Public Life Assessment

This chapter provides a summary and analysis of the public life data collected from the Pioneer Square sites. Sections include site conditions, movement data, stationary data, and linger data.

Site Conditions

Weather Conditions

Table 6-3 describes the weather conditions recorded during observation days. As noted in the observation schedule, we did not observe on Saturday mornings. In general, weather during the observation days was relatively mild. The most extreme weather conditions recorded was sun-exposure on Tuesday (04/22/25), and light rain on Tuesday (04/29/25). However, both of these Tuesdays had periods of less intense weather conditions. As such, we believe that weather did not have an immense impact on our data collection. Thus our observations should reflect activity on a typical mild-weather day.

Site Events

It should, however, be noted that there was a Saturday market during the day on Occidental Square on Saturday (4/26/25). There was also a Mariners Game at 6:40 PM PDT. These two events

Table 6-3: Site Conditions

Day	Weather Conditions
Monday (4/21/25)	Sun-shaded Light clouds Heavy clouds
Tuesday (4/22/25)	Sun-exposed Sun-shaded
Saturday (4/26/25)	Sun-shaded
Monday (4/28/25)	Light clouds Heavy clouds
Tuesday (4/29/25)	Light rain Light clouds
Saturday (5/3/25)	Light clouds

may have caused increased activity in this area during the afternoon and evening observation times. Our observations may be reflective of the typical flux of activity in this area during game days. Our team did not record any events the following Saturday, (4/26/25).

Movement Data

Analysis

Movement mode and apparent age and gender were recorded in two separate observation periods. The mode choice distribution is summarized in Table 6-4. Pedestrians made up the majority of the observed movement observations across all three sites, followed by motorized vehicles. Rolling transportation made up about 5% of the total traffic.

Figure 6-5 shows a more detailed breakdown of moving mode by site and time of day. Motorized traffic was highest on the Jackson St arterial, but also made up a significant portion of the traffic on Occidental Rd, which is classified by SDOT as a downtown neighborhood access road (Seattle Department of Transportation, 2025). A few vehicles were observed in the morning and afternoon at Occidental Plaza, which is used for parking during the day, but vehicles are not permitted in the evening. Vehicle traffic was fairly consistent across the time periods, but it was highest in the evening at the Jackson site and in the morning at Occidental ROW.

Jackson St had the highest number of cyclists, and Occidental Plaza had the most pedestrians.

The moving trends are further illustrated in Figure 6-6, along with age distribution by day of the week. These volumes include only non-motorized transportation, as age and gender data was not recorded for drivers. The age range at all sites was primarily that of working adults; about 80% of travelers were estimated to be 25-64 years old, and about 12% were 15-24 years old. Few children under 5 were observed.

Table 6-4: Mode Choice Distribution

Movement Mode	Mode Share
Walking	54.45%
Biking	2.76%
Micromobility	0.51%
Shared Mobility	1.07%
Mobility Device	0.23%
Supported (stroller)	0.06%
Motorized	40.92%

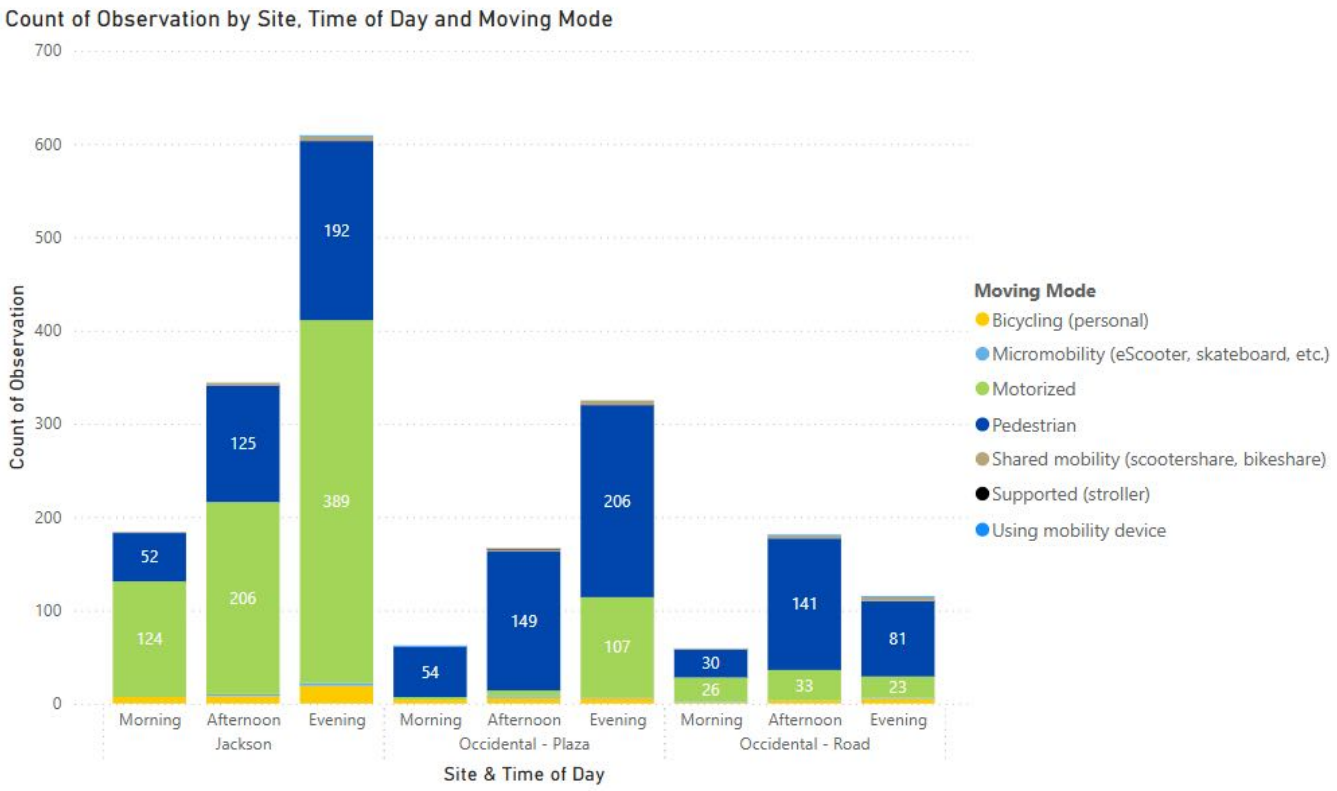


Figure 6-5: Mode Choice Observations by Time of Day
Source: Chart created with Power BI

Volumes were highest on Saturday for Occidental Plaza and Occidental ROW, while Jackson's highest volumes occurred on Tuesday. Kids and young adults in particular (ages 5-14 and 15-24) accessed all three locations more frequently on Saturdays. People in these age ranges were also seen more often in the afternoons and evenings, and used Occidental Plaza more than the other sites.

Masculine presenting people were observed moving more often at all three sites and during all time periods. Overall, about 58% of moving individuals were masculine presenting and 42% were feminine presenting.

Summary and Trends

Site trends indicate that most people move through the study area by walking or driving. Walking is most popular at Occidental Plaza, which is the most pedestrianized site, but it is also popular along The Jackson St arterial. This is a good indication that pedestrian oriented features, such as low vehicle volumes and tree cover, do help to attract users, but convenient routes like Jackson are also important. The largest user group is masculine presenting people ages 25-64, but there is more diversity of age and gender on weekends and in the evenings. This supports expectations that weekday use revolves around working people, while weekends and evenings involve more recreation and family-oriented activities.

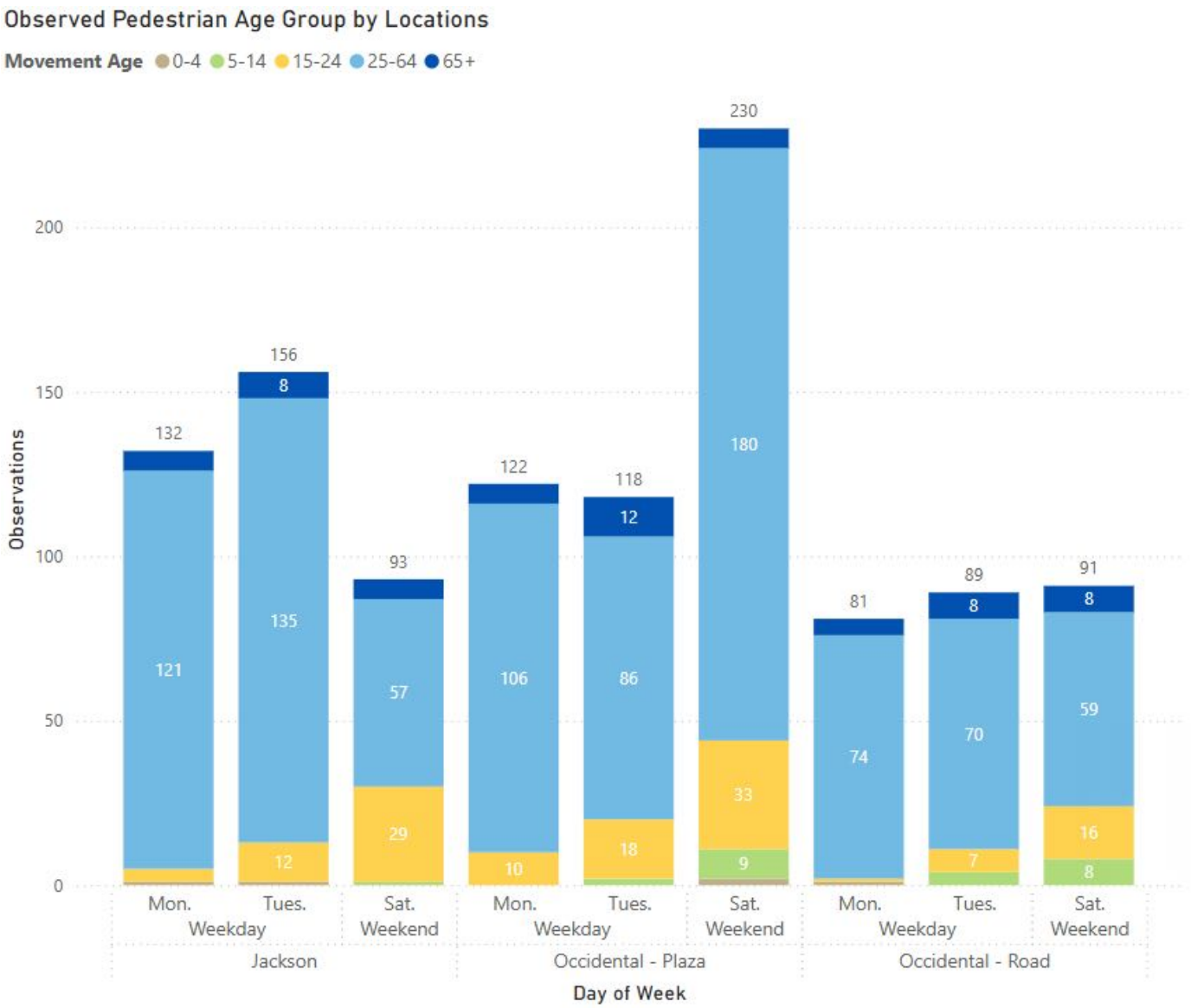


Figure 6-6: Perceived Age of People Moving by Day of Week
Source: Chart created with Power BI

Stationary Data

Analysis

Figure 6-7 shows the cumulative documented activities throughout all 20-minute stationary observation periods, categorized by location and activity type. The purpose of this graph is to demonstrate general behaviors rather than unique individual counts; therefore, it is possible for one individual to be represented multiple times if they engaged in more than one activity. Activity counts below 2 have been filtered out to focus on the general trend on site.

Based on the results, the most frequently observed activity overall was "Talking to others" (120 observations), heavily concentrated at Occidental Plaza. Other common activities included "Using electronic devices" (61), "Eating/Drinking" (57), "Waiting for public transportation" (37), and

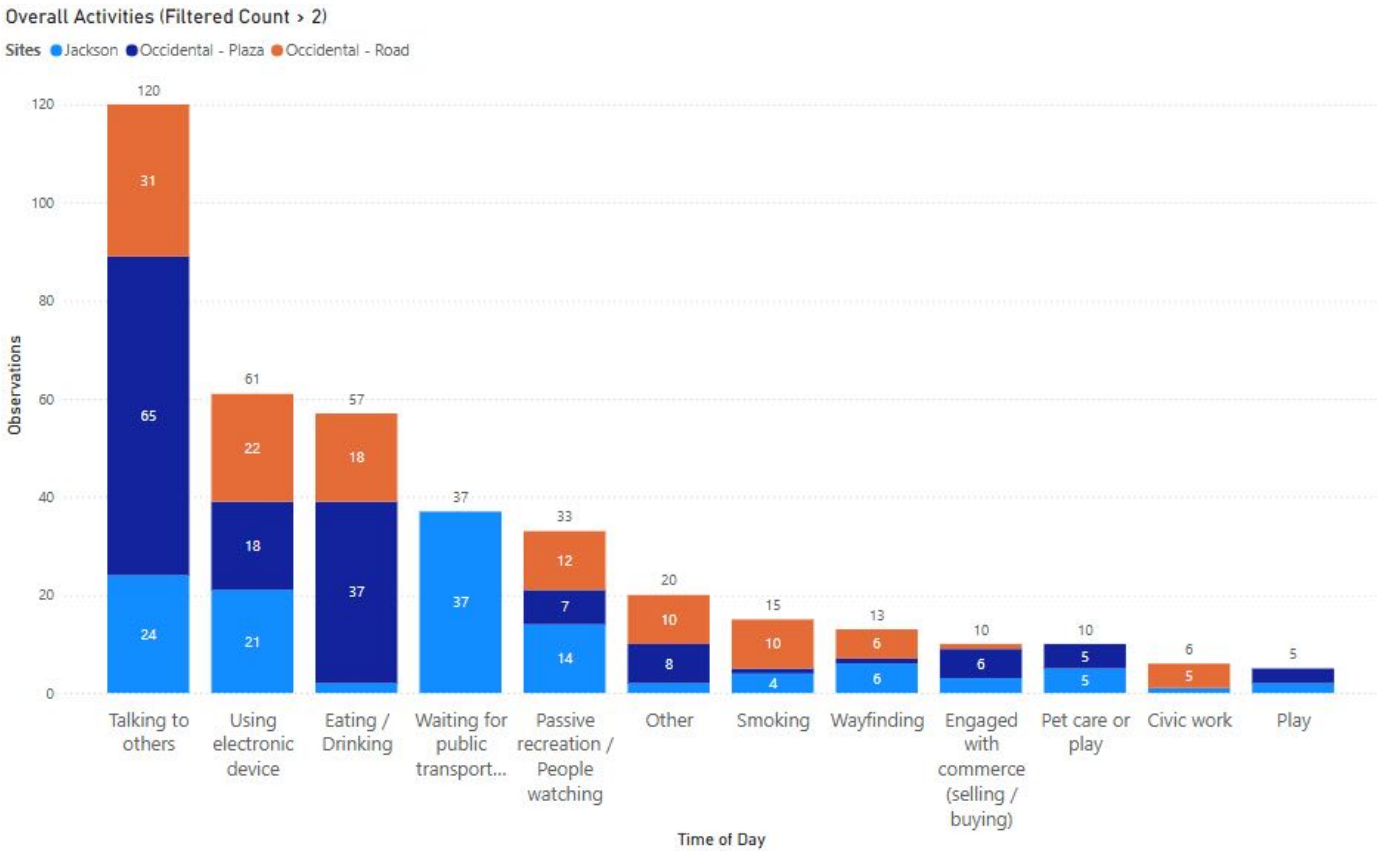


Figure 6-7: Top Stationary Activities
Source: Chart created with Power BI

"Passive recreation/People watching" (33). Notably, some site-specific patterns emerged, particularly among "Eating/Drinking" and "Waiting for public transportation." The majority of "Eating/Drinking" activities occurred at Occidental Plaza and Road (55 out of 57), whereas all "Waiting for public transportation" activities were observed at Jackson (37 out of 37). The trends align with street usage: Jackson is more transit-oriented due to the presence of the Occidental Mall streetcar station and higher vehicular traffic, whereas most commercial storefronts, such as cafés and restaurants, are located along Occidental Plaza.

A wide variety of other general behaviors, from smoking to pet care/play, were observed, reflecting the leisurely nature of the Pioneer Square blocks. However, though much less frequent and not visible in the graph, two disruptive activities were also recorded during the relatively short observation periods. Coupled with verbal reports of suspicious behavior (primarily drug use) around Pioneer Square, the presence of disruptive incidents still highlights ongoing concerns regarding pedestrian and street safety in Downtown Seattle.

During the 20-min observation periods, postures of the lingering population were also recorded across Jackson, Occidental Plaza, and Occidental Road, categorized by location and time of day (Figure 6-8). Overall, "Standing" was the most frequently observed posture across all locations, with particularly high counts at Jackson (57 observations) followed closely by Occidental Road (45) and Occidental Plaza (45).Jackson showed a clear dominance in standing posture, particularly in the afternoon and evening (23 and 29 observations respectively), reflecting the area's role as a transit corridor where people are often in motion or waiting. Occidental Plaza was notable for its high count of "Sitting Commercial" posture (41 observations),

almost entirely during the evening, indicating engagement with the local businesses or storefronts. Occidental Road exhibited more varied postures, including a notable number of "Sitting Commercial" (13) along with similar patterns of standing activity as Occidental Plaza. Instances of leaning were relatively low across all sites but still present, whereas sitting in public areas was infrequent overall, suggesting limited but existing opportunities for rest or informal use of space.

The distribution of posture types across different times of day and locations reflects both the physical layout and functional roles of each site—Jackson as a transit corridor, Occidental Plaza as a commercial and gathering space, and Occidental Road as a more flexible, mixed-use environment. It is worth noting that as a transit corridor, Jackson does not provide any formal seating opportunities at all, as pedestrians and transit users mostly resolve by sitting or leaning against walls or storefront windows.

Age distribution observations across Jackson, Occidental Plaza, and Occidental Road reveal distinct patterns by site and day (Figure 6-9). Across all locations, adults aged 25 to 64 consistently made up the majority of the observed population, highlighting that these public spaces primarily serve working-age individuals.Jackson had relatively consistent age distributions across Monday and Tuesday, with 25 to 64-year-olds dominating the lingering presence and a modest presence of perceived aged 15 to 24 occasionally. No observations were recorded for children under 5 nor elderly adults (65+) on either weekday. Occidental Plaza showed a significant increase in total observations on the weekend (56), compared to weekdays (14 & 20). Notably, the number of observed adults aged 25 to 64 nearly tripled from weekday levels (13 & 16) to 44 on Saturday. There was also a visible increase in older

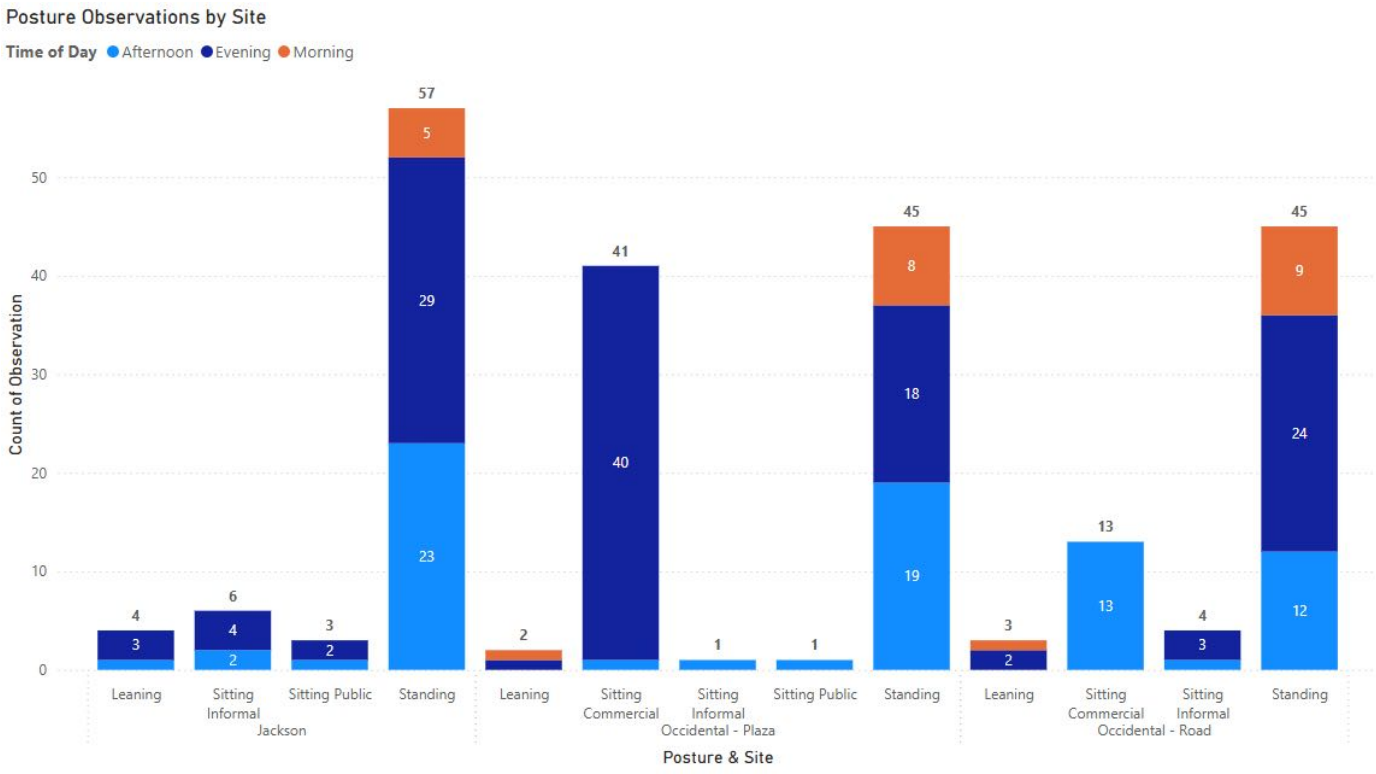


Figure 6-8: Top People Postures per Site
Source: Chart created with Power BI

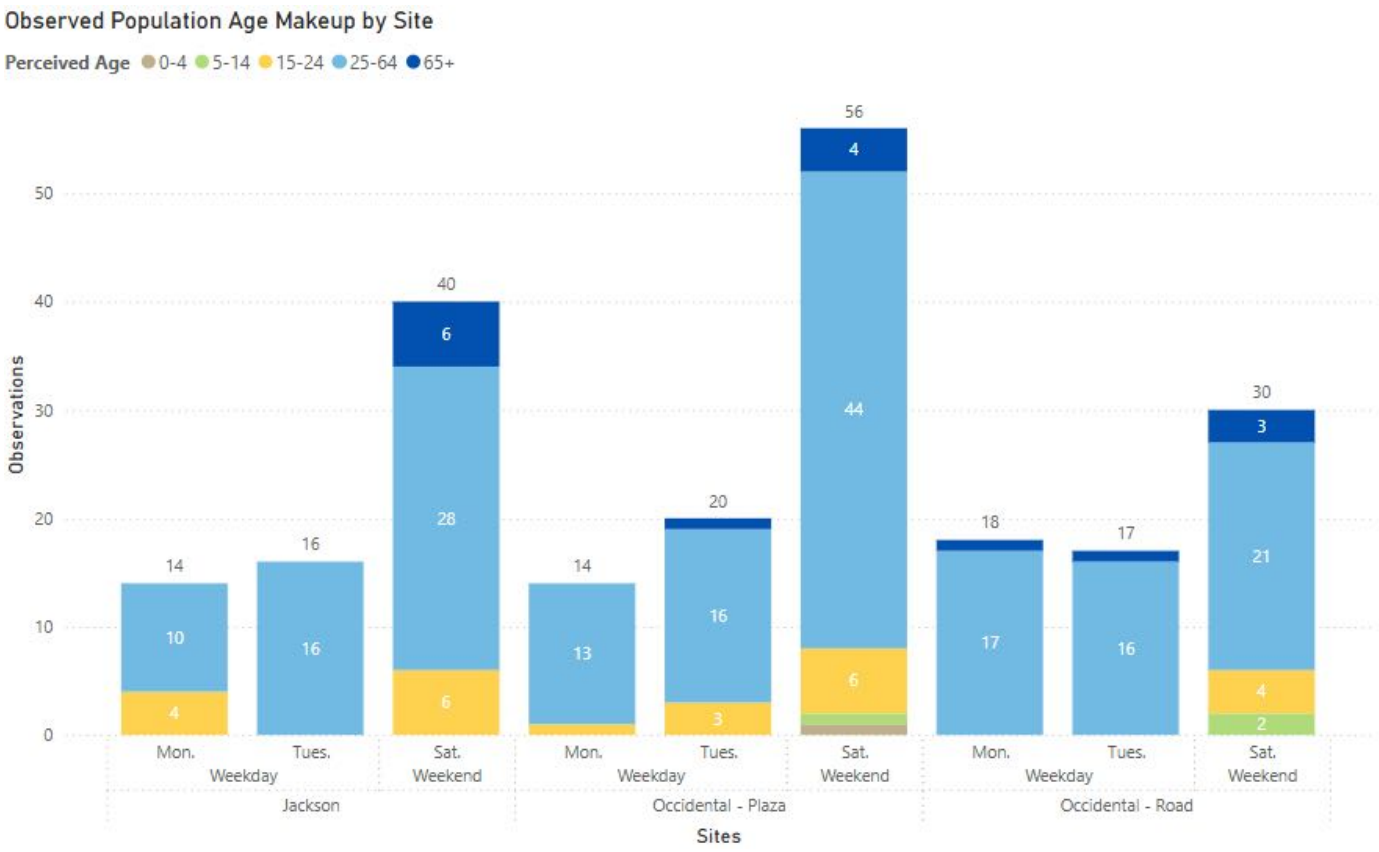


Figure 6-9: Ages Observed per Site
Source: Chart created with Power BI

adults (65+) and slight presence of young children, suggesting the area becomes a more family- and elder-inclusive space during weekends, likely due to commercial and leisure activities. Occidental Road had stable weekday numbers (17 & 18) primarily composed of 25 to 64-year-olds. On the weekend, the total rose to 30 observations, with a slightly more diverse age mix including children (ages 0 to 4 and 5 to 14), youth (15 to 24), and older adults (65+). While still dominated by working-age adults, the presence of families and elders suggests a broader demographic usage on weekends, resembling the patterns observed at Occidental Plaza.

In general, weekend observations, especially at Occidental Plaza, reveal increased activity and age diversity, likely driven by non-work-related visits. In contrast, weekday data across all sites show a significantly higher concentration of working-age individuals, supporting the interpretation that these areas serve different purposes depending on the day—commuting and routine on weekdays, leisure and social interaction on weekends.

Overall, gender distribution observations across Jackson, Occidental Plaza, and Occidental Road show consistent trends on weekdays and weekends, although there are slight variations between locations and time of day (Figure 6-10). Jackson exhibited a relatively even split between masculine- and feminine-presenting individuals during weekdays and weekends, with masculine-presenting slightly leading overall. Considering the data collected from the posture observations, this gender distribution could also indicate the general gender makeup of the working-class in and around the area. Occidental Plaza had the highest overall count on the weekend (56 observations), with

feminine-presenting individuals making up the majority (33). This contrasts with weekday patterns where masculine-presenting individuals were more prominent. The weekend shift could indicate greater female engagement in the plaza during leisure hours, possibly due to retail, dining, or event-driven foot traffic. Occidental Road maintained a relatively consistent masculine-presenting dominance across all days. Weekend observations (30 total) still showed a strong masculine-presenting presence (18), though feminine-presenting observations also increased slightly (12).Notably, only one gender-nonconforming-presenting individual was recorded throughout the observation periods, which could reflect either a lack of representation or limitations in perception and categorization during the observational period.

Figure 6-11 illustrates the spatial distribution of stationary observations across the study area in Pioneer Square, categorized by time of day: morning (green), afternoon (blue), and evening (red). Figures 6-12 ~ 6-14 illustrate isolated times from morning to evening. Each dot represents one stationary observation, layered over key amenities such as restaurants, cafes/pubs, hotels, and public transit stations.

Jackson shows a high density of afternoon and evening observations, particularly clustered near the public transit stop at the Occidental Mall. The concentration of observations here reinforces the impression of Jackson St. as a transit-heavy corridor, where people pause while commuting or waiting for services.

Occidental Plaza shows a significant concentration of all-day observations, especially during the afternoon and evening. Most of them are clustered around restaurants and cafes, suggesting the plaza serves as

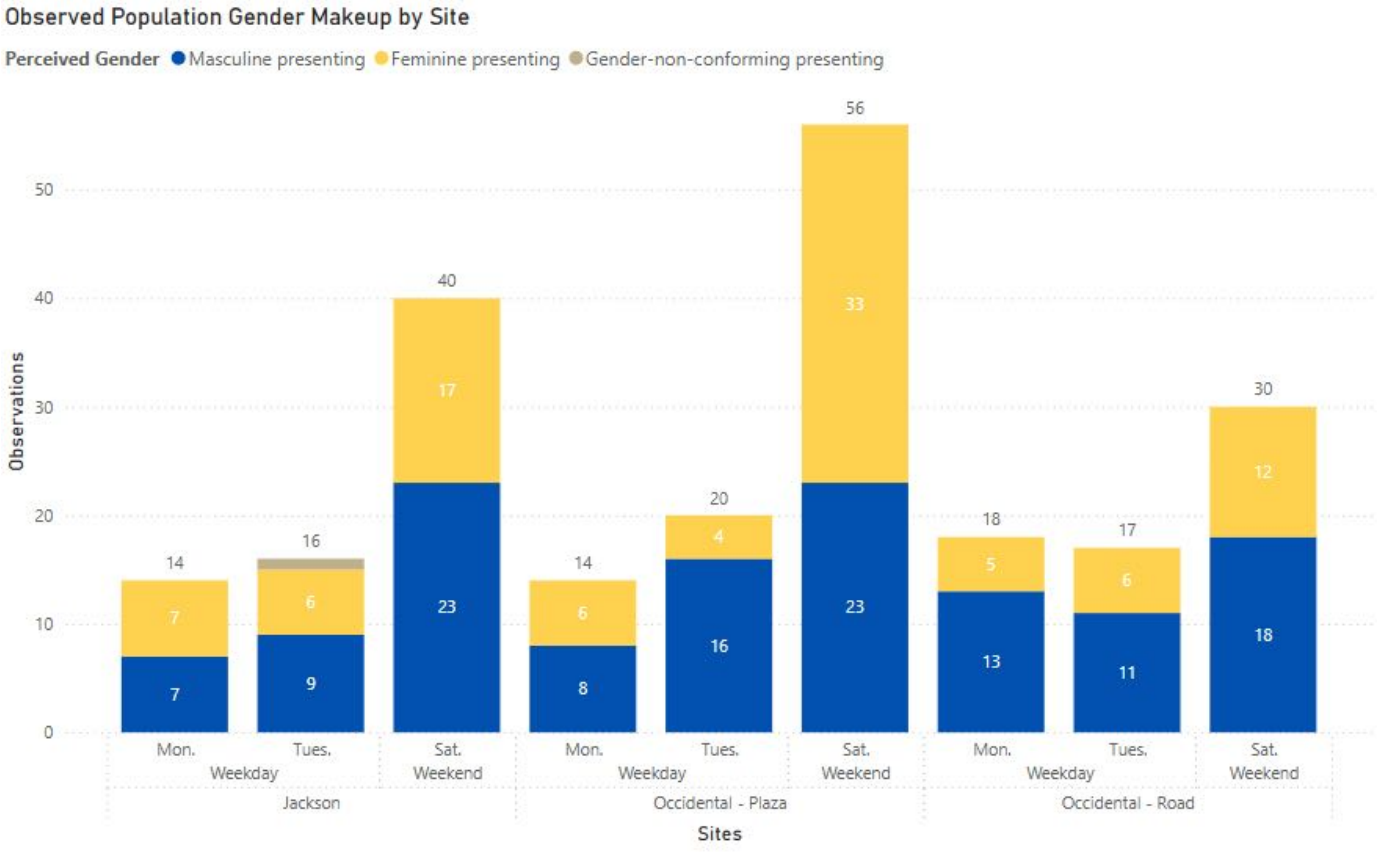


Figure 6-10: Gender Observed per Site
Source: Chart created with Power BI

Figure 6-11: Stationary Activity Mapping
Source: Chart created with Power BI

Figure 6-12: Morning Activity Mapping
Source: Chart created with Power BI

Figure 6-13: Afternoon Activity Mapping
Source: Chart created with Power BI

Figure 6-14: Evening Activity Mapping
Source: Chart created with Power BI

a key gathering space for dining, leisure, and social interaction, especially during non-working hours. There were also some that were gathered near the north entrance, indicating a possible connection between the Occidental Plaza and the Occidental Square just north of the block.

Occidental Road shows a similar pattern to the plaza, with most dense activities in the afternoon and evening. The proximity to restaurants and public seating may explain this concentration, reflecting mixed use and flexible street programming in this area. Notably, there were also some clusters around the alley entrance near the hotel, as it was a common sight for people to be waiting, talking to others, and wayfinding in general in and around that area.

In general, morning observations are noticeably less

frequent and more dispersed. With limited data, it was rather difficult to distinguish any noticeable patterns for morning stationary observations. In contrast, afternoon and evening observations (blue and red) dominate the plaza and road segments, indicating increased lingering activity tied to leisure, dining, or passive use. Locations near restaurants, pubs, cafes, and transit nodes strongly correlate with higher observation density, particularly in non-morning hours. This could suggest that both food/beverage offerings and transit infrastructure are key attractors for public presence and stationary activity in this area.

Summary and Trends

The most common observed activity was "Talking to others," concentrated at Occidental Plaza, followed by electronic device use, eating/drinking, and waiting for public transportation—each indicating some site-specific patterns aligned with street functions. Among the three locations, Jackson is considered primarily transit-oriented, Occidental Plaza serves as a social and commercial gathering space, and Occidental Road is considered to be a more mixed-use area accommodating both pedestrians and vehicles from Jackson St. and Occidental Plaza.

Posture observations revealed "Standing" as the most frequent posture across all sites, with notable implications: Jackson, being the transit corridor of the site, lacked formal seating and had high standing rates, Occidental Plaza had the most commercial sitting but could be improved by increasing general public seatings, and Occidental Road showed a mix of postures, indicating its potentials for flexible usage on site.

Age distribution data showed that adults aged 25 to 64 consistently dominated across all sites and days, though weekends, particularly at Occidental Plaza, showed increased activity and greater diversity in age groups, including more youth/children and older adults. This suggests a shift in space use from commuting during weekdays to leisure and family activities on weekends.

Gender observations were fairly balanced across all sites, with masculine-presenting individuals slightly more prevalent overall. However, Occidental Plaza saw a notable shift toward feminine-presenting individuals on weekends, aligning with increased leisure use.

Overall, the data highlights how spatial function, time of day, and day of week influence who uses these public spaces and how they engage with them. However, it is important to note the limitations of this data collection, specifically regarding the time constraints and limited data quantity. Therefore, the data should only serve as a broad impression of the general population patterns of the site.

Linger Data

Analysis

Table 6-5 shows the average number of people observed per 20 minute observation period across different scenarios. In order to highlight trends in walking and rolling data, motorized transportation has been omitted. The linger factor represents the ratio of people staying compared to those moving

The average number of people moving is more than double the average people staying for all scenarios. This indicates that most people are using the space to get from one place to another rather than lingering. This is especially true at the Jackson site, which has the lowest linger factor. People tend to walk and bike along this road because it provides convenient access to where they are going, but it offers little in the way of attractions.

The highest overall volumes were seen at Occidental Plaza, which is the most pedestrian-oriented location of the three. However, the highest linger factor was seen at Occidental ROW. Although the movement and stationary observations were recorded at separate times, we can infer that people moving through this location stopped about 24% of the time, compared to 23% at Occidental Plaza and 19% at Jackson. While fewer people use Occidental ROW overall, those who do are more likely to spend a greater amount of time there. The linger factor is very similar for Occidental Plaza, which indicates that the two locations serve similar purposes.

Table 6-5: Observation Averages

	Time of Week		Time of Day			Site Location			All Sites
	Weekday	Weekend	Morning	Mid-Day	Evening	Jackson	Occ. ROW	Occ. Plaza	
Average People Staying	5.5	21.0	4.0	8.3	14.9	8.8	8.1	11.3	9.4
Average People Moving	37.2	63.2	25.3	49.6	50.0	47.3	34.1	49.6	43.7
Linger Factor	0.15	0.33	0.16	0.17	0.28	0.19	0.24	0.23	0.21

When considering the trends over time, weekends and evenings have the most activity overall. Activity at this time is likely to be more recreational compared to weekdays or other times of day, as it is outside of typical working hours. The linger factor is also higher at this time, indicating that people passing through the area are more likely to stay. On weekends, the linger factor increased to 0.56 across the three sites, which suggests that more than half of visitors paused for some amount of time in one of the study locations.

A summary of age and gender across all collected data is shown in Table 6-6, with the most prominent age and gender categories highlighted. Motorized vehicles were not included in the data collection for these characteristics. About 58% of the people observed were masculine presenting, compared to 42% feminine presenting and less than 1% gender non-conforming. The gender balance is slightly more even in the stationary observations compared to the moving data, with about 57% masculine presenting and 43% feminine presenting. Although the difference between stationary and moving gender data is not particularly large, it may indicate that men are more likely to use the space simply to pass through while women are more drawn to its attractions. The overall gender imbalance may be a result of perceived danger or discomfort, area demographics, or a number of other factors.The majority of people observed in both categories were adults ages 25-64. Seniors aged 65 and older were more likely to be observed staying rather than moving, while children and teens were more likely to be moving.

Summary and Trends

The comparison of moving and stationary data highlights a few key differences in the people who use the study locations for each purpose. Most notably, the linger factor demonstrates that more of the people accessing Occidental ROW treat it as a destination or resting point than people accessing the other sites, despite the lower volumes overall. This may indicate that the location is appealing, but underutilized.

As seen in both the moving and stationary data, the most common users are male-presenting and of working age, but women and seniors make up a higher proportion of people staying than those moving. It is important to consider these differences when designing the built environment for the population.

Table 6-6: Summary of Age and Gender Data

	Stationary	Moving	Total
Masculine-presenting	56.89%	58.18%	57.97%
Feminine-presenting	42.67%	41.82%	41.96%
Gender non-conforming	0.44%	N/A	0.07%
Age 0-4	0.44%	0.45%	0.45%
Age 5-14	1.33%	2.16%	2.02%
Age 15-24	10.67%	11.69%	11.52%
Age 25-64	80.44%	79.86%	79.96%
Age 65+	7.11%	5.85%	6.06%

Conclusion & Considerations

Summary of Findings

The movement, stationary, and subsequent lingering data will help inform future space interventions and programs to improve the quality of these three sites. Across the three sites, the overall linger factor is 0.21 people lingering for each person moving. The observations suggest that people tend to linger more on weekends than weekdays, and more in the evenings than the morning or afternoon. Male-presenting people, generally tend to linger longer than female-presenting people. Finally, the stationary data observations illustrate that people tend to linger near commercial seating areas, transit stops and at intersections, especially near alleyway entrances and near the edges of Occidental Plaza. Of the three sites, Occidental ROW has the highest linger factor.

The qualitative and quantitative data collected has helped distinguish the three sites by their unique character and usage. In general, Jackson Street is a transit and car-heavy corridor primarily used for moving. As such, people lingering in this area are often waiting for public transit. Occidental Plaza is a part-time pedestrian-only street with beautiful street trees and unique building facades. People lingering in this area tend to do so around commercial areas, especially since there is no public seating in the plaza. Occidental ROW is a shaded commercial block with a hotel, restaurants, shops, and frequently used street parking. People in this area tend to linger near the alleyway running east to west at the midpoint of the block. They also linger near commercial seating, and near intersections where there is wider visibility. These unique characteristics may also inform the design interventions and programs implemented by SDOT as a reaction to this Public Life study.

Figure 6-15: Occidental Plaza "Pedestrians Only" Sign; Source: Sarah Whitney

Recommendations

The linger factor for the entire site is fairly low for a historic arts neighborhood with regular activities, and in close proximity to Seattle's sport facilities. To increase the lingering factor for these three sites, we recommend that the City of Seattle add more public seating. This includes public seating for the transit stop on Jackson, flexible public seating in Occidental Plaza, and public seating in the alleyway outlets on Jackson St. and Occidental ROW. Public seating should encompass diverse options like curvilinear stationary seating and movable furniture as suggested by William Whyte's public space analysis (Municipal Art Society of New York, 2005). To encourage all-year round usage, we also recommend adding a mix of transparent shelters to let light in during dark months and umbrellas for shade during warmer months. Collectively these efforts may support increasing site capacity, and capturing folks who are in the area for larger community events.

We also recommend designating this area of Occidental Avenue South as a main pedestrian corridor, and adding additional traffic calming measures to protect pedestrians and non-motorized transit in this area. Occidental Avenue South directly connects to Occidental Square, a pedestrian only space. As mentioned it is a tree lined space that, part of the time, is a pedestrian only corridor. Juxtaposing that, S Jackson Street is a car and transit heavy avenue. We suggest improving the built environment to draw pedestrians to Occidental as their primarily north to south walking path. On Occidental Plaza we suggest adding permanent bollards to close the street pedestrians. Currently the street is closed to cars from 11:00 AM to 6:00 AM, as indicated by a fold-out sign at the south end of the plaza. The site could permanently be closed to vehicular traffic, and/or have more robust infrastructure like bollards to stop cars from entering the site and provide further protections for pedestrians. While street parking is frequently used on Occidental ROW, a bold vision could also close this street to be pedestrian only, thus creating a pedestrian avenue stretching from Occidental Square to the stadiums. Additional site programming and streetscape improvements like planters and public seating could encourage usage of this corridor. Separately, we also recommend adding more greenery and planters on Jackson St. to beautify the street and improve perceived safety by further separating pedestrians from the east to west vehicular traffic.

Future Research

Studying public life requires ongoing research to assess current conditions and usage, and respond accordingly. While this data may be used by SDOT to inform their public space interventions, we suggest that they continue to collect data and expand the days, times, and seasons to get a better understanding of public life year round. If site recommendations come to fruition in the public realm, we suggest continuing to monitor this space to create a comparative public life study. Finally, we recommend improving the public life study by collecting qualitative data such as surveys. These surveys could help understand how people frequenting this area feel about the space, and what interventions they would like to see.

CONCLUSION

CHAPTER 7

This project provided a valuable snapshot of public life in downtown Seattle at a moment when the city is preparing to welcome the world for the 2026 FIFA Men's World Cup. By documenting how people move through and use streets, sidewalks, and gathering spaces, the student teams captured both the opportunities and challenges of creating safe, vibrant, and inclusive public spaces for residents and visitors alike. These observations reveal the patterns and behaviors that will help guide thoughtful planning for both everyday activity and large-scale events.

Our findings highlight who is using the space, how design features influence movement and lingering, and where gaps in accessibility or comfort exist. Looking forward, pairing design interventions with data interventions will be key. By accompanying changes to physical spaces with systematic ways of collecting and analyzing data about how people actually use the spaces, the city will be better positioned to strategically invest in the public realm. For example, intercept surveys can provide demographic details and user perspectives, while flexible observation protocols can capture unique or unexpected behaviors that fixed categories might miss.

Automated tools and sensors may also enhance future studies, particularly during high-volume events like World Cup match days. Continued data collection across seasons and years will help track changes in linger factor, user demographics, and perceptions of safety. This ongoing monitoring creates a valuable feedback loop, ensuring that public spaces evolve in ways that respond to real-world use.

We also note several limitations of this study. Data were collected over a short period in the spring, coding of age and gender carries some subjectivity, and nearby development projects may alter flows in the near future. These considerations underscore the importance of continuous monitoring and adaptive approaches for public life studies.

Finally, we encourage readers to review the specific conclusions and recommendations from each team, which provide additional detail and location-specific insights. Together, these findings offer a comprehensive understanding of downtown public life and inform both current and future planning decisions. By combining observational data, user feedback, and adaptive design strategies, Seattle can ensure that its downtown spaces serve all users, weekdays and weekends. With thoughtful planning and continuous learning, the city will be well-positioned not only to host the World Cup successfully but also to strengthen its public spaces for years to come.

Road Under Construction, Image credits: University of Washington Visual Asset Collection

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