

# **BOUNCING BACK**

**PUBLIC LIFE IN POST PANDEMIC POBLENOU, BARCELONA**

2022

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Figure 1: Superilla Poblenou, 2022



# INTRODUCTION

In 2022 Poblenou is bouncing back. After two long years of pandemic life, there are clear signs that the neighborhood is returning to its pre-pandemic patterns. Most restrictions on travel and movement have been lifted. Tourism has returned, large gatherings, concerts, and cultural events are allowed again. Parents no longer worry that children will be sent home from school for isolation. Except for public transportation and medical institutions, masks are no longer required in public spaces.

The last two years have been exceptional. In the spring and summer of 2020, there were hardly any tourists in Barcelona, creating a memorable and local feel to public life. In 2021, Spain had opened its borders to welcome visitors from abroad again, but mandatory testing and vaccination requirements reduced movements across borders.

And now in 2022, much like elsewhere in Barcelona and Europe, Poblenou is returning to a new normal. The city is breathing a sigh of relief, with squares and restaurants bustling with life. Residents once again enjoy public spaces without restrictions or fear. Not long ago, in the midst of the pandemic, observers speculated about how the public health crisis would change how we use public space [1]. Might the pandemic alter activities, attitudes, or interactions in public, and if so, might these changes be permanent? Or would public life rapidly bounce back?

This report provides data that may begin to answer some of these questions. We follow up on previous work at the same sites, using the same methods and protocols. The project has collected data in June of each year since 2018, making 2022 the fifth year of a longitudinal study on public life in Poblenou [2, 3]. This report describes the results of observations from June 2022. As in other years, our objective has been to measure patterns in public life at four sites in the Poblenou neighborhood of Barcelona: The Rambla Poblenou, Superilla Poblenou, the Trullàs Park at Pere IV, and the Mar Bella skatepark and beachfront.

While big data is able to measure how many people move and where they go, big data rarely is able to capture their age or gender, nor can these data sources reveal the finer details of what these individuals do in public or why. From the outset this study has sought to measure the gender gap in the use of public space, the use of space by the elderly and children, as well as the social interaction between public space users [4].

While Poblenou continues to evolve, many of the challenges we observed in 2018 still remain: Poblenou is still undergoing a transition from a post-industrial neighborhood to one that relies on tourism, technology and new media. New real-estate investments are driving up taller buildings. Rents are increasing. Fears of gentrification remain. Even after the pandemic, or perhaps especially after the pandemic, Poblenou remains a highly desirable place to live, work and play.



Figure 2: Map of Poblenou and neighboring districts, 2022



# METHODS

This research was designed and implemented by the City Lab Barcelona research group at the Institut de Ciència i Tecnologia Ambientals of the Universitat Autònoma de Barcelona (ICTA-UAB). As in past years, we observed public life during the first full week of June 2022. We observed public life in 4-hour intervals, from 08:00 hrs to 12:00 hrs; 12:00 hrs to 16:00 hrs; 16:00 hrs to 20:00 hrs and 20:00 hrs to 24:00 hrs during weekdays. We collected three types of data: (1) people staying; (2) people moving by gender and mobility type; and (3) public life indicators. The first two data types followed methods proposed by the Gehl Institute and public life protocol [5, 6]. The public life indicators were developed by previous teams of students at the University of British Columbia [2, 3].

## PEOPLE STAYING

We counted the individuals staying at each site every hour. For each individual, we noted their gender, the size of their group, and their activity: in conversation, active recreation, passive recreation, attending to children, using electronics, eating/drinking, reading, cultural activity, civic work, playing, exercise, skateboarding, or commercial activity. We also recorded their posture: standing, sitting, sitting commercial, sitting private, and laying down.

Each site had defined polygons within which we counted staying behavior. The Pere IV site included two separate polygons: Trullàs Park and the triangle of public space between Pere IV and Avila. The Rambla site included the Rambla segment between Ramón Turó and Ramón Llull. Counts were repeated at the roundabout at Ramón Turó. The Superilla site also had two polygons: the pedestrianized segment of Sàncio de Avila, and the intersection at Roc Boronat with the playground. The Marbella site included the skatepark and pedestrianized walkway next to the skatepark.

## PEOPLE MOVING

We measured pedestrian traffic at five locations within the four study areas: Pere IV (1 transect), La Rambla del Poblenou (1 transect), the Superilla (1 transect), and the Marbella site (2 transects). At each hour, we counted the people crossing the transect for a period of exactly 10 minutes. We counted people on foot, on wheels (bicycles, scooters, and skateboarders) and people being carried in strollers or wheelchairs.

## PUBLIC LIFE INDICATORS

Building on past work, we collected a set of public life indicators (previously called “social cohesion indicators”) that aimed to capture social relations and social connections among public users at the site. The public life indicators captured if people were laughing, hugging, kissing (affection), kissing (salutation), shaking hands, photographing people, photographing objects, waving, nodding (salutation), high-fiving, smoking, or drinking alcohol. We also chose indicators that denoted if they were employees at one of the local firms (work badge) and indicators that the individuals might be tourists (selfie-stick, suitcase). For each observation we noted gender.





Figure 3: Community Garden at Pere IV, 2022



# PERE IV

## SITE DESCRIPTION

Pere IV is a street that diagonally stretches throughout Poblenou, starting from Bogatell Metro Station in the South-West, crossing Via Diagonal, and ending at Rambla Prim, in the El Besòs i el Maresme neighborhood. With a length of over three kilometers, it cuts through the Cerdà grid, producing street corners with unconventional shapes. The street is a high-traffic corridor that formerly served as gateway out of Barcelona [7]. It lets the visitor experience the original charm of Poblenou with its contrasts in uses and urban qualities.

Our study site is located at the intersection of Carrer d'Àvila, Pallars, and Pere IV. We studied people staying at two locations. First, we looked at the triangular intersection between Àvila, Pallars, and Pere IV where there is a bar with outdoor seating. Second, we collected data at the community garden located on Pere IV at the same intersection. The data for “people staying” reflects patterns only at the community garden in order to examine the use of one specific place that we can later use for comparison. In the section “public life indicators” we integrated both locations.

In 2016, the former parking lot became a neighborhood garden with the aim of being community-based and self-organized. The plot has been transformed into a thriving, biodiverse, and social urban space that is maintained by local residents. While the garden is a welcoming heaven of peace for residents and workers, it also serves as a place for children, community events or dog walks.

The community garden is quiet and offers a place to escape the noise and busy feel of Pere IV, where cars, trucks, buses and motorcycles speed by. Both sides of the streets exhibit sidewalks, while the main traffic lane is shared by cyclists, scooters, and cars. Pere IV represents the ongoing transformation of the formerly industrial environment into a modernized and trendy mixed-use neighborhood. You will find metal workshops next to yoga studios, old car wash next to restaurants, and newly evolving tech companies next to old bookstores.

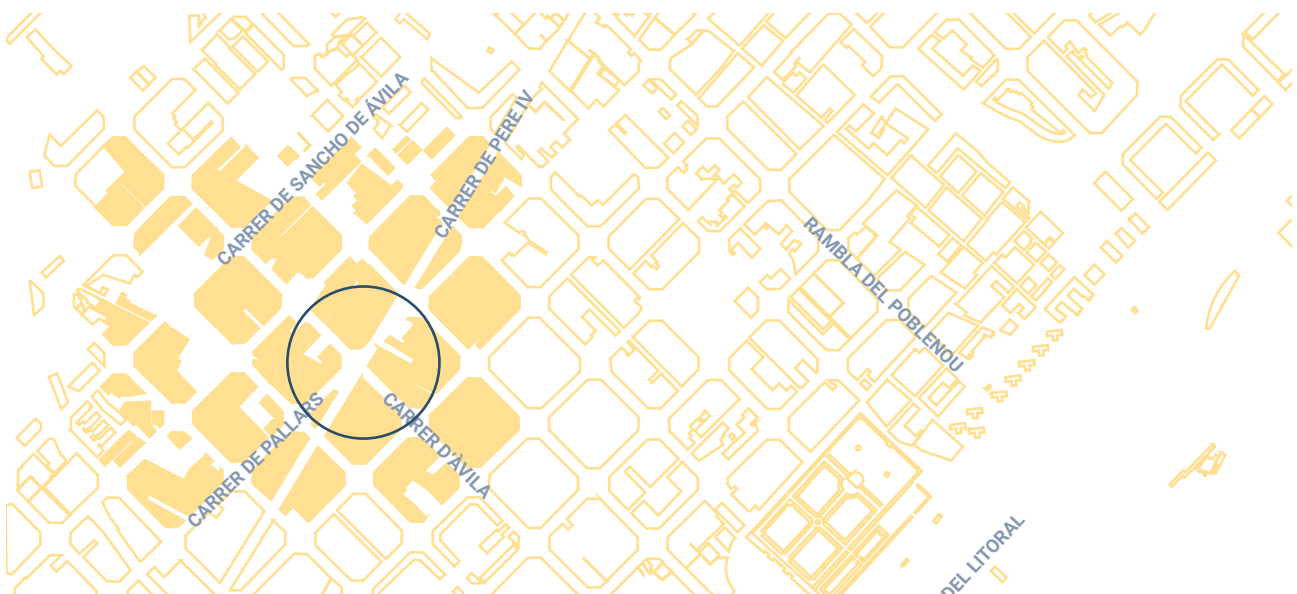


Figure 4: Map of Pere IV, 2022







# RAMBLA

## SITE DESCRIPTION

The Rambla de Poblenou stretches from Gran Via de les Corts Catalanes to the Passeig de Calvell, which runs along Barcelona's beachfront. It is a highly walkable urban environment, with a wide pedestrian promenade (Rambla) running down its center, lined on each side by 'calmed' traffic lanes and additional sidewalks. At intersections with other streets, roundabouts for vehicle travel surround circular pedestrian plazas. Above the businesses are residential buildings, often between 5 and 7 stories tall. The tree canopy, ubiquitous benches, and outdoor dining areas make the Rambla an emblematic street in Barcelona's urban fabric, and reflect some of the most popular elements of the city's design.

Residents and tourists share the street's pedestrian lanes and resting spaces, where benches and trees make sitting a pleasurable refuge from the summer heat. Bikes, scooters, and a regulated number of cars — driven by residents and city services — travel in thin lanes between the pedestrianized spaces. The pace of motion on the Rambla itself is leisurely, while the vehicle travel lanes allow people on different forms of 'wheels' to move much quicker. This division of space permits both pedestrians and riders to use the Rambla to meet their specific needs. Those moving in the travel lanes can reach their destinations efficiently and safely with little car traffic, while pedestrians on the Rambla can stroll as slowly and deliberately as they would like.

The Rambla Poblenou is studded by a mix of businesses, such as stationary shops, book stores, ice-cream shops, and an especially high number of restaurants and cafés that offer outdoor seating. Pedestrians range in age, gender, and race, with mornings often playing host to more seniors as evenings give way to younger couples and groups of friends dining out. Every so often, large groups of school children or tourists walk through en masse. City employees, unhoused people, and workers at local businesses sit and walk on the Rambla from morning until night. The Rambla is lively and full, with activity at all hours of the day. Even when the sun is shining directly overhead in summertime, the tree canopy keeps the street cool.

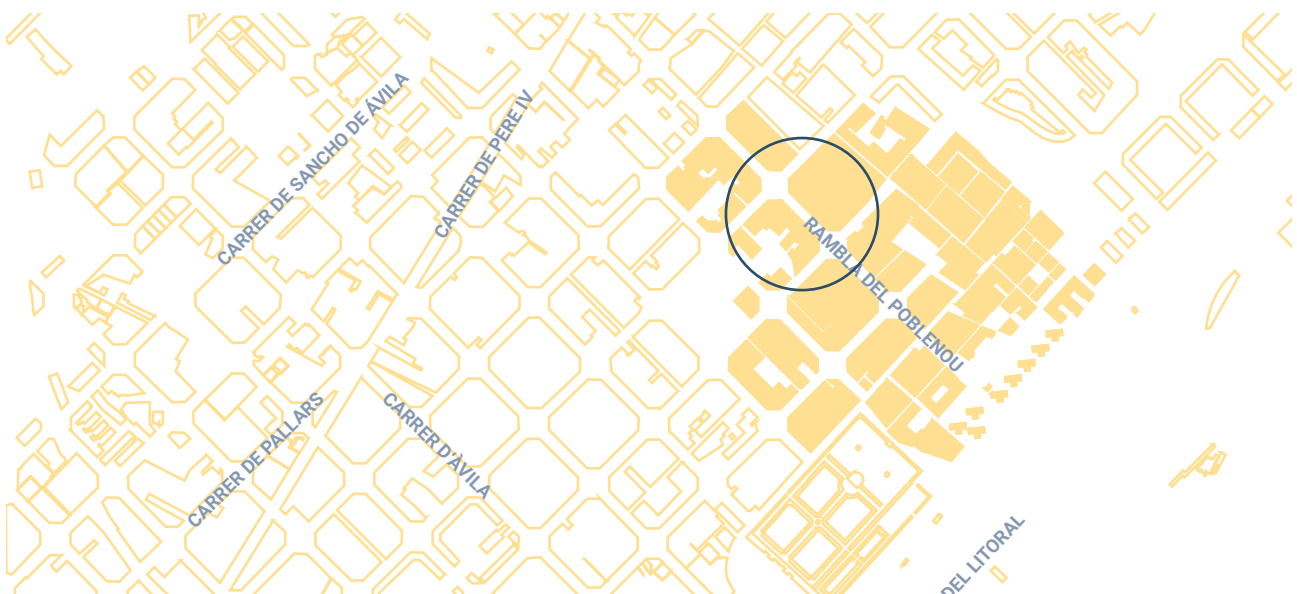


Figure 6: Map of Rambla de Poblenou, 2022







# SUPERILLA

## SITE DESCRIPTION

The Superilla of Poblenou was created in 2016 along the perimeter streets formed by Badajoz, Pallars, Llacuna, and Tànger. Characterized by the presence of the MediaTIC building, the Can Framis Museum, a hip café/restaurant, a school, and a playground for children, the Superilla has something to offer to everyone. Àvila street is adorned with statues of human figures made out of concrete and steel, and picnic benches spread out along the street, providing space to lounge and socialize. There is additional public seating between the office building and the corner café, which invite families and tech workers to linger, eat, and hang out. Families bring their children to the playground in the mornings and afternoons. All of this takes place on the street, in a space that was formerly for private vehicles. This re-design is made possible by the redirection of street traffic, effectively making segments of the Superilla car-free.

Being a multi-faceted public space, the Superilla has both a family environment and a corporate vibe. The trendy and colorful urban design is reminiscent of the playful environments of high-tech firms, aspiring to place Poblenou on par with the Silicon Valley and other high-tech hubs of Europe. During the morning and evening hours, the space is unmistakably tied to those working at MediaTIC and other knowledge economy office buildings – young and middle-aged tech workers roam the Superilla during different moments of the day: they fill the café during their morning and lunch breaks, and could not be a better fit for the 2010s minimalist, wood-adorned, semi-naturalist and trendy corner café. At times the Superilla feels like an extension of the office complex that surrounds it, and when the workers go home, the area's activity decreases considerably.

At the same time, there is a distinct family environment. On Friday afternoon, the Superilla was brimming with families celebrating all kinds of birthdays with their little ones. Children, parents and caretakers use Superilla Poblenou as part of their everyday routine, which has helped consolidate this urban experiment, more than five years after its implementation.

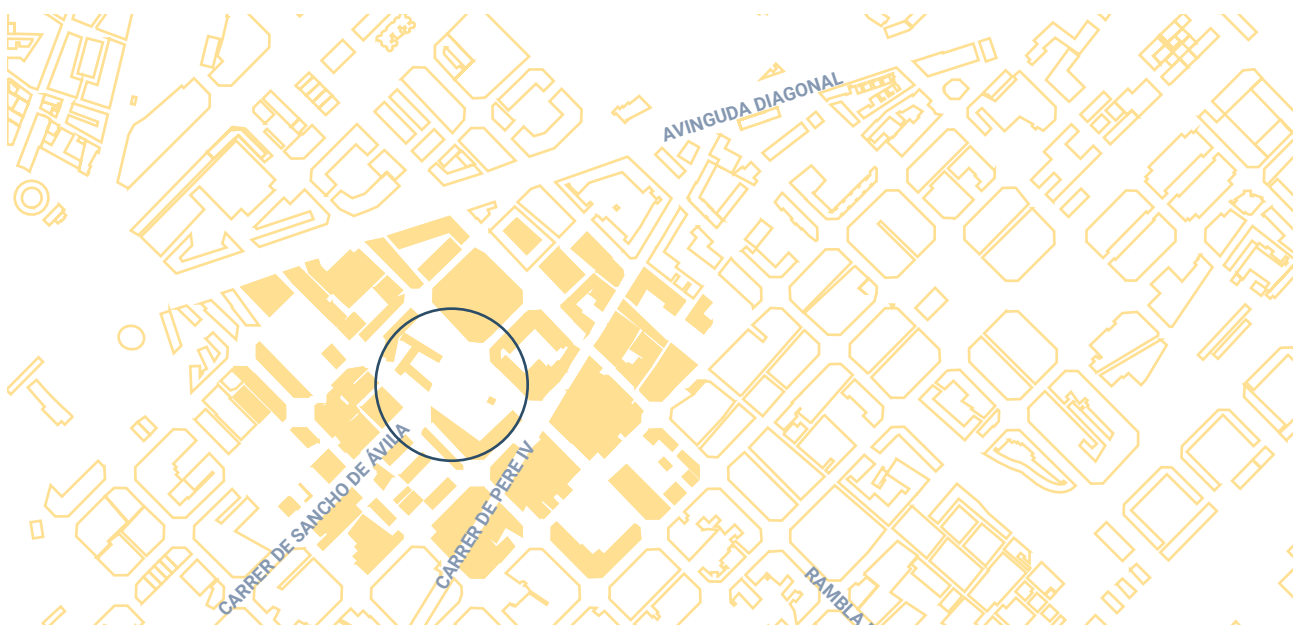


Figure 8: Map of Superilla, 2022







# MAR BELLA

## SITE DESCRIPTION

The skateboard park Mar Bella is located between Av. del Litoral and Platja de la Mar Bella, near the Pista d'Atletisme La Mar Bella. This park was finished in 2014. It is a walkable urban environment, nudged between the pedestrianized waterfront named Passeig Marítim de Bogatell and Av. del Litoral which is dominated by vehicular traffic.

The Mar Bella skatepark is a collection of deep skating bowls. At the entrance, there is a wave ramp that leads to the bowls. After crossing the wave ramp, skaters can enter a canal that branches off to the various bowls with different levels of difficulties. The deepest and most demanding bowl for advanced skaters is closest to the waterfront. The Mar Bella skatepark attracts skaters, bmx bikers and scooters, who each show off their most daring tricks.

The surrounding streets are designed for walking and running; however, there are some commercial businesses, including restaurants, located near the park and along the beach. Passeig Marítim de Bogatell includes bike lanes that are generally used for cycling and scooters/e-scooters. Other surrounding streets share their space in between pedestrians, cyclists and scooters. The skatepark is adjacent to a grassy area, with trees that provide much-needed shade in the summer.

People use the spaces that are not particularly designated as resting areas for informal seating and passive recreation. Young people visit the skatepark to practice their skills, and they also use the seating area which is located inside the skatepark to relax and interact with their friends. Because of this division, each group is able to use their area in customized ways to meet their specific requirements. There is a wide range of people in terms of age, and gender. In the mornings, most are younger, especially inside the skatepark, but in the evenings, groups of seniors are more visible, especially along the waterfront.

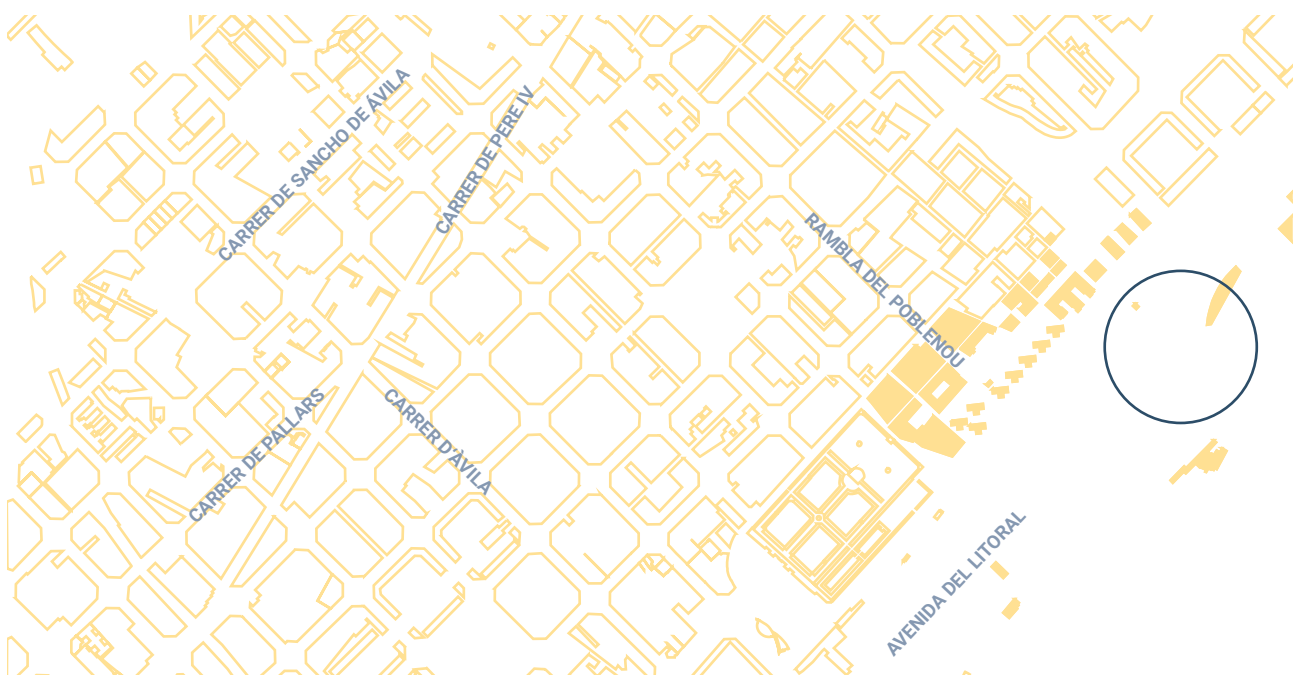


Figure 10: Map of Mar Bella, 2022



# PEOPLE STAYING

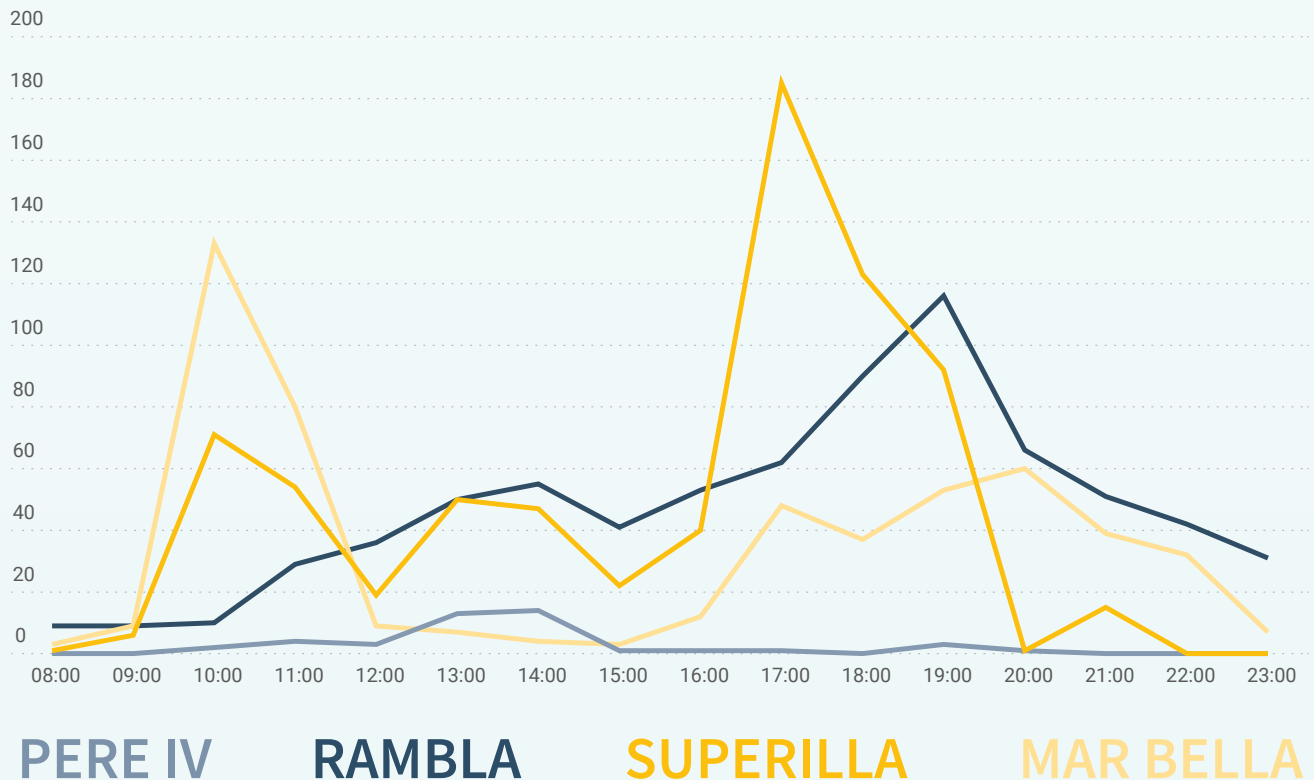


Figure 11: Total Count of People Staying, 2022

## PER SITE

Counting the number of people staying and using public space is a basic indicator of its quality. Often the success of an urban design is measured by how many people a particular place is able to host, with more popular places deemed as more successful. Do people stay and linger? If they do, what do they do there? What insight can we derive from patterns of use over the day?

When comparing total use over the course of the day, we observe that Superilla is the site with the highest number of users peaking at 17:00 hrs (Figure 11). The pedestrianized street in front of the school hosted several birthday parties as children came out of school. This also coincided with the absolute peak of human presence at the Superilla and sharply contrasted with the total absence of people in the Superilla in the evening hours. Depending on the time of the day, the atmosphere changes from sterile and corporate to warm and familiar, and then mostly empty.

Other peaks at Superilla took place at 10:00 hrs (coffee break), at 13:00 hrs (lunch), and then, after 17:00 hrs the number of people slowly goes down again. The other notable site is Rambla, with a consistently high number of users, which increases until 19:00 hrs, and has a small peak at 14:00 hrs. Both of these times could be signs for lunch and dinnertime, which coincides with the fact that there are many restaurants at the Rambla. Mar Bella shows an exceptional number of people at 10:00 hrs, which can be explained by a school trip visiting the site at that time. During the day it has few visitors until it picks up starting at 16:00 hrs. Pere IV is the site with the lowest amount of people, the data does not exceed the number of 20 people in total, although there is a clear peak between 12:00 hrs and 14:00 hrs, where employees of nearby companies would go there to have their lunch.



# GENDER

We observe a systematic

gender imbalance in the use of public space in Poblenou. Of the four sites, Pere IV (Figure 12) was the most male-dominated among persons staying, especially during working hours, when employees of surrounding companies went there for lunch.

PERE IV

RAMBLA

SUPERILLA

MAR BELLA

La Rambla de Poblenou (Figure 13) seems to be the most gender-balanced site, across most times of the day, with the exception being in the evening between 20:00 hrs and 21:00 hrs, when the number of men exceeds the number of women by almost 20 people.

Superilla (Figure 14) is the only site where we observe more women than men. Unsurprisingly, we observe more women in a place with a school and a playground, where parents engage in caretaking activities and attend to children. The female use of the space peaks at 17:00 hrs, coinciding with school pick-up. It is also the site with a visible number of “Unsure/ Non-binary”, which is explained by the high number of children aged 0-4 using the space, where we did not distinguish gender.

Mar Bella (Figure 15) is a place that tends to attract active, young, and able-bodied males. As observed in past years, the gender gap remains at the Marbella skatepark, although the presence of women is not insignificant and fairly constant. This reflects the fact that overall, women are still less represented in a sport such as skating.

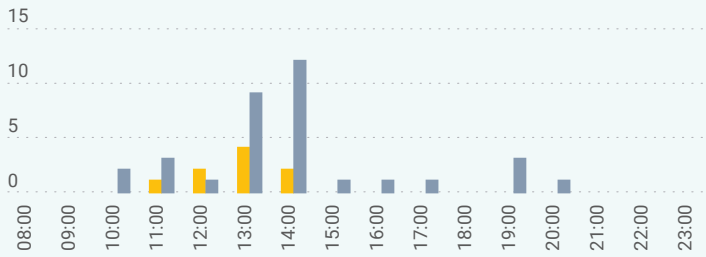


Figure 12: Gender Distribution at Pere IV, 2022

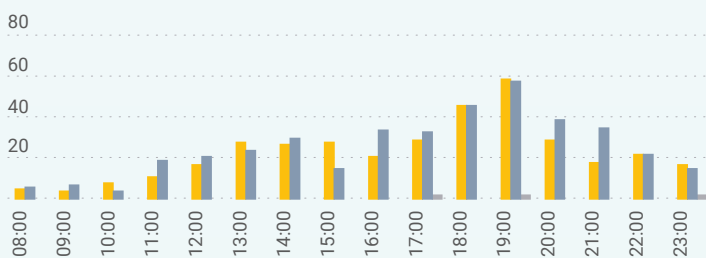


Figure 13: Gender Distribution at Rambla, 2022

■ FEMALE ■ MALE ■ UNSURE

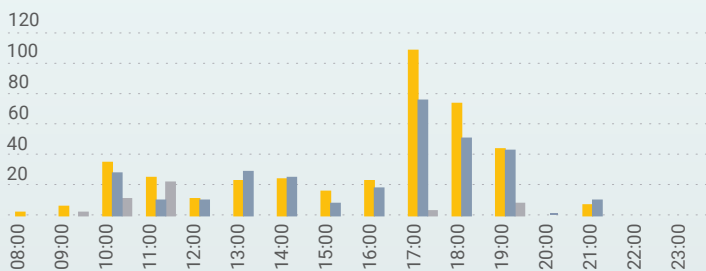


Figure 14: Gender Distribution at Superilla, 2022

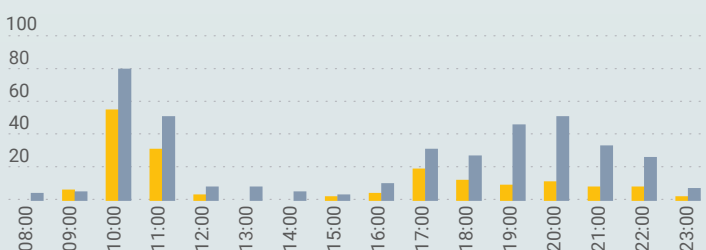


Figure 15: Gender Distribution at Mar Bella, 2022





Figure 16: Activities per Site, 2022

## ACTIVITIES

We examined what people do when using public spaces (Figure 16). When we look at specific activities, we note that some places have characteristics that lead to a particular atmosphere and function. The most common activities were in conversation, eating/drinking, passive recreation, active recreation, and attending to children. We also recorded when individuals were attending to pets, reading, engaged in civic work or a cultural activity, but received very few observations (<2%) in these categories and therefore we did not include those findings in this report.

The park at Pere IV is a place used for passive recreation and eating/drinking. The physical features of the place with its hidden location inside the block, the vegetation and comfortable seating invites visitors to seek refuge from the bustling surroundings. The Rambla shows a similar set of activities, however, the percentage of conversation does exceed all other measures. Accompanied by a high amount of eating/drinking, the Rambla has clearly the most opportunities to have food or drinks. Activity patterns in Superilla and Marbella differ from those observed in Rambla or Pere IV. The activity data reinforce the Superilla as a place for families and care-taking as we observe the most number of people playing and attending to children. Mar Bella is the most active place with a high percentage of skating, active recreation, and passive recreation.



**AGE** The age distribution (Figure 17) of users in public spaces can indicate how accessible, inviting, and inclusive the space has been designed. The presence of children and seniors often implies high-quality public spaces that are welcoming for all. Conversely, the absence of younger or older users indicates that space might need to be improved to ensure that everyone feels welcome.

We did not observe any children or families staying at the Pere IV site which seems inconsistent with the design of the space, which includes a play area, protected by a fence and shade. It is possible that this site is used by families on weekends, while our measurements were only taken on weekdays. But it might also show that adding play items for children does not guarantee its success. With Superilla nearby, families might prefer other places to bring their children.

The Rambla de Poblenou shows the greatest age balance. Every group is represented, meaning that it seems to be the most inclusive space. The presence of children is enhanced through safe places without traffic, while seniors are attracted by public seating in the shade.

Superilla shows high percentages of children, in particular with the age of 0-4.

Mar Bella, due to its active environment and a lack of public seating, has no representation of seniors but rather people from 5-24 years old.

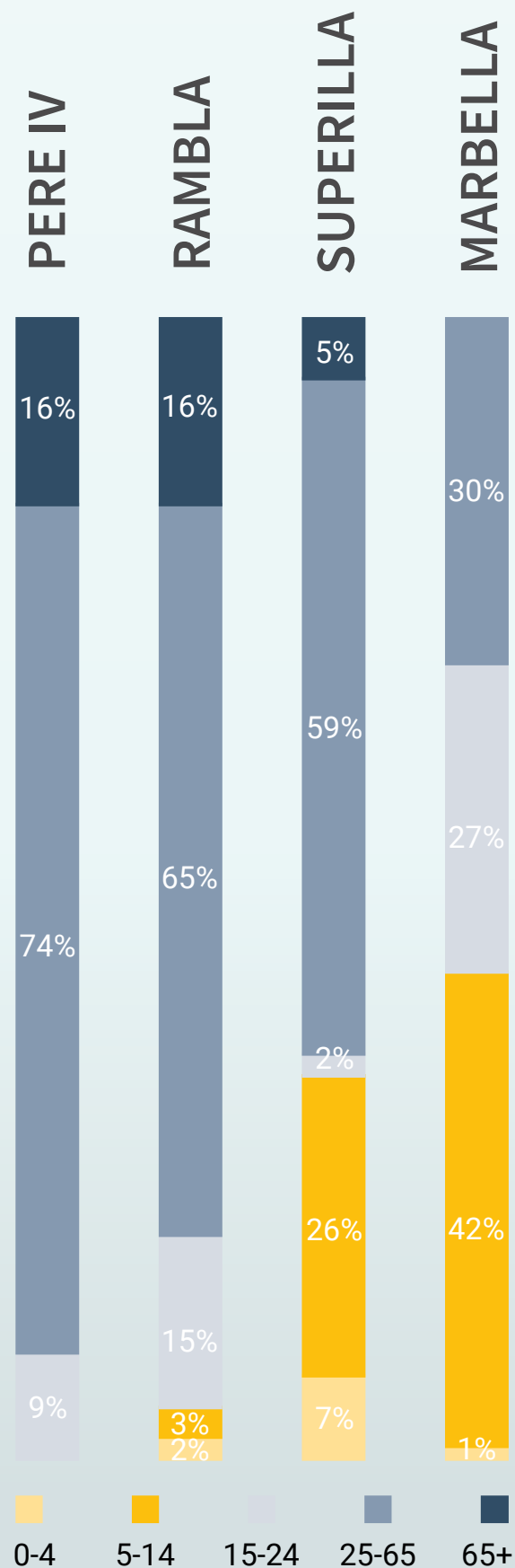


Figure 17: Age Distribution per Site, 2022



# PEOPLE MOVING

10 MINUTES OBSERVATION EACH HOUR

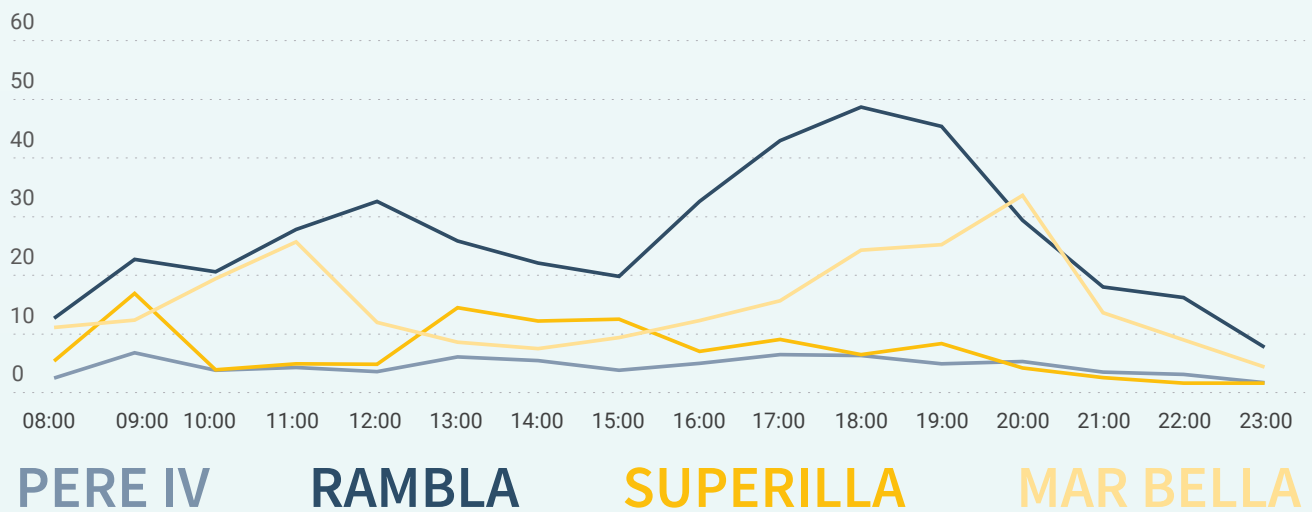


Figure 18: Total Flow Count per Minute, 2022

## PER SITE

We collected the number of people moving through a place including different modes of mobility. We look at pedestrians, cyclists, and people on scooters.

This data is gathered manually, allowing the categorization of age and gender. This analysis captures the movement dynamics of a public space as well as it might show the potential for improvement. Three out of the four sites are pedestrianized: Rambla, Superilla, and Marbella. This means that the use of cars is limited, if not prohibited, making the journeys by pedestrians, cyclists, and scooters more safe and comfortable.

We counted all pedestrians, cyclists, scooters, wheelchairs, and non-motorized traffic for a period of 10 minutes. This data can be extrapolated to an hourly average (as in past work) to make it more comparable to traditional traffic flows, which are often in hourly (or daily) averages. However, we found that the large volume of traffic makes hourly estimates more difficult to conceptualize, which is why we present our findings as counts per minute, with the assumption that it is easier to imagine how many people might cross a transect in a short period of time. Pedestrian flow is not constant over the day, and it has distinct daily patterns that reflect on wider patterns of movement in the city (Figure 18).

Pere IV shows the lowest levels of foot traffic, ranging between 1 and 6 people crossing the transect each minute. There are peaks at 9:00 hrs, 13:00 hrs, and 17:00 hrs. Rambla has the highest level of pedestrian flow, peaking at lunchtime and during the early afternoon. Flow rapidly decreases in the evening. The observations in Superilla show a rush hour at 9:00 hrs coinciding with the school drop-off, going to lower values during the rest of the morning. The second peak is around lunch hour at 13:00 hrs, then decreasing all the way into the night. Movement patterns in Marbella are notably different. There are two clear peak times, in the morning and in the late evening, coinciding with times when residents are active and seek exercise. Pedestrian levels are lower during the warmest times of the day along the waterfront. The 20:00 hrs peak at Marbella marks a measurement that slightly surpasses the flow at Rambla, which otherwise has a higher level of pedestrian traffic at all other times of the day.



The flow transect at Pere IV (Figure 19) measures approximately 22.5 meters. The street is characterized by two relatively small sidewalks on each side, and a 12.5 meters wide paved road. It includes two car lanes and a segregated bus lane. A provisional outdoor seating in front of a restaurant, accompanied by construction site equipment adds up to the slightly chaotic picture the street section gives. Out of all sites, the flow counts in Pere IV were the lowest with 4,362 counts in total.

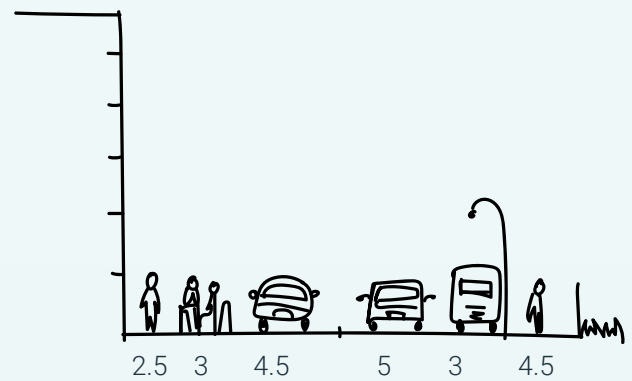


Figure 19: Flow Transect at Pere IV, 2022

The flow transect at the Rambla de Poblenou (Figure 20) is located between Carrer de Ramon Turró and Carrer de Llull, right in front of the neighborhood association (Casal de Barri del Poblenou). Rambla de Poblenou shows the highest observed flow with 25,512 counts. The transect measures approximately 20 meters in a traffic-calmed street. A 2.5 meters wide sidewalk on each side is accompanied by a 2.5 meters wide lane, primarily used by cyclists and e-scooters, but also by delivery and emergency vehicles. The central section, the Rambla promenade, measures approximately 10 meters wide and is the zone used by pedestrians to walk or sit in public, but it is also the place for the outdoor dining of restaurants.

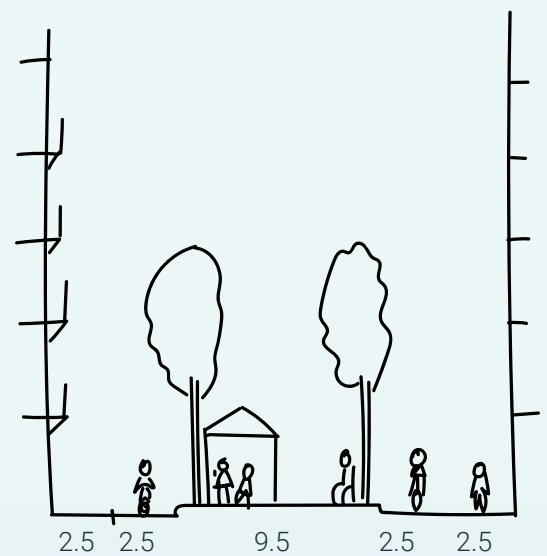


Figure 20: Flow Transect at Rambla, 2022

The section of Superilla (Figure 21) is located in Carrer Sancho de Ávila, and next to a primary school. The space, embedded in the classic Eixample grid, is closed for cars. It only allows pedestrians, cyclists, and scooters. It includes a wide sidewalk on each side and a multifunctional central space that serves as bike lane, footpath, public seating, and play zone. The total flow in this transect was 6,966 counts.

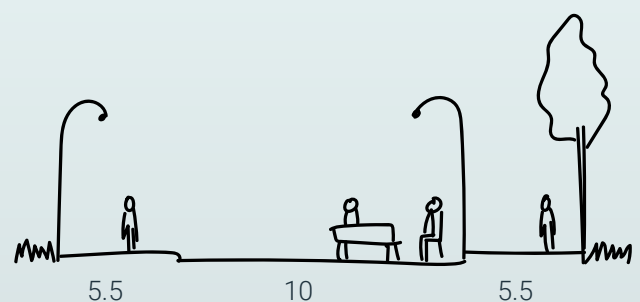


Figure 21: Flow Transect at Superilla, 2022

The transect in Mar Bella (Figure 22) is located at the beachfront at Passeig Marítim de Bogatell and stretches over 21 meters. It includes segregated bike lanes for each direction, a 13 meters wide promenade, and a small ramp that leads to the beach. The observed flow in this transect was 14,652 people.

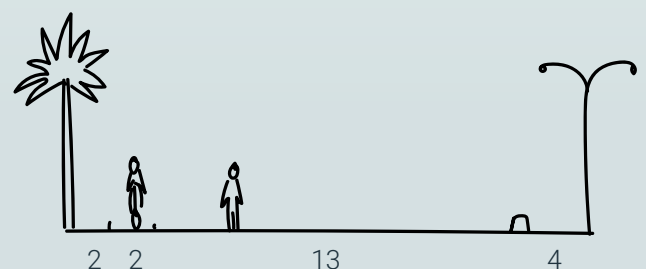


Figure 22: Flow Transect at Mar Bella, 2022

## GENDER

When looking at gender of pedestrians, Rambla de Poblenou and Superilla are the sites that show the most balance in gender (Figure 23). Pere IV is male-dominated, as the surroundings of construction sites and tech companies are still more related to men. The gender gap in Mar Bella is the highest with only 36% female pedestrians. As in the section of “people staying”, this might be a hint of the general gender gap in some sports such as skating.

The gender analysis of cyclists is increasing, and Rambla de Poblenou, as well as Superilla, are not as balanced with only 33% females in Rambla and 36% females in Superilla. However, the overall dynamics do not change; those places with dominance in men by foot do also show a dominance in men by bike, which we can also observe with scooters. In general, the gender gap tends to be lower when looking at pedestrians, while the male dominance in biking and scooter is higher.

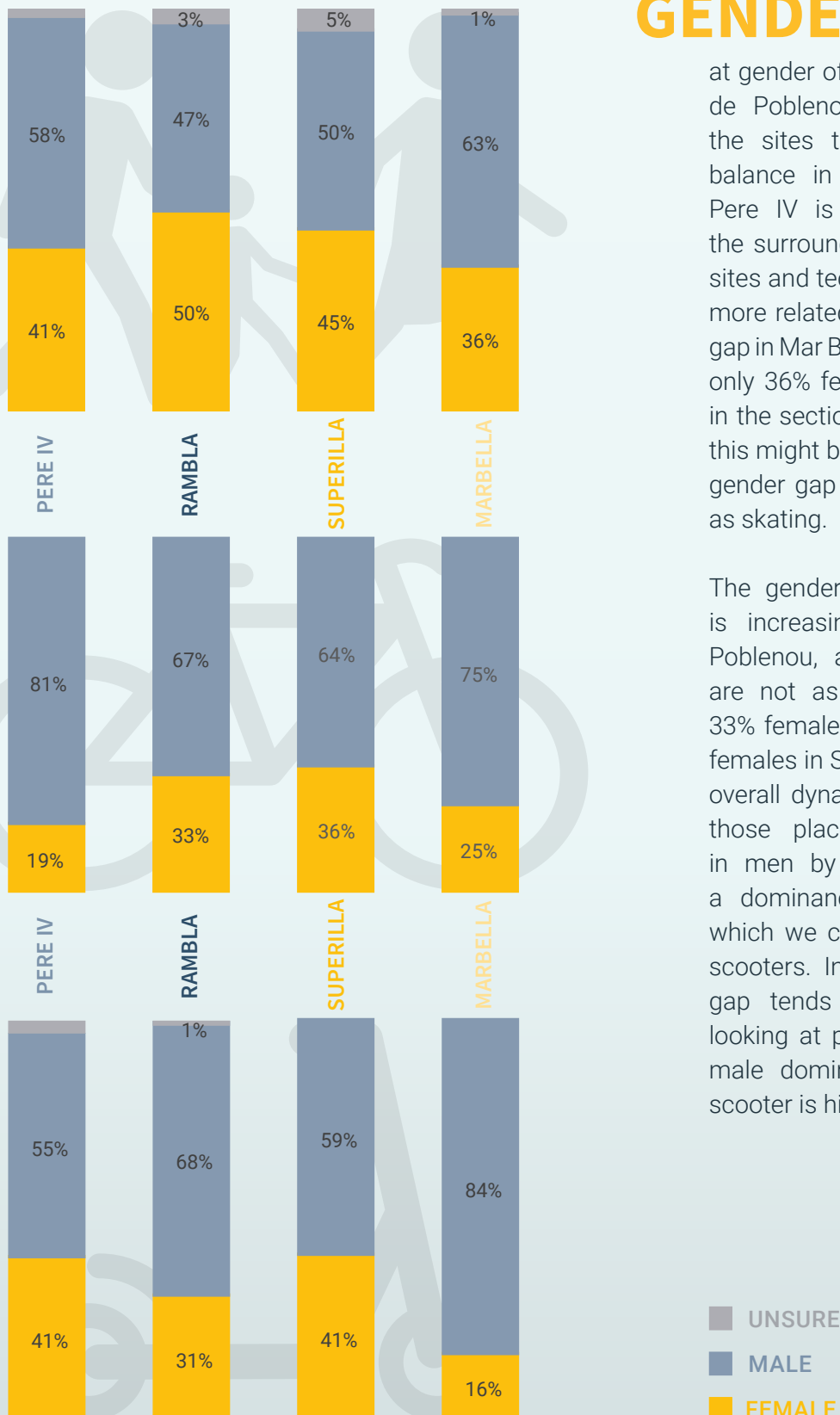


Figure 23: Gender Distribution per Mode of Transport, 2022



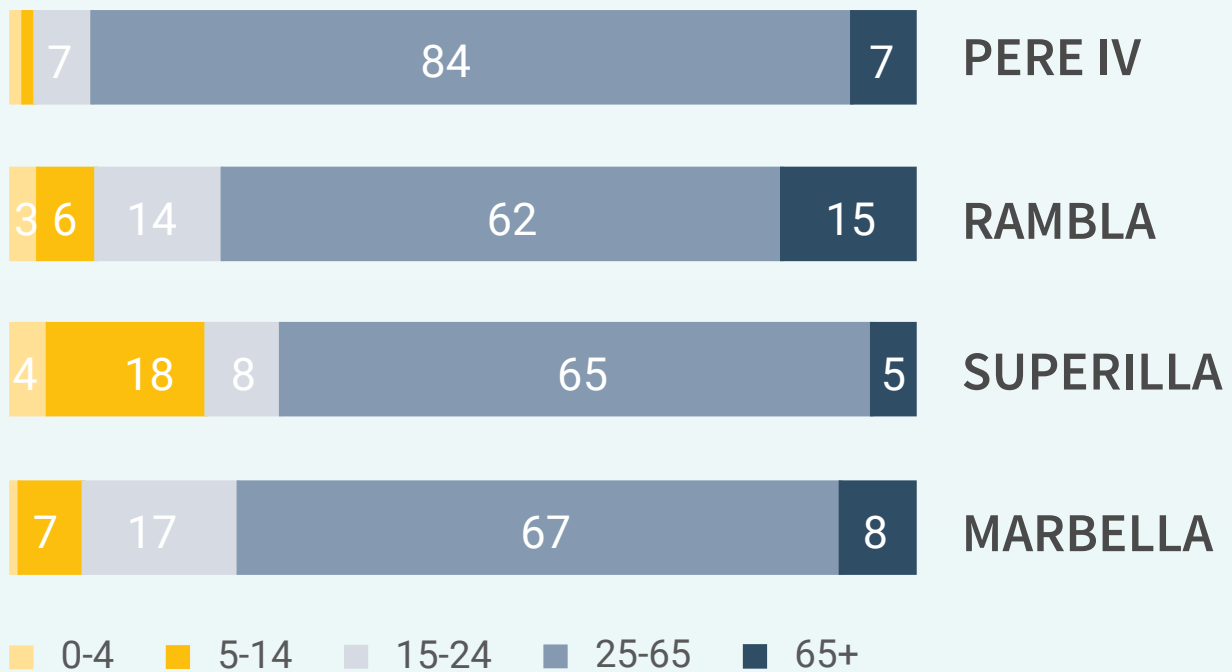


Figure 24: Age Distribution of People Moving, 2022

**AGE** The distribution of age groups is a key factor when analyzing public space. People of different ages use places in various ways. Each site has a different age profile (Figure 24). The share of children aged 0-4, as well as 5-14, is the highest in Superilla, most probably due to the school and playground. In contrast, the percentage of seniors in Superilla is relatively low with only 5%. The Rambla shows the most balance across age groups. Mar Bella shows the highest percentage of youth (15-24), since the skatepark seems to attract teenagers and young adults. Marbella and Pere IV have a considerably small share of children with the age 0-4. Pere IV has the highest percentage of adults moving, while it seems that the physical features of the street are simply not suitable for a safe commuting with children.

# PUBLIC LIFE INDICATORS

10 MINUTES OBSERVATION EACH HOUR

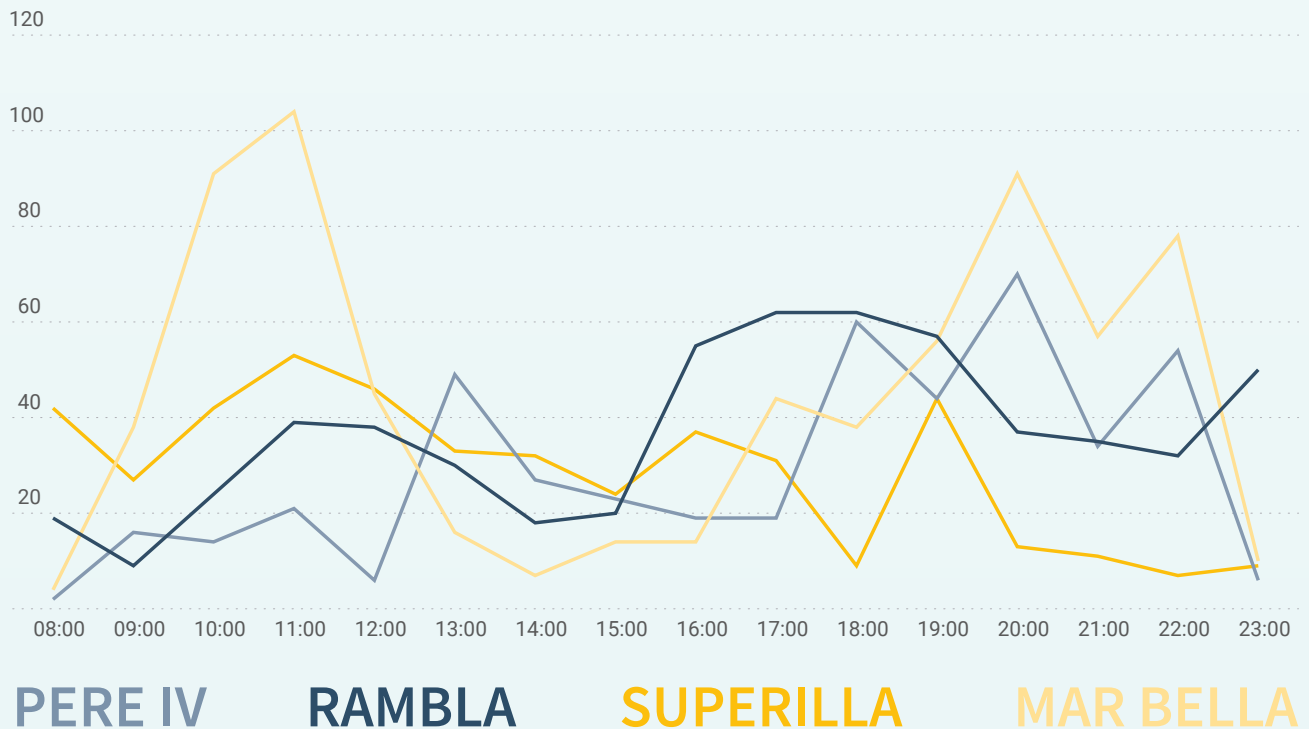


Figure 25: Public Life over Time, 2022

## PUBLIC LIFE

We collected a set of public life indicators to capture the experience and feel of spending time at our four study sites. These indicators aim to measure the subtle and intangible elements of public life, like the presence of tourism, social bonds, and the quality of social relationships. These elements are unlikely to be captured in counts of people staying and people moving.

Overall, Mar Bella counts the highest number of public life indicators, with significant peaks around 11:00 hrs and 20:00 hrs (Figure 25). Contrastingly, the Rambla and Pere IV peak at work-related times, both during lunch break and after work – although Rambla prolongs its liveliness throughout the night.

The use of the spaces can be analyzed through a dissection of the public life indicators per site, (Figure 26). The most common public life indicator was related to the category affection which surpassed all other categories, especially in La Rambla. Compared to all other sites, we observed the most greetings and photos being taken in Mar Bella, which can be attributed to the skatepark as a center for social interaction. Pere IV, in turn, has a high level of smoking and drinking. This can be explained by its nature of mid- and post-work socialization, especially because of the bar at the triangular intersection at Pere IV. Superilla has the most balanced ratio of work badges to substance use, greetings, and affection, as well as the lowest count of total public life indicators.



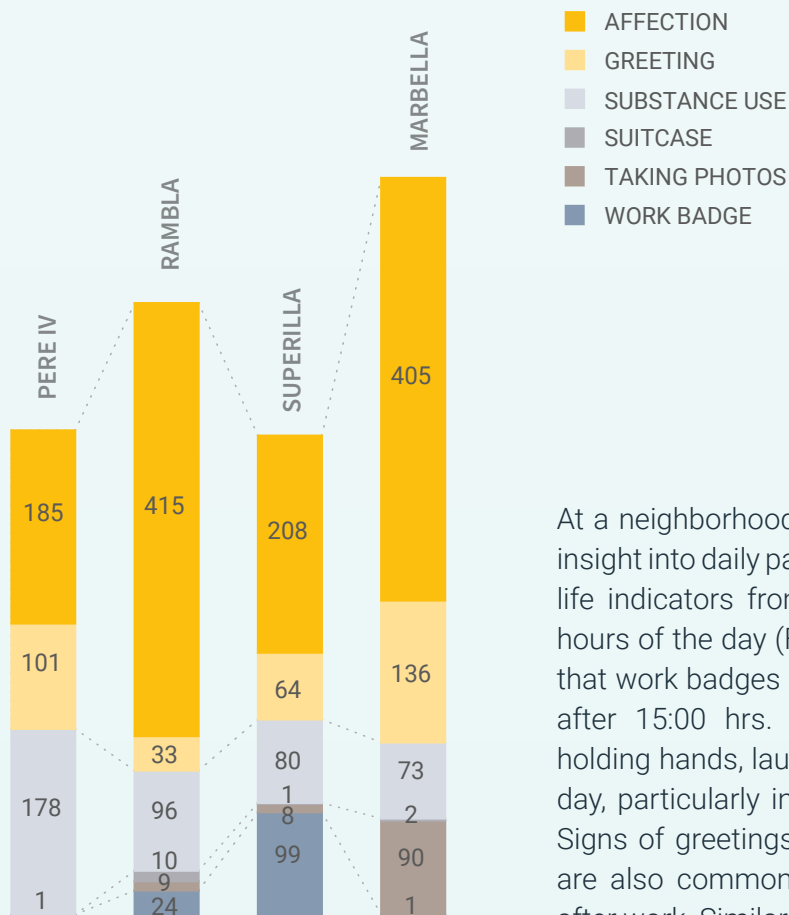


Figure 26: Public Life Indicators, 2022

At a neighborhood level, the public life indicators give us insight into daily patterns of activities. We combined public life indicators from all sites and plotted them over the hours of the day (Figure 27). This allows us to appreciate that work badges come out in the morning but disappear after 15:00 hrs. Signs of affection (kissing, hugging, holding hands, laughing) are the common throughout the day, particularly in mid morning, afternoon and evening. Signs of greetings (handshake, wave, nod, elbow bump) are also common, but rise considerably in the evening after work. Similarly, smoking and drinking rise in the early afternoon and evening.

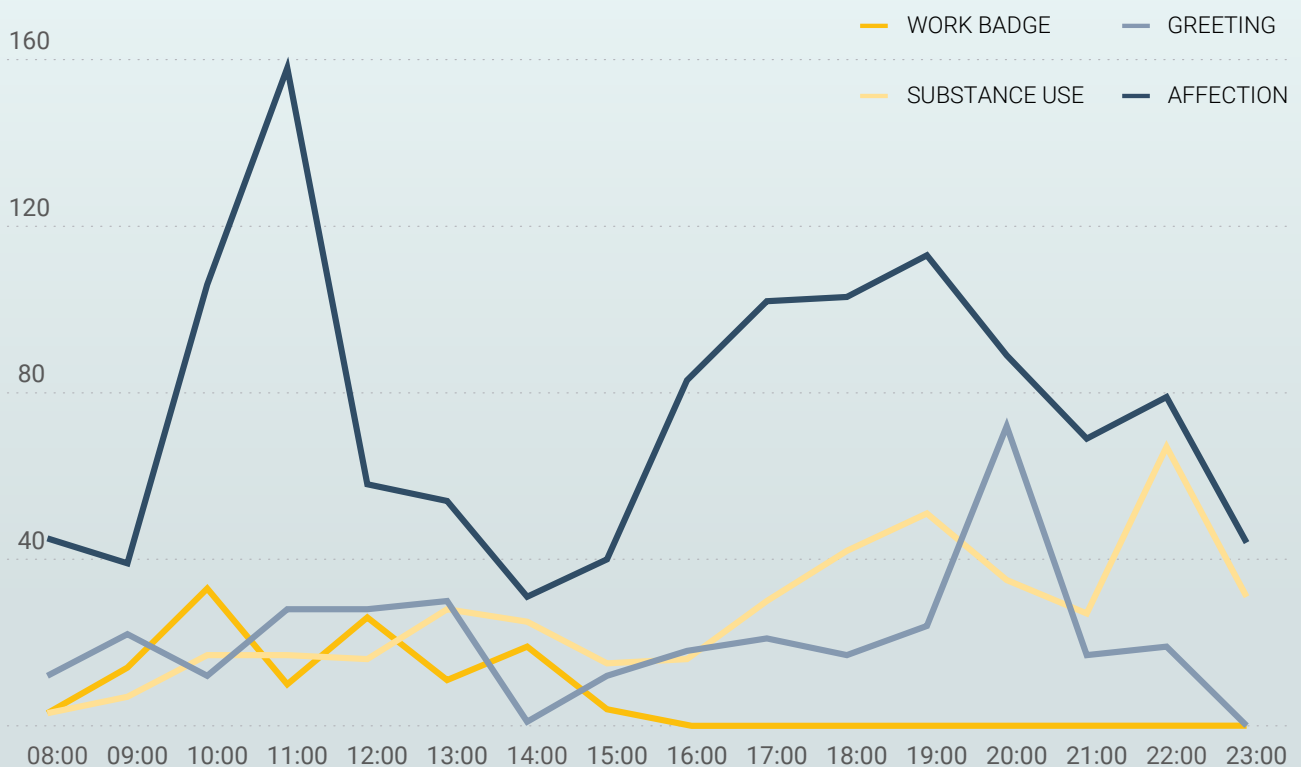


Figure 27: Selected Categories of Public Life Indicators by Hour, 2022

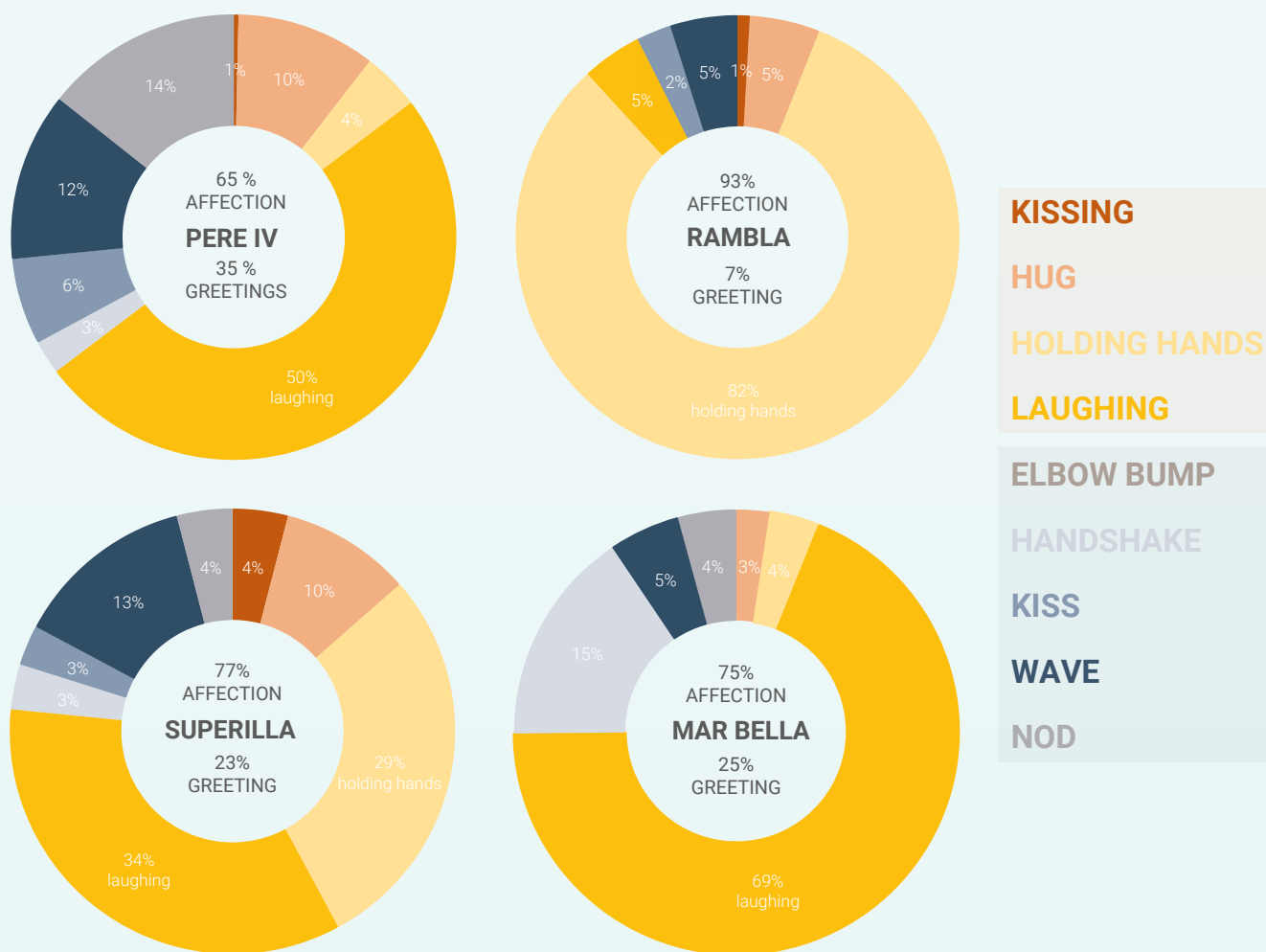


Figure 28: Affection versus Greeting per Site, 2022

# AFFECTION VS GREETING

The public life indicators for “affection” (kissing, hug, holding hands, laughing) and “greeting” (wave, nod, kiss, handshake, elbow bump) show that neighbors know each other and suggest that there is a sense of community. In Figure 28, we break down affection and greeting indicators per site, to identify which expressions of affection or which types of greetings were most common. We compare the percent greeting interactions with the percent affectionate interactions. This ratio is valuable in portraying the type of social cohesion in a place. When there is significantly more affection than greetings, one can assume that there is greater intimacy. A high number of greetings indicates that there is a neighborly feel and that the people of the area know each other and share a strong sense of community. Pere IV has the highest percentage of greetings, demonstrating a broader communal space, as, for instance, in Rambla, where 82% of all affection and greetings are hand holding. This allows for the interpretation of a space more used by couples or families rather than socializing within bigger communities. Mar Bella and Superilla are almost equal in their percentage of observed affection. However, in Superilla there is significantly more hand-holding than laughter, painting the site as comparatively more intimate. This numerical evidence is explained by the presence of a school and the respective parental-child relations. Superilla also has the greatest diversity of affectionate and greeting interactions. Mar Bella is once again strongly shaped by its skate park, where handshakes are the prevailing way of greeting, showing that there is a strong community of users.



## TOURISM

In an effort to identify the background of people using the individual spaces, we aimed to distinguish between locals and tourists (Figure 29). Indicators of tourism included selfie sticks, suitcases and photography of people or objects. These indicators are proxies since local residents may also walk the streets with a suitcase or take photos, however we anticipate that these activities are much more common in sites with a high percentage of tourists. Using these metrics, the site with the most number of tourism related indicators is Mar Bella, followed by Rambla, then Superilla and finally Pere IV. The results fit our expectations since we expect to see more tourists along the waterfront. However a significant proportion of photographs taken at Mar Bella were by the skaters themselves and not necessarily tourists. Overall, Rambla seems to portray the greatest equilibrium in terms of the ratio of all categories, except selfie sticks, which were only documented in Mar Bella. Unsurprisingly, the Pere IV did not show a single indicator of tourism.

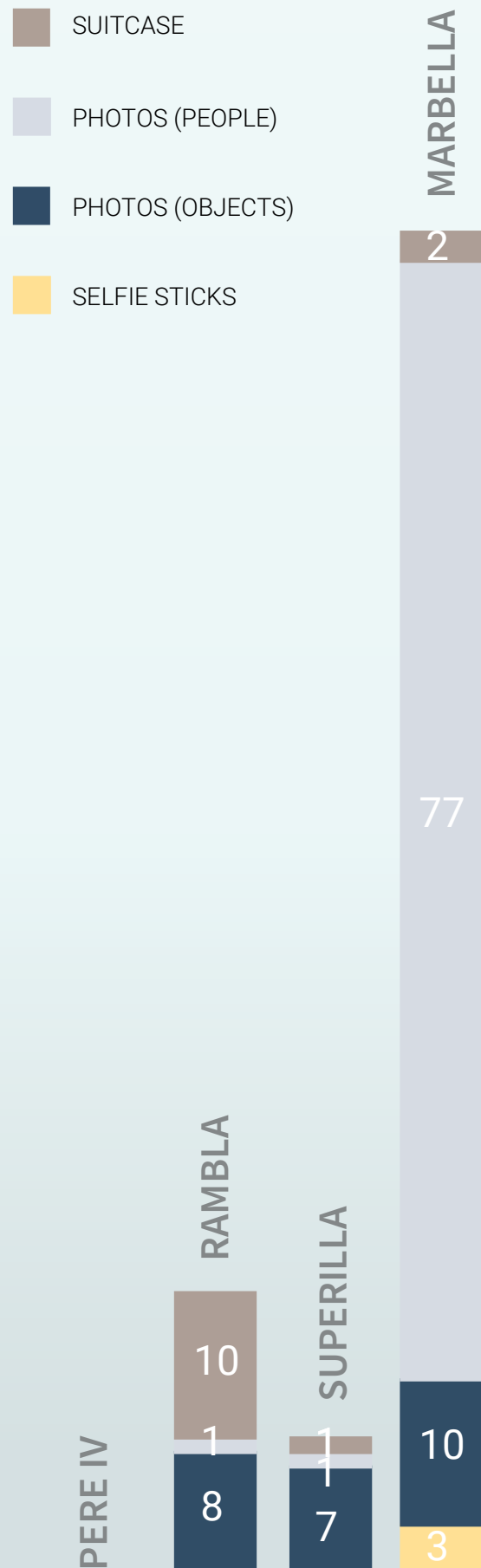


Figure 29: Indicators of Tourism, 2022

# CONCLUSION

Public spaces are the reflection of society. They are a public stage for expression, gathering, exchange, and socialization. An open living room and a collective endeavor, co-created by each of us who walk, sit or stand in city streets, parks and plazas. By observing everyday life in four public spaces in Poblenou, we aimed to learn about the neighborhood dynamics, its activities, movements, and patterns.

Poblenou is a fascinating neighborhood to observe public life because of its contrasts, and the urban redevelopment that is taking place. The 22@ innovation district has invited change, altering the mix of residents, building types, and commercial spaces. The former industrial district is attracting young families, tech workers, investors, and city newcomers. This transformation has generated a scene of conflicting interests among users. We see capitalist pressure, community building and collective resistance to unwanted change. The tensions and transformations spill over into public space, altering who uses certain places, and what it feels like to be in the evolving neighborhood. In some instances, these transformations have welcomed young children and families, in other cases, we see exclusions by age or gender. In this section we aim to synthesize the lessons and insights derived from our observation of public space in Poblenou.

## *Poblenou bounces back*

We observe that Poblenou has bounced back from the pandemic. The overall use of public space is high, socialization is frequent, and everyday patterns have returned. Tourism has also returned to Poblenou, and its presence is felt, particularly in Rambla del Poblenou and

along the waterfront. We did not see signs of tourism at the community garden at the Pere IV site, although it remains to be seen if this might change. While Poblenou is not associated with the mass tourism that overwhelms Barcelona's most visited sites, the pressure generated by visitors, along with the associated changes in commercial spaces and restaurants, may alter the look and feel of Poblenou if tourism continues to grow.

## *We observe systematic exclusion by gender*

Another important finding is that not all spaces are open to all ages and genders. We observe considerable gender imbalances at Pere IV and Mar Bella. These sites are dominated by men, both in terms of who is staying and who is moving through. Women remain absent in many public spaces or during particular times of the day. This finding reinforces the notion that city spaces are not gender neutral, and women are excluded from particular places through cultural expectations or by design [8]. Even in the Rambla del Poblenou, a site with an overall gender balance, the number of women drops during evening hours, when there are more caretaking responsibilities. Therefore the use of public space reflects entrenched gender inequalities and gives rise to the need to actively include women in city planning and design. Public spaces must be inclusive of all, accessible to everyone, and make everyone feel welcome and safe, regardless of gender, age, and social group.

## *The Superilla Poblenou comes of age*

Superilla Poblenou is no longer the novel and youthful addition to Barcelona's urban fabric.





Figure 30: Photography in Poblenou, 2022



It has matured and come of age. The women, children, and caretakers of the Superilla have helped consolidate this site as a space with its own independent identity, and as a place for play and care. We see hugging, kissing, laughing, neighborly salutations, and holding hands. It is the site with the most women and children.

The urban design of the Superilla includes many elements of what city planners like to insert into successful public spaces [9]. It features wide seating areas with big tables, plenty of space for pedestrians, diverse vegetation, safe playgrounds, and limitations on the movement of cars and motorbikes. Superilla invites users to linger, celebrate birthday parties, hang out with friends, and pull out their laptop at the corner café. As long as the surrounding offices and businesses are open, the Superilla is vibrant and full of life. There are still fewer seniors in comparison to other sites, and total use drops off in the evening. However, Superilla has overall consolidated itself as a space for everyday life, heavily used by locals. Nearly six years after Superilla Poblenou emerged as a planning experiment, we can now say that Superilla has consolidated itself with its own identity and feel, as a distinct and lively place within Barcelona's urban fabric.

#### *Rambla Poblenou is a high quality public space*

We find that Rambla Poblenou is an exceptionally high quality public space that is well used by women and inviting to seniors. Our findings reinforce past work in Rambla del Poblenou that illustrated the extent to which this site excels across most public life measures [2, 3]. The centrality of the pedestrian promenade gives cyclists and pedestrians more freedom and comfort on the street. Large trees provide shade and atmosphere, restaurants and shops make it a bustling, vivid, and social place. The Rambla has the most balanced gender composition and the highest number of seniors. We also see that

it is a high quality public space because many are engaged in conversation and socialization. The Rambla is a place to stay, although most who stay are clients in one of the many cafés, which compete for spaces that do not require consumption like public seating and passive recreation. Public seating can also be found on the roundabouts, which are an ideal place to people-watch. The Rambla is also a place of movement. Of all the sites, it was the busiest, at all hours of the day, as pedestrians, cyclists, and scooters quickly rushed through on their way to work or school. It is a place to see and be seen; the promenade for the retired seniors, the leisurely visitors, and the flaneurs out for a stroll.

#### *Mar Bella Skatepark has its community*

Mar Bella has its own unique atmosphere. It is a highly active skatepark, full of young people, mostly men, surrounded by a seaside park that stretches along the beach of Poblenou. Its distance and isolation from the Poblenou core contribute to its distinct feel. There are no commercial uses on the site. Our public life indicators show that there is a well-defined community of users who know each other. The adjacent park is inviting for people to stay on the grass and relax, picnic, or play. Perhaps because of the lack of public seating and shade, Mar Bella is not visited by the elderly. However children use the skatepark, as participants or observers, and at times families will come together as children learn to do new tricks. The space has a significant gender gap, and yet there is a strong sense of community and sense of belonging, making it a unique and valuable addition to the city.

#### *The future remains uncertain*

Finally, our observations raise questions about what the future of the neighborhood might look like, to what extent the physical changes



are impacting activities in public space, and who might be excluded by economic pressures and rising housing costs. Longtime residents fear gentrification and wonder if the new public spaces are being built for them, or for someone else [10]. There is skepticism about the urban agenda advanced by the city, which often operates on institutional logic and has been unable to calm fears of displaced [11].

The Pere IV site is the least used of the four, distant from popular commercial destinations or high-end architecture, and the most likely to undergo a major transformation in the next few years. It is primarily visited by locals and employees. The calming, relaxing atmosphere of the garden brings its users joy. The neighborhood garden at Pere IV is a multi-beneficial project. The most obvious benefit is the successful creation of a new public space, providing vegetation, shade, seating, and playing areas. In addition, the community-led creation process has strengthened neighborhood bonds, increased the sense of belonging, and served as a point of resistance to gentrification. Perhaps the Superilla is the site where the ongoing gentrification processes are most noticeable, as the design and activities of the space are meant to attract a user group of recently moved-in tech workers, creative class entrepreneurs, and young people brought to the city as part of the creative economy.

Our study has characterized the dynamics of public space at four sites in Poblenou. While the urban transformation is exciting, there remains the risk of excluding local residents, and many spaces are not as inclusive as they could be.

# REFERENCES

- [1] Honey-Rosés J, Anguelovski I, Chireh VK, et al. The impact of COVID-19 on public space: an early review of the emerging questions – design, perceptions and inequities. *Cities & Health*. 2021; (5):S263-S279. doi:10.1080/23748834.2020.1780074
- [2] Anderson, R., Chin, S., Dara, N., Harlos, D., Johnson, E., Labahn, S., LaRocque, E., Lloyd, G., Lone, S., McBurnie, M., Nakao, T., Nesbitt, C., Oswald, T., Raphael, L., Shen, H., van der Veen, A., Zhou, S., Villagomez, E., & Honey-Rosés, J. (2018). Life in Poblenou: Observation and Exploration. doi 10.14288/1.0372821 URL: <http://hdl.handle.net/2429/67589>
- [3] Akaltin, D., Chen, J., Cho, W., de Haan Bosch, C., Flock, I., Grondin, S., Guzmán, I., King, S., Kinman, A., McCausland, S., Oscilowicz, E., Rachelson, H., Roe, J., Soler Cruz, J., Yilang, Y., Zhu, J., Muxi, Z., & Honey-Rosés, J. (2019). Life in Poblenou: Observing Spaces in Transition. doi:10.14288/1.0384917 <http://hdl.handle.net/2429/72184>
- [4] Honey-Rosés, J. (2019). Measuring Neighbourhood Change in Public Space: A Public Life Study in Poblenou, Barcelona. Seminario Internacional de Investigación En Urbanismo. doi: <https://doi.org/10.5821/siiu.6622>
- [5] Gehl Institute (2017) The Open Public Life Data Protocol New York, NY.
- [6] Gehl, J., & Svarre, B. (2013). How To Study Public Life. In How To Study Public Life. Island Press. [https://doi.org/10.5822/978-1-61091-525-0\\_1](https://doi.org/10.5822/978-1-61091-525-0_1)
- [7] Institut de Cultura de Barcelona (2016). Pere IV, una calle para comprender la historia de Poblenou. Ajuntament de Barcelona. Available online at <https://www.barcelona.cat/barcelonacultura/es/recomanem/pere-iv-una-calle-para-comprender-la-historia-de-poblenou>, updated on 3/3/2016.
- [8] Col·lectiu Punt 6. (2019). Urbanismo Feminista: Por una transformación radical de los espacios de vida. Virus Editorial.
- [9] Zografos C, Klause KA, Connolly JJT, Anguelovski I. (2020) The everyday politics of urban transformational adaptation: Struggles for authority and the Barcelona superblock project. *Cities*. 2020;99(June 2018):102613.
- [10] Oscilowicz E, Honey-Rosés J, Anguelovski I, Triguero-Mas M, Cole H. (2020) Young families and children in gentrifying neighbourhoods: How gentrification reshapes use and perception of green play spaces. *Local Environment*.;25(10):765–786. doi:10.1080/13549839.2020.1835849
- [11] Guijarro Turégano B. Repensar los cruces: La implementación del modelo Superilles: el caso de la Superilla del Poblenou de Barcelona (2016-2021) (2021). Universitat de Barcelona. PhD Dissertation. <http://hdl.handle.net/2445/185009>



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# APPENDIX

## 1 WORKSHEET FOR PEOPLE STAYING

STATIONARY DATA SHEET	
Poblenuu Public Life Study	
COLLECTION SITE	
Name	
DATE	
Weekday	<input type="checkbox"/>
Weekend	<input type="checkbox"/>
WEATHER	
Sunny	<input type="checkbox"/>
Cloudy	<input type="checkbox"/>
Showers	<input type="checkbox"/>
Rain	<input type="checkbox"/>
Windy	<input type="checkbox"/>
TEMPERATURE  _____ °C	
TIME	

#	Gender	Mask	Group Size	Age	Posture	Activity
1				0-4 (Stroller or Carrier)	Standing	
2				5-14 (Kids)	Sitting	
3				15-24 (Youth)	Sitting-Public	
4				25-65 (adult)	Sitting-Commercial	
5				+65	Sitting- Informal	
6					Lying Down	
7					In Conversation	
8					Attending to Children	
9					Using Electronics	
10					Passive Recreation	
11					Active Recreation	
12					Active Recreation	
13					Eating/Drinking	
14					Reading	
15					Cultural Activity	
16					Civic Work	
17					Attending to pets	
18					Playing	
19					Stateboarding	
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						


# 2 WORKSHEET FOR PEOPLE MOVING

<b>FLOW DATA SHEET</b>  <b>Poblenou Public Life Study</b>	Site Name Date
---	----------------------

	Age	Male	Female	Unsure
<b>Pedestrians</b>  (people walking, running, being carried in strollers, and moving in wheelchairs)	<b>0-4</b> (strollers/carriers)			
	<b>5-14</b> (kids)			
	<b>15-24</b> (young adults)			
	<b>24-65</b> (adults)			
	<b>65+</b> (seniors)			
<b>Cyclists</b> (any kind)				
<b>E-Scooter/ Scooter</b> (any kind)				
<b>Other wheels</b> (skateboards, rollerblades, etc..)				


WEATHER

Sunny




☐

Cloudy




☐

Showers




☐

Rain




☐

Windy



☐

TEMPERATURE



°C

TIME

Start time:

:

End time:

:

Weekday

☐

Weekend

☐

3 WORKSHEET FOR  
PUBLIC LIFE INDICATOR

Social Cohesion

	Work	Tourism	Salutation					Photographs			Affection			Substance Use				
	Work Badge	Selfie Sticks	Suitcase	Elbow Bump	Handshake	Kiss	Wave	Nod	High Five or Fist Bump	Objects or Landscape	People	Self	Kissing	Hug	Holding Hands	Laughing	Smoking	Drinking Alcohol
Male																		
Female																		

COLLECTION SITE	
Name	
DATE	
Weekday	<input type="checkbox"/>
Weekend	<input type="checkbox"/>

WEATHER	
Sunny	<input type="checkbox"/>
Cloudy	<input type="checkbox"/>
Showers	<input type="checkbox"/>
Rain	<input type="checkbox"/>
Windy	<input type="checkbox"/>
TEMPERATURE	<input type="text"/> °C

TIME	
Start time:	<input type="text"/>
End time:	<input type="text"/>



