

Final Report

Monitoring and Optimising Outdoor
Fitness Equipment Usage in South
Australia



Monitoring and Optimising Outdoor Fitness Equipment Usage in South Australia

Contents

Background	4
Methodology	4
Monitoring sensors.....	4
Direct observations.....	4
Intercept surveys	5
Walk-along interviews.....	5
Manufacturer perspectives.....	6
Results	7
Monitoring sensors.....	7
Direct Observations.....	9
Intercept Surveys.....	11
Walk-along interviews.....	13
Manufacturer perspectives.....	18
Knowledge Translation and Impact	18
Appendix A. Council-Specific Findings	20
Berri Barmera Council	20
City of Adelaide.....	21
City of Holdfast Bay.....	22
City of Salisbury	24
City of West Torrens.....	26
References	28

Final Report

Monitoring and Optimising Outdoor Fitness Equipment Usage in South Australia

Background

This report presents findings from a research project that examined the use and perceived value of outdoor fitness equipment across several South Australian council areas. Local councils have invested substantially in outdoor fitness equipment, installing more than 200 freely available sites to promote physical activity across South Australia (Crozier et al., 2026). Despite the prevalence of this equipment, usage rates are rarely monitored and preferences and barriers to use are largely unknown, limiting effective decision-making about future infrastructure investments.

This project aimed to address this gap by monitoring outdoor fitness equipment usage across metropolitan and regional council areas in South Australia. The study explored community and stakeholder perspectives to improve understanding of user characteristics and preferences and to explore whether the equipment meets diverse needs. The findings presented in this report provide an evidence base to support more informed planning and design of future installations to optimise outdoor fitness equipment provision for the community.

Methodology

A mixed methods approach was used to collect both quantitative and qualitative data within four metropolitan (City of Adelaide, City of Holdfast Bay, City of Salisbury, City of West Torrens) and one regional council (Berri Barmera Council) using five distinct, but interconnected, research components.

Monitoring sensors

Movement sensors ($n = 75$) were installed on pieces of outdoor fitness equipment at ten sites within the partner council areas, with data collected between 1 May 2025 – 30 April 2026. Sensors were primarily attached in inconspicuous locations (e.g., under seats, benches, bars), with some fixed to instruction boards. In one instance, a movement sensor was unable to be installed without causing equipment damage, so this piece was not monitored (static bar system at Mile End Common). Additionally, temperature and humidity data was collected at one site (Barmera) using an alternative sensor device.

The monitoring sensors were programmed to activate when continuous equipment movement was detected for more than 15 seconds, and to deactivate 60 seconds after the last movement was sensed. The sensitivity of the monitors was calibrated to minimise environmental interference (e.g., wind).

Direct observations

Behaviour mapping protocols (Moore & Cosco, 2010) were used to systematically observe and document outdoor fitness equipment usage, including user demographics, equipment usage patterns, duration, and type of use.

Observers were positioned at vantage points that had clear equipment visibility and were an adequate distance away from the users to prevent interference with their use. There were two observers recording usage at each observation session.

The observations occurred at six outdoor fitness equipment sites during May/June and October 2025, accumulating 120 hours of structured observations within forty-eight 2.5-hour blocks (approximately 20 hours per site). In May/June, the observations occurred on Tuesday and Wednesday from 8:30-11am and 11:30am-2pm, on Friday from 11:30am-2pm and 2:30-5pm, and on Sunday from 9:30am-12pm and 12:30-3pm. The same observation schedule was followed in October, however on Friday the sites were observed one hour later from 12:30-3pm and 3:30-6pm to accommodate extended daylight hours due to the commencement of daylight savings.

Custom hardcopy forms were developed to collect the observation data. One form (Form 1) was specific to each outdoor fitness equipment site and contained data fields for observers to record site details, observer names, date, time, weather conditions, and temperature. A section of Form 1 was designated for recording participant information, which included assigning a unique participant number, estimating gender, age group, and ethnicity, and denoting arrival and departure times at the site. An annotated map depicting the location of each piece of equipment at the site along with an equipment identification number was also included, aiding the observer to record usage data on Form 2.

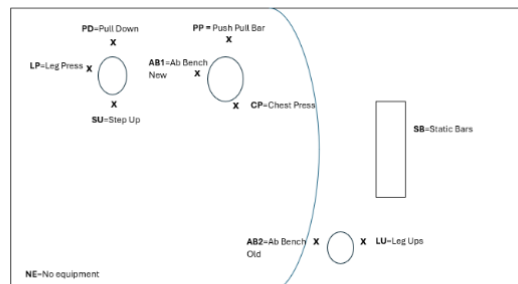
Form 2 was a generic record sheet used to collect participant's outdoor fitness equipment usage information. In addition to providing data fields to enter date, time, and site details, the form contained rows for recording a unique participant number and equipment identification code (linked to Form 1), equipment usage start and end times, use type (exercise, play, sitting, other), and contextual notes.

Each observer was supplied with a digital watch displaying hours, minutes, and seconds which was prominently positioned to enable efficient and accurate recording of start/finish times for each usage instance.

Form 1: OFE Site and Participant Demographics

FORM 1: OFE Site and Participant Demographics

OBSERVATION ID: (e.g., ME12051000)		[Location abbrev] & [DDMM] & [Obs start time]	
OFE SITE NAME:	Mile End	STUDENT 1 NAME:	
DATE:		STUDENT 2 NAME:	
OBS START TIME:		WEATHER (circle):	Sunny Overcast Rainy Windy
OBS END TIME:		TEMP (°C):	



GENDER: M=Male; F=Female; U=Unsure. ETHNICITY: C=Caucasian; NC=non-Caucasian.
AGE GROUP: C=Child (<13yrs); T=Teen (13-17); YA=Young adult (18-35); MA=Middle-aged adult (35-54); OA=Older adult (55+).

Participant Number	Gender	Age group	Ethnicity	Arrival time (hh:mm)	Departure time (hh:mm)
	M / F / U	C / T / YA / MA / OA	C / NC		
	M / F / U	C / T / YA / MA / OA	C / NC		

Form 2: OFE Usage Record Sheet

FORM 2: OFE Usage Record Sheet

OBSERVATION ID: (e.g., CT12051000)		[Location abbrev] & [DDMM] & [Obs start time]	
OFE SITE NAME:		OBS START TIME:	
DATE:		OBS END TIME:	

USE TYPE: E=Exercise; P=Play; S=Sitting; O=Other

Participant Number	Equip ID	Start time (hh:mm:ss)	End time (hh:mm:ss)	Use type	Notes (e.g., contextual factors, user behaviour, social interactions)
				E / P / S / O	
				E / P / S / O	
				E / P / S / O	
				E / P / S / O	
				E / P / S / O	
				E / P / S / O	
				E / P / S / O	
				E / P / S / O	
				E / P / S / O	

Intercept surveys

During the direct observations, the two observers also conducted intercept surveys with park users ($n = 46$). Adults visiting the park were approached and invited to participate in a short survey (5-minutes) about park use. All types of park users were approached, including outdoor fitness equipment users and non-users aged 18+ years. Participants were asked questions about their demographics, park feature preferences, outdoor fitness equipment use behaviours, preferences, and barriers.

Walk-along interviews

Walk-along interviews were conducted in-person at outdoor fitness equipment sites across metropolitan South Australia. Interview participants ($n = 20$) were recruited via free and paid social media advertising and through a question in the intercept survey about future interview participation. The interviewee nominated an outdoor fitness equipment site at which to meet the researcher, and interviews were held as they "walked along" within the outdoor gym site. Questions were designed to explore participants' usage behaviours, preferences and barriers. The interviews were audio-recorded using two-lapel microphones and transcribed verbatim by Otter.ai software. Transcripts were checked for accuracy and analysed thematically to identify key themes related to participants' preferences and barriers to outdoor

fitness equipment use. All participants provided informed consent prior to the interviews and pseudonyms were used in the analysis to protect anonymity.

Manufacturer perspectives

Informal phone or online discussions ($n = 4$) with outdoor fitness equipment manufacturers (Kompan, UrbanFiT, PlayCo, and Proludic Australia) explored equipment design rationale, intended users, installation practices, and collaborations with councils and communities.

Results

This section presents the overall findings from the four phases of research for all sites within the five council areas.

Council-specific information related to the monitoring sensor data is provided in Appendix A.

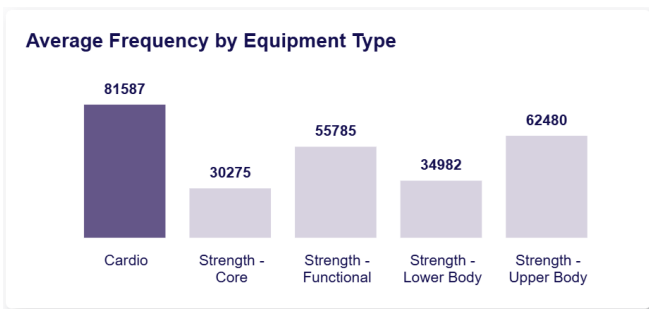
Monitoring sensors

There were >265,000 distinct usage events across the ten outdoor fitness equipment sites from 1 May 2025 to 30 April 2026, with a cumulative usage time of 17,437 hours. Users typically engaged with each piece of equipment for an average of 4 minutes (median usage duration was 2 minutes).



Equipment insights

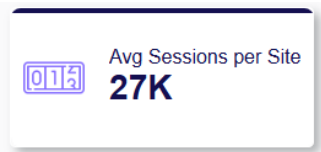
Strength-based equipment ($n = 183,522$) was used more often than cardio equipment ($n = 81,587$), with upper body (e.g., chest press) and functional (e.g., parallel bars) strength equipment the most popular. The prevalence of strength-based equipment use may be because there are typically more strength-based pieces at outdoor fitness equipment sites than cardio pieces.



Of the 24 different types of outdoor fitness equipment installed across the ten sites, the pull down was used for the longest total duration (2309 hours; followed by the elliptical trainer and the leg press), while the butterfly press was used for the shortest duration (followed by the balance beam and the t-bar row). This may reflect the prevalence of these equipment types across sites. The pull down, elliptical trainer and leg press were available at six, five, and seven of the ten sites, respectively, while the butterfly press, balance beam and t-bar row were only monitored at one site each.

Site insights

There was an average of 27,000 distinct equipment use sessions per site during the study period.

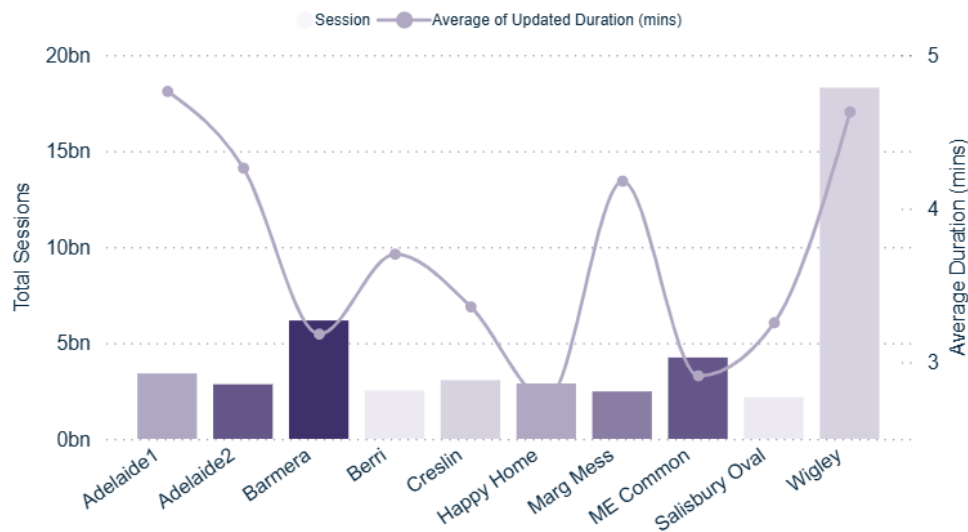


Equipment use (duration and frequency)

Equipment Name	Total Usage	AvgFrequency
Pull Down	2309 hrs	32,627
Elliptical	2292 hrs	28,953
Leg Press	2265 hrs	33,808
Pull / Push Ups	1737 hrs	23,221
Chest Press	1216 hrs	22,661
Parallel Bars	1113 hrs	15,347
Aerobic Cycle	1112 hrs	16,541
Walker	964 hrs	15,208
Leg Lift	927 hrs	16,613
Body Twist	667 hrs	8,247
Sit Up Bench	451 hrs	9,210
Pendulum Swing	358 hrs	6,477
Oblique Pivot	350 hrs	6,341
Cycle	348 hrs	5,488
Shoulder Press	276 hrs	3,984
Double Skier	275 hrs	4,687
Fit-Rider	252 hrs	5,314
Step Up	206 hrs	3,384
Rower	110 hrs	2,012
Chest Fly	101 hrs	2,165
Leg Extension	48 hrs	1,174
TBar Row	24 hrs	656
Balance Beam	21 hrs	604
Butterfly Press	15 hrs	387

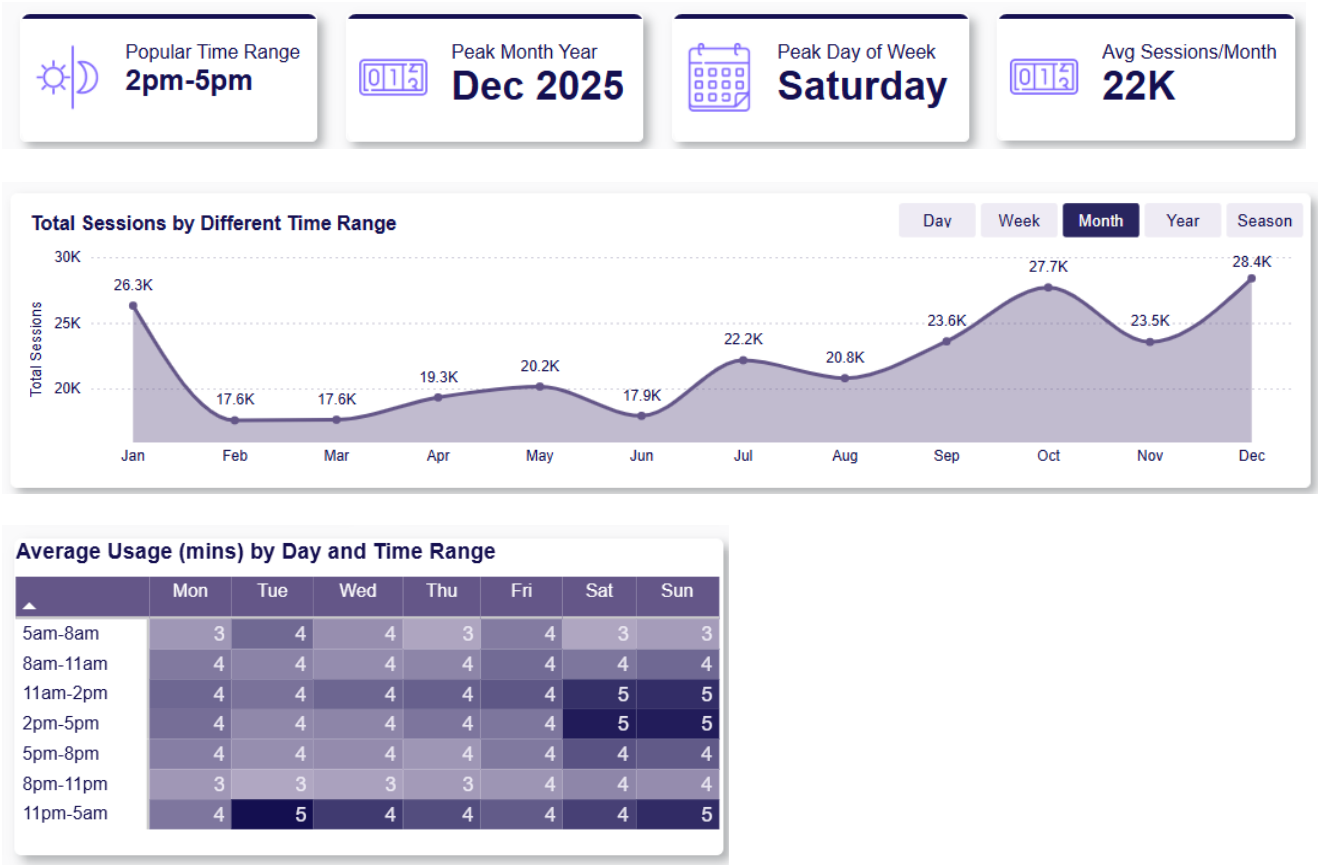
The outdoor fitness equipment at Wigley Reserve in the City of Holdfast Bay was used most frequently and for the second longest duration. While the equipment at Adelaide 1 was used for a slightly longer duration than Wigley Reserve, the frequency of use was much lower.

Session and Average of Updated Duration (mins) by Site



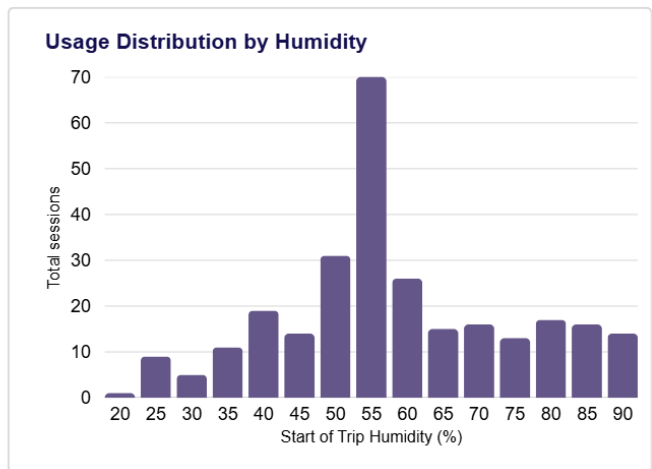
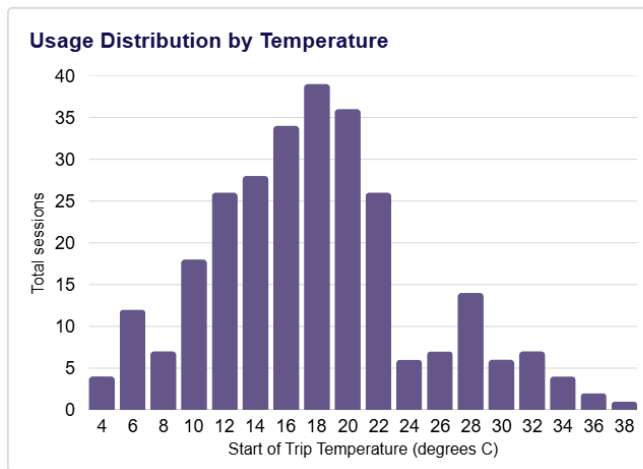
Temporal insights

The average number of outdoor fitness equipment sessions per month was 22,000, and usage was highest in December 2025 and lowest in February and March 2026. Saturday was the most popular day to use equipment, with the longest average use time of 5 minutes. The equipment was used most often between 2pm and 5pm.



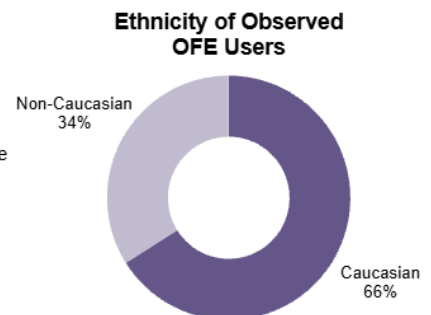
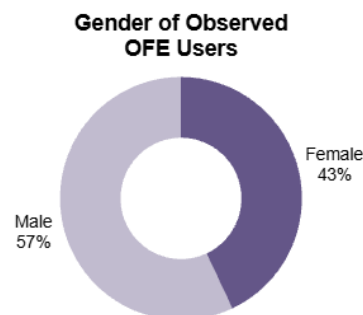
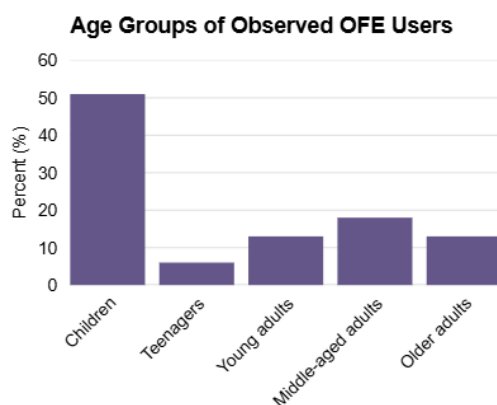
Temperature and humidity

Temperature and humidity data was collected at the Barmera outdoor fitness equipment site. Most people used the equipment when the temperature was 12-22 °C and humidity around 55%.

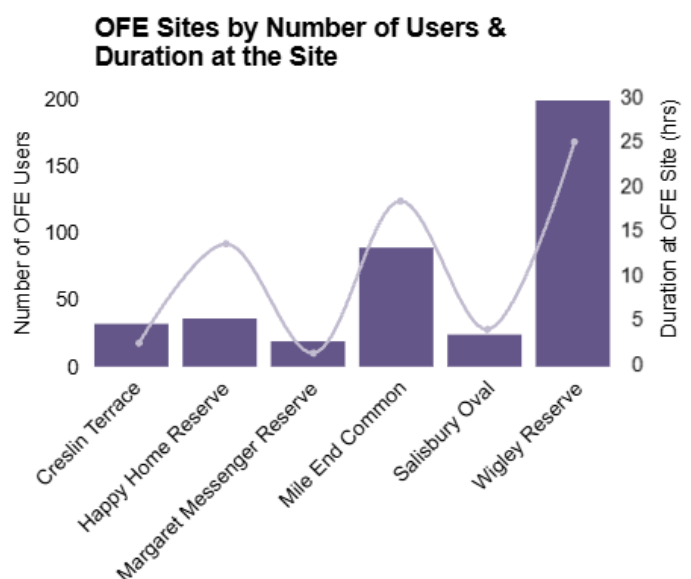


Direct Observations

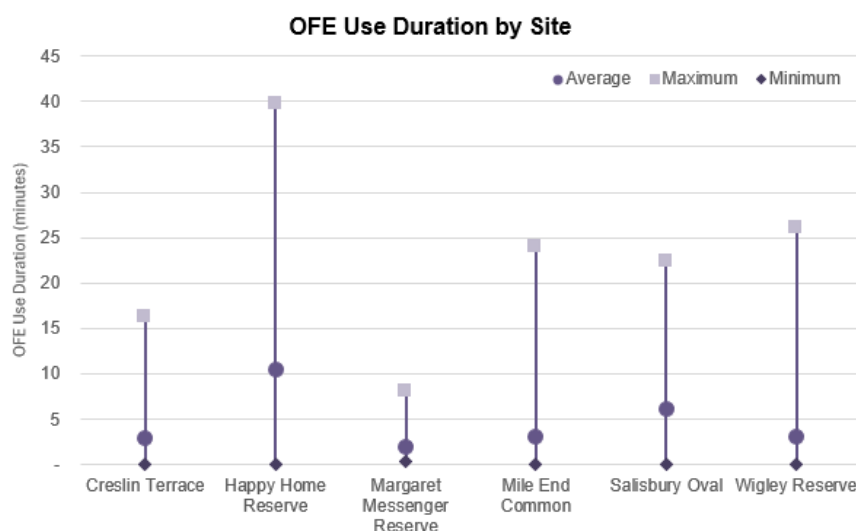
Across the six observed sites (two each in City of West Torrens, City of Holdfast Bay, and City of Salisbury), 399 people used the outdoor fitness equipment throughout the observation period (120 hours total). Most users were children (51%), male (57%) and White/Caucasian (66%).



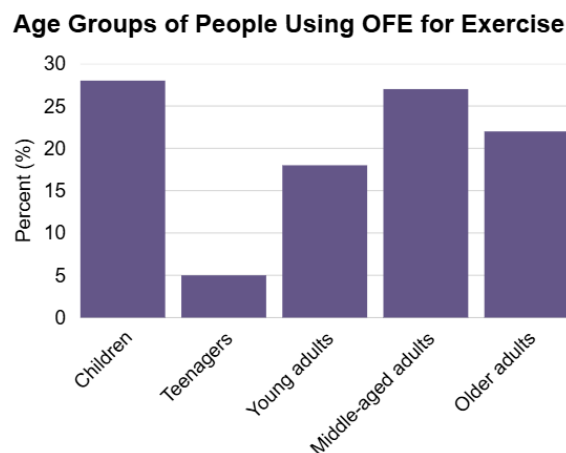
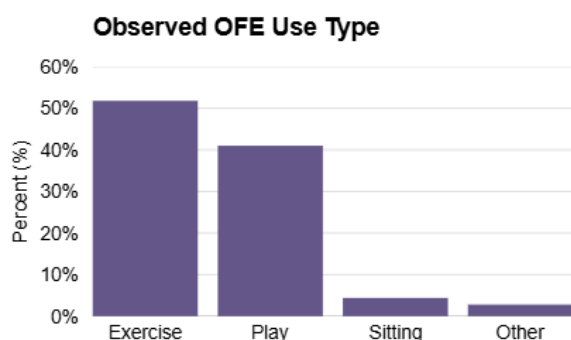
Users spent an average of 10 minutes and 8 seconds at the outdoor fitness equipment sites, totalling 67 hours and 11 minutes across all six sites. Wigley Reserve had the highest frequency and total duration of site visits ($n = 199$; 25 hours and 14 minutes), and Margaret Messenger Reserve had the lowest ($n = 19$; 1 hr and 52 minutes).



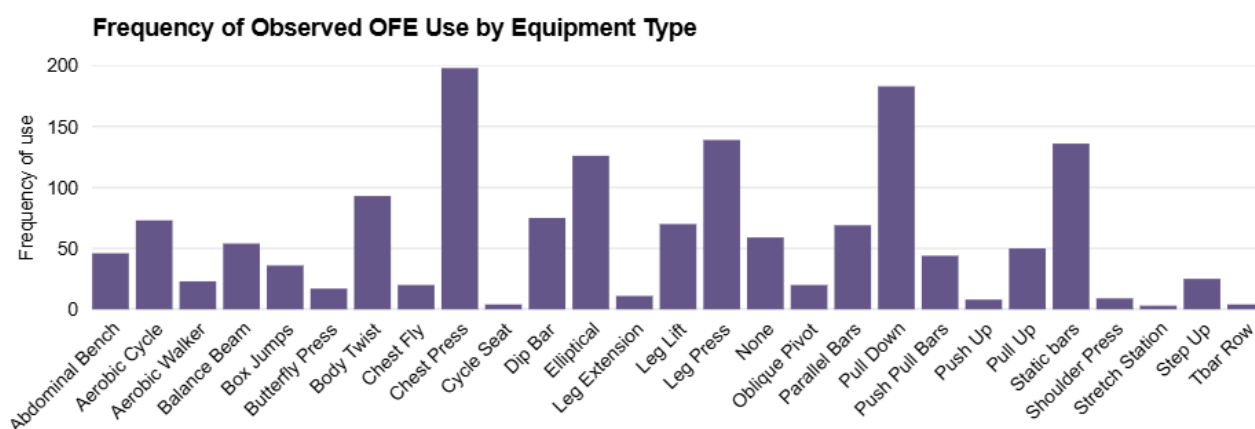
On average, people used the outdoor fitness equipment for 3 minutes and 50 seconds each time they visited a site, with use time ranging from one second to 39 minutes and 40 seconds. The average use time was highest at Happy Home Reserve (10 minutes and 41 seconds) and lowest at Margaret Messenger Reserve (2 minutes and 1 second).



Most people were observed using the equipment for exercise purposes (51.8%), however 41.0% were seen using it for play (90% of whom were children). Children (28%) and middle-aged adults (27%) were the primary users of the equipment for exercise. The relatively high proportion of children observed using the equipment for exercise reflects that many used the equipment as intended (e.g., the elliptical trainer), whereas children swinging or climbing on the equipment was classified as engaging in play.



Across all sites, the chest press was used most often, followed by the pull down, leg press, static bars, and elliptical trainer.



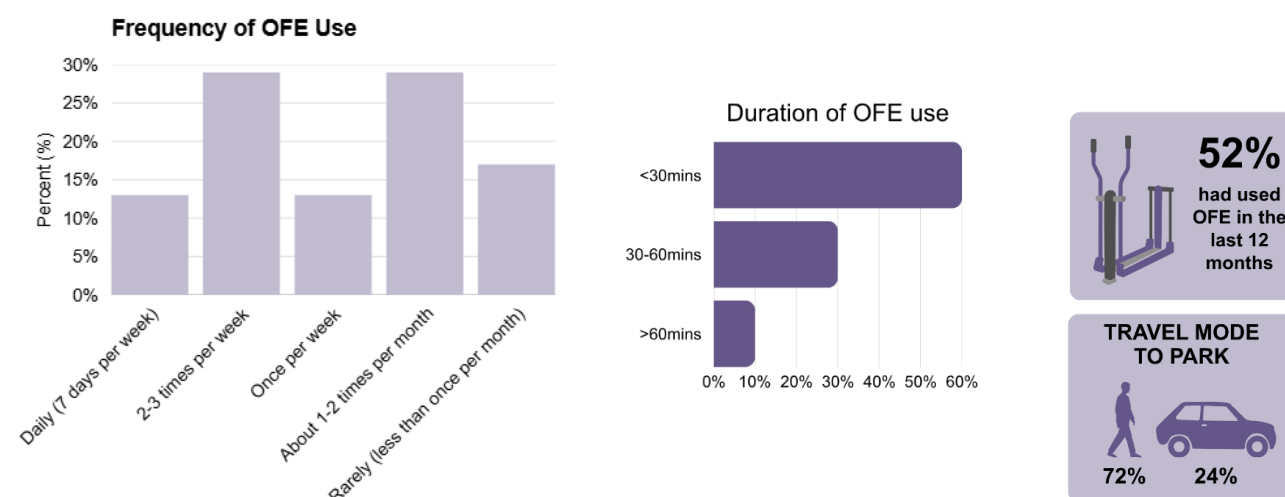
Intercept Surveys

A total of 46 intercept surveys were completed during May/June ($n = 19$) and October ($n = 27$) 2025. Just over half of the participants were surveyed at parks in the City of West Torrens (52%), a quarter in the City of Salisbury (28%) and one fifth in the City of Holdfast Bay (20%).

Participants were predominantly older adults (46%; 55+ years), female (52%), born in Oceania (57%), not of Aboriginal and Torres Strait Islander descent (98%), from an English-speaking background (63%), and did not have a disability (96%).

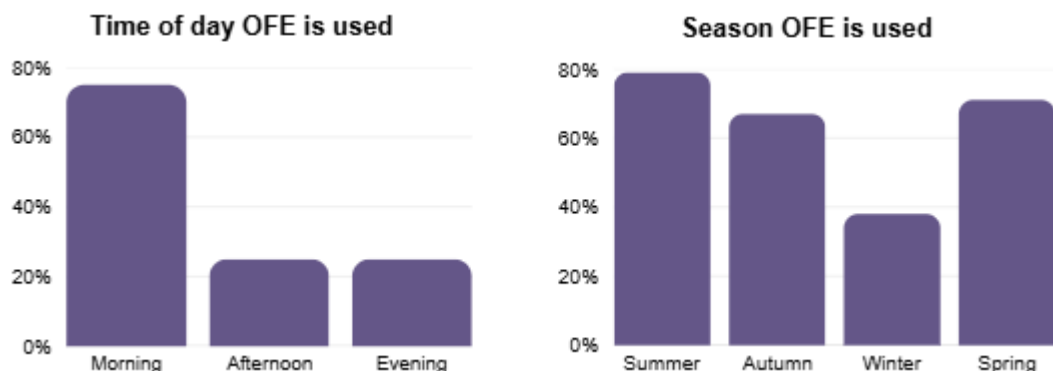


Participants mostly walked to the park (72%) or travelled by car (24%). Around half (52%) of the survey participants had used outdoor fitness equipment in the last 12 months, with most using it 2-3 times per

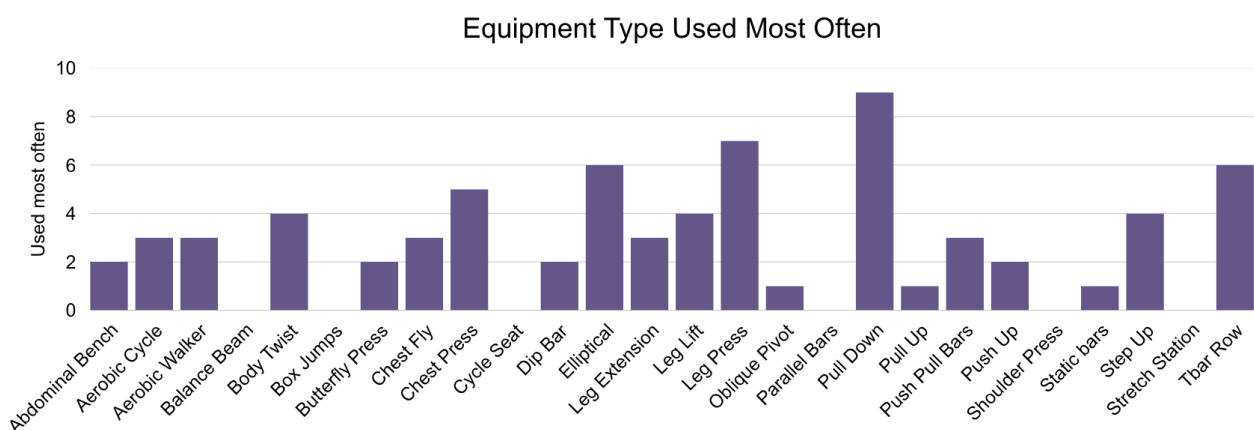


week (29%) or 1-2 times per month (29%). Most people (60%) reported using the equipment for less than 30 minutes each time.

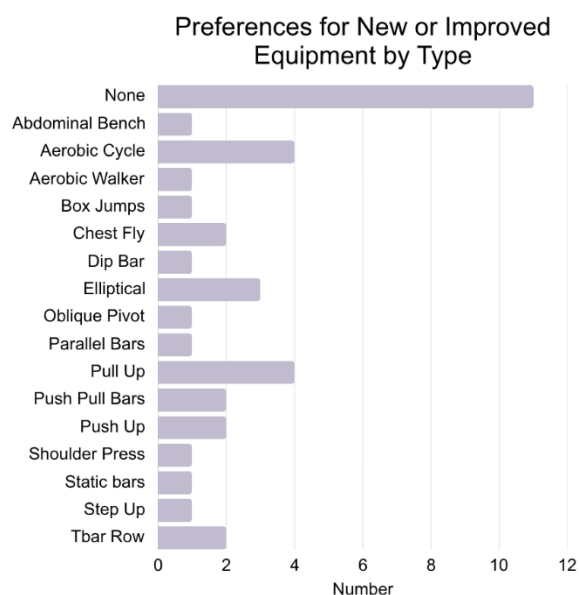
Of the participants who had used the equipment in the last 12 months ($n = 24$), most reported using it in the morning (before 12pm; 75%), with fewer using it in the afternoon (12-5pm; 25%) or evening (after 5pm; 25%). Summer (79%), spring (71%), and autumn (67%) were the most preferred seasons to use the outdoor fitness equipment, while winter (38%) was the least preferred.



The pull down was the equipment type participants reported using most often ($n = 9$), followed by the leg press ($n = 7$) and the elliptical trainer ($n = 6$) and Tbar row ($n = 6$).



Participants were asked which types of equipment they would like to see added or improved at the outdoor fitness equipment site, with most reporting they did not desire any additional pieces ($n = 11$). Where people did want additional equipment, the aerobic cycle ($n = 4$), pull up bars ($n = 4$), and elliptical trainer ($n = 3$) were the most frequently requested.



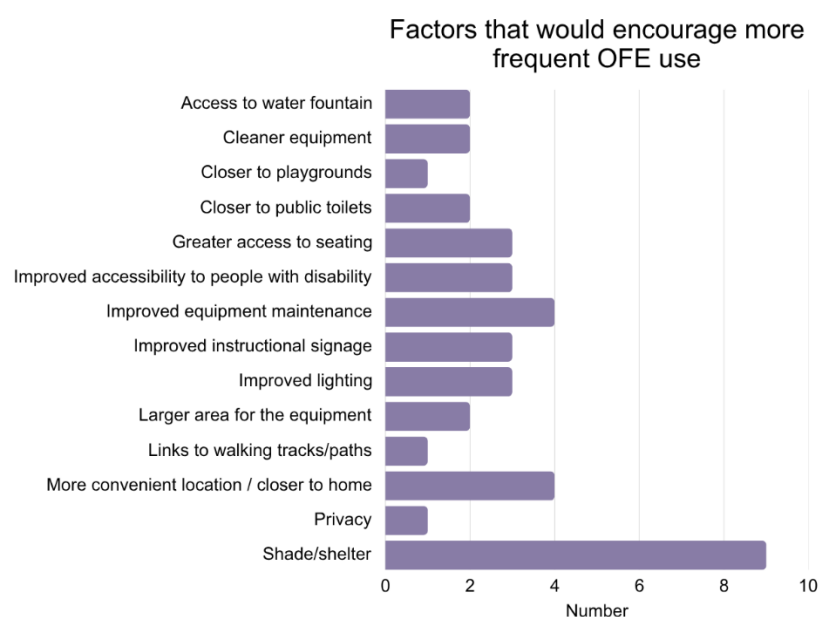
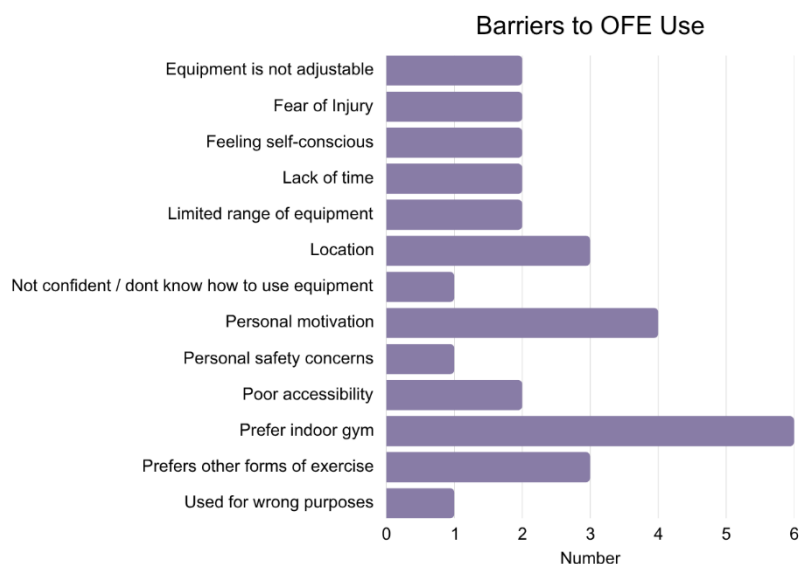
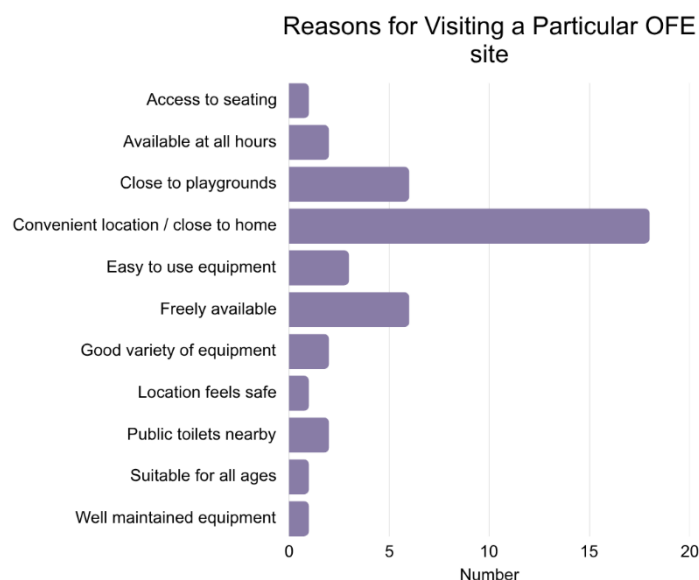
Most participants reported visiting a particular outdoor fitness equipment site because it was in a convenient location and/or close to their home ($n = 18$). The freely available equipment ($n = 6$) and proximity to a playground ($n = 6$) were also common reasons for attending a site. Interestingly, access to a water fountain, instructional signage, shade/shelter, and sufficient lighting were not reported as reasons for visiting a particular outdoor fitness equipment site.

A preference for indoor gyms ($n = 6$) was the most reported barrier to outdoor fitness equipment use. A lack of personal motivation to use the equipment ($n = 4$), inconvenient location ($n = 3$), and preference for other forms of exercise ($n = 3$) were other common barriers. The condition of the equipment, insufficient lighting and shade/shelter, lack of awareness of the equipment, and absence of supporting amenities were not identified as barriers to use.

Participants reported that having access to more shade or shelter ($n = 9$) would encourage more frequent use of the outdoor fitness equipment.

Walk-along interviews

Walk-along interviews were conducted with 20 participants from June to November 2025 ($n = 17$ adults, $n = 3$ fitness professionals; 50% female), who ranged in age from 35 to 84 years ($M_{age} = 64$ years). The main reasons participants used the equipment were because a friend or family member encouraged them ($n = 3$), a health professional



recommended its use ($n = 3$), to gain strength to support other sport or physical activities ($n = 3$), or because an indoor gym was too expensive ($n = 3$). A council program initiated some people's use ($n = 2$), while others used the equipment to improve fitness and strength ($n = 2$), or to support healthy ageing ($n = 2$).

Three main themes were developed from the thematic analysis: 1) Equipment that works for everyone, 2) Settings that engage the community, and 3) From installation to activation.

Theme 1: Equipment that works for everyone

This theme reflects participants' sentiments about specific equipment, site design, and accessibility for people of all abilities and backgrounds. Outdoor fitness equipment represents valuable community fitness infrastructure that is accessible and beneficial, as Colin and Trevor explain:

For a pensioner, I just can't afford gym fees. (Colin)

I feel stronger, and any problems I had physically seem to have gone away. (Trevor)

More specifically, participants expressed a desire for a variety of equipment at the sites, facilitating both strength-based and aerobic exercises. While specific equipment preferences were diverse, there was consensus that equipment with intuitive and clear functionality was preferred, such as a leg press, chest press, and aerobic cycle.

If I was designing it, first thing I'd put in is a bike because everyone understands an exercise bike. (Trevor)

Nonetheless, participants reported a common limitation of existing equipment was the inability to adjust the resistance or setup. This restricted people from altering the exercise difficulty outside of their own bodyweight and presented accessibility barriers for many (e.g., bike seat too high/low).

The only drawback is everything works on bodyweight and there's no way to increase it if you want to work a bit harder. (Colin)

With this aerobic cycle, the seat height's not adjustable. (...) It's really not good for everyone. (...) If you're really short, you won't be able to reach it, or if you're really tall, your knees will be up to your elbows. (Kylie)

Participants also highlighted accessibility barriers related to static equipment, such as pull-up bars, steps, and boxes. People expressed a desire to use these static pieces, and some were advised by health professionals to do so, but in many instances the bars, steps and boxes were too high or low for safe and effective use.

I don't use it [the box jump] to jump, I just use it for stepping up and stepping down (...) that one's too high. (...) A physio told me to step up to something (...) but this is a little bit high. (Rodney)

To rectify this concern, participants suggested installing static equipment at multiple heights to support a variety of exercises and to accommodate a broader range of users' needs.

The push up bars' probably a bit too low...() but that [post] could have another one going off (...) on an angle with a slightly higher one. (Kylie)

In addition to specific equipment preferences, the layout of the outdoor fitness equipment influenced use. Participants primarily favoured hub-style layouts, where the equipment was clustered in one area,

rather than trail-based arrangements, as many reported using the equipment to complete a circuit-style workout: “What I do is 20 repetitions on everything. I do two rounds” (Barbara).

The accessibility of outdoor fitness equipment sites in relation to ground surface and equipment types were highlighted as important considerations. The type of ground surface varied at the interview locations from soft-fall rubber material to bark chips, which a participant discerned “might not be [accessible] for someone who's a bit more immobile” (Kylie). Others were concerned about bark chip flooring from a safety perspective:

I don't want to hurt myself so having a good surface is important. Grass or wood chips, sometimes you worry there's glass or something hidden there. (Linda)

Soft-fall rubber was favoured by many participants, particularly older adults as “we tend to not be as steady on our feet as we used to be” (Judith). For wheelchair users, having a flat, smooth surface was also critical: “If anyone was setting up a park fitness facility, obviously the flatter you can make it so it's accessible to everybody” (Ray).

These findings highlight the importance of providing equipment to suit a range of abilities, exercise goals, and preferences to ensure the site facilitates safe and accessible outdoor gym use for the local community.

Theme 2: Settings that engage the community

The outdoor fitness equipment site and surrounding environment played a significant role in influencing initial and ongoing use, principally in relation to safety, comfort, and motivation. The location of the equipment within an outdoor space was critical for supporting perceptions of personal safety, particularly for the female participants, with a preference for sites positioned in high-traffic open areas.

It is a thoroughfare. There're people coming and going all the time. I find I feel quite safe. (Claire)

A participant emphasised that the positioning of other park amenities also required thoughtful consideration as it played a role in perceptions of safety and broader site activation.

If there was a picnic table and chair close to the school [which was located deep within the park and surrounded by fences], for instance, it's a bit far away [from the road], and if somebody dodgy was hanging around you wouldn't feel as safe like you would being a bit close to the road. (Tracey)

Participants reported the importance of associated amenities, such as access to drinking water and shade, to increase their comfort and motivation to use certain sites. Access to drinking water was frequently discussed and, while some people brought their own water bottles to the sites, others incorporated outdoor fitness equipment use into their regular walk or run and did not carry their own water. Providing “just a water fountain” (Leslie) at outdoor fitness equipment sites would improve the comfort of users, as Tracey pointed out: “it would be nice to have a mouthful of water right now”.

There were also mixed views about shade and shelter at outdoor fitness equipment sites for sun and rain protection. While most people agreed that shade and shelter were important, many regular outdoor fitness equipment users visited the sites in the early, cooler mornings so access to shade was not a pertinent issue, as Trevor explains: “I'm here at seven o'clock in the morning, so it doesn't matter”. Rain appeared to be more of a barrier to use with many citing that “if it's raining, I wouldn't come” (Barbara). Another person suggested:

If the equipment was better [quality] and it was more covered, I don't mind coming out in the rain, but I don't want to get sopping wet. (Leslie)

Despite these varied perspectives, participants agreed that providing access to shade and shelter may promote greater use of the equipment throughout the day and during the warmer and wetter months.

Probably the most important thing, being Australia, it's got no shade cover. Like a small little shade cover (...) to both protect it from pummelling rain and terrible heat. (Tracey)

Many of the public parks where the interviews took place contained other features (e.g., children's playgrounds, picnic tables, basketball courts, etc) for broad community use. Generally, these associated amenities encouraged the participants to use the outdoor fitness equipment as more people appeared to visit the parks for recreational activities, creating a sense of community.

There's the community centre there, it's got everything around here, the playground, picnic tables, (...) you couldn't get much better community spot than this. (Kylie)

Several participants who were regular outdoor fitness equipment users at a particular site, reported becoming acquainted with others, which motivated them to return to the site each week.

There's a whole lot of people that we get to know really quite well, and we look forward to seeing them and to know them by name. (Kenneth)

Furthermore, the co-location of outdoor fitness equipment with playgrounds, created multigenerational recreational opportunities and facilitated equipment use.

I've got grandkids, so I can (...) let the 11-year-old (...) climb around up there [on the playground] and do all those things, while I can sit here and do 20 minutes on an exercise bike. (Trevor)

This is in stark contrast to sites that had no other features and limited exercise equipment.

There's another [outdoor gym] in [a nearby suburb], which has a bigger setup or is closely associated to a kid's playground. This is neither. It's so random in its choices to just have two pieces and it be near nothing. And then I kind of just thought, what's the point? (David)

Most participants preferred to use the outdoor fitness equipment with others, reporting they felt less self-conscious, more motivated and safer when others were around, as Judith reiterated: "I prefer [using the equipment with others], (...) I wouldn't feel comfortable coming here by myself". Furthermore, most people who encountered other people using the equipment, reported they were easily able to accommodate each other's equipment preferences and complete their workout uninterrupted.

If I wanted to use the bike, she's using the bike at the minute, well I can use the cross trainer or the other strengthening exercises, because I find that people don't sit on them for more than five minutes. (Trevor)

Some people, however, preferred to use the equipment alone, reporting they felt intimidated, uncomfortable or judged by others at the site.

It tends to be a one-person space. (...) I think that we all tend to be a little self-conscious about, you know, whether we're doing it wrong. Am I doing this right? Is somebody going to criticise me? Am I in somebody's way? (Claire)

Equipment positioned too close together can also create discomfort, as Leslie explains:

Having the two leg press machines, where you're literally right up against another person. If you're using it, you don't know which way to look, [you're] looking at each other, and it's a bit awkward. (Leslie)

This theme highlights the value of thoughtful equipment area design, showing that with strategic site selection and equipment layouts, outdoor fitness equipment areas can become multigenerational, community-oriented spaces for active recreation.

Theme 3: From installation to activation

This theme reflects participants' perspectives on strategies for effectively activating outdoor fitness equipment sites to maximise community use. At the macro-level, a key barrier to outdoor fitness equipment use was not knowing where sites were located or what equipment was available. Many people reported encountering outdoor fitness equipment sites incidentally:

I just stumbled on it. I guess you got to know where they are. I have come across others, but it's because I've been looking for parks and things to go to [for running]. [It's] random that I found them really. (Linda)

Participants reiterated the importance of making the sites discoverable. One person shared that “a pin was added (...), on Google Maps, which helped” to locate outdoor gyms, while others suggested that a centralised website would help to identify sites and the equipment available.

There's no website to list out where you can find this thing [outdoor gym]. It was really hard. [It would be good if the website identified that] you can go here, and there's a machine there (...), or the machine you want is over there, a map or something. Or even just like, legs or arms or core, you can find those machines here. It would be useful. (Aisha)

Once participants had located outdoor fitness equipment areas, on-site user instructions were important for facilitating use. Participants reported that being unsure of how to use equipment appropriately and safely was a common barrier, affecting peoples' confidence and motivation.

I must admit, there's stuff I wouldn't know what to do with. (...) I often find it a bit bewildering. (Linda)

Many outdoor fitness equipment sites contained written instructions and pictorial diagrams to explain how to use each piece of equipment, providing a QR code to access more detailed information and video demonstrations. While most participants found these signs useful, some people reported that they “don't have the facilities on [their] phone to scan QR codes” (Barbara), and others mentioned that they don't carry a phone while out running or walking. This highlights the importance of using multiple methods to share information that suit diverse needs. To further support use, many people were interested in detailed signage that provided options of how to structure a workout using the equipment available on site.

There are instructions on how to use the different bits of equipment on there, but to really get use out of it, it would be good if they had a decent sign that was, okay, do a circuit this way. (Alex)

An additional strategy for increasing user confidence and activating outdoor fitness equipment sites was to engage a trainer or a guide to facilitate more widespread uptake. Some councils had implemented short-term programs that involved a qualified instructor demonstrating safe and appropriate use of the equipment at targeted sites. A participant explained how the promotion of this program initiated her use of the equipment:

I'd never actually used it [the equipment] before until [the] council put an ad up on their Facebook page stating that they were doing a five-week free program. (Barbara)

Such programs offered a valuable initiative for enhancing people's confidence and motivation to use outdoor gyms, particularly for those who preferred to learn by watching others (rather than reading instructions), as Linda explained:

I think it would be good to see what other people are doing and how long they use it for. (...) I guess sometimes it would be good to have someone else to show you how to use the equipment, to motivate you. (Linda)

This theme emphasises the value of moving beyond installation of outdoor gyms, to strategically activating their uptake for widespread use. It highlights the importance of accommodating a range of abilities and diverse backgrounds to ensure the benefits of outdoor fitness equipment use are maximised.

Manufacturer perspectives

Consultations with outdoor fitness equipment manufacturers highlighted that equipment design and procurement are influenced by a combination of community needs, budget constraints, safety requirements, accessibility, and long-term durability. Manufacturers described balancing ergonomic design with compliance to safety standards while seeking to provide outdoor equipment that delivers an effective exercise experience for users with diverse abilities. Interestingly, manufacturers differed in their perspective on whether body-weight only equipment or resistance-based equipment was more inclusive and accessible to the population, and it was clear that some manufacturers invested more heavily in research and development with actual end-users to ensure the equipment is comfortable, adjustable, and user-friendly; whereas others used computer modelling with limited user-insights to design their equipment.

Councils were identified as the primary decision-makers, with procurement commonly occurring through tender processes where budget, available space, target demographics, maintenance considerations, and perceived risk strongly influenced equipment selection. Manufacturers also emphasised the importance of thoughtful site layout, user education, activation programs, and inclusive design to maximise community use and long-term value, though often were not able to discuss these options with councils due to the strict tender process. While some manufacturers have begun incorporating digital technologies such as QR codes, mobile applications, and camera-based or Bluetooth-enabled monitoring, all noted a lack of robust user data to inform future product development.

Collectively, these discussions identified that manufacturers have different perspectives and approaches to the design and research of outdoor fitness equipment, though similar procurement and tender processes with councils. It is recommended that rather than the typical tender process, that councils spend time having verbal discussions with manufacturers to ensure that the ethos and values of the company align with the goals of the council.

Knowledge Translation and Impact

Several knowledge translation activities have occurred during the project to enhance the impact of this program of research.

A decision-making resource, *Outdoor Fitness Equipment Planning Guide: A Practical Guide for Local Councils*, was developed to assist council interest holders make evidence-informed decisions about investments in outdoor gym infrastructure. The guide was officially launched at an event on 9 June 2026

at the Local Government of South Australia offices and online (hybrid event). A total of 42 people registered to attend the event, and, on the day, there were 13 online and 2 in-person attendees. The Guide and a video recording of the launch event are available on the [LGA website](#)¹, and these were also sent to all 42 registered participants after the event via email.

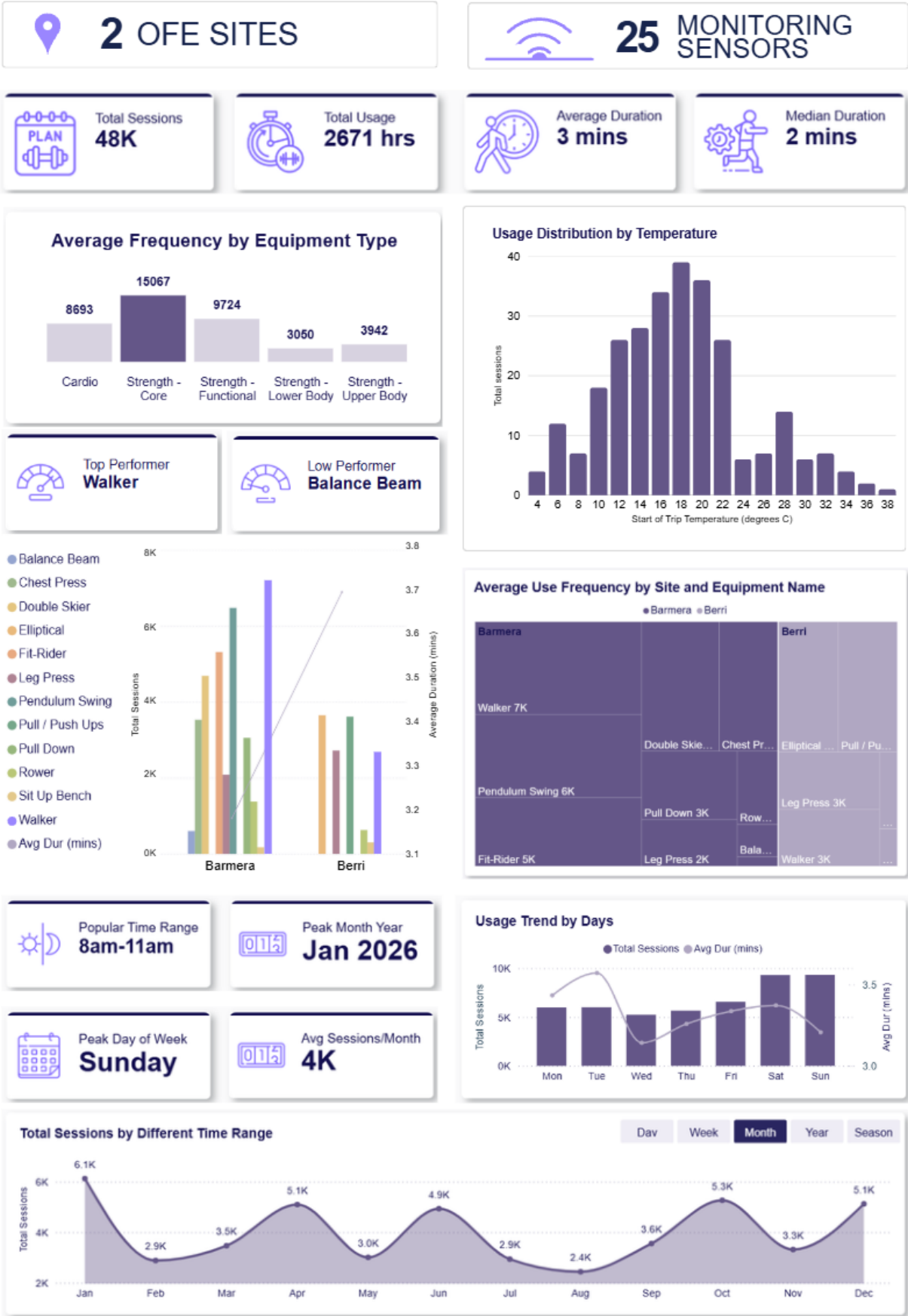
Presentations were delivered at two international conferences during the project period. In November 2025, Dr Alyson Crozier attended the 5th Asia-Pacific Society for Physical Activity Conference in Newcastle, New South Wales and presented preliminary findings from all phases of the study (sensors, observations, surveys, and interviews) in a symposium on outdoor gym research. On 19 June 2026, Dr Alyson Crozier presented findings from walk-along interviews at the North American Society for the Psychology of Sport and Physical Activity 2026 Annual Conference in Montreal, Quebec, Canada.

Conference presentation abstracts have also been submitted to the 6th Asia-Pacific Society for Physical Activity Conference to be held in Hong Kong, China in December 2026. If accepted, these presentations will share results from the direct observations and intercept surveys and examine associations between climate conditions and outdoor gym use.

¹ <https://www.lga.sa.gov.au/members/financial-sustainability/grants/research-and-publications/library/2024/monitoring-and-optimising-outdoor-fitness-equipment-usage-in-sa>

Appendix A. Council-Specific Findings

Berri Barmera Council



**2* OFE SITES**

*From January 2026, only one site was monitored.

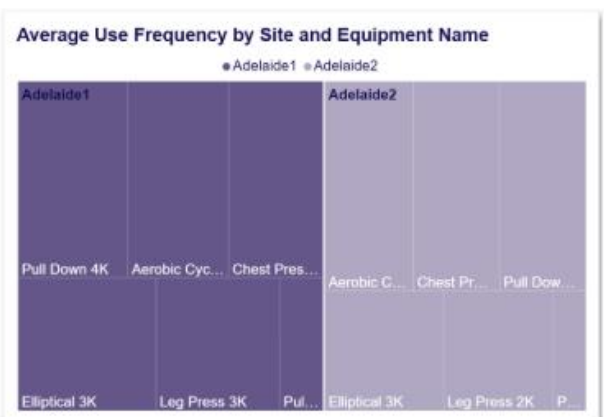
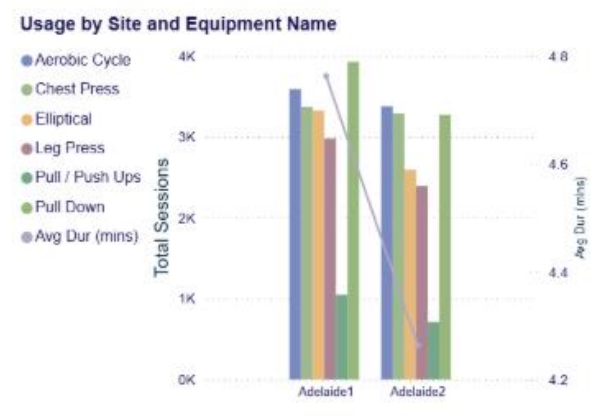
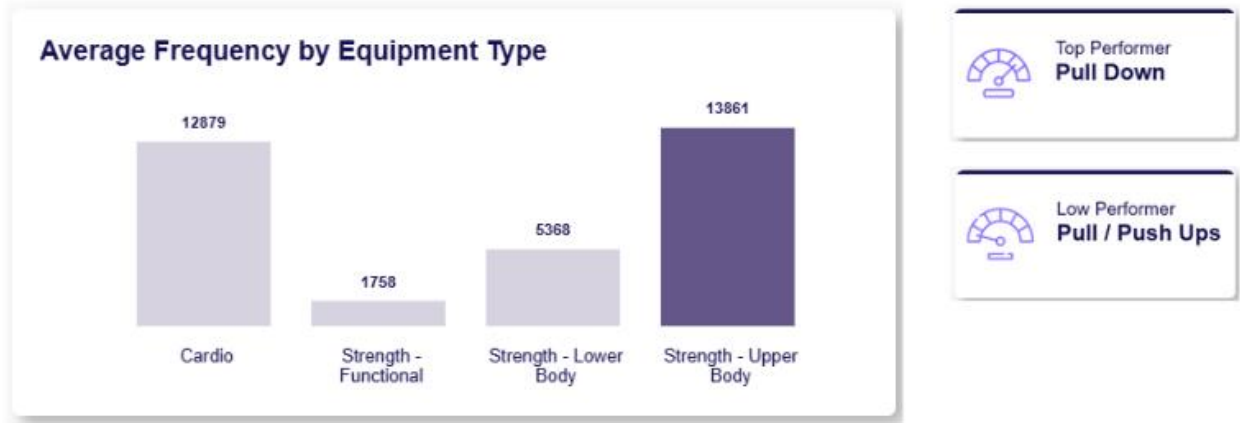
**12 MONITORING SENSORS**

**Total Sessions**
34K

**Total Usage**
2558 hrs

**Average Duration**
5 mins

**Median Duration**
3 mins

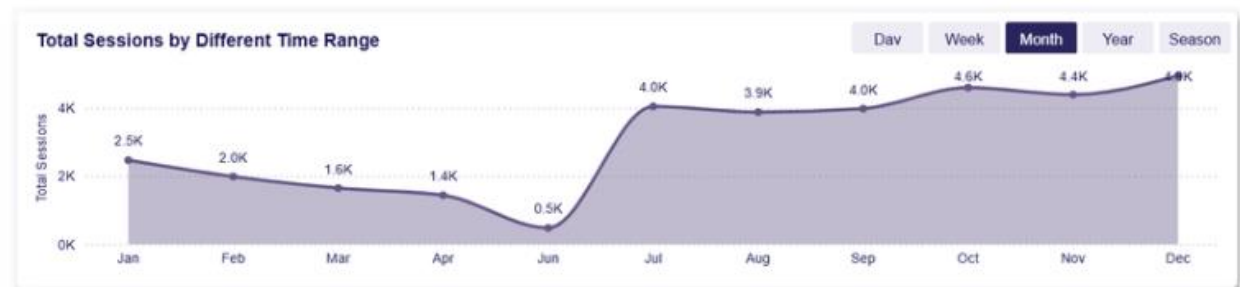


**Popular Time Range**
8am-11am

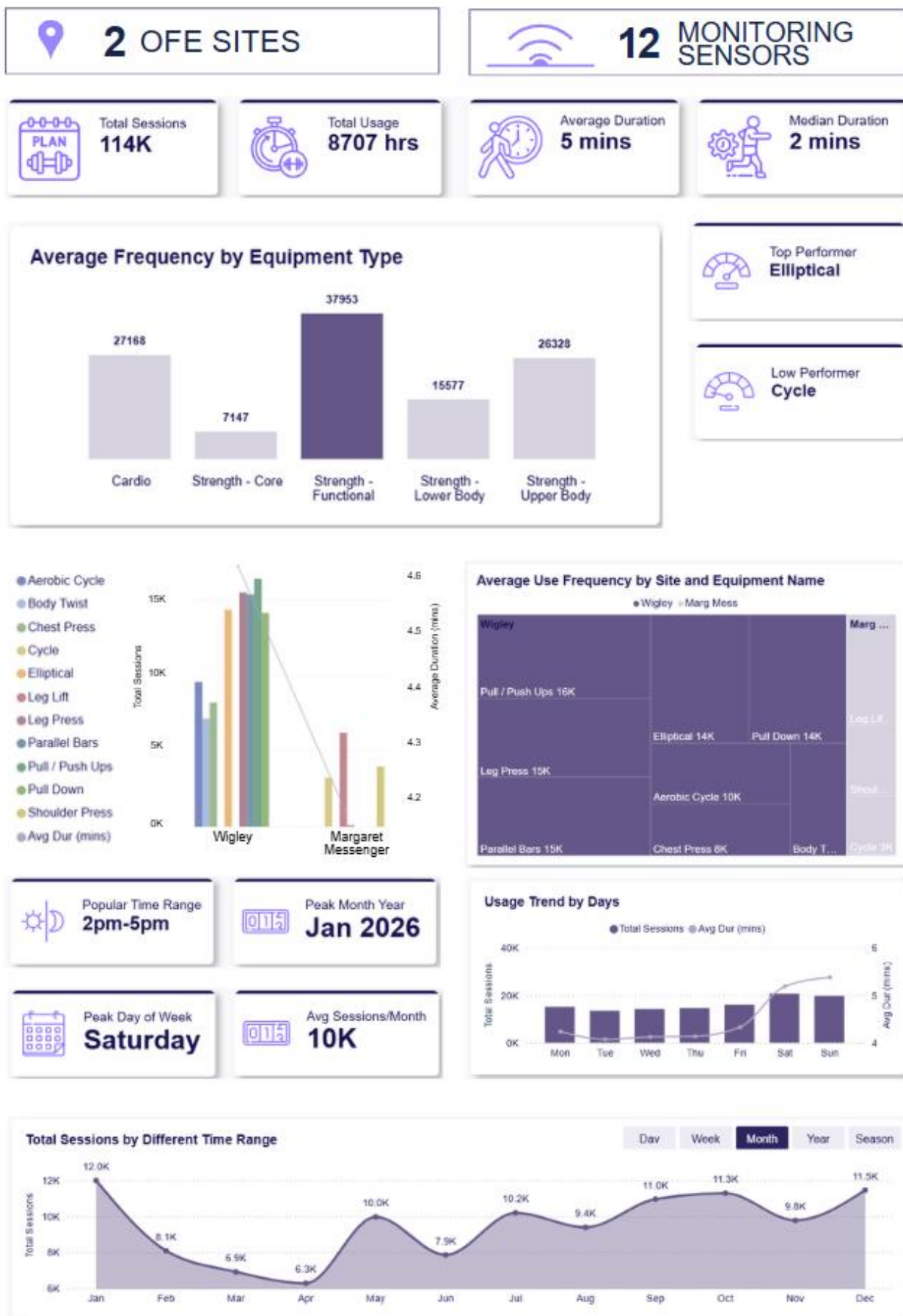
**Peak Month Year**
Dec 2025

**Peak Day of Week**
Sunday

**Avg Sessions/Month**
3K



City of Holdfast Bay



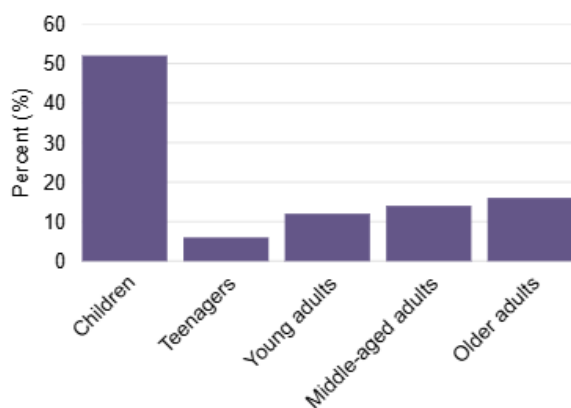


20 HOURS OF
OBSERVATIONS

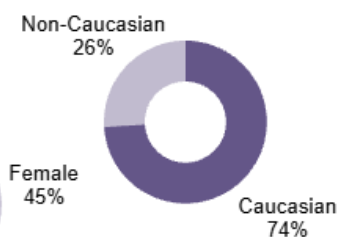


218 PEOPLE
OBSERVED

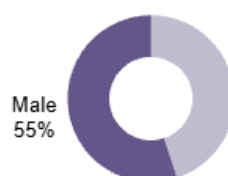
Age Groups of OFE Users



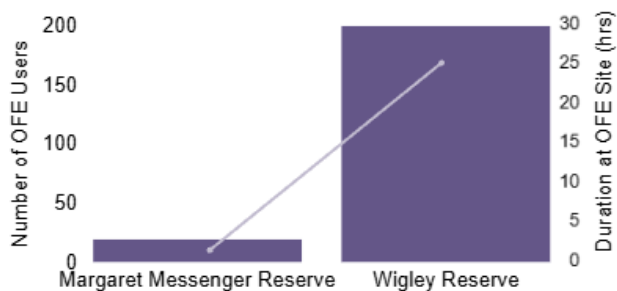
Ethnicity



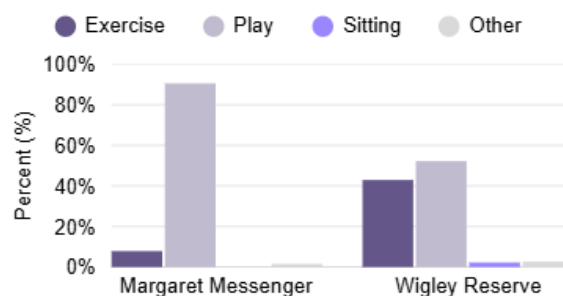
Gender



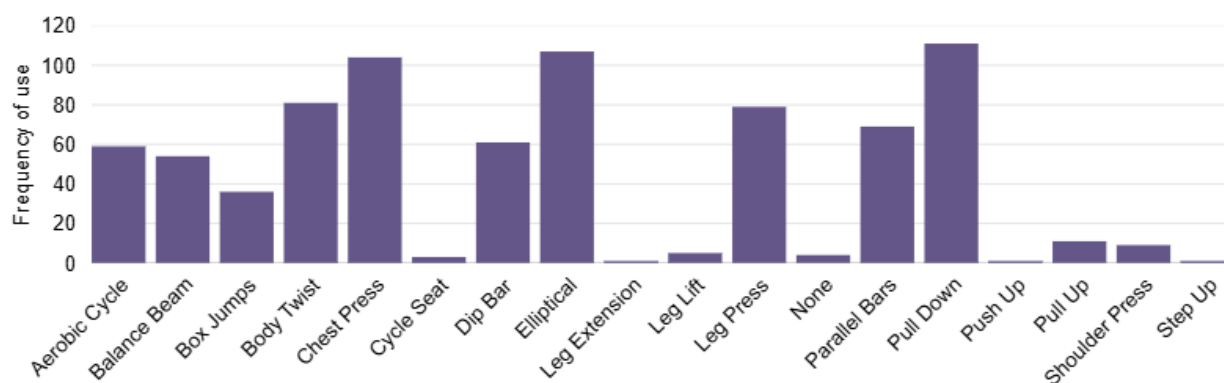
Number of Users & Duration by Site

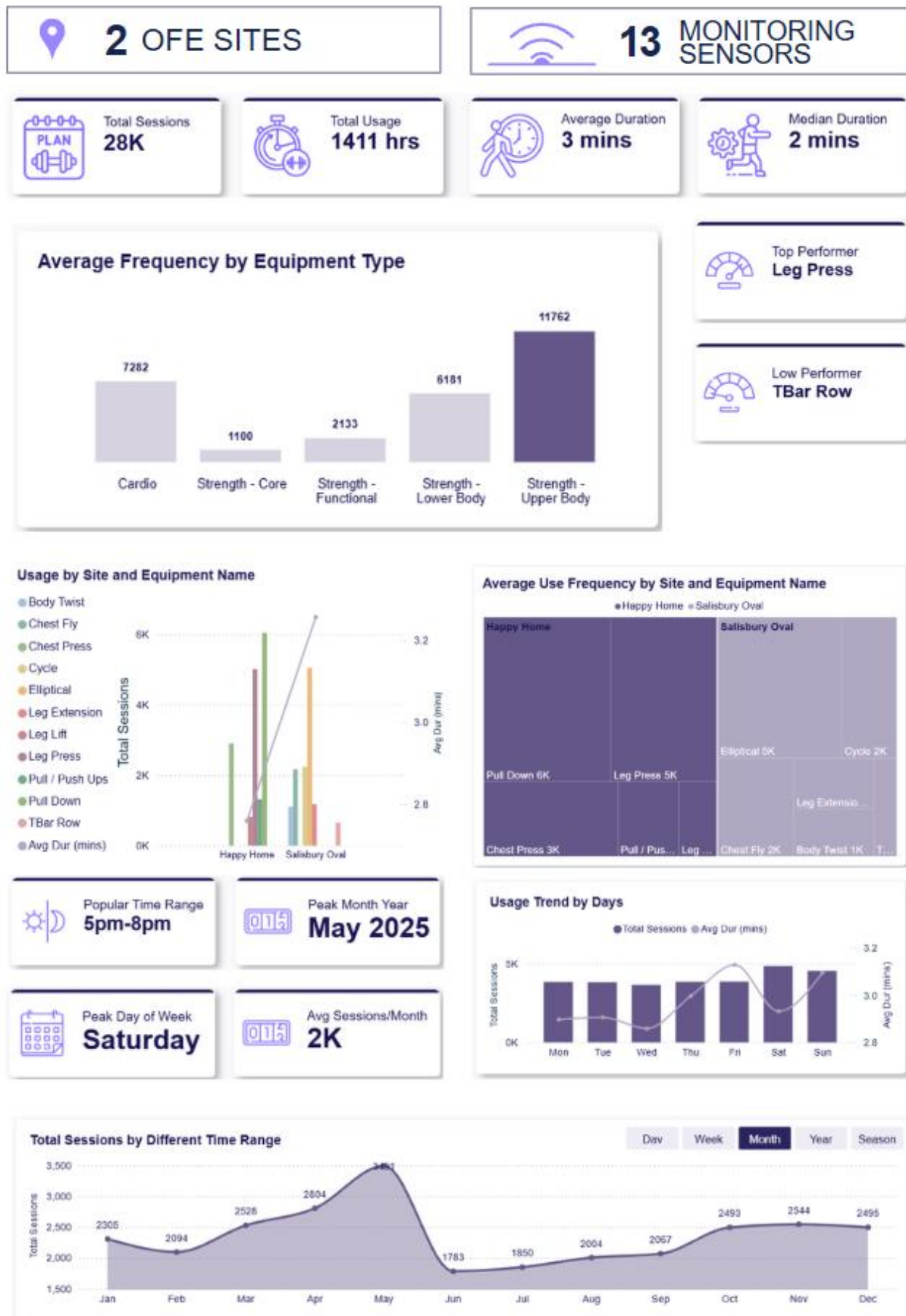


Use Type by Site



Frequency of OFE Use by Equipment Type





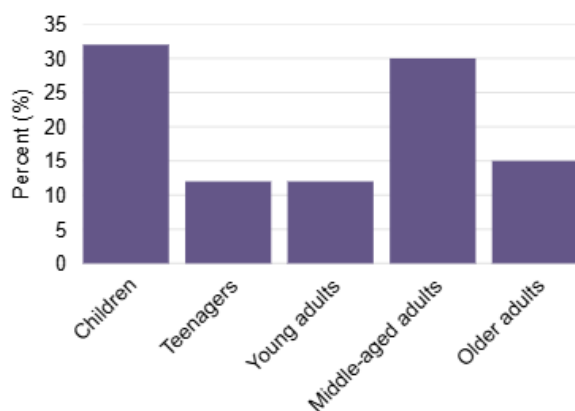


20 HOURS OF
OBSERVATIONS

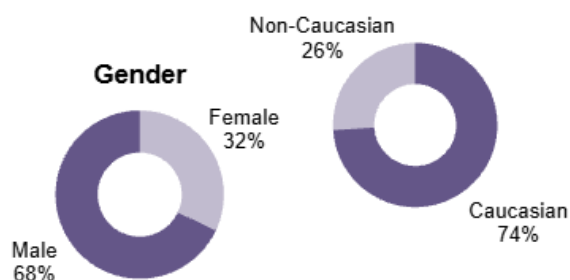


60 PEOPLE
OBSERVED

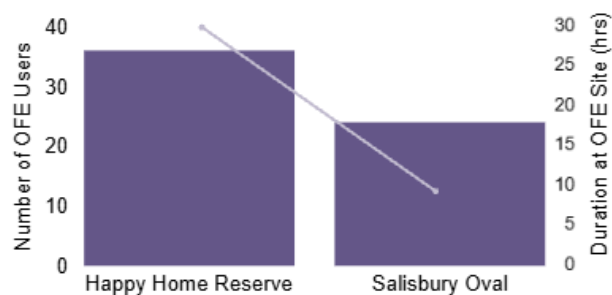
Age Groups of OFE Users



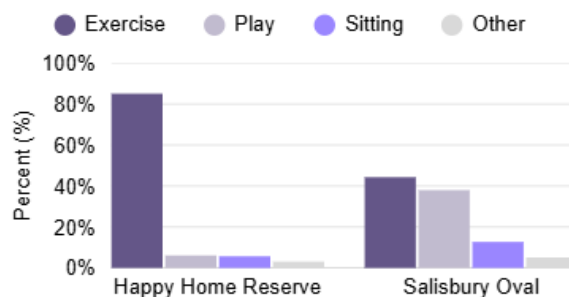
Ethnicity



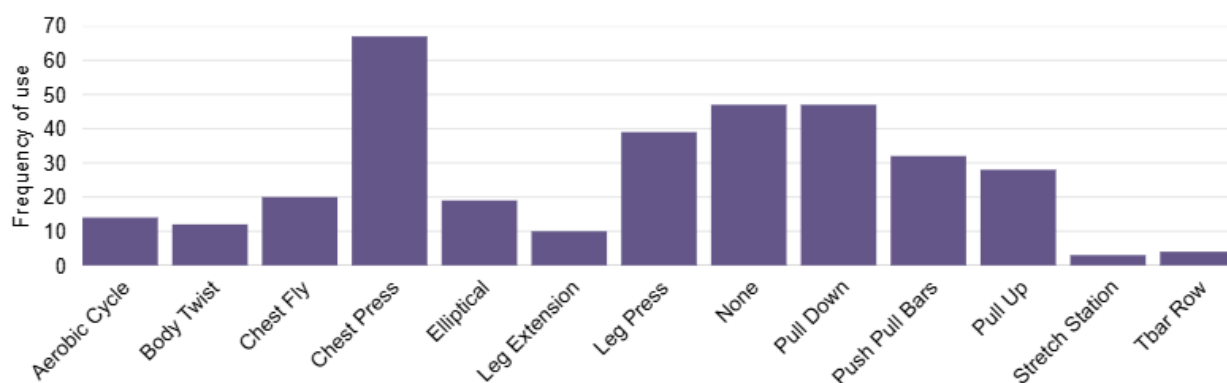
Number of Users & Duration by Site



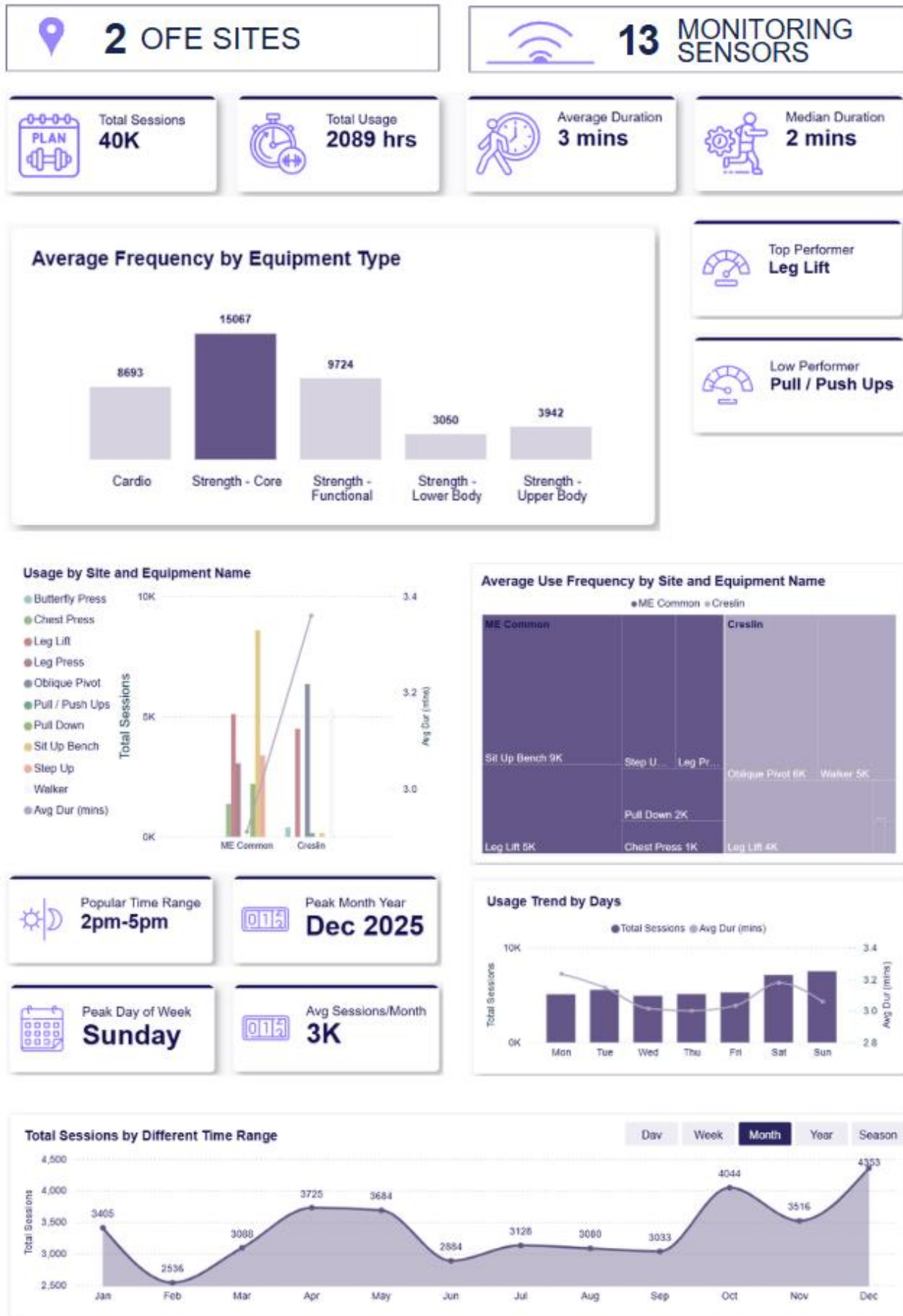
Use Type by Site



Frequency of OFE Use by Equipment Type



City of West Torrens



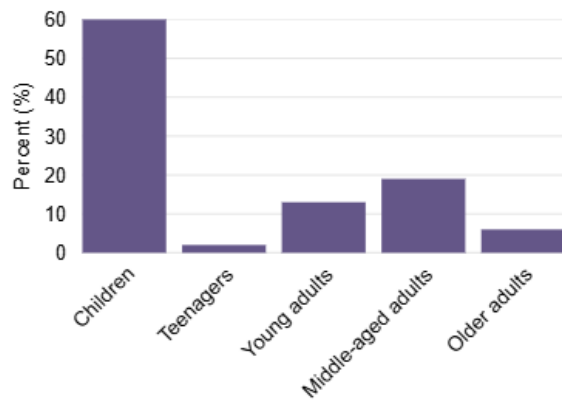


20 HOURS OF
OBSERVATIONS

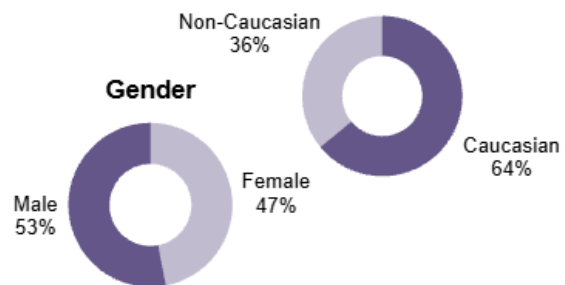


121 PEOPLE
OBSERVED

Age Groups of OFE Users



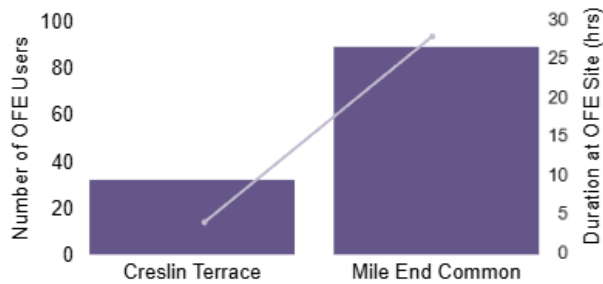
Ethnicity



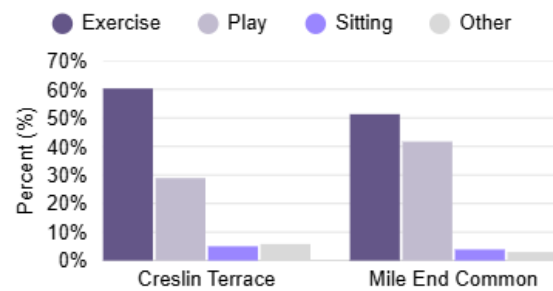
Gender



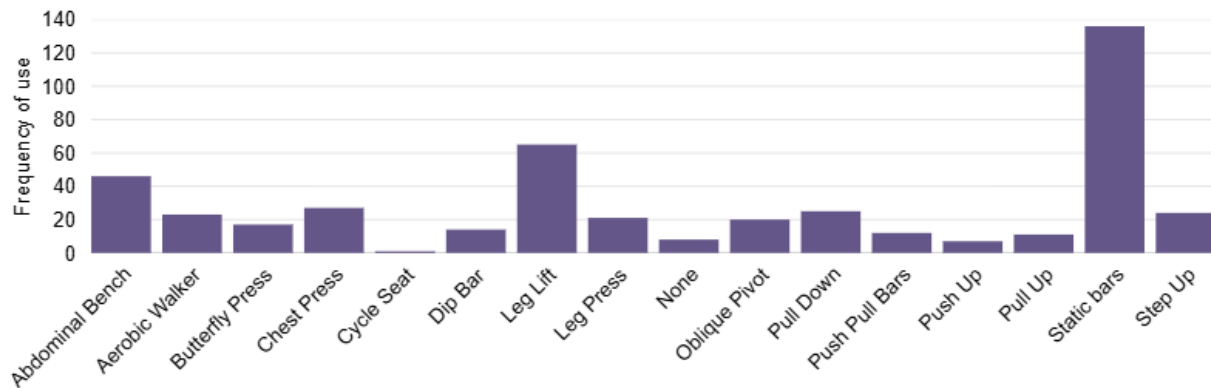
Number of Users & Duration by Site



Use Type by Site



Frequency of OFE Use by Equipment Type



References

- Moore, R. C., & Cosco, N. G. (2010). Using behaviour mapping to investigate healthy outdoor environments for children and families: conceptual framework, procedures and applications. In C. W. Thompson, P. Aspinall, & S. Bell (Eds.), *Innovative approaches to researching landscape and health: Open space: People space 2*. Routledge.
<https://doi.org/https://doi.org/10.4324/9780203853252>

Further enquiries

Allied Health and Human Performance

GPO Box 2471, Adelaide SA 5001

Ph: +61 8 830 22094

Email: alyson.crozier@adelaide.edu.au

Web: adelaideuni.edu.au

[/about/school/allied-health-and-human-performance/](http://adelaideuni.edu.au/about/school/allied-health-and-human-performance/)

The content in this publication is for general information only and Adelaide University makes no representation about its accuracy, completeness or suitability for any purpose. It is subject to change, and you can find updated information on our website at **adelaideuni.edu.au**

Australian University Provider Number PRV14404
CRICOS Provider Number 04249J

Published June 2026