

CYCLING AT UC: CONTEXT, BACKGROUND AND REVIEW



THIS REVIEW

Building on the previous UC Cycle Plan 2014-2022, this review document attempts to provide a snapshot of current cycling facilities, services and engagement tools to build an understanding of priority areas and strategies needed to enhance the future of cycling at UC. This review document is one of the tools that have informed the new UC Cycle Plan 2022-2030.

Since the previous UC Cycle Plan 2014-22, the UC Sustainability Plan 2022 – 2030 has been adopted. The Plan's fourth priority, *Improving Environmental Sustainability* includes a piece on improving active transport and mobility, four of which are directly linked to cycling:

- Improving cycling infrastructure across UC campuses and encourage cycling
- Reviewing and repositioning cycle parks to best effect
- Travel surveys to be undertaken every four years to guide campus planning
- An organisational cycling commuting target of 20% by 2030

With that in mind, the new UC Cycle Plan 2022 – 2030 indicates an eight year programme of works to meet the needs and expectations of staff, students and visitors of UC around cycling.

This review addresses key areas of interest to our community, including major barriers and drivers to choosing to cycle:

- Cycle parking – types and provision
- Cycle routes – current and planned
- End of trip facilities (showers, lockers and other requirements)
- Cycle safety and security
- On-campus maintenance hubs and other facilities
- Education and engagement programmes – including access to bikes
- Staff, student and visitor wellbeing
- Cycling advocacy and action



- How cycling can complement other types of transport infrastructure at UC

OUR COMMUNITY AT A GLANCE

The 2020 Travel Survey shows that usual travel to UC remains car dominant for both students and staff (45%). Collectively, 18% of staff and students cycle, with staff cycling slightly higher (19%) than when compared to students (17%). Figure 1 shows a snapshot of our community’s general travel behaviour in July 2020.

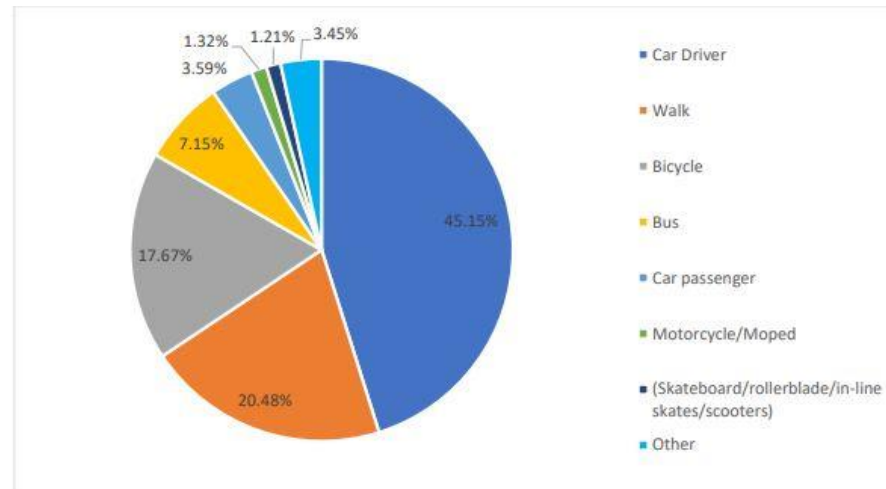


Figure 1: Respondents usual mode of transport to UC (2020 UC Travel Survey)

CYCLING BARRIERS & DRIVERS

In 2020, Travel Survey respondents who *do not* cycle to UC were asked what factors would influence them bike to more often. Of the respondents who answered this question, 23% indicated that improved cycle routes would influence them, 20.5% indicated less traffic and congestion on roads. Of those who answered ‘other’, the most cited reasons were distance and weather.

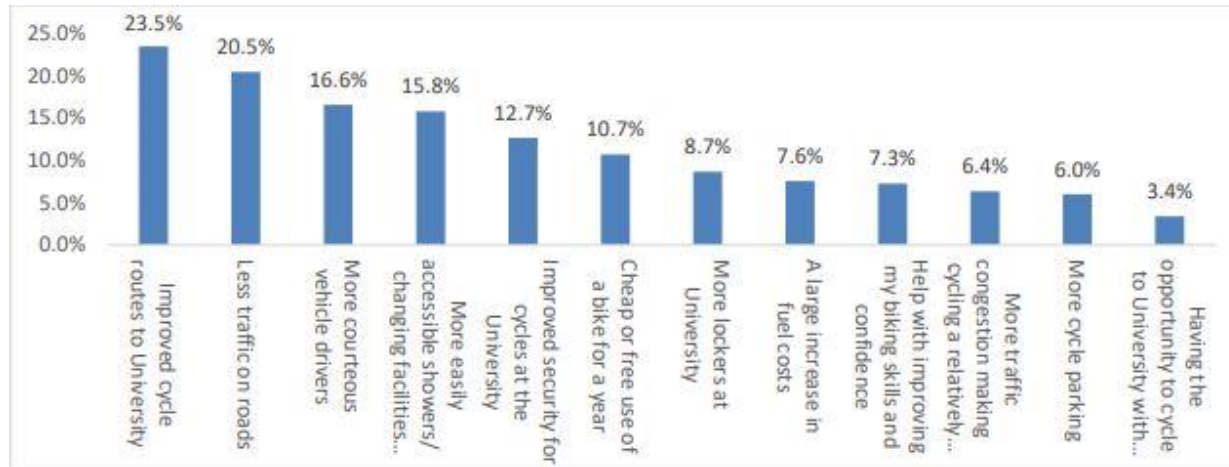


Figure 2: Respondents reason to consider cycling more often (2020 UC Travel Survey)

Interestingly, Figure 2 also shows that;

- 15.8% respondents felt that more easily accessible lockers/shower facilities would encourage them to consider biking more often
- 12.7% felt that improved security for bikes would encourage them to bike more often
- 10.7% of respondents indicated that cheap or free use of a bike was the most important incentive
- And 7.3% felt that help improving their cycling skills and confidence would influence their participation in cycling

1. CURRENT INFRASTRUCTURE

The 2020 Travel Survey asked respondents who cycled to University about the convenience of infrastructure around campus. Of those respondents, 74% believed that the infrastructure was convenient or very convenient with the 16% indicating they thought that cycle parking was inconvenient or very inconvenient.



1.1 Cycle Stands

As of March 2022, UC has **3,804** bike parks across Ilam and Dovedale campus, doubling our provision since 2014.

Cycle stand types

Cycle stand types at UC include a mix of styles, including: Sheffield Hoops, Compact, Toast Racks and Slot Stands (or “wheel-benders”). A 2022 report from Waka Kotahi ‘Cycle Planning and Design’ identifies preferred vs unacceptable types of cycle stands, which consider a range of security and safety measures, as well as functionality and user-friendliness.

While UC has a strong provision of Sheffield Hoops (deemed ‘preferred’) and Hoop stands (deemed ‘acceptable’) particularly in newer cycle parking areas, a large amount of ‘unacceptable’ styles such as slot-stands on campus still remain. A slot-stand is any stand that supports the cycle only by a single wheel. With no support for the frame, the cycle may be inadvertently knocked over, buckling the wheel. They require a long (and easily cut) cable lock to secure the frame.

At the time of this review, UC does not offer cycle stands that are designed to cater for electric and/or cargo-bikes.

Open-air, covered and secure stands

Current bike parking on campus includes a mix of predominantly open-air stands, as well as the provision of covered and enclosed secure stands.

We know from the 2020 UC Travel Survey that 43% of respondents (who usually cycle) indicated that enclosed secure stands are their preferred option for cycle parking. 38% of respondents indicated that covered cycle stands (unlocked) were their preference and a further 16% indicated they prefer open-air stands, placed close to buildings.

Providing covers over cycle stands is a requirement of the District Plan.

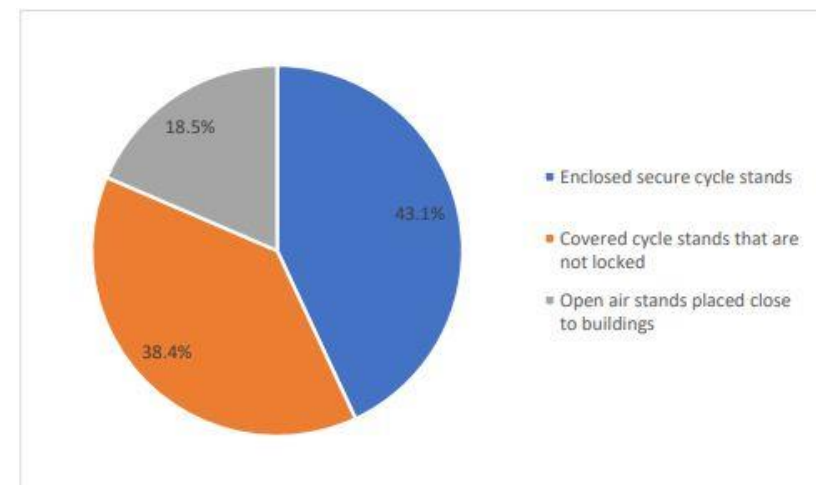


Figure 3: Cyclists preferred cycle parking facilities (UC Travel Survey 2020)

UC has the following availability of stands (by type) on campus:

Secure (swipe card access) cycle stands in the following locations:

- Engineering (Creyke Road) – 123 parks provided
- Behind Central Lecture Theatres – 162 parks provided
- To the west of Meremere (Law) – 100 parks provided

Covered cycle stands in the following locations:

- Beatrice Tinsley Bike Park – 416 parks provided (156 of which are covered)
- West of Ernest Rutherford – 48 parks provided
- Behind C Block Secure Stands – 174 parks provided

Note that some open-air stands are deliberately positioned under the eaves of buildings to provide shelter, however the above locations are dedicated covered stands.

Open-air cycle stands are the most prominent on campus. These are deliberately positioned close to buildings, with the most notable in popularity being:

- Beatrice Tinsley Bike Park - 416 parks provided (260 which are open-air)
- Science Road by West Building – 18 parks provided
- North Arts Lecture Theatre – 45 parks provided
- Arts Quad/1894 (Yellow Brick Road) – 54 parks provided
- Ernest Rutherford South Entrance – 30 parks provided
- Registry Quad – 30 parks provided

Since 2019, significant new additions to our campus bike parking offering include 416 new open and covered bike parks in the Beatrice Tinsley Bike Park and 42 open-air parks provided on Homestead Lane for the new student accommodation, Tupuānuku.

According to the Christchurch City Council District Plan, UC requires 1 staff space / 4 FTE staff and 1 student space / 4 FTE students. The table below shows that despite significant additions to our cycle parking since 2014, according to the measures provided in the District Plan, **UC is short 928 cycle park spaces.**

| | Total population numbers (2022) | District Plan requirement ratio | # needed according to District Plan | 2022 UC bike parks |
|--------------|---------------------------------|---------------------------------|-------------------------------------|--------------------|
| Student FTE: | 17,028 | 1:4 | 4257 | |
| Staff FTE: | 2,112 | 1:4 | 528 | |
| Total | 19,140 | | 4785 | 3804 |

1.2 Bike Park Utilisation

UC has an exemption to the District Plan requirements on the basis that we conduct twice-yearly utilisation audits to show our bike parking provision is led by utilisation, where we undertake to increase bike parking in a) new areas and b) when utilisation reaches 70% or more.

In March 2022, UC had 3,804 bike parks with an average utilisation rate for all bike parking areas of 31%. With the current utilisation being significantly lower than 70%, we do not need to increase the number of parks provided, but rather develop a work programme that allows us to position our parking to the greatest effect.



2. CURRENT FACILITIES

2. End of ride facilities

2.1 Showers

UC currently has 73 showers available in 32 locations. However, not all of these are accessible to students.

The District Plan requires there to be 10 showers provided for the first 100 staff/student cycle parks, and an additional 2 showers for each additional 50 cycle parks required.

Based on the measures in the District Plan and from the staff/student FTE figures on page 7, UC needs 187 showers. Despite the increase in showers since the previous plan, we are still offering 114 less showers than required.

2.2 Lockers

The District Plan requires there to be 1 locker provided per every staff/student cycle park provided, meaning 3804 lockers are needed. There remains a significant lack of locker spaces on campus.

2.3 Water fountains

The UC Sustainability Office and the UCSA recently undertook a survey to understand student and staff perspectives on drinking water (specifically bottled water) on campus. Of the almost 500 who responded, 58% of staff and students thought there were enough water refill stations on campus, but 55% also indicated that they would however like to see more outdoor water fountains.

While there is a good coverage of water fountains / refill stations spread across campus (and as backed up by the survey results) almost all of these are located inside buildings by the lifts and stairs, in office spaces and in student heat and eat areas. The recently completed Beatrice Tinsley Bike Park has the only outdoor water fountain.

2.4 Repair stations

Bike repair stations, bike pumps and puncture repair kits continue to be a popular offering to cyclists.

Bike repair stations are located:

- Behind Puaka James-Hight building
- Matariki bike stands
- Beatrice Tinsley Bike Park

These stations provide a range of maintenance tools for DIY bike service and repair.

Bike pumps are located in the secure cycle stands. While popular, the manual pumps are often found to be broken due to misuse. An air compressor pump was installed in the Engineering secure cycle stands in early 2022, with a view to roll these out across other secure stands on campus in an attempt to minimise breakages to the manual pumps.

2.5 Signage

It is a requirement of the District Plan that cycle parking facilities be clearly signposted or visible to cyclists entering the site. It is also highly recommended that preferred cycle routes are clearly marked.

The Uni-Cycle | Puari ki Pū-taringa-motu (see below) is well marked and sign-posted from the access points of Waimairi Road, Ilam Road, Clyde Road and University Drive. The Uni-Cycle includes path markings indicating the shared cycle/pedestrian nature of the path through the University.

A lack of signage around cycle facilities still remains on campus.

3 CURRENT ROUTES

3.1 Puari ki Pū-taringa-motu - Uni-Cycle

Opened in 2017, Puari ki Pū-taringa-motu | Uni-Cycle is a 5.6km route connecting UC to the central city via Ilam Fields, Riccarton Bush and Hagley Park. This route also connects with two other Major Cycle Routes – Te Ara O-Rakipaoa | Nor'West Arc cycleway at Ilam Road and Puari ki Pū-harakeke-nui | Northern Line Cycleway at Mona Vale.



According to the Christchurch City Council, the number of people using the cycleway through Hagley Park increased by 22% between 2016 and 2017, and in the summer of 2018, 1000 people per day were using the cycleway through campus.

Data from the 2020 UC Travel Survey shows that 23% of respondents indicated that improved cycle routes would influence them to cycle to UC more often. With 31% of respondents in the 2016 Travel Survey reporting that improved cycle route would encourage them to cycle more often, this suggests access to the Uni-Cycle route has made an improvement in this area.

Other major cycle ways that interact with the UC campus are the Te Ara O-Rakipaoa | Nor'West Arc Cycleway and Puari ki Pū-harakeke-nui | Northern Line Cycleway. The Nor'West Arc Cycleway from the University to Harewood Road will run along Ilam Road to Aorangi Road, Condell Avenue and Matsons Avenue before linking to the Northern Line cycleway via Harewood Road. Construction of the final sections of

this cycleway is expected to start in early 2023. The remaining section of the Northern Line Cycleway near the University (between Kilmarnock Street and Old Blenheim Road) is scheduled to be completed in 2024. The completion of these cycle ways will add a valuable transport link from northern and western suburbs to the University.

4 ENGAGEMENT

There is on-going engagement with UC's community to a) reward those already cycling to UC and b) encourage those who are not yet cycling but would consider it, to do so. This engagement is guided by barriers identified in UC Travel Surveys and includes events, safety workshops, staff challenges, social marketing, free bike maintenance and providing access to bikes.



4.1 Aotearoa Bike Challenge

Pitched as a nation-wide organisational challenge to get as many people to a bike in the month of February, UC has been participating in the month-long challenge since 2017. Fun, free, and accessible for all types of cyclists (not just commuters), since 2017 UC has recorded:

- 28% staff participation (527 staff)
- 24,000 commuter trips
- Almost 50,000 kg of co2 saved

2022 highlights include placing second in Ōtautahi Christchurch (in the 2000+ staff size category) and third overall in Aotearoa, with 237 staff (11% participation) cycling 45,512kms during the month. Strong support from UC Communications and UC Wellbeing allowed for a successful campus-wide staff communications campaign.

4.2 Dr Bike

Continuing to address the barrier of costly bike maintenance, Dr Bike has been running since 2015. Offering free basic bike maintenance and repairs, Dr Bike runs as a weekly drop-in service in a highly visible spot on campus (C Block Lawn). The Sustainability Office continues to employ two students from the student bike club, UC Bike, on a casual basis to offer this service during term time.

The most common requests are checking or tuning brakes, gear shifting, puncture repairs and general check-ups.

Since 2015, Dr Bike has fixed 600 bikes free of charge for students and staff.





4.3 Free or cheap use of a bike

The UCSA offers a free bike hire service 'Borrow-a-Bike' for UC students and staff. The scheme is used predominantly by students, with 2022 seeing the bikes borrowed 150 times, predominantly by international students. Bikes are checked out from the UCSA reception and come with a lock and helmet.

According to the four-year UC Travel Surveys, 8% of respondents in 2016 and 9% of respondents in 2020 indicated that free or cheap use of a bike for a year would be the most important incentive to consider cycling more often.

4.4 Cycle safety courses

In 2022, four 'cycle with confidence' workshops were offered at UC, in partnership with the Christchurch City Council's Adult Bike Skills programme. Led by a trained cycle coach, 16 staff and students attended, with half using the Borrow-a-Bike

scheme (above) in order to participate. Sessions took participants through basic cycle safety skills in an off-road setting (tennis courts on Ilam Fields) before progressing the following week to navigating cycle paths and intersections nearby to the university.

Of the attendees, nine identified as staff, four identified as domestic students and four identified as international students. Guided by data from the 2020 Travel Survey showing that 7.3% felt that help improving their cycling skills and confidence would influence their participation in cycling, with 4.7% indicating it would be the *most* important incentive, the Sustainability Office plans to continue running these workshops in 2023.

4.5 Cycle security

Cycle theft continues to be an issue at UC, and in Ōtautahi Christchurch more generally. 12.7% of respondents in the 2020 UC Travel Survey stated that improved security for cycles would encourage them to cycle more often.

Crime Prevention through Environmental Design (CPTED) principles recommend cycle parking is located with adequate passive surveillance (e.g. areas with high foot traffic). No data currently exists on the correlation of bike thefts at UC and the location of the cycle park. Secure cycle stands are monitored by

surveillance cameras and are accessed via a swipe card mechanism, however despite restricted access, bikes have still been stolen from within these secure stands. CPTED principles should be considered when undertaking re-positioning of parks, and certainly in the placement and building of future parks.

UC has been supporting the rollout of the 529 Garage programme, led by Christchurch City Council and NZ Police. 529 Garage is a bike security platform that enables users to register their bike details, such as photos, descriptions and serial numbers in minutes. Once registered, users can obtain a unique 529 Garage code on a tamper-resistant shield that sticks to your bike. Upon launching in 2022, 529 Garage shields were available to collect for free at Te Pātaka, UC Student Services Hub and from Dr Bike.

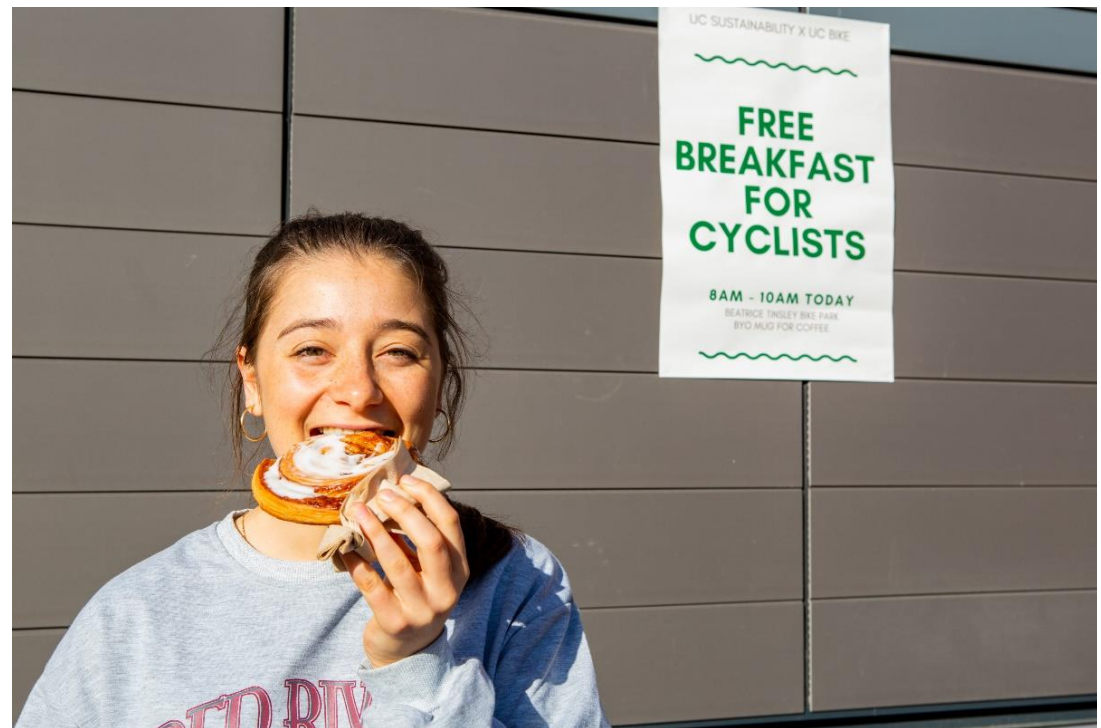
From time to time, bikes are abandoned on campus. UC Security is responsible for the removal of bikes deemed abandoned on campus. Previously the student cycling club, UC Bike, fixed up these abandoned bikes and sold these to fund club activities. There is currently no formal programme for the repairing, salvaging of parts or re-homing of these bikes.

4.6 Events and activities

Since 2014, almost 2,200 staff and students have participated in cycling events held (or co-hosted) by the UC Sustainability Office.

Bike Breakfast

Run by the Sustainability Office since 2018, the free breakfast for cyclists' event continues to grow in popularity, attracting between 150-200 staff and students each year. Recent years have seen this event take place as part of Biketober, Ōtautahi's month-long festival of cycling. Biketober is led by volunteers of cycling advocacy group Spokes Canterbury.



Other popular cycling events have included Bike Fest (2019) Matariki Social Ride (2021) E-bike demos (2021) and World Car Free Day (2022).

4.7 UC Bike

Engaging with the student cycle club continues to be an important tool for understanding student cycling behaviour. Popular cycling events like the Bike Breakfast and Bike Fest (2019) have been run in collaboration with UC Bike, increasing connection to the student community. In 2022, UC Bike had 120 members, and ran a range of activities from group downhill and road rides, social events, women's rides, bike-packing trips, and a free bike maintenance skills workshop with community-led Recycle-A-Dunger (RAD) Bikes.

4.8 UC Cycle Guide and other resources

[The UC Cycle Guide](#) acts as an introduction to cycling at UC and in Ōtautahi Christchurch more broadly. Popular among first year students, the Guide is given out during Orientation and is available on the UC website, alongside other cycling information tailored for the UC community.



The “Cycling at UC: Background, Context and Review” document essentially gives a snapshot of UC’s current cycling facilities, services and engagement tools, giving context for priority areas and the suggested strategies explored in the new UC Cycle Plan, 2022-2030.

