Trinity College Dublin

Campus Travel Plan 2025-2030

Project Title:	**Trinity College Dublin Transport Study**		
Document Title:	**Campus Travel Plan 2025-2030**		
File Ref:	**240061-X-X-X-XXX-RP-DBFL-CE-0002**		
Status:	**P1 – Information**	Rev:	**3**
	S – Issued		

Status	Rev.	Date	Description	Prepared	Reviewed	Approved
P1	0	11/12/2024	First Draft Issue	Shauna Kelly	Robert Kelly	Thomas Jennings
P1	1	04/03/2025	Updated Draft	Shauna Kelly	Kevin Burke	Robert Kelly
P1	2	10/04/2025	Updated Draft	Shauna Kelly	Robert Kelly	Thomas Jennings
P1	3	14/08/2025	Draft for Internal Approval	Shauna Kelly	Robert Kelly	Robert Kelly

Executive Summary

DBFL Consulting Engineers have been commissioned by Trinity College Dublin to prepare a Campus Travel Plan to promote sustainable travel to all campus locations by students, staff and visitors and to reduce the number of vehicles accessing the College Green Campus. The preparation of this Campus Travel Plan has come about as a direct action from the *Trinity College Dublin Sustainability Strategy 2023-2030*. Alongside this Campus Travel Plan, an overall Trinity College Dublin Masterplan is being prepared by Allies and Morrison.

Although 97% of students and staff commute to Trinity using sustainable modes, there has been a 13% decrease in the proportion of these groups walking and cycling to the College since 2018 and a 15% decrease since 2011. As such, the overall vision for this Campus Travel Plan is:

"To increase the number of students, staff and visitors using active and sustainable transport to travel to Trinity and between campus locations by fostering a College Community that embraces active and sustainable travel as a way to promote physical, mental and social health, and as a key tool in Trinity's journey towards Net Zero by 2040".

The Plan contains 59 Travel Plan Actions to aid progress towards this overall vision which are presented under five key themes.

Prior to the development of this Campus Travel Plan, three specialised investigations were carried out to gather information on the existing transport conditions at Trinity. These investigations included:

- **Campus Cordon Study:** To determine how people enter and exit the College Green Campus
- **Cycle Audit:** To determine if the cycling infrastructure connecting key Trinity owned sites across Dublin adequately caters for and responds to the needs of cyclists
- **Microsimulation at Lincoln Place:** To determine the impact of the measures proposed within the Dublin City Centre Transport Plan on access to the College Green Campus via Lincoln Place.

Extensive stakeholder consultation was undertaken in the development of this plan including with Trinity Library, Trinity Sport, Trinity DisAbility, Estates & Facilities, Trinity Tourism, Senior Trinity Management, Trinity College Dublin Students' Union, members of the Healthy Trinity Smarter Travel Group, Dublin City Council and the National Transport Authority. This comprehensive stakeholder engagement has been vital to ensuring that their specific requirements and needs have been incorporated into this Plan from the outset. The feedback and information gathered as part of this stakeholder engagement has been used to develop the five key themes for this Campus Travel Plan. These themes are:

1. Walking and Wheeling
2. Cycling
3. Public Transport
4. Vehicle Access
5. Visitors and Tourism

Theme 1 examines the environment for **Walking and Wheeling** internally within the College Green Campus and externally surrounding the campus. This includes the environment for pedestrians walking and those using mobility aids to move through the pedestrian environment. A total of 11 actions are put forward to promote walking and wheeling at Trinity.

Through the pedestrian cordon study conducted as part of the overall Trinity College Dublin Transport Study, it was unveiled that over 30,500 pedestrians enter the College Green Campus on a typical weekday. The Area immediately outside Front Arch at College Green was identified in particular for not providing sufficient public facilities for safe and comfortable walking and wheeling.

Under the theme of walking and wheeling, a study was undertaken to audit the pedestrian catchment from the College Green Campus. The study revealed that while many Trinity owned buildings in the immediate vicinity of the College Green Campus fall within the pedestrian catchment, there are opportunities to expand the catchment by increasing permeability through opening additional access points along Pearse Street and updating online information about gate opening times. Future proposals to improve the pedestrian environment in Dublin City Centre as part of the Dublin City Centre Transport Plan are also discussed under the theme of walking and wheeling and include the construction of a new pedestrian plaza at College Green, the reconfiguration of Pearse Street and Tara Street and the pedestrianisation of Lincoln Place.

Theme 2 deals with the environment for **Cycling** at Trinity as well as the connections for cyclists travelling between different Trinity owned sites. A total of 23 actions are put forward to promote cycling at Trinity College Dublin.

Through the cyclist cordon study conducted as part of the overall Trinity College Dublin Transport Study, it was revealed that approximately 325 cyclists enter the College Green Campus on a typical weekday. A cycling catchment analysis revealed that many Trinity sites, including Iveagh Grounds, St. James' Hospital, Trinity Hall and Trinity East are all accessible from the College Green Campus in 20 minutes or less by bike.

A cycle infrastructure audit was undertaken to examine the quality of facilities for cyclists that connect the College Green Campus to Trinity Hall, Iveagh Grounds, Trinity East, St. James' Hospital and Kavanagh Court, as well the cycle parking at each location. The audit of the facilities connecting Trinity's campuses uncovered a number of locations that pose risks to cyclists in terms of both actual and perceived safety and identified ways to upgrade the routes and mitigate this risk.

As an overall observation, the cycle audit noted that it was quite common on all routes to see cyclists sharing facilities with buses and are being forced to swerve in front of other motorised traffic due to the presence of bus stops and vehicle parking. Recommendations from the cycle audit focus on increasing segregation and removing the obstacles for cyclists caused by parked cars and dwelling buses.

The future changes to the City Centre environment for cyclists as part of the Dublin City Centre Transport Plan, Dublin City Council Active Travel Network and BusConnects are also discussed under this theme. The projects put forward under the Dublin City Centre Transport Plan to improve the walking and wheeling environment surrounding Trinity will also include upgraded facilities for cyclists. The Trinity to Ballsbridge and

Ringsend to College Green schemes put forward as part of the Dublin City Council Active Travel Network will be progressed during the lifetime of this plan while BusConnects will provide improved facilities for cyclists travelling to Iveagh Grounds, St. James' Hospital and Trinity Hall.

Theme 3 deals with **Public Transport** and provides an overview of the existing public transport network serving Trinity and providing connections between Trinity owned locations. The accessibility issues raised by Trinity DisAbility regarding public transport are also included under this theme alongside the future planned public transport network that will serve Trinity during the lifetime of this plan and beyond. A total of 7 actions are put forward to promote public transport use at Trinity.

Theme 4 examines the existing **Vehicle Access** at the College Green Campus for private vehicles, Trinity owned vehicles, and servicing and deliveries. A total of 11 actions are put forward for managing vehicle access at College Green.

This theme provides an overview of car parking at Trinity, servicing and delivery protocols and vehicle volumes at key access gates. A case study on last mile delivery at the University of Toronto is presented to illustrate how other universities have removed a proportion of delivery vehicles from their campus.

This theme also examines the proposals put forward under the Dublin City Centre Transport Plan that will have an effect on how vehicles access the College Green Campus, particularly via Lincoln Place. As noted under this theme, Lincoln Place is identified as the busiest vehicle access to Trinity with approximately 750 two-way vehicle movements through the gate on an average weekday.

Theme 5, the final theme, provides an overview of travel to the College Green Campus by **Visitors and Tourists**. Attractions such as The Book of Kells bring approximately 1,000,000 additional visitors to the College Green Campus each year and as such contribute significantly to the pedestrian volumes at the campus. This theme discusses current visitor volumes, future proposed visitor volumes, and proposals to better understand how one-off visitors travel to Trinity. A total of 3 actions are put forward to promote sustainable travel specifically to visitors and tourists travelling to Trinity.

Following a dissection of the current and future transport environment at Trinity College Dublin through the five key themes, this Campus Travel Plan sets out a target 2030 modal split for students and staff with a focus on increasing the proportion of these groups that walk and cycle to the University. These modal split targets have been informed by the location of Trinity's campuses across Dublin, the existing student and staff travel patterns and modal split, previous student and staff travel patterns and modal splits, the distance that students and staff commute to Trinity and the changing national, regional and local policy context.

A summary of the actions and recommendations put forward under each theme to help create the modal shift towards these targets is summarised in tabular format in the summary document that accompanies this report and in **Appendix A.** An implementation and monitoring plan accompanies the modal split targets to track progress towards the targets and the overall Campus Travel Plan vision.

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Introduction

1 Introduction

1.1 Overview

DBFL Consulting Engineers have been commissioned by Trinity College Dublin to prepare a Campus Travel Plan to promote sustainable travel to all campus locations by students, staff and visitors, and to reduce the number of vehicles accessing the College Green Campus. The preparation of this Campus Travel Plan forms part of an overall Transport Study for Trinity College Dublin and is listed as a key action within the Trinity College Dublin Sustainability Strategy 2023-2030.

Trinity College Dublin is Ireland's oldest university, founded in 1592 on the grounds of the former Priory of All Hallows. The University today consistently ranks as Ireland's Top University and strives to *"promote a diverse, interdisciplinary, inclusive environment which nurtures ground-breaking research, innovation, and creativity through engaging with issues of global significance"*. There are approximately 22,000 undergraduate and postgraduate students currently enrolled at Trinity.

Trinity's largest campus is located in the heart of Dublin City at College Green. This 47-acre campus currently accommodates approximately 20,000 students and 3,500 staff members. Trinity also occupies a number of smaller locations across the city including Trinity East at Grand Canal Dock and the Trinity Centre for Health Sciences at St. James' Hospital. In addition to the limited student accommodation available at the College Green Campus, Trinity's largest student residence, Trinity Hall, is located approximately 4km from College Green at Dartry.

Alongside its academic pursuits, Trinity is also home to world famous tourist attractions such as The Book of Kells and The Old Library. These tourist attractions bring over 1,000,000 visitors to the College Green Campus each year and provide Trinity with crucial revenue to fund the running of the University and its research mission.

Prior to the development of this Campus Travel Plan, three specialised investigations were carried out to gather information on the existing transport conditions at Trinity. These investigations included:

- **Campus Cordon Study:** To determine how people enter and exit the College Green Campus
- **Cycle Audit:** To determine if the cycling infrastructure connecting key Trinity owned sites across Dublin adequately caters for and responds to the needs of cyclists.
- **Microsimulation at Lincoln Place:** To determine the impact of the measures proposed within the Dublin City Centre Transport Plan on access to the College Green Campus via Lincoln Place

The results of these studies will be made available online alongside this report.

The overall vision for this Campus Travel Plan is:

"To increase the number of students, staff and visitors using active and sustainable transport to travel to Trinity and between campus locations by fostering a College Community that embraces active and sustainable travel as a way to promote physical, mental and social health, and as a key tool in Trinity's journey towards Net Zero by 2040".

The success of the Campus Travel Plan will be measured against a set of 2030 modal split targets. These targets are important as they give the Campus Travel Plan direction from the beginning and provide a measurable goal.

Progress towards these targets and the overall vision will be guided by the 59 Actions put forward as part of this Campus Travel Plan. These actions along with existing and future transport environment at Trinity College Dublin are presented through five key themes:

1. Walking and Wheeling
2. Cycling
3. Public Transport
4. Vehicle Access
5. Visitors and Tourists at College Green

Access for All forms a key pillar of this Campus Travel Plan. The actions put forward in this Plan take account of students, staff and visitors with a variety of travel styles and requirements in order to create a meaningful shift in the existing modal split. Any change in how people travel to Trinity and between Trinity owned sites can only come about by targeting measures at the entire college community.

1.2 Key Stakeholder Engagement

Round 1 of Stakeholder Engagement on the Trinity College Dublin Campus Travel Plan took place from May 2024 to January 2025 via a mixture of in-person and online meetings. This consultation took place with representatives of various Trinity departments, Trinity College Dublin Students' Union, the Healthy Trinity Smarter Travel Group, Trinity College Dublin Management, Dublin City Council and the National Transport Authority.

Prior to each consultation session, the group representatives were sent a copy of the Trinity College Dublin Transport Study brief so that they could familiarise themselves with the project. Where required, stakeholders were also given a short presentation at the beginning of the consultation to provide a refresher of the Transport Study purpose and components. During each consultation, the stakeholders were then asked to discuss their work in the context of the Transport Study and to provide their experience with transport at Trinity College Dublin.

Early engagement with stakeholders has been vital to ensuring that their specific requirements and needs have been incorporated into this Plan from the outset. This early engagement will also assist in creating a sense of ownership over the Plan and encourage active participation in the modal shift process.

Following the conclusion of the first round of stakeholder consultation, a number of common topics and areas of consideration were identified. These included:

- Car and cycle parking at Trinity
- The impact of the Dublin City Centre Transport Plan
- Public transport provision
- Servicing and deliveries at College Green
- The development of Trinity East

Details on the provision of both car and cycle parking are discussed in this Campus Travel Plan under the themes of cycling and vehicle access while the impact of the Dublin City Centre Transport Plan is discussed under the themes of walking, cycling, public transport and vehicle access. Public transport provision is discussed under the theme of public transport while servicing and deliveries to College Green are detailed under the themes of vehicle access, and visitors and tourism. The development of Trinity East is addressed under the themes of walking, cycling and public transport.

A breakdown of the groups involved in round 1 of the consultation process along with the dates and medium of engagement can be found in **Appendix B.**

1.3 Report Structure

Following this introduction, **Chapter 2** of this report will present an overview of the context within which this Campus Travel Plan sits.

Chapters 3 through 7 will then discuss the five key themes of this Campus Travel Plan. Each theme will be presented first in terms of existing conditions, future proposals and travel plan recommendations and actions.

Chapter 8 will present the future modal split targets that have been set for students and staff at Trinity College Dublin based on the actions and recommendations put forward in this Plan while **Chapter 9** puts forward an implementation plan for these actions alongside a monitoring plan to track progress towards the future modal split targets. The conclusion to this report is provided in **Chapter 10.**

Campus Travel Plan Context

2 Campus Travel Plan Context

2.1 Overview

The following chapter presents the context within which this Campus Travel Plan has been developed. The chapter first illustrates the geographical spread of Trinity across Dublin, noting the number of locations occupied by the University outside of the largest campus at College Green. Following this, the chapter will discuss future expansion plans for Trinity and the work already being undertaken by Trinity, and in particular Healthy Trinity, to promote sustainable travel as part of the NTA's Smarter Travel Campuses programme. Finally, the chapter highlights the results of the most recent student and staff travel surveys to establish a baseline modal split.

2.2 Policy Context

This Campus Travel Plan has been informed by a number of international, national, regional and local transport planning, health, climate and land use plans and strategies. The review of these plans, policies and strategies has provided an understanding of the climate, health and transport environment that is expected to develop over the lifetime of this Plan and has directly influenced the goals, targets and actions set out in the Plan.

The plans and strategies that have been reviewed and that have informed this Campus Travel Plan include:

- Climate Action Plan 2025;
- National Development Plan 2021-2030;
- National Sustainable Mobility Policy;
- Tourism Policy Framework 2021-2030;
- Global Action Plan on Physical Activity 2018-2030;
- Moving Together – A Strategic Approach to the Improved Efficiency of the Transport System in Ireland;
- Five Cities Demand Management Study;
- Cycle Design Manual;
- Design Manual for Urban Roads and Streets (DMURS);
- Permeability Best Practice Guide;
- Regional Spatial and Economic Strategy for the Eastern and Midlands Region 2019-2031;
- Greater Dublin Area Transport Strategy 2022-2042;
- Dublin City Centre Transport Plan 2023;
- Dublin City Development Plan 2022-2028;
- Fingal County Development Plan 2023-2029;
- Trinity College Dublin Sustainability Strategy 2023-2030;
- Trinity College Dublin Carbon Footprint Report 2021-2022; and
- The Trinity Disability Service Strategic Plan 2020-2025.

The most relevant goals, objectives and targets from these plans and strategies are summarised in **Appendix C.**

2.3 Campus Locations

Trinity's largest campus is located at College Green, Dublin 2 and occupies an area of approximately 47 acres. The historical nature of the College Green Campus and the protected status of many of its 18th and 19th century buildings has limited the ability of the College to develop and expand at this site. As a result, the College has obtained a number of additional sites and now operates from a variety of locations across Dublin City, including:

- **Goldsmith Hall** – Located along Pearse Street, in direct proximity to the College Green Campus. Goldsmith Hall provides teaching space, student accommodation and space for student societies.
- **TBSI** – Trinity Biomedical Sciences Institute is located adjacent to Goldsmith Hall on Pearse Street and houses teaching spaces and research facilities.
- **D'Olier Street** – The School Nursing & Midwifery is located approximately 300m from the College Green Campus along D'Olier Street.
- **Leinster Street South** – The Trinity occupied building along Leinster Street South is located approximately 100m from Lincoln Gate and is home to the Student Counselling Service, the Careers Advisory Service and other academic departments.
- **Stack B** – Stack B provides office space for a number of staff from the School of Engineering and the School of Computer Science and Statistics. The building is located at George's Dock, approximately 550m from the Naughton Institute entrance to the College Green Campus.
- **Trinity Hall** – Trinity's primary student accommodation for junior fresh undergraduate students, located approximately 4km from the College Green Campus in Darty. Trinity Hall can accommodate over 1,000 students and acts as private accommodation during the summer months.
- **Santry Sports Grounds** – Trinity Sport's largest outdoor sports facilities are located on a 34-acre site approximately 8km from the College Green Campus on Santry Avenue, Dublin 9.
- **Iveagh Sports Grounds** – Trinity Sport operates an additional 17-acre facility in Crumlin, Dublin 12. The Iveagh Sports Grounds are located approximately 4km from College Green.
- **Islandbridge Boathouse** – The Islandbridge Boathouse is located approximately 4km from College Green, along the southern bank of the River Liffey in Kilmainham. The boathouse is home to Dublin University Boat Club and Dublin University Ladies Boat Club.
- **Trinity East** – The Trinity East campus is located approximately 800m east of the College Green Campus at Grand Canal Dock. Trinity East is currently home to the Lir Academy, commercial units, a community space and specialist research labs. Plans are being advanced to redevelop the site into a full research and innovation campus.
- **St. James' Hospital** – St. James' Hospital is located approximately 3km from the College Green Campus in Dublin 8. The hospital is a teaching partner of Trinity and is home to the Trinity Centre for Health Sciences.

The locations of Trinity's campus locations across Dublin are highlighted in **Figure 2-1.**

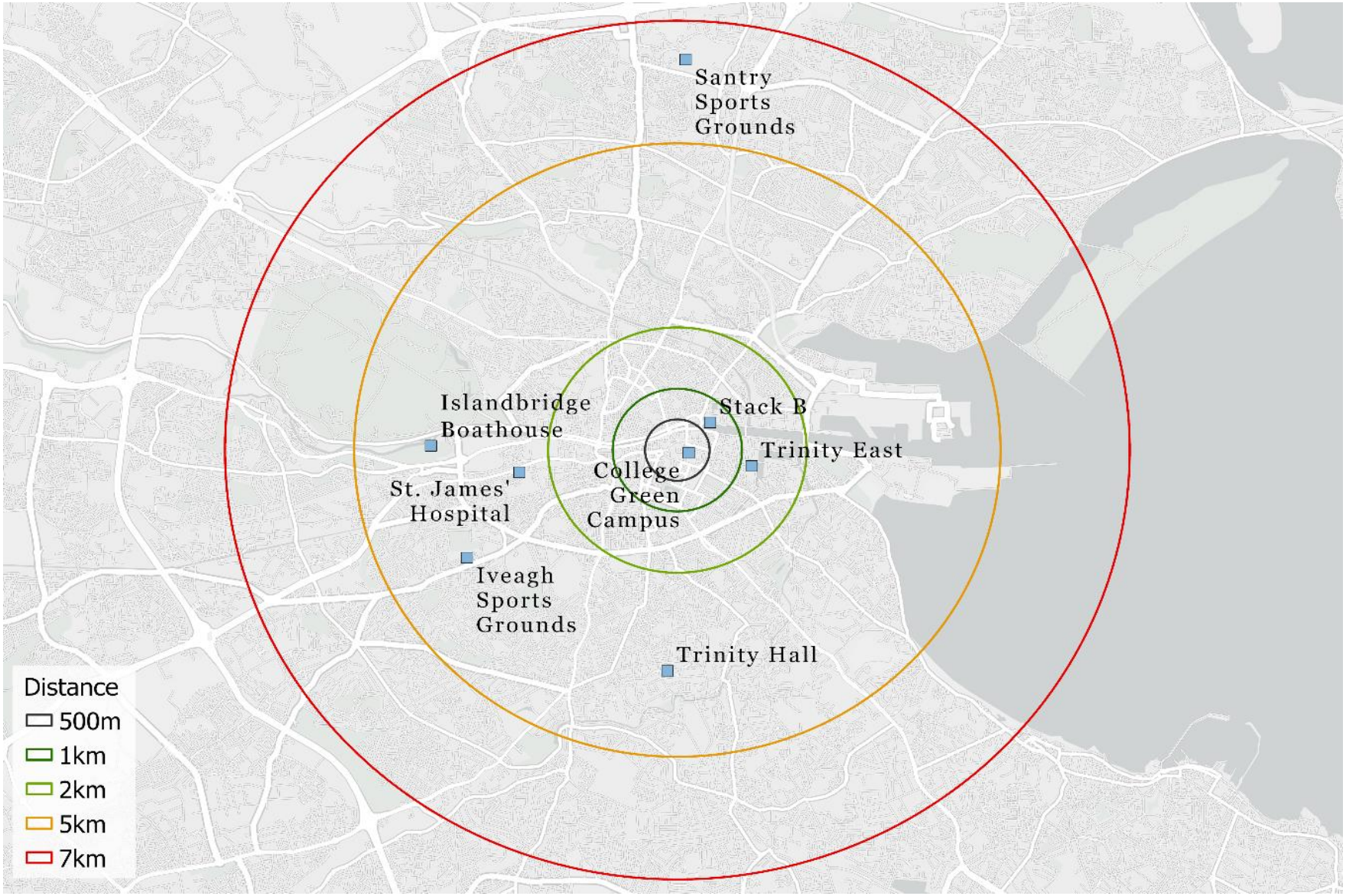


Figure 2-1 Trinity's Campus Locations Across Dublin City

2.4 Future College Expansion

Construction on the Martin Naughton E3 Learning Foundry began in September 2021 on the site of the former Robert's Lab and Biochemistry Buildings. It is expected that the building will be completed during the 2025/2026 academic year and will allow Trinity to increase its population of STEM students by approximately 1,800 over the coming decade. The Martin Naughton E3 Learning Foundry is likely to be the last major new construction project at the College Green Campus due to space limitations and the strategic priorities of the University.

Following the completion of the Martin Naughton E3 Learning Foundry, Trinity will look to redevelop some of its existing sites across the city, including Iveagh Grounds in Crumlin and Trinity East at Grand Canal Dock. The exact plan and timeline for the refurbishment of these sites is currently being developed as part of the overall College Masterplan, which will be informed by the overall Trinity College Dublin Transport Study.

2.5 Healthy Trinity Smarter Travel

Trinity has been an active participant in the NTA's Smarter Travel Campuses Initiative since 2011. The programme seeks to encourage students and staff to walk, cycle or take public transport to their place of education or work through behavioural change initiatives. The Healthy Trinity Smarter Travel Group features representatives from a variety of student and staff groups including Trinity College Dublin Students' Union, Estates & Facilities, College Health, Trinity Sport, Human Resources, the Green Campus Committee and the St. James' Campus Committee.

The Healthy Trinity Smarter Travel Group conducts its activities across six action areas, including:

1. Events / Interventions: The Committee takes part in national behavioural change events such as Marchathon and Walktober while also hosting events such as bike servicing during Trinity's Green Week. The Committee also plays a role in the provision of infrastructure to support active travel such as cycle parking and bike repair stands.

2. Supportive Environment: The Healthy Trinity Smarter Travel Group is a strong advocate for the expansion of segregated cycling facilities across Dublin City. Since 2018, the Committee has submitted responses to 13 public consultations on active travel across the city.

3. Living Lab: The Healthy Trinity Smarter Travel Group administers the staff and student travel survey. This survey is carried out every 2 to 3 years with all students and staff invited to participate. The results of the survey are published on the Smarter Travel Living Lab section of the Healthy Trinity website with graphs to compare the results of the most recent survey with previous surveys.

The knowledge generated by the Living Lab approach to Smarter Travel with the NTA allows Trinity to understand the barriers to sustainable commuting, adapt the activities of the Healthy Trinity Smarter Travel Group in response to changing travel behaviour, seek funding for on campus facilities such as cycle parking and to pursue safe, segregated cycling between Trinity's campuses and residences.

4. Co - / curricular activities: The Healthy Trinity Smarter Travel Group regularly works with academics to include elements of sustainable travel into the curriculum where applicable. Previous collaborations have

included working with third year mechanical and manufacturing engineering students to design new devices to increase safety for cyclists and working with students at Trinity Business School to create promotional materials for active travel and compile business cases for liveable cities.

5. Funding: The Healthy Trinity Smarter Travel Group seek out funding to support the work of the Committee in promoting sustainable and active travel in Trinity. This can include applying to the NTA for funding of physical infrastructure such as cycle parking or for supportive work such as the appointment of a consultant to undertake the Trinity College Dublin Transport Study.

6. Communications: The Healthy Trinity Smarter Travel Group promotes active travel and the work of the Committee on the Healthy Trinity social medial profiles while also providing detailed online information about walking, cycling and taking public transport to the College Green Campus. However, this information is not regularly updated with many sections out of date such as the available information on cycle parking and the benefits of the Student Leap Card.

2.6 Existing Modal Split

The last student and staff travel survey was carried out by the Healthy Trinity Smarter Travel Group in 2023 with a total of 1,832 respondents. This is equivalent to a response rate of approximately 7%. The low response rate likely results in the travel survey not accurately representing the modal split among students and staff.

Promotion of the travel survey has been weak in the past, with students and staff typically not receiving more than one or two email requests to complete the survey and no information on the survey deadline provided. For future travel surveys, a wider promotional campaign should be implemented to increase the response rate. Incentives to encourage the completion of the travel survey in the past have typically been a single prize of one Trinity Ball ticket. The lack of variety of incentives and the limited number of incentives does not encourage a diverse range of students and staff to respond to the survey. For future travel surveys, a greater number and variety of incentives should be used to encourage a higher response rate. Incentives could include T-Card credit, vouchers for on campus outlets, vouchers for sustainable businesses in the vicinity of Trinity or credited Leap Cards.

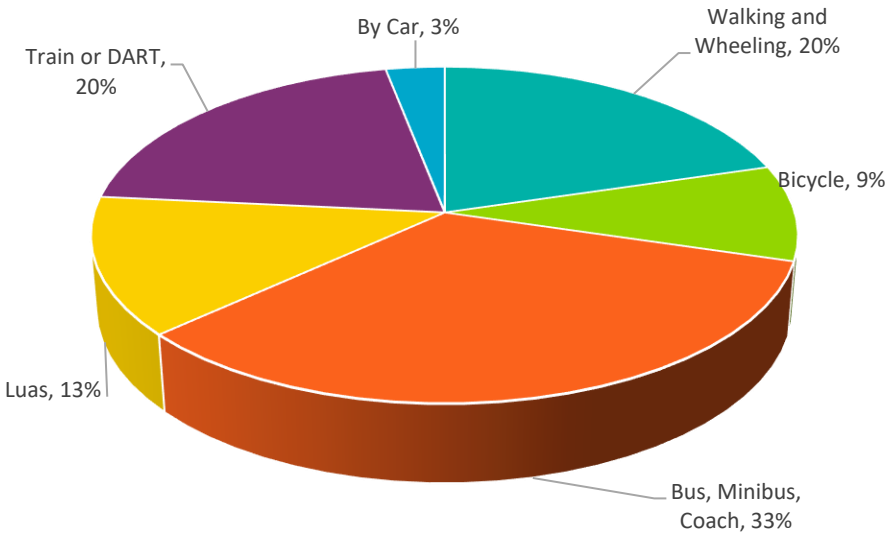


Figure 2-2 2023 Student and Staff Modal Split

The results of the survey, as presented in **Figure 2-2** show that 97% of students and staff travel to Trinity using sustainable transport modes. This includes 20% of students and staff walking to Trinity with 9% cycling. Two thirds of students and staff travel to Trinity by public transport with the most popular public transport mode being the bus, taken by 33%. The proportion of students and staff travelling to Trinity by car is low at just 3%. It should be noted that while staff can apply for a free parking permit on campus, students have no access to College owned parking.

Since 2018, there has been an 8% decrease in the proportion of students and staff walking to Trinity as well as a 5% decrease in the proportion of students and staff cycling to Trinity. This fall in active commuting corresponds with an overall increase of 11% in public transport use and has not resulted in a larger proportion of the population driving to the College.

The sharp increase in the proportion of students and staff travelling to Trinity by public transport correlates with the introduction of the 50% discount on public transport fares for students in September 2022. While there has been a 13% decrease in the proportion of those living within 6km of Trinity, the results of the 2023 travel survey indicate that 51% live within 6km of Trinity and therefore could use active modes. It is not clear if reduced public transport prices, the ongoing housing crisis, or other factors have contributed to these changes.

Although an increase in public transport ridership is positive in terms of sustainability, the shift from active modes to public transport over the past number of years is disappointing from an overall health perspective. The World Health Organisation's Global Action Plan on Physical Activity 2018-2030 notes that *"regular physical activity is proven to help prevent and treat noncommunicable diseases such as heart disease, stroke, diabetes and breast and colon cancer."*

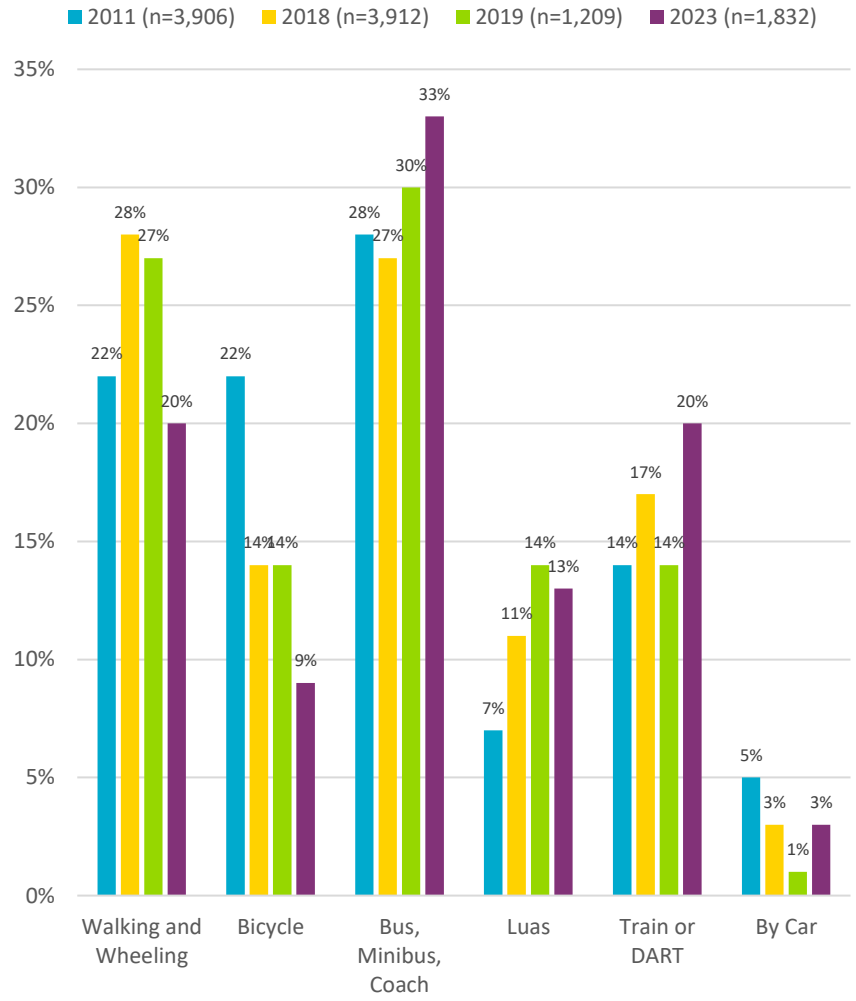


Figure 2-3 Modal split comparison between 2011, 2018, 2019 and 2023

Theme 1: Walking and Wheeling

3 Theme 1: Walking and Wheeling

3.1 Overview

Walking and wheeling are fundamental parts of all transport networks, with all journeys containing some element of walking or wheeling. This includes pedestrians walking and those using mobility aids to move through the pedestrian environment.

This chapter first sets out to establish the baseline conditions for pedestrians at Trinity College Dublin by examining the physical environment within and surrounding the College Green Campus, investigating the walking catchment from the campus and analysing the permeability of the campus.

Following this, the chapter discusses what the future pedestrian environment may look like following the implementation of the Dublin City Centre Transport Plan and recommends a number of measures to improve the pedestrian environment at Trinity and to encourage more students, staff, visitors and tourists to travel to Trinity on foot.

3.2 College Green Campus Existing Pedestrian Environment

3.2.1 Internal Pedestrian Environment

Campus Access Locations

There are 20 pedestrian gates located on the perimeter of the College Green Campus, 9 of which are in regular use. The location of these gates around the perimeter of the College Green Campus is illustrated in **Figure 3-1** while **Figure 3-2** presents a high level overview of the weekday operating hours of these gates. Full details on gate opening times, including the restrictions in place on weekends and after hours are provided in **Appendix D.**

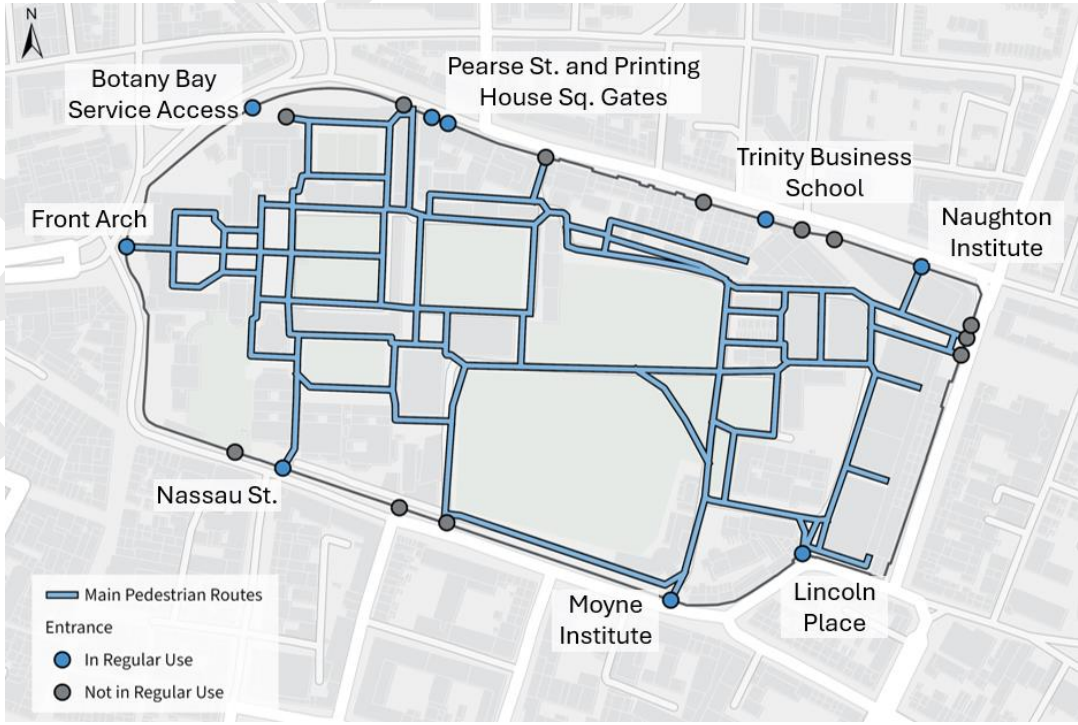


Figure 3-1 Pedestrian Entrances and Routes through the College Green Campus

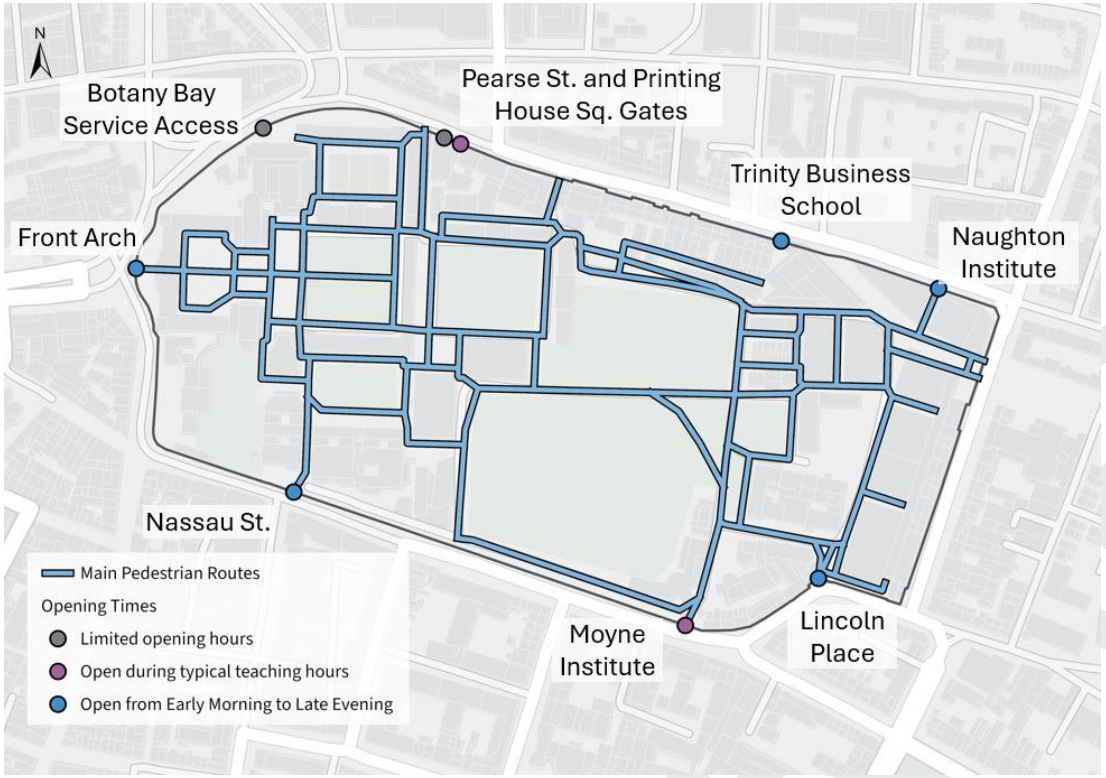


Figure 3-2 Typical Weekday Operating Times for College Green Campus Entrances

It can be confusing for students, staff and visitors to the campus to understand when these gates are open or closed due to a lack of up-to-date online information regarding their operating hours. Online information regarding gate opening times was last updated in 2009 and excludes newer gates such as the entrance at Printing House Square.

Action AW1 – Gate Access Times
Update online information regarding the opening times of the various entrances to the College Green Campus.

Pedestrian Cordon Study

A Cordon Study was conducted over a 6-day period at the pedestrian gates shown in **Figure 3-2** in April 2024 as part of the overall Transport Study that informs this Campus Travel Plan.

Action AW2 - Pedestrian Counters
In order to gain an understanding of how pedestrian flows vary across the year, it is recommended that Trinity install permanent pedestrian counters across the College Green campus. Data gathered from these counters can identify areas of crowding, inform a future wayfinding plan, and disperse this crowding. This aligns with the Healthy Trinity Smarter Travel Group Living Lab proposal on pedestrian counters, proposed in 2021.

The Cordon Study undertaken in April 2024 revealed that the most used pedestrian gates are Front Arch, Nassau Street and The Naughton Institute on Pearse Street, used by approximately 22,900, 19,000 and 12,200 pedestrians respectively on an average weekday. Unlike the typical AM and PM peak hours observed for vehicle movements, pedestrian activity at these entrances has one distinct weekday peak hour, from 13:00-14:00. **Table 3-1** provides a summary of the pedestrian volumes recorded during the cordon study while

Figure 3-3 illustrates the proportion of pedestrians using each access point on a typical weekday.

Table 3-1 Summary of Pedestrian Cordon Count Results

Access Location	Total no. of Pedestrians Counted (6-day survey period)	Average no. of Weekday Pedestrian Movements	Average no. of Weekend Pedestrian Movements	Average no. of Weekday Peak Hour Pedestrian Movements
Front Arch*	68,736	22,192	Not Available	2,809
Nassau St	129,295	19,047**	19,716	2,850**
Moyne Institute	8,650	2,163	Gate open weekdays only	364
Lincoln Place	18,055	3,618	1,792	517
Naughton Institute	57,114	12,184	4,189	1,680
Printing House	12,448	1,741	2,743	399
Botany Bay Service Access	1,559	390	Gate open weekdays only	264

*Front Arch was only open for the first 3 days of the survey due to preparations for Trinity Ball. This caused an increase in the number of pedestrians using the Nassau Street Entrance in the latter half of the survey.

** Average taken based on days when Front Arch was open

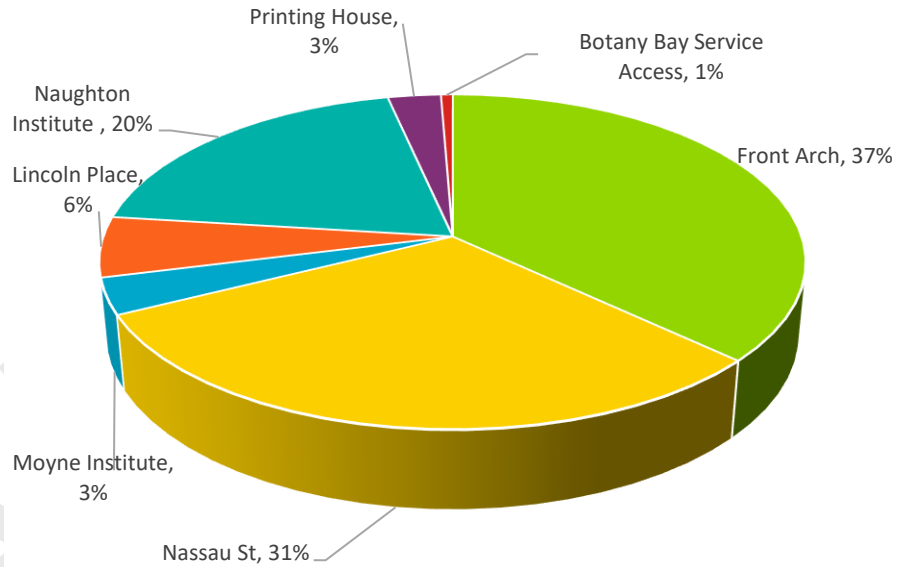


Figure 3-3 Proportion of Pedestrians using each Access Point at the College Green Campus (calculated for days when Front Arch was open)

Internal Campus Pathways

Pedestrians have access to all public areas of the College Green Campus. Where a path is shared with vehicular traffic, pedestrians have the right of way. There are many locations along the pedestrian pathways where benches and other seats are provided to allow pedestrians to rest, including at Front Square, Fellows' Square, along the Cricket Pitch, at the Rose Garden and at the Physics Garden. These rest areas are of particular value to those entering Trinity who may be older or not able bodied. All street furniture on campus must not be

permanent, to allow for its removal during filming or special events. It is noted from stakeholder consultation that street furniture is sometimes removed during events where visitors of all ages and abilities are expected to attend Trinity and is not always returned promptly following the conclusion of such events. Although it may be necessary to remove some benches during late night events, such as Trinity Ball, it may not be necessary to remove them for events with much smaller attendance during the day such as commencement ceremonies.

Action AW3 – Street Furniture
When it is deemed necessary to remove street furniture, such as benches, from areas of campus due to special events, ensure that they are returned promptly following the conclusion of the event. Street furniture such as benches are vital for providing rest areas for pedestrians of a wide range of ages and abilities.

A large proportion of Trinity's historic squares, including Front Square, Library Square and Fellows Square are paved with limestone cobbles that were installed in the 1970s. In 2009 / 2010 a proportion of these cobbles were removed and replaced with flat paving slabs to create enabled pathways and make these squares easier to navigate for wheelchair users and those with other mobility impairments. The enabled pathways around Front Square, Library Square and Fellows Square follow the perimeters of the squares, with the exception of the path from Front Arch to the Campanile. Consequently, these pathways do not provide the shortest route through the squares, resulting in those who already experience reduced mobility having to travel longer distances.

The presence of the enabled pathways, particularly through Front Square, has had the unintended consequence of creating a guiding path, with many visitors following the enabled pathway from Front Arch towards the Campanile and pausing to take in the square. As noted from visits to Front Square and discussions with Trinity DisAbility, crowding on these enabled pathways creates obstacles for those who rely on them.

Although the installation of the enabled pathways provided a greatly improved experience for wheelchair users and those with mobility impairments when compared to full cobbled paving, the extensive presence of cobbles still results in significant limitations to the way that these groups can navigate the College's historic squares.

Action AW4 – Enabled Pathways
Increase the number of enabled pathways through Front Square and increase the width of the existing enabled pathways through Parliament Square, Front Square, Library Square and Fellows Square in order to reduce crowding and provide greater options for mobility impaired users who are reliant on the enabled pathways to navigate the squares.

Outside of the cobble paved historic squares, all other paths through the College Green Campus are surfaced with tarmac. This can create confusion in some areas as to whether pedestrians or vehicles have the right of way.

Figure 3-4 Enabled Pathways along Front Square

Figure 3-5 Tarmac Pathways Through New Square

Wayfinding

A lack of clear, up to date wayfinding is apparent across the College Green Campus. Upon entering Front Square through Front Arch, pedestrians are greeted with a map of the campus. This map is many years out of date, showing buildings such as Luce Hall which was demolished in 2015 and other since closed or demolished buildings such as the Printing House, Biochemistry Building, former Health Centre and the Science Gallery.

Wayfinding signage placed around Front Square primarily focuses on buildings and sites of interest to tourists such as the Book of Kells and GMB rather than those of interest to students, staff and the general public passing through the campus. Much like the campus map presented adjacent to Front Arch, these signs are out of date, giving directions to closed buildings and attractions.

Figure 3-6 Wayfinding Signs at Front Square advertising the closed Science Gallery and no longer existing campus Bank of Ireland branch

There is an inconsistency of identity with the existing signage across the College Green Campus also, with some signs displayed in the older blue style and some signs posted in a more modern grey tone. Digital mapping is provided at the Nassau Street entrance to the campus but is displayed on rotation with other information notices and advertisements for Trinity's attractions.

Action AW5 - Wayfinding

Commission a full wayfinding strategy for both College Green and its other satellite locations to provide up to date signage, create a single identity for signage across all locations and provide wayfinding to locations of interest for students and staff as well as tourists and visitors.

There is great opportunity to improve wayfinding around the College Green Campus by providing up to date signage and maps as well as including wayfinding features to alert campus users of connections to external destinations of interest such as the National Gallery, Pearse Street Train Station, Tara Street Train Station and the Dawson Street Luas Stop.

Case Study: TU Dublin – Grangegorman Campus

Grangegorman Campus is shared between TU Dublin, the HSE and Dublin 7 Educate Together. The campus is located on the site of the former Richmond Penitentiary and St. Brendan's Hospital. Although modern development is taking place at Grangegorman, a number of buildings on the site date back to the early 1800s.

All wayfinding at Grangegorman was developed with the historic nature of the campus in mind. Signage outside older buildings has been designed in colour and proportion so as not to detract from the fabric of the historic buildings while also providing a clear indication of the building's name. Each sign utilises a dark grey colour and displays the building names in both Irish and English.

Grangegorman is an excellent example of a campus that has become a place of education and healthcare while also welcoming the local community to enjoy the space. As such, wayfinding at Grangegorman does not solely focus on the occupiers of the campus and instead balances providing directions to on campus buildings with providing direction to local areas of interest such as Stoneybatter and public transport interchanges such as the Broadstone Luas Stop.

Figure 3-7 Wayfinding at Grangegorman

Case Study: Wayfinding at Dublin City University

Dublin City University (DCU) is an example of an Irish university that has created a consistent wayfinding identity across multiple campus locations, both physically and online. DCU provides up to date maps online for its three primary teaching campuses that all utilise a consistent colour pallet and style that mirrors the physical wayfinding signage across their campuses.

Additionally, in September 2024, DCU launched the interactive, online DCU Campus Explorer. This platform allows students, staff and visitors to explore the indoor and outdoor areas DCU teaching campuses in 3D. The platform also provides the quickest walking routes between key locations on campus and offers digital campus tours specifically tailored to new students, new staff or those interested in the history of each campus.

Public Lighting

As illustrated in **Figure 3-6,** lighting around the campus' historic squares is primarily provided through antique style lanterns placed around the perimeter of the lawns. Outside of these areas, floodlights are placed high on the roofs of most buildings to light up pedestrian areas outside of daylight hours. Generally, the campus is well lit at night with all main pedestrian areas served by the internal public lighting system. Smaller nooks of the campus however lack sufficient lighting such as the corners where the historic squares join each other, the pathway between the Trinity Business School and the Sports Centre and at the cycle parking under the railway bridge adjacent to the Sports Centre.

Action AW6 – Public Lighting

Conduct a public lighting review at the College Green Campus to determine if the lighting currently installed across the campus is sufficiently contributing to pedestrian safety. This review will also need to consider the effects of light pollution on the biodiversity of the campus.

3.2.2 External Pedestrian Environment

Footpaths are available around the entire perimeter of the College Green Campus, ranging in width from 2m on approach to the Nassau Street entrance to 7m at points along College Green. Generally, the footpaths around the perimeter of the campus are in good condition but the presence of large poles to support the overhead lines for the Luas and a high volume of signs creates clutter that artificially narrow the footpaths in some areas, creating pinch points. Narrow footpaths are particularly prevalent on the western and southern perimeter of the campus, along Grafton Street and Nassau Street. These narrow footpaths create a safety issue for pedestrians by forcing them to step out into traffic to navigate busy sections.

Figure 3-8 Narrow Footpaths at Nassau Street

Figure 3-9 Wide Footpaths at Grafton Street

A total of 13 no. signalised pedestrian crossings connect the wider street network to the perimeter of the campus. At Front Gate, the closest signalised pedestrian crossing can be found 10m to the south, facing College Green.

The pedestrian crossing at College Green is located to the south of Front Gate and obscured by the perimeter railings. As a result, the crossing is not visible to pedestrians until they have passed through the gate. This lack of visibility, the presence of a dropped kerb immediately facing Front Gate and the large volume of street clutter associated with the public transport corridor through College Green create a hostile pedestrian environment that is difficult to navigate.

Figure 3-10 Location of College Green Pedestrian Crossing in relation to Front Gate

Figure 3-11 Dropped Kerb and Unreachable Footpath directly outside Front Gate

Once at the signalised crossing, there is little room for pedestrians to wait for a green pedestrian signal. Although the crossing is 8m wide, the footpath where pedestrians must wait to cross is just 3m wide. As noted in the Transport for London publication *'Pedestrian Comfort Guidance for*

London (2010)', the recommended minimum width of a footpath in areas where pedestrian flows exceed 1,200 pedestrian per hour is 5.3m. As observed during the Pedestrian Cordon Study carried out as part of the overall Trinity College Dublin Transport Study, hourly pedestrian flows through Front Arch exceed 1,200 between 09:00-19:00 on the average weekday. Front Arch itself creates an artificial bottleneck for pedestrians when only the inner wooden arch is open, leaving less than 1.5m of width for pedestrians to pass through the entrance. Opening the larger wooden door at Front Arch would provide pedestrians with at least 1m of extra width and alleviate the pedestrian queuing frequently observed at the entrance when incoming and outgoing pedestrians are forced to yield to each other. The larger wooden door can be opened to allow vehicles such as fire engines to access Front Square but is typically not opened to accommodate high volumes of pedestrian traffic.

Action AW7 – Front Arch
Open the full wooden door at Front Arch from 07:00-00:00 on weekdays and 08:00-18:00 on weekends to reduce pedestrian overcrowding, congestion and delays.

In addition to the inadequate space provision for pedestrians to wait and cross the road at College Green, the signalised junction for which the pedestrian crossing is part of, regularly operates with the maximum allowable cycle time of 110s during the day in Dublin City. As a result, pedestrians can be left waiting almost 2 minutes for a green pedestrian signal which allows large crowds to gather at the crossing. Overcrowding and frustration at the crossing can force pedestrians into the way of oncoming buses and trams or encourage pedestrians to make dangerous crossing manoeuvres.

If a pedestrian wishes to travel from Front Gate towards Temple Bar, they must wait again to cross Dame Street as the 21 seconds combined green and amber time given to pedestrians at the junction is not adequate to cross the 43m distance from Front Gate to the northern side of Dame Street. A central reserve is provided for pedestrians to wait again for a green signal.

At Nassau Street, the closest signalised pedestrian crossing is located immediately in front of the campus entrance. Although there is ample room for pedestrians to wait for a green signal at this crossing, narrow footpaths on approach along Nassau Street can make the area difficult to navigate for pedestrians who do not want to cross the street.

The closest pedestrian crossing to the Naughton Institute can be found 50m east along Westland Row. The crossing is long at 20m with a refuge island provided halfway. The width for pedestrians to cross aligns with the minimum desired width of 2.4m. This width is adequate at most times but may struggle to safely accommodate large volumes of pedestrians at the crossing at the changeover of lectures. Although this crossing is slightly further from the campus entrance, it provides a direct connection to the Trinity owned buildings along Pearse Street such as Goldsmith Hall and the Trinity Biomedical Sciences Institute. Despite the length of the crossing, pedestrians are provided with ample time to cross. During site visits, pedestrian green times of greater than 20 seconds were observed. This is much greater than the minimum 6 second green time applied in many parts of the city. Of the 9 regularly used pedestrian access points to the College Green Campus, Nassau Street is the only one which immediately faces a pedestrian crossing.

Although the pedestrian environment surrounding the College Green Campus is extensive and provides a connection to the entirety of Dublin

City Centre, the network of footpaths and crossings does not provide high quality facilities for pedestrians. Narrow footpaths incapable of handling large volumes of pedestrians, pedestrian crossings located away from pedestrian desire lines and clutter caused by street furniture are a common feature on the perimeter of the campus. Narrow and overcrowded pedestrian facilities can force pedestrians onto the carriageway or encourage them to undertake risky crossing manoeuvres.

Action AW8 – Engagement with Dublin City Council on Walking and Wheeling

Lobby DCC to improve the external pedestrian environment immediately surrounding the College Green Campus, particularly to the west at College Green and Dame Street and to the north along Tara Street. Trinity should do this by highlighting particular issues around facility widths, layouts and signal timings with DCC and continuing to respond to relevant public consultations.

3.3 College Green Campus Permeability

With the high number of pedestrian gates located around the perimeter, the College Green Campus has the potential to be highly permeable for pedestrians. However, the distribution of these gates and their operating hours creates a barrier to pedestrian movements, particularly on the northern border of the campus along Pearse Street.

On the southern side of the campus, along College Green, Grafton Street, Nassau Street, Leinster Street South, Lincoln Place and Westland Row, the maximum distance between pedestrian gates is just 350m or a 5-minute walk. To the north of the campus, the two closest pedestrian gates visibly in regular use are located 700m or a 9-minute walk apart. Although the perimeter gate at Printing House Square is open from 07:00-23:30 each day, it is the only campus access point where the gate remains closed over during operational hours. This creates a hostile environment that does not welcome pedestrians to use this campus access.

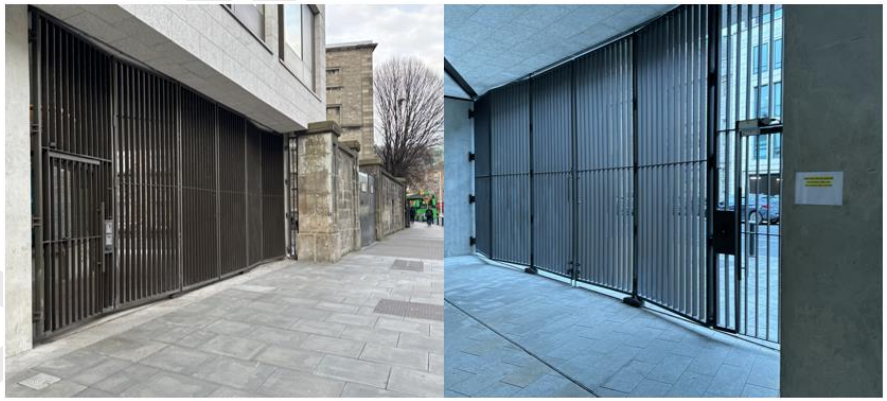


Figure 3-12 External and Internal Views of the Pedestrian Gate at Printing House Square

This creates the false assumption among those unfamiliar with the campus that this is not an access gate and forces them to continue 4-minutes west towards Front Gate or 5 minutes east towards the Naughton Institute. It is also noted that the Printing House Square gate is not included in information for gate opening times available online as this information was last updated in 2009 (Facilities - College Maps : Trinity College Dublin).

As part of the overall transport study that informs this Campus Travel Plan, a permeability exercise was conducted to better understand the impact of creating a more visible pedestrian access point at the Printing

House on walking times to key locations of interest to campus visitors to the north of the College Green Campus. For the purpose of this exercise, all walking times have been calculated from the Campanile using ArcGIS. It should be noted that these calculations represent a best-case scenario as they strictly take account of walking time and cannot account for variations in pedestrian dwell time at signalised pedestrian crossings or delays caused to pedestrians due to overcrowding when using congested access / egress points from the campus such as at Front Arch.

As seen in **Figure 3-13** the current walking time between the Campanile and Tara Street train station for those unfamiliar with the operation of the Printing House gate is approximately 8 minutes. Using the Printing House gate, this reduces to just 6 minutes. Tara Street station provides access to Irish Rail DART and commuter rail services. The Tara Street metro station will be located directly adjacent to the existing train station upon the completion of MetroLink.

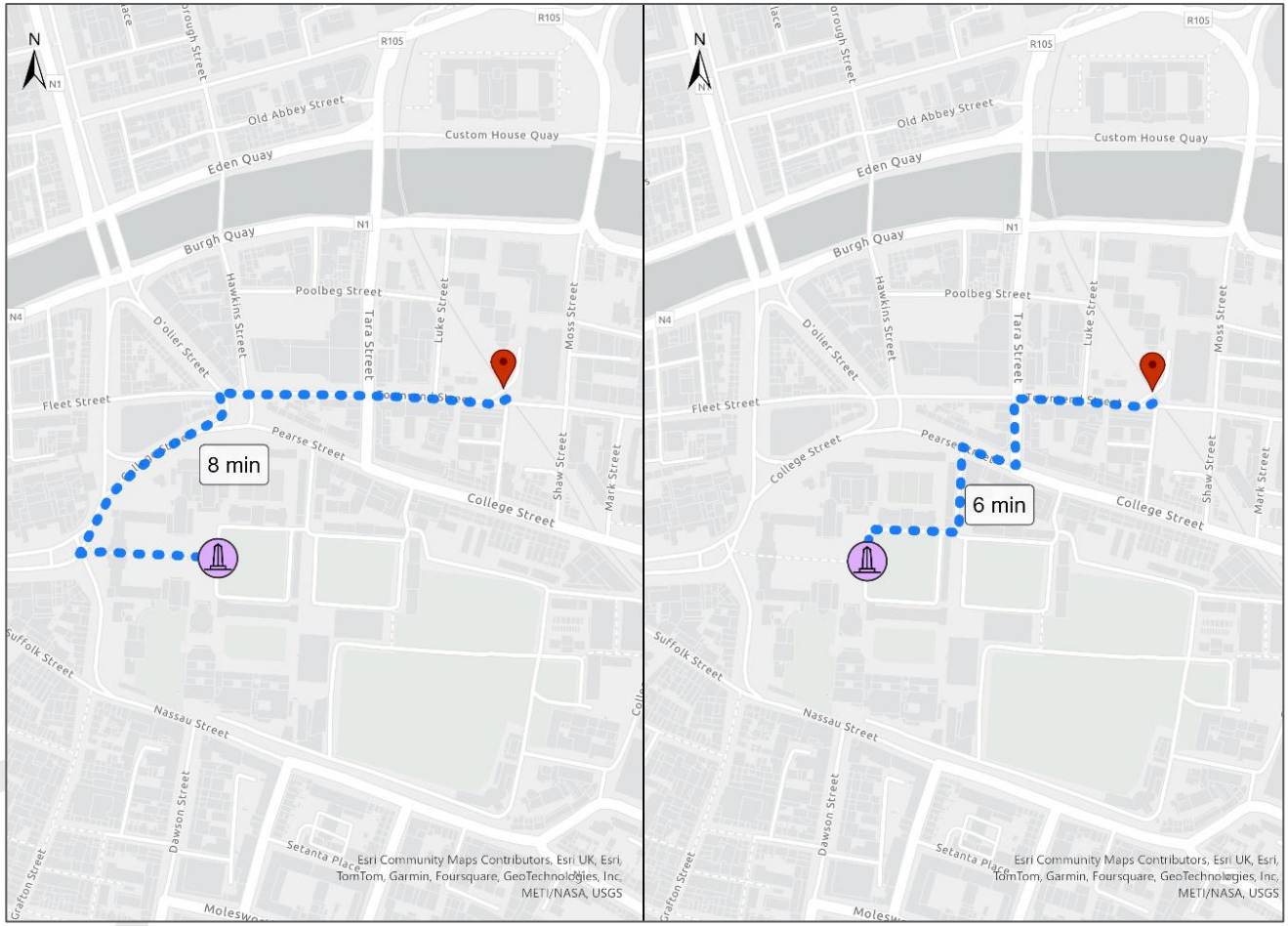


Figure 3-13 Walking Time from Tara Street Station to the Campanile with and without Permeability at Printing House Square

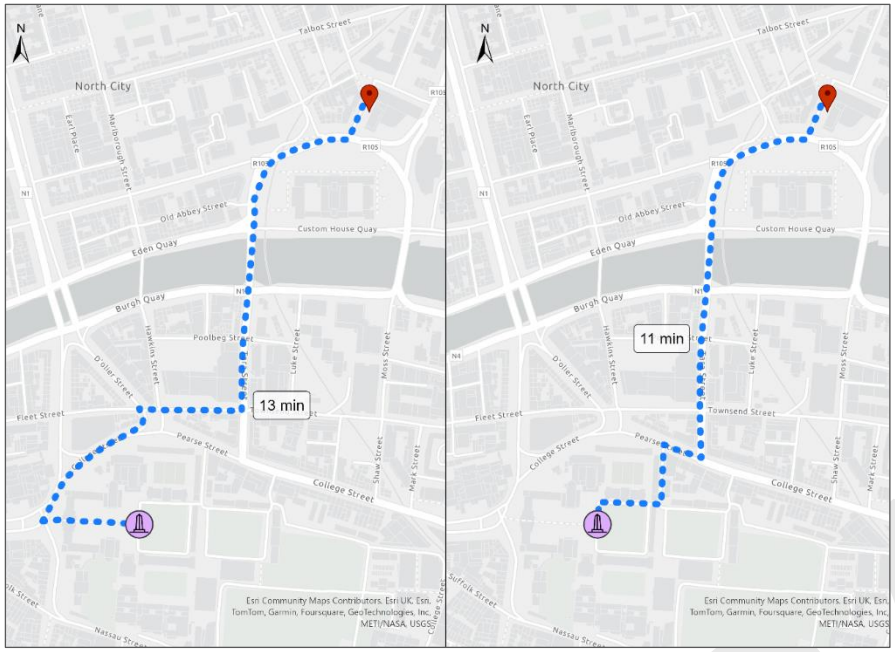


Figure 3-14 Walking Time from Busáras to the Campanile with and without Pearse Street Permeability at Printing House Square

Figure 3-14 shows the current walking time between the Campanile and Busáras for those unfamiliar with the operation of the Printing House gates. Without the Printing House gate, the walking time is approximately 15 minutes. This reduces to 13 minutes when the gate is used.

Figure 3-15 illustrates the current walking time between the Campanile and the CHQ building with and without using the gates at Printing House Square. In a similar fashion to the reduction in walking times to Tara Street train station and Busáras, creating a more visible pedestrian entrance at Printing House Square has the potential to reduce walking times for visitors by 2 minutes.

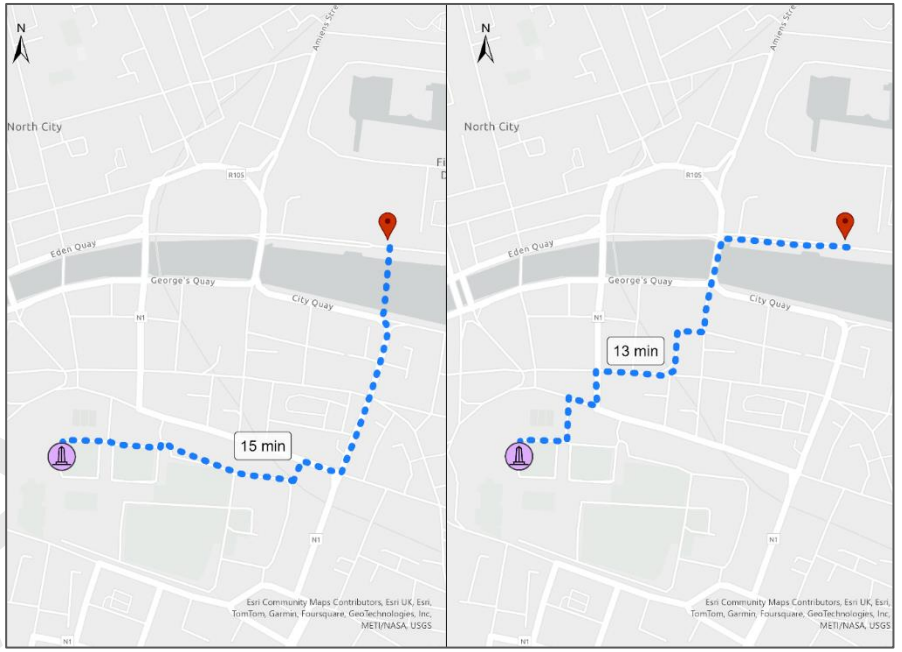


Figure 3-15 Walking Time from CHQ to the Campanile with and without Pearse Street Permeability at Printing House Square

In addition to reducing the direct walking time to key locations and public transport interchanges, increasing the permeability along Pearse Street would likely reduce some of the congestion experienced at Front Arch by providing an alternative route for those accessing the campus from the northern side of the City Centre.

Case Study: Permeability at Grangegorman

The Grangegorman Development Agency (GDA) was established in 2006 to oversee the redevelopment of the former St. Brendan's Hospital site in accommodate new facilities for the HSE, TU Dublin and a new primary school. The site is located off the North Circular Road in Dublin City Centre. The overall Masterplan for the site was published in 2009 followed by the Grangegorman Planning Scheme in 2012. These documents set out the principles and plans for the redevelopment of the site, including the introduction of permeability measures to welcome the local community to the campus and increase connectivity between key local streets.

Before the redevelopment, the Grangegorman campus did not have any through access. Today, 9 no. pedestrian access locations have been constructed, creating direct links to local schools, the urban village of Stoneybatter and the Luas Green Line at Broadstone.

Increasing permeability through the campus has also provided the local community with new alternative walking routes through urban green spaces and away from vehicular traffic. Walking time between areas of the North Circular Road and Grangegorman Lower has been reduced by up to 5 minutes due to the permeability measures.

Figure 3-16 Change in Pedestrian Routes through the Grangegorman Campus (Source: Google Earth)

Increasing the permeability of the College Green Campus is a long-standing goal of the Green Pearse Street Network, which Trinity College Dublin is a part of. The Campaign aims *to 'green' the street while improving air quality, creating a health and biodiversity corridor and adding more social space.* With Trinity owning the vast majority of buildings on the southern part of Pearse Street, it is important that the College welcomes rather than shuts out the local community.

Action AW9 – Pearse Street Permeability

Physically open the gate at Printing House Square during its current operational hours and update all information online regarding the opening times of the pedestrian entrances to the College Green Campus in an effort to increase the permeability of the campus and make it more accessible for students, staff and visitors.

There are proposals as part of the Dublin City Centre Transport Plan to provide an improved pedestrian and cycling environment along

Pearse Street accompanied by the planting of new street trees and other public realm interventions. These upgrades along Pearse Street are likely to attract more pedestrians and cyclists to the area, creating a higher demand for a link to the College Green Campus from Pearse Street. This scheme is currently being designed by DCC's Active Travel Unit with construction completion expected in 2028.

Figure 3-17 Artists Impression of Tara Street Reconfiguration, Facing Printing House Square (Source: Dublin City Centre Transport Plan 2023)

3.4 Pedestrian Catchment

Walking catchment analysis was carried out using ArcGIS Pro to determine the walking time from the College Green Campus to the other Trinity owned sites across the city. Front Gate was chosen for the starting point for this analysis as this is the busiest pedestrian entry / exit point for the campus.

As seen in **Figure 3-18,** the western half of the College Green Campus and the School of Nursing and Midwifery on D'Olier Street can be reached within a 5-minute walk from Front Gate. Within a 10-minute walk, the eastern end of the College Green Campus can be reached as well as Goldsmith Hall which is located in close proximity to the campus at Pearse Street/Westland Row.

The Trinity Biomedical Sciences Institute, located on Pearse Street, as well as Stack B, situated on Custom House Quay, are located within a 15-minute walk of College Green. Trinity East, which is located at Grand Canal Dock lies within a 20-minute walk from Front Gate. St. James' Hospital can be reached within 30 minutes on foot. Trinity Hall, Iveagh Grounds, Santry Sports Grounds and the Islandbridge Boathouse all lie outside the walking catchment of the College Green Campus.

With so many locations across Dublin City Centre accessible for pedestrians from the College Green Campus, Trinity is ideally located to encourage students and staff to walk and wheel for a portion of their daily trips. Although participation in Smarter Travel behavioural change programmes such as Walktober and Marchathon is already high in Trinity, there is scope to increase participation and foster competition among the College community to increase engagement.

Action AW10 – Smarter Travel Walking and Wheeling Programmes

Allocate a budget to allow for new incentives to increase participation in national organised walking events such as Walktober and Marchathon. These incentives can include internal competitions with prizes between students and staff, different schools and departments or between sports clubs and societies.

Action AW11 – Student Collaboration

Expand existing collaboration with student societies and sports groups to run specific promotional events for walking.

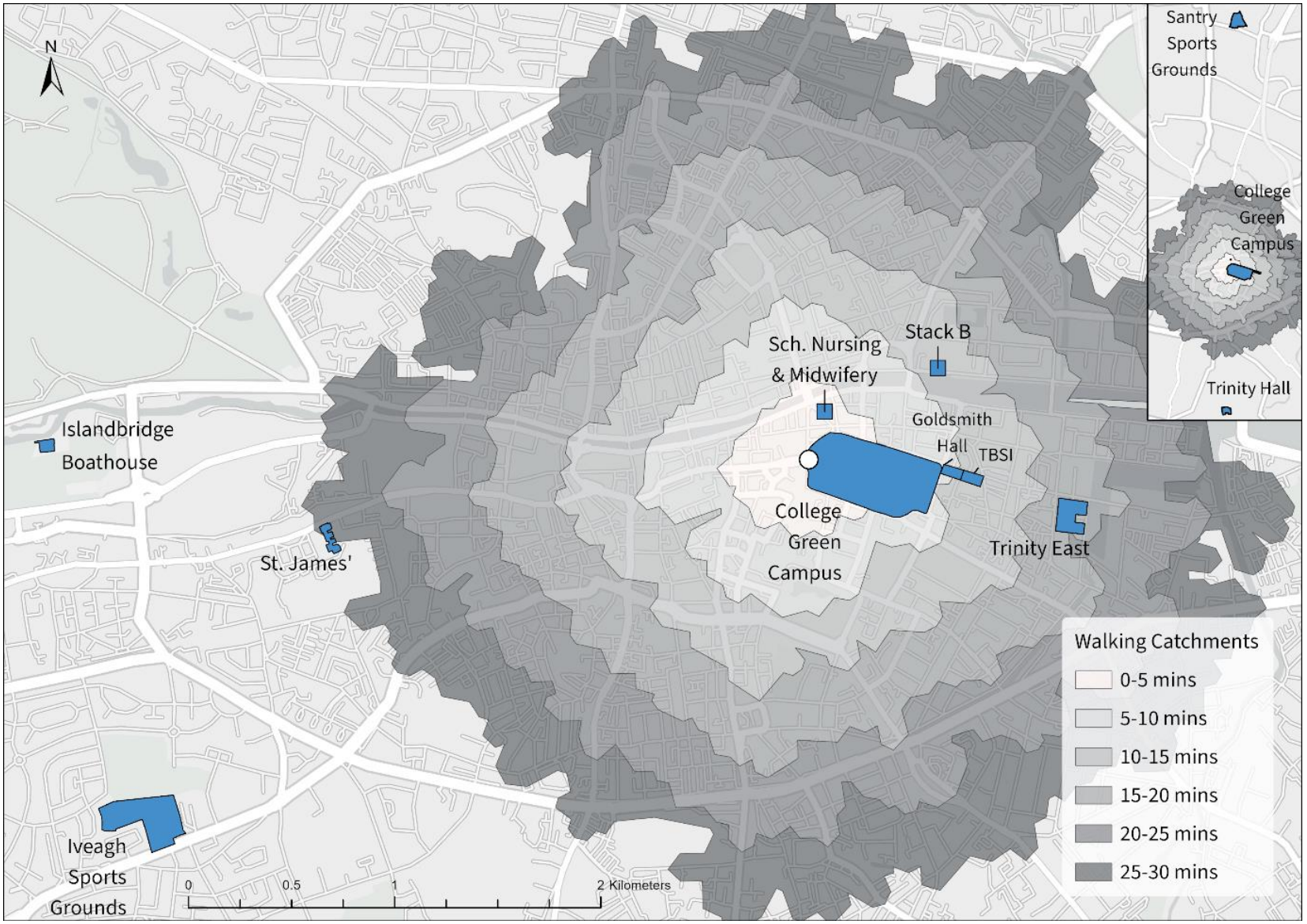


Figure 3-18 Walking catchment from Front Gate

3.5 Future Improvements to the Pedestrian Environment

The pedestrian environment surrounding the College Green Campus and between Trinity's other sites is generally well developed with facilities of some form available on all streets. However, the Dublin City Centre Transport Plan contains a number of proposed interventions to improve the City's public realm, many of which will have a direct benefit for students, staff and visitors to Trinity. These proposed interventions include:

- **College Green and Dame Street:** This intervention will create multifunctional pedestrianised plaza through the removal of general traffic from the area, from College Green to the junction with South Great George's Street. Local access and deliveries will be maintained while additional greening will enhance the biodiversity directly outside Front Gate. Although the Luas will continue to travel past the front of the Trinity campus, the realignment of the pedestrian crossing will help to create a less hostile environment for all those accessing the campus at Front Arch. A design team has been appointed for this scheme, with pre-design public consultation ongoing at the time of writing. The Dublin City Centre Transport Plan states that this scheme will be complete by the end of 2028.

- **Pearse Street and Tara Street:** This intervention will provide for widened pedestrian pathways and an increased number of street trees along both Pearse Street and Tara Street. A new pedestrian plaza will be created to the west of the existing railway arches, at the location of the proposed Tara Street Metro Station. This pedestrian plaza will create a new access route from Pearse Street to the metro station as well as the existing Irish Rail station. The Dublin City Centre Transport Plan states that this scheme will be complete by the end of 2026, although work on the scheme has not begun.

- **Lincoln Place:** Subject to the rerouting of public transport services, this intervention will pedestrianise Lincoln Place to create a new seating area around a central green feature. This intervention will also provide a raised table connecting Lincoln Place to the National Gallery and widen the existing footpaths along Merrion Street. A specific date for the implementation of this scheme will not be known until further assessment has been undertaken on its potential impact. Trinity should continue their current work in responding to public consultations once the consultations for the schemes above opens.

3.6 Summary of Campus Travel Plan Actions for Walking & Wheeling

The following Campus Travel Plan actions for walking & wheeling have been put forward throughout this chapter to promote and support walking and wheeling at Trinity College Dublin.

Table 3-2 Campus Travel Plan Actions for Walking and Wheeling

Campus Travel Plan Actions for Walking and Wheeling	
AW1	**Gate Access Times -** Update online information regarding the opening times of the various entrances to the College Green Campus.
AW2	**Pedestrian Counters -** In order to gain an understanding of how pedestrian flows vary across the year, it is

Campus Travel Plan Actions for Walking and Wheeling	
	recommended that Trinity install permanent pedestrian counters across the College Green campus. Data gathered from these counters can identify areas of crowding, inform a future wayfinding plan, and disperse this crowding. This aligns with the Healthy Trinity Smarter Travel Group Living Lab proposal on pedestrian counters, proposed in 2021.
AW3	**Street Furniture -** When it is deemed necessary to remove street furniture, such as benches, from areas of campus due to special events, ensure that they are returned promptly following the conclusion of the event. Street furniture such as benches are vital for providing rest areas for pedestrians of a wide range of ages and abilities.
AW4	**Enabled Pathways -** Increase the number of enabled pathways through Front Square and increase the width of the existing enabled pathways through Parliament Square, Front Square, Library Square and Fellows Square in order to reduce crowding and provide greater options for those reliant on the enabled pathways to navigate the squares.
AW5	**Wayfinding -** Commission a full wayfinding strategy for both College Green and its other satellite locations to provide up to date signage, create a single identity for signage across all locations and provide wayfinding to locations of interest for students and staff as well as tourists and visitors.

Campus Travel Plan Actions for Walking and Wheeling	
AW6	**Public Lighting -** Conduct a public lighting review at the College Green Campus to determine if the lighting currently installed across the campus is sufficiently contributing to pedestrian safety. This review will also need to consider the effects of light pollution on the biodiversity of the campus.
AW7	**Front Arch -** Open the full wooden door at Front Arch from 07:00-00:00 on weekdays and 08:00-18:00 on weekends to reduce pedestrian overcrowding, congestion and delays.
AW8	**Engagement with Dublin City Council on Walking and Wheeling -** Lobby DCC to improve the external pedestrian environment immediately surrounding the College Green Campus, particularly to the west at College Green and Dame Street and to the north along Tara Street. Trinity should do this by highlighting particular issues around facility widths, layouts and signal timings with DCC and continuing to respond to relevant public consultations.
AW9	**Pearse Street Permeability -** Physically open the gate at Printing House Square during its current operational hours and update all information online regarding the opening times of the pedestrian entrances to the College Green Campus in an effort to increase the permeability of the campus and make it more accessible for students, staff and visitors.

Campus Travel Plan Actions for Walking and Wheeling	
AW10	**Smarter Travel Walking and Wheeling Programmes –** Allocate a budget to allow for new incentives to increase participation in national organised walking events such as Walktober and Marchathon. These incentives can include internal competitions with prizes between students and staff, different schools and departments or between sports clubs and societies.
AW11	**Student Collaboration -** Expand existing collaboration with student societies and sports groups to run specific promotional events for walking.

Theme 2: Cycling

4 Theme 2: Cycling

4.1 Overview

When compared to many other transport modes, cycling provides the user with increased mental and physical health benefits as well as being more environmentally friendly and offering greater flexibility of travel. Although the proportion of students and staff cycling to Trinity has decreased since 2019, there is a desire to cycle among the College community. As part of the 2018 student and staff travel survey, only 13% of respondents felt that Dublin was safe enough for cycling while 91% stated that more segregated cycle lanes and/or an increase in the number of quiet ways would encourage them to cycle more.

Action AC1 – Cycling Survey
Gather information as part of future travel surveys on why current staff and students may have switched to or from cycling as part of their commute to College.

This chapter first provides a detailed summary of the cycling catchment from the College Green Campus as well as the results of a Cycle Infrastructure Audit undertaken along the routes between key Trinity sites. The chapter then examines the provision of cycle parking at Trinity and set outs a number of Campus Travel Plan Actions to improve the cycling environment and encourage a higher proportion of students, staff and visitors to cycle to college.

4.2 Cycling Catchment

As discussed in Section 2.2, Trinity occupies a number of campus locations across Dublin City, the largest of which is found at College Green. The College Green Campus is located in the heart of Dublin City Centre and as such is ideally located for those cycling to the College Green Campus or for those looking to travel by bike between College Green and other Trinity owned locations.

A cycling catchment analysis was carried out using ArcGIS Pro to examine the cycling times between the College Green Campus and the other Trinity owned sites across the city. Front Gate was chosen as the starting point for the analysis to allow for a direct comparison with the walking catchment analysis presented in **Figure 3-18.**

As shown in **Figure 4-1**, the whole of the College Green Campus, the School of Nursing and Midwifery, Stack B, Goldsmith Hall and the Trinity Biomedical Sciences Institute can all be reached within a 5 minute cycle from Front Gate. Both Trinity East and St. James' Hospital can be reached within 10-minutes by bike, while Trinity Hall can be reached within 15 minutes. The Islandbridge Boat House, located on the River Liffey, 2 miles upstream of the College Green Campus, and the Iveagh Sports Grounds in Crumlin can both be reached with 20-minutes. Santry Sports Grounds located on Santry Avenue can be reach by bike within 30 minutes from Front Gate. For all of these locations, cycling provides the quickest connection to the College Green Campus with public transport journeys typically taking much longer due to heavy traffic in the City Centre.

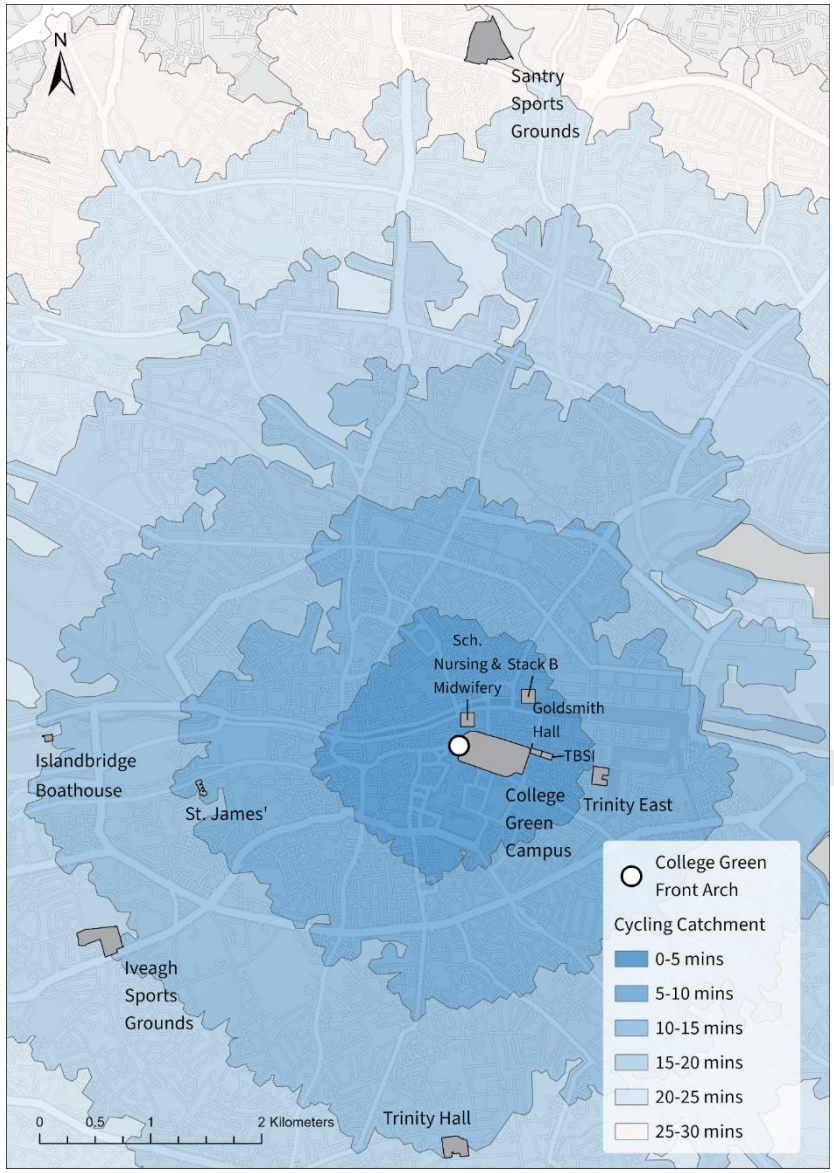


Figure 4-1 Cycling Catchment from Front Gate

4.3 Cycling Infrastructure Audit

4.3.1 Overview

A cycle infrastructure audit was conducted in November 2024 as part of the overall Transport Study that informs this Campus Travel Plan. The audit utilises the CycleRAP methodology and qualitative analysis to evaluate the cycling infrastructure provided on 5 key routes between the College Green Campus and other Trinity owned sites across the city. This infrastructure was appraised in terms of cyclist safety, comfort, directness, coherence and the varying experience of cyclists of different abilities, ages and genders. Following the audit, a number of recommendations to improve the experience for cyclists along these routes have been put forward. Trinity has actively been lobbying DCC and the NTA to provide safe, segregated cycling facilities along the routes connecting its campuses since 2011.

The five key routes included within the audit are summarised in **Table 4-1** and illustrated in **Figure 4-2.** Routes 2, 3 and 4 overlap with three of the four key routes identified for investment and upgrade by Healthy Trinity. The fourth Healthy Trinity route, Nassau Street, has been replaced in this audit by routes connecting College Green to specific locations, namely Kavanagh Court and Iveagh Grounds. Despite Nassau Street being excluded from this audit, the street still forms a key part of the cycling environment surrounding the College Green Campus and should remain designated as a key route by Trinity for lobbying for safe, segregated cycling infrastructure. The result of this audit will be made available online alongside this report.

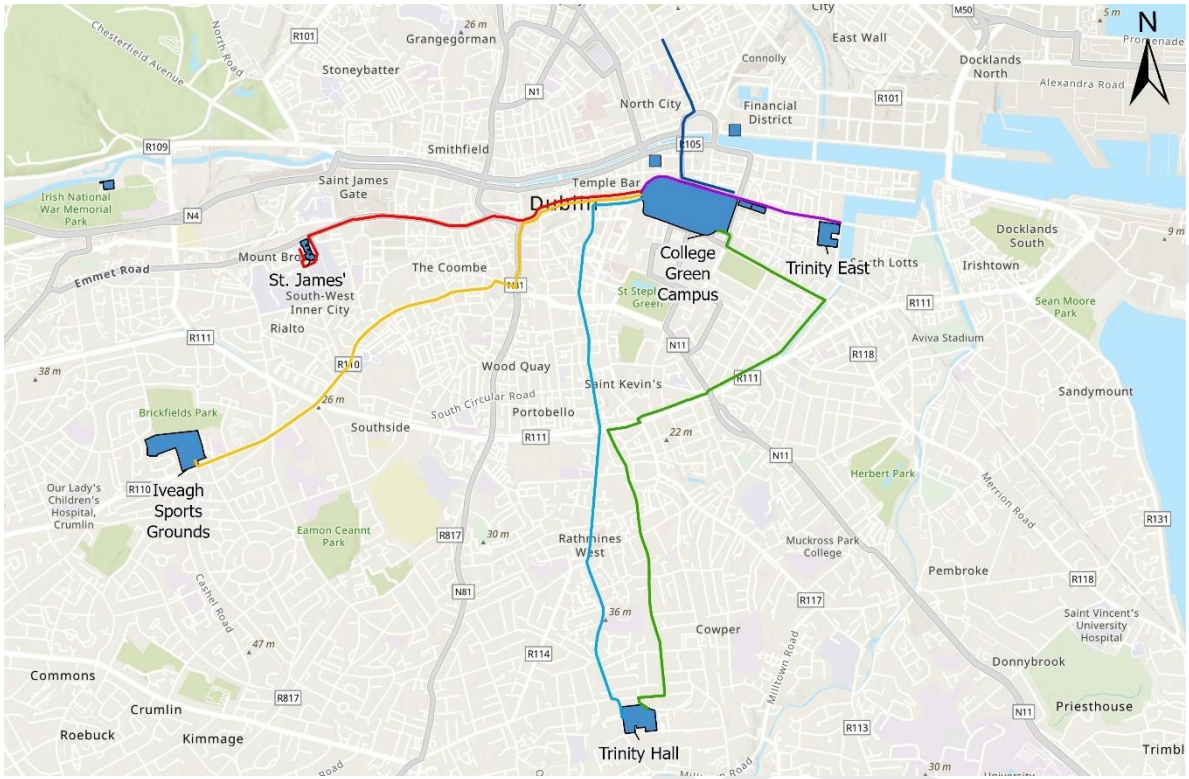


Figure 4-2 Routes included within the Cycle Infrastructure Audit

Table 4-1 Routes included within the Cycle Infrastructure Audit

No.	Description		Length	End to End Cycle Time
1	College Green to Kavanagh Court		1.4km	6 mins
2	College Green to Trinity Hall	a. Direct Route	4.1km	15 mins
		b. Quiet Route	5.3km	24 mins
3	College Green to St. James' Hospital		2.8km	10 mins
4	Trinity East to College Green (Pearse Street)		1.2km	5 mins
5	College Green to Iveagh Grounds		4km	14 mins

4.3.2 Existing Facilities

Route 1 – College Green Campus to Kavanagh Court

This route begins at the Naughton Institute exit from the College Green campus along Pearse Street and follows the R802 at Tara Street as far as Kavanagh Court on Gardiner Street.

For the majority of the route, cyclists share the bus lane. Cyclists often have to swerve into adjacent traffic lanes to avoid dwelling buses, increasing the risk of collisions between vehicles and cyclists. There is no segregated facilities for cyclists on this route.

There are no facilities for cyclists along sections of the route between Tara Street and Gardiner Street, including at Butt Bridge and Beresford Place. A narrow on-road, painted, advisory cycle lane is provided along Gardiner Street, but this is broken by on-street parallel parking and bus stops. The narrowness of this facility results in insufficient space for non-standard cycles or riding with small children.

The presence of storm drains, potholes and tram tracks long the route create additional

obstacles for cyclists. There are no segregated facilities for cyclists on this route.

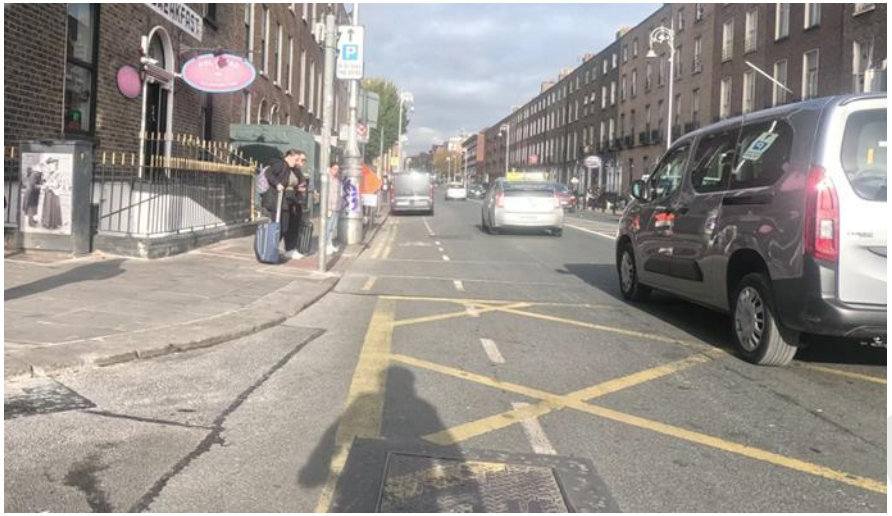


Figure 4-3 Narrow Advisory Cycle Lane on Gardiner Street with Parked Vehicles

The entire route from the College Green Campus to Kavanagh Court feels uncomfortable, even for confident riders. This is visible through a lack of cyclists of varying ages, genders and abilities. The high level of street activity and presence of numerous shops and restaurants gives the route the potential to be very welcoming. However, media reports focusing on anti-social behaviour on adjoining streets in recent years have given the area surrounding Gardiner Street an unwelcoming reputation which may increase the feeling of insecurity among some users.

Action AC2 – Cycle Training
Reintroduce cycle training on a biannual basis for less confident cyclists or those new to cycling in Dublin.

Route 2a – College Green Campus to Trinity Hall (Direct Route)

The route begins at College Green and continues west along Dame Street before following the R114 and R820 as far as Trinity Hall. The majority of the route alternates between shared bus lanes and on-road cycle lanes (mandatory and advisory). Frequent bus stops along the route and parallel parking through Rathmines force cyclists to swerve around dwelling buses and parked cars into traffic. On some segments, bollards provide light segregation between the on-road cycle lane and lanes for vehicle traffic. After passing Rathmines and turning on the R820 (Rathmines Rd Upper), there are no cycle facilities present and road space is shared with general vehicle traffic, buses and parked vehicles. Just 750m, or 18.5%, of this route has segregated facilities for cyclists. These take the form of on road cycle lanes separated from general traffic by plastic bollards.

This route is popular among cyclists with some diversity in terms of adult age and gender observed during the audit. However, the inconsistency of facilities makes the routes less accessible for less confident cyclists or vulnerable users such as those cycling with young children, mobility impaired cyclists and older adults.

The vitality along the majority of the route is quite high with lots of shops, restaurants and on street pedestrian activity. However, on approach to Trinity Hall, dead space and large boundary walls create an uncomfortable feeling and decrease the perceived sense of personal security.

Figure 4-4 Dead Space at Tranquila Park

Route 2b – College Green Campus to Trinity Hall (Quiet Route)

This route begins at the Lincoln Place entrance to the College Green campus and takes a longer route to Trinity Hall than route 2a, but on quieter streets with better cycling infrastructure. Of all routes audited, this route has the highest proportion of segregated facilities for cyclists, with 1.65km of segregated facilities, equating to 32% of the route.

The route follows the R118 along Merrion Square North and Mount Street Lower where a shared bus and cycle lane is present followed by an advisory on-street cycle lane. There are a small number of bus stops along this section with minimal parallel parking present. From here, the route follows Warrington Place and Wilton Terrace where a two-way off-road cycling path is present, separated from motor vehicle traffic.

This off-road cycling path is continued on the segment between Lock C5 and Lock C6, where a left turn takes you over the bridge onto Ranelagh Rd, Canal Rd and Mountpleasant Ave. There are generally lower traffic counts in this suburban area, but also a high incidence of parallel parking and relatively narrow streets for cyclists and cars to pass one another. The rest of the route via Belgrave Square and Palmerston Road follows quieter roads for cyclists than Route 2a offers. There is on-street parking present, but generally there is space for cyclists and motor vehicles to pass each other without the cyclist having to swerve in and out from in between parked vehicles. At sections where this isn't the case, car volume and speed are generally low.

Of all of the routes included in the cycle infrastructure audit, this is the only one that includes fully segregated facilities. Along the segregated sections that follow the Grand Canal, a variety of cyclists based on age and gender were observed. The presence of mature trees and the canal make this section of the route attractive and enjoyable to cycle.

While overall a much more comfortable route option for less experienced cyclists, it is less direct than Route 2a, which could make it unattractive for those looking to cycle for commuting. Additionally, the sections of the route immediately before and after the segregated infrastructure are more uncomfortable, making it challenging for less experienced cyclists and may act as a deterrent for use as a reliable and safe route.

Figure 4-5 Two-way Cycle Path along the Grand Canal

Route 3 – College Green Campus to St. James' Hospital

This route begins at College Green and follows the R137 along Dame Street before continuing along the R810 as far as St. James' Hospital. Along the majority of Dame Street, there are no facilities for cyclists and no bus lanes that cyclists can share. Near the Sycamore Street side street, an on-road advisory cycle lane is present, but this is often interrupted by bus stops and parking areas, forcing cyclists to swerve into traffic.

Along Thomas Street, there are small sections of on-road bike lane (mandatory and advisory) present, which also gets interrupted by bus stops and parking areas. Near the intersection with the R804, bikes share a lane with buses. At the crossing of James St (R810) and Bow Bridge, tram tracks appear, mixing cars, buses, trams and cyclists all in one lane.

Figure 4-6 Tram Tracks on Approach to St. James' Hospital

Cycling along tram tracks increases the risk of single-bike crashes and vehicle-bike crashes. Bicycle wheels can get stuck in tram rails, resulting in a falling hazard. Therefore, cyclists try to avoid and/or cross tram tracks, which increases the likelihood of cyclists having to interact with motor vehicle traffic. Only 50m of this route features segregation for cyclists, equating to just 1.8% of the route.

Route 4 – Trinity East to College Green Campus

This route begins at Trinity East and follows Pearse Street and College Street as far College Green. Cyclists share the bus lane for the majority of the route, with frequent bus stops present. These bus stops can force cyclists to swerve into live traffic to avoid dwelling buses. There are no segregated facilities for cyclists on this route.

Figure 4-7 Shared Bus and Cycle Lanes along Pearse Street

For some small sections of painted on-road mandatory cycle lane are present but there are no segregated facilities. Tram tracks are present where College Street meets Pearse Street. These tram tracks increase

the risk of single-bike collisions, due to the risk of bike wheels getting caught in the tram tracks. The visibility and vitality along the route is inconsistent, with some areas of high activity, diversity of amenities, and other users, and others with little to no activity.

Route 5 – College Green to Iveagh Grounds

This route begins at College Green and follows the R137 along Dame Street, Christchurch Place and Patrick Street before following the R110 along Cork Street, Dolphin's Barn and Crumlin Road. On road cycles lanes are present along the majority of this route but their quality varies. Along part of Dame Street and Christchurch Place, on-road advisory cycle lanes are in place while sections of cycle lane along Cork Street are protected with flexi-bollards. Sections of Dolphin's Barn feature bus lanes which cyclists can share while mandatory cycle lanes are in place immediately outside Iveagh Grounds along Crumlin Road.

Figure 4-8 Bus Stop in the Cycle Lane along Crumlin Road

Bus stops are common along this route, creating a danger for cyclists who need to swerve into traffic to manoeuvre around dwelling buses. This also contributes to making the route less accessible for less confident cyclists. The connectivity and clarity of the route is not obvious, meaning cyclists would need previous knowledge of the route. In order to turn into Iveagh Grounds, cyclists must cross oncoming traffic or dismount their bike and use the signalised pedestrian crossing outside the grounds to cross. There are 800m of cycle lanes segregated from general traffic with bollards along this route, equating to 19.5% of the route.

Common Observations along the Routes

As an overall observation, the cycle audit noted that it was quite common on all routes to see that cyclists are being forced into lanes dedicated for motor vehicle traffic. Parking spaces or bus stops interrupt the cycling lane, which causes cyclists to move around parked vehicles or buses to continue on their way. This is not only causing cyclists to get in front of motor vehicles approaching from behind but also causes the cyclist to look over the shoulder to see if vehicles are coming. When cyclists look over their shoulder, they usually also start to swerve more. This adds to the risk level, especially when cycling next to motor vehicle traffic.

Additionally, it was noted that the street design alternates frequently on the assessed routes, usually after junctions. One section can have a shared bus lane, while the next section doesn't have any bicycle facility, and the next section can have an on-road cycling lane either with or without light segregation. This inconsistency is confusing for all users and introduces safety concerns. When cyclists and motorists alike constantly have to adapt to changing road designs, it becomes unclear

where each mode of transport is supposed to be. When a cycling lane ends abruptly the cyclists find themselves in between vehicle traffic. This could aid to motorists' beliefs that cyclists don't belong on 'their' piece of road, stimulating motorists to not provide space for cyclists.

4.3.3 Cycle Audit Recommendations

As noted in section 4.3.2, the majority of routes feature the same hazards for cyclists, including on-street parking, cycling in bus lanes and the presence of bus stops causing cyclists to swerve into live traffic. As such, the recommendations put forward as part of the Cycle Audit are applicable to all routes.

Figure 4-9 Advanced Stop Line provided southbound only on Route 5

The audit has recommended that better road markings should be applied on all routes to provide clarity for both cyclists and other road users on the space provided for them. Alongside an improvement in road markings, it is recommended to increase the quality and quantity of advanced stop lines at signalised junctions to provide space for cyclists to safely wait before continuing. It was noted during the audit that these advanced stop lines are often only provided in one direction which increases cyclist confusion as they try and figure out where they are supposed to go.

The audit also recommends that light segregation should be increased on all routes where possible to specifically reduce the risk of cyclist and vehicle collisions. Light segregation can lead to a slight increase in the risk of cyclist-on-cyclist collisions and single bike collisions but this minor risk increase is outweighed by the benefit of reducing vehicle-cyclists collisions which are usually the most severe.

Another recommendation from the audit is to increase the width of parallel parking by removing some space from the footpath in areas where the footpath is particularly wide. It was observed during the audit that many cars parked parallel were encroaching into road space and cycle lanes, causing cyclists to swerve into live traffic to avoid the obstacle.

Finally, the audit noted that allowing cyclists to make use of bus lanes and implementing on-road cycle lanes that are disrupted by parking areas and bus stops illustrates that that planning for bicycles was an afterthought rather than a deliberate action from national and local authorities. The audit recommends that that when building new roads and when reconstructing existing roads, the City includes cycling as a mode of transport into the planning and design processes. This is tied to a recommendation to implement island bus stops where space allows to eliminate the need for cyclists to swerve into live traffic to avoid stopped buses.

4.3.4 Cycle Audit Safety Summary

Table 4-2 and **Table 4-3** summarise the physical and perceived safety along each route calculated as part of the overall Cycle Audit, based on the existing facilities identified on each route. The variation between the physical and perceived safety on the routes highlights the importance of the overall streetscape and not just the cycling infrastructure in contributing to cyclist comfort and confidence. A full breakdown of the exact points along each route which have contributed to these rankings can be found in the graphs and maps contained within the Cycle Audit Report attached in **Appendix F.**

Table 4-2 Physical Risk on each route by Proportion

Route	Proportion of Each Route Categorised by Physical Risk			
	Low	Medium	High	Extreme
1	6%	94%	0%	0%
2a	1%	72%	27%	0%
2b	13%	72%	16%	1%
3	5%	95%	0%	0%
4	3%	88%	9%	0%
5	0%	31%	69%	1%

Table 4-3 Route Safety Ranking following the Cycle Audit

Perceived Safety Rank	Route
1	2a
2	2b
3	1
4	3
5	4
6	5

Route 5 from College Green to Iveagh Grounds has been identified as the worst route overall with 69% of the route identified as posing a high physical risk to cyclists and the route also ranking lowest in terms of perceived safety. Despite ranking first in terms of perceived safety, route 2a from College Green to Trinity Hall has been noted as having the second highest proportion of the route posing a high physical risk to cyclists. Due to the high risk of cycling between College Green and Iveagh Grounds and the number of students travelling between Trinity Hall and College Green (approx. 1,000), Trinity should focus its lobbying efforts on these routes in order to gain the most benefit in terms of potential increase in cycling among the student population.

Action AC3 – Lobby Dublin City Council on Cycling Infrastructure

Use the results of the Cycle Audit to continue to lobby the National Transport Authority and Dublin City Council to prioritise investment in accessible, connected and segregated cycling infrastructure. This lobbying should focus first on the route from College Green to Iveagh Grounds and the direct route from College Green to Trinity Hall, but include all key routes.

4.4 Future Improvements to the Cycling Environment

4.4.1 Dublin City Centre Transport Plan 2023

In addition to the pedestrian environment improvements discussed in Section 3.5, the Dublin City Centre Transport Plan puts forward a

number of proposed projects to improve facilities for cyclists. The projects that will have a direct impact on those cycling to Trinity include:

- **College Green and Dame Street:** As part of the creation of the pedestrian plaza at College Green, it is intended to also provide a high-quality cycle route from the junction of George's Street and Dame Street as far as College Green. The implementation of the plaza will help to create a less hostile environment for cyclists looking to access Trinity via Front Arch. A pre-design public consultation was held for this scheme in November and December 2024 with the project expected to be complete in 2028.
- **Liberty Place:** This project proposes to remove traffic from Beresford Place, between Eden Quay and Abbey Street, to create a pedestrian plaza and provide a two-way segregated cycle route. This link will be of particular benefit to students residing at Kavanagh Court, located on Gardiner Street. Work on this scheme is expected to commence in 2025 and be completed by the end of 2028.
- **Gardiner Street:** This project proposed to provide a two-way cycle facility along the full length of the eastern side of Gardiner Street. This facility would be segregated from traffic by planting and would directly benefit students residing at Kavanagh Court, located on the eastern side of Gardiner Street. Work on this scheme was set to commence in 2024 but has not yet started.
- **Pearse Street and Tara Street:** In addition to the proposed pedestrian upgrades along Pearse Street and Tara Street, this project will provide dedicated cycle lanes on both sides of Tara Street as well as segregated cycle lanes on both sides of Pearse Street. As with the Gardiner Street scheme, work on this project was expected to start in 2024 but has not yet begun. Details on the Ringsend to College Green active travel scheme, which covers Pearse Street are provided in section 4.4.2. It should be noted that while Pearse Street is covered under the Dublin City Council Active Travel Network, Tara Street is not.

In addition to these specific projects, the Plan sets out a broad vision to allow cycling on all traffic free streets and to allow two-way cycling on all one-way streets where possible.

4.4.2 Dublin City Council Active Travel Network

The Dublin City Council Active Travel Network sets out to improve connectivity for people throughout the city through the delivery of 304km of additional active travel infrastructure. Of this 304km of additional infrastructure, 214km will be delivered by the Active Travel Programme Office within Dublin City Council, and the remaining 90km will be delivered as part of BusConnects (see section 4.4.3). Trinity has been engaging with Dublin City Council on the provision of safe, segregated cycle infrastructure along the key routes connecting its campuses through public consultation since 2011. The current Dublin City Council Active Travel Network map can be viewed online, ATN Map.

Action AC4 – Engagement with DCC and the NTA on Cycling
Continue to support DCC and the NTA in the delivery of the Proposed Active Travel Network for Dublin through public consultation.

The routes and projects included within the Active Travel Network are directly informed by the 2022 Greater Dublin Area Cycle Network Plan which was released in conjunction with the Greater Dublin Area Transport Strategy 2022-2042. As part of the development of this

Campus Travel Plan, representatives from DBFL Consulting Engineers Ltd and Trinity consulted with members of the Dublin City Council Traffic, Transport Planning and Active Travel teams to gain an understanding of the likely progress of sections of the Active Travel Network that will directly benefit Trinity. Some of the projects currently being progressed by Dublin City Council as part of their Active Travel Network that will directly benefit Trinity include:

- **Trinity to Ballsbridge:** This 2.0km walking and cycling scheme will provide protected cycle paths and improved facilities for pedestrians commencing at the Dawson Street junction and proceeding along Nassau Street, Clare Street, Merrion Square North, Mount Street and Northumberland Road before finishing at Lansdowne Road. Phase 1 of this project will provide 1.6km of improved walking and cycling facilities from the Holles Street junction to the Lansdowne Road junction, along Mount Street Lower and Northumberland Road, while phase 2 will focus on providing facilities from the Holles Street junction west as far as the junction between Nassau Street and Grafton Street. The public consultation for an interim scheme along phase 1 was held in Q4 2023 with implementation set for Q1 2025. Phase 2 of the scheme will be implemented after the rerouting of public transport services under BusConnects and the Dublin City Centre Transport Plan.
- **Ringsend to College Green Cycle Scheme:** This 2.2km cycling scheme will begin at Ringsend Park and continue west along Bridge Street, Ringsend Road, and Pearse Street before terminating at the junction between Pearse Street and College Street where it will tie into the proposed pedestrian plaza at College Green. The project is currently at options development stage with public consultation expected to take place in 2025 and construction to commence before the end of 2026.
- **Kilmainham to Thomas Street Cycling Improvements:** This 2.6km active travel scheme will provide high quality walking and cycling facilities from the South Circular Road / Kilmainham Lane junction along South Circular Road, Suir Road, Grand Canal View, St James Linear Park, James Walk, Forbes Lane, Marrowbone Lane and Thomas Court to the junction with Thomas Street. The project will provide an alternative route to St. James' Hospital. The interim scheme for this project was completed in 2024 and provided facilities for cyclists from Rialto Bridge as far as the Marrowbone Lane to Summer Street South junction. The permanent scheme is currently at preliminary design stage. A date for the commencement of construction is not yet known but it is expected that this will be completed within the lifetime of this Campus Travel Plan.

Other Active Travel Network proposals that will likely be completed beyond the lifetime of this Plan but that will directly benefit Trinity include:

- **Rathmines to Milltown:** This 1.6km scheme will begin at the junction between Dodder Walk and Dartry Road and continue north along the R820 Rathmines Road Upper as far as Rathmines village centre. The scheme will provide new and upgraded active travel facilities between The Dodder Greenway and the Rathfarnham to City Centre core bus corridor. The scheme is expected to commence post 2028.

- **Parnell Square to College Green:** This scheme will provide 900m of new and upgraded active travel facilities along the full length of O'Connell Street, O'Connell Bridge, D'Olier Street and College Street. Some interim measures are currently in place along the route with work on the permanent scheme expected to commence post 2028.
- **Christchurch to George's Street:** This scheme will provide approximately 550m of new and upgraded active travel facilities along Dame Street, Lord Edward Street and Christchurch Place. The scheme will provide a connection between the Greenhills to City Centre and Liffey Valley to City Centre core bus corridors and the proposed pedestrian plaza at College Green. The scheme is not expected to commence until post 2028.
- **Grand Canal to Lincoln Place:** This walking and cycling scheme is proposed to provide 1.75km of new cycle tracks and improved pedestrian facilities from Townsend St / Lombard St junction along Townsend St, Sandwith St Lwr, Hogan Place and Grand Canal Street Upper as far as Canal St Bridge including a section along Fenian Street from Sandwith Street Junction to Merrion St Lower Junction. This scheme is expected to progress post 2028.
- **Eden Quay to Dorset Street:** This 1.4km scheme will provide upgraded active travel facilities from Eden Quay along Beresford Place and Gardiner Street as far as the junction with Dorset Street and Synnott Place. The exact origin place for this route along Eden Quay will be determined by the implementation of the pedestrian plaza at Beresford Place or Custom House Quay as proposed under the Dublin City Centre Transport Plan. Work on the scheme is not expected to commence until post 2028.

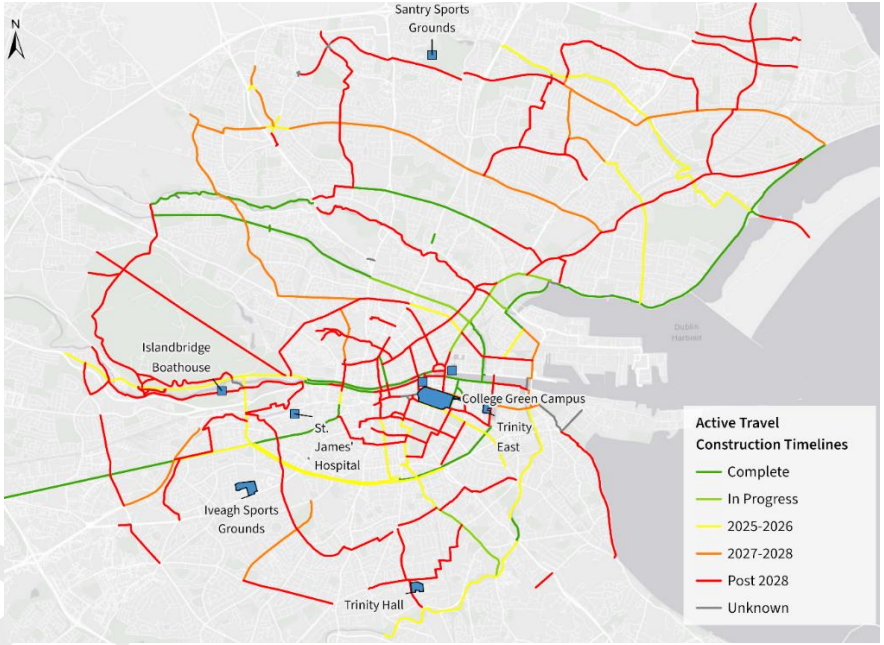


Figure 4-10 Expected Construction Commencement Timelines for the DCC Active Travel Network

In an attempt to fully illustrate the expected timelines for the commencement of construction of the various schemes proposed under the Dublin City Council Active Travel Network, DBFL have produced the map shown in **Figure 4-10**. This map has been developed based on the online DCC Active Travel Network Map and consultation with Dublin City Council undertaken as part of this Transport Study.

4.4.3 BusConnects

As discussed in 4.4.2, 90km of the Dublin City Centre Active Travel Network will be provided as part of BusConnects. BusConnects is the

National Transport Authority's (NTA) programme to overhaul and enhance bus services in Irish cities, including Dublin.

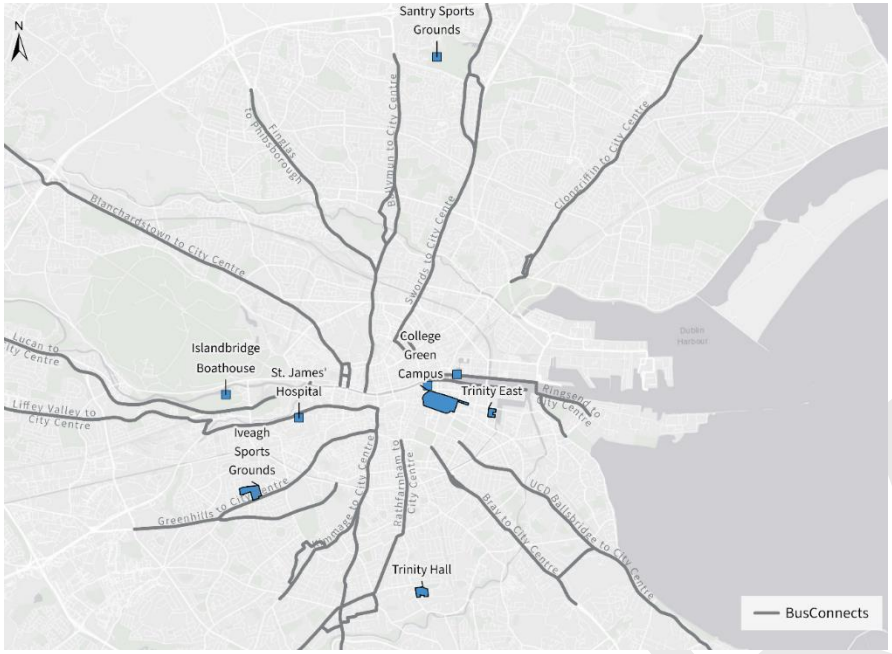


Figure 4-11 BusConnects Core Bus Corridors

As part of the project, 12 core bus corridors have been developed to provide bus priority infrastructure on key routes into the City Centre. This new bus priority infrastructure will be accompanied by upgrades to the pedestrian and cycling environment. It is expected that all core bus corridors in the BusConnects scheme will be completed by 2030, although no more than four corridors will be built concurrently.

The map shown in **Figure 4-11** highlights the location of all 12 core bus corridors in relation to Trinity's locations across Dublin.

The core bus corridors which will provide infrastructure to directly benefit those travelling to Trinity and between Trinity owned sites are as follows:

- **Swords to City Centre:** This core bus corridor begins at the Pinnock Hill roundabout on the R132 and follows most of this regional road as far as Parnell Street. The route will provide an improved connection between the City Centre and the Santry Sports Grounds, located along Santry Avenue. This corridor received planning permission from An Bord Pleanála in 2024 with the construction contract due to be awarded in 2025.
  Segregated cycle tracks will be provided on both sides of the road along the majority of the corridor. A quiet street treatment will take cyclists off the R132 at Omni Shopping Centre and along Lorcan Road until the junction between Shanrath Road and the R132. Beyond this junction, a two-way cycle track will be provided on the eastern side of the corridor all the way to North Frederick Street where cycle tracks are provided on both sides of the road as far as Parnell Square North where cyclists will again be brought onto a two-way cycle track on the eastern side of the corridor.
  Dedicated signals for cyclists will be provided at 9 key junctions along the corridor, including the junction between the R132, Santry Avenue and Church Lane. Many of the existing pedestrian crossings along the corridor will also be upgraded to toucan crossings, increasing the opportunities for cyclists to safely access minor roads off the corridor.
- **Ballymun to City Centre:** This route begins at St. Margaret's Road and follows the R108 as far as Ormond Quay. The core bus corridor runs in parallel to the Swords to City Centre Corridor

and will provide an additional connection to the Santry Sports Grounds, as far as the junction between the R108 and Santry Avenue. This core bus corridor received planning permission from An Bord Pleanála in March 2024. It is not yet known when the procurement process for the construction of this scheme will commence.

Segregated cycle tracks will be provided along the majority of the R108 as part of this route. As the route comes closer to the City Centre, a two-way cycle track will be provided on the eastern side of the road between Prospect Way and Whitworth Road. South of the Royal Canal, cyclists will be brought off the R108 and onto the parallel Royal Canal Bank which will receive a quiet streets treatment where cyclists have the right of way. This quiet street treatment will continue as far as Broadstone where cyclists will rejoin the R108 with a two-way cycle track provided on the eastern side of the corridor and a northbound cycle track provided on the western side. South of Catherine Lane North, cyclists will once again be diverted onto a quiet street which will continue along Coleraine Street, Linenhall Street, Anne Street North and Ormond Square before joining Ormond Quay.

Dedicated cycle signals will be provided at 7 junctions along the corridor including at the junction between the R108 and Santry Avenue.

- **Liffey Valley to City Centre:** This core bus corridor will provide upgraded facilities from Fonthill Road and follows the R833 as far as Sarsfield Road before joining the R839 and then the R810 at Emmet Road. The route then follows the rest of the R810. The route will directly serve St. James' Hospital and will provide a link for students travelling from College Green to the hospital, via Thomas Street and James' Street. This core bus corridor was granted planning permission in December 2023. It is not yet known when the procurement process for the construction of this scheme will commence.

  From the entrance to St. James' Hospital, cyclists will be brought on a quiet street along Ewington Lane, Basin View, St. James' Avenue, Grand Canal Place and Echlin Street. From here, cyclists can join the cycle tracks that will be provided on both sides of the road along the full length of Thomas Street. Dedicated cycle signals will be provided at 3 junctions along this corridor.

- **Tallaght / Clondalkin to City Centre:** This core bus corridor begins as two spurs, commencing at the Old Blessington Road / Cookstown Way junction in Tallaght and the New Nangor Road / Woodford Walk junction in Clondalkin. The two spurs then meet at the Walkinstown Road / Drimnagh Road junction. This core bus corridor will benefit users of Iveagh Grounds and received approval from An Bord Pleanála in November 2024. It is not yet known when the procurement process for the construction of this scheme will commence.

  From Iveagh Grounds, cyclists will be able cycle in the bus lane eastbound or cycle in the carriageway or bus lane (where present) westbound. Not all cyclists feel comfortable cycling in a bus lane and this arrangement is typically only recommended where widths are very constrained on existing streets. If the width allows, it is preferable to provide segregated cycle tracks.

  After crossing the Grand Canal, cyclists will be able to make use of new cycle tracks on both sides of the road along Dolphin's Barn, Cork Street, St. Luke's Avenue, Dean Street, Patricks Street and Nicholas Street. The route will terminate at the junction of

Nicholas Street / High Street / Christchurch Place, where it will meet the Liffey Valley to City Centre core bus corridor. Dedicated cycle signals will be provided at 4 signalised junctions along this route.

- **Templeogue / Rathfarnham to City Centre:** This core bus corridor also begins as two spurs, commencing along the R137 in Tallaght to the east of the M50 junction 11 interchange and in Rathfarnham at the Grange Road / Nutgrove Avenue junction. These spurs then join at Terenure Cross. This core bus corridor will benefit residents of Trinity Hall and is currently awaiting approval from An Bord Pleanála.
  Although this core bus corridor will not directly pass by Trinity Hall, the scheme will provide cycle tracks on both sides of the road from Rathmines Road all the way to George's Street, where students will be able to utilise the cycle facilities proposed as part of the College Green and Dame Street project put forward in the Dublin City Centre Transport Plan 2023. Dedicated cycle signals will be provided at 5 junctions along this corridor.

Although there are no specific completion timelines available for the individual Core Bus Corridors, they will form a key part of the future active travel network across Dublin City.

Figure 4-12 presents the potential future active travel network across the city, should the Dublin City Centre Active Travel Network and all 12 Core Bus Corridors be completed.

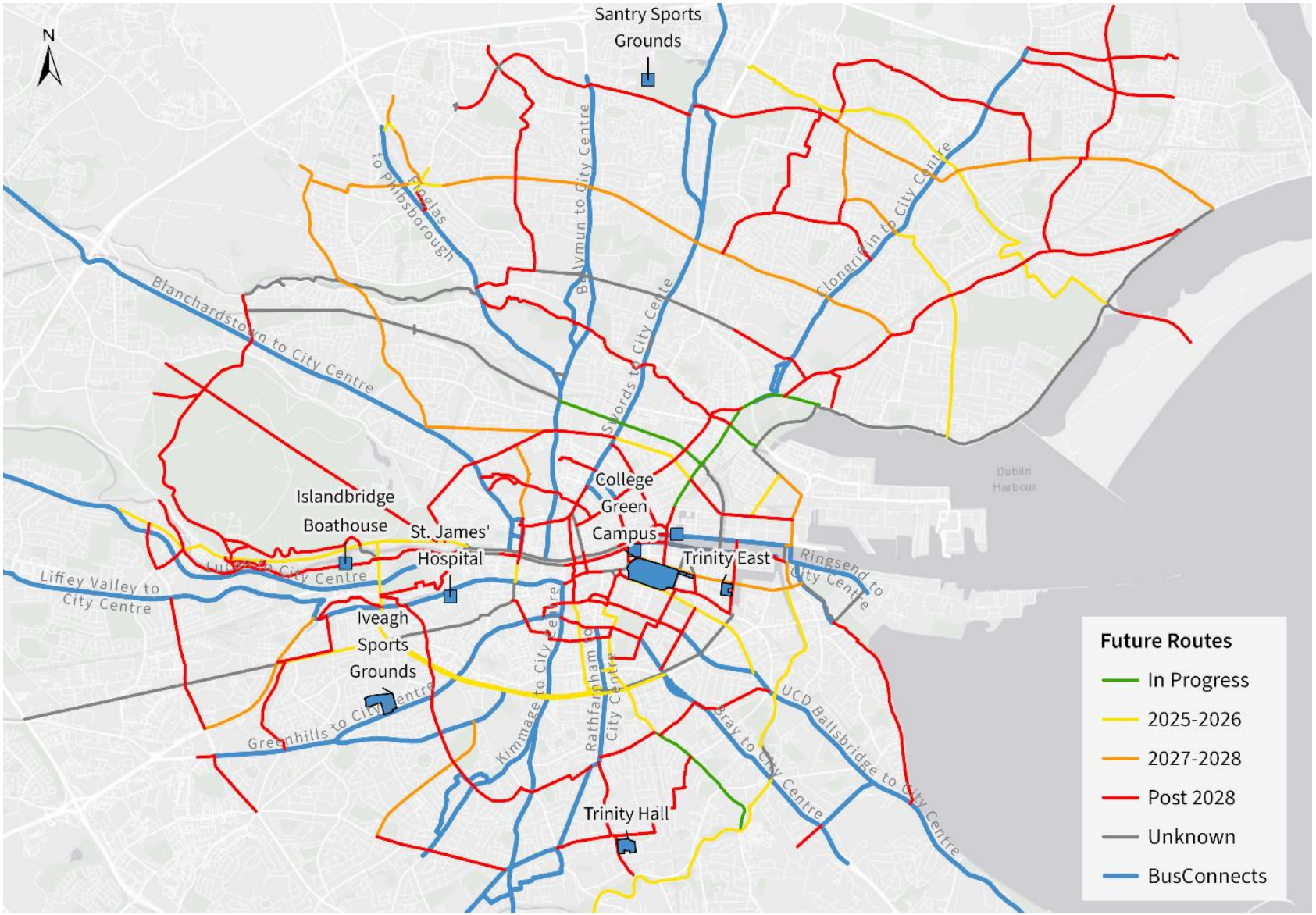


Figure 4-12 Future Dublin City Centre Active Travel Network

4.5 Cycling Environment at College Green

Cyclist Cordon Study

A Cordon Study for cyclists was conducted at the gates listed in **Figure 4-13** in April 2024 in tandem with the pedestrian cordon study conducted as part of the overall Transport Study that informs this Campus Travel Plan. The Cordon Study recorded a total of 2,905 two-way cyclist movements from 07:00-19:00 Tuesday 2nd of April and Sunday 7th of April 2024. The Cordon Study revealed that the most popular access points for cyclists are Lincoln Place, the Naughton Institute and Front Arch, used by 42%, 29% and 11% of cyclists respectively.

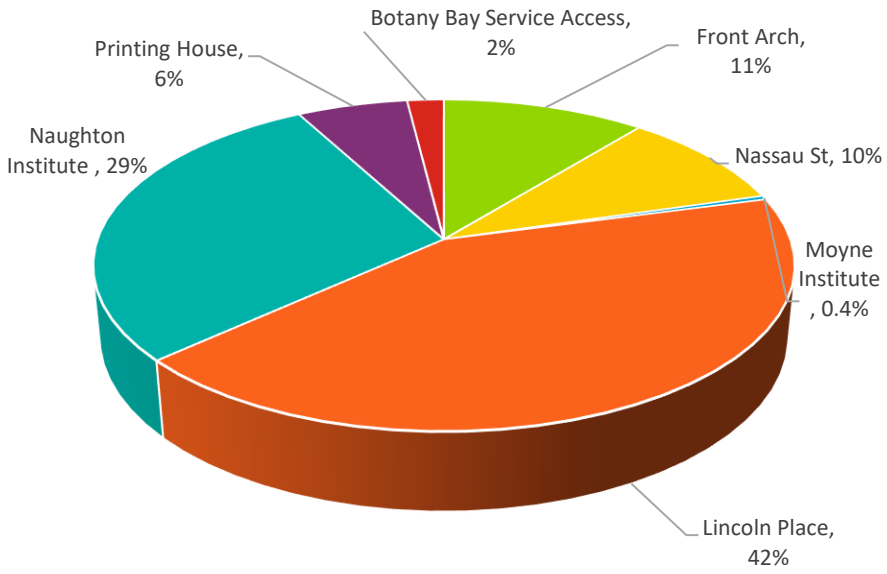


Figure 4-13 Proportion of Cyclists using each Access Point at the College Green Campus

From the cordon study, it was also observed that the majority of cyclists enter / exit the College Green Campus during distinct AM and PM peak hours, occurring from 09:00-10:00 and 17:00-18:00. However, the exact peak hour at each entrance varies.

Table 4-4 Summary of Cyclist Cordon Count Results

Access Location	Total no. of Cyclists Counted (6 day- survey period)	Average no. of Weekday Cyclist Movements	Average no. of Weekend Cyclist Movements	Average no. of Weekday Peak Hour Cyclist Movements	
				AM Peak	PM Peak
Front Arch*	212	71	Not Available	9	10
Nassau St	289	59	27	9	4
Moyne Institute	10	3	Gate open weekdays only	1	1
Lincoln Place	1,250	276	74	37	35
Naughton Institute	897	187	74	22	22
Printing House	196	39	21	5	9
Botany Bay Service Access	51	13	Gate open weekdays only	2	N/A

*Front Arch was only open for the first 3 days of the survey due to preparations for Trinity Ball. This did not cause an change in the number of cyclists using the Nassau Street Entrance in the latter half of the survey.

Campus Access for Cyclists

Cyclists can enter the College Green Campus via Lincoln Place without being asked to dismount. Bikes can be brought through all other pedestrian entrances, but signs indicate that cyclists must dismount when moving through these entrances.

Figure 4-14 Lincoln Place Access

Lincoln Place serves as the primary vehicle entrance for the campus and as such, a security barrier is in place to regulate vehicle access. However, this security barrier no longer provides a gap for cyclists to pass, resulting in cyclists having to wait for a security officer to lift the barrier or having to cycle the wrong way down the one-way exit lane of Lincoln Gate to avoid the barrier. The presence of railings along the pedestrian footpath prevents cyclists from dismounting and walking with their bike around the barrier. This arrangement creates a serious hazard for cyclists as they typically choose to avoid the vehicle barrier, potentially putting them into direct conflict with the construction vehicles headed to the E3 Learning Foundry site.

The layout of the Lincoln Place access should be reconfigured to provide a safe and barrier free way for cyclists to enter the campus. This will become particularly important should the proposed pedestrianisation of Lincoln Place be implemented as part of the Dublin City Centre Transport Plan which would result in an increased number of cyclists and pedestrians using this campus access.

Action AC5 – Lincoln Gate
Alter the layout of the Lincoln Place entrance so that cyclists can enter the campus barrier free.

Internal Environment for Cyclists

Cycling is permitted within the College Green Campus, but cyclists must give-way to pedestrians at all times. The comfort for cyclists within the College Green Campus is dependent on surfacing and levels of pedestrian crowding. Cyclists face difficulty navigating Front Square, Library Square and parts of Fellows' Square, where pedestrians tend to crowd on the enabled pathways, and it is difficult to cycle on the cobblestones. The presence of speed ramps across the campus also presents a difficulty for cyclists. The gap between the kerb and these speed ramps is narrow and does not allow cyclists using alternative cycles such as tricycles or cargo bikes to avoid the ramp. Interacting with

these speed ramps can make cyclists unstable and increase their risk of a fall.

Action AC6 – Speed Ramps
Decrease the length of the speed ramps across the College Green Campus to allow all cyclists to safely move around the ramp without having to dismount.

Cyclists can also struggle to walk with their bikes through Front Arch, where the wooden gate is very narrow and there are high volumes of pedestrians trying to use the gate (see section 3.2). This issue is particularly acute for those using non-standard cycles such a cargo bikes and tricycles. Upon exiting the campus via Front Arch, cyclists struggle to join the road network and start their journey due to narrow footpaths, high pedestrian volumes, the limited space available at the adjacent signalised pedestrian crossing and the presence of tram tracks.

Action AC7 – Front Arch
Open the larger wooden gate at Front Arch from 07:00-00:00 on weekdays and 08:00-18:00 on weekends to remove the pinch point and allow for the efficient movement of cyclists and pedestrians.

4.6 Cycling Parking at Trinity

The provision of high quality and secure cycle parking capable of accommodating a variety of cycle types is a necessity to encourage greater numbers of students, staff and visitors to cycle to the College Green Campus and between Trinity owned sites across Dublin City. As discussed in the following sections, the current cycle parking provision at College Green and Trinity's satellite locations differs greatly in terms of both quantity and quality. Regularising this provision would give all those who wish to cycle the confidence that a safe space will be available for them to park at the end of their journey.

4.6.1 College Green Campus

Figure 4-15 illustrates the cycle parking locations at the College Green Campus as of May 2024. It is understood that all cycle parking provided at College Green is designed to be moveable at short notice if required. As such, the exact location of cycle parking across the campus can vary across the year.

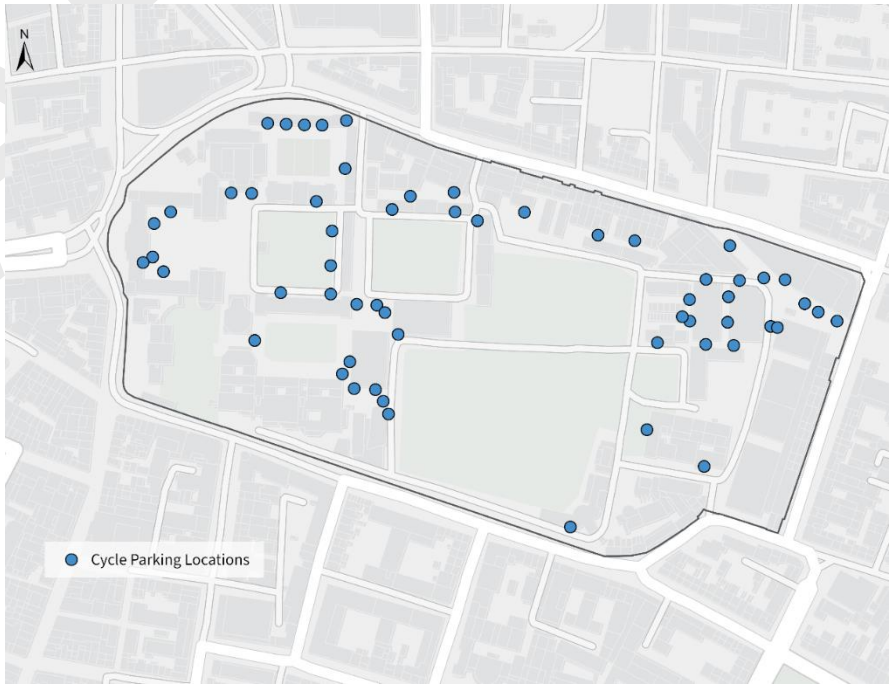


Figure 4-15 Cycle parking locations at the College Green Campus

Standard Cycle Parking

Standard cycle parking is generally well distributed across the College Green Campus with a mixture of racks of angled Sheffield stands and space saving Streetpods being the dominant types of parking. Streetpods and angled Sheffield stands are the preferred methods at College Green due to the limited space availability and the requirement that all cycle parking at the historic campus can be moved within an hour. This cycle parking at College Green is free to use for students, staff and visitors.

Sheffield stands are a popular type of cycle parking due to their relatively low cost and the stability they provide for locked bikes. Sheffield stands also allow for two-point locking of the bike frame and wheels, increasing the amount of time required to steal a bike and therefore decreasing the opportunities for theft. Although Streetpods are less common, they offer many of the same benefits as Sheffield stands.

Figure 4-16 Streetpods in use at the College Green Campus

Figure 4-17 Angled Sheffield Stands in use at the College Green Campus

Some of the cycle parking provision at College Green, such as the spaces provided at the Arts Block, adjacent to the entrance to Kinsella Hall, are only accessible by steps or lift. The simple addition of a wheeling ramp would increase the accessibility of these spaces by allowing cyclists to wheel their bike up the stairs without having to carry it or wait for the lift. However, wheeling ramps typically only benefit able bodied cyclists and those using standard cycles. Although cycle parking should not be located in areas without ramped or level access where possible, it is acknowledged that there is likely a demand for cycle parking at this location for those using the 24-hour library, at Kinsella Hall.

Action AC8 – Wheeling Ramp
Install a wheeling ramp on both staircases leading to Kinsella Hall to assist those accessing the cycle parking that is currently only accessible by lift or steps.

Over the past two years, car parking spaces to the east and south of Library Square have been removed to provide additional cycle parking

capacity. The location of this new cycle parking has not been included on any college cycle parking maps. To the south of Library Square, along the northern side of The Old Library, 110 no. cycle parking spaces have been installed in the form of Sheffield stands. These stands are well used and provide extra capacity to cater for the cycle parking demand at Fellows' Square. The stands are located less than 100m from the entrance of the Arts Block and less than 50m from the entrance of the library complex.

Figure 4-18 Cycle Parking replacing Car Parking along the northern side of The Old Library

To the east of the square, along the Rubrics building, an additional 120 no. cycle parking spaces have been installed as Sheffield stands. These stands are almost entirely unused compared to the stands at The Old Library. Generally, the path along the Rubrics building does not receive a lot of pedestrian traffic and is less well overlooked than the other side of Library Square. Despite the low utilisation of these spaces, they should remain in place as they physically claim this space for active travel and reinforce the removal of the car parking spaces that once lined this side of the square. When the volume of cyclists at Trinity increases, the cycle parking at the Rubrics will provide overflow capacity for the cycle parking at The Old Library.

Figure 4-19 Cycle Parking replacing Car Parking adjacent to the Rubrics Building

Due to the flexible nature of cycle parking at College Green, the exact number of spaces is not known but is estimated to be approximately 1,500. The provision of cycle parking across the College Green Campus was observed changing several times during the course of the Transport Study, highlighting its dynamic nature.

The E3 Learning Foundry, which is expected to open in 2025, will provide an additional 360 cycle parking spaces, of which 86 will be covered. These spaces will be provided at mezzanine level adjacent to the existing Chemistry and Zoology buildings and along the length of the new E3 Learning Foundry at Parade Ground. The additional provision of cycle parking as part of this development will increase the provision of cycle parking at the College Green Campus to approximately 1,900, still far below the Dublin City Development Plan 2022-2028 requirement to provide 1 no. covered long stay cycle parking space per 2 students and per 5 staff at colleges of higher education.

Figure 4-20 Bikes Parked along Railings at the Hamilton Building

Figure 4-21 Bikes Parked along Railings at Front Square

Based on the existing modal split that shows 9% of students and staff cycle to Trinity, there could be daily demand for up to 2,406 cycle parking spaces at College Green. Although the provision of cycle parking is lower than the potential demand, it is noted that some of this shortfall is currently being catered for through unofficial cycle parking arrangements such as parking bikes along railings and fencing. This activity is typically observed where sufficient cycle parking stands are not provided such as at Front Square and directly adjacent to the Hamilton Building. This behaviour is shown in **Figure 4-20** and **Figure 4-21.** It is understood that a number of staff members choose to store their bikes in their offices during the day instead of using the on-campus cycle parking. Bringing bikes into college buildings is prohibited.

Based on the future modal split target set out in Chapter 8 of 28% of students and staff cycling to Trinity, there could be up to 7,485 bikes being brought onto Trinity campuses daily by 2030, rapidly increasing the demand for cycle parking. It is expected that the vast majority of this demand will be generated at College Green. The future reduction in car parking at the campus, as discussed in Chapter 6, will free up space to increase the provision of cycle parking at the College Green campus in line with a growth in demand.

Action AC9 – Standard Cycle Parking
Expand the number of standard cycle parking spaces at the College Green Campus and other Trinity owned locations in proportion with the increased demand. This cycle parking could be located in car parking spaces that will be removed from use during the lifetime of this plan.

Although there is a large bank of cycle parking located within 100m of the Hamilton Building, under the railway bridge, the area is poorly lit, with the only pedestrian activity coming from those accessing the cycle parking or using the Sports Centre. While Trinity may not be able to provide lighting directly attached to the bridge as it is in Irish Rail ownership, there is still scope to improve lighting at the cycle parking and increase the perceived safety levels for those accessing the cycle parking. The provision of cycle parking as part of the E3 Learning Foundry will provide a new purpose-built cycle parking option for the east end of the campus.

Action AC10 – Cycle Parking Audits
Undertake annual cycle parking audits at Trinity's locations across Dublin to determine if the provision of cycle parking is sufficient for the demand.

Secure Cycle Parking

Despite the high number of cycle parking spaces available throughout the College Green Campus, there are limited covered or secure cycle parking spaces for use by students and staff. This has resulted in many staff members bringing their bikes into college buildings for storage. Covered cycle parking is particularly important for those bringing e-bike onto the campus, as the performance of these cycles can deteriorate when exposed to harsh weather conditions for long periods of time.

Swipe access only sheltered cycle parking can be found behind houses 15 to 20 in Botany Bay and under the railway arches to the rear of the Business School. Although these locations do provide covered and secure cycle parking, they are hidden in quiet areas of the campus, poorly lit and are not well known among students and staff. There is no information available online regarding the new secure cycle parking under the railway arches and this cycle parking area has not been included on any campus maps.

Figure 4-22 Access to Secure Cycle Parking at Botany Bay and The Arches

Action AC11 – Online Cycle Parking Information
Update all information online regarding the type and location of cycle parking and bike repair stands.

Action AC12 – Wayfinding for Cyclists
Include physical wayfinding to cycle parking and bike repair stands as part of an overall Trinity wayfinding strategy.

The lack of activity at the secure cycle parking under the railway arches has resulted in the space being used as temporary storage by Estates & Facilities, making the space feel unwelcoming and hard to navigate. The two secure cycle parking areas should be improved to make them more attractive, including lighting upgrades, wayfinding to these areas and improved advertisement of their existence.

Action AC13 – Upgrade Secure Cycle Parking
Upgrade the existing secure cycle parking at Botany Bay and the railway arches to include better lighting, signage on the entrance gates to highlight their location and advertisement of their existence to students and staff.

Chapter 6 of this report discusses a reduction in car parking at the College Green Campus. The removal of car parking spaces, particularly in the less historic areas of the campus, presents a great opportunity to increase the volume of secure cycle parking spaces in areas that are better overlooked and that have higher cyclist volumes. This could be provided by Bike Bunkers or similar, with students able to rent a secure bike parking space in the same way they can currently rent lockers across the campus. Bike Bunkers and other small, secure, bike shelters can be obtained in a number of colours to minimise their visual impact. However, the visual impact of a small bike shelter is unlikely to be greater than the visual impact of a car. A new Bike Bunker space rental scheme is currently being rolled out at St. James' Hospital, details of which are presented in 4.6.4.

The exact number of shelters that could be provided will depend on the areas identified for the removal of car parking and consultation with Estates & Facilities and the Grounds and Gardens Committee. Desirable areas for these shelters include the space currently occupied by car parking at New Square, adjacent to the Rugby Pitch and the car parking areas in front of the old Chemistry, Physiology and Zoology Buildings. Secure cycle parking in the large car parking area to the south of College Park would likely not see much use, as the area is hidden away and has very little pedestrian traffic.

Parking for Non-Standard Cycles

Transport for those with a mobility impairment can often be focused on driving and the availability of designated car parking spaces. However, driving is one of the most exclusionary forms of transport, with those under the age of 17, those who cannot afford the high cost of obtaining a licence and running a car, those with visual or hearing impairments, and those with intellectual disabilities that preclude passing the driving test all prohibited from driving. Those with physical disabilities who can obtain a licence are often unable to drive due to the expense of purchasing a specially adapted car. Trinity College Dublin fully supports and acknowledges that cycling is a popular method of transport for disabled people. Cycling can provide disabled people with improved confidence and a sense of freedom and empowerment.

In 2019, Trinity installed the first disabled bike parking spaces in New Square at its College Green Campus. These spaces are wider than a standard cycle parking space, clearly signposted and can accommodate non-standard cycles such as hand-operated tricycles. Despite being clearly marked on the ground, there is no information on any of Trinity's online cycle parking maps regarding the location of the disabled bike parking spaces. As noted in a 2021 interview with Wheels for Wellbeing *"If a disabled cyclist cannot be sure that they will be able to leave their cycle somewhere secure when they reach their destination, cyclising will be limited to leisure or exercise rather than for everyday journeys"*. As captured under *Action AC5 – Online Cycle Parking Information*, all new maps will need to illustrate the location of accessible cycle parking spaces at Trinity. A total of 4 no. disabled cycle parking bays were originally planned to open between College Green and St. James' Hospital but the remaining 3 bays were not implemented.

Although the installation of these disabled cycle parking spaces is very positive, the number of spaces across the campus should be increased in order to give disabled cyclists flexibility on where they park. As noted within the NTA's *Cycle Design Manual (2023)*, 5% of cycle parking spaces should be designated for use by larger non-standard cycles. This can include adapted cycles for those with disabilities, cargo bikes, tricycles, tandems and bikes fitted with child trailers.

Figure 4-23 Disabled Cycle Parking at New Square

Based on the approximate 1,500 cycle parking spaces at College Green, 75 spaces should be laid out for use by non-standard cycles. These spaces should also be located in the most accessible locations, close to the entrances of buildings with high flows of students and staff, such as the Arts Block, libraries, Hamilton Building, Sports Centre and Business School. Parking for non-standard cycles should also be provided in close proximity to the on campus creche, where up to 8 no. cargo bikes are regularly parked.

Figure 4-24 Cargo Bikes Parked Adjacent to the Campus Creche

Although it is technically possible to lock some non-standard cycles to standard Sheffield stands, this arrangement does not provide the best user experience. Non-standard cycles can be much longer than regular bikes and a standard Sheffield stand may be unlikely to provide the opportunity for two-point locking of the bike wheel and frame to the stand. Sheffield stands also provide little stability for larger cycles, making the bikes difficult to load and unload. A lack of adequate space between standard Sheffield stands can also make it more challenging to assist passengers being transported with non-standard cycles.

Action AC14 – Parking for Non-Standard Cycles

Provide parking for non-standard cycles (e.g. cargo-bikes, tricycles, adapted cycles) across key Trinity owned sites at a rate of 5% of the overall cycle parking provision. This cycle parking should be located as convenient as possible to the entrance to each building or location.

Case Study – Dublin City Council Cargo Bike Parking

In 2018, Dublin City Council began the rollout of cargo bike parking within a number of multistorey car parks across the city centre. Currently, secure bike parking for non-standard cycles is available for free in car parks at Drury Street, Jervis Street and Cathal Brugha Street. Cargo bike parking is also available outdoors at St. Stephen's Green. Th is non-standard cycle parking uses elongated Sheffield type stands to provide two-point locking capability for longer cycles and add additional stability when loading and unloading passengers or cargo.

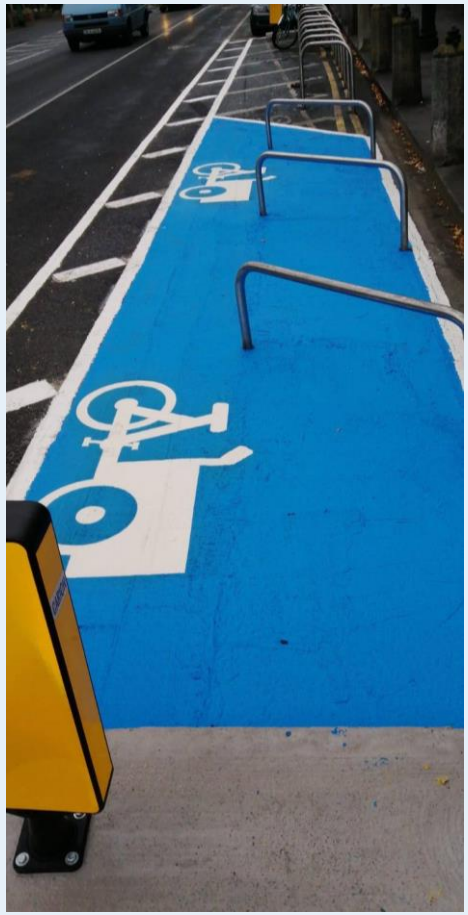


Figure 4-25 Cargo Bike Parking at St. Stephen's green

Case Study – Accessible Cycle Parking at University of Galway

The University of Galway unveiled 3 no. accessible bike parking shelters across its campus in May 2023, in conjunction with Bike Week 2023. Each shelter has space to park up to 4 non-standard cycles and does not require cyclists to dismount and navigate gates or doors to access. These shelters are located adjacent to busy teaching buildings, with their locations clearly visible on the University's online interactive cycle parking map.

Figure 4-26 Cargo Bike and Accessible Cycle Parking at the University of Galway

Bike Repair Stands

There is currently one bike repair stand available, under the railway bridge, at the east end of the campus. This stand features a rack to hold a bicycle off the ground while using the attached pump and tools to carry out any repairs or maintenance. The stand is located in close proximity to cycle parking but is often out of service and unavailable for use. This negates the benefit of having a cycle repair stand, which increases the reliability of cycling as a mode by providing cyclists guaranteed access to facilities for any tweaks and repairs at the end of their journey.

Trinity should install an additional bike repair stand in the western end of the campus to provide an alternative option for when the existing stand is undergoing maintenance. Trinity should also alter its current maintenance schedule for the existing repair stand to minimise the time it is unusable while also teaching students and staff how to use the stands through bike maintenance workshops.

Action AC15 – Bike Repair Stands

Increase the number of bike repair stands at College Green and at other Trinity owned sites such as St. James' Hospital, Trinity East, Trinity Hall and Iveagh Grounds. Implement a maintenance plan for these stands to minimise the amount of time they are not in use.

Action AC16 – Bike Maintenance Workshops

Reinstate annual bike repair workshops to teach students and staff how to maintain their own bikes and how to deal with any mechanical issues while out cycling.

Action AC17 – Bike Repair Clincs
Introduce monthly on campus bike repair clinics to allow students and staff to have any damage repaired conveniently by a professional bike mechanic on regular basis.

4.6.2 Trinity Hall

As of November 2024, a total of 430 no. cycle parking spaces are provided for use by residents and visitors at Trinity Hall. This volume of cycle parking equates to approximately 43% of the total number of residents of Trinity Hall and adequately caters for the cycle parking demand. These spaces are well distributed across the site but are not always located in accessible areas. As shown in **Figure 4-27,** a number of cycle parking spaces are located on grassed areas which are covered in leaves during the autumn.

Figure 4-27 Cycle Parking covered in fallen leaves at Trinity Hall

Cycle parking at Trinity Hall is provided as a mixture of Sheffield stands and other bike racks. Of the 430 no. cycle parking spaces at Trinity Hall, only 20 no. are sheltered. Generally, the Sheffield stands and bike racks at Trinty Hall are sufficient for securely locking a bike's frame and wheels. However, it would be preferable for the majority of the spaces to be sheltered, given that bikes at Trinity Hall are likely to be parked overnight and potentially all day at weekends.

Action AC18 – Covered Bike Parking
Increase the number of covered cycle parking spaces in locations where students and staff are likely to be parked for long periods of time such as Trinity Hall and St. James' Hospital.

Planning permission was granted in October 2024 for the installation of 2 no. free standing bike parking shelters at Trinity Hall, providing an additional 48 no. covered cycle parking spaces (DCC Ref: 3526/24).

Figure 4-28 Bikes Racks at Trinity Hall

There are currently no spaces to park non-standard cycles at Trinity Hall. This excludes any residents who want or need to use an alternative cycle

for commuting between Trinity Hall and any other Trinity location by bike. It also prevents visitors to the site who use a non-standard cycle from travelling by bike. In line with Action AC9, Trinity should designate a proportion of the cycle parking at Trinity Hall for use by non-standard cycles.

Figure 4-29 Sheffield Stands at Trinity Hall

As part of the site visits undertaken to gain an appreciation of the cycle parking facilities at Trinity Hall, the project team were unable to locate any cycle repair stands. With the bike shop in Rathmines having recently closed, a cycle repair stand at Trinity Hall would provide a sense of reassurance to residents that they have the tools available to carry out their own repairs and maintenance if required. In line with Action AC10, Trinity should provide a bike repair stand at Trinity Hall to increase the reliability of cycling as a mode choice for residents.

4.6.3 Trinity East

A total of 60 no. cycle parking spaces are currently provided at Trinity East. These spaces are provided as a mixture of Sheffield stands and other short stay bicycle racks. The bike racks in place at Trinity East do not allow for the secure locking of both a bike's frame and wheels to the rack. These racks should be upgraded and replaced with Sheffield stands wherever possible. With the limited student and staff numbers currently operating out of Trinity East, this cycle parking appears to be catering for the current demand. However, it was observed during a site visit to Trinity East that a motorcycle was using one of the Sheffield stands for parking.

Figure 4-30 Sheffield Stands at Trinity East

There are currently no covered or secured cycle parking spaces at Trinity East as well as no spaces for non-standard bikes. These types of cycle parking will need to be installed at Trinity East along with additional standard cycle parking when the site undergoes redevelopment to align with the expected increase in student and staff activity. The full timeline for the redevelopment of Trinity East is expected to be published as part of the overall Trinity College Dublin Masterplan currently being prepared by Allies and Morrison. There are currently no bicycle repair stands in place at Trinity East. When cycle parking at the site is being redeveloped, a minimum of 1 no. cycle repair stand should be installed.

Figure 4-31 Bike Racks at Trinity East

4.6.4 St. James' Hospital

A total of 80 no. cycle parking spaces are provided in the parking area located adjacent to the Trinity Centre for Health Sciences at the St. James' Hospital campus which is adequately catering for the current demand. A bike repair stand can be found adjacent to the cycle parking. These spaces are provided primarily as Sheffield stands with 1 no. bike hangar also provided.

A trial for assigning spaces within the bike hangar began in February 2025. Students and staff primarily based at St. James' Hospital were able to take part in a three-month pilot programme where they could apply to rent for free, one of the 6 no. spaces in the locked hangar. One space was reserved for use a cyclist with a disability, but it is unlikely that this space would be capable to accommodating most non-standard cycles. Results of the trial are currently being assessed.

Figure 4-32 Sheffield Stands and Bike Repair Station at St. James' Hospital

Apart from the bike hangar currently being trialled, there are no covered or secured bike parking spaces at St. James' Hospital and no spaces designated for non-standard cycles. A minimum of 5% of the current cycle parking provision (4 no. spaces) should be reserved for use by non-standard cycles to create a more inclusive and welcoming cycle parking environment at the site.

A planning application for 1 no. secure cycle parking shelter was lodged by Trinity at the Trinity Centre for Health Sciences in July 2024. This application was granted planning permission in October 2024 (DCC

Ref:4036/24) . When complete, the new shelter will be capable of accommodating 32 no. bikes.

Figure 4-33 Bike Hangar at St. James' Hospital

4.6.5 Iveagh Grounds

A total of 39 no. cycle parking spaces are currently provided at Iveagh Grounds. As the site has not yet been redeveloped, this cycle parking is sufficient to meet the current demand. Similar to the rest of Trinity's sites, these spaces are provided as a mixture of Sheffield stands and other bike racks. Although the Sheffield stands are of sufficient quality for securely parking a bike, the bike racks at Iveagh Grounds are substandard and do not allow users to lock both their bike wheels and frame to the racks. These bike racks should be replaced with the higher quality, more user friendly, Sheffield stands.

Once the site is redeveloped and becomes more widely used by Trinity Sport, the number of cycle parking spaces will need to be increased in line with the relevant Dublin City Council development standards. The redevelopment of cycle parking at the site should designate 5% of spaces for use by non-standard cycles and include a cycle repair stand to increase the reliability of cycling as a mode of transport to Iveagh Grounds. There is currently no bicycle repair stand provided at Iveagh Grounds.

Figure 4-34 Sheffield Stands at Iveagh Grounds

Figure 4-35 Bike Racks at Iveagh Grounds

4.6.6 Abandoned and Unwanted Bikes

Each year a number of bikes are left abandoned at Trinity's locations across Dublin. These bikes are typically abandoned if their owner has moved away following the completion of their studies and has been unable to sell the bike or dispose of it. Currently, bikes that are suspected of being abandoned are tagged with a warning to the owner to move the bike. Where the bike is not moved, it is removed by Trinity Security to a storage facility before being disposed of.

Each year, new students arriving in Dublin to study at Trinity who are considering cycling from their accommodation to the College must first purchase a bicycle. Many students live on a tight budget and are reluctant to spend a large amount of money on a new bike. Students new to Ireland may be uneasy about purchasing cheaper second-hand bikes online. Unlike staff members, students cannot avail of discounted bike purchase under the bike to work scheme. A similar 'Bike to College' scheme was announced as part of the Irish Government's Budget 2024 but has yet to be implemented. The exact details of how this scheme will operate have not been published.

There is a clear opportunity for Trinity to collect unwanted bicycles from students at the end of the academic year and combine these with any abandoned bikes to set up a second-hand bike sale during Freshers' Week and at the start of each term. Such a scheme could be operated by Trinity College Dublin Students' Union (TCDSU) to generate revenue for the Union, reduce the cost of bike purchase for students, and reduce the waste generated each year by unwanted and abandoned bikes. Similar schemes have been operated by TCDSU in the past where students have been able to purchase discounted second-hand lab coats no longer needed by other students.

Action AC19 – Sale of Unwanted and Abandoned Bikes
Organise second-hand bike sales at the start of new academic terms. These sales would generate revenue, reduce the cost of bike purchase for students and reduce the waste generated each year by unwanted and abandoned bikes.

4.7 Bike Sharing Schemes

4.7.1 Public Bike Sharing Schemes

Trinity's College Green Campus is ideally located to take advantage of the many bike share schemes operating across Dublin City, with services such as DublinBikes accessible directly adjacent to the campus. DublinBikes is a bike sharing service where users can collect and drop off bikes from a number of stations located across the city between 05:00 and 00:30 every day. The first 30 minutes of all DublinBikes journeys are free, with a rental fee applying after this time. However, membership or a day pass is required to access the scheme. Student membership is currently priced at €20 per year.

In addition to providing standard bike rentals, DublinBikes offers a battery subscription service at an additional €60 per year which provides the user with a rechargeable battery that can be plugged into many of the bikes on the DublinBikes network to provide pedal assistance.

The closest DublinBikes stations to the College Green Campus can be found directly beside the Naughton Institute entrance and on the opposite side of the road along Leinster Street South. For those travelling between Trinity owned locations, DublinBikes stations are located within 50m of the entrances to St. James' Hospital and Trinity East.

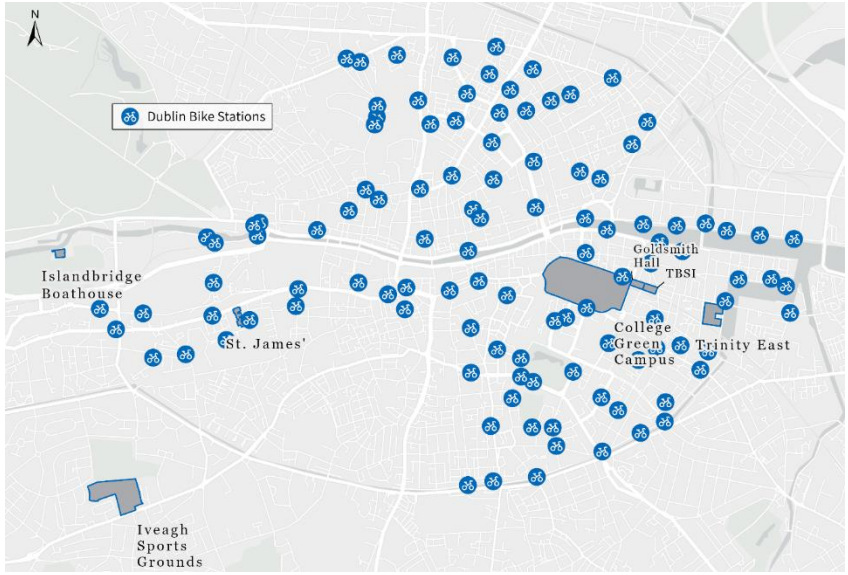


Figure 4-36 DublinBikes Stations

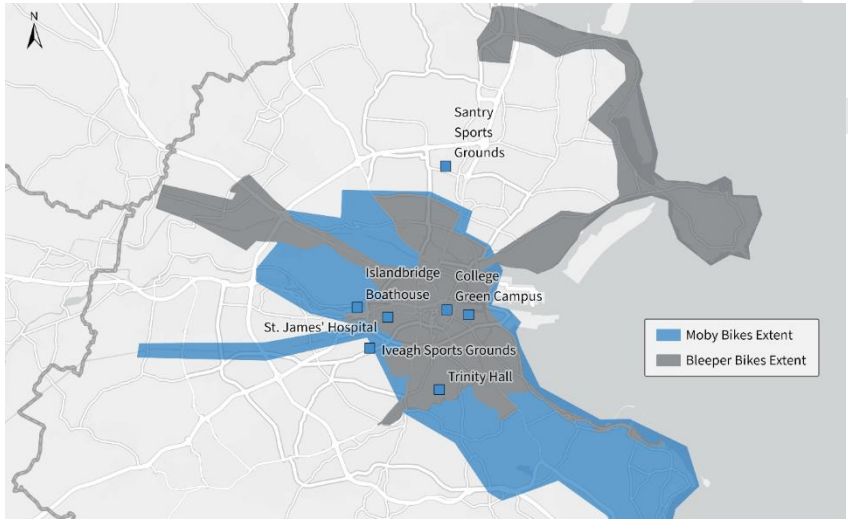


Figure 4-37 Operation Zones for Moby Bikes and Bleeper Bikes

In addition to DublinBikes, Bleeper and Moby operate stationless bike sharing schemes across the City Centre and into many of Dublin's suburbs. These bikes can be found all across their operating zones, locked to public Sheffield stands. Both of these stationless bike sharing schemes operate in very similar ways with users paying an initial fee to unlock the bikes followed by a small per minute fee for their journey. Both operators offer a mixture of manual and e-bikes and allow bike rentals 24/7. Bleeper manual bikes can be picked up or dropped off within the College Green Campus, St. James' Hospital and Trinity Halls. The bikes can also be picked up and dropped off in close proximity to Trinity East and Kavanagh Court. Bleeper e-bikes and all Moby bikes are available in a much small area, only serving College Green, Trinity East and Kavanagh Court. Healthy Trinity provides video tutorials on their website explaining how to use DublinBikes and Bleeper Bikes. Ways to cycle without buying a bike - Healthy Trinity - Trinity College Dublin.

4.7.2 Bike Libraries

Bike libraries differ from public bike sharing schemes as they offer members the opportunity to borrow different types of bikes for extended periods of time without charge. This typically includes the ability to borrow non-standard cycles such as e-bikes, e-cargo bikes and folding e-bikes. As these cycles are usually more expensive than standard bikes, Bike Libraries allow people to try a variety of different cycles to see which one suits their needs best before purchasing.

The first bike library in Ireland was opened at Harold's Cross Educate Together National School in September 2022. The library was funded by the NTA in collaboration with the UCD School of Architecture, Planning and Environmental Policy. The bikes for the library are provided by

Bleeper, with families able to borrow bikes for up to one school year. Bike libraries are in operation at 20 schools across Dublin.

There is great opportunity for Trinity to collaborate with the NTA to open a bike library at the College Green Campus to allow students and staff to test out a variety of different cycles to see there is an option to suit their needs where cycling a standard bike is not possible. Such a Bike Library could be located in the new Student Centre which is being developed in the former Science Gallery space, adjacent to the underutilised secure bike parking at the railway arches or in some of the space that will be freed up on the campus following a reduction in car parking spaces.

Action AC20 – Bike Library
Collaborate with the NTA to establish a Bike Library at the College Green Campus which will allow students and staff to borrow non-standard cycles for an extended period of time.

4.8 Other Micromobility Modes

In addition to the standard bike, e-bikes, e-cargo bikes and e-scooters are becoming more and more popular as forms of micromobility. These vehicles can provide an alternative mode of micromobility for those who cannot use a standard bike due to the nature of their journey, the physical effort required or the distance they need to travel.

Trinity does not have an official policy for other micromobility modes such as e-scooters and e-bikes. The number of students and staff currently travelling to Trinity by e-scooter or alternative bikes is currently unknown as past travel surveys did not capture this data. The lack of official policy on alternative micromobility mode use is common among third level education institutions in Ireland, with none having yet published such a policy online.

Action AC21 – Micromobility Policy
Establish a dedicated policy on the use of micromobility modes such as e-scooters, e-bikes and e-cargo bikes throughout the College Green Campus.

It was mentioned during stakeholder consultation that e-scooter users in particular tend to bring their scooters into campus buildings with them rather than park their e-scooter at the one of the numerous cycle parking racks. This is likely due to the high value of such scooters, the lack of dedicated e-scooter parking and the lack of charging facilities for micromobility modes. Due to issues with e-scooter and e-bike batteries, this presents a fire hazard, particularly when such devices are being charged. With the legalisation of e-scooters with a maximum speed of up to 20 km/h in May 2024, Trinity will need to outline an official policy for their use, charging and storage.

Action AC22 – Micromobility Charging
Commission a strategy for providing on-campus charging for e-bikes and other micromobility vehicles such as e-scooters. This may form part of an overall Zero Emission Vehicle strategy for Trinity.

Case Study – E-bike charging at Queen's University Belfast

In October 2024, Queen's University Belfast unveiled their first e-bike charging facility for use by students and staff. The new secure, covered cycle parking shelter contains cycle parking for 32 bikes and replaces 5 car parking spaces in the University's main car park.

The new bike shelter is fob access only, so that it can only be used by students and staff at the University. The shelter contains a battery charging cabinet with 8 spaces where users can detach the battery from their e-bike and lock it in the fire safe cabinet to charge for free while they go about their day. As the use of private e-scooters on public land is still illegal in Northern Ireland, the facility does not provide parking or charging for these vehicles.

Figure 4-38 Secure Bike Shelter and E-Bike Charging at Queen's University Belfast

The legalisation of e-scooters and the growth in popularity of e-bikes and e-cargo bikes presents Trinity with the opportunity to reduce travel time between their locations across Dublin City and create a more connected College community. This could be done through the implementation of a mobility hub to serve students and staff at Trinity College Dublin. Mobility Hubs are an innovative and emerging concept in urban transport and mobility planning that offer a more integrated approach to multi-modal travel. Such hubs typically allow access to a variety of mobility modes in one location and can range in size from multistorey buildings to small docks the size of a few car parking spaces. Mobility hubs are often collocated with last mile delivery hubs (see section 0). The adoption of mobility hubs is only beginning to emerge in Ireland, giving Trinity the opportunity to become a pioneer for mobility hubs among Irish universities.

Trinity should commission a mobility hub study to investigate the feasibility of creating a mobility hub or multiple mobility hubs to provide viable micromobility alternatives for students and staff who need to move between Trinity owned locations during their day. Section 0 of this report presents a case study on a last mile delivery hub created out of a disused shipping container in the car park of the University of Toronto. A similar set up could be used to create mobility hubs at Trinity College Dublin. Such mobility hubs are often seen collocated with last mile delivery hubs. Potential locations for any such mobility hubs will be determined from the mobility hubs study, future car parking reduction and the development of the overall Trinity College Dublin Masterplan by Allies & Morrison.

Action AC23 – Mobility Hubs
Investigate the potential for establishing a mobility hub(s) to increase the connectivity between Trinity's locations across Dublin and create a closer linked College community.

4.9 Campus Travel Plan Actions for Cycling

The following Campus Travel Plan actions for cycling are put forward to promote and support cycling at Trinity College Dublin.

Table 4-5 Campus Travel Plan Actions for Cycling

Campus Travel Plan Actions for Cycling	
AC1	**Cycling Survey -** Gather information as part of future travel surveys on why current students and staff may have switched to or from cycling as part of their commute to College.
AC2	**Cycle Training -** Reintroduce cycle training on a biannual basis for less confident cyclists or those new to cycling in Dublin.
AC3	**Lobby Dublin City Council on Cycling Infrastructure -** Use the results of the Cycle Audit to continue to lobby the National Transport Authority and Dublin City Council to prioritise investment in accessible, connected and segregated cycling infrastructure. This lobbying should focus first on the route from College Green to Iveagh Grounds and the direct route from College Green to Trinity Hall but include all key routes.
AC4	**Engagement with DCC and the NTA on Cycling** - Continue to support DCC and the NTA in the delivery of the Proposed Active Travel Network for Dublin through public consultation.
AC5	**Lincoln Gate -** Alter the layout of the Lincoln Place entrance so that cyclists can enter the campus barrier free.
AC6	**Speed Ramps -** Decrease the length of the speed ramps across the College Green Campus to allow all cyclists to safely move around the ramp without having to dismount.
AC7	**Front Arch -** Open the larger wooden gate at Front Arch from 07:00-00:00 on weekdays and 08:00-18:00 on weekends to remove the pinch point and allow for the efficient movement of cyclists and pedestrians.
AC8	**Wheeling Ramp -** Install a wheeling ramp on both staircases leading to Kinsella Hall to assist those accessing the cycle parking that is currently only accessible by lift or steps.
AC9	**Increase Standard Cycle Parking -** Expand the number of standard cycle parking spaces at the College Green Campus and other Trinity owned locations in proportion with the increased demand. This cycle parking could be located in car parking spaces that will be removed from use during the lifetime of this plan.
AC10	**Cycle Parking Audits -** Undertake annual cycle parking audits at Trinity's locations across Dublin to determine if the provision of cycle parking is sufficient for the demand.

Campus Travel Plan Actions for Cycling	
AC11	**Online Cycle Parking Information -** Update all information online regarding the type and location of cycle parking and bike repair stands.
AC12	**Wayfinding for Cyclists -** Include physical wayfinding to cycle parking and bike repair stands as part of an overall Trinity wayfinding strategy.
AC13	**Upgrade Secure Cycle Parking -** Upgrade the existing secure cycle parking at Botany Bay and the railway arches to include better lighting, signage on the entrance gates to highlight their location and advertisement of their existence to students and staff.
AC14	**Increase Parking for Non-Standard Cycles -** Provide parking for non-standard cycles (e.g. cargo-bikes, tricycles, adapted cycles) across key Trinity owned sites at a rate of 5% of the overall cycle parking provision. This cycle parking should be located as convenient as possible to the entrance to each building or location.
AC15	**Bike Repair Stands -** Increase the number of bike repair stands at College Green and at other Trinity owned sites such as St. James' Hospital, Trinity East, Trinity Hall and Iveagh Grounds. Implement a maintenance plan for these stands to minimise the amount of time they are not in use.
AC16	**Bike Maintenance Workshops -** Reinstate annual bike repair workshops to teach students and staff how to maintain their own bikes and how to deal with any mechanical issues while out cycling.

Campus Travel Plan Actions for Cycling	
AC17	**Bike Repair Clincs -** Introduce monthly on campus bike repair clinics to allow students and staff to have any damage repaired conveniently by a professional bike mechanic on regular basis.
AC18	**Covered Bike Parking -** Increase the number of covered cycle parking spaces in locations where students and staff are likely to be parked for long periods of time such as Trinity Hall and St. James' Hospital.
AC19	**Sale of Unwanted and Abandoned Bikes -** Organise second-hand bike sales at the start of new academic terms. These sales would generate revenue, reduce the cost of bike purchase for students and reduce the waste generated each year by unwanted and abandoned bikes.
AC20	**Bike Library -** Collaborate with the NTA to establish a Bike Library at the College Green Campus which will allow students and staff to borrow non-standard cycles for an extended period of time.
AC21	**Micromobility Policy -** Establish a dedicated policy on the use of micromobility modes such as e-scooters throughout the College Green Campus.
AC22	**Micromobility Charging -** Commission a strategy for providing on-campus charging for e-bikes and other micromobility vehicles such as e-scooters.
AC23	**Mobility Hubs -** Investigate the potential for establishing a mobility hub(s) to increase the connectivity between Trinity's locations across Dublin and create a closer linked College community.

Theme 3: Public Transport

5 Theme 3: Public Transport

5.1 Overview

Public transport plays a key role in connecting the University to students, staff and visitors who commute from outside the city or for whom active travel modes are not a viable option. Public transport can move large volumes of people far more efficiently than private cars while also generating less environmentally damaging emissions. Public transport is currently the most popular mode for commuting to Trinity, with 66% of students and staff travelling this way.

This chapter presents a summary of the current public transport services that provide connections to College Green and other Trinity owned sites as well as details on the future planned public transport network. Although the overall goal of this Campus Travel Plan is to increase the number of students, staff and visitors using active travel modes, this chapter provides a number of Campus Travel Plan Actions to enhance the public transport experience for those who choose to use this transport mode.

5.2 Existing Public Transport Network

5.2.1 Leap Card Fares

In 2022, the National Transport Authority (NTA) introduced a 50% reduction in public transport fares for full time students and young adults aged between 19 and 25. This fare reduction has resulted in a weekly fare cap of €16.00 for those travelling across the Dublin transport network, regardless of the number of different public transport modes used. The reduction in student fares coincided with the introduction of the TFI 90-minute fare which allows students to interchange between an unlimited number of different public transport services in the Dublin area within 90 minutes for just €1.

Trinity College Dublin is extremely well served by public transport due to its City Centre location. Access to the Luas network, DART, commuter rail and bus services can all be found within a 5-minute walk of the College Green Campus with connections available to the College's other sites across the City.

5.2.2 Luas Network

The closest Luas Green Line stops to the College Green Campus can be found approximately 120m north of Front Arch along College Street or 90m south of the Nassau Street entrance, along Dawson Street. The Luas Green Line is 24.5km in length and serves a total of 35 stops between Broombridge and Brides Glen. The line provides a connection between College Green and Trinity Hall, with the Milltown Luas stop located 800m or an 11-minute walk from Trinity Hall. The Luas journey time between Milltown and Dawson Street takes approximately 18 minutes.

The closest Luas Red Line stop to the College Green Campus can be found 500m or a 7-minute walk north of Printing House Square, at Abbey Street. The Luas Red Line is 20km in length and serves 32 stops between Tallaght / Saggart and The Point. The Luas Red Line stops directly adjacent to the Trinity Centre for Health Sciences at St. James' Hospital. The Luas journey between Abbey Street and St. James' Hospital takes approximately 11 minutes. Luas services typically operate between 05:30-00:00 on weekdays and between 06:30-00:00 and 07:00-00:00 on Saturdays and Sundays.

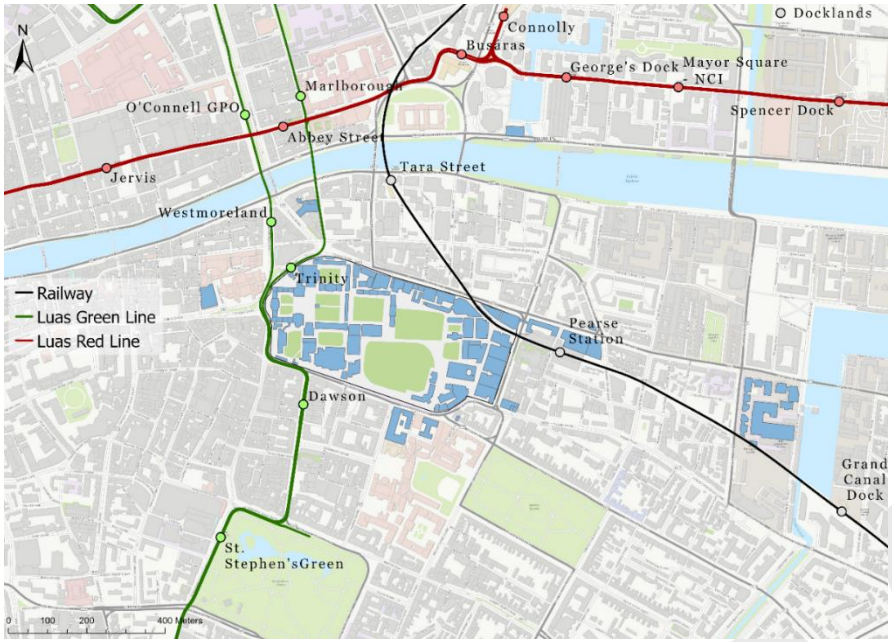


Figure 5-1 Luas and Rail Network in the Proximity of College Green

5.2.3 DART and Commuter Rail Network

Dublin Pearse train station is the closest station to the College Green Campus, located along Westland Row, just 140m or a 2-minute walk from the Naughton Institute. Tara Street station is also readily accessible from the College Green Campus with the Townsend Street entrance to the station located just 300m or 5-minute walk from Printing House Square.

Pearse station and Tara Street station provide commuter rail services to Dundalk, Maynooth, Longford, Dunboyne and Celbridge. DART services to Howth, Malahide, Bray and Greystones also operate via these stations as well as regional trains serving Rosslare Europort.

Action APT1 – Pearse Street Permeability
Building on action AW9, physically open the gate at Printing House Square during its current operational hours to improve public transport access by reducing travel time from the western end of the campus to the 7 bus stops on Pearse Street, Tara Street train station and the future Tara Street metro station.

The Irish Rail network does not provide any meaningful connection between Trinity owned sites across the City. Although Grand Canal Dock station is located just 220m from Trinity East, the exit from the station is located on the southern side of the Grand Canal, resulting in a 9-minute walk between the campus and the station. The College Green Campus is located just 12 minutes from Trinity East on foot and 6 minutes from the campus by bike.

5.2.4 Bus Network

Given its City Centre location, the vast majority of bus services into Dublin City Centre drop off in locations that are within walking distance of the College Green Campus. A total of 59 different bus services operate from the stops located directly around the perimeter of the campus.

With the high volume of bus services operating throughout Dublin city, there are bus connections available between virtually all of Trinity's Dublin locations that fall outside the 10–15 minute walking catchment. **Table 5-1** summarises the bus services that operate between College Green and other Trinity owned sites. It should be noted that all bus connections between College Green and Santry Sports Grounds require a 15-minute walk along Santry Avenue to reach the sports grounds.

Table 5-1 Summary of Dublin Bus Connections between Key Trinity Sites

Destination	Route	Closest Stop to College Green Campus	Average Weekday Frequency	Peak Hour Journey Time
St. James' Hospital	13	College Green (1 min walk)	12-15 mins	13 mins
	G1	Burgh Quay (4 min walk)	12-15 mins	15 mins
	G2	Burgh Quay (4 min walk)	12-15 mins	14 mins
Trinity Hall	140	Dame Street (4 min walk)	10-15 mins	27 mins
Iveagh Grounds	27	College Green (1 min walk)	10 mins	30 mins
	56A	College Green (1 min walk)	15 services / day	26 mins
	77A	College Green (1 min walk)	15-20 mins	28 mins
	151	College Green (1 min walk)	15-20 mins	28 mins
Santry Sports Grounds	4	Shaw Street (4 min walk)	12 mins	50 mins
	13	College Green (1 min walk)	12-15 mins	48 mins
	16	Westmoreland St (2 min walk)	10-12 mins	53 mins
	155	Westmoreland St (2 min walk)	20 mins	49 mins

5.2.5 Disability Access

As part of the development of this Campus Travel Plan, Trinity DisAbility were consulted on the challenges their users face in accessing sustainable transport modes. A large part of the feedback received during this consultation revolved around public transport access. Accessible public transport is crucial for enabling those living with disabilities to live independent lives. This becomes even more important at university level, where many students are living away from home or commuting by themselves for the first time on potentially unfamiliar transport services.

Action APT2 – Wayfinding Centre
Collaborate with Trinity DisAbility to provide biannual trips to The Wayfinding Centre for those registered with the service that are not confident using public transport or that are unfamiliar with how to navigate the public transport system in Dublin.

All Luas services provide level access from the platform to the tram. However, from consultation with Trinity DisAbility, it is noted that the alignment of the tram and platform is not always exact which can cause wheelchairs to get stuck in the gap. Designated areas are provided on all Luas trams for wheelchairs to park, but these are poorly signposted and usually crowded at rush hour. Although the majority of Luas platforms are located at street level, a small number are found elevated on bridges and must be accessed via stairs or a lift. It is the experience of users of the DisAbility Service that information regarding any breakdowns of these lifts is not readily available.

Currently, all Irish Rail trains feature some level of stepped access to board. Irish Rail can deploy a staff member with a ramp to help those with mobility impairments to board and alight. However, this service must be booked at least 24 hours in advance at the majority of stations on the Irish Rail network, limiting the flexibility of travel for those who require the ramp service. All Irish Rail trains have some dedicated space for wheelchairs to park while the train is moving.

All buses in the Dublin Bus fleet are low-floor and wheelchair accessible with built in ramps. Each bus is also fitted with a dedicated wheelchair space to allow users to park their wheelchair safely while the bus is moving. Wheelchair users do not need to alert Dublin Bus in advance of their travel which can provide a greater degree of flexibility than the DART or other train services. However, each bus can only accommodate one wheelchair users at a time and there is currently no system in place to alert wheelchair users if the wheelchair space on the bus they wish to board is occupied before it arrives. This can leave wheelchair users stranded at the bus stop and reduces the reliability of the bus as a transport mode for wheelchair users. There is an opportunity for Trinity to engage and collaborate with TFI to research ways of disseminating information on the real time availability of wheelchair spaces on public transport services.

Action APT3 – Wheelchair Space Availability Information
Engage and collaborate with TFI to research ways of disseminating information on the real time availability of wheelchair spaces on public transport services.

Dublin Bus also administers a free travel assistance programme where a dedicated staff member can teach a person with disabilities how to travel independently on Dublin Bus, Go-Ahead Ireland, DART or Luas.

In contrast, Bus Éireann does not guarantee that the buses operating on their regional services are low floor and independently wheelchair accessible. This is partially due to the varying quality of bus stop pavements outside of Dublin. Wheelchair users wishing to travel on a Bus Éireann regional service must book their travel 24 hours in advance, limiting their options for flexible travel. The accessibility of private operators providing regional connections to/from Dublin varies by operator.

5.2.6 Visitors and Tourists

As discussed further in Chapter 7, the exact proportion of visitors and tourists using different transport modes to access Trinity is not currently recorded. Collecting this data in future will allow Trinity to adapt how they target sustainable travel information at groups not undertaking regular trips to Trinity.

Despite a lack of data on the exact number of visitors arriving to the campus by public transport, there are steps that Trinity can take to encourage those less familiar with Dublin City Centre and its College Green Campus to use sustainable modes such as public transport when traveling to / from Trinity. It is recommended that Trinity include physical wayfinding to Tara and Pearse Street railway stations and the Trinity and Dawson Luas Stops as part of an overall wayfinding strategy for the campus. Additionally, Trinity could install real time information displays for rail, Luas and bus services in the vicinity of the campus. This would benefit students, staff and visitors to the campus by improving

confidence in the local public transport network and its integration as well as decreasing wait times. These information displays could be installed in high trafficked areas such as the Arts Block, libraries, Sports Centre, Business School, future Student Centre and on campus dining outlets. Real Time Passenger Information displays are utilised at the TU Dublin Grangegorman campus, DCU Glasnevin and UCD Belfield campus. Funding for these displays was provided to these universities by the NTA.

Figure 5-2 Real Time Public Transport Information Displays at TU Dublin Grangegorman

Action APT4 – Wayfinding
Provide physical wayfinding to Tara Street and Pearse Street railway stations as well as Trinity and Dawson Luas stops as part of an overall campus wayfinding strategy.

Action APT5 – Real-Time Information
Provide Real Time Information for public transport services in high trafficked areas such as the Arts Block, libraries, Sports Centre, Business School, future Student Centre and on campus dining outlets. Funding for these displays may be available from the NTA.

5.3 Future Public Transport Network

Trinity College Dublin will benefit directly from many of the large-scale public transport schemes in development for Dublin, including improvements to the DART network and bus network. Beyond the lifetime of this plan, MetroLink and Luas expansions will also improve connectivity for the College. The future expansion of the wider public transport network will also include the construction of new park and ride facilities. With many students and staff now living further from Trinity than over the last 5 years, park and ride facilities will increase access to public transport for those not living within walking distance of a direct service to Trinity. The future proposed public transport network for Dublin in relation to Trinity, including details on proposed park and ride facilities are discussed below.

Action APT6 – Support for Public Transport
Continue to support development of proposed schemes that will improve and expand the public transport network in Dublin, including MetroLink, BusConnects, DART+ and upcoming Luas extensions by responding to all upcoming public consultations.

5.3.1 Future Luas Network

In 2020, TII and the NTA released the emerging preferred route for a new extension to the Luas Green Line known as Luas Finglas. The project aims to extend the green line north of Broombridge as far as Charlestown, providing 3.9km of new grass track, 4 new stops and new facilities for pedestrians and cyclists. The development of Luas Finglas will also include a new park and ride facility at St. Margaret's Road with room for 350 cars.

By constructing this extension to the green line, TII hopes to provide greater connectivity for communities along the Green Line while reducing transport emissions by providing an attractive alternative to private car use. It is estimated Luas Finglas will reduce peak hour journey time from Charlestown to the City Centre by approximately 15 minutes when compared to the private car. When fully operational, services will operate along the extension with a frequency of just 7.5 minutes.

A Railway Order Application for Luas Finglas was submitted to An Bord Pleanála in November 2024. It is expected that this extension to the Luas Green Line will be operational in 2031.

Other Luas lines expected to be completed beyond the lifetime of this plan include Luas Lucan and Luas Poolbeg. Luas Lucan will provide 16km of new track, serving 15 – 18 new stops between Adamstown and the City Centre while Luas Poolbeg will provide 2km of new track, serving 3 new stops between The Point and Poolbeg. It is estimated that each of these Luas projects will kick off before 2030 with operations beginning 13 – 16 years after each project commences.

5.3.2 Future DART and Rail Network

With its proximity to the Irish Rail network, the College Green Campus will see a direct increase in connectivity due to the DART+ programme. The DART+ Programme will see the DART network grow from its current 50km in length to over 150km. The programme will see rail electrification introduced on existing lines servicing locations such as Drogheda, Maynooth, Hazelhatch and Greystones. Electrification of the fleet will help to reduce greenhouse gas emissions from transport, provide more frequent services with higher capacity and support sustainable growth among existing communities. The new fleet will also allow for platform level access, eliminating the requirement for wheelchair users to book rail travel 24 hours in advance.

DART+ West between Maynooth / M3 Parkway and Dublin City Centre received partial planning permission from An Bord Pleanála in July 2024. DART+ Southwest between Hazelhatch & Celbridge and Glasnevin and DART+ Costal North between Drogheda and Malahide are both currently before An Bord Pleanála awaiting a decision to grant or reject their respective railway order applications. A railway order application for DART+ Costal South is expected to be lodged before the end of 2024. The exact timeline for the completion of the Dart+ network is not currently available.

5.3.3 Future Bus Network

BusConnects is an initiative launched by the National Transport Authority with the aim of overhauling the bus system in the Dublin Region. The initiative includes a review of bus services and the definition of a core bus network which comprises radial, orbital and regional core bus corridors. It also includes enhancements to ticketing and fare systems as well as transition to a new low emission vehicle fleet. The proposed fundamental changes to the network can be summarised as follows:

- Increasing the overall amount of bus services;
- Providing new and frequent orbital services connecting more outer parts of the city together;
- Building a network of "next generation" bus corridors on the busiest bus lines to make bus journeys faster, predictable and reliable;
- Developing a state-of-the-art ticketing system using credit and debit cards or mobile phones to link with payment accounts and making payment much more convenient;
- Simplifying the bus services on the key radial routes into "spines" where all buses will operate under a common letter system and buses will run very frequently and be more evenly spaced;
- Increasing the number of routes where buses will have a frequency of 15 minutes or less all day;
- A web-shaped grid with many interchange opportunities to reach more destinations. Everywhere that two frequent routes cross, a fast interchange is possible; and
- Additional services provided at peak hours to limit overcrowding.

As described in section 4.4.2, BusConnects will also provide improved active travel facilities along each of the core bus corridors, with many of these facilities directly benefitting those travelling between Trinity owned sites.

A high volume of bus routes will directly serve the College Green Campus with many of these also providing a connection between Trinity owned sites across the city. **Table 5-2** summarises the future bus routes which will provide these connections. It is expected that all core bus corridors in the BusConnects scheme will be completed by 2030, although no more than four corridors will be built concurrently.

Table 5-2 Future BusConnects Services and Weekday Frequencies

Destination	Route	Peak Hour Frequency	Off-Peak Frequency
Trinity Hall	A-Spine	3 mins	3-4 mins
	80	10-15 mins	10-15 mins
Iveagh Grounds	D-Spine	4 mins	4-5 mins
	72	30 mins	30 mins
	74	30 mins	30 mins
Santry Sports Grounds	A2	12 mins	12-15 mins
	A4	12 mins	12-15 mins
	D4	30 mins	30 mins
	E1	8 mins	8-10 mins
St. James' Hospital	G-Spine	6-8 mins	6-8 mins
	73	10-15 mins	10-15 mins

In addition to the improvements to the bus network put forward under BusConnects, the NTA's Park & Ride Strategy for the Greater Dublin Area 2021 identifies a number of strategic park and ride locations along the existing motorway network to increase access to high frequency bus services. The proposed locations of these park and ride facilities are summarised in **Table 5-3.** The majority of these schemes were originally marked for completion by the end of 2024. However, delays in starting the design of these park and ride facilities has resulted in none of them having yet started construction.

Table 5-3 Proposed Bus Based Park and Ride Facilities (GDA Park & Ride Strategy 2021)

Corridor	Location	No. of Spaces
M1	Lissenhall	1,000
M2 / N2	Ashbourne	350
M4	Junction 5 or Junction 6	500-600
M7	Kill	500
M11	Fassaroe	400
M11	Greystones	600

Action APT7 – Park and Ride
Support, through public consultation, the construction of Park and Ride facilities and transport interchanges at locations outside of Dublin City Centre to broaden the catchment of the existing public transport network.

5.3.4 MetroLink

MetroLink is the proposed high-capacity, high-frequency rail line running from Swords to Charlemont, linking Dublin Airport, Irish Rail, DART, Dublin Bus and Luas services, creating fully integrated public transport in the Greater Dublin Area. The scheme will include a new 3,000 space multistorey park and ride facility at Estuary to provide access to a greater catchment of potential commuters living near the M1 and R132 Old Belfast Road.

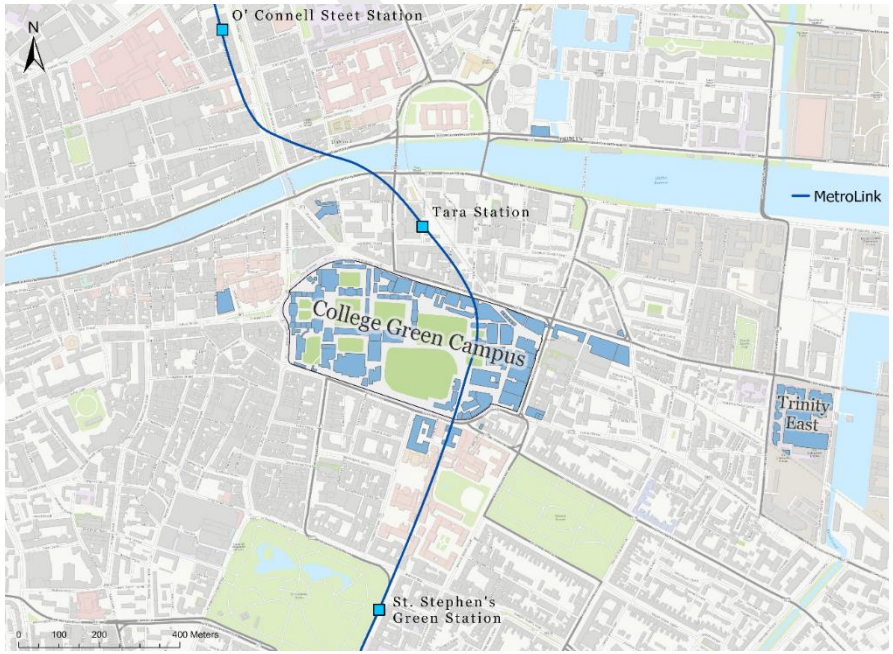


Figure 5-3 Location of Future Metro Stations in Relation to the College Green Campus

The College Green Campus will benefit directly from the new proposed metro station adjacent to the existing Tara Street railway station.

MetroLink will provide a new connection between the College Green Campus and Santry Sports Grounds, with Northwood metro station to be located a 16-minute walk or 5-minute cycle northwest of the grounds. It is estimated that the travel time between Tara Street and Northwood will be approximately 20 minutes or less. Peak hour metro frequency will be just 90 seconds.

A railway order application for MetroLink was submitted to An Bord Pleanála in September 2022. It is estimated that a decision on the application will be made before the end of 2024 with construction then taking 8 years to complete. No final date has been put forward for when the service will become operational.

5.4 Campus Travel Plan Actions for Public Transport

The following Campus Travel Plan actions for public transport are put forward to promote and support public transport use at Trinity College Dublin:

Table 5-4 Campus Travel Plan Actions for Public Transport

Campus Travel Plan Actions for Public Transport	
APT1	**Pearse Street Permeability -** Building on action AW9, physically open the gate at Printing House Square during its current operational hours to improve public transport access by reducing travel time from the western end of the campus to the 7 bus stops on Pearse Street, Tara Street train station and the future Tara Street metro station.
APT2	**Wayfinding Centre -** Collaborate with Trinity DisAbility to provide biannual trips to The Wayfinding Centre for those registered with the service that are not confident using public transport or that are unfamiliar with how to navigate the public transport system in Dublin.
APT3	**Wheelchair Space Availability Information -** Engage and collaborate with TFI to research ways of disseminating information on the real time availability of wheelchair spaces on public transport services.
APT4	**Wayfinding -** Provide physical wayfinding to Tara Street and Pearse Street railway stations as well as Trinity and Dawson Luas stops as part of an overall campus wayfinding strategy.
APT5	**Real-Time Information -** Provide Real Time Information for public transport services in high trafficked areas such as the Arts Block, libraries and on campus dining outlets.
APT6	**Support for Public Transport -** Continue to support development of proposed schemes that will improve and expand the public transport network in Dublin, including MetroLink, BusConnects, DART+ and upcoming Luas extensions by responding to all upcoming public consultations.
APT7	**Park and Ride –** Support, through public consultation, the construction of Park and Ride facilities and transport interchanges at locations outside of Dublin City Centre to broaden the catchment of the existing public transport network.

Theme 4: Vehicle Access

6 Theme 4: Vehicle Access

6.1 Overview

The proportion of students and staff driving to Trinity College Dublin is generally very low at just 3%. However, as a University with a wide range of departments with varying servicing requirements, some vehicle access to all of Trinity's locations will be necessary for the operation of the University.

This chapter provides an overview of private and commercial vehicle access and movements at the College Green Campus and dissects the way that car parking functions on the campus. A summary of the measures affecting vehicle access under the Dublin City Centre Transport Plan is then provided as well as a number of Campus Travel Plan Actions to further reduce the number of people driving to Trinity and to increase the efficiency of the necessary vehicle movements around the campus.

6.2 Private Vehicle Access and Parking at College Green

6.2.1 Vehicle Volumes at College Green

A Cordon Study was conducted at Lincoln Place, the Printing House and the service access at Botany Bay in April 2024 as part of the overall Transport Study that informs this Campus Travel Plan.

This Cordon Study revealed that Lincoln Place is overwhelmingly the most used vehicle gate for both private and goods vehicle access with 93% of cars, 97% of light goods vehicles (LGVs) and 95% of heavy goods vehicles (HGVs) entering the College Green Campus at this location. This equates to approximately 750 two-way vehicle movements on the average weekday at the Lincoln Place vehicle gate between 07:00-19:00. Of these 750 vehicle movements, approximately 422 are cars, 210 are LGVs and 63 are HGVs. This reduces to 309 two-way vehicle movements at weekends.

Table 6-1 Summary of Vehicle Cordon Count Results

		Lincoln Place	Printing House	Botany Bay
Total no. of two-way vehicle movements	Car & Motorbike	2,941	173	8
	LGV	1,086	14	14
	HGV	347	14	2
	Total	***4374***	***201***	***24***
Average no. of weekday two-way vehicle movements	Car & Motorbike	477	35	2
	LGV	211	3	3
	HGV	63	3	<1
	Total	***751***	***41***	***5***
Average no. of weekend two-way vehicle movements	Car & Motorbike	277	Gate open weekdays only	Gate open weekdays only
	LGV	16		
	HGV	16		
	Total	***309***		

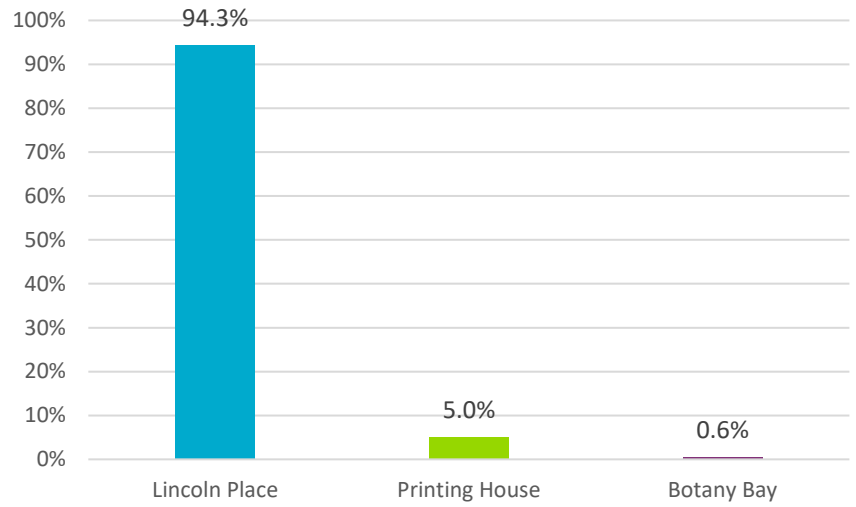


Figure 6-1 Proportion of Vehicles using each Access Point at the College Green Campus

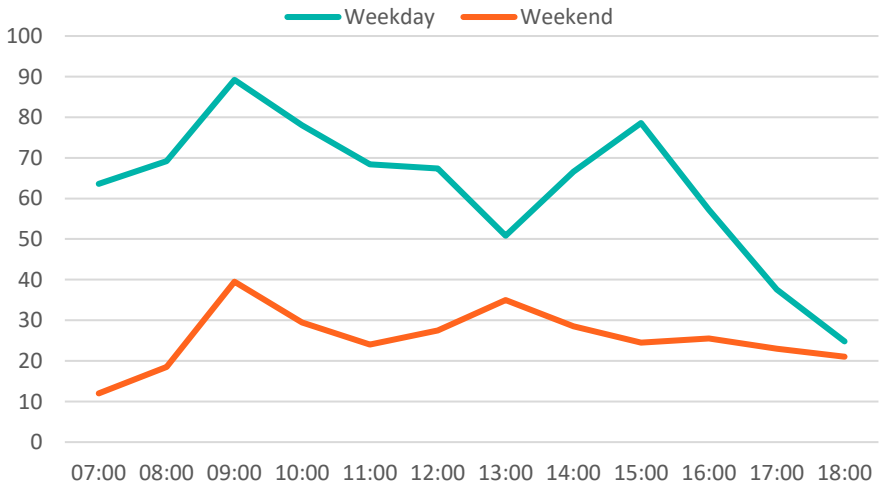


Figure 6-2 Average Two-way Vehicle Flows Through Lincoln Place

Weekday vehicle activity at Lincoln Place is busiest during two distinct peak hours, from 09:00-10:00 and 15:00-16:00. The weekday AM and PM peak hours for vehicle movements at Lincoln Place do not overlap with the weekday AM and PM peak hours for pedestrians. The weekday PM peak hour for vehicles does not overlap with that for cyclists, however, the weekday AM peak hour for cyclists and vehicles at Lincoln Place is the same.

6.2.2 Car Parking

Private vehicles with a valid staff parking permit can enter the College Green Campus via Lincoln Place and make use of the car parking areas illustrated in **Figure 6-3**.

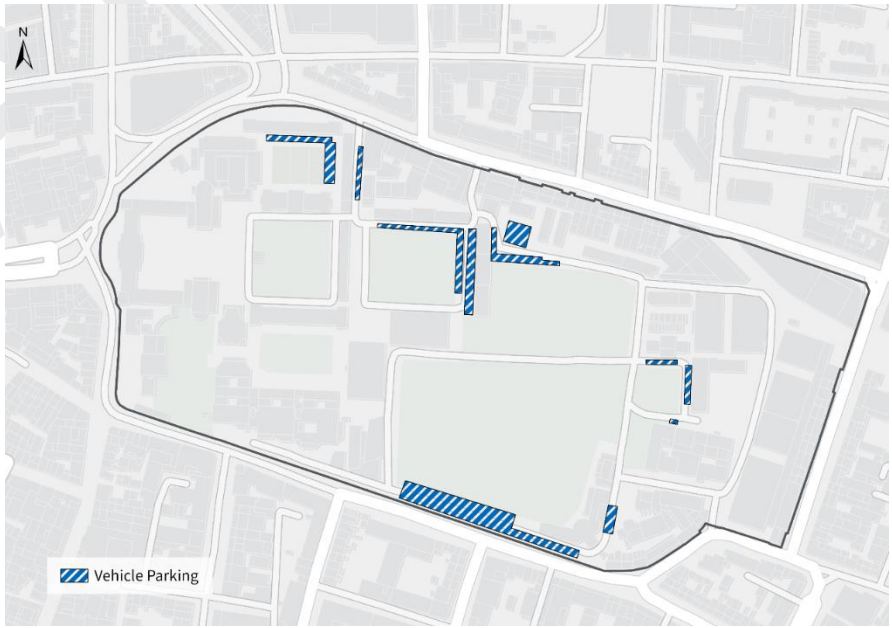


Figure 6-3 Vehicle parking locations at the College Green Campus

There are approximately 250 car parking spaces available at College Green with an additional 16 spaces located close by at South Leinster Street and 29 spaces at the Trinity Biomedical Sciences Institute. The location of these spaces on the campus is not provided by Trinity in map or text form and there are no clear routes or signposting to car parking areas on the campus.

All full-time College staff are entitled to apply for a free car parking permit on the College Green Campus, while there is an annual fee of €615 to rent a space at South Leinster Street or the Trinity Biomedical Sciences Institute. Trinity College Dublin is the only university in the Greater Dublin Area that does not charge for a parking permit on its campus.

Car parking is available to staff weekdays and weekends, with parking demand typically not exceeding supply on any given day. The daily surplus of car parking has only come about following the introduction of hybrid working following the Covid-19 pandemic. There are approximately 4,500 active parking permits at any given time, suggesting that many staff hold a permit 'just in case' or for use outside their typical working hours, such as travelling into the City Centre for leisure purposes at weekends. Trinity should investigate introducing a fee for parking permits at the College Green Campus to discourage staff from driving to work and incentivise the use of more sustainable modes of transport. Funds generated from the car parking permit fee could be used to upgrade facilities for active travel and to increase the promotion of sustainable commuting to Trinity.

Car parking at College Green occupies an area of approximately 3,000m2. As part of the Climate Action Plan 2024 and the objectives set out in the Trinity College Dublin Sustainability Strategy 2023-2030, Trinity is obligated to reduce the overall car parking provision at the College Green Campus by 50% during the lifetime of this plan.

Action AV1– Car Parking Permit Fee
Investigate the feasibility of introducing a fee for car parking permits for staff with regular working hours.

Action AV2 – Weekend Car Parking Permits
Remove weekend car parking permits for staff without weekend working hours.

A car parking usage survey should be conducted to identify areas where this car parking can be removed. Upon removal of this car parking, the approximate 1,500m^2 of additional space on the campus could be given over to cycle parking, recreational space for students and staff or biodiversity projects.

Action AV3 – Car Parking Reduction
Undertake a car parking utilisation survey to identify areas where car parking can be reduced across the College Green Campus. Reduce the car parking provision by at least 50% based on the outcome of this survey, in line with the objectives set out in the Trinity Sustainability Strategy 2023-2030.

Students and staff with a Parking Permit for People with Disabilities (Blue Badge) are also entitled to apply for a Trinity parking permit to park at the College Green Campus free of charge. Those visiting the campus for academic or business purposes who hold a Parking Permit for People with Disabilities can also park at College Green free of charge.

Of the approximate no. 250 car parking spaces on the College Green Campus, 9 no. are designated enabled parking. This is far below the minimum requirement that 5% of car parking spaces are reserved for use by persons with disabilities under the *Building Regulations: Technical Guidance Document M 2022*, as published by the Department of Housing, Local Government and Heritage. As with the information available online regarding gate opening hours, the map showing the location of accessible car parking spaces has not been updated since 2009 (College Maps : Trinity College Dublin)

Figure 6-4 Enabled Parking Bays at The Physics Garden and New Square (observed July 2024)

Action AV4 – Enabled Parking Information
Update online information regarding the location of accessible car parking spaces.

A number of the enabled car parking spaces at College Green are also of substandard quality. Many spaces do not provide the recommended 1200mm wide access zone on both sides and at the rear of the space. This access zone is essential to allow those with reduced mobility enough space to safely and comfortably exit and enter their vehicles. Although this Campus Travel Plan seeks to reduce the overall number of car parking spaces at College Green, it is important that an appropriate provision is retained for use by those with reduced mobility.

Action AV5 – Upgrade Enabled Parking Bays
Upgrade the existing provision of disability car parking spaces so that they are compliant with Building Regulations: Technical Guidance Document M 2022 and the Dublin City Development Plan 2022-2028

6.3 Access to College Green for Servicing and Deliveries

6.3.1 Daily Access

There are 2 primary vehicle entrances at the College Green Campus used for servicing and deliveries. The 2 primary entrances are located at Lincoln Place, to the southeast corner of the campus and the Printing House which is located on the north-northwest side of the campus.

Figure 6-5 Vehicle Barrier at Lincoln Place Gate

Figure 6-6 Vehicle Barrier at The Printing House

Figure 6-7 shows the locations of these entrances around the campus perimeter as well as the internal road network for the campus. Although these are the primary vehicle paths, vehicles can enter all areas of the campus for servicing or during special events. All areas of the campus are shared between pedestrians, cyclists and vehicles.

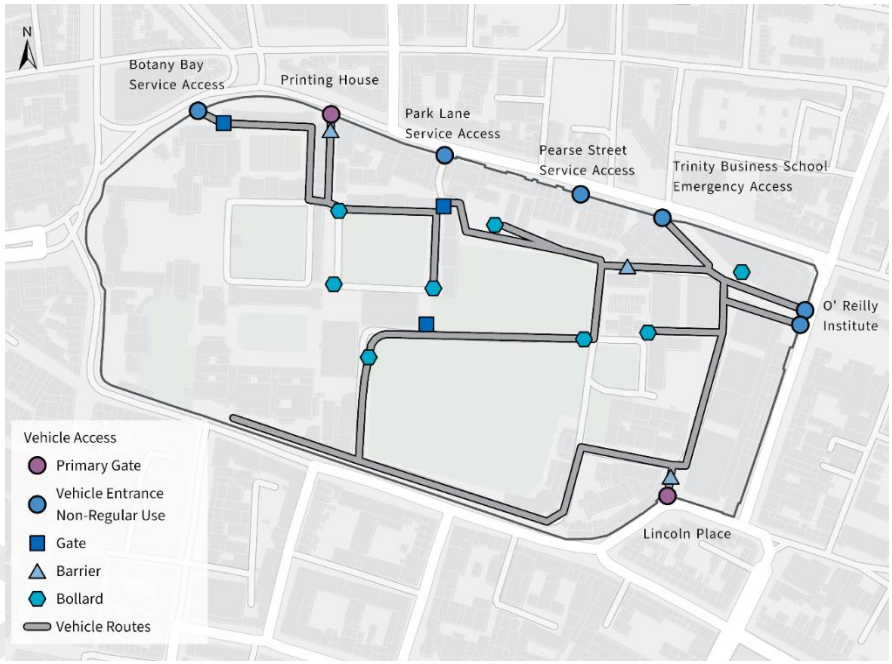


Figure 6-7 Vehicle Access and Routing at the College Green Campus

Both main vehicular entrances are guarded by lifting barriers. The Lincoln Place gate is open 7 days a week from 05:30-00:00 while the Printing House vehicle entrance has shorter opening hours, with the gate only operational from 08:00-10:00 and 16:00-19:00 Monday to Friday. An additional 6 entrances are capable of handling vehicle traffic but are seldom used or function primarily as emergency access points.

Deliveries to the Trinity Gift Shop, storage at Printing House Square and large vehicles serving the northwestern end of the campus all arrive through the vehicle gate at the Printing House. The narrow gap between the houses at the northeastern corner of New Square creates a pinch point, restricting larger vehicles from traversing the length of the

campus. Deliveries to The Buttery and Dining Hall can arrive via a dedicated access, located to the rear of Botany Bay. The majority of other traffic enters the campus through Lincoln Place, including regular contractors, postage destined for the Trinity Mail Room, couriers, books arriving from / being sent to external library storage, refuse vehicles and most other deliveries.

Figure 6-8 College Green Campus Vehicle Entrances not in Regular Use

It is estimated that an average of 6 couriers visit the College Green Campus each weekday, including 1 arrival each from UPS, Amazon, DHL and Fastway and 2 arrivals per day from DPD. Other courier movements are demand dependent, such as deliveries from the Trinity Library storage facilities in Santry and Damastown or catering deliveries for on campus events. These frequent yet irregular deliveries can create a large vehicle presence in some parts of the campus which adds to the vehicle and pedestrian / cyclist conflict and likely affects the local air quality on a campus largely shielded from the localised pollution generated on nearby roads.

Action AV6 – Freight Management Study
Undertake a Freight Management Study to identify the full extent of servicing and delivery demands generated at College Green and to uncover ways to improve the efficiency of these vehicle movements while reducing their impact on pedestrians and cyclists.

Contractors arriving on site must present to one of the security huts at either the Printing House or Lincoln Place and will be granted permission to the enter the campus, provided that the security team has been informed of their arrival in advance by a relevant Trinity staff member. Typically, contractors are permitted to enter the campus with a maximum of two vans and can be assigned up to two car parking spaces to create a small compound. Contractors are not permitted to arrive on campus in their personal cars.

Action AV7 – Automatic Number Plate Recognition (ANPR)
Introduce Automatic Number Plate Recognition technology at the Lincoln Place and Pearse Street Gates to speed up security checks during peak times.

It is the responsibility of each courier to ensure that their deliveries are dropped off at their final on campus destination. Couriers are not given specific routes through the campus to get to their destination and instead must decide for themselves the most efficient routes. This can create conflicts with pedestrians and cyclists when delivery vehicles block busy pathways or attempt to traverse the campus at busy times, such as the changeover period between lectures.

Action AV8 – Vehicle Routes
Define clear vehicle routes through the College Green Campus for routine servicing and deliveries to reduce existing conflicts with pedestrians and cyclists.

Action AV9 – Vehicle Ban for Historic Areas
Introduce a motor vehicle free policy in Front Square, Library Square and Fellows Square with the exception of access for servicing during limited times and emergency vehicle access.

Vehicles owned and operated by Trinity typically enter and exit the campus via Lincoln Place. The majority of Trinity owned vehicles are operated by Estates & Facilities with some departments, such as Trinity Library, owning vans to provide a stop gap when there are issues with courier services. All vehicles operated by Estates & Facilities are either fully electric or fuelled with HVO.

Action AV10 – Zero Emissions Vehicle Strategy
Produce a Zero Emissions Vehicles (ZEV) Strategy for all vehicles owned by Trinity or undertaking servicing and delivery functions on behalf of Trinity to minimise the emissions generated by vehicles as part of Trinity's operations and encourage the use of ZEVs wherever possible in the daily running of the University.

The vans are typically used within the College Green Campus to undertake security patrols or for the internal movement of goods. The vans are also used by the Estates & Facilities team to travel between Trinity owned locations, including the Estates & Facilities workshop, based at Trinity East.

6.3.2 Alternative Servicing and Delivery Methods

E-cargo bikes are becoming increasingly popular among couriers and other delivery services as an energy efficient and cost-effective way to handle last mile deliveries in congested urban environments. Companies such as An Post and UPS are regularly seen travelling across Dublin City on compact e-cargo bikes making deliveries.

There have been attempts in the past to replace a proportion of the Estates & Facilities vehicles with e-cargo bikes, but the scheme was unsuccessful due to insurance, storage, and maintenance issues. Although the emissions generated by the existing Estates & Facilities vehicles is relatively low, the introduction of e-cargo bikes for the use by estates and facilities should be re-examined to reduce the overall footprint of vehicles on campus, particular in the busy historic squares such as Front Square, Library Square, New Square and Fellows Square.

Case Study – Last Mile Delivery at the University of Toronto
The University of Toronto was ranked 1st in the QS 2025 Sustainability University Rankings. In 2022, the University partnered with Canadian courier Purolator to create a living lab where researchers at the University could study the impact of last mile delivery schemes.
A last mile delivery hub was established on the campus inside a standard shipping container, placed across existing car parking spaces. A more permanent structure could be constructed at Trinity to implement such a hub in a more aesthetically sensitive and pleasing manner and could be collocated with other services such a mobility hub. Deliveries to the hub are made once a day where students, staff and those living and working locally can collect their packages. Door to door deliveries still take place on the campus as

required with goods arriving at the delivery hub and being transported across the campus using e-cargo bikes. Compared to traditional vans, e-cargo bikes take up less space on the campus, are easier to park and reduce harmful emissions. The last mile delivery hub is still operating successfully today.

Figure 6-9 Last Mile Delivery Hub at the University of Toronto (Source: Urban Quick Stop provides a living laboratory to study the challenges of last-mile delivery - U of T Engineering News)

Action AV11 – Last Mile Delivery

Subject to the results of the Freight Management Study, introduce a last mile delivery hub to reduce the number of vehicles travelling across the College Green Campus.

With e-cargo bikes becoming more popular, there is room to explore the use of such vehicles to provide a last mile delivery service for smaller parcels and postage being distributed across the College Green Campus. This would reduce the number of large vehicles entering the College Green Campus and create an improved pedestrian and cycling environment. There is also scope to investigate replacing some of the Trinity owned vehicles such as vans with e-cargo bikes for moving equipment around the campus or moving goods between the Estates & Facilities workshop at Trinity East and other Trinity owned sites. As discussed in further detail in chapter 6, there is potential for the implementation of a last mile delivery scheme to replace delivery vans on the College Green Campus with e-cargo bikes to reach their final destination.

Pending the outcome of the Freight Management Study, Trinity should implement a last mile delivery scheme using e-cargo bikes to remove a large proportion of unnecessary vehicle movements from the College Green Campus. This could be co-located with a mobility hub housing micromobility modes for use by students and staff travelling between Trinity sites.

6.3.3 Access During Special Events

In an effort to generate additional income to support its academic pursuits, Trinity College Dublin hosts a number of large-scale events throughout the year.

Following the conclusion of examinations at the end of May, the College Green Campus provides accommodation for tourists over the summer months. Additional servicing arrangements are required at the campus during this time, such as additional cleaning and laundry services. Laundry is typically collected twice a week during the summer by large vans but this can increase to three times when demand is high. Restaurants on campus such as The Buttery and The Perch Café also

remain open during the summer months to cater to hotel guests and tourists alike.

In April each year, Trinity hosts the Trinity Ball at its College Green Campus. The ball is organised and run by MCD who supply all equipment, catering and staff for the events. All of this apparatus, including generators, stages, lighting and catering outlets are brought onto the campus via Lincoln Gate and removed in the same way by MCD following the event. The same servicing arrangements are in place for the Trinity Summer Series, a series of live concerts held on the College Green Campus each July and also organised by MCD.

Other events held on the College Green Campus which require bespoke serving and deliveries include the numerous conferences that take place in the Arts Block throughout the year. Vehicles making deliveries to the Arts Block typically enter the campus via Lincoln Place and travel along the Moyne Institute and southern side of College Park to reach the loading bays located to the rear of the Arts Block. Increased vehicle movements due to filming or the arrival of special guests to the campus are organised on a bespoke basis.

6.4 Dublin City Centre Transport Plan Traffic Management Proposals

In order to successfully implement the pedestrian and cycling environment improvement projects discussed in sections 3.5 and 4.4.1, the Dublin City Centre Transport Plan outlines a number of proposals to reduce vehicular traffic and create more space for active travel. The implementation of these projects will change the way that vehicles can travel to the College Green Campus, particularly at Lincoln Place. The traffic management and public realm proposals set out in the Dublin City Centre Transport Plan that will have an effect on traffic travelling to Trinity include:

- **Bus Gates at Bachelors Walk and Aston Quay:** The introduction of bus gates on the north and south quays at Bachelors Walk and Aston Quay in August 2024 were the first traffic management proposals implemented as part of the Dublin City Centre Transport Plan. At Bachelors Walk, all traffic except for buses, taxis, pedestrians and cyclists, must turn left onto O'Connell Street and cannot continue straight onto Eden Quay or right onto O'Connell Bridge. At Aston Quay, all traffic except for buses, taxis, pedestrians and cyclists travelling from Westmoreland Street must continue north onto O'Connell Bridge, those travelling from Burgh Quay can turn left onto D'Olier Street or right onto O'Connell Bridge. The bus gates are operational from 7am to 7pm only.
- **Westland Row / Pearse Street Junction:** This traffic management scheme proposes to impose restrictions allowing only northbound public transport and cyclists to make the left turn from Westland Row onto Pearse Street. To accommodate this, a right turn for general traffic has been introduced at the junction, with Pearse Street made two-way between Westland Row and Sandwith Street. The reduction of traffic lanes on Pearse Street and Tara Street as a result of this scheme will allow for the enhancement of the active travel environment along the street while also affording a greater priority for public transport vehicles.
- **Beresford Place and Custom House Quay:** With reduced traffic along the North Quays due to the changes at Pearse

Street, Aston Quay and Bachelors Walk, there is an opportunity to create a pedestrianised plaza at either Beresford Place or Custom House Quay. The options to pedestrianise one of these areas both received significant support during the public consultation on the draft City Centre Transport Plan and as such the project is subject to further investigation to decide which area will be converted into a pedestrian plaza. It is expected that this measure could be implemented some time before the end of 2028.

- **College Green and Dame Street:** As discussed in Chapter 5, there are proposals to create a European style plaza at College Green, stretching as far as the junction with George's Street. Should this plaza be built, all traffic except for the Luas, pedestrians and cyclists will be removed from the area. A design team has been appointed for this scheme with completion currently expected before the end of 2028.
- **Parliament Street:** Works began in August 2025 to recreate the traffic free environment implemented along Capel Street south of the Liffey on Parliament Street.
- **Lincoln Place:** The Dublin City Centre Transport Plan sets out proposals to create a pedestrianised plaza along either Lincoln Place or Merrion Street Lower. The exact location of this pedestrianised plaza is yet to be decided and will rely on further traffic modelling and the removal of bus traffic as part of BusConnects. Should either of these streets become pedestrianised, it will have a significant effect on how traffic directly accesses the Lincoln Place gate. However, with much further study and other interventions on public transport needed, no certain date has been put forward for the implementation of this intervention.

6.4.1 Microsimulation at Lincoln Place

A microsimulation exercise to determine the impacts of the proposed Dublin City Centre Transport Plan pedestrianisation of Lincoln Place on the access to the campus at this location using the Paramics modelling software was carried out as part of the overall Trinity College Dublin Transport Study. The microsimulation models have been developed using Paramics Discovery version 27.0. This represents the latest version of the software at the time of writing. Vehicle numbers, profiles and categories were gathered from junction turning counts carried out in April 2024.

Scenarios

A Base Scenario with the road network as it is currently was created first. The results of the Base Scenario were validated and calibrated using turning count numbers and queue lengths gathered from the traffic surveys.

A Future Scenario was then created which incorporated the following assumptions, illustrated in **Figure 6-10** below.

- Nassau Street, Leinster Street South and Clare Street will be a one-way road in a west to east direction.
- Kildare Street will be a one-way street for general traffic in a north to south direction and a two-way street for public transport.

- Lincoln Place will be pedestrianised with access to Trinity College Dublin for vehicles only possible from the Lincoln Place/Westland Row junction.
- Merrion Street Lower, Merrion Square West, Merrion Square North, Fenian Street and Westland Row will be two-way streets.

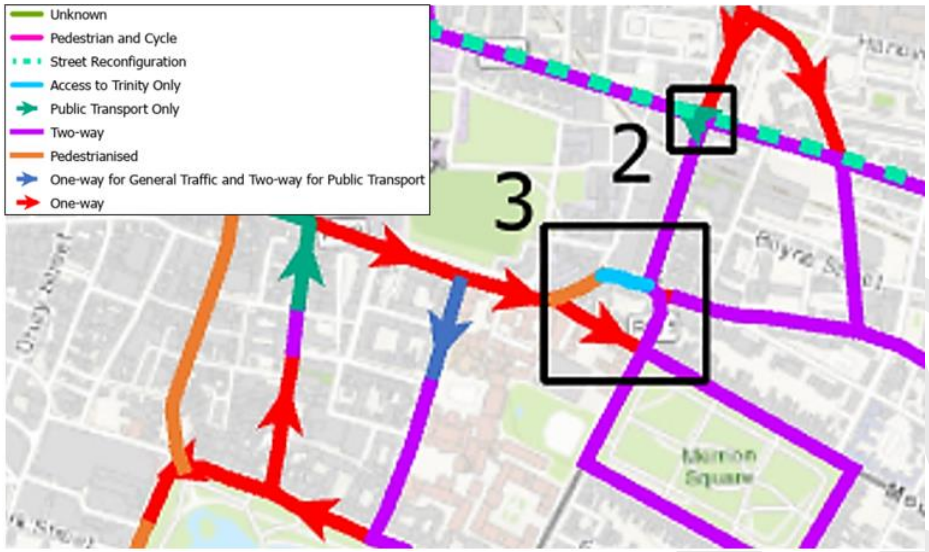


Figure 6-10 Future Scenario Road Network Assumptions

Figure 6-11 Paramics Base Network for the Microsimulation at Lincoln Place

Figure 6-12 Paramics Future Network for the Microsimulation at Lincoln Place

Key Findings

The microsimulation exercise found that the overall road network will operate more efficiently in the future scenario with reduced queueing observed at the majority of junctions.

During the AM peak hour journey times **to** Trinity College Dublin will experience:

- Significant increases from Nassau Street (99 seconds) and Kildare Street (94 seconds)
- Significant decreases from Merrion Square West (313 seconds) and Westland Row (77 seconds)

During the PM peak hour journey times **to** Trinity College Dublin will experience:

- Significant increases from Nassau Street (106 seconds)
- Significant decreases from Merrion Square West (528 seconds) and Westland Row (50 seconds)

The changes in journey times **from** Trinity College Dublin will be less significant with:

- Maximum increases of 20 seconds in the AM peak hour
- Maximum increases of 27 seconds in the PM peak hour

For both the AM and PM peak hours the average speed of vehicles in the model has increased in the future year scenario, indicating that the road network is operating more efficiently.

In the AM Peak Hour vehicles within the model travel on average 3.6 km/h faster and in the PM Peak Hour vehicles travel on average 4.8 km/h faster in the future scenario than in the current base scenarios.

The microsimulation exercise illustrates that the pedestrianisation of Lincoln Place and the reorientation of the surrounding road network will offer improvements in terms of queueing at the majority of surrounding junctions, reduced journey times to and from Trinity College Dublin in a number of directions and increased overall efficiency of the surrounding road network for vehicular traffic. The pedestrianisation of Lincoln Place will negatively impact vehicular traffic arriving to Trinity College Dublin via Nassau Street and Kildare Street with increases of approximately 100 seconds in the AM and PM peak hours.

The pedestrianisation of Lincoln Place will provide an improved public realm for pedestrians as well as a route for cyclists that is separated from vehicular traffic. This scheme aims to remove vehicular through-traffic to make it a calmer, more attractive people-friendly place to be. The design of Lincoln Place will be proposed with an emphasis on place-shaping and public realm led street design that prioritises people of all ages and ability to safely walk and cycle.

Figure 6-13 Pedestrianisation of Lincoln Place as shown in the Paramics Microsimulation Model

6.5 Campus Travel Plan Actions for Vehicle Access

The following Campus Travel Plan actions for Vehicle Access are put forward to encourage a reduction in vehicle movements to and from the College Green Campus while supporting the servicing needs of Trinity.

Table 6-2 Campus Travel Plan Actions for Vehicle Access

Campus Travel Plan Actions for Vehicle Access	
AV1	**Car Parking Permit Fee -** Investigate the feasibility of introducing a fee for car parking permits for staff with regular working hours.
AV2	**Weekend Car Parking Permits -** Remove weekend car parking permits for staff without weekend working hours.
AV3	**Car Parking Reduction -** Undertake a car parking utilisation survey to identify areas where car parking can be reduced across the College Green Campus and reduce the car parking provision by at least 50% based on the outcome of this survey.
AV4	**Enabled Parking Information -** Update online information regarding the location of accessible car parking spaces.
AV5	**Upgrade Enabled Parking Bays -** Upgrade the existing provision of disability car parking spaces so that they are compliant with Building Regulations: Technical Guidance Document M 2022 and the Dublin City Development Plan 2022-2028
AV6	**Freight Management Study -** Undertake a Freight Management Study to identify the full extent of servicing and delivery demands generated at College Green and to uncover ways to improve the efficiency of these vehicle movements while reducing their impact on pedestrians and cyclists.
AV7	**Automatic Number Plate Recognition -** Introduce Automatic Number Plate Recognition technology at the Lincoln Place and Pearse Street Gates to speed up security checks during peak times.
AV8	**Vehicle Routes -** Define clear vehicle routes through the College Green Campus for routine servicing and deliveries to reduce existing conflicts with pedestrians and cyclists.
AV9	**Vehicle Ban for Historic Areas -** Introduce a motor vehicle free policy in Front Square, Library Square and

	Campus Travel Plan Actions for Vehicle Access
	Fellows Square with the exception of access for servicing during limited times and emergency vehicle access.
AV10	**Zero Emissions Vehicle Strategy -** Produce a Zero Emissions Vehicles (ZEV) Strategy for all vehicles owned by Trinity or undertaking servicing and delivery functions on behalf of Trinity to minimise the emissions generated by vehicles as part of Trinity's operations and encourage the use of ZEVs wherever possible in the daily running of the University.
AV11	**Last Mile Delivery -** Subject to the results of the Freight Management Study, introduce a last mile delivery hub to reduce the number of vehicles travelling across the College Green Campus.

Theme 5: Visitors and Tourism

7 Theme 5: Visitor and Tourists at College Green

7.1 Overview

Trinity College Dublin is Ireland's top ranked university with the overarching mission to *"promote a diverse, interdisciplinary, inclusive environment which nurtures ground-breaking research, innovation, and creativity through engaging with issues of global significance".*

In order to achieve this mission, the University relies on a number of income streams, including those generated by tourism and events. This chapter provides an overview of some of these activities and the additional volume of movements that they generate. This chapter also sets out a number of Campus Travel Plan Actions for tourism and visitors to promote sustainable transport among all who travel to Trinity.

7.2 Visitors and Tourism

7.2.1 Visitor and Tourism Activities

Trinity is home to a number of tourist attractions including The Book of Kells, the Old Library, the historic College Green Campus, the Museum Building and the Douglas Hyde Gallery. All revenue generated from these attractions is fed back to the University to improve the experience for its students.

The Book of Kells attracts the largest proportion of tourist to the campus, with 968,654 visitors in 2023. The number of visitors to the Book of Kells has been decreasing since 2019 when visitor numbers peaked at 1,144,410. This reduction in visitor numbers has been intentional in order to reduce the burden of tourism on the University's academic activities. A modern digital ticketing system has allowed for tighter control on visitor numbers and has removed the once common long queues for The Book of Kells from Fellows' Square.

It is estimated that approximately 25% of visitors to The Book of Kells also participate in a guided tour of the College Green Campus. Although the new Trinity Trails tour was launched in 2022 to try and spread tourism move evenly across the campus, crowding at the western side still remains a problem, particularly at Front Square. Work is ongoing by Trinity Tourism to promote some of the smaller tourist attractions located away from Front Square and Fellows Square in an additional effort to spread the impact of tourism more evenly across the campus.

Action AVT1 – Re-design Campus Tour Routes
Collaborate with Trinity Tourism and Trinity DisAbility to redesign campus tour routes in an effort to minimise crowding on the enabled pathways.

Outside of these ongoing tourism ventures throughout the year, Trinity provides accommodation for tourists during the summer months. Between College Green and Trinity Hall, Trinity rents out over 1,000 rooms, with occupancy peaking in July.

As well as tourism activities, many visitors travel to Trinity for one of the many events that take place throughout the year. The College hosts a wide variety of events throughout the year including concerts at College Park, public lectures, academic conferences, weddings, art exhibitions and theatre shows.

7.2.2 Travelling to College Green

As discussed in chapter 9, public parking is not available at any Trinity owned locations. Although all visitors to the campus enter by walking or

cycling, the proportion who drive or take public transport into the City Centre to visit Trinity is not understood. There is scope to further understand how visitors travel to Trinity by adding travel related questions to existing visitor experience and feedback surveys.

Action AVT2 – Visitor Travel Information
Introduce travel-based questions into existing visitor feedback surveys to better understand how tourists and visitors get to Trinity.

For those unfamiliar with Dublin, the Visit Trinity website provides information on how to travel to the campus from Dublin Airport, Connolly Train Station / Busáras and Heuston Station. All suggested methods of transport include taxi or public transport. Active travel is not mentioned despite walking and cycling often being quicker than public transport during peak times.

Action AVT3 – Promote Sustainable Travel for Visitors and Tourists
Collaborate with Trinity Tourism to promote active travel as a way for tourists and visitors to travel to the College Green Campus, including adding active modes to the list of options promoted in the 'How to get here' section of the Visit Trinity website.

With the large amount of cycle parking available at College Green, particularly during the summer months, there is great potential to promote cycling among visitors to Trinity. With DublinBikes stations also located directly adjacent Trinity's College Green Campus and many of the other popular tourist attractions across Dublin, it would be possible for tourists at Trinity to cycle to the campus and continue by bike onto their other destinations across the city.

7.3 Future Plans for Visitors at College Green

As stated in the beginning of this chapter, Trinity College Dublin is first a university with its academic activities coming before all else. As such, there are no plans to increase the number of tourists at College Green, especially during term time.

Trinity Tourism are currently working to activate some of the smaller tourist attractions at the College Green Campus in an effort to reduce crowding around Front Square and encourage the existing level of tourists to spend longer in Trinity rather than increasing visitor numbers.

The Old Library is beginning to undergo extensive renovations with many of the collections already moved off campus to The Library's extensive storage facilities. As works on The Old Library continue, The Book of Kells will be temporarily moved to The Printing House, shifting tourists away from Fellows' Square and into New Square. It is recommended that Trinity Tourism engage directly with Trinity DisAbility to understand the impact that this shift in tourist concentration may have on those registered with the service. It is noted that the Trinity DisAbility Service is located in Printing House Square, adjacent to the Printing House.

7.4 Campus Travel Plans for Visitors at College Green

The following Campus Travel Plan actions for visitors and tourism are put forward to create a sustainable transport environment for those unfamiliar with Trinity.

Table 7-1 Campus Travel Plan Actions for Visitors and Tourism

Campus Travel Plan Actions for Visitors and Tourism	
AVT1	**Redesign Campus Tour Routes -** Collaborate with Trinity Tourism and Trinity DisAbility to redesign campus tour routes in an effort to minimise crowding on the enabled pathways.
AVT2	**Visitor Travel Information -** Introduce travel-based questions into existing visitor feedback surveys to better understand how tourists and visitors get to Trinity.
AVT3	**Promote Sustainable Travel for Visitors and Tourists -** Collaborate with Trinity Tourism to promote active travel as a way for tourists and visitors to travel to the College Green Campus, including adding active modes to the list of options promoted in the 'How to get here' section of the Visit Trinity website.

Future Modal Split Targets

8 Future Modal Split Targets

8.1 Overview

This chapter sets out the future modal split targets for students and staff at Trinity College Dublin for this Campus Travel Plan's horizon year of 2030. These modal shift targets have been set out based on:

- the location of Trinity's campuses across Dublin;
- Existing student and staff travel patterns and modal split;
- Previous student and staff travel patterns and modal splits;
- Distance that students and staff commute to Trinity;
- Changing national, regional and local policy context;
- A review of existing and proposed transport infrastructure and services.

The proposed measures and actions to achieve these targets are summarised in **Appendix A.**

8.2 Future Modal Split Targets

The future 2030 modal split target for students and staff travelling to Trinity College Dublin is presented in **Figure 8-1**. These targets seek to increase participation in active travel beyond the recent 2018 peak of 42% to 44%. This mirrors the total proportion of students and staff using active travel to commute to Trinity in 2011, when a total of 44% travelled this way. This is higher than the National Climate Action Plan (2024) target of 28% of journeys being undertaken by active travel by 2030. Trinity is already exceeding this target, with 20% of students and staff walking to Trinity and 9% cycling.

Based on the research undertaken in preparing this Campus Travel Plan and the actions put forward in the Plan, the 2030 mode share target for Trinity is seen as ambitious yet achievable. However, the appointment of a dedicated Sustainable Travel Officer to administer this Plan from the outset will be crucial in realising these targets.

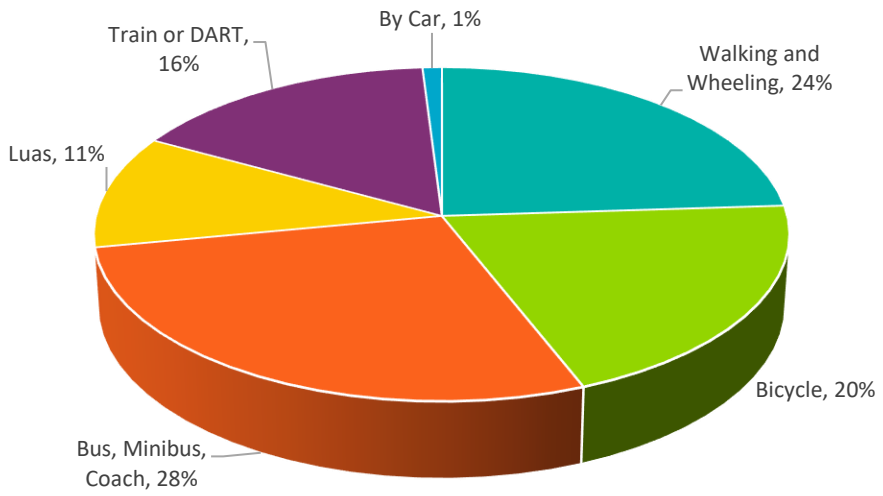


Figure 8-1 2030 Modal Split Targets for Students and Staff travelling to Trinity College Dublin

Table 8-1 provides a comparison between the latest 2023 staff and student modal split with the 2030 modal split targets presented in **Figure 8-1.** Although the proportion of students and staff travelling to Trinity by car is currently very low at just 3%, the proportion of those choosing active modes for their commute has dropped by 13% since 2018, correlating with an 11% increase in the proportion of those choosing public transport for their commute. Although public transport is more sustainable than travel by private car, active commuting supports physical health, mental health and overall wellbeing and as such has been prioritised over public transport use in the future modal split targets.

Table 8-1 Existing Modal Split and Future Target Modal Split Comparison

Mode	Existing 2023 Modal Split	Future 2030 Target Modal Split
Walking and Wheeling	20%	24%
Bicycle	9%	20%
Bus, minibus or coach	33%	28%
Train or Dart	20%	16%
Luas	13%	11%
By car	3%	1%

There is a proposed increase of 4% in the proportion of students and staff walking to Trinity when compared to the 2023 modal split. This increase is seen as realistic as the proportion of students and staff walking to Trinity recently sat at 28% in 2018 and 2019. There is a proposed 11% increase in the proportion of students and staff cycling to Trinity when compared to the 2023 modal split. Although the proportion of students and staff cycling to Trinity has not surpassed 13% in the 2018, 2019 or 2023 travel surveys, 22% of students and staff cycled 16 years ago in 2011.

The increase in cycling being proposed as part of these modal split targets aims to promote active commuting to as many members of the College community as possible; while recognising that not everyone lives within walking distance of Trinity. As of 2023, 32% of students and staff live within 3km of Trinity, while 51% live within 6km of Trinity with 69% live within 10km. The proposed 6% increase in cycling above the previous 2018 peak of 14% is heavily supported by the 22 actions put forward as part of this Campus Travel Plan to promoted cycling to Trinity. The actions put forward cover a wide range of areas to support cycling, including actions to upgrade cycle parking, increase parking for non-standard cycles, implement behaviour change programmes, continue to lobby for segregated cycling facilities, boost access to bikes for students, expand permeability at the College Green Campus and enhance information for cyclists. Encouraging students and staff to choose sustainable modes for their commute to Trinity will nevertheless be influenced by any change in the distance they travel to Trinity and the changing housing landscape.

Monitoring and Implementation

9 Implementation and Monitoring Plan

9.1 Overview

The following chapter sets out the requirements to implement and monitor the impact of this Campus Travel Plan. The implementation and coordination of the Campus Travel Plan in the short, medium and long term will require management support and resources if it is to be successful in achieving its long-term aspirations and targets.

9.2 Implementation Plan

An Implementation Plan has been prepared to accompany this Campus Travel Plan and can be found in **Appendix A**. The Implementation Plan collates all of the actions put forward in this Campus Travel Plan and notes whether they should be implemented in the short-term (2025), medium-term (2026-2027) or long term (2028-2030).

A dedicated Sustainable Travel Officer should be appointed at the outset of this plan and remain in place for the lifetime of the plan. This Sustainable Travel Officer will be responsible for overseeing the implementation of the actions listed within this Plan and will be supported in their role by the wider Healthy Trinity Smarter Travel Group.

Action AIM1 – Sustainable Travel Officer
Ensure a dedicated Sustainable Travel Officer is in place to oversee the implementation of the Campus Travel Plan Actions until at least 2030.

As an overall guiding target for the Plan, the Sustainable Travel Officer should seek to immediately apply for the Smarter Travel Mark and use the outcome of the award process to rate the current level of support for sustainable Travel at Trinity. The Smarter Travel Mark is a three-tiered certification awarded by the National Transport Authority that recognises and celebrates organisations that support active and sustainable travel. In the event that the gold Smarter Travel Mark is not achieved on the first application, the Sustainable Travel Officer should use the feedback from the NTA to identify the priority actions from this Plan.

Action AIM2 – Smarter Travel Mark
Upon adoption of this plan, immediately apply for the Smarter Travel Mark to recognise the current work being carried out by the Healthy Trinity Smarter Travel Group.

9.3 Monitoring Plan

A programme of monitoring has been designed to generate information by which the success of the Campus Travel Plan can be evaluated. It is essential that the continued rollout and subsequent impact of the Campus Travel Plan actions are monitored on a regular basis to:

- Demonstrate that the various targets are being met (or not met, at which point the measures being used should be reviewed);
- Ensure that the Campus Travel Plan continues to receive support from students, staff and management; and
- Show that the financial resources dedicated to the promotion of sustainable travel are being well spent.

It is recommended that student and staff travel surveys be conducted annually to understand and monitor travel patterns and behaviour. Surveys should seek to understand the barriers to commuting by active modes and monitor the effectiveness of measures to encourage the modal shift. In addition to student and staff surveys, questions regarding mode of travel should be included in existing visitor experience surveys to establish a baseline visitor modal split and measure progress towards increasing the modal split of sustainable modes if necessary. The Sustainable Travel Officer will be responsible for the administration of these surveys and updating this plan based on the results.

Action AIM3 – Annual Student and Staff Travel Survey
Conduct annual student, staff and visitor surveys to monitor the success of this Campus Travel Plan in September/October each year.

Action AIM4 – Net Zero Transport Emissions
Use the measures set out in this Campus Travel Plan to target net zero transport emissions at Trinity College Dublin by 2040.

Table 9-1 Campus Travel Plan Actions for Monitoring and Implementation

Campus Travel Plan Actions for Implementation and Monitoring	
AIM1	**Sustainable Travel Officer -** Ensure a dedicated Sustainable Travel Officer is in place to oversee the implementation of the Campus Travel Plan Actions until at least 2030.
AIM2	**Smarter Travel Mark -** Apply for the Smarter Travel Mark to recognise the current work being carried out by the Healthy Trinity Smarter Travel Group.
AIM3	**Annual Student and Staff Travel Survey -** Conduct annual student, staff and visitor surveys to monitor the success of this Campus Travel Plan in September/October each year.
AIM4	**Net Zero Transport Emissions -** Use the measures set out in this Campus Travel Plan to target net zero transport emissions at Trinity College Dublin by 2040.

Conclusion

10 Conclusion

DBFL Consulting Engineers have been commissioned by Trinity College Dublin to prepare a Campus Travel Plan to promote sustainable travel to all campus locations by students, staff and visitors and to reduce the number of vehicles accessing the College Green Campus. The preparation of this Campus Travel Plan has come about as a direct action from the *Trinity College Dublin Sustainability Strategy 2023-2030.* Alongside this Campus Travel Plan, an overall Trinity College Dublin Masterplan is being prepared by Allies and Morrison. This Plan will directly inform the development of this Masterplan.

Trinity College Dublin consistently ranks as Ireland's Top University and strives to *"promote a diverse, interdisciplinary, inclusive environment which nurtures ground-breaking research, innovation, and creativity through engaging with issues of global significance".* There are approximately 22,000 undergraduate and postgraduate students currently enrolled at Trinity.

Trinity's largest campus is located in the heart of Dublin City at College Green and stands at 47-acres. Trinity also occupies a number of smaller locations across the city including Trinity East at Grand Canal Dock and the Trinity Centre for health sciences at St. James' Hospital. Trinity's largest student residence, Trinity Hall, is located approximately 4km from College Green at Dartry.

In addition to its academic endeavours, Trinity is also home to world famous attractions such as The Book of Kells and The Old Library. These attractions bring over 1,000,000 visitors to the College Green Campus each year and provide Trinity with crucial revenue to fund the running of the College and its research mission.

The overall vision for this Campus Travel Plan is:

"To increase the number of students, staff and visitors using active and sustainable transport to travel to Trinity and between campus locations by fostering a College Community that embraces active and sustainable travel as a way to promote physical, mental and social health, and as a key tool in Trinity's journey towards Net Zero by 2040".

The success of the Campus Travel Plan will be measured against a set of 2030 modal split targets. Progress towards these targets and the overall vision will be guided by the 59 Actions put forward as part of this Campus Travel Plan. These actions along with existing and future transport environment at Trinity College Dublin are presented through five key themes:

1. Walking and Wheeling
2. Cycling
3. Public Transport
4. Vehicle Access
5. Visitors and Tourists at College Green

Access for All has been considered through every theme of this Campus Travel Plan. Any change in how people travel to Trinity and between Trinity owned sites can only come about by targeting Campus Travel Plan measures at the entire college community.

The overall success of this Campus Travel Plan will rely on a strong Sustainable Travel Officer being appointed and supported by the

dedicated Healthy Trinity Smarter Travel Group already in place at Trinity College Dublin. As Ireland's oldest and top-rated university, Trinity College Dublin is in a unique position to set a national and international example of how ancient universities can maximise participation in active travel while creating a healthier University community and contributing to net zero carbon emissions targets.

Appendix A : Implementation Plan

Trinity College Dublin Campus Travel Plan 2025 – 2030: Implementation Plan				
Action No.	**Action Description**	**Action Timeline**		
		Short Term (2025)	**Medium Term (2026-2028)**	**Long Term (2028-2030)**
Campus Travel Plan Actions for Walking and Wheeling				
AW1	**Gate Access Times** - Update online information regarding the opening times of the various entrances to the College Green campus.	✓		
AW2	**Pedestrian Counters** - In order to gain an understanding of how pedestrian flows vary across the year, it is recommended that Trinity install permanent pedestrian counters across the College Green campus. Data gathered from these counters can identify areas of crowding, inform a future wayfinding plan, and disperse this crowding. This aligns with the Healthy Trinity Smarter Travel Group Living Lab proposal on pedestrian counters, proposed in 2021.	✓		
AW3	**Street Furniture** - When it is deemed necessary to remove street furniture, such as benches, from areas of campus due to special events, ensure that they are returned promptly following the conclusion of the event. Street furniture such as benches are vital for providing rest areas for pedestrians of a wide range of ages and abilities.	✓		
AW4	**Enabled Pathways** - Increase the number of enabled pathways through Front Square and increase the width of the existing enabled pathways through Parliament Square, Front Square, Library Square and Fellows Square in order to reduce crowding and provide greater options for those reliant on the enabled pathways to navigate the squares.		✓	
AW5	**Wayfinding** - Commission a full wayfinding strategy for both College Green and other satellite locations to provide up to date signage, create a single identity for		✓	

Trinity College Dublin Campus Travel Plan 2025 – 2030: Implementation Plan				
Action No.	Action Description	Action Timeline		
		Short Term (2025)	Medium Term (2026-2028)	Long Term (2028-2030)
	signage across all locations and provide wayfinding to locations of interest for students and staff as well as tourists and visitors.			
AW6	**Public Lighting** - Conduct a public lighting review at the College Green Campus to determine if the lighting currently installed across the campus is sufficiently contributing to pedestrian safety. This review will also need to consider the effects of light pollution on the biodiversity of the campus.		✓	
AW7	**Front Arch** - Open the full wooden door at Front Arch from 07:00-00:00 on weekdays and 08:00-18:00 on weekends to reduce pedestrian overcrowding, congestion and delays.	✓		
AW8	**Engagement with Dublin City Council on Walking and Wheeling** - Lobby DCC to improve the external pedestrian environment immediately surrounding the College Green campus, particularly to the west at College Green and Dame Street and to the north along Tara Street. Trinity should do this by highlighting particular issues around facility widths, layouts and signal timings with DCC and continuing to respond to relevant public consultations.	✓	✓	✓
AW9	**Pearse Street Permeability -** Physically open the gate at Printing House Square during its current operational hours and update all information online regarding the opening times of the pedestrian entrances to the College Green campus in an effort to increase the permeability of the campus and make it more accessible for students, staff and visitors.	✓		

Trinity College Dublin Campus Travel Plan 2025 – 2030: Implementation Plan				
Action No.	**Action Description**	**Action Timeline**		
		Short Term (2025)	**Medium Term (2026-2028)**	**Long Term (2028-2030)**
AW10	**Smarter Travel Walking and Wheeling Programmes -** Allocate a budget to allow for new incentives to increase participation in national organised walking events such as Walktober and Marchathon. These incentives can include internal competitions with prizes between students and staff, different schools and departments or between sports clubs and societies.	✓		
AW11	**Student Collaboration** - Expand existing collaboration with student societies and sports groups to run specific promotional events for walking.	✓	✓	✓
Campus Travel Plan Actions for Cycling				
AC1	**Cycling Survey** - Gather information as part of future travel surveys on why current students and staff may have switched to or from cycling as part of their commute to College.	✓	✓	✓
AC2	**Cycle Training** - Reintroduce cycle training on a biannual basis for less confident cyclists or those new to cycling in Dublin.	✓		
AC3	**Lobby Dublin City Council on Cycling Infrastructure** - Use the results of the Cycle Audit to continue to lobby the National Transport Authority and Dublin City Council to prioritise investment in accessible, connected and segregated cycling infrastructure. This lobbying should focus on the route from College Green to Iveagh Grounds and the direct route from College Green to Trinity Hall but include all key routes.	✓	✓	✓

Trinity College Dublin Campus Travel Plan 2025 – 2030: Implementation Plan				
Action No.	Action Description	Action Timeline		
		Short Term (2025)	Medium Term (2026-2028)	Long Term (2028-2030)
AC4	**Engagement with DCC and the NTA on Cycling** - Continue to support DCC and the NTA in the delivery of the Proposed Active Travel Network for Dublin through public consultation.	✓	✓	✓
AC5	**Lincoln Gate** - Alter the layout of the Lincoln Place entrance so that cyclists can enter the campus barrier free.		✓	
AC6	**Speed Ramps -** Decrease the length of the speed ramps across the College Green Campus to allow all cyclists to safely move around the ramp without having to dismount.	✓		
AC7	**Front Arch -** Open the larger wooden gate at Front Arch from 07:00-00:00 on weekdays and 08:00-18:00 on weekends to remove the pinch point and allow for the efficient movement of cyclists and pedestrians.	✓		
AC8	**Wheeling Ramp** - Install a wheeling ramp on both staircases leading to Kinsella Hall to assist those accessing the cycle parking that is currently only accessible by lift or steps.		✓	
AC9	**Increase Standard Cycle Parking at College Green -** Expand the number of standard cycle parking spaces at the College Green campus in proportion with the increased demand generated by the modal shift towards cycling that will be generated by this Campus Travel Plan. This cycle parking could be located in car parking spaces that will be removed from use during the lifetime of this plan.	✓	✓	

Trinity College Dublin Campus Travel Plan 2025 – 2030: Implementation Plan				
Action No.	**Action Description**	**Action Timeline**		
		Short Term (2025)	**Medium Term (2026-2028)**	**Long Term (2028-2030)**
AC10	**Cycle Parking Audits -** Undertake annual cycle parking audits at Trinity's locations across Dublin to determine if the provision of cycle parking is sufficient for the demand.	✓	✓	✓
AC11	**Online Cycle Parking Information** - Update all information online regarding the type and location of cycle parking and bike repair stands.	✓		
AC12	**Wayfinding for Cyclists** - Include physical wayfinding to cycle parking and bike repair stands as part of an overall Trinity wayfinding strategy.		✓	
AC13	**Upgrade Secure Cycle Parking -** Upgrade the existing secure cycle parking at Botany Bay and the railway arches to include better lighting, signage on the entrance gates to highlight their location and advertisement of their existence to students and staff.		✓	
AC14	**Increase Parking for Non-Standard Cycles** - Provide parking for non-standard cycles across key Trinity owned sites at a rate of 5% of the overall cycle parking provision. This cycle parking should be located as convenient as possible to the entrance to each building or location.		✓	
AC15	**Bike Repair Stands** - Increase the number of bike repair stands at College Green and at other Trinity owned sites such as St. James' Hospital, Trinity East, Trinity Hall and Iveagh Grounds. Implement a maintenance plan for these stands to minimise the amount of time they are not in use.		✓	

Trinity College Dublin Campus Travel Plan 2025 – 2030: Implementation Plan				
Action No.	Action Description	Action Timeline		
		Short Term (2025)	Medium Term (2026-2028)	Long Term (2028-2030)
AC16	**Bike Maintenance Workshops** - Reinstate annual bike repair workshops to teach students and staff how to maintain their own bikes and how to deal with any mechanical issues while out cycling.	✓	✓	✓
AC17	**Bike Repair Clinics -** Introduce monthly on campus bike repair clinics to allow students and staff to have any damage repaired conveniently by a professional bike mechanic on regular basis.	✓	✓	✓
AC18	**Covered Bike Parking** - Increase the number of covered cycle parking spaces in locations where students and staff are likely to be parked for long periods of time such as Trinity Hall and St. James' Hospital.		✓	
AC19	**Sale of Unwanted and Abandoned Bikes -** Organise second-hand bike sales at the start of new academic terms. These sales would generate revenue, reduce the cost of bike purchase for students and reduce the waste generated each year by unwanted and abandoned bikes.	✓	✓	✓
AC20	**Bike Library -** Collaborate with the NTA to establish a Bike Library at the College Green Campus which will allow students and staff to borrow non-standard cycles for an extended period of time.		✓	
AC21	**Micromobility Policy -** Establish a dedicated policy on the use of micromobility modes such as e-scooters throughout the College Green campus.	✓		
AC22	**Micromobility Charging -** Commission a strategy for providing on-campus charging for e-bikes and other micromobility vehicles such as e-scooters.		✓	

Trinity College Dublin Campus Travel Plan 2025 – 2030: Implementation Plan				
Action No.	**Action Description**	**Action Timeline**		
		Short Term (2025)	**Medium Term (2026-2028)**	**Long Term (2028-2030)**
AC23	**Mobility Hubs** - Investigate the potential for establishing a mobility hub(s) to increase the connectivity between Trinity's locations across Dublin and create a closer linked College community.		✓	
Campus Travel Plan Actions for Public Transport				
APT1	**Pearse Street Permeability** - Building on action AW9, physically open the gate at Printing House Square during its current operational hours to improve public transport access by reducing travel time from the western end of the campus to the 7 no. bus stops on Pearse Street, Tara Street train station and the future Tara Street metro station.	✓		
APT2	**Wayfinding Centre** - Collaborate with Trinity DisAbility to provide biannual trips to The Wayfinding Centre for those registered with the service that are not confident using public transport or that are unfamiliar with how to navigate the public transport system in Dublin.	✓	✓	
APT3	**Wheelchair Space Availability Information -** Engage and collaborate with TFI to research ways of disseminating information on the real time availability of wheelchair spaces on public transport services.	✓	✓	
APT4	**Wayfinding** - Provide physical wayfinding to Tara Street and Pearse Street railway stations as well as Trinity and Dawson Luas stops as part of an overall campus wayfinding strategy.		✓	

Trinity College Dublin Campus Travel Plan 2025 – 2030: Implementation Plan				
Action No.	Action Description	Action Timeline		
		Short Term (2025)	Medium Term (2026-2028)	Long Term (2028-2030)
APT5	**Real-Time Information** - Provide Real Time Information for public transport services in high trafficked areas such as the Arts Block, libraries and on campus dining outlets.	✓	✓	
APT6	**Support for Public Transport** - Continue to support development of proposed schemes that will improve and expand the public transport network in Dublin, including MetroLink, BusConnects, DART+ and upcoming Luas extensions by responding to all upcoming public consultations.	✓	✓	✓
APT7	**Park and Ride** – Support, through public consultation, the construction of Park and Ride facilities and transport interchanges at locations outside of Dublin City Centre to broaden the catchment of the existing public transport network.	✓	✓	✓
Campus Travel Plan Actions for Vehicle Access				
AV1	**Car Parking Permit Fee** - Investigate the feasibility of introducing a fee for car parking permits for staff with regular working hours.	✓		
AV2	**Weekend Car Parking Permits** - Remove weekend car parking permits for staff without weekend working hours.	✓		
AV3	**Car Parking Reduction** - Undertake a car parking utilisation survey to identify areas where car parking can be reduced across the College Green Campus and reduce the car parking provision by at least 50% based on the outcome of this survey.	✓	✓	

Trinity College Dublin Campus Travel Plan 2025 – 2030: Implementation Plan				
Action No.	Action Description	Action Timeline		
		Short Term (2025)	Medium Term (2026-2028)	Long Term (2028-2030)
AV4	**Enabled Parking Information** - Update online information regarding the location of accessible car parking spaces.	✓		
AV5	**Upgrade Enabled Parking Bays** - Upgrade the existing provision of disability car parking spaces so that they are compliant with Building Regulations: Technical Guidance Document M 2022 and the Dublin City Development Plan 2022-2028		✓	
AV6	**Freight Management Study** - Undertake a Freight Management Study to identify the full extent of servicing and delivery demands generated at College Green and to uncover ways to improve the efficiency of these vehicle movements while reducing their impact on pedestrians and cyclists.	✓		
AV7	**Automatic Number Plate Recognition** - Introduce Automatic Number Plate Recognition technology at the Lincoln Place and Pearse Street Gates to speed up security checks during peak times.	✓		
AV8	**Vehicle Routes** - Define clear vehicle routes through the College Green Campus for routine servicing and deliveries to reduce existing conflicts with pedestrians and cyclists.	✓		
AV9	**Vehicle Ban for Historic Areas** - Introduce a motor vehicle free policy in Front Square, Library Square and Fellows Square with the exception of access for servicing during limited times and emergency vehicle access.	✓		
AV10	**Zero Emissions Vehicle Strategy** - Produce a Zero Emissions Vehicles (ZEV) Strategy for all vehicles owned by Trinity or undertaking servicing and delivery	✓		

Trinity College Dublin Campus Travel Plan 2025 – 2030: Implementation Plan				
Action No.	**Action Description**	**Action Timeline**		
		Short Term (2025)	**Medium Term (2026-2028)**	**Long Term (2028-2030)**
	functions on behalf of Trinity to minimise the emissions generated by vehicles as part of Trinity's operations and encourage the use of ZEVs wherever possible in the daily running of the University.			
AV11	**Last Mile Delivery** - Subject to the results of the Freight Management Study, introduce a last mile delivery hub to reduce the number of vehicles travelling across the College Green campus.		✓	
Campus Travel Plan Actions for Visitors and Tourism				
AVT1	**Redesign Campus Tour Routes** - Collaborate with Trinity Tourism and Trinity DisAbility to redesign campus tour routes in an effort to minimise crowding on the enabled pathways.	✓		
AVT2	**Visitor Travel Information** - Introduce travel-based questions into existing visitor feedback surveys to better understand how tourists and visitors get to Trinity.	✓		
AVT3	**Promote Sustainable Travel for Visitors and Tourists** - Collaborate with Trinity Tourism to promote active travel as a way for tourists and visitors to travel to the College Green campus, including adding active modes to the list of options promoted in the 'How to get here' section of the Visit Trinity website.	✓		
Campus Travel Plan Actions for Implementation and Monitoring				
AIM1	**Sustainable Travel Officer** - Ensure a dedicated Sustainable Travel Officer is in place to oversee the implementation of the Campus Travel Plan Actions until at least 2030.	✓		

Trinity College Dublin Campus Travel Plan 2025 – 2030: Implementation Plan				
Action No.	**Action Description**	**Action Timeline**		
		Short Term (2025)	**Medium Term (2026-2028)**	**Long Term (2028-2030)**
AIM2	**Smarter Travel Mark** - Apply for the Smarter Travel Mark to recognise the current work being carried out by the Healthy Trinity Smarter Travel Group.	✓		
AIM3	**Annual Student and Staff Travel Survey** - Conduct annual student, staff and visitor surveys to monitor the success of this Campus Travel Plan in September/October each year.	✓	✓	✓
AIM4	**Net Zero Transport Emissions** - Use the measures set out in this Campus Travel Plan to target net zero transport emissions at Trinity College Dublin by 2040.			✓

Appendix B : Stakeholder Consultation Summary

Key Stakeholder	Date of Engagement	Engagement Medium
Trinity College Dublin Library	27th May 2024	In-person
Trinity Sport	27th May 2024	In-person
Trinity DisAbility	27th May 2024	In-person
Trinity College Dublin Chief Operating Officer	27th May 2024	In-person
Estates & Facilities – Campus Infrastructure	27th May 2024	In-person
Estates & Facilities – Logistics	31st May 2024	In-person
Estates & Facilities - Projects	14th June 2024	In-person
Estates & Facilities - Maintenance	14th June 2024	In-person
Trinity Tourism	14th June 2024	In-person
Dublin City Council	26th June 2024	Online
Trinity East	20th June 2024	Online

Key Stakeholder	Date of Engagement	Engagement Medium
Estates & Facilities – Campus Security	2nd July 2024	Online
Trinity College Dublin Students' Union	9th August 2024	Online
National Transport Authority	21st August 2024	Online
Estates & Facilities – Capital Projects and Planning	17th September 2024	Online
Estates & Facilities – Environmental Operations	18th November 2024	Online
Healthy Trinity Smarter Travel Committee Members	Various dates in December 2024 and January 2025	Online

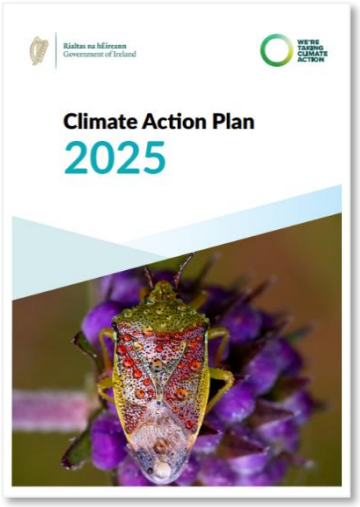
Appendix C : Review of Applicable Plans and Strategies

C.1 Introduction

This Campus Travel Plan has been informed by a number of international, national, regional and local transport planning, health, climate and land use plans and strategies. The most relevant goals, objectives and targets from these plans and strategies are summarised in this chapter. The plans and strategies that have been reviewed and that have informed this Campus Travel Plan include:

- Climate Action Plan 2024;
- National Development Plan 2021-2030;
- National Sustainable Mobility Policy;
- Tourism Policy Framework 2021-2030;
- Global Action Plan on Physical Activity 2018-2030;
- Moving Together – A Strategic Approach to the Improved Efficiency of the Transport System in Ireland;
- Five Cities Demand Management Study;
- Cycle Design Manual;
- Design Manual for Urban Roads and Streets (DMURS);
- Permeability Best Practice Guide;
- Regional Spatial and Economic Strategy for the Eastern and Midlands Region 2019-2031;
- Greater Dublin Area Transport Strategy 2022-2042;
- Dublin City Centre Transport Plan 2023;
- Dublin City Development Plan 2022-2028;
- Fingal County Development Plan 2023-2029;
- Trinity College Dublin Sustainability Strategy 2023-2030;
- Trinity College Dublin Carbon Footprint Report 2021-2022; and
- The Trinity Disability Service Strategic Plan 2020-2025.

C.2 Climate Action Plan 2025



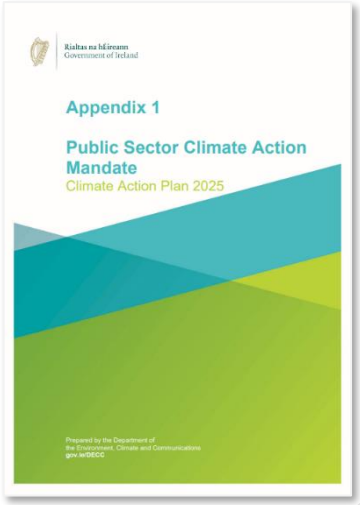
The Climate Action Plan 2025 sets out a pathway for Ireland to achieve its overarching goals to halve emissions by 2030 and to achieve net zero emissions by 2050. It is envisaged that the proposals and actions contained within the plan will have associated positive economic and societal benefits, including cleaner air, warmer homes, and a more sustainable economy in the longer term.

Regarding sustainable transport, the Plan makes a commitment to reduce total vehicle kilometres travelled by 20% by 2030.

Chapter 14 of the Plan outlines the actions to be taken over the next year to push Ireland towards its emissions targets. The actions which will have an impact on the transport environment in which Trinity operates include:

- **TR/25/9** *BusConnects Dublin: At least one Core Bus Corridor approved at Approval Gate 3 and start construction*
- **TR/25/23** *Prioritise the delivery of further phases of the BusConnects Network Design Plan*

The Public Sector Climate Action Mandate 2025 was published by the Department of the Environment, Climate and Communications as an accompaniment to the Climate Action Plan 2025. The mandates within the current iteration of the document are grouped into four categories:



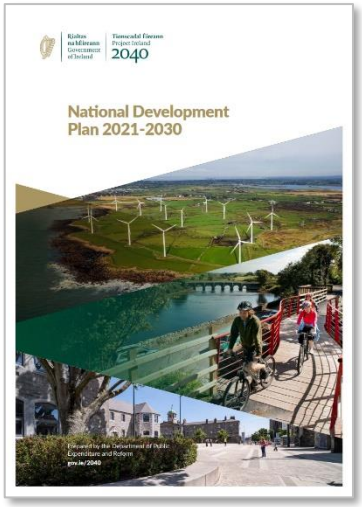
1. Our Targets
2. Our People
3. Our Way of Working
4. Our Buildings and Vehicles

Of particular relevance to this transport study are:

Mandate 4.1 *"Promote the use of bicycles (including push bikes, electric bikes, and cargo bikes) and shared mobility options as an alternative to car use among employees and visitors by creating and maintaining facilities (both inside and outside of buildings) that support such options, including secure and accessible bicycle parking, shared mobility parking, and charging stations, as appropriate, with a view to achieving the National Transport Authority's Smarter Travel Mark".*

Mandate 4.2 *"Phase out the use of parking in buildings that have access to a range of public transport services and active/shared mobility options for the majority of staff/visitors, while providing that sufficient accessible parking is maintained for those with physical mobility issues."*

C.3 National Development Plan 2021-2030



The National Development Plan 2021-2030 (NDP) sets out the Irish Government's plan for organised, large-scale expenditure on national infrastructure up to 2030. The NDP contains strong commitments on climate action and the environment and seeks to support the realisation of Ireland's climate ambitions and targets.

The NDP includes significant provision for the improvement of sustainable transport infrastructure in Ireland with the goal of enabling 500,000 additional walking, cycling and public transport journeys by 2030.

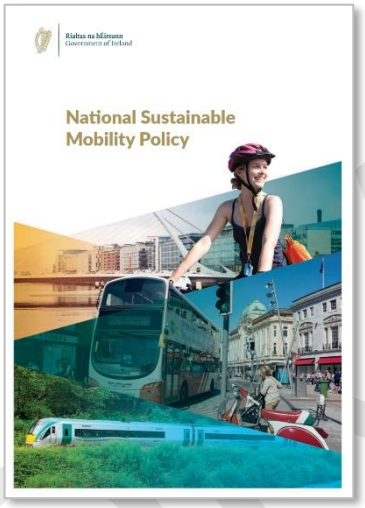
The Plan outlines several Strategic investment priorities for transport which are of relevance to the overall Transport Study including:

- Active Travel – An investment of €360m per year on walking and cycling infrastructure over the lifetime of the Plan.
- BusConnects – The provision of high-quality bus corridors on the busiest routes across all five cities with the aim of making journeys faster, predictable and reliable.
- DART+ - The electrification of four additional rail lines across the Greater Dublin Area which will allow for a higher frequency, more reliable service.

- MetroLink – The provision of a 19km carbon-neutral light rail line running between Swords and Dublin City Centre, serving 15 stations.

Light Rail – Progress will continue on extending the Luas Green Line north as part of Luas Finglas along with the appraisal process for Luas Lucan and Luas Poolbeg.

C.4 National Sustainable Mobility Policy



The National Sustainable Mobility Policy was published in April 2022 by the Department of Transport. The overall aim of the Policy is to *"set out a strategic framework for 2030 for active travel and public transport to support Ireland's overall requirement to achieve a 51% reduction in carbon emissions by the end of this decade".* The overarching vision of the Policy is *"To connect people and places with sustainable mobility that is safe, green, accessible and efficient."*

The Policy recognises the vital importance of continued investment in transport to ensure an efficient economy and continued social development, but it also sets out the necessary steps to ensure that people choose more sustainable transport modes such as walking, cycling and public transport. This includes continued investment in the successful Smarter Travel Campuses behavioural change programme.

The Policy is a direct response to the fact that continued growth in demand for road transport is not sustainable due to the resulting adverse impacts of increasing congestion levels, localised air pollution, contribution to global warming and the additional negative impacts to health through promoting increasingly sedentary lifestyles.

The following 3 key Policy areas and 10 goals form the basis of the National Sustainable Mobility Policy:

Safe and Green Mobility

1. Improve mobility safety.
2. Decarbonise public transport.
3. Expand availability of sustainable mobility in metropolitan areas.
4. Expand availability of sustainable mobility in regional and rural areas.
5. Encourage people to choose sustainable mobility over the private car.

People Focused Mobility

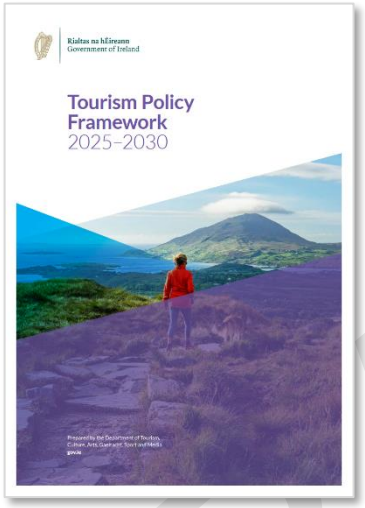
1. Take a whole journey approach to mobility, promoting inclusive access for all.
2. Design infrastructure according to Universal Design Principles and the Hierarchy of Road Users model.
3. Promote sustainable mobility through research and citizen engagement.

Better Integrated Mobility

1. Better integrate land use and transport planning at all levels.

2. Promote smart and integrated mobility through innovative technologies and development of appropriate regulation.

C.5 Tourism Policy Framework 2025-2030



The Tourism Policy Framework 2025-2030 was published by the Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media (DTCAGSM) in November 2024. The mission underlying the Framework is *"to support a thriving tourism sector by managing Irelan's natural, cultural and heritage assets, in harmony with local communities, while conserving these resources for use by future generations".*

The overall goal of the Policy Framework is to ensure that growth in the Irish tourism sector over the coming years is built on the three pillars of environmental sustainability, economic sustainability and social sustainability. Based on the Tourism Policy Framework, a Tourism Action Plan will be developed to include tourism specific emissions reductions targets.

Under the pillar of Environmental Sustainability, the Policy Framework recognises that decarbonising road and air transport will need to be at the core of achieving a sustainable tourism sector. Of particular relevance to this Campus Travel Plan, policy 3.4.3 within the Framework acknowledges that "*Increasing the use of public and active transport by tourists is critical to achieving decarbonisation in the sector*". This will be supported by creating an online tool to enable decarbonised tourism as well as the promotion of walking and cycling and the development of mixed mobility hubs.

C.6 Global Action Plan on Physical Activity 2018-2030: More Active People for a Healthier World

The Global Action Plan on Physical Activity 2018-2030 provides a framework of effective and feasible policy actions to increase physical activity at all levels. The overall goal of the plan is for *"A 15% relative reduction in the global prevalence of physical inactivity in adults and in adolescents by 2030".*

To compliment this goal, the plan sets out four objectives, as follows:

- **Objective 1:** Create Active Societies
- **Objective 2:** Create Active Environments
- **Objective 3:** Create Active People
- **Objective 4:** Create Active Systems

The Plan sets out a number of actions to achieve these objectives, a number of which are of relevance to this Campus Travel Plan. These are:

- **Action 2.1:** *"Strengthen the integration of urban and transport planning policies to prioritize the principles of compact, mixed-land use, at all levels of government as appropriate, to deliver highly*

connected neighbourhoods to enable and promote walking, cycling, other forms of mobility involving the use of wheels (including wheelchairs, scooters and skates) and the use of public transport, in urban, peri-urban and rural communities."

- **Action 2.2:** *"Improve the level of service provided by walking and cycling network infrastructure, to enable and promote walking, cycling, other forms of mobility involving the use of wheels (including wheelchairs, scooters and skates) and the use of public transport, in urban, peri-urban and rural communities, with due regard for the principles of safe, universal and equitable access by people of all ages and abilities, and in alignment with other commitments"*
- **Action 2.3:** *"Strengthen the policy, regulatory and design guidelines and frameworks, at the national and subnational levels, as appropriate, to promote public amenities, schools, health care, sports and recreation facilities, workplaces and social housing that are designed to enable occupants and visitors with diverse abilities to be physically active in and around the buildings, and prioritize universal access by pedestrians, cyclists and public transport."*
- **Action 3.1:** *"Strengthen provision of good-quality physical education and more positive experiences and opportunities for active recreation, sports and play for girls and boys, applying the principles of the whole-of-school approach in all pre-primary, primary, secondary and tertiary educational institutions, to establish and reinforce lifelong health and physical literacy, and promote the enjoyment of, and participation in, physical activity, according to capacity and ability."*

  The plan also outlines a number of sub-actions under Action 3.1, of which the following two are relevant:

  - *"Collaborate with higher education sector and institutions to develop leadership and engagement in strengthening the provision of opportunities for students, staff and visitors to increase physical activity and reduce sedentary behaviour, including by promoting and prioritizing access to campuses by walking, cycling and public transport"*
  - *"Higher education institutions should strengthen implementation of initiatives such as WHO's "Health Promoting Universities" or similar, to demonstrate a whole-of-campus approaches to the promotion of physical activity and reduction of sedentary behaviour to all students, staff and visitors."*

C.7 Moving Together – A Strategic Approach to the Improved Efficiency of the Transport System in Ireland

Moving Together – A Strategic Approach to the Improved Efficiency of the Transport System in Ireland was first released for public consultation by the Department of Transport in April 2024, with the consultation closing in August 2024.

The Strategy recognises that *"the education sector, in conjunction with the local planning authorities, has a considerable role to play in reducing unsustainable transport demand through*

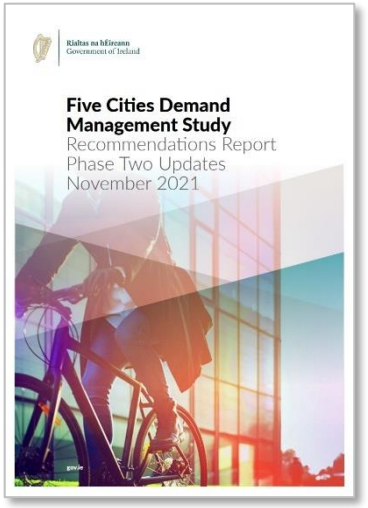
the provision of effective Campus Travel Plans for schools and third level institutions".

Action 24 from the implementation plan accompanying the strategy states that "*third level institutions will lead on reducing private car journeys though climate action and Green Campus Programmes".* Third level institutions will be supported in progressing with this action through 4 sub-actions as follows:

- **Action 24a** *Institutions will be supported through continued investment in university owned/operated accommodation and changes to criteria for devolved grants to support a reduction in unsustainable journeys to/from campuses.*
- **Action 24b** *Review provision of public transport services to Higher Education Institutions.*
- **Action 24c** *Develop better understanding of travel patterns and service sustainable mobility gaps in Higher Education Institutions.*
- **Action 24d** *Higher Education Institutions encouraged to make progress in reducing car travel demand. Progress monitored.*

C.8 Five Cities Demand Management Study

Phase 1 of the Five Cities Demand Management Study was published by the Department of Transport in March 2021, with Phase 2 published in November 2021. The Strategy examines a wide range of demand management techniques, with the goal of reducing private car travel and addressing the carbon, congestion and air quality challenges facing our cities, and applies a methodology as to their suitability across Dublin, Cork, Limerick, Galway and Waterford.



Some of the relevant recommendations to be taken forward for further consideration in Dublin include:

- FM05: Alternative Fuelled Vehicle Support;
- FM11: Congestion Charging;
- PTM01: Workplace Parking Levy;
- PTM04: Public Parking Controls;
- PP01: Healthy Streets Assessments;
- FM10: Sustainable Mobility Incentives;
- PP02: Public Health & Transport;
- TC01: Next Generation Ticketing;
- PTM09: Workplace Parking Standards;
- PTM16: Park & Ride;
- PTM17: Car Free Zones & Streets;
- BC05: Flexible Working;
- BC11: Reward Schemes;

These proposals will transform the transport environment across Dublin city, creating a sustainable shift in the ways that students, staff, tourists and service vehicles access the various college sites across the city.

C.9 Cycle Design Manual

The Cycle Design manual was published in September 2023 by the National Transport Authority (NTA) and is a replacement for the National Cycle Manual, which was published by the NTA in 2011.

The new manual uses the experience acquired from delivering cycling infrastructure throughout Ireland over the last decade. The manual has been steered by the need to deliver cycle facilities that are safe for people of all ages and abilities.

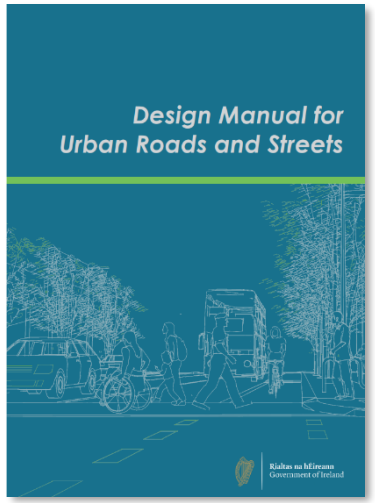
As set out within the manual, there are 5 main requirements to consider when developing cycle friendly infrastructure. These include:

1. **Safety:** Actual and perceived safety.
2. **Coherence:** Cycle routes should be connected and easy to navigate.
3. **Directness:** Cycle routes should connect origins and destinations using the shortest route with as little delay as possible.
4. **Comfort:** Cycle facilities should be designed and maintained so that they are comfortable to use.
5. **Attractiveness:** the cycling environment along a route should ideally be as pleasant and interesting as possible.

The manual also provides guidance on the design of cycle parking, shower facilities and storage lockers to ensure that all facilities comply with universal access guidelines and can cater for both standard and non-standard bicycles.

C.10 Design Manual for Urban Roads and Streets (DMURS)

The Design Manual for Urban Roads and Streets (DMURS) was produced by the Department of Transport, Tourism and Sport and the Department of Housing, Planning and Local Government in March 2013 and last updated in May 2019. It presents a series of principles, approaches and standards that are necessary to achieve balanced, best practice design outcomes with regard to urban street networks and individual streets.

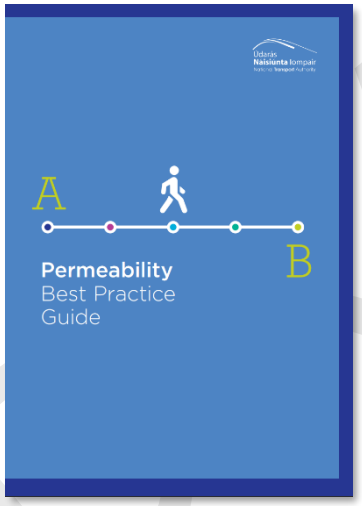


The manual places a significant emphasis on car dominance in Ireland and the implications this has had regarding the pedestrian and cycle environment. The document encourages more sustainable travel patterns and safer streets by proposing a hierarchy for user priorities. This hierarchy places pedestrians at the top, indicating that walking is

the most sustainable form of transport and that by prioritizing pedestrians first, the number of short car journeys can be reduced, and public transport made more accessible.

Second in the hierarchy are cyclists with public transport third in the hierarchy and private motor vehicles at the bottom. By placing private vehicles at the bottom of the hierarchy, the document indicates that there should be a balance on street networks and cars should no longer take priority over the needs of other users.

C.11 Permeability Best Practice Guide



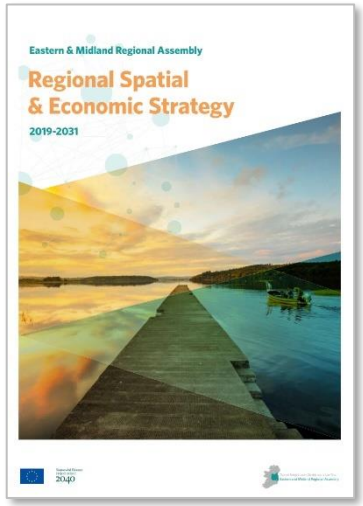
The National Transport Authority's Permeability Best Practice Guide was published in July 2015. The Guide outlines how best to facilitate the demand for walking and cycling in exiting built-up areas through the removal of severance caused by built-in barriers, such as boundary walls. The Guide also sets out a six-stage process for implementing permeability schemes from scheme identification through to scheme evaluation and monitoring.

Contained within the guide are the four key principles for creating and maintaining permeability and connections in urban areas. These key principles put a heavy emphasis on pedestrian and cyclists priority as follows:

- Origins and destinations, such as schools and shops, should be linked in the most direct manner possible for pedestrians and cyclists;
- Greater priority should be given to pedestrians and cyclists;
- The physical design of links should be fit for purpose in terms of capacity and security; and
- Junctions in urban and suburban areas should cater for pedestrians and cyclists safely and conveniently.

The Guide also contains a toolkit for assessing the permeability benefits of various options once a potential permeability improvement scheme has been identified.

C.12 Regional Spatial and Economic Strategy for the Eastern and Midlands Region 2019-2031



The Eastern and Midland Regional Assembly Regional Spatial and Economic Strategy (RSES) containing the Dublin Metropolitan Area Strategic Plan (MASP) provides the basis for land-use planning and investment priorities up to the year 2031. It supports continued population and economic growth in Dublin City and suburbs, with high quality new housing promoted and a focus on the role of good urban design, brownfield redevelopment and urban renewal and regeneration. It

promotes improvement in the provision of public transport and active travel and the development of strategic amenities to provide for sustainable communities.

A number of Regional Policy Objectives (RPOs) of relevance to the transport environment surrounding Trinity are outlined below.

- **RPO 5.2 MASP Sustainable Transport;** *"Support the delivery of key sustainable transport projects including Metrolink, DART and LUAS expansion programmes, BusConnects and the Greater Dublin Metropolitan Cycle Network and ensure that future development maximises the efficiency and protects the strategic capacity of the metropolitan area transport network, existing and planned."*
- **RPO 5.3 MASP Sustainable Transport;** *"Future development in the Dublin Metropolitan Area shall be planned and designed in a manner that facilitates sustainable travel patterns, with a particular focus on increasing the share of active modes (walking and cycling) and public transport use and creating a safe attractive street environment for pedestrians and cyclists."*
- **RPO 5.8 MASP Green Infrastructure;** *"Support the promotion and development of greenway infrastructure and facilities in the Dublin metropolitan area and to support the expansion and connections between key strategic cycle routes and greenways as set out in the NTA Greater Dublin Area Cycle Network Plan."*
- **RPO 7.42 Decarbonising Transport;** *"Local authorities shall include proposals in statutory land use plans to facilitate and encourage an increase in electric vehicle use, including measures for more recharging facilities and prioritisation of parking for EVs in central locations."*
- **RPO 8.7 Mobility Management and Travel Plans;** *"To promote the use of mobility management and travel plans to bring about behaviour change and more sustainable transport use."*

C.13 Greater Dublin Area Transport Strategy 2022-2042

The Greater Dublin Area Transport Strategy 2022-2042 has arisen from a review and update of the original 2016 strategy. The overall aim of the Transport Strategy is *"To provide a sustainable, accessible, and effective transport system for the Greater Dublin Area which meets the region's climate change requirements, serves the needs of urban and rural communities, and supports the regional economy"*. Four primary objectives have been identified as part of the Greater Dublin Area Transport Strategy 2022-2042. These are:

- **An Enhanced Natural and Built Environment:** To Create a better environment and meet our environmental obligations by transitioning to a clean, low emission transport system, increasing walking, cycling and public transport use, and reducing car dependency.
- **Connected Communities and a Better Quality of Life:** To enhance the health and quality of life of our society by improving connectivity between people and places, delivering

safe and integrated transport options, and increasing opportunities for walking and cycling.

- **A Strong Sustainable Economy:** To support sustainable economic activity and growth by improving the opportunity for people to travel for work or business where and when they need to and facilitating the efficient movement of goods.
- **An Inclusive Transport System:** To deliver a high quality, equitable and accessible transport system, which caters for the needs of all members of society.

The Greater Dublin Area Transport Strategy 2022-2042 identifies a number of sustainable transport measures to be provided in the short, medium and long term over the course of the plan. **Figure C-1** below illustrates the timeline over which these schemes will be implemented.

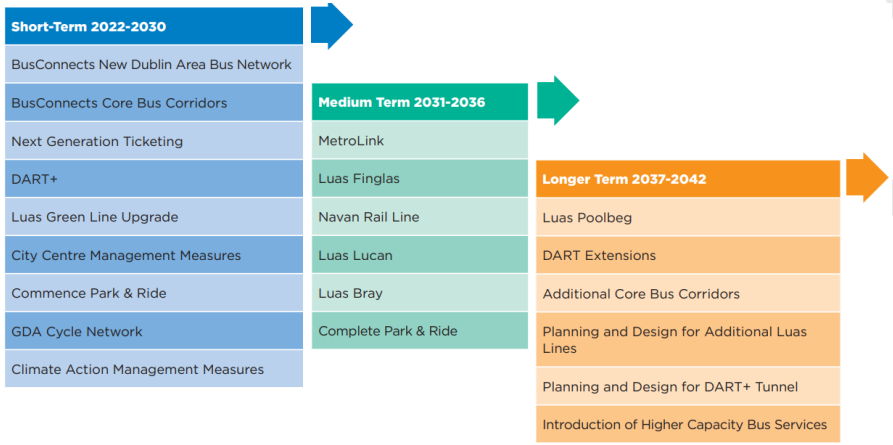


Figure C-1 Greater Dublin Area Transport Strategy 2022-2042 Phasing Strategy (Source: Greater Dublin Area Transport Strategy 2022-2042 Fig. 19.1)

Other measures put forward as part of the Strategy which will benefit the transport environment around Trinity include:

- **INT4** – To secure the development of a network of bus and rail-based Park and Ride facilities.
- **INT5** – To deliver high quality interchange facilities or mobility hubs in appropriate locations served by high-capacity public transport.
- **INT10** – Expand the Smarter Travel Workplaces and Campuses Programme.
- **INT18** - Expand a range of public transport services to run on a 24-hour basis as appropriate.
- **CYC2** - To ensure that cycle infrastructure provides an adequate quality of service to all users in the GDA.
- **CYC9** – To seek to put in place interoperability arrangements between bike sharing schemes.
- **TM19** – To reduce the level of free or cheaply available on-street parking and/or the implementation of charging regimes.

C.14 Dublin City Centre Transport Plan 2023

The aim of the Dublin City Centre Transport Plan is to recognise and prioritise changes to the existing transport arrangements which are needed to achieve the vision of a sustainable, dynamic and

inclusive city as presented in the Dublin City Development Plan.

The vision of the Plan is *"A thriving, active City Centre with sustainability and facilitation of emissions reduction as fundamental goals, where the transport system enhances freedom of movement and meets the environmental, social, cultural and economic needs of the people it serves."*

The Plan sets out three overarching objectives which are as follows:

- To Provide a Significantly Enhanced City Centre Environment.
- To Facilitate the Delivery of a Net-Zero City Centre Transport System.
- To Improve the City Centre's Economy and Liveability.

The Plan details a number of traffic management and public realm proposals that are located in the immediate vicinity of the College Green Campus. These are:

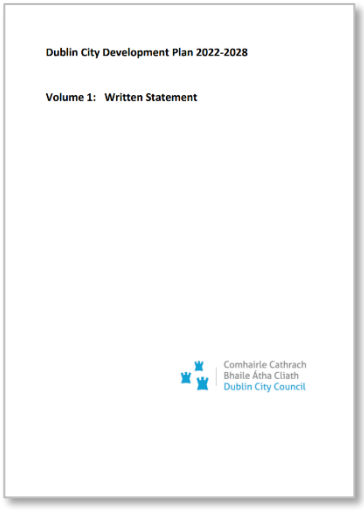
- The removal of traffic from College Green and Dame Street, as far as the junction with South Great George's Street.
- The implementation of bus gates along the quays at Bachelors Walk and Aston Quay.
- A left turn ban for private vehicles from Westland Row onto Pearse Street.
- The pedestrianisation of a section of Lincoln Place.
- The reconfiguration and greening of Pearse Street and Tara Street

The plan also sets out priorities for the City Centre servicing and delivery network. Of particular interest are the following:

- The use of low and zero emissions delivery vehicles will be promoted, including transition to smaller vehicles for last-mile and micro-deliveries; and A City Centre Freight, Servicing and Deliveries Plan will be developed.
- The DCC HGV management strategy will move towards no longer issuing permits for certain Euro class of HGVs to enter the city to assist in reducing emissions.

C.15 Dublin City Development Plan 2022-2028

The Dublin City Development Plan 2022-2028 (DCDP) plan sets out policies and objectives to guide development in the city over the lifetime of the Plan. It provides an integrated, coherent spatial framework to ensure the city is developed in an inclusive way which improves the quality of life for citizens, whilst also being a more attractive place to visit and work.



Climate action plays a large role in the DCDP, which drives the need for sustainable transportation in the city. The policies and objectives of the DCDP reflect this. The plan highlights the need to move away from private car and fossil-fuel-based mobility to reduce the negative impacts of transport and climate change.

The DCDP outlines a number of Strategic Development Regeneration Areas (SDRAs) considered as being capable of delivering significant quantities of homes and employment for the city. SDRA 6, Docklands, includes the area occupied by Trinity East while SDRA 14 covers the St.

James' Healthcare Campus, including the Trinity Centre for Health Sciences.

As part of SDRA 6, Trinity East is identified as a Key Opportunity site that *has "potential to provide a new hub for innovation, teaching, research, collaboration, enterprise, and support facilities bridging between the commercial activities in Docklands and research at Trinity College and enabling the development of a globally competitive innovation district for Ireland".* It is also noted within the DCDP that The City Council has the intention to work with Trinity in order to develop a masterplan for the site.

SDRA 14 covers St. James' Healthcare Campus and Environs, including the Trinity Centre for Health Sciences. Within the DCDP, The Council notes the vision to develop the campus into a leading heath and innovation hub. This will include the preparation of a Campus Travel Plan to increase connectivity for pedestrians, cyclists and public transport as well as an investigation into the provision of a new active travel link to Heuston Station via the River Camac.

In addition to the SDRAs, the DCDP puts forward a number of policies and objectives that look to promote active travel and ease of movement in and around the city as well as protecting the environment. These include:

- **SMT1**: *"To continue to promote modal shift from private car use towards increased use of more sustainable forms of transport such as active mobility and public transport, and to work with the National Transport Authority (NTA), Transport Infrastructure Ireland (TII) and other transport agencies in progressing an integrated set of transport objectives to achieve compact growth."*
- **SMT5**: *"To support the development of mobility hubs at key public transport locations and local mobility hubs in tandem with new developments to include shared car and micro mobility initiatives, creating a vibrant, accessible and liveable place to support the transportation experience."*
- **SMT11**: *"To protect, improve and expand on the pedestrian network, linking key public buildings, shopping streets, public transport points and tourist and recreational attractions whilst ensuring accessibility for all, including people with mobility impairment and/or disabilities, older persons and people with children."*
- **SMT14**: *"To manage City Centre road-space to best address the needs of pedestrians and cyclists, public transport, shared modes and the private car, in particular, where there are intersections between DART, Luas and Metrolink and with the existing and proposed bus network."*
- **SMT15**: *"To seek to achieve a significant reduction in the number of motorised delivery vehicles in the City through supporting and promoting the use of the 'last-mile' delivery through the development of micro hubs and distribution centres."*
- **SMT16**: *"To prioritise the development of safe and connected walking and cycling facilities and prioritise a shift to active travel for people of all ages and abilities, in line with the city's mode share targets."*
- **SMT19**: *"To work with the relevant transport providers, agencies and stakeholders to facilitate the integration of active travel (walking/cycling etc.) with public transport, ensuring ease of access for all."*

- **SMTO12**: *"To provide publicly accessible cycle parking spaces, both standard bicycle spaces and non-standard for adapted and cargo bikes, in the City Centre and the urban villages, and near the entrance to all publicly accessible buildings such as schools, hotels, libraries, theatres, churches etc. as required."*

C.16 Fingal County Development Plan 2023-2029

The Fingal County Development Plan 2023-2029 (FCDP) plan sets out policies and objectives to guide development in the county over the lifetime of the Plan. Although the vast majority of Trinity's premises are located within Dublin City, the Santry Sports Grounds and library storage facilities are located within Fingal and as such the FCDP will influence the transport connections to these sites.

The Fingal County Development Plan 2023-2029 puts forward a number of objectives and policies to promote sustainable travel within the county, including:

- **Objective CMO1 – Transition to Sustainable Modes** Work with the NTA, TII and other transport agencies in facilitating the integrated set of transport objectives for the County as set out in this Plan, in line with National and Regional policy including the NTA's GDA Transport Strategy and any subsequent plan to encourage modal shift towards more sustainable modes of transport and patterns of commuting to reduce reliance on the private car.
- **Objective CMO2 – Modal Shift** Work with the NTA to develop mode share targets for the County to achieve and monitor a transition to more sustainable modes including walking, cycling and public transport, during the lifetime of the Plan. This includes providing targeted infrastructure in the most appropriate locations and prioritising development at the most accessible locations in order to achieve the appropriate levels of integration and sustainable transport provision.
- **Policy CMP9 – Prioritisation of Pedestrians and Cyclists** Support the prioritisation of pedestrians and cyclists and the provision of improved public realm to make walking and cycling safer, healthier, quicker, more direct and more attractive.
- **Policy CMP10 – Bicycle Infrastructure** Improve bicycle priority measures and cycle parking infrastructure throughout the County in accordance with best accessibility practice.
- **Objective CMO8 – Active Travel Strategy** Prepare an Active Travel Strategy to encourage active travel and modal shift to sustainable transport modes.

C.17 Trinity College Dublin Sustainability Strategy 2023-2030

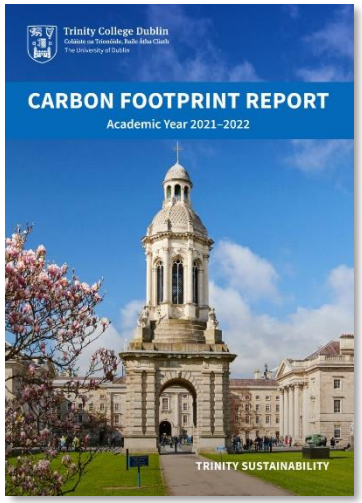
The Trinity College Dublin Sustainability Strategy 2023-2030 sets out a pathway of how the College can tackle climate change, restore biodiversity and create healthy futures through its education, research, operations and community engagement. The Strategy informs an Action Plan to help the College move towards its specific sustainability targets.

Objective 3.3.5 within the Plan aims to "Continue to support sustainable travel to all sites". A key action to achieve this objective is Action 3.3.5a to *"Develop a Campus Travel Plan / Campus Travel Plan to promote sustainable travel to all campus locations by staff, students, and visitors and to reduce the number of vehicles accessing the College Green Campus".*

Other transport specific objectives within the Strategy include:

- **Objective 3.2.3** - Reduce the greenhouse gas emissions from transport vehicles owned by Trinity by 51% in 2030.
- **Objective 3.3.1** - Prioritise permeability throughout the campus to facilitate a greater connection between College Green, Trinity East, Pearse Street and Grand Canal Dock.
- **Objective 3.3.2** - Prioritise connectively between the College Green Campus and other sites namely Trinity Hall, St. James, Iveagh Grounds etc.
- **Objective 3.3.3** - Reduce the number of vehicles accessing the College Green Campus.
- **Objective 3.3.4** - Reduce car parking by 50% on the College Green Campus.
- **Objective 3.3.5** - Support the delivery of walking and cycling infrastructure.
- **Objective 3.5.7** - Support initiatives that improve air quality across the campus and in the wider community.

C.18 Trinity College Dublin Carbon Footprint Report 2021-2022



The Trinity College Dublin Carbon Footprint Report 2021-2022 aims to quantify hotspots of carbon emissions across Trinity's operations throughout the financial year October 2021 to September 2022, with the goal of developing a baseline and setting science-based targets for Trinity's Sustainability Strategy and Action Plan.

The carbon footprint is measured in three different scopes:

Scope 1 emission sources (those directly created from sources owned or controlled by Trinity) were natural gas, LPG, gasoil, road diesel, petrol, marked diesel, and refrigerants.

Scope 2 emission sources (those indirectly created from purchased electricity, heat, cooling or steam consumed by Trinity) included solely purchased electricity.

Scope 3 emission sources (those indirectly created by Trinity's activities but from sources not owned or controlled by Trinity) included purchased goods and services, capital goods, water consumption, fuel and energy related activities, waste generated in operations, business and student academic travel, student and staff commuting, upstream transportation and distribution, and investments.

The results of the study show that business travel and commuting are a relatively small percentage of the total carbon emissions, at 0.68% and 3.28% respectively. Nevertheless, the study highlights the importance of tackling this area as it *"will have the collateral benefit of changing staff and student behaviours which will reduce environmental impacts beyond the university's boundaries."*

The report underlines that "*The primary focus for staff commuting should be shifting from cars to public transport and active travel. Student commuting is already made up predominantly of public transport, hence priority actions should involve working closely with Dublin City Council, Fingal County Council, and Dun Laoghaire-Rathdown County Council to develop safe active travel routes and assist students in finding rental accommodation closer to campus."*

"A targeted survey for car commuters could also help understand barriers and opportunities and pin-point specific actions for this mode. These figures should be taken as approximations due to the low response rate of 7–8% to the 2023 Smarter Travel Survey, which meant that a large proportion of the staff and student primary travel modes were not captured."

According to the Study, the highest emitters were the Purchased Goods & Services and Capital Goods categories with 39.22% and 39.91% of the total emissions respectively, thus *"demonstrating the need for the strong implementation of the Sustainable Procurement Policy and collection of supplier specific emissions data to track improvements over time."*

C.19 The Trinity College Dublin Disability Service Strategic Plan 2020-2025

The Trinity College Dublin Disability Service Strategic Plan 2020-2025 set out the priorities for the Disability service over the five-year period. The first version of this strategic Plan was published in 2011 and has been regularly updated from then until the present day. With the current version of the Strategic Plan expiring in 2025, it is expected that an updated version will be produced during the lifetime of this Campus Travel Plan.

As laid out in the Strategic Plan, the current CORE Mission Statement of the Disability Service is as follows:

- **Civic Action** - Through our collaboration with students with disabilities and our engagement with the Trinity Ability Co-op, we will create a more inclusive campus and fully encourage students with disabilities to participate in a sustainable society.
- **Organisation** - To provide an effective and dynamic service that anticipates and responds to our diverse student population's emerging needs
- **Research** - Engage in ongoing research to better understand students with disabilities, retention barriers, and widening participation at both UG and PG levels, and positively impact these student cohorts

- **Education** - To empower students with disabilities to develop to their full potential and inspire them to meet future challenges. Guide staff in the principles and application of inclusive teaching, learning and assessment to create a fully inclusive educational experience for our students. Ensure students with disabilities have the confidence to think independently, communicate effectively, act responsibly, and develop continuously.

Of particular relevance to this Campus Travel Plan is the action listed under the category of Civic Action to improve campus accessibility.

Appendix D : College Green Gate Opening Hours

College Green Campus Gate Opening Times			
Location	**Operation**		
	Monday - Friday	**Saturday**	**Sunday / Bank Holidays**
Front Gate	• 07:00-00:00 No restriction • Out of hours access for campus residents	• 08:00-18:00 No restriction • Out of hours access for campus residents	• 08:00-18:00 No restriction • Out of hours access for campus residents
Nassau Street	• 07:00-22:30 No restriction • 22:30-07:00 Locked, no access	• 08:00-00:00 No restriction • 00:00-08:00 Locked, no access	• 09:30-00:00 No restriction • 00:00-09:30 Locked, no access
Lincoln Place	• 05:30-00:00 No restriction • 00:00-05:30 Locked, no access	• 05:30-00:00 No restriction • 00:00-05:30 Locked, no access	• 05:30-00:00 No restriction • 00:00-05:30 Locked, no access
Printing House Square	• 07:00-19:00 Gate closed over but open • 19:00-23:30 Swipe access • 23:30-07:00 Locked, no access	• 07:00-19:00 Gate closed over but open • 19:00-23:30 Swipe access • 23:30-07:00 Locked, no access	• 07:00-19:00 Gate closed over but open • 19:00-23:30 Swipe access • 23:30-07:00 Locked, no access
Pearse St Vehicle Gate	• 08:00-10:00 No restriction • 16:00-19:00 No restriction • Locked at all other times	• Locked, no access	• Locked, no access
Moyne Institute	• 08:00-18:00 No restriction • Key Access Only all other times	• Key Access Only	• Key Access Oly
Naughton Institute	• 06:30-22:30 No restriction • 22:30-23:30 Swipe access • 23:30-06:30 Locked, no access	• 08:00-19:00 No restriction • 19:00-23:30 Swipe access • 23:30-08:00 Locked, no access	• 08:00-19:00 No restriction • 19:00-23:30 Swipe access • 23:30-08:00 Locked, no access