CAMPUS CYCLING PLAN

JANUARY 2019

University of Victoria

The university acknowledges with respect the Lekwungen-speaking peoples on whose traditional territory the university stands and the Songhees, Esquimalt and W̱SÁNEĆ peoples whose historical relationships with the land continue to this day.

The University of Victoria has developed its first Campus Cycling Plan, and is committed to a campus where everyone can safely ride their bikes and walk no matter where they are headed.

This plan will guide future campus cycling infrastructure, including bicycle parking, cycling paths and end-of-trip facilities.

EXECUTIVE SUMMARY

The Campus Cycling Plan establishes a framework to guide the development of future cycling infrastructure on campus. The plan provides a strategy for increasing cycling on campus, including improvements to the bicycle network, bicycle parking, end-of-trip facilities and access to campus. Supporting policies to enhance the convenience and safety of cycling are also provided.

The plan was developed based on extensive input from students, faculty, staff and visitors to the campus. The planning process was launched in the fall of 2017 and was developed in three phases.

Based on input from the campus community, five bicycle planning principles were developed to guide the development of the plan.

1. To create a campus where students, staff, faculty and visitors can safely ride their bicycles no matter where they are headed on campus.
2. To create a bicycle-friendly campus that will help achieve the transportation goals set out in the Campus Plan and the Sustainability Action Plan; notably, working towards increasing the use of transit, cycling, walking and carpooling to 70% of all trips to campus by increasing the cycling mode share to 10%.
3. To work towards the development of an All Ages and Abilities (AAA) cycling network by creating new and enhanced cycling infrastructure on campus, including bicycle connections, bicycle parking and end-of-trip facilities.
4. To plan cycling network and facility improvements in a way that supports a balanced and connected multi-modal transportation system.
5. To improve levels of safety and comfort for pedestrians and cyclists on shared pathways across campus.

Based on the five bicycle planning principles, four key strategies were identified to guide the implementation of the plan's policy recommendations and cycling network improvements. These four strategies represent key considerations for the implementation of the plan, including:

1. **Transportation Planning Priorities** – Establish a decision tool to guide policy decisions and to prioritize the needs and safety of each group of road users on campus;
2. **Shared Space and Safety** – Implement a shared space policy approach that promotes respectful active transportation etiquette and awareness in areas inside Ring Road;
3. **Cycling Network** – Enhance the cycling network to improve safety and comfort for people cycling to and from campus as well as on campus in order to increase the cycling mode share to 10%; and
4. **End-of-trip Facilities** – Enhance end-of-trip facilities to improve the current level of service and support the demand that would result from a cycling mode share of 10%.

STRATEGY 1 – TRANSPORTATION PLANNING PRIORITIES

A Transportation Priorities Hierarchy was developed as a strategy to help the university prioritize the needs and safety of each group of road users and to ensure future projects improve conditions for the most vulnerable road users. The Transportation Priorities Hierarchy is the overarching policy direction for the Campus Cycling Plan and will be used as a decision-making tool to guide campus transportation improvements and policies.

STRATEGY 2 – SHARED SPACE AND SAFETY

The Shared Space and Safety Strategy is focused on improving pedestrian-cyclist interactions on campus. A shared space approach is recommended for areas of campus where vehicle movements are highly restricted (service vehicles only) and pedestrian-oriented spaces are widely valued. Shared space policies will be applied primarily within Ring Road, especially the Quadrangle area, but also in a few select areas outside of Ring Road—notably around CARSA, the Student Union Building and McKinnon Building/transit exchange. Strategic components of the shared space approach include:

Education and Awareness | Speed Management | Signage, Signals and Lighting

STRATEGY 3 – CYCLING NETWORK

This plan supports the development of an All Ages and Abilities (AAA) Cycling Network on campus. This Cycling Network Strategy focuses on bicycle network improvements that were identified by the campus community as key opportunities to enhance safety and comfort for cyclists on university grounds. Seven locations were identified for cycling network improvements. Detailed descriptions and actions to support these improvements are outlined under Strategy 3 of the plan.

STRATEGY 4 – BICYCLE PARKING, END-OF-TRIP FACILITIES AND BICYCLE SHARING

Bicycle parking and end-of-trip facilities were a key area of discussion throughout the Campus Cycling Plan process. Strategy 4 focuses on ensuring new and existing buildings provide these amenities in a consistent fashion. Where possible, buildings will be required to have showers and change facilities, as well as sufficient bicycle parking.

It is recommended that approximately 600 additional bicycle parking spaces be added to address the increased demand for bicycle parking needed to achieve a 10% cycling mode share. Recommendations for end-of-trip facilities for cyclists are provided for all new or renovated academic and administrative buildings, and mixed-use hubs in scale with each facility's floorspace.

IMPLEMENTATION

It is anticipated that the proposed network improvements and upgrades discussed in Strategies 2-4 of this plan will be implemented over a period of approximately 10 years and based on available funding. The proposed timeline for the implementation of these projects is provided in Chapter 3 of the plan.

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CHAPTER 1: INTRODUCTION

The University of Victoria (UVic) is the third largest university in British Columbia and a major regional destination in Greater Victoria. The campus straddles the municipalities of Saanich and Oak Bay and is surrounded primarily by low-density residential neighbourhoods and small commercial centres.

The UVic Gordon Head campus is a significant regional destination, with approximately 21,000 students, 800 faculty, 1,700 sessional instructors and specialist and instructional staff, and 3,600 administrative, professional and support staff, in addition to members of neighbouring communities who frequent the campus for the various community events, activities and other learning opportunities.

The university is committed to encouraging sustainable forms of transportation such as walking, cycling and transit to, from and within campus. UVic has a goal that 70% of all trips to and from campus be made by carpooling, walking, cycling or transit—an increase from approximately 60% today. Making cycling a safe, comfortable and convenient transportation choice for students, faculty, staff and visitors to the campus is a means of improving quality of life and benefitting the environment by reducing greenhouse gas (GHG) emissions. However, as the popularity of active transportation grows, challenges and safety concerns have become more frequent across campus. There is an increasing need to balance all modes of transportation in a way that improves functionality and safety.

The Campus Cycling Plan establishes a clear framework to guide the development of future cycling infrastructure, including the bicycle network, bicycle parking and end-of-trip facilities on campus to help improve cycling on campus, as well as access to campus. The Campus Cycling Plan also provides policy direction and strategies to improve levels of comfort and safety in cycling-pedestrian and cycling-vehicle interactions.

1.1 PLAN PURPOSE AND OBJECTIVES

This Campus Cycling Plan is a key outcome of the UVic Campus Plan, which was completed in 2016. The Campus Plan provides policy direction around the need for a pedestrian and cycling-oriented campus and supporting infrastructure for sustainable modes of transportation to increase cycling mode share. The Campus Plan identifies walking as the highest priority for the campus, followed closely by cycling. Through the Campus Plan process, several concerns regarding cycling were identified. These have been grouped into the following four broad areas of improvement:

- Cycling connections leading to and from the campus core;
- Ring Road (cycling infrastructure and safety);
- End-of-trip facilities (bike parking facilities, change rooms, storage lockers, etc.); and
- Cycling and pedestrian congestion and interaction points.

The Campus Cycling Plan was initiated to address these concerns and identify key policies and network improvements that would enhance the functionality and safety of cycling on campus. A key objective of this plan is to increase the cycling mode share from 7.7% of all trips in 2016 to 10% of all trips in the future. The 10% threshold was selected based on the 70% target mode share for transit, cycling, walking and carpooling outlined in UVic's Campus Plan (2016). This was determined to be a reasonable and proportional target for cycling mode share as it also matches the 2036 cycling mode share target of the neighbouring District of Saanich. This plan outlines a 10-year strategy for improving cycling on the UVic campus and reaching this target through key policy and network improvements.

1.2 PLAN PROCESS

The Campus Cycling Plan was developed based on extensive input from students, faculty, staff and visitors to the campus. The planning process was launched in the fall of 2017 and was developed in three phases. The key elements of the three phases are as follows (see **Figure 1.1**):

Phase 1 – Consult and Idea Generation involved initial engagement activities, an online survey, establishing advisory committees and stakeholder groups, and collecting and reviewing background data.

Phase 2 – Plan Development involved ongoing engagement and meetings with advisory committees and stakeholder groups, a review of initial findings, developing bicycle network improvement options, and establishing policy options and recommendations.

Phase 3 – Finalizing Campus Cycling Plan involved preparing the draft plan and implementation strategy, conducting final meetings and engagement events, and preparing the final plan.

Figure 1.1 – Campus Cycling Plan Process

1.3 COMMUNITY ENGAGEMENT

The Campus Cycling Plan was developed over a one-year period between the fall of 2017 and fall of 2018. Community engagement events and meetings with key stakeholders were held throughout the process, including two online surveys, numerous pop-up engagements, promotional events, and several meetings with an Internal Advisory Team and a Technical Advisory Team. A high-level summary of the community engagement activities is provided in **Appendix A**.

For further information, two discussion papers were developed at the end of Phases 1 and 2, respectively. These discussion papers provide a detailed summary of the community discussions and engagement activities that took place in the first two phases of the plan's development.

1.4 BICYCLE PLANNING PRINCIPLES

Based on input from the campus community, five bicycle planning principles were developed to guide the development of the Campus Cycling Plan.

1. To create a campus where students, staff, faculty and visitors can safely ride their bicycles no matter where they are headed on campus.

2. To create a bicycle-friendly campus that will help achieve the transportation goals set out in the Campus Plan and the Sustainability Action Plan; notably, working towards increasing the use of transit, cycling, walking and carpooling to 70% of all trips to campus by increasing the cycling mode share to 10%.

3. To work towards the development of an All Ages and Abilities (AAA) cycling network by creating new and enhanced cycling infrastructure on campus, including bicycle connections, bicycle parking and end-of-trip facilities.

4. To plan cycling network and facility improvements in a way that supports a balanced and connected multi-modal transportation system.

5. To improve levels of safety and comfort for pedestrians and cyclists on shared pathways across campus.

CHAPTER 2: STRATEGIES AND ACTIONS

The implementation of the Campus Cycling Plan requires a supportive policy framework to improve access to bicycle parking and end-of-trip facilities, as well as improving cycling safety and promoting respectful behaviour on campus by all road users. This policy framework will also help to guide the implementation of the plan's recommended physical improvements and supporting infrastructure, such as signage and wayfinding. Providing infrastructure is always a balance between supporting each mode of transportation in a constrained space, with policy being necessary to balance positive aspects of each mode, while mitigating the negative effects of that mode.

2.1 OVERARCHING STRATEGIC DIRECTION

Policy and design changes must focus on safety and improving conditions for the most vulnerable road users, such as cyclists and pedestrians. By improving safety and comfort and prioritizing people walking and cycling, this plan aims to increase the cycling mode share to 10% of all trips made to and from campus.

2.2 FOUR KEY STRATEGIES

Based on the overarching policy direction presented above, the Campus Cycling Plan includes four key strategies:

1

Transportation Planning Priorities

Establish a decision tool to guide policy decisions and to prioritize the needs and safety of each group of road users on campus

2

Shared Space and Safety

Implement a shared space policy approach that promotes respectful active transportation etiquette and awareness in designated Shared Space areas

3

Cycling Network

Enhance the cycling network to improve safety and comfort for cyclists on campus in order to increase the cycling mode share to 10%

4

End-of-trip Facilities

Enhance end-of-trip facilities to improve the current level of service and support the demand that would result from a cycling mode share of 10%

These four strategy areas represent key considerations for the implementation of the Campus Cycling Plan. They also speak to key issues brought forward by the campus community through the public engagement process. UVic's Gordon Head campus will include all four key strategies. UVic's adjacent properties, such as the Ian Stewart Complex and Ocean-Climate Building, will focus only on Strategy 4 End-of-Trip Facilities and not the connections between campus properties that are on municipal lands. The section below elaborates on each of these strategies along with supporting actions and provides key considerations and policies for each.

STRATEGY 1

TRANSPORTATION PLANNING PRIORITIES

A Transportation Priorities Hierarchy was developed as a strategy to help the university prioritize all transportation improvements on campus and to ensure future projects do not make travel on campus more dangerous for the most vulnerable road users. This strategy encourages all transportation projects on campus to look at infrastructure improvements and policy actions through the lens of the most vulnerable road users starting with pedestrians, then cyclists and skateboarders, transit users, service vehicles and finally motor vehicle drivers (as shown in **Figure 2.1**). This is a general approach and does not mean that users at the top of the list will always receive the most beneficial treatment on every street or place on campus. Within the campus environment there is not always enough space to provide the ideal facilities for all users' needs, and compromises must sometimes be made. When modes further down on the list are prioritized, the reasons for this approach will be explained and improvements to alternative routes considered.

Pedestrian priority includes the provision of a variety of services to support the principles of universal design, and to create physical environments that are usable and accessible to people with a wide range of abilities.

KEY ACTION

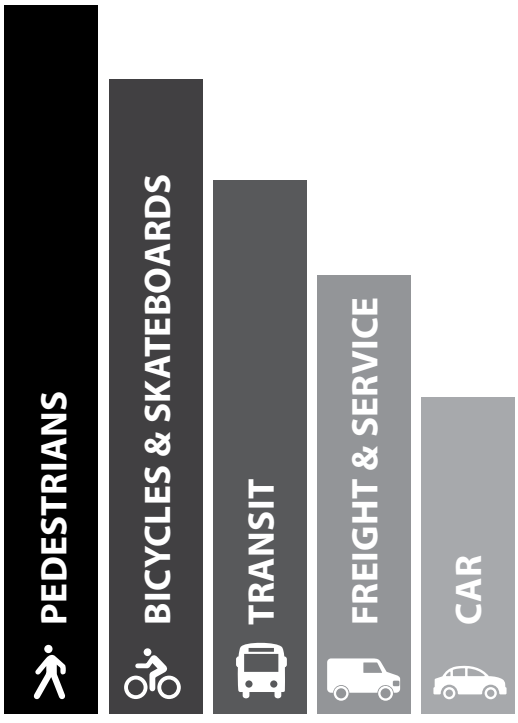
ACTION 1.1 BALANCE CYCLING WITH OTHER MODES OF TRAVEL ON CAMPUS

The Transportation Priorities Hierarchy (see **Figure 2.1**) is the overarching policy direction for the Campus Cycling Plan and will be used as a decision-making tool to guide campus transportation improvements and policies.

In the application of the Transportation Priorities Hierarchy, one of the most challenging aspects is determining which tools and strategies are most appropriate for integrating different modes of transportation successfully. The difficulties facing cyclists on campus are varied, and different areas of campus face different issues. These differences are especially notable between areas of campus that are inside of Ring Road versus those outside of Ring Road. Different approaches are needed for these two areas of campus.

Outside Ring Road, most of the pathways and roadways are focused on accessing core destinations within the campus. The key challenge in these areas is balancing the needs and safety concerns for each mode where pedestrians, cyclists, transit and vehicles are sharing space and interacting with each other. Moving forward, the recommendation for these areas is to focus on having greater separation of modes through hard and soft infrastructure treatments supported by signage, wayfinding and education.

Figure 2.1 – Hierarchy of Transportation Priorities



In contrast, the approach for areas of campus inside Ring Road is very different, as the travel patterns are irregular, with many key destinations spread out within the campus core. Moreover, the interactions within the campus core are primarily between pedestrians and cyclists. Therefore, the recommendation for the interior of Ring Road is a shared space policy approach that focuses on policy, signage, speed mitigation and education, rather than on developing dedicated cycling facilities.

Although policy will be important for implementing changes in both areas of campus, it will be especially critical for supporting changes in travel behaviour and safety within Ring Road where the introduction of separate bicycle facilities is not a viable option due to the high volumes of pedestrians and the diversity of travel patterns.

STRATEGY 2

SHARED SPACE AND SAFETY

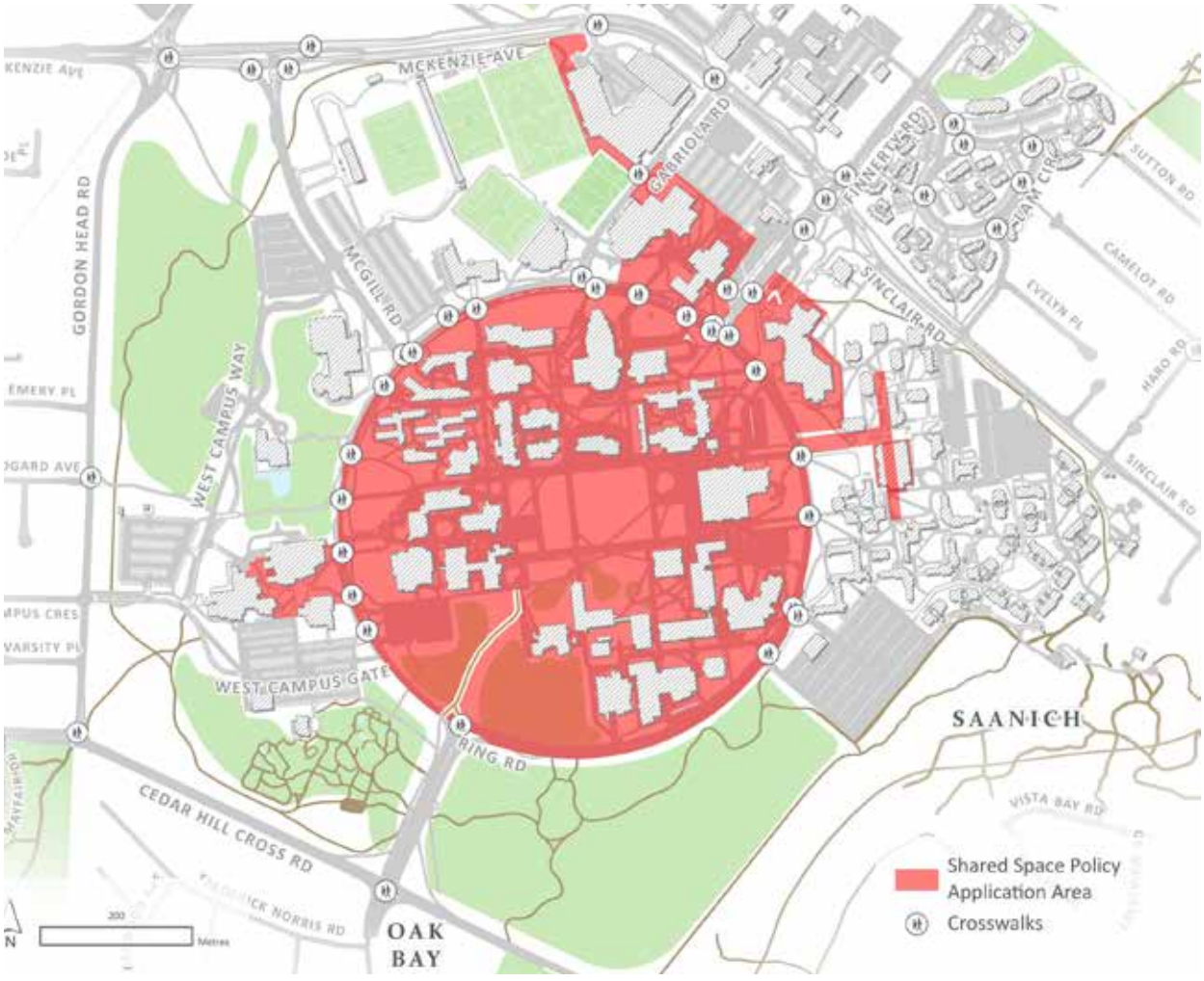
Two of the key concerns identified by the campus community were vehicle-cyclist and cyclist-pedestrian conflicts. Within the interior of Ring Road, multi-use pathways and high traffic areas showed a large potential for negative pedestrian-cyclist interactions. Therefore, a strategy has been developed to improve pedestrian-cyclist interactions on campus.

For areas outside Ring Road, the separation of pedestrian and cycling facilities is recommended as the primary method for improving vehicle, cyclist and pedestrian safety as outlined in further detail under Strategy 3 (Cycling Network). For areas within Ring Road where vehicle movements are highly restricted (service vehicles only) and pedestrian-oriented spaces are widely valued, the implementation of a shared space strategy is recommended.

Inside Ring Road, it is recommended that cyclist movement and speed be managed through design-based mitigation strategies, including education, signage and the application of speed mitigation tools and slow zones.

"Shared Space" is an approach to street and pathway design that minimizes the separations between motorized vehicles, cyclists and pedestrians, requiring that all users share the space. In the shared space model, the pedestrian is considered the primary user of the shared space and has the right of way at all times. A shared space policy is recommended primarily within Ring Road, especially the Quadrangle area, but also in a few select areas outside of the Ring—notably around the Centre for Athletics, Recreation and Special Abilities (CARSA), the Student Union Building and McKinnon Building/transit exchange (as shown in **Figure 2.2**). The shared space policy is supported by Strategy 3 (Cycling Network), which outlines options for safe, alternative cycling paths to alleviate congestion in pedestrian-oriented areas of campus.

Figure 2.2 – Shared Space Application Area



KEY ACTIONS

The following key actions have been developed to support the implementation of a shared space approach and other safety measures to improve the travel experience of all users on campus. Best practices suggest that as pedestrian volumes increase, cyclists are increasingly unable to operate safely and courteously.

Therefore, the key strategic components of a shared space approach include actions for the following strategy areas:

- Education and Awareness;
- Speed Management; and
- Signage, Signals and Lighting.

The following actions are recommended to develop a supporting framework for implementing a shared space approach. Again, these actions are supported by Strategy 3 (Cycling Network), and the provision of safe, alternative cycling routes.

ACTION 2.1 EDUCATION AND AWARENESS STRATEGY

To develop awareness around shared space norms, including safe and respectful cyclist and pedestrian movement and ongoing monitoring, the following actions are recommended:

2.1.1 Develop a cycling education and awareness plan to promote safe cycling on campus.

2.1.2 Designate areas of campus shown in red on **Figure 2.2** as shared space zones where bikes are welcome, but pedestrians have the right of way—including the majority of campus within the interior of Ring Road.

2.1.3 Work with internal and external partners, such as the Bike to Work Society, local municipalities, the Capital Regional District (CRD) and others, to support opportunities to provide adult education, road safety programs and cycling skills training throughout the campus year-round.

2.1.4 Establish "Cycling Ambassador" or "Bike Guru" roles to support the implementation of education and awareness initiatives and to support positive cycling behaviour.

Key policies to support the Education and Awareness Strategy can be found in **Appendix B 1.1**.

Slow Zone

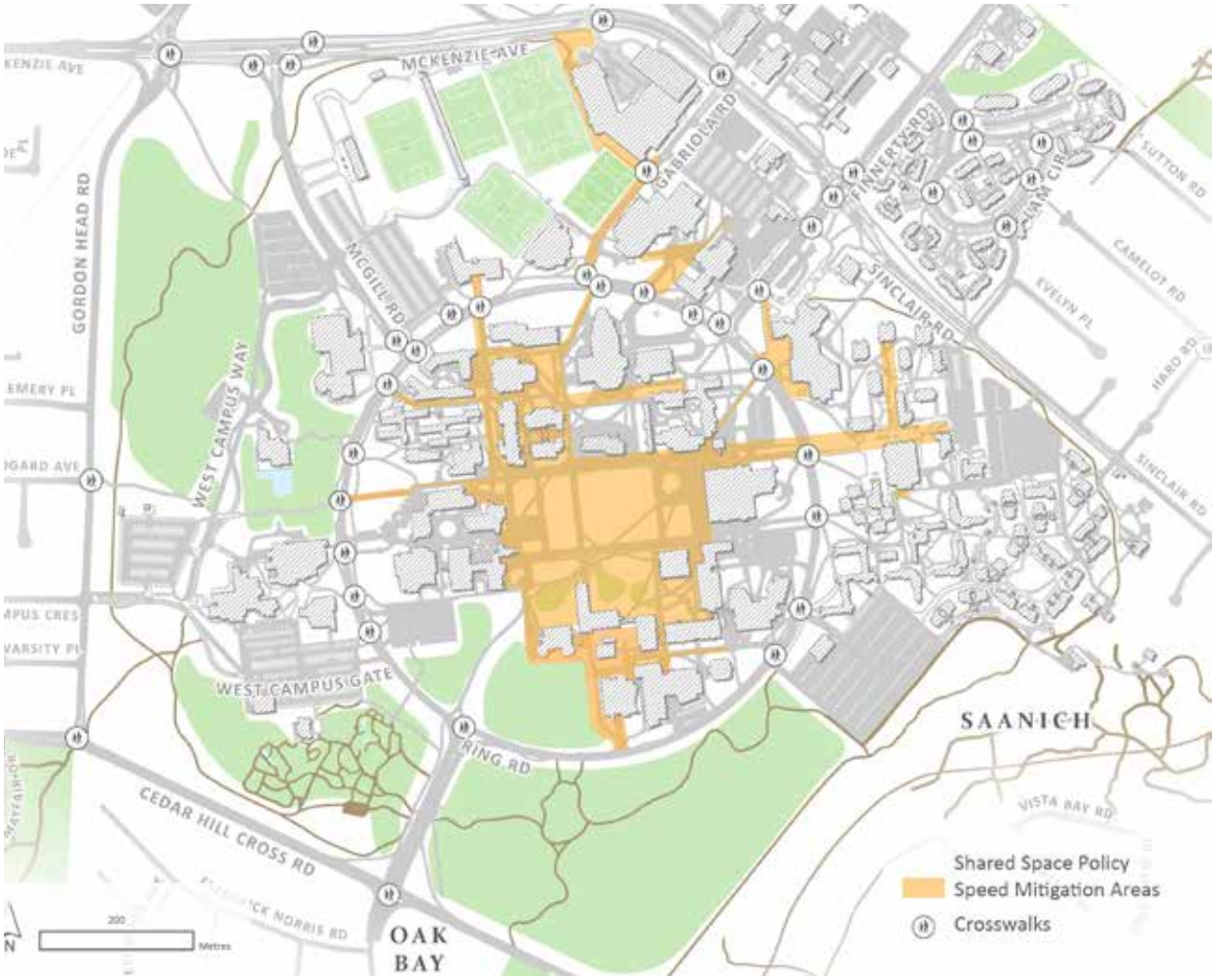
ACTION 2.2 SPEED MANAGEMENT STRATEGY

It is recommended that speed management actions be implemented in the areas identified in **Figure 2.3**, including slow zones, design interventions (i.e. speed bumps, planters and other physical barriers) and pedestrian harbours to facilitate safe and respectful sharing of space. Speed management measures must consider emergency vehicle access and egress.

The following actions are recommended to implement speed mitigation modifications in the areas identified in **Figure 2.3**:

2.2.1 Implement designated slow zones in the core areas of the campus identified in **Figure 2.3**. In these areas, cyclists are asked to travel slowly and give priority to pedestrians.

Figure 2.3 – Shared Space Policy Speed Management Areas (Slow Zones)



2.2.2 Develop an inventory of appropriate design measures, such as textured surfaces, speed bumps and pedestrian harbours, that can be used to manage cycling speeds in the slow zone area identified in **Figure 2.3**. Design approaches should not pose any hazards or impact accessibility and should consider the overall function of the space so as to contribute to a pleasant pedestrian experience and enhance accessibility.

2.2.3 Speed mitigation measures applied in the Campus Greenway should ensure this space remains a continuous corridor, and enhance the aesthetic appeal of this space as a central feature of campus.

Key policies to support the Speed Management Strategy can be found in **Appendix B 1.2**.

ACTION 2.3 SIGNAGE, SIGNALS AND LIGHTING STRATEGY

To assist with the implementation of a shared space approach and the recommended slow zones, a strategy will need to be developed to enhance signage, signals and lighting to improve safety and inform travellers when they enter or exit shared space areas along with the associated expectations. The following actions are recommended:

2.3.1 Develop a comprehensive signage, signals and lighting implementation plan to identify key locations for signage, signals and lighting improvements. This implementation plan should include installing "slow cycling" signage throughout the speed mitigation zone identified in **Figure 2.3**. Special consideration should be given for entry and exit points.

2.3.2 Install new signage and/or pavement markings to support shared space norms. This could include encouraging attentive riding, slow travel speeds and cyclists yielding the right-of-way to pedestrians within marked crosswalks or within unmarked crosswalks at intersections.

2.3.3 Enhance and expand pedestrian and cycling wayfinding information to identify slow zone areas on all campus maps.

2.3.4 Expand and refresh the existing #sharethespace program to promote shared space within the core of campus and permanent installation of signage.

2.3.5 Improve lighting in the following areas: the pathway behind the Medical Sciences Building to the Engineering/ Computer Science Building (ECS); the pathway by the Engineering Office Wing (EOW); Bob Wright Building; MacLaurin Building; Sedgewick Building and the Ring Road side of ECS.

2.3.6 Install in-ground bicycle detection sensors in coordination with the District of Oak Bay and District of Saanich, at actuated signals to alert the signal controller of bicycle crossing demand on all intersections accessing campus.

Key policies to support the Signage, Signals and Lighting Strategy can be found in **Appendix B 1.3**.

STRATEGY 3

CYCLING NETWORK

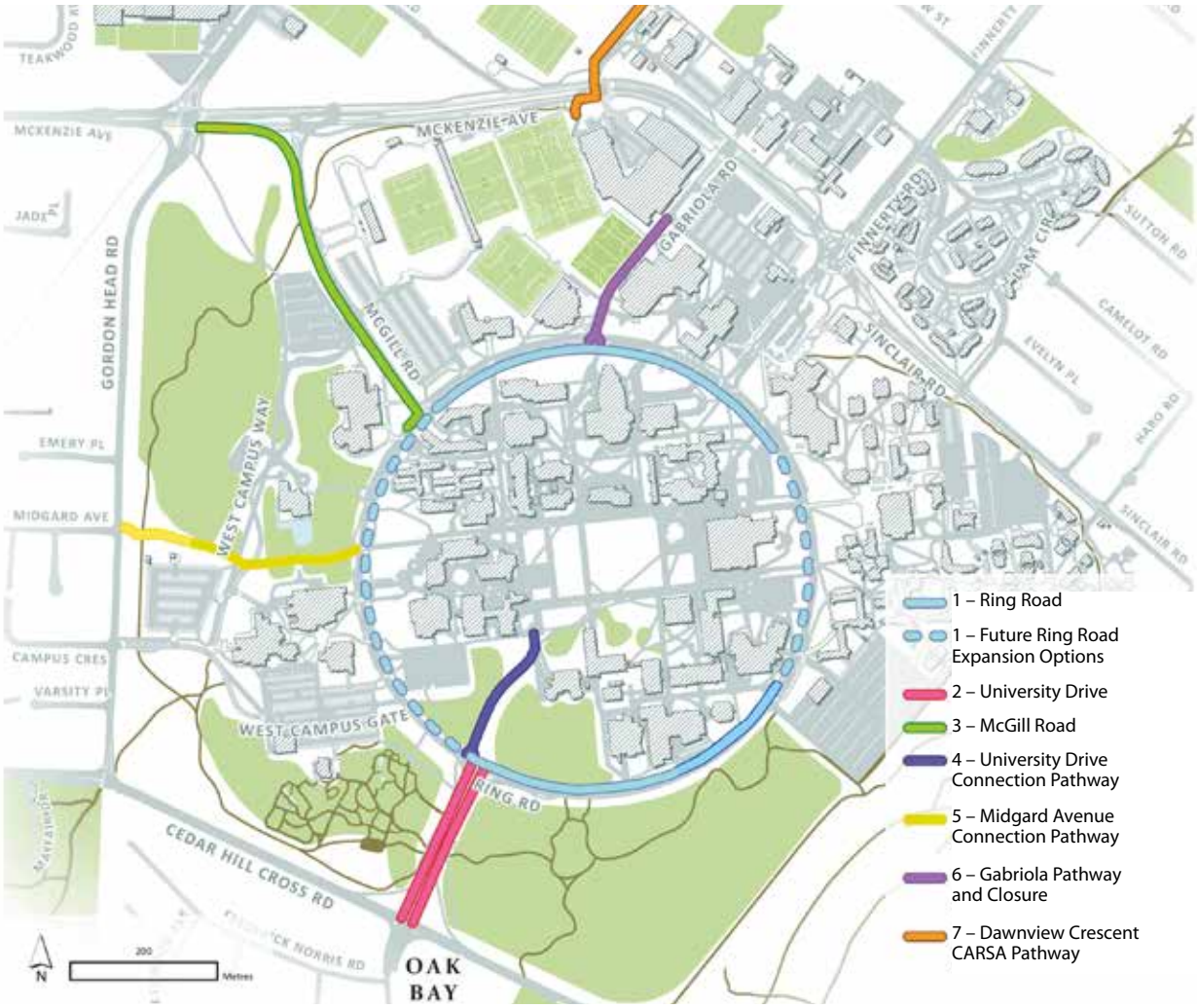
This plan supports the development of an All Ages and Abilities (AAA) Cycling Network on campus. This strategy focuses on bicycle network improvements that were identified by the campus community as key opportunities to enhance safety and comfort for cyclists on university grounds.

The development of an AAA network will improve safety, enhance cycling facilities, enhance route connections and provide separated travel spaces for pedestrians, cyclists (as well as other human-powered modes, such as skateboarding) and vehicles. These represent key areas of desired improvements and locations where cycling facilities could expand cyclist access to campus. A full overview of community feedback and network improvement options can be found in discussion papers 1 and 2.

KEY ACTIONS

This section provides recommendations for new and upgraded cycling facilities. Seven locations were identified for cycling network investments (as highlighted in **Figure 2.4**). Detailed descriptions and actions to support these improvements are outlined below.

Figure 2.4 – Cycling Network Improvement Areas



ACTION 3.1 RING ROAD

During the public engagement process, four improvement options were developed for Ring Road. Options ranged from maintaining the status quo to removing a motor vehicle travel lane to creating a bi-directional protected bicycle lane. The feedback from both the survey and in-person engagement activities showed that the preferred option is a separated multi-use pathway along the inside of Ring Road, especially for certain key sections. The need to upgrade crossings on Ring Road to facilitate the efficient movement of transit and motor vehicles during peak periods was also identified.

ACTION 3.1.1 SHORT-TERM RING ROAD NETWORK IMPROVEMENTS

In the short term, it is recommended that the university consider adding directional sharrows (shared lane markings) along the entirety of Ring Road to encourage greater awareness of cyclists and help drivers recognize Ring Road as a shared travel space.

Sharrow

ACTION 3.1.2 MEDIUM-TERM RING ROAD NETWORK IMPROVEMENTS

In the medium term (5-7 years), improvements along Ring Road should be prioritized at locations that provide the most important connections to key destinations on campus. These improvements will include a pathway adjacent to Ring Road, to provide a separated and safe space for cycling. Two locations have been identified for medium-term improvements (see **Figures 2.5 and 2.6**):

1. **Ring Road Pathway (North)** – Separated pedestrian and bicycle pathways from McGill Road to the Student Union Building along the inside of Ring Road; and
2. **Ring Road Pathway (South)** – Separated pedestrian and bicycle pathways (where feasible) from the University Drive pathway to the Bob Wright Building along the inside of Ring Road.

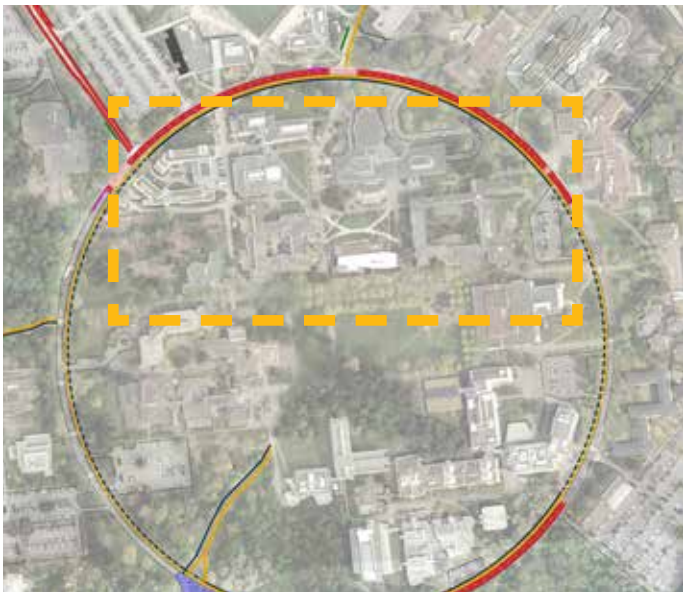
In both cases the existing pathways would be upgraded and widened to separate bicycle and pedestrian pathways with a combined desirable width of 5.0 metres. This would create more space for cyclists and pedestrians to safely travel along these key connections.

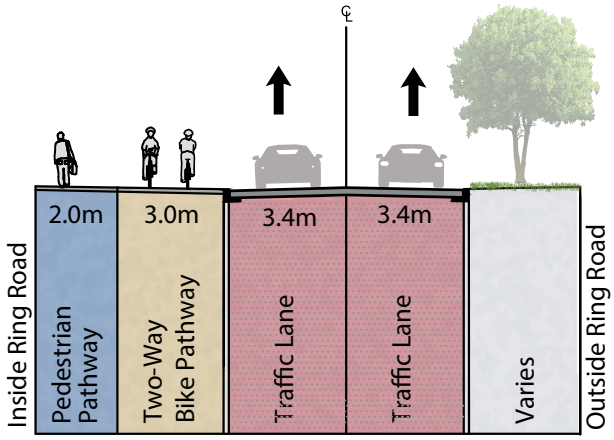
KEY CONSIDERATIONS (MEDIUM-TERM)

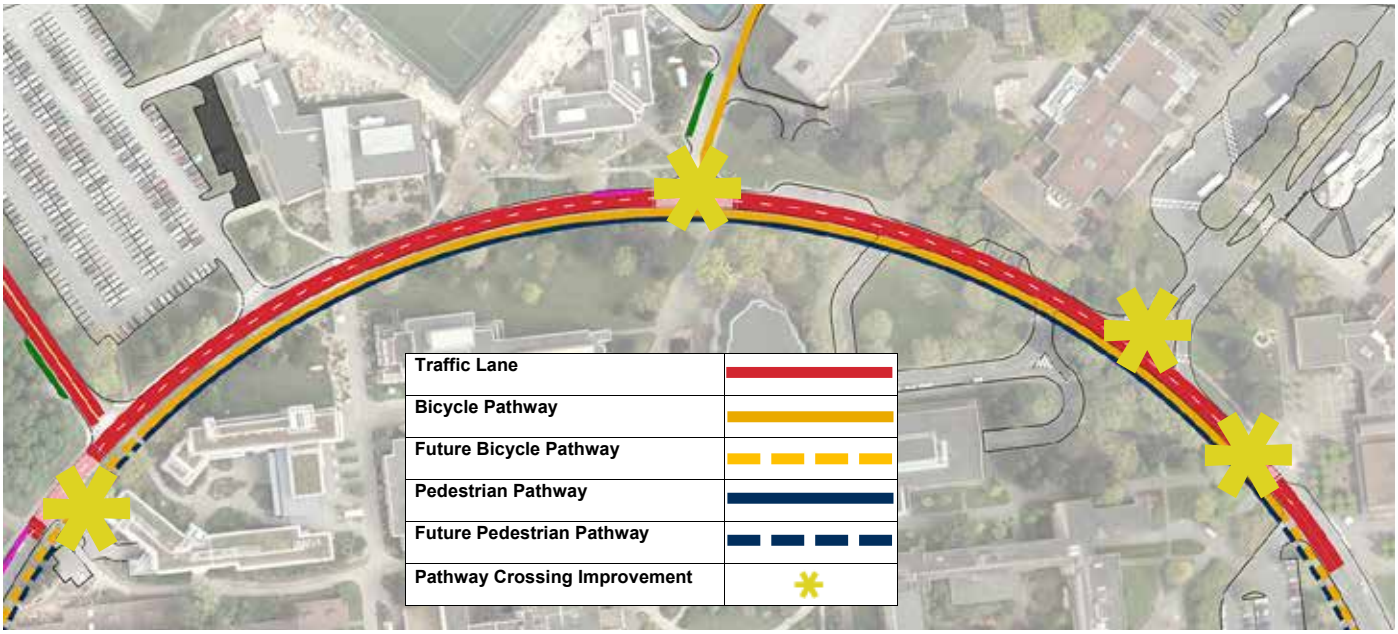
Paving materials and road markings should be used to differentiate between the pedestrian and cycling pathways. In areas where significant trees or other barriers exist, pathways may be narrowed and downgraded to shared use pathways for a short distance. Signage would be required to identify this transition. Other key design considerations include:

- Traffic calming measures, landscaping and other design features should be integrated into bicycle pathways to encourage compliance with the posted speed in accordance with Strategy 2.
- The design of the separation between pathways should be intuitive.
- Edge conditions must be considered when determining appropriate width, as they may add to or subtract from the usable width.
- Several existing trees and adjacent foliage will need to be removed to create space for this pathway.
- Additional clearance is needed from vertical obstructions such as lamp poles.
- Over short distances or in constrained environments, narrower widths may be acceptable taking into account the local context.
- Where there are abrupt changes in grade, the bicycle facility should be designed to minimize jarring. For example, long ramps and vertical curves should be used where a bicycle pathway transitions from road to sidewalk level.

Figure 2.5 – McGill Road to the Student Union Building Separated Pedestrian and Bicycle Pathways



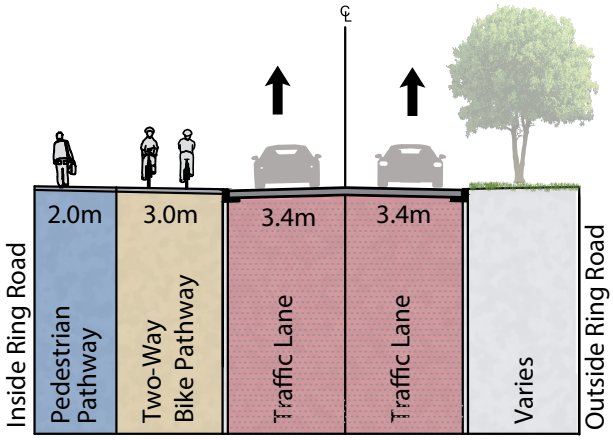


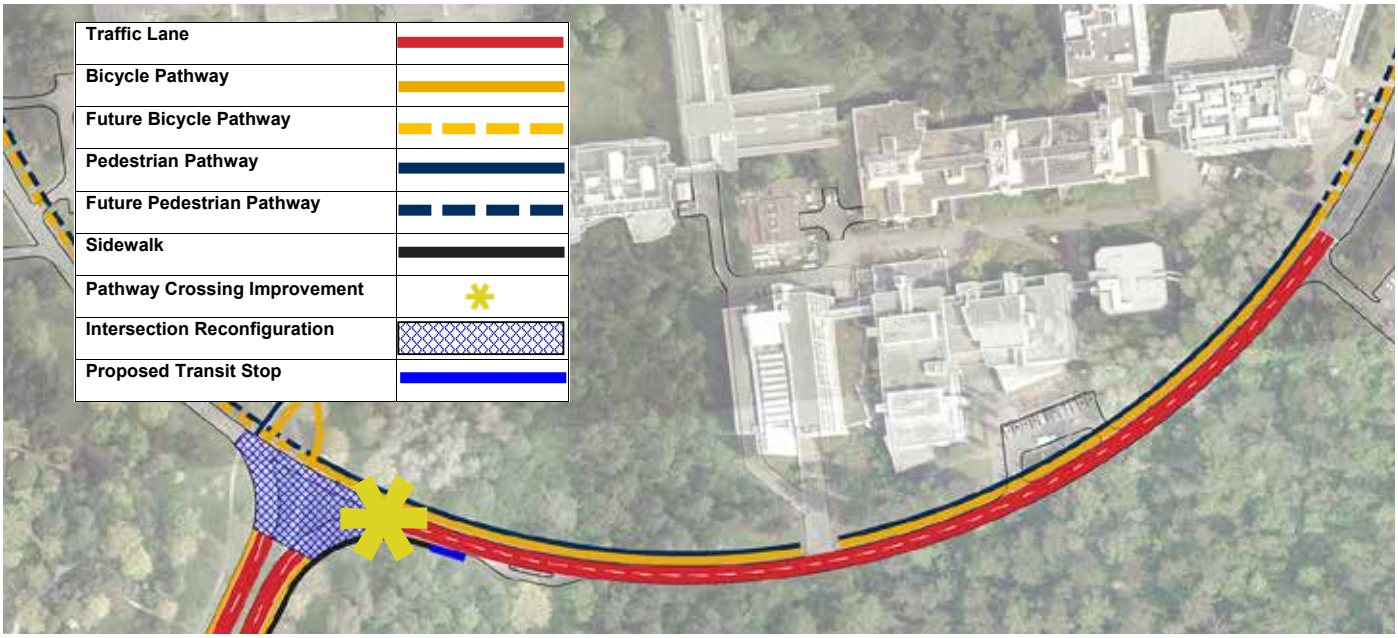


DESIGN SPECIFICATIONS

- 5.0m asphalt separated pedestrian and bicycle pathways made up of a minimum 3.0m two-way cycling path and 2.0m pedestrian path.
- Minimum 0.5m buffer between the path and all adjacent infrastructure.
- Pedestrian and cycling paths to be delineated using pavement markings or contrasting surface treatment.
- High visibility green conflict paint to be used where motorists cross the cycling path entering parking lots.
- Continuous centreline to be used on the cycling path for the approach to all intersections.

Figure 2.6 – University Drive to Engineering Building Separated Pedestrian and Bicycle Pathways





DESIGN SPECIFICATIONS

- 5.0m asphalt separated pedestrian and bicycle pathways made up of a minimum 3.0m two-way cycling path and 2.0m pedestrian path.
- Minimum 0.5m buffer between the path and all adjacent infrastructure.
- Pedestrian and cycling paths to be delineated using pavement markings or contrasting surface treatment.
- High visibility green conflict paint to be used where motorists cross the cycling path entering parking lots.
- Continuous centreline to be used on the cycling path for the approach to all intersections.

ACTION 3.1.3 LONG-TERM RING ROAD NETWORK IMPROVEMENTS

The integration of all modes of transportation along Ring Road should continue to be a long-term goal of the university. In keeping with the Campus Plan, a comprehensive design study for Ring Road should be completed. The study should examine walking, cycling, transit and traffic holistically. Through a comprehensive design study for Ring Road, the university should continue to:

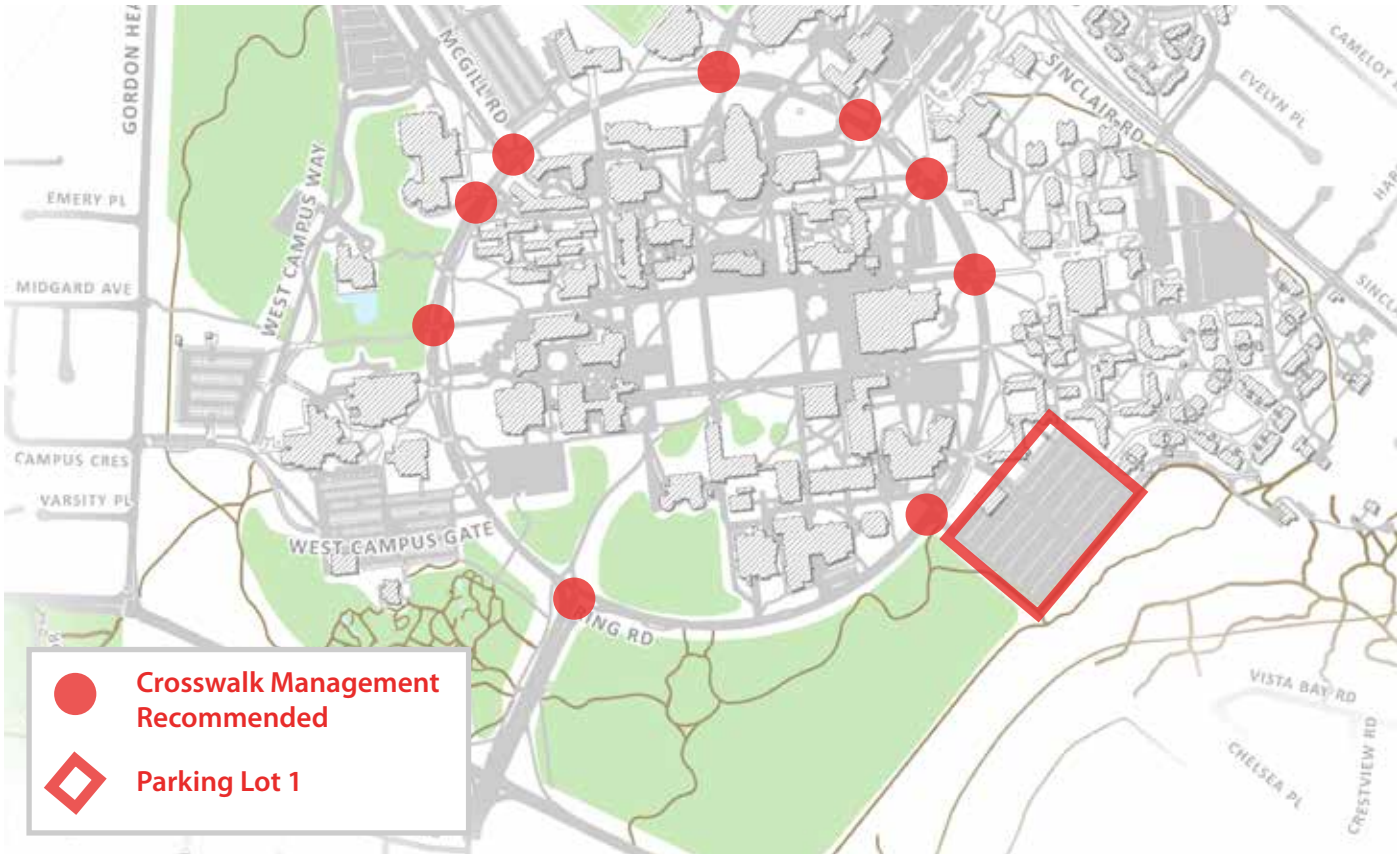
- Pursue opportunities to reduce vehicle traffic on Ring Road.
- Reduce parking lot access/egress points on Ring Road.
- Explore alternative vehicle egress from Parking Lot 1 to Cedar Hill Cross Road to mitigate large volumes of vehicle traffic on Ring Road.
- Consider options to reallocate road space from single occupancy vehicles to transit, cycling or a combination of these modes.

The comprehensive design study for Ring Road should also review opportunities for crosswalk enhancements at several key points. It is recommended that pedestrian/cyclist push-button activated signals be located at crossings in nine locations and provided with signage notifying pedestrians to cross when permitted to better manage the timing of pedestrian and cyclist crossings (see **Figure 2.7**). Further analysis is also required to determine the most appropriate treatment for each intersection.

Signage, wayfinding and roadway pavement markings will be required to identify key transitions where cyclists join the Ring Road pathway or cross Ring Road at the following areas:

- Intersection of Ring Road and McGill Road;
- Crosswalk in front of the Fraser Building on Ring Road (near McGill Road);
- Intersection of Ring Road and Gabriola Road;
- Intersection of Ring Road and Finnerty Road;
- Terminus of the multi-use pathway in front of the Student Union Building;
- Intersection of Ring Road and the Midgard Pathway;
- Crossing between the future student housing area and the Campus Greenway;
- Intersection of University Drive and Ring Road; and
- Transitions to the multi-use pathway at the end of University Drive.

Figure 2.7 – Future Ring Road Design Considerations



ACTION 3.2 UNIVERSITY DRIVE

This section outlines proposed cycling network improvements for University Drive. University Drive runs from the intersection of Cedar Hill Cross Road and Henderson Road to Ring Road and presents an important opportunity to improve cycling safety and cycling network connectivity on the campus. Redesigning University Drive has the potential not just to improve cyclist and pedestrian safety, but also to unlock other options to enhance transit and vehicle travel on campus. Evolving this key gateway into an integrated travel corridor that supports all modes of transportation will support the broader revitalization of UVic's entire transportation network.

The redesign of University Drive will be heavily influenced by the proposed Ring Road Design Study and any future changes made to Ring Road. The focus of this redesign will be improving the safety and comfort of pedestrians and cyclists, notably at the intersections of University Drive and Ring Road, and University Drive and Cedar Hill Cross Road, where there is tremendous opportunity to safely integrate travel facilities for vehicles, buses, cyclists and pedestrians. Therefore, the recommended improvements presented for University Drive in this plan considered the broader objectives of reducing speeds, improving access to campus, and improving crossings for both pedestrians and cyclists within the context of a future redesign of University Drive and Ring Road.

Based on these opportunities and feedback from the campus community, the recommended approach is to add a protected bicycle lane to the west side of the southbound travel lane, and to shift the existing bicycle lane on the northbound lane from the west side to the east side and upgrade this facility to a protected bicycle lane (see **Figure 2.8**). It should be noted that this will require moving the existing bus stop past University Drive to the existing layby on Ring Road or another location to the west of the layby. This option has the most potential to improve connectivity for transit users by relocating the bus stop closer to key destinations, and would also help to improve the transition to the left side bicycle lane at Cedar Hill Cross Road.

KEY CONSIDERATIONS (SHORT-TERM):

In the short term, this plan supports the following improvements on University Drive:

- Improve the crossing of Ring Road by creating a safe crossing point and connection to the centre of campus via the pathway leading from the end of University Drive to the Quadrangle.
- Add in a green painted box to the recommended southbound bike lane where vehicles turn right onto Ring Road from University Drive. This could be done in advance of the actual bike lane construction to encourage drivers to beware of cyclist traffic.
- Work with the District of Oak Bay to install in-ground bicycle detection sensors for the traffic signal at Cedar Hill Cross Road and Henderson/University Drive to facilitate expedited crossing.

Further discussions will be required with the District of Oak Bay to confirm intersection treatments for preferred options, notably shifting the bicycle lane crossing to the right side of the northbound lane on Henderson Road.

Signage, wayfinding, roadway paint and additional lighting will be required to identify key transitions at the following areas:

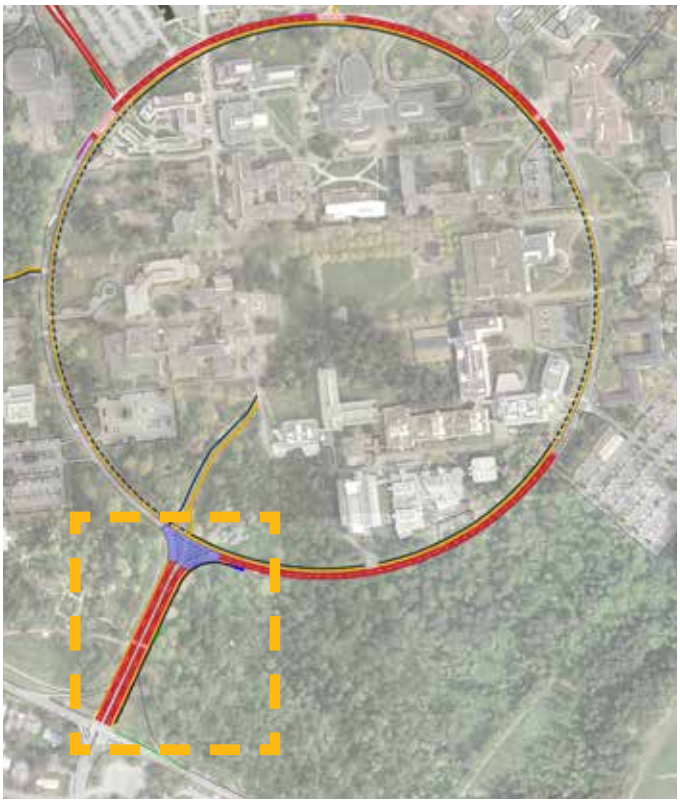
- Intersection of Cedar Hill Cross Road and University Drive;
- Intersection of University Drive and Ring Road;
- Transitions to the multi-use pathway at the end of University Drive; and
- Improved lighting at the intersection crossings is recommended, as these areas can be dark at night.

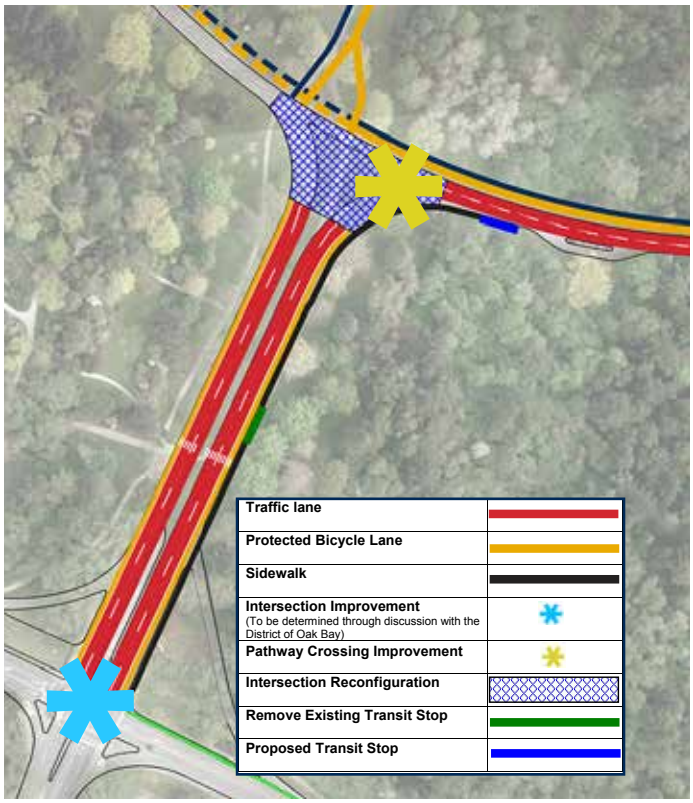
KEY CONSIDERATIONS (LONG-TERM):

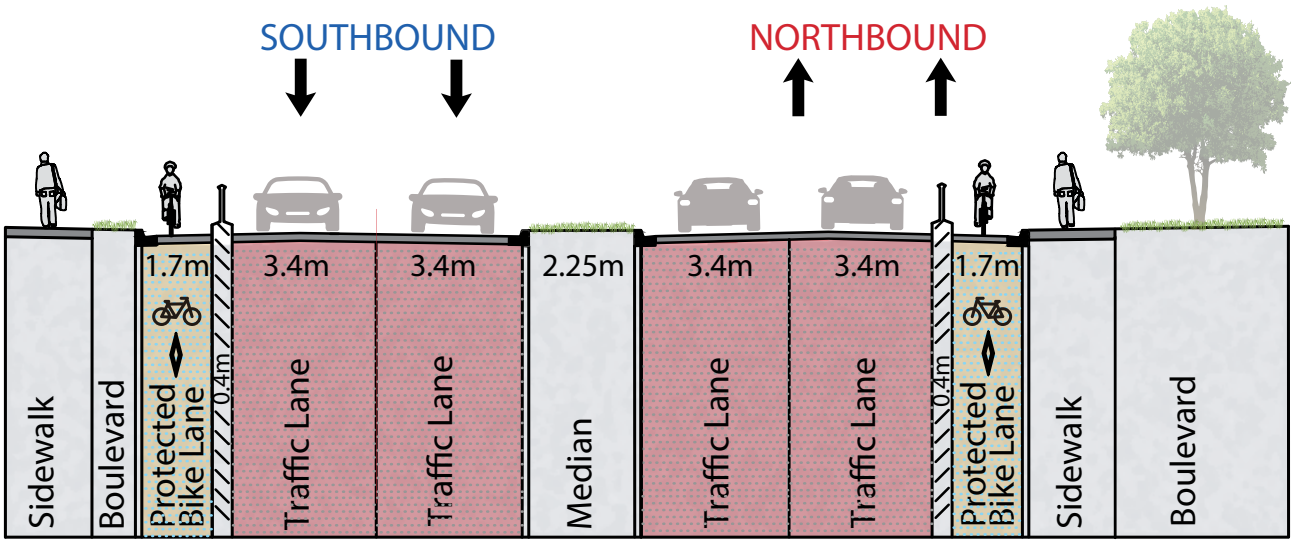
In the long term, this plan supports the redesign of the intersection at University Drive and Ring Road. A comprehensive redesign with seamless connections to other network improvements is required. Key safety improvements include:

- Install marked pedestrian and cycling crossings at Ring Road and University Drive;
- Where there are abrupt changes in grade, design the bicycle facility to minimize jarring;
- Relocate the existing transit stop on the east side of University Drive to the nearby layby on the south side of Ring Road or to another location to the west of the layby;
- Reduce width of existing median to provide adequate road width for new separated bicycle lanes that meet the AAA standard and avoid the removal of trees.

Figure 2.8 – University Drive Improvement Concept







DESIGN SPECIFICATIONS

- Minimum 1.7m protected bicycle lane, with a minimum 0.4m concrete buffer (AAA Standard).
- High visibility green conflict paint to be used where motorists cross the bike lanes.
- High visibility crossing at Ring Road to be coordinated with intersection redevelopment.
- Relocate the existing bus stop from northbound University Drive to Ring Road.

ACTION 3.3 MCGILL ROAD

The focus of improvements for McGill Road is to provide a safe connection from the McKenzie Avenue and Gordon Head Road intersection to the centre of campus. This plan supports the development of a 3.0 metre two-way bicycle pathway and a 2.0 metre pedestrian path adjacent to the west side of McGill Road (see **Figure 2.9**). The provision of a separated cycling facility from the intersection at Gordon Head Road and McKenzie Avenue to the intersection of Ring Road and McGill Road, with separated pedestrian and bicycle pathways, will improve safety and comfort for all users. A new crosswalk and path would be added south of McKenzie Avenue to connect the path to the existing multi-use path that runs east of McGill Road along McKenzie Avenue.

Existing trees along McGill Road will be impacted by the construction of the new path.

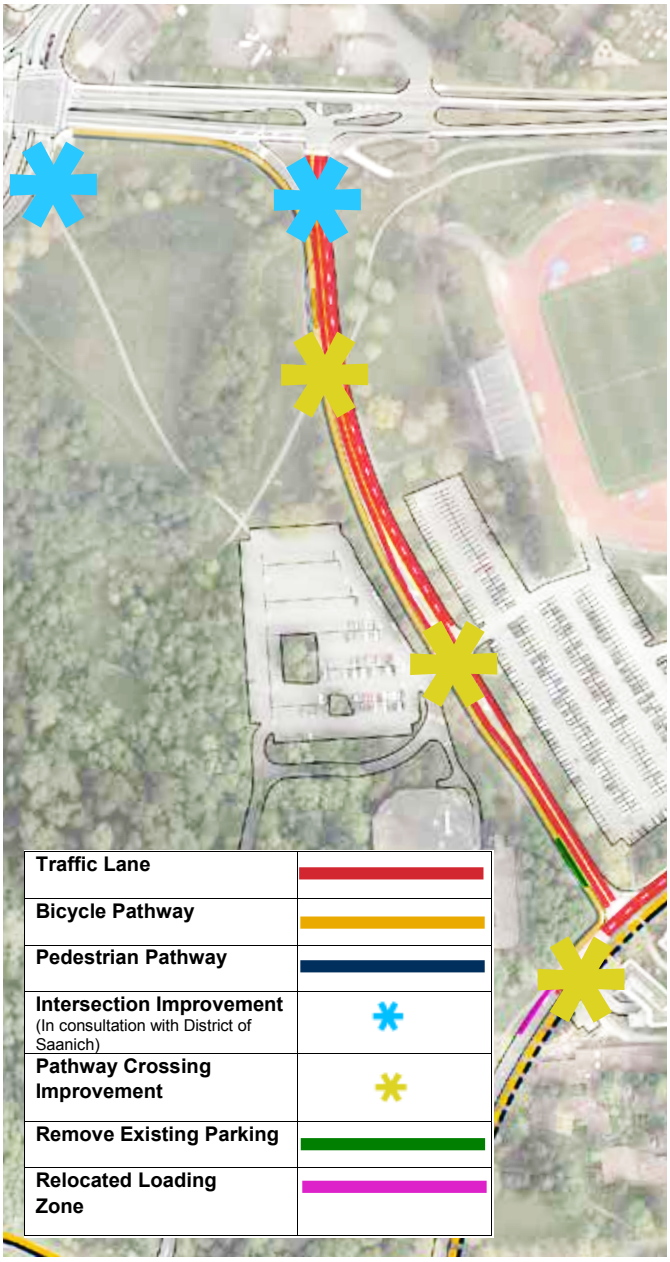
KEY CONSIDERATIONS:

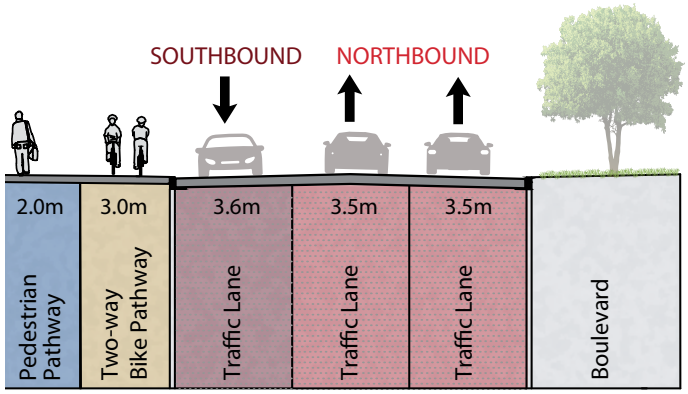
- Explore a short-term measure to ensure safer crossing of cyclists from McGill Road to the centre of the campus between the David Turpin Building and Sedgewick Building.
- Remove the existing wayfinding layby on McGill Road and integrate this into the proposed multi-use pathway.
- Improve the crossing of Ring Road by creating a safe crossing point for cyclists and pedestrians, including a connection to the centre of campus between the David Turpin Building and Sedgewick Building and to the Ring Road multi-use pathway (north).
- Use paving materials and/or road markings to differentiate between pedestrian and cycling sections of the pathway.
- The design of separation between pathways should be intuitive.
- Where there are abrupt changes in grade, design the bicycle facility to minimize jarring.
- Further discussions will be required with the District of Saanich to confirm intersection treatments at Gordon Head Road and McKenzie Avenue, and McGill Road and McKenzie Avenue.
- Relocate the loading zone for the Fraser Building from McGill Road to a new layby on Ring Road.

Signage and education is required to encourage cyclists to continue on the bicycle pathway to the Gordon Head/McKenzie intersection to exit campus. Signage, wayfinding and roadway paint will be required to identify key transitions at the following areas:

- Intersection of Gordon Head Road and McKenzie Avenue;
- Intersection of McKenzie Avenue and McGill Road;
- Intersection of Ring Road and McGill Road;
- Mid-way crosswalk on McGill Road; and
- Crosswalks and crossing points on Ring Road.

Figure 2.9 – McGill Road Improvement Concept





DESIGN SPECIFICATIONS

- 5.0m asphalt separated pedestrian and bicycle pathways made up of a minimum 3.0m two-way cycling path and 2.0m pedestrian path.
- Minimum 0.5m buffer between the path and all adjacent infrastructure.
- Pedestrian and cycling paths to be delineated using pavement markings or contrasting surface treatment.
- High visibility green conflict paint to be used where motorists cross the cycling path entering parking lots.
- Intersection improvements along McKenzie Avenue to be coordinated with Saanich.
- Continuous centreline to be used on the cycling path for the approach to all intersections.

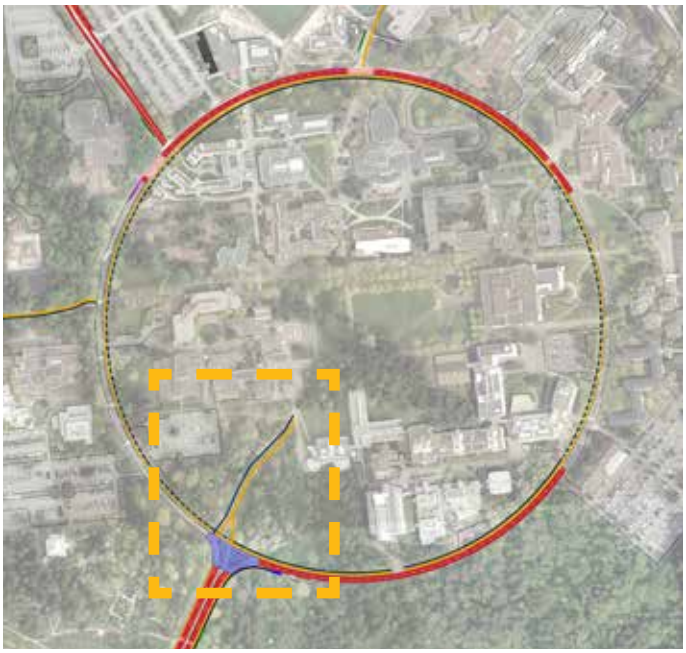
ACTION 3.4 UNIVERSITY DRIVE CONNECTION PATHWAY

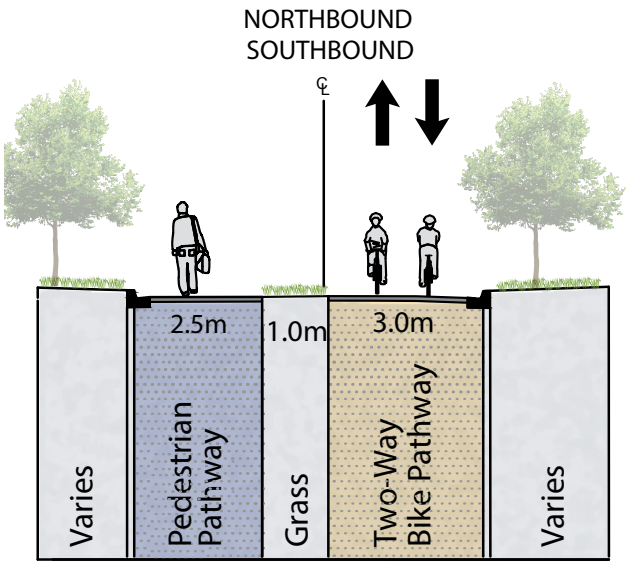
A new two-way bicycle path is recommended to connect cyclists from University Drive to the centre of campus. The existing shared use pathway was identified as a high-traffic area for cyclists and pedestrians. This improvement would add a 3.0 metre two-way bicycle pathway adjacent to the existing pathway, and the existing pathway would be converted from shared use to pedestrian only (see **Figure 2.10**).

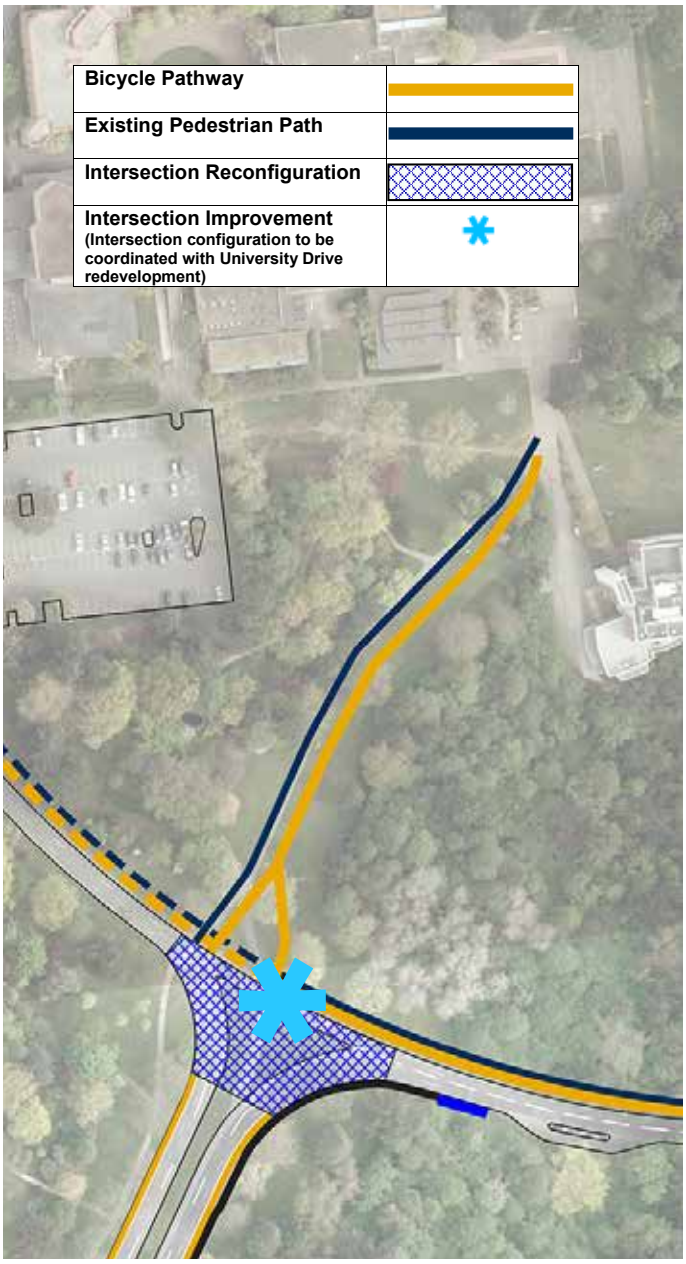
KEY CONSIDERATIONS:

- Clearly sign and mark bicycle path gateways at the University Drive/Ring Road intersection and at the trailhead between the Medical Sciences Building and MacLaurin Building near the Quadrangle. This may require aligning the pathway to connect directly into the plaza in front of the MacLaurin Building.
- Integrate traffic calming measures, landscaping, signage and other design features into pathway entry and exit points to encourage compliance with the posted speed.
- Improve lighting along the pathway leading into campus.
- Ensure sufficient clearance is provided from vertical obstructions such as trees and lamp posts.
- Use signage and pavement markings to differentiate between pedestrian and cycling sections of the pathway.
- Where speed reduction is required in accordance with Strategy 2, the 'SLOW' marking on pavement is preferred.

Figure 2.10 – University Drive Pathway Improvement Concept







DESIGN SPECIFICATIONS

- 3.0m minimum width for proposed two-way asphalt cycling pathway.
- 1.0m minimum buffer between the cycling and pedestrian pathways.
- Lighting improvements needed along proposed pathway.
- Improve path gateways with pavement markings and signage at Ring Road, University Drive and the junction with the existing walkway.
- Continuous centreline to be used on the cycling pathway where the pathway turns and at the approach to all intersections.

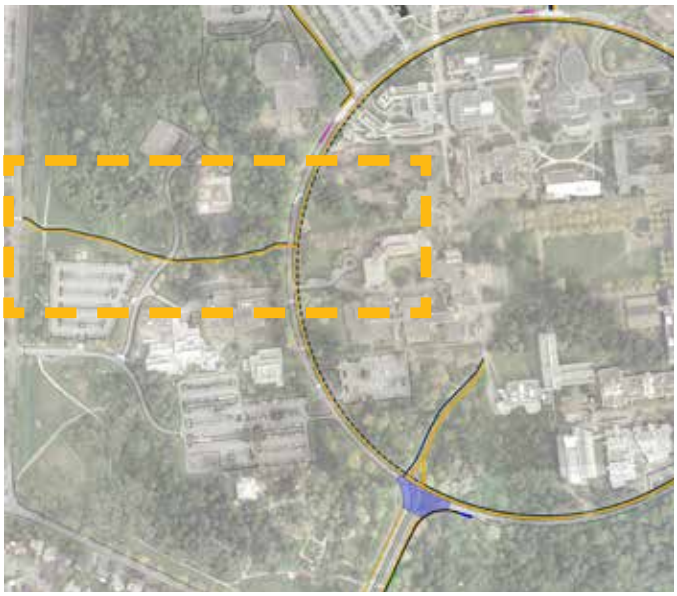
ACTION 3.5 MIDGARD AVENUE CONNECTION PATHWAY

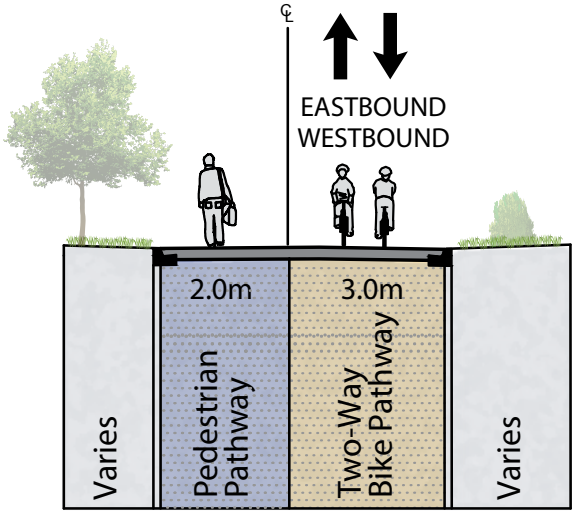
This plan supports the widening of the Midgard Avenue Connection Pathway to a minimum of 5.0 metres and creating separate walking and cycling pathways (see **Figure 2.11**). This pathway improves the connection to the centre of campus from the Shelbourne neighbourhood, west of campus, via the Saanich cycling route on Midgard Avenue. Intersection improvements and connections to campus will require coordination with both the District of Saanich and the District of Oak Bay. Additionally, crossing improvements are recommended at both West Campus Way and Ring Road to connect with the Campus Greenway leading to the Quadrangle.

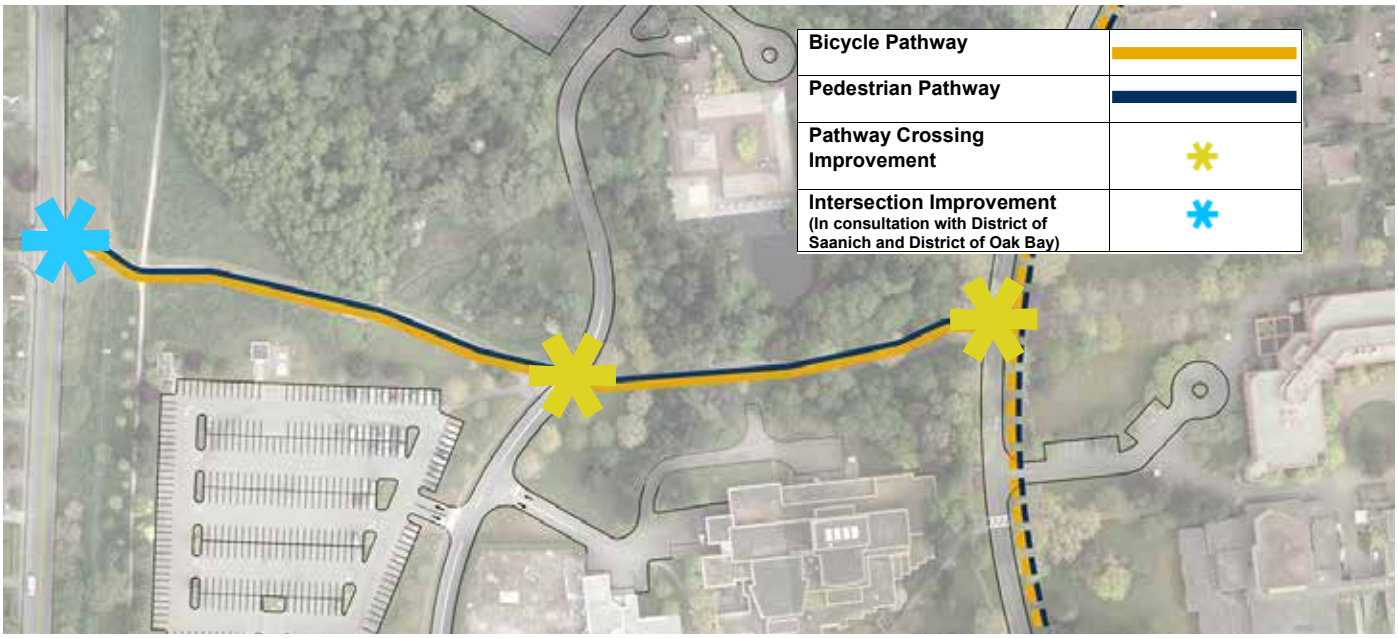
KEY CONSIDERATIONS:

- The minimum pathway width should be 5.0 metres. However, over short distances or in constrained environments narrower lanes may be acceptable considering the local context. Similarly, where ample space is available, the pathway should be made wider (up to 5.5 metres) to accommodate higher pedestrian and cycling traffic.
- Integrate traffic calming measures, landscaping, signage and other design features into road crossing points (i.e. West Campus Way and Ring Road), as well as pathway entry and exit points.
- Consider pathway edge conditions when determining appropriate width, as they may add to or subtract from usable width.
- Ensure sufficient clearance is provided from vertical obstructions such as trees and lamp poles.
- Improve lighting for the pathway and at the campus gateway at Gordon Head Road.
- Use signage and pavement markings to differentiate between pedestrian and cycling sections of the pathway.
- Where there are abrupt changes in grade, design the bicycle pathway to minimize jarring.
- Consultation with the District of Saanich and the District of Oak Bay is required to confirm intersection treatments and potential improvements at Gordon Head Road and Midgard Avenue. Potential improvements for discussion include:
  - Opportunities to enhance signage and traffic controls to facilitate the pedestrian and cyclist crossing (in coordination with Oak Bay and Saanich); and
  - New signage to encourage cyclists to reduce speed when entering the campus.

Figure 2.11 – Midgard Avenue Pathway Improvement Concept







DESIGN SPECIFICATIONS

- 5.0m asphalt separated pedestrian and bicycle pathways made up of a minimum 3.0m two-way cycling path and 2.0m pedestrian path.
- Pedestrian and cycling paths to be delineated using pavement markings or contrasting surface treatment.
- At all roadway crossings the pathway is to cross perpendicular to the roadway.
- Raised crossings recommended to assign priority to path users at West Campus Way and Ring Road.
- Continuous centreline to be used on the cycling path where the pathway turns and at the approach to all intersections.

ACTION 3.6 GABRIOLA ROAD

The recommended approach for Gabriola Road is to create a cycling path and pedestrian walkway along the current roadway between Parking Lot 2 (located behind the McKinnon Building) to Ring Road (see **Figure 2.12**). In this approach, all non-service vehicle movements would be restricted, and pavement markings would be used to delineate the bicycle lanes from the pedestrian portion of the walkway.

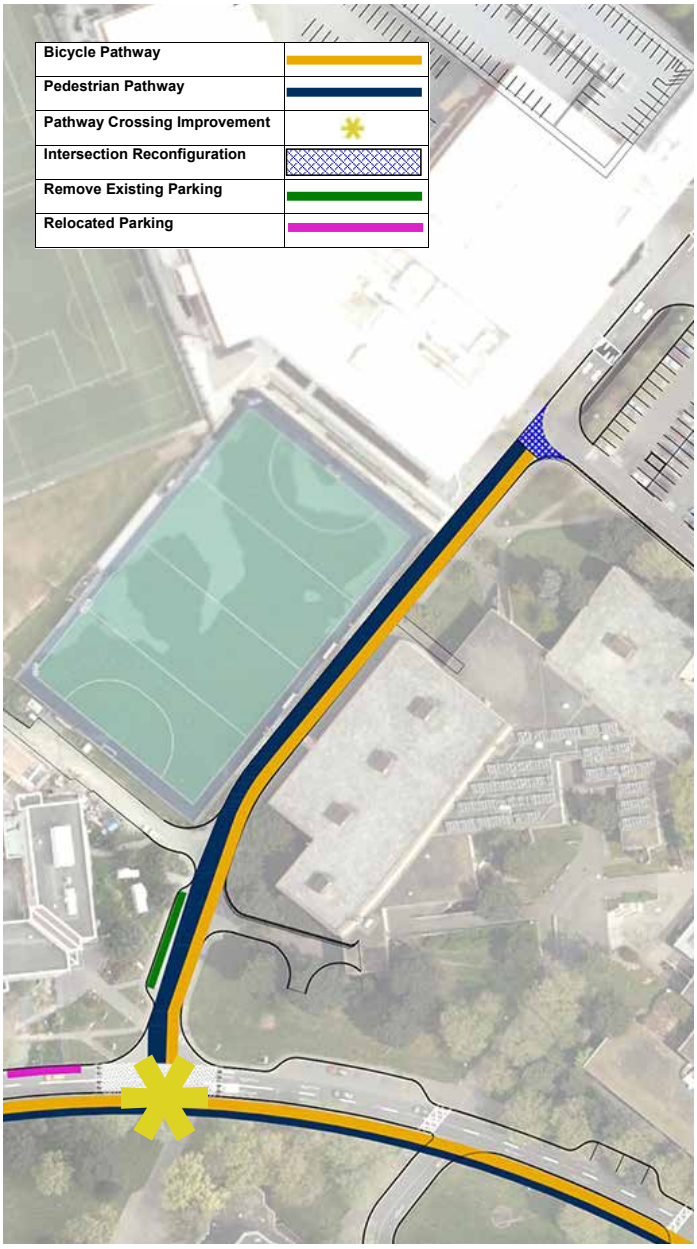
Traffic analysis indicates that closing this section of Gabriola Road would have minimal impact on overall traffic flow, while improving the cycling connection to and from the Centre for Athletics, Recreation and Special Abilities (CARSA). This would also increase safety for both pedestrians and cyclists at the Gabriola Road and Ring Road intersection, which was identified as requiring improvements in all phases of consultation. Additionally, this road closure could be designed to allow it to be reopened during special events at CARSA or during severe weather events to allow for expedited vehicle egress from Parking Lot 2.

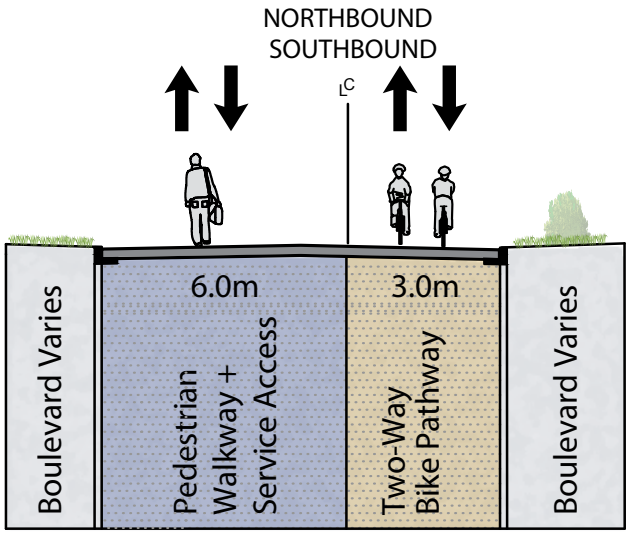
The current crosswalk at the intersection of Gabriola Road and Ring Road is to be relocated to align with the pathway leading to the centre of campus.

KEY CONSIDERATIONS:

- Access points to the closed section of Gabriola Road should allow for continued access of service vehicles and for temporary openings for general vehicle traffic to exit from Parking Lot 2 to Ring Road.
- The closure of Gabriola Road can be phased in over time by first closing only the inbound lane from Ring Road to Parking Lot 2, before closing both lanes to traffic.
- The crosswalk at the intersection of Gabriola Road and Ring Road will need to be shifted to align with the pathway leading to the centre of campus / Campus Bike Centre (i.e. between the Business and Economics Building and University Centre).
- Work with the District of Saanich to understand how the closure of Gabriola Road will affect traffic and safety at the Gabriola Road and McKenzie Avenue intersection, and consider opportunities to improve the crosswalk in this location.
- This design will result in the loss of three short-term parking spaces at the Continuing Studies Building. These spaces are to be replaced by creating a three-space parking pocket on Ring Road in front of the Continuing Studies Building. One of these spaces should be made accessible to maintain the current configuration.
- Integrate traffic calming measures, landscaping, signage and other design features into this corridor, as well as the pathway entry and exit points, to encourage compliance with desired speeds. Preferred treatments include planters, benches or sitting areas and other materials that contribute to a vibrant and safe pedestrian space.
- Where speed reduction is required in accordance with Strategy 2, the 'SLOW' pavement marking is preferred.
- Use signage, pavement materials and markings to differentiate between pedestrian and cycling sections of the pathway.
- Where there are abrupt changes in grade, design the bicycle facility to minimize jarring.

Figure 2.12 – Gabriola Road Improvement Concept





DESIGN SPECIFICATIONS

- Close non-service vehicle access to Gabriola Road.
- 3.0m two-way cycling pathway with remaining roadway used as a pedestrian walkway.
- Pedestrian and cycling pathways to be delineated using pavement markings or contrasting surface treatment.
- Continuous centreline to be used on the cycling path for the approach to all intersections.
- Align the crossing of Ring Road to the proposed pathways.
- Closure of Gabriola Road may be phased by closing northbound lane only.

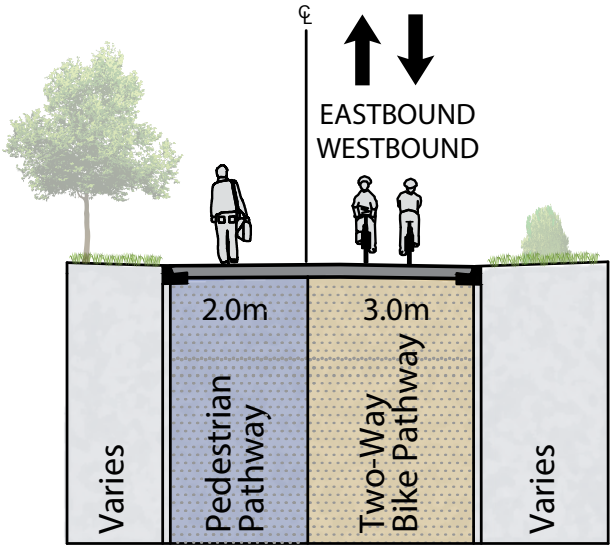
ACTION 3.7 DAWNVIEW CRESCENT-CARSA PATHWAY

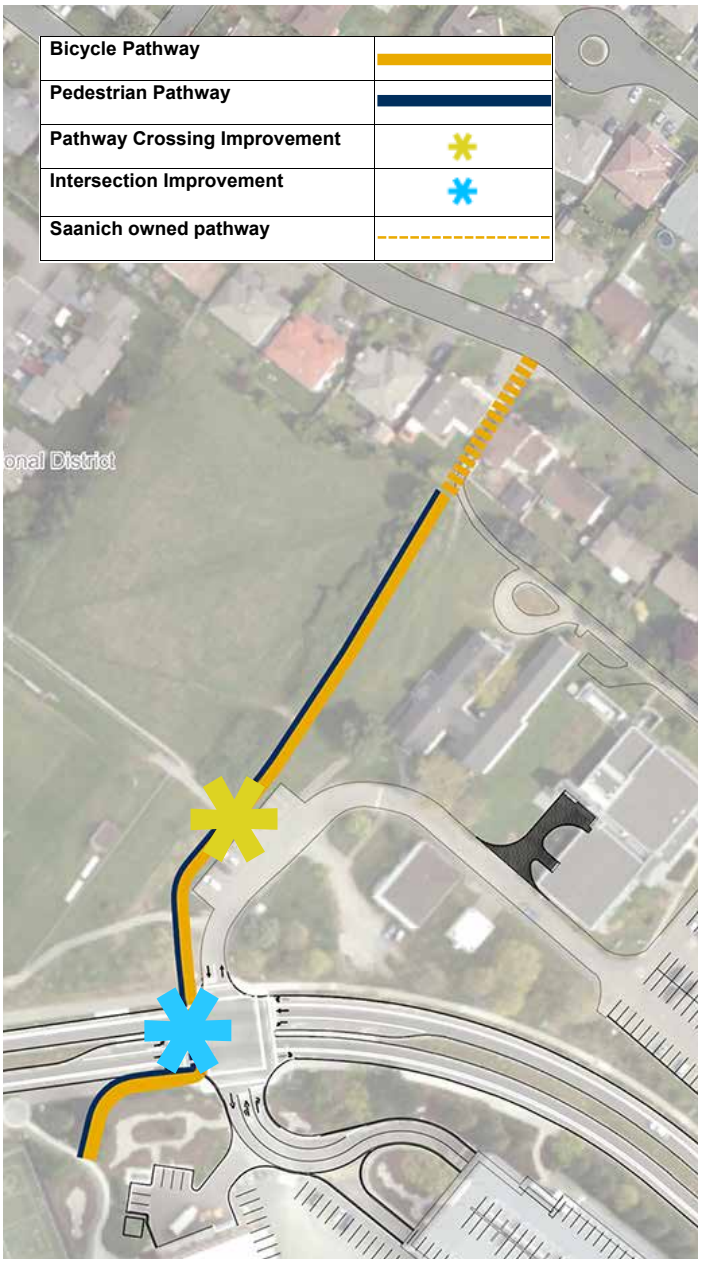
The Dawnview Crescent-CARSA Pathway will formalize an existing cycling and pedestrian connection that many students and community members use to travel to and from the Gordon Head neighbourhood located to the north of campus. There is a pedestrian pathway connecting Dawnview Crescent to an existing dirt pathway at the northern boundary of campus, which runs adjacent to the R Hut and Enterprise Data Centre buildings. The existing dirt pathway runs from the Dawnview Crescent pedestrian pathway to the intersection of McKenzie Avenue at Vikes Way. This path is currently an unmaintained dirt trail. Therefore, to improve this connection, it is recommended that a new paved pedestrian and cycling pathway be constructed. Additionally, it is recommended that this pathway provide a connection from the intersection of Vikes Way and McKenzie Avenue to the pathway behind CARSA (see **Figure 2.13**).

KEY CONSIDERATIONS:

- The detailed design of this pathway should explore opportunities to prevent pedestrians and cyclists from shortcutting through the loading area at the rear of CARSA.
- The design alterations for the McKenzie Avenue and Vikes Way intersection and crossings need to be determined through discussions with the District of Saanich and BC Transit.
- The minimum path width should be 5.0 metres. However, over short distances or in constrained environments narrower lanes may be acceptable considering the local context.
- Integrate traffic calming measures, landscaping, signage, pathway entry and exit points and other design features into road crossing points (i.e. Mackenzie Avenue) to encourage compliance with the speeds in accordance with Strategy 2.
- Consider edge conditions when determining appropriate width, as they may add to or subtract from usable width.
- Future consultation with BC Transit is required on location of bus stops on this section of Mackenzie Avenue as relocation may be required.
- Ensure adequate clearance is provided from vertical obstructions such as trees and lamp poles.
- Improve lighting for the proposed paths from the intersection of Vikes Way to the Dawnview Crescent pedestrian pathway.
- Use signage and pavement markings to differentiate between pedestrian and cycling sections of the pathway.
- Speed reduction and the addition of a 'SLOW' pavement marking is required at the exit/entry points to the paths between CARSA and the sports fields and the Dawnview Crescent pedestrian pathway.
- Where there are abrupt changes in grade, design the bicycle facility to minimize jarring.
- Future consultation with Vikes administration is required at the detailed design stage to ensure game day operations at Wallace Field are considered and designed for upon initiation of this project.

Figure 2.13 – Dawnview Crescent-CARSA Pathway Improvement Concept





DESIGN SPECIFICATIONS

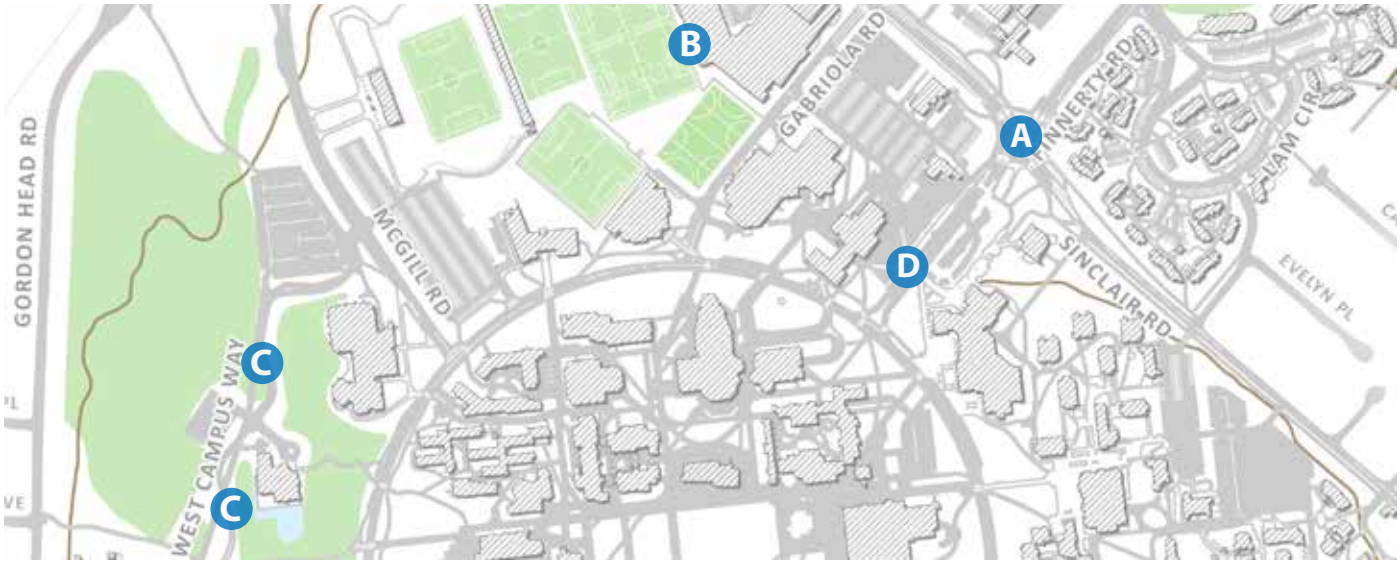
- 5.0m asphalt separated pedestrian and bicycle pathways made up of a minimum 3.0m two-way cycling path and 2.0m pedestrian path.
- Minimum 0.5m buffer between the pathways and all adjacent infrastructure.
- Pedestrian and cycling pathways to be delineated using pavement markings or contrasting surface treatment.
- Continuous centreline to be used on the cycling pathway for the approach to all intersections.

ACTION 3.8 MINOR NETWORK IMPROVEMENTS

The review of background information, online survey responses, feedback from community engagement events and an analysis of current traffic conditions has yielded a significant amount of information regarding cycling issues and opportunities at other locations on campus. This section provides a brief overview of these other issues as well as some high-level recommendations for infrastructure adaptation and safety improvements.

Several other desired improvements identified through engagement with the campus community have been reviewed and supporting interventions and improvements have been outlined below (see **Figure 2.14**).

Figure 2.14 – Minor Network Improvements



A Finnerty and Sinclair-McKenzie Roundabout

The roundabout at Finnerty Road and Sinclair Road-McKenzie Avenue is a safety concern for cyclists as not everyone is aware of the etiquette for pedestrian-cyclist-vehicle interactions within a roundabout. It is recommended that the university work with the District of Saanich to develop clearer signage and public education opportunities. Sinclair Road is also identified as part of the long-term cycling network by Saanich and the CRD. Forthcoming improvements are expected to include designated on-street cycling facilities.

B CARSA Pathways

CARSA is home to the majority of the athletic activities on campus. The paths between CARSA and the sports fields are widely used but are narrow and contain blind corners. This area is included in the shared space approach area, but should be prioritized and reviewed in detail to determine what treatments could be applied to improve safety or encourage cyclists to slow down. There is also a safety concern for both pedestrians and cyclists travelling through the parking lots around CARSA (i.e. Parking lots 2 and 3); increased signage or an alternative travel path is recommended.

C West Campus Way

West Campus Way is currently very narrow and windy, which makes it difficult to cycle alongside vehicles. It is recommended that bike sharrows be painted on West Campus Way and signage be installed to encourage vehicles and cyclists to travel single file.

D Transit Exchange

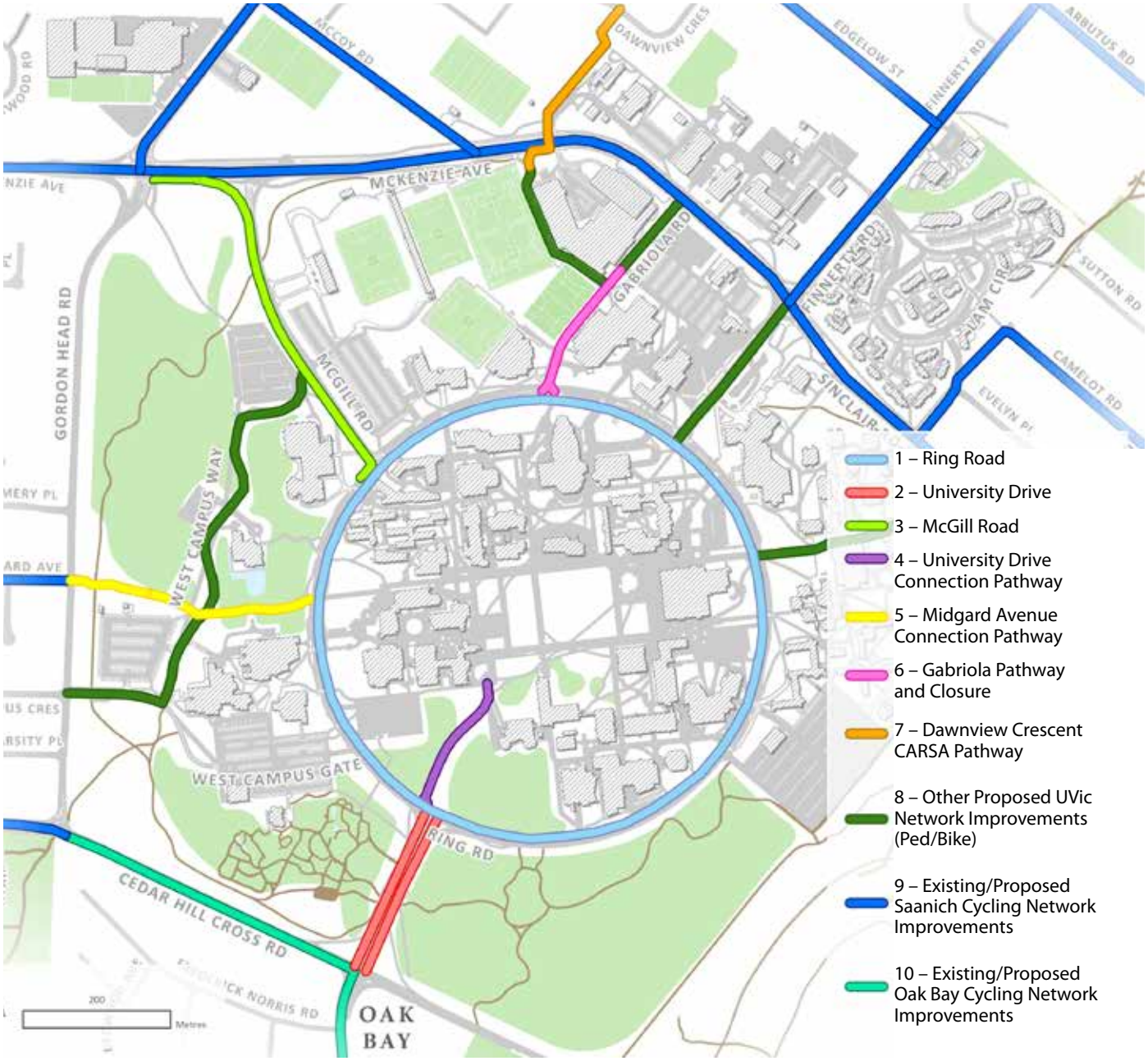
There are safety concerns for cyclists and pedestrians accessing or exiting campus through the transit exchange on Finnerty Road. To improve safety for cyclists, it is recommended that an inbound on-road painted bike lane and outbound sharrows be provided on Finnerty Road, between the roundabout at Sinclair Road and Ring Road.

SUMMARY OF CYCLING NETWORK

Once completed, the cycling network improvements outlined in Actions 3.1 to 3.8 will support numerous connections to the broader UVic transportation network, as well as the surrounding cycling networks in the District of Saanich and District of Oak Bay.

Figure 2.15 provides a summary of how the cycling network improvements outlined under Strategy 3 will integrate into current and future active transportation networks.

Figure 2.15 – Long-term Cycling Network Vision (UVic and Surrounding Neighbourhoods)



STRATEGY 4

BICYCLE PARKING, END-OF-TRIP FACILITIES AND BICYCLE SHARING

The Gordon Head campus and its adjacent properties currently have a variety of bicycle parking facilities, including short- and long-term facilities. End-of-trip facilities, such as showers and clothing lockers, are also available throughout campus, although the capacity of those facilities can vary from building to building and they are not present in all buildings on campus.

KEY ACTIONS

Bicycle parking and end-of-trip facilities were a key area of discussion throughout the Campus Cycling Plan process. Specifically, the community identified a lack of bike parking, sheltered bike parking, showers and change facilities. Moving forward, actions should be undertaken to ensure new and existing buildings provide these amenities in a consistent fashion. New buildings should, where possible, be required to have showers and change room facilities, as well as sufficient bicycle parking. Opportunities should also be reviewed to add these amenities to existing buildings and areas with an existing deficit—especially those that could be considered key destinations.

ACTION 4.1 BICYCLE PARKING LOCATIONS

There are currently approximately 4,010 bicycle parking spaces on campus to service a total campus population of 26,444 people (2016), including 21,593 students and 4,851 employees. The mode share for cyclists was 7.7% of all trips made to and from campus in 2016. Using the current campus population of 26,444 people, an increase in cycling to 10% of the mode share would result in an additional 608 cyclists on campus. The campus community identified that bicycle parking is currently limited in several key locations. It is recommended that approximately 600 additional bicycle parking spaces be added to address the increased demand for bicycle parking needed to achieve a 10% cycling mode share. Approximately 20% of these additional spaces should be long-term bicycle parking spaces in accordance with the recommended minimum bicycle parking guidelines outlined in **Table 2.1**.

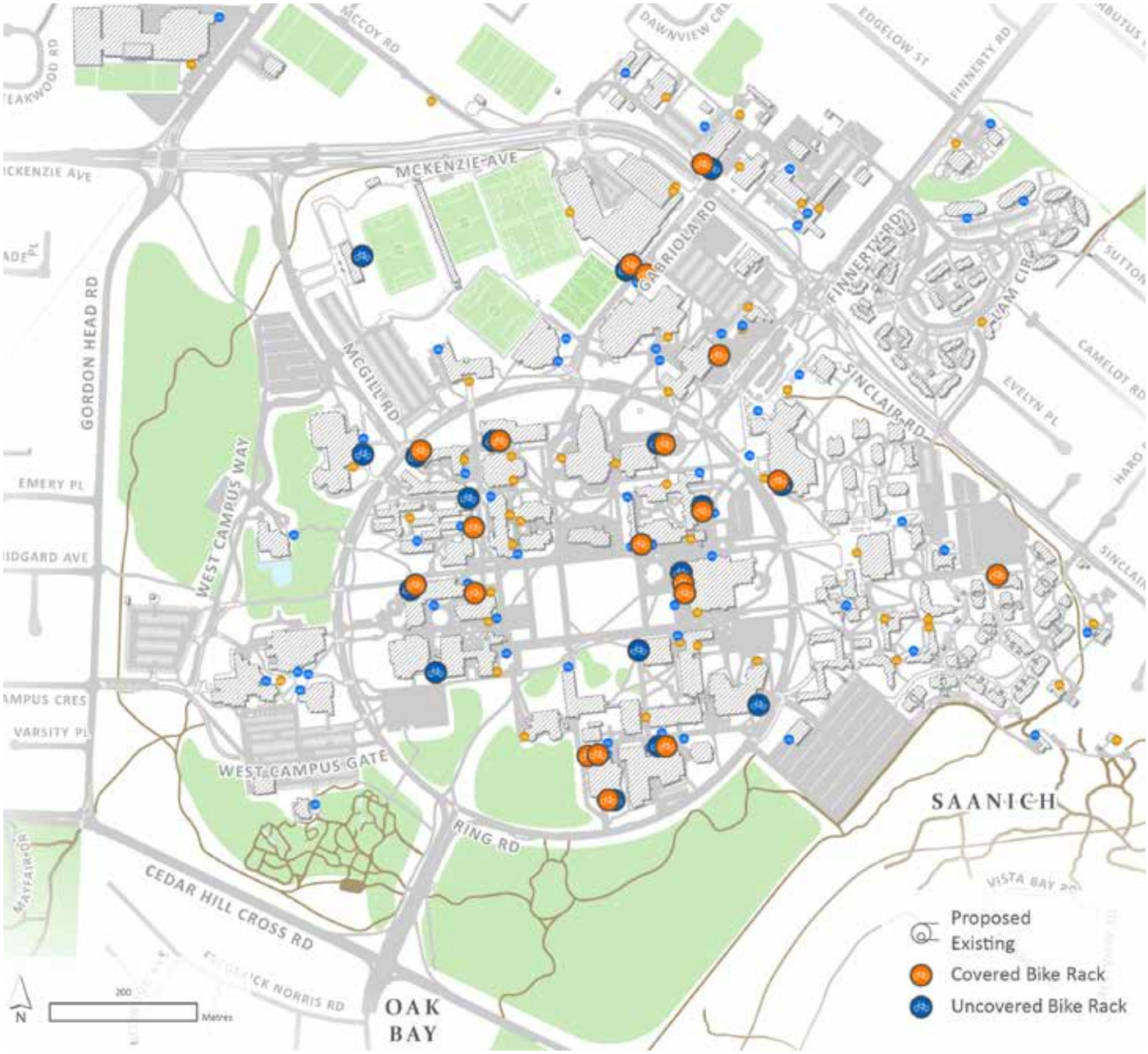
Key locations for additional bike parking are identified in **Figure 2.16**; however, there are several locations where bike parking demand significantly exceeds supply. These areas have been identified as priority locations for additional bike parking. These top six priorities are based on feedback from the community and include:

1. McPherson Library
2. Engineering/Computer Science Building
3. CARSA
4. David Turpin Building
5. Fraser Building
6. Human and Social Development Building

Table 2.1 – Bicycle Parking Guidelines

USE	DESCRIPTION	LONG-TERM	SHORT-TERM
Institutional or academic	Including academic and research space, libraries, sporting and recreational centres, hub community facilities, daycares, auditoriums and arenas	0.8 spaces per 100m^2 of gross floor area	4 spaces per 100m^2 of gross floor area
Administration or office	Including any UVic or third-party campus building accommodating faculty, research, professional or administrative offices	0.4 spaces per 100m^2 of gross floor area	1 space per 100m^2 of gross floor area
Student housing	Including all forms of non-family student housing: dormitories, single and shared rooms, apartments or townhouses	0.25 spaces per bedroom	0.10 spaces per bedroom
Commercial	Including retail stores, personal service shops, restaurants and specialty food services	1 space per 750m^2 of gross floor area	8 parking spaces per establishment

Figure 2.16 – Proposed Additional Bicycle Parking



Bicycle parking facilities should also be considered as part of new construction and major building additions, including facilities for both short-term and long-term parking. Two types of bicycle parking facilities should be considered for new and renovated buildings on campus.

- Long-term parking is intended for long-term use and may consist of attended facilities, parking facilities in an enclosed and lockable room, indoor or outdoor bicycle lockers, or restricted-access parking facilities.
- Short-term parking is intended for short-term use and should consist of parking facilities located with natural surveillance in an accessible outside location, preferably protected from weather, within close proximity of the building entrance, on a concrete surface.

It is recommended that each building provide long-term and short-term bike storage capacity to address the ratios suggested in the guidelines for each land-use category below.

Bicycle parking for new or renovated buildings could also be provided through centralized bicycle parking/end-of-trip facilities, like the Campus Bike Centre.

Consideration should also be made for electric bicycle (EBike) charging and parking. Currently, EBike parking and charging can be found in six locations around campus, with the most accessible and utilized location being inside the Campus Bike Centre. The other five locations are outside and receive limited use as they are exposed to weather and taken up by regular bikes. Moving forward, it is recommended that the university provide additional EBike charging and parking in close proximity to the six priority locations listed under Action 4.1. EBike charging and parking stations should be well lit, clearly designated as EBike-only parking and protected from the weather; these locations should be accessible and easy to locate.

Key policies recommended for bicycle parking can be found in **Appendices B 2.1** and **B 2.2**.

ACTION 4.2 END-OF-TRIP FACILITIES

Additional end-of-trip facilities are recommended in several locations on campus, based on a review of existing facilities and public feedback. Recommended new end-of-trip facilities are shown in **Figure 2.17**. It should also be noted that the showers and change rooms shown in **Figure 2.17** only generally represent desired locations for additional facilities and not exact locations. These will be pursued in buildings based on the availability of space and feasibility.

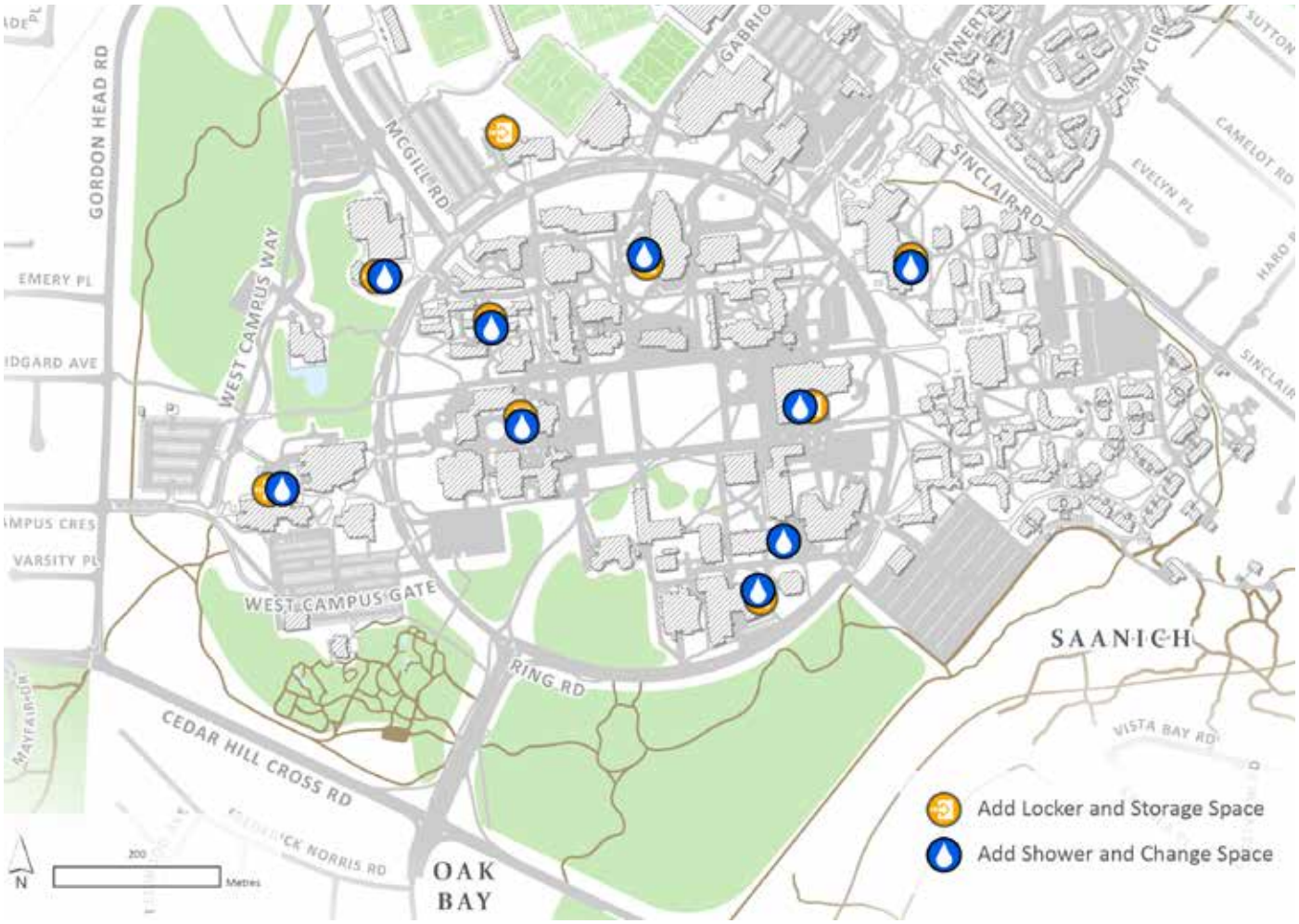
Opportunities to increase end-of-trip facilities for cyclists should also be considered in the development or major renovation of academic and administrative buildings and mixed-use hubs. Recommended guidelines for lockers and showers in scale with a facility's floorspace are provided in **Table 2.2**.

Key policies recommended for end-of-trip facilities can be found in **Appendix B 2.2**.

Table 2.2 – End-of-trip Facility Guidelines

TOTAL BUILDING OCCUPANCY (PEOPLE)	RECOMMENDED MINIMUM SHOWER REQUIREMENTS
< 50	One (1) shower
50 – 150	Two (2) showers
150 – 300	Four (4) showers
300 – 600	Six (6) showers
> 600	Additional shower facilities will be required at a rate of 2 showers for every 300 occupants

Figure 2.17 – Proposed Additional End-of-Trip Facilities or Upgrades



ACTION 4.2.1 SECOND CAMPUS BIKE CENTRE

During the planning process the potential for a second campus bike centre near the Engineering/Computer Science Building was also identified. Although there was considerable interest in this additional bike centre, it did not receive strong support in comparison to other recommended network improvements, upgrades and end-of-trip facilities. Therefore, it has not been carried forward in this plan. However, as cycling ridership grows on campus, there may be an increased desire for a second campus bike centre in the future. This opportunity should be re-evaluated near the end of the ten-year planning horizon to determine if it is warranted at that time.

ACTION 4.3 BICYCLE SHARING

The two main types of bike-share systems are: docked (parked at stations) or free-standing (dockless), both of which charge by user time. A third type of bike share is volunteer-based, and generally free or very low cost for users; the SPOKES bike loan program provides an example of the latter. Currently, the District of Saanich, the District of Oak Bay and the City of Victoria have permitted a bike-share organization to operate within their municipalities. The free-standing bike-share program will likely become more common on campus; therefore, guidelines and policies should be developed to manage the introduction of paid bike-share systems on campus.

Policy recommendations for bicycle sharing can be found in **Appendix B 2.3**.

CHAPTER 3: IMPLEMENTATION STRATEGY

It is anticipated that the proposed network improvements and upgrades discussed in Strategies 2-4 of this plan will be implemented over a period of approximately 10 years. The proposed timeline for the implementation of these projects is outlined in **Table 3.1** on the following page.

3.1 IMPLEMENTATION STRATEGY

The Campus Cycling Plan will be implemented in stages. In the near term, it is recommended that four network upgrades be completed. In the long term, major network improvements such as upgrades to University Drive are to be completed. Longer-term improvements will require significantly more planning and consideration of the broader campus transportation system.

3.2 ONGOING TRANSPORTATION INITIATIVES, SURVEYS AND METRICS

The University of Victoria currently undertakes a Campus Travel Survey every two years. The survey incorporates traffic counts based on automatic tube, transit and manual counts. Survey results indicate the mode split has remained relatively consistent over the last six to eight years (though one notable trend indicates steady growth in pedestrian travel over the last four surveys).

Moving forward, it will be important for the university to measure the impacts of changes to the cycling network and the implementation of new cycling policies. Therefore, it is recommended that the Campus Cycling Plan provide key measures and actions that should be undertaken over the next 10 years, including: advancing conversations with the District of Saanich and District of Oak Bay, ongoing travel surveys, conducting pedestrian counts in high traffic areas, etc.

Key policies recommended for ongoing initiatives, surveys and metrics can be found in **Appendix B 3.1**.

Phase 2 Open House

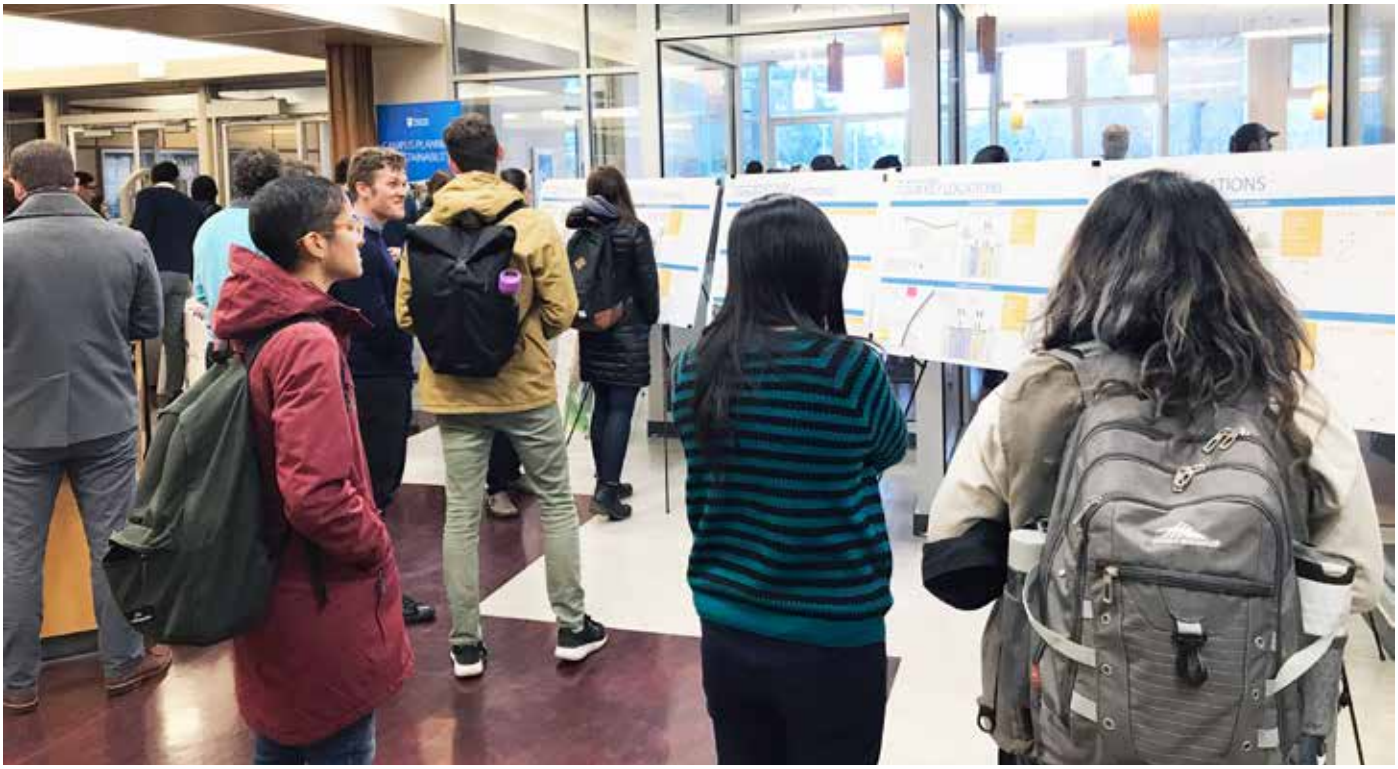


Table 3.1 - Implementation Strategy for Proposed Network Improvements and Upgrades

PROPOSED NETWORK IMPROVEMENT OR UPGRADE	IMPLEMENTATION TIMING	KEY REQUIREMENTS

Signage and Wayfinding	Ongoing	• Provide cycling signage and wayfinding improvements based on the proposed network improvements or upgrades.
		• Prioritize cycling signage and wayfinding in locations identified in Strategy 2:
		  • roundabout at Finnerty Road and McKenzie Avenue;
		  • entry and exit points to the transit exchange;
		  • paths between CARSA and the sports fields;
		  • West Campus Way; and
		  • paths around the Student Union Building.

Signalization of Key Crosswalks on Ring Road	Ongoing	• As part of a Ring Road design study, identify key locations on Ring Road for crosswalk signalization.
Bike Parking	Ongoing	• Provide additional bike parking based on locations identified in **Figure 2.16** in accordance with bike parking actions outlined in **Table 2.1**.
End-of-trip Facilities	Ongoing	• Provide additional showers, change rooms and lockers to locations identified in **Figure 2.17** and as part of all new construction and major building additions in accordance with end-of-trip facility actions outlined in **Table 2.2**.
Shared Space Approach (Signage and Education)	Ongoing	• Define approach to educating the campus community of this policy change and how the shared space approach will improve safety. • Identify key locations for signage placement based on the proposed shared space policy area shown in **Figure 2.2** and actions outlined under Strategy 2.
Speed Mitigation (Slow zones, Signage and Design Interventions)	Short-term to Medium-term (1-3+ years)	• Implement designated slow zones based on the speed mitigation areas identified in **Figure 2.3** and implement signage and road markings to notify the public of the boundaries of these areas. • Identify areas where speed mitigation is required and the appropriate treatments, which could include design interventions (i.e. speed bumps, planters and other physical barriers) and/or pedestrian harbours in accordance with actions outlined under Strategy 2. • Identify key locations for signage to notify cyclists of upcoming changes to grade, pathway surface and/or any obstacles.
University Drive Connection Pathway	Short-term (1-3 years)	• Complete detailed engineering design and cost estimates. • Determine preferred design and upgrades required for crossing Ring Road. • Intersection configuration to be coordinated with University Drive and Ring Road redevelopment and associated cycling facilities. • Review opportunities to improve lighting. • Evaluate tree impacts and replacement strategy. • Identify where signage, wayfinding and roadway paint will be required to identify key transitions.

PROPOSED NETWORK IMPROVEMENT OR UPGRADE	IMPLEMENTATION TIMING	KEY REQUIREMENTS
Midgard Avenue Connection Pathway	Short-term (1-3 years)	• Complete detailed engineering design and cost estimates. • Determine preferred crosswalk design and upgrades required for crossing Ring Road and West Campus Way. • Determine preferred design and upgrades required for crossing Gordon Head Road through discussions with the District of Saanich and District of Oak Bay. • Evaluate environmental and tree impacts and replacement. • Review opportunities to improve lighting. • Identify where signage, wayfinding and roadway paint will be required to identify key transitions.
Dawnview Crescent-CARSA Pathway	Short-term (1-3 years)	• Complete detailed engineering design and cost estimates. • Determine preferred design and upgrades required for crossing McKenzie Avenue through discussions with the District of Saanich. • Review opportunities to improve lighting. • Identify where signage, wayfinding and roadway paint will be required to identify key transitions, notably the connection to Dawnview Crescent.
Gabriola Pathway and Closure	Medium-term (4-6 years)	• Complete detailed engineering design and cost estimates. • Confirm existing to/from vehicle traffic volumes accessing Parking Lot 2 (daytime and special events). • Configuration of Ring Road and Gabriola Road intersection to be coordinated with Ring Road Network Improvement-McGill Road to SUB. • Determine potential impacts of Gabriola and McKenzie intersection through discussion with the District of Saanich. • Determine which traffic calming measures, landscaping and design features should be integrated into this corridor. • Determine design of removable barriers to allow vehicle traffic to temporarily access Ring Road during major events and ensure service vehicle access. • Identify where signage, wayfinding and roadway paint will be required to identify key transitions.
Ring Road Network Improvement (Engineering Pathway)	Medium-term (4-6 years)	• Complete detailed engineering design and cost estimates. • Access configuration to be coordinated with University Drive and Ring Road redevelopment and associated cycling facilities. • Evaluate tree impacts and replacement strategy. • Review opportunities to improve lighting. • Identify where signage, wayfinding and roadway paint will be required to identify key transitions.
Ring Road Network Improvement (McGill Road to SUB)	Medium-term (4-6 years)	• Complete detailed engineering design and cost estimates. • Determine configuration of intersection/access crossings at McGill Road, Parking Lot 4 access, Gabriola Road, Finnerty Road and all crosswalks. • Evaluate tree impacts and replacement strategy. • Identify where signage, wayfinding and roadway paint will be required to identify key transitions.

PROPOSED NETWORK IMPROVEMENT OR UPGRADE	IMPLEMENTATION TIMING	KEY REQUIREMENTS
McGill Road Network Improvements	Medium-term to Long-term (4-6+ years)	• Complete detailed engineering design and cost estimates. • Configuration of Ring Road and McGill Road intersection and crossings to be coordinated with Ring Road Network Improvement-McGill Road to SUB. • Determine preferred design and upgrades required for the intersections of McKenzie Avenue and Gordon Head Road, and McKenzie Avenue and McGill Road through discussions with the District of Saanich. • Determine configuration of access crossings at Parking Lot 8 and a new mid-point crosswalk on McGill Road. • Evaluate tree impacts and replacement strategy. • Review opportunities to improve lighting. • Identify where signage, wayfinding and roadway paint will be required to identify key transitions
University Drive Network Improvements	Long-term (7+ years)	• Determine the overall approach for redesigning University Drive and the Ring Road/University Drive intersection with consideration for pedestrians, cyclists, transit and vehicles. • Confirm preferred options for intersection treatments for Cedar Hill Cross Road and University Drive with the District of Oak Bay—notably, shifting the bike lane crossing to the right side of the northbound lane on Henderson Road to connect with the proposed bike lane on the right side of the northbound lanes on University Drive. • Confirm approach for moving the existing transit stop on the east side of University Drive to the nearby layby on the south side of Ring Road. • Based on the approach for redesigning University Drive determine optimal crossing and connections to the Ring Road Network Improvement (Engineering Pathway) and University Drive Connection Pathway. • Complete detailed engineering design and cost estimates. • Identify where signage, wayfinding and roadway paint will be required to identify key transitions.
Second Campus Bike Centre	Long-term (7+ years)	• Re-evaluate the need for a second campus bike centre after at least 5 years. If this is desired, identify a potential location for this facility near the Engineering/Computer Science Building. • Determine space requirements and opportunities to integrate this facility within a new or existing building.
Expansion of Cycling Facilities along Ring Road	Long-term (7+ years)	• Establish alternative access to Parking Lot 1 from Cedar Hill Cross Road. • Close egress from Parking Lot 1 to Ring Road. • Substantially reduce all existing parking lot access/egress to Ring Road. • Implement a priority lane for transit along Ring Road. • Update Campus Cycling Plan to determine new cycling network improvements or upgrades required.

APPENDIX A: COMMUNITY ENGAGEMENT SUMMARIES

COMMUNITY ENGAGEMENT – PHASE 1

The first phase of engagement with the campus community was launched in the fall of 2017 and was designed to build awareness and interest for the Campus Cycling Plan, as well as to better understand current travel patterns, bicycle use, and challenges and opportunities for cycling. Through the first round of engagement, there were approximately 2,000 interactions with members of the campus community through campus engagement activities and an online survey (see **Table A-1**).

Two meetings were held with the Internal Advisory Team and Technical Advisory Team. The Internal Advisory Team, composed of UVic faculty and student representatives, provided feedback on the planning process based on their knowledge of campus. Staff representatives from Facilities Management, Campus Security, Vikes Recreation and Athletics and the University of Victoria Student Society were also included. The Technical Advisory Team was comprised of staff from the District of Saanich, District of Oak Bay and BC Transit. The Technical Advisory Team provided feedback on the planning process based on their technical understanding of different initiatives happening near campus in the surrounding municipalities of Oak Bay and Saanich, as well as regional transportation initiatives being undertaken by BC Transit.

Table A-1 – Summary of Community Engagements in Phase 1

ENGAGEMENT	DATE AND DESCRIPTION	PEOPLE REACHED
Interactive Online Survey	**Oct. 12** to **Nov. 24, 2017**	1,306
CAMPUS ENGAGEMENT		
Campus-Wide Launch Event	**Oct. 12, 2017** Launch of the plan and presentation by keynote Speaker Gordon Price	60
Pop-Up Booths	**Oct. 3, Oct. 17, Oct. 18 (3), Oct. 25, 2017** The project team hosted 8 pop-up booths in visible, high-foot-traffic spaces on campus to spread awareness and to provide the opportunity for input on the project.	750
Campus Tour	**Sept. 6, 2017** The project team joined the Cycling Advisory Committee on a campus bike tour to learn about some of the key issues impacting cyclists.	15
Cycling Advisory Committee	**Oct. 10, 2017** A meeting was held with the Cycling Advisory Committee to review key issues and collect feedback.	16
STAKEHOLDER MEETINGS		
Internal Advisory Team Meeting #1	**Oct. 2, 2017** Meeting to establish the role of the Internal Advisory Team, review project objectives, discuss issues and opportunities for cycling on campus, and discuss communication approaches.	10
Technical Advisory Team Meeting #1	**Oct. 2, 2017** Meeting to introduce the project to the Technical Advisory Team, review project objectives, discuss issues and opportunities for cycling to and from campus, and discuss communication approaches for the broader community.	6
Presentations to the Engineering 110 class	**Sept. 26, 2017** Presentation of a cycling case study to two classes of approximately 400 students.	400
TOTAL		**2,500 +**
Media Engagement	**Oct. 12** to **Nov. 24, 2017** Online tools were used to enhance the public engagement opportunities, such as a website, Facebook, Instagram, Twitter and newspapers, to allow members of the campus community and neighbouring residents to participate at their convenience.	Thousands of views and unique engagements

The key take-aways from the feedback received from the first phase of public engagement included: the desire to make it easier to walk and cycle on campus; prioritizing improvements to Ring Road; identifying problem areas for congestion and near misses; safety concerns with respect to connections to the campus; areas for improving cycling facilities; and areas for increasing the number of end-of-trip facilities, such as bicycle parking, lockers and showers.

With the findings from Phase 1, the project team developed concepts to improve the safety and connectivity of the cycling network. Feedback was also used to identify locations with high demand for improved end-of-trip facilities.

COMMUNITY ENGAGEMENT – PHASE 2

The second phase of the engagement process took place in the winter of 2018 and was designed to obtain input on preliminary content for the Campus Cycling Plan. This round of engagement focused on gathering feedback on proposed bicycle network improvements, campus cycling policies, and end-of-trip facility recommendations. The second round of engagement saw interactions with approximately 1,200 members of the campus community (see **Table A-2**).

Community engagement in Phase 2 resulted in substantial feedback from the campus community, which was translated into actionable directions for the Campus Cycling Plan. The feedback collected was used to refine cycling network improvements, campus cycling policies, and approaches for improving end-of-trip facilities.

Table A-2 – Summary of Community Engagements in Phase 2

ENGAGEMENT	DATE AND DESCRIPTION	PEOPLE REACHED
Interactive Online Survey	**Feb. 26** to **March 29, 2018** The five-part survey was designed to obtain feedback on the planning principles and policy directions being considered for shared space; end-of-trip facility guidelines being considered; and preferences for various preliminary bicycle network improvements being considered.	587
Engagement Labs	**Feb. 27, 28,** and **March 1, 2018** The project team hosted three interactive pop-up engagement labs to discuss the proposed cycling network and road improvements and to invite the campus community to provide input.	600+
STAKEHOLDER MEETINGS		
Internal Advisory Team Meeting #2	**Jan. 24, 2018** Meeting to present what was heard during the first round of engagement; to present findings; and to discuss preliminary directions and principles/policies being considered for the Campus Cycling Plan.	7
Technical Advisory Team Meeting #2	**Jan. 24, 2018** Meeting to present what was heard during the first round of engagement; to present findings; and to discuss preliminary directions and principles/policies being considered for the Campus Cycling Plan.	6
Internal Advisory Team Meeting #3	**March 26, 2018** Meeting to focus on the plan's development to date and provide an update on the second round of engagement.	7
Technical Advisory Team Meeting #3	**April 19, 2018** Meeting to focus on the plan's development to date and provide an update on the second round of engagement.	6
TOTAL		**1,200 +**
Media Engagement	**Feb. 26** to **March 29, 2018** Social media tools were used to enhance the public engagement opportunities, and allow members of the campus community and neighbouring residents to participate at their convenience.	Thousands of views and unique engagements

COMMUNITY ENGAGEMENT – PHASE 3

The third phase of the engagement process took place on October 10, 2018. The draft Campus Cycling Plan was presented in an open house format in the University Centre lobby and feedback was collected on the four key strategies provided in the plan. The public open house at the University Centre lobby attracted approximately 100 attendees representing UVic students, staff and faculty. The plan was also available on the UVic Campus Planning website during October 2018 to encourage feedback from the greater campus and neighbouring communities. Stakeholder meetings were also held with the Internal and Technical Advisory Teams, as well as the Campus Planning Committee and Cycling Advisory Committee to confirm final plan directions. This round of engagement provided comprehensive feedback on the plan, which allowed the project team to refine policies and concepts for the final plan's adoption.

Phase 2 Engagement Lab

APPENDIX B: POLICIES AND GUIDELINES

B 1 RECOMMENDED SUPPORTING POLICIES AND GUIDELINES - SHARED SPACE AND SAFETY (STRATEGY 2)

B 1.1 EDUCATION AND AWARENESS

A. Work with internal and external partners, such as the Greater Victoria Bike to Work Society, Greater Victoria Cycling Coalition, local municipalities, the Capital Regional District and others, to support the provision of adult education, road safety programs and cycling skills training throughout the campus year-round.

B. Develop a comprehensive signage and education plan to promote safe cycling on campus, including installing "slow cycling" signage in key areas such as the shared space zone (see **Figure 2.2** on page 6 for speed mitigation zones).

C. Establish "Cycling Ambassador" or "Bike Guru" roles to support the implementation of the education and awareness initiative and to support positive cycling behaviour.

B 1.2 SPEED MANAGEMENT

Implement speed management actions in the areas identified in **Figure 2.3** (see page 8), including slow zones, design interventions (i.e. speed bumps, planters and other physical barriers) and pedestrian harbours.

A. Implement designated slow zones in the core areas of the campus identified in **Figure 2.3** (see page 8). In these areas, cyclists are asked to travel at slower speeds and give priority to pedestrians.

   i. No person shall operate a bicycle at a speed greater than is safe under existing conditions.

   ii. Maximum speed limit in all slow zones is 15 km/h, unless otherwise posted.

   iii. Slow zone areas will be shown on all campus maps, on-site wayfinding signs and maps, and on new or temporary signs to introduce the designation.

B. Implement signage and road markings in designated pedestrian areas, identified in **Figure 2.3** (see page 8), to increase cyclist awareness of pedestrians, encourage responsible cycling behaviour and identify designated slow zones.

C. Implement design measures, such as textured surfaces, speed bumps and pedestrian harbours, to manage cyclist speed in the slow zone areas identified in **Figure 2.3** (see page 8).

   i. Design measures to manage cyclist speed must consider the overall function of the space and contribute to a pleasant pedestrian experience.

   ii. Design measures should not pose any hazards to pedestrians, cyclists or other vehicles.

   iii. Design measures should support the principles of universal design.

   iv. Special consideration should be given to the design and function of the Campus Greenway as a central feature of campus.

   v. The use of functional design interventions, such as planters, benches and activity areas is strongly encouraged.

   vi. Any textured surfaces used for speed management should be weather resilient, anti-slip and contribute to the overall campus aesthetic.

   vii. Design measures shall consider the required movements of emergency vehicles.

B 1.3 SIGNAGE, SIGNALS AND LIGHTING

A. Enhance and expand pedestrian and cycling wayfinding information.
   i. Update wayfinding signage to include cycling routes, bike parking and end-of-trip facilities to help direct and orient on-campus cycling travel;
   ii. Include 'share the space' messaging on campus maps and signage; and
   iii. Develop a cycling network map including routes to, from and around campus.

B. Develop signage and pavement markings to encourage attentive travel and slow travel speeds.

C. Improve lighting in the following areas: pathway behind the Medical Sciences Building connecting to the Engineering/Computer Science Building; the South Promenade; along corridors and near bicycle parking facilities adjacent to the MacLaurin Building and Sedgewick Building; and the Ring Road side of the Engineering/Computer Science Building.

D. Implement signage and road markings on Ring Road and areas of campus outside of Ring Road to increase driver awareness of pedestrians and cyclists (i.e. green conflict paint).

E. Implement signage and visual cues to help reinforce the changing conditions in transition zones or entry/exits points to shared space areas.

F. Implement signage and road markings in designated pedestrian areas identified as shared space areas to increase cyclist awareness of pedestrians, encourage responsible cycling behaviour, and identify designated slow zones.

G. Consider use of mirrors to avoid collisions and near misses in busy travel corridors where linear sightlines are limited.

H. Advocate for the installation of bicycle detection at actuated signals to alert the signal controller of bicycle crossing demand at all intersections accessing campus.

Slow Zone Example

B 2 RECOMMENDED SUPPORTING POLICIES AND GUIDELINES - BICYCLE PARKING, END-OF-TRIP FACILITIES AND BICYCLE SHARING (STRATEGY 4)

B 2.1 BICYCLE PARKING GUIDELINES

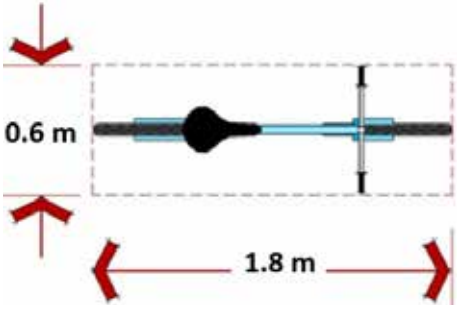
The following section outlines key actions for increasing the bicycle parking supply on campus. These guidelines provide direction on the design and implementation of new covered and uncovered bicycle parking facilities.

A. Design bicycle parking facilities that are safe, protected from weather (covered where possible), secure and maximize storage capacity.

B. Construct bicycle parking facilities that include theft-resistant materials and are securely anchored in the ground or to a building.

C. Bicycle parking facilities must be designed in a way that minimizes any potential tripping hazards for cyclists or pedestrians.

D. Bicycle parking facilities shall be designed with a minimum dimension envelope of 1.8 metres in length, 0.6 metres in width, and 1.2 metres in height (see right).



E. Locate bicycle parking in areas that are convenient, maximize cyclist function and utility, do not block pedestrian movements, help to prevent theft and vandalism, and help cyclists to feel more personally secure.

F. Locate bicycle parking facilities near building entrances and other attractions, preferably no more than 15 metres from the building entrance(s).

G. Locate bicycle parking facilities in areas that are highly visible to passersby, and within clear view of pedestrians, activity or office windows.

H. Bicycle parking facilities should not be placed within 15 metres of a fire zone, loading zones, bus zones, taxi zones, etc.

I. The location of the bicycle parking facilities should not present conflicts with pedestrians, other cyclists or automobiles.

J. Bicycle parking locations that require cyclists to travel over stairs should be avoided.

K. Bicycle parking should be in well-lit locations and be easily identifiable by cyclists as they are riding.

L. Bicycle parking facilities should fit in with the surrounding streetscape and campus environment. Bicycle parking facilities can incorporate unique colours or original designs to match awnings, facades or other street furniture.

M. To allow ample pedestrian movement and cyclist utility, bicycle parking facilities should be located a minimum of 1.5 metres from obstructions such as building facades, trees, utilities, lights, garbage cans, newspaper racks, sign poles, benches/outdoor furniture, fire hydrants, crosswalks or driveways.

N. Enclosed bicycles facilities in buildings and parkades should be located and designed according to security and safety considerations. Siting and entrances should be broadly visible and accessible, enclosures should be well lit or have daylight openings, and more than one entrance and exit should be provided.

O. Bicycles must be parked in the designated parking spaces.

P. Bicycles parked in places that restrict pedestrian movement, access to buildings or critical infrastructure (i.e. fire hydrants) will be removed.

Q. Consideration should be made for electric bicycles (EBikes). Additional EBike charging and parking should be provided in accessible and easy-to-locate areas in close proximity to key destinations identified in the Campus Cycling Plan.

R. Electric bicycle charging and parking stations should be well-lit, clearly designated as EBike-only parking and protected from the weather.

BICYCLE PARKING PRECEDENT PHOTOS

Tools and tire pumps near bicycle parking areas will increase.

A good example of bike parking placement that it is protected from vandalism and theft.

Accessible and visible sheltered bike parking such as this should be increased around campus.

Bike parking facilities should be installed to avoid obstacles and walls and maximize parking opportunities.

B 2.2 END-OF-TRIP FACILITY GUIDELINES

A. Increasing the number of end-of-trip facilities and providing lockers, showers and covered secure bicycle storage for cyclists should be considered in the development or renovation of academic and administrative buildings and mixed-use hubs in scale with the facility's floor space.

   i. Change rooms and showers should be conveniently located close to bicycle parking facilities or major building entrances.

   ii. Change rooms and shower facilities should be designed so they are accessible for all users and inclusive.

   iii. Facilities should have non-slip surfaces, hooks and/or benches to keep belongings off the floor, along with adequate lighting and ventilation.

   iv. End-of-trip facilities should be included in regular cleaning and maintenance programs.

   v. It is preferable for facilities to be lockable and they should not be easily accessed by persons who do not work or study in the building.

B. Lockers should be provided alongside end-of-trip shower and change room facilities.

   i. There should be one locker for each available long-term bicycle parking space.

   ii. Lockers should be secure (with robust locking mechanisms) to ensure belongings are adequately protected while stored.

   iii. Locker facilities should be regularly maintained so that they remain clean and functional.

   iv. Procedures should be developed to provide for regular audits of the lockers to ensure they are cleaned regularly and available for general use.

C. Continue to support the Campus Bike Centre and implement bicycle repair and maintenance stations in keys areas of campus.

   i. Consider opportunities to locate end-of-trip shower and change room facilities at the Campus Bike Centre.

   ii. Locate bicycle repair and maintenance stations (preferably weather protected) at high-traffic locations on campus. Potential locations include the McPherson Library and the engineering buildings, as well as mini cycling hubs in transition zones between shared space areas and cycling pathways (i.e. Midgard pathway prior to entering the Campus Greenway and the beginning of the University Drive pathway near the David Lam Auditorium).

   iii. Bicycle repair and maintenance stations should include air pumps and tools.

   iv. Consider opportunities for a user-pay bicycle repair service on campus.

B 2.3 BICYCLE SHARING

A. Basic provisions of a bike-share program should include an operator business license; insurance and liability provisions held by the operator.

B. Promote bike sharing on UVic campus as a way to increase cycling mode share.

C. Minimize the impacts of dockless bike sharing by prohibiting parking on sidewalks or pedestrian paths and creating preferred bike share drop-off areas.

D. Prevent free-standing (dockless) bike share from occupying bike parking spaces in the Campus Bike Centre.

E. Continue to support the SPOKES bike loan program.

B 3 IMPLEMENTATION STRATEGY

B 3.1 ONGOING TRANSPORTATION INITIATIVES, SURVEYS AND METRICS

A. Work with the District of Oak Bay and the District of Saanich to ensure route planning for bicycles and pedestrians is supportive and consistent with other routes being planned outside campus property boundaries.

B. Continue to identify and fill in gaps in the cycling network as land use changes and future development occurs.

C. Future travel surveys should consider the addition of new metrics to better understand travel patterns by members of the campus community, such as identifying travel mode by gender. Understanding travel mode differences by staff, faculty and students may also be valuable to determine policies, guidelines and promotion around sustainable transportation.

D. Consider conducting pedestrian counts in high traffic areas on campus to better target speed mitigation strategies and inform locations for potential pedestrian harbours.

E. Review key crossing points along Ring Road and review opportunities to implement controlled crossings for pedestrian and cyclists on Ring Road. Key locations include: in front of the SUB, between Parking Lot 1 and the Engineering Office Wing building, between the student housing area and engineering precinct; and the intersections of McGill Road (in front of Fraser Building), Finnerty Road, Gabriola Road and the Midgard Pathway.

For more information contact:

University of Victoria
Campus Planning and Sustainability
p: 250-472-5433
e: planning@uvic.ca
uvic.ca/campusplanning

Report prepared by:

Urban Systems Ltd.
Suite #312 - 645 Fort Street
Victoria, BC
V8W 1G2

File No: 4262.0001.01