Camosun College Transportation Demand Management Plan, 2019 – 2024



Contents

Executive Summary	3
Current Mode Share	4
Camosun College's TDM Vision & Goals	5
Transportation Demand Management Strategies	6
1. CAMPUS FACILITIES	6
1.1 Continue to advocate for student housing on (or near) campus	6
1.2 Integrate Mobility Planning with Building Siting/Design	7
1.3 Implement Integrated "Mobility Hubs" Over the Long Term	8
1.4 Improve Transit Facilities	9
1.5 Improve Bike Parking Facilities and Amenities	10
2. SERVICES, TECHNOLOGY & EMERGING MOBILITY SOLUTIONS	11
2.1 Increase Camosun Express Ridership	11
2.2 Expand Electric Vehicle Charging Opportunities	12
3. PRICING & FINANCIAL INCENTIVES	13
3.1 Reduce Carpool Parking Costs for Students	13
3.2 Explore Reduced Rates for Daily Motorcycle Parking	13
3.3 Reduce Secure Bike Parking Costs (i.e. Bike Lockers and Cages)	14
3.4 Advocate for the inclusion of the Alternative Transportation Program for all employee groups	14
4. PROGRAMS & MARKETING	15
4.1 Develop an Annual Outreach Action Plan and Resource it appropriately	15
4.2 Develop a TDM Annual Overview	16
4.3 Facilitate Ridesharing	16
4.4 Host Cycling Skills Workshops	17
4.5 Develop Park & Ride/Walk programs to encourage multi-modal transportation options	17
4.6 Advocate for and facilitate the development of Low Carbon Travel Policies for Staff	18
5. COORDINATION & PARTNERSHIPS	19
5.1 Stagger Class Times	19
5.2 Schedule Classes to Avoid Inter-Campus Travel	20
5.3 Improve Transit Service and Scheduling	20
5.4 Liaise and Advocate with Local Municipalities on Priority Areas	22
Action Plan	23
Monitoring and Evaluation	26

Executive Summary

This *Transportation Demand Management Plan* builds on a strong foundation of previous transportation demand management (TDM) plans and programs at Camosun College. The primary goal of this five-year plan is to provide convenient, environmentally responsible and affordable access to both campuses. In doing so, the college expects to see mode share shift away from single occupancy vehicle (SOV) trips and towards alternate transportation. Sustainable transportation has benefits not just for the college, but for our community; it supports more equitable options, safer routes, reduced greenhouse gas emissions and a healthier society.

The TDM Plan outlines a roadmap on how the College can meet its five goals:

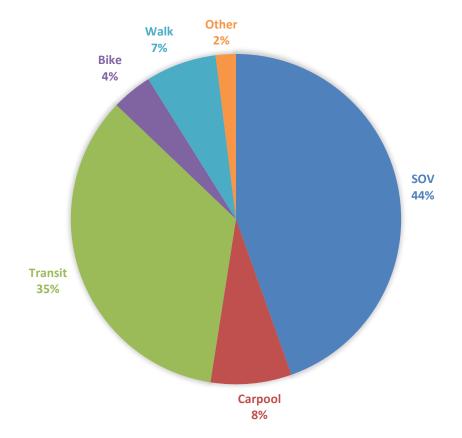
- 1. **Reduce parking demand and total single occupancy vehicle (SOV) trips -** Reduce total emissions and the proportion of trips made by single occupant vehicles.
- 2. Improve the quality and diversity of active transportation choices Promote active transportation choices for the Camosun community by developing safe and accessible cycling and pedestrian connections, infrastructure and incentives.
- 3. Improve the quality and coordination of non-SOV vehicle connections to/from campus Work effectively with both internal and external groups to facilitate non-SOV travel to campus, including transit service, the Camosun Express, carpooling, and cycling.
- 4. **Maximize cost effectiveness of existing infrastructure and facilities -** Identify opportunities to reduce the College's costs related to transportation and maximize efficiencies of current programs, services, and resources.
- 5. Enhance the campus experience through transportation Improve travel choices and helping make travel on and to campus safer, more convenient, and accessible.

This plan was developed with the support of Watt Consulting Group who was contracted to develop a long-term (10 year) TDM Strategy for Camosun. Watt made 26 recommended actions for how the College could become a leader in sustainable transportation by 2029. Of those Camosun has adopted 21 actions into this five-year TDM Plan.

In addition to guiding how the college will meet the above mentioned goals, this TDM Plan contributes to Camosun's *Sustainability Plan* and supports regional climate action efforts.

Current Mode Share

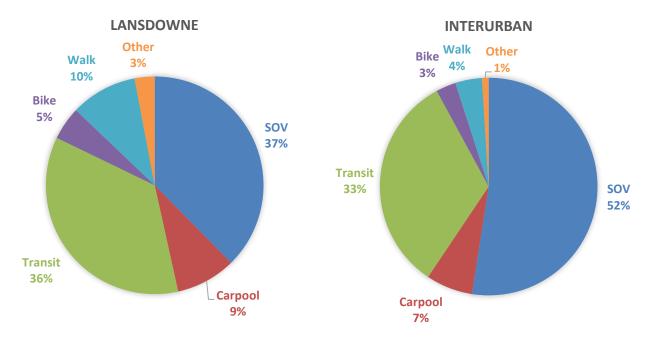
A central goal in this TDM plan is focused on reducing the College's SOV mode share and increase the number of trips made by active transportation, transit and carpooling.



2018 Mode Share (both campuses)¹:

¹ The 2018 mode split figure uses an average of the spring 2018 and fall 2018 mode split counts.

2018 Mode Share, by campus



Camosun College's TDM Vision & Goals

The vision of the Camosun College TDM Plan is to provide convenient, environmentally responsible and affordable access to Camosun's campuses.

This plan provides a roadmap on how the College can better provide transportation choices and, ultimately, meet its **five goals**:

- 1. **Reduce parking demand and total single occupancy vehicle (SOV) trips -** Reduce total emissions and the proportion of trips made by single occupant vehicles.
- Improve the quality and diversity of active transportation choices Promote active transportation choices for the Camosun community by developing safe and accessible cycling and pedestrian connections, infrastructure and incentives.
- 3. Improve the quality and coordination of non-SOV vehicle connections to/from campus Work effectively with both internal and external groups to facilitate non-SOV travel to campus including transit service, the Camosun Express, carpooling, and ride-hailing.
- Maximize cost effectiveness of existing infrastructure and facilities Identify opportunities to reduce the College's costs related to transportation and maximize efficiencies of current programs, services, and resources.
- 5. Enhance the campus experience through transportation Improve travel choices and helping make travel on and to campus safer, more convenient, and accessible.

Transportation Demand Management Strategies

To meet the TDM goals, recommended activities are described in the following section. Each has been grouped within one of **five strategy areas**, as follows:



1. <u>CAMPUS FACILITIES</u>

Campus facilities encompass everything from the development of student housing, to investment in infrastructure upgrades, to campus transit and bicycle infrastructure. While campus facilities do not directly dictate how students and staff travel to campus, they can strongly influence the overall transportation experience by facilitating sustainable travel and travel support options. This section includes six strategies outlining how campus facilities can be better designed and/or enhanced to facilitate sustainable transportation.

1.1 Continue to advocate for student housing on (or near) campus

Continue to advocate for on-campus housing to increase the proportion of student trips to/from campus made by walking.

Campus housing is generally provided at many large post-secondary institutions. The University of Victoria, as an example, offers approximately 2,500 on-campus housing units, which represents approximately 12% of the student Full Time Equivalents (FTEs; approximately twice as many FTEs as Camosun). Walking represents 15% of all trips to/from UVic, which is nearly double the proportion of walking trips to/from Camosun's Lansdowne campus despite virtually the same context and availability

of nearby off-campus housing (the proportion of walking trips to/from the Interurban Campus is 4%). Presumably students living on-campus is a significant factor in the increased number of walking trips.

Certain TDM strategies become increasingly important if/when students live on-campus, such as reliable transit service to nearby commercial areas (i.e., Tillicum Centre, Royal Oak), access to campus car share services, and pedestrian/cycling infrastructure improvements (see Strategy 5.4).

Actions:

- 1. Consider the addition of campus housing as part of the Campus Master Plan process (on-going).
- 2. Develop a broader student housing strategy that addresses the need for support services such as transit service, carshare, pedestrian infrastructure, and mobility hubs.

1.2 Integrate Mobility Planning with Building Siting/Design

Establish a process to ensure that the design and location of any new or substantially renovated campus building considers how people will connect to it.

Compact and easily connected land use creates the most effective and efficient transportation networks in the larger community and the same is true within the smaller area of each campus. A key consideration for the siting of any new buildings or usage changes to existing buildings should be how entrances connect to sustainable transportation modes. The largest buildings that will attract the most users should be located as close as possible to transit and key cycling and pedestrian gateways to each campus. While consideration may be given to nearby parking for people with disabilities or drop off / loading zones in proximity to buildings, generally connection to arrival points by sustainable modes should be prioritized over connection to parking.

The design of new buildings or renovation of existing buildings should also consider the following factors:

- Are the main building entrances clearly identifiable at a distance and fully accessible?
- **Do the main building entrances face towards other key campus destinations** and sustainable transportation arrival points; can their location be easily communicated through wayfinding signage and maps?
- **Does the building design integrate cycling facilities** where possible, such as bike racks, covered area where bike racks may be placed or end of trip facilities for students and staff if relevant (showers, lockers, etc.).
- Is there opportunity to integrate other mobility improvements as part of the design, such as incorporation of building overhangs or food and beverage service areas with transit or rideshare waiting zones?

Actions:

1. As part of the Campus Master Plan process, consider prioritizing the placement of major buildings (i.e. those that will generate the highest number of daily users) as close as possible to sustainable transportation arrival points.

- 2. Implement a development referral protocol/program that includes the Office of Sustainability, Transportation & Parking staff in [a] providing input on functional requirements for building design and [b] reviewing and commenting on building designs from a mobility perspective.
- 3. Include "Mobility Improvements" as a standing line item as part of cost estimates for any new building or renovation to ensure they are included from the start as part of capital project planning and budgeting.

1.3 Implement Integrated "Mobility Hubs" Over the Long Term

In conjunction with future development and campus planning, create a space at each campus that acts as a hub to consolidate and promote sustainable transportation.

Integrate "mobility hub" space at each campus to consolidate many mobility choices helps to crosspromote them. As flagship spaces, they would also visibly demonstrate the importance that the College places on non-SOV travel and would act as a focal point for students who want to learn more about how to access the College by means other than private automobile.

In particular, the Interurban campus would be an excellent place to pilot this approach due to the need to consider an improved transit exchange and also the distance many students travel to reach the campus.

Ideally integrated with a building nearby transit, an example Mobility Hub would include the following amenities:

- **Covered outdoor seating and waiting areas** using building overhangs or shelters, with lighting, landscaping garbage receptacle and other amenities.
- **Nearby transit and Camosun Express stop locations** with customer information and other seating, shelter and safety amenities as required.
- Nearby formally designated pick up/drop off space for carpooling, handyDART vehicles, taxis, and ridesharing and ride-hailing vehicles.
- Nearby electric vehicle charging and car pool spaces.
- **Covered bicycle parking, e-bike charging, and a "bike kitchen"** where bicycle maintenance tools could be provided. This could be as simple as a small display with an air hose, adjustable wrench and allen key set on a chain. Or it could potentially consider the co-location of a small bike repair shop or bicycle advocacy non-profit.
- **Mobility information displays within the Hub**, such as electronic next bus arrival signage, transit and Camosun Express map and schedule information, bulletin boards with cycling route, ride sharing and mobility information, and on-campus wayfinding.
- **Potential co-location of a Camosun College function** such as parking and security service desk that could also enable staff to provide mobility information to students.
- **Comfortable indoor sitting area** where passengers can see arriving vehicles through windows which may also provide areas to work. This area could also be consolidated with food and beverage services.

Actions:

1. As part of the Campus Master Plan process, include opportunities to develop a Mobility Hub space as part of future development or infrastructure improvements.

2. In the interim, seek ways to initiate aspects of an introductory Mobility Hub in an existing available space on each campus and indicate this Hub on campus maps. This interim space could use an exterior wall with nearby bike racks and feature covered bulletin boards with maps, getting to campus information, and a few bike kitchen tools.

1.4 Improve Transit Facilities

Make additions and changes to transit stops and exchange facilities to improve accessibility and accommodate further passengers and vehicles.

Both campuses have transit stops that generally provide the main elements required to support transit ridership: shelters, seating, paved areas, lighting, garbage/recycling receptacle and customer information. To continue to attract transit passengers and build future ridership, the following improvements will be considered for each campus:

Lansdowne campus:

- Seek to increase the accessibility and amenities for the Foul Bay Road stops by increasing the curb height, expanding the paved waiting area and adding/upgrading shelters.
- Over time, the route 15 UVic/Esquimalt route is slated to evolve into a bus-operated Rapid Transit line with increased frequency. Therefore, the Foul Bay Road stops served by this route will likely evolve into stations. Account for this in future campus planning.
- There are other routes serving the campus that do not go to the main Foul Bay Road stops, namely Hillside Avenue/Richmond Avenue (served by route 8 Oak Bay / Interurban) and Richmond Avenue (served by route 14 VGH/UVic). Therefore, it may be useful to work with BC Transit to create a map showing Lansdowne transit options and their locations. This map could be used online and also replicated as wayfinding signage at all stops so that passengers would be aware of all their options.

Interurban campus:

- Having a dedicated on-site transit exchange at the Interurban campus is a positive aspect. However, its current size and rounded "key hole" shape presents challenges to maneuverability and the ability to meet transit vehicle capacity at peak times. Therefore, it limits the ability to increase future transit frequency. Capacity issues may be somewhat mitigated if BC Transit extends more routes past Interurban campus to the Royal Oak Exchange via the Vancouver Island Technology Park.1 This is because less space is needed when vehicles operate through a point rather than terminating there.
- Regardless, as part of campus planning and redevelopment, opportunities to relocate the
 exchange and/or redesign it should be explored. Any redesign should seek opportunities to
 increase curb height, have straight areas where vehicles can pull alongside, increase the
 number of vehicle bays, separate the vehicle layover areas from passenger pick up points where
 possible, and increase shelters and seating.
- An exchange placement and internal road network structure that facilitates travel in both directions through or alongside the campus may also be useful for consistency between the various routes.

HandyDART – Lansdowne campus currently has a designated drop off/pick up area and shelter for HandyDART users. This should be replicated at Interurban campus and the locations at both campuses

should be marked on campus maps. In future, it may be useful to relocate or redesign the pick up area at Lansdowne as newer HandyDART vehicles have side ramps rather than rear lifts and function better with sidewalk/landing space and curbing that is higher and straight.

Actions:

- 1. Lansdowne campus: plan to increase the capacity of shelters, seating and the paved waiting area at the main Foul Bay Road stops to address existing overcrowding at peak times and plan for the eventual implementation of Rapid Transit to that area.
- 2. Interurban campus: explore opportunities to improve the placement and design of the campus transit exchange to provide further capacity for transit vehicles, as well as accessibility improvements, space and amenities for waiting passengers.
- 3. As transit infrastructure improvements move forward, plan on including the necessary conduit and pre-built features to enable the installation of real time transit arrival information displays as that technology becomes available in the Victoria Regional Transit System.
- 4. Designate HandyDART pick up/drop off areas with adjacent seating and shelter at each campus and show these locations—as well as the main transit stops—on all campus maps.
- 5. As needed, partner with area municipalities to pursue cost-shared funding of transit stop and shelter improvements through BC Transit's bus stop improvement program.

1.5 Improve Bike Parking Facilities and Amenities

Increase the provision of short-term and long-term (secure) bicycle parking at both campuses to encourage more cycling to campus.

Bike parking—in the form of bike racks and secure facilities—is currently available at both campuses; the Lansdowne campus offers roughly 236 racks, two bike lockers and one secured covered bike parking area with 20 spaces. The Interurban campus currently has 210 racks and one secure bike parking area with 24 spaces with a second area planned as part of the new Centre for Health and Wellness.

The 2018 Ancillary Student Survey specifically identified the need for more secure bike parking on campus. In responding to the question "what factors would continue to support your choice to use active modes of transportation," 20% of respondents indicated "improved cycling amenities." Qualitative comments specifically highlighted the need for secure bike parking in the form of lockers or storage facilities. The provision of bike lockers and other forms of secure bike parking can help encourage more cycling trips to the College.

In addition, electric bikes (e-bikes) are a rapidly growing mobility phenomenon that have the potential to compete with, and substitute for, private motor vehicles. There is one e-bike parking facility at Interurban Campus. Better understanding of e-bike parking needs and interests could be gained by College surveys surveys (e.g., Ancillary Services Survey, Student Sustainability Survey, etc.). Given that e-bikes could replace SOV trips and reduce GHG emissions, the College should consider them as a viable sustainable transportation option and support e-bike owners and prospective owners by providing e-bike charging facilities.

Actions:

- 1. Audit/survey bike parking infrastructure at both Camosun campus
- 2. Provide a minimum of 10 bike lockers at both campuses by 2024.
- 3. Target a secure bike parking occupancy of 85% at both campuses by continuing to add new supply as demand warrants.
- 4. Promote and communicate bike parking options to encourage use.
- 5. Provide electric bike charging stations, ideally situated within Mobility Hub vicinity (see 1.3 above).
- 6. Consider potential partnerships with bicycle advocacy or mobile bicycle maintenance providers to offer services or information on campus on a weekly basis, such as "Wheelie Wednesdays."

2. SERVICES, TECHNOLOGY & EMERGING MOBILITY SOLUTIONS

Sustainable transportation is not limited to transit, cycling, walking, and carpooling. It also refers to other opportunities that provide options for those who do not own a vehicle including shuttle services (e.g., Camosun Express), carsharing, electric vehicles, and e-bikes. This section includes five strategies that outline how adopting new services, technologies and emerging mobility can help advance sustainable transportation options at both campuses.

2.1 Increase Camosun Express Ridership

Increase the visibility and ease of use of the Camosun Express service by implementing changes to routing, scheduling, marketing and customer information.

The Camosun Express is a free shuttle service for students and staff commuting between campuses that began operation in 2014. It provides approximately hourly service between campuses—with a midday gap—when the College is in full session from September to April. It is designed to serve both students and staff.

The shuttle operates through contract with a private operator and is overseen by the Office of Sustainability, Transportation & Parking. As part of this TDM Strategy, a detailed analysis of the Camosun Express was undertaken and recommendations developed in collaboration with Office of Sustainability, Transportation & Parking staff.

Actions:

- Work with BC Transit and area municipalities to add an additional stop to the existing Camosun Express route to serve higher density housing in areas where it is otherwise harder to get to/from campus easily, such as the Royal Oak Exchange. Additional stops to consider could also include McKenzie Avenue at Quadra, and McKenzie at Shelbourne.
- 2. Expand service offering in alignment with opening of Alex & Jo Campbell Centre for Health and Wellness building. Expanded service offerings could include commuter stops as mentioned above, schedule adjustments, and the revitalization of the West Shore commuter service.

- 3. Adjust portrayal of schedule in all customer information materials to separate trips by direction to make it easier for users to see when the bus is leaving a location and to also integrate the schedule into other marketing and customer information materials.
- 4. Adjust schedule to focus trips on travel to/from Interurban as that campus has fewer transit options. Schedules should also line up with peak travel times and allow for 10 minutes walking time between the shuttle stop and the class or meeting locations.
- 5. Create a PDF summary of schedule and pertinent information and post it on the website as it can be easily downloaded and stored on phones in this format and can be shared and replicated in many places (printed flyer, staff intranet, newsletter, posters around campus, etc.).
- 6. Create wayfinding and Camosun Express schedule signage and post it in multiple bus stops. This includes creating Camosun Express double-sided branded bus stop signs (so they can be seen from both sides unlike the current single-sided signs) and posting information about the Camosun Express at the main transit stops for each campus, including schedule and directional arrows or small map showing where to catch it.
- 7. Update campus maps to show Camosun Express bus stop locations. This option applies to both the online versions of the campus maps as well as ideally the physical wayfinding maps located on site. It may also be useful to submit the Camosun Express schedule and stop locations in General Transit Feed Specification (GTFS) format to Google, which would then enable them to pop up in Google maps and trip planners
- 8. Continue to promote the Camosun Express, particularly as part of staff functions, staff tools or new student and staff onboarding processes. This includes CamFest and welcome back celebrations, Back to School orientation and in the new employee brochure, as well as potentially among those Executive Assistant staff who book many of the internal meetings.

2.2 Expand Electric Vehicle Charging Opportunities

Expand the number of electric vehicle charging stations at both campuses to align with the College's overall strategy to reduce greenhouse gas (GHG) emissions.

There are currently 13 electric vehicle (EV) charging stations at Camosun, seven at Interurban and six at Lansdowne. Another six stations are planned for the new Centre for Health and Wellness building, bringing the total number up to 19.

Expanding the number of EV charging stations will provide more opportunities for both students and staff to use and charge their electric vehicle on campus. Expanding the number of EV charging stations on campus will not address one of the Strategy's main goals to reduce SOV travel as EVs still represent a vehicle trip and require parking. However, the provision of more EV charging stations demonstrates the College's environmental leadership and overall commitment to reducing corporate GHG emissions.

The demand for EV charging has increased significantly over the last 5 years. The College has been tracking the electrical usage of its stations; the first EV charging station that was installed (located in P2 at Interurban), saw an 800% increase in kWh use from 2013 to 2017 growing from 241 kWh to 2,813 kWh whereas the other six stations have seen a 2,550% increase in kWh use over this time.

Actions:

1. Implement a formal process for monitoring the utilization of College EV charging stations and add new stations if utilization continues to grow.

- 2. Include questions in future College surveys (e.g., Ancillary Services Survey, Student Sustainability Survey, etc.) to understand student and staff intent to purchase or lease an electric vehicle within the next five years, as well as whether the provision of EV infrastructure at the College would influence this decision.
- 3. Site new charging stations in convenient and highly visible locations to maximize overall utilization.

3. PRICING & FINANCIAL INCENTIVES

Pricing and financial incentives can be effective tools to disincentivize single occupant vehicle travel, and encourage greater uptake in sustainable modes including transit, carpooling, and cycling. This section includes four strategies focused on how pricing and/or financial incentives could be better designed to encourage sustainable transportation. It does not address employee parking pricing (which is a taxable benefit provided under collective agreements).

3.1 Reduce Carpool Parking Costs for Students

Offer monthly carpool permits at a discount to encourage carpooling among students.

The College has a carpool program that entitles registered vehicles with a permit to occupy identified carpool parking spaces. The spaces are located in the most desirable locations within the General parking areas (i.e., the shortest walking distance from key campus destinations). Camosun staff have indicated that uptake in the carpool permit has been limited, presumably due to the effort involved in obtaining the carpool permit and the limited benefit (i.e., convenience only). It is assumed that a number of informal carpools are occurring in General parking areas.

Actions:

There are two options to reward existing carpoolers and encourage a greater number of students to carpool, as follows:

- Establish a reduced hourly / daily rate for carpool vehicles. This would require a "carpool" rate in the pricing structure and the carpooler to use this rate when making parking payment. Enforcement is needed to ensure that non-carpool vehicles are not paying the carpool rate.
- 2. Offer carpool parking as a discounted monthly parking permit. This will be attractive to most full-time students who drive as their primary travel mode, and less attractive to part-time students who would rather pay each day.

3.2 Explore Reduced Rates for Daily Motorcycle Parking

Offer reduced daily rate to motorcycles to encourage use and promote flexibility in mode choice.

Motorcycles use less resources than other vehicles. They put less pressure on transportation infrastructure, using less road and parking space. Generally speaking, they are also more fuel efficient and emit far few GHG emissions than an average vehicle.

At Camosun, special motorcycle zones and permits exist. Motorcycle users can purchase a monthly permit for \$32.50. No daily discounted rate is offered. To further incent this favourable mode share, it is recommended that a daily rate be offered so long as it is feasible to patrol and enforce.

Action:

1. Explore the feasibility of offering a reduced daily rate for motorcycle parking. If acceptable, implement and promote this new price structure.

3.3 Reduce Secure Bike Parking Costs (i.e. Bike Lockers and Cages)

Reduce the costs of secure bike lockers to encourage more cycling to the College.

There are currently four bike lockers available at the College, two at each campus. The lockers are rented on a first-come, first-served basis costing \$15 per month, or \$60 for 4 months. While \$15 may seem like a nominal amount compared to the price of monthly vehicle parking (\$130), it may still be a financial barrier to students looking for secure bike parking on campus. As shown in **Table 4**, bike locker costs at the College are higher than a number of other representative institutions that charge for bike lockers.

As the College looks to expand its secure bike parking, it will have an opportunity to re-evaluate how much it chargers for bike lockers. Gradually reducing both the monthly and semester cost will alleviate the potential financial barrier that the cost is currently posing to students (and staff). Other post-secondary institutions such as Langara College made secure bike parking as affordable as possible, charging students \$5 annually for a bike locker.

Actions:

- 1. Reduce the monthly cost of bike lockers to \$5, and the semester cost to \$30, by 2024.
- 2. Eliminate the costs of bike lockers by 2029.
- 3. Eliminate the cost of secure bike parking.

3.4 Advocate for the inclusion of the Alternative Transportation Program for all employee groups.

Provide incentives for all Camosun employees to choose alternative transportation options.

Camosun College, through the Transportation and Parking department, has developed an Alternative Transportation Dividend (ATD) Program currently available to CCFA and Exempt employees. The ATD Program became available in September 2015, and it provides an opportunity for employees who decline the parking to receive a cash dividend payment which may assist in offsetting costs for their preferred alternative mode of transportation. Eligible employees may choose the full dividend or a half dividend, which includes a flex permit. Both options provide access to alternative transportation choices and benefits, such as transit pass subsidies, free towel and locker rentals, car share membership discounts and an emergency ride home program. CCFA members get a one-time incentive for entering into the program. From 2015 to 2018 the program has had an average of 75 participants per year.

Action:

1. Through bargaining advocate for all employee groups to be eligible to enter the ATD program on a voluntary basis.

4. PROGRAMS & MARKETING

4.1 Develop an Annual Outreach Action Plan and Resource it appropriately.

Develop a communications action plan that outlines the activities, methods and required resources to promote TDM initiatives and programs at the College across each calendar year.

To most efficiently promote TDM at Camosun an Annual TDM Outreach Action Plan should be created. To ensure feasibility, additional resources may be required. This Outreach Action Plan would:

- Identify **target audiences, messaging and communications methods** to be used to inform and engage students, staff and the larger community in Camosun's TDM initiatives and progress towards its TDM/sustainability goals.
- Create a **calendar of events and promotions** that would be presented as a table showing which activities should be undertaken when, as well as planning and material preparation lead times required. This calendar would enable the team to work as efficiently as possible, since activities would be mapped out and planning/preparation could take advantage of times when more staff capacity is available. It would also enable outreach activities and social media messaging to align with and build from other regular campaigns or events going on in the larger community.
- Identify associated material and staff resources for the initiatives, enabling additional requirements to be considered and confirmed as part of Camosun's annual budgeting processes. Besides potentially helping to gain the required additional resources necessary to undertake the activities, showing the direct link between planned activities and resources is also useful in managing expectations for the team if those resources are not available. (Unfunded outreach activities can be moved to a "Future Wish List" section for consideration in subsequent years).
- Outline opportunities to reduce costs and support the College Sustainability Plan's goal of integrating "sustainability into all teaching and learning" by collaborating with classes and students to help facilitate some of the activities.
- Define how outreach activity results will be **monitored and measured**.

Actions:

 Integrated with other Office of Sustainability, Transportation & Parking initiatives, develop an initial Annual Outreach Action Plan that captures recommended activities from this TDM Strategy as well as events and outreach activities undertaken each year (Camfest, CCSS Sustainability Day, Bike to Work Week, etc.). Besides placing these activities on a calendar, determine the resources and on-campus collaboration required to undertake them. 2. To ensure that the benefit of any College investment in TDM infrastructure and programs is maximized, seek additional staff and material resources as required to undertake the desired Outreach Action Plan activities. Update this budget and process annually.

4.2 Develop a TDM Annual Overview

Develop a short summary document to inform students and staff about TDM programs / initiatives and how the College is performing on its TDM metrics.

As part of increasing the profile of TDM on campus, the Office of Sustainability, Transportation & Parking will develop a short, visual TDM Overview, which could be available on print and online. This document could also serve as a source for social media posts and other communications throughout the year.

The purpose of the document is two-fold: the first is to inform the College community about the various TDM and sustainable transportation opportunities on campus. This could include scheduling/pricing information about services such as the Camosun Express as well as general information about other programs and opportunities that facilitate sustainable travel to campus including the recommended strategies in this section.

The second objective of the Overview would be to present a summary of how the College is meeting its overall Strategy goals and TDM Metrics perhaps as a "Moving Forward" visual index or infographic. This would allow for greater transparency into how the College is performing on the TDM strategies outlined in this document.

The Overview could be completed in the summer months and be released in the first couple of weeks of September to help promote TDM as part of the Camosun College brand, support outreach events organized for the start of the academic year, and encourage sustainable transportation habits when they tend to form.

Actions:

- 1. Develop a TDM Overview communication materials (i.e. infographics), as one of the key activities outlined in an Annual Outreach Action Plan
- 2. Update the TDM Overview on an annual basis to demonstrate what the TDM opportunities are at the College and how the College is performing on its TDM metrics.

4.3 Facilitate Ridesharing

Promote tools that enable students and staff to coordinate carpooling / ridesharing.

One area that could be expanded on the Camosun College transportation webpage is information on where to go to establish ridesharing arrangements. Indeed, approximately 20% of respondents to a 2018 survey conducted by Ancillary Services indicated that "carpool information or a ridematching app" would motivate them to leave their vehicle at home.

On its own transportation page, the Camosun College Student Society promotes the Student Life app as being able to help students coordinate ridesharing. If this is the main tool being used at the College, it would be useful to include similar messaging on the College's website. For staff, a section of the intranet could be established to help facilitate this.

Alternately, an existing ridesharing app such as Carma Carpool, Carpool World, and iCarPool could be promoted by the College for both groups. Whether an internal or external source is used to ride match, the key is to let students and staff know where they should go to do this and be consistent in messaging.

Actions:

- 1. In coordination with the Camosun College Student Society, determine and promote an online site or app that will be consistently included in messaging for where to go to find carpool or ridesharing matches. (Also, determine whether "carpool" or "rideshare" is going to be the term used at the College and be consistent in its use through all materials).
- 2. Choose a week or event to help promote this form of transportation.

4.4 Host Cycling Skills Workshops

Encourage staff and students to cycle to campus more often by providing them with learning that lets them feel safer on their bikes.

One common barrier to increased cycling is the perception that it is unsafe or too hard. One way the College can help encourage more cycling is by addressing this barrier through the provision of cycling skills courses and activities designed to increase confidence in riding a bike and knowledge of how best to be safe on the road.

The Victoria Bike to Work Society is a local resource that has trained instructors who offer one-day cycling skills workshops, as well as shorter and more focused learning sessions. The College could partner with the Society to offer training annually to staff, as well as potentially promote the Society's existing free learning sessions to students as they arise².

Actions:

- 1. Either once or twice per year, provide an opportunity for staff and students to participate in a cycling skills workshop.
- 2. Promote existing free cycling workshop opportunities as they arise to both students and staff.

4.5 Develop Park & Ride/Walk programs to encourage multi-modal transportation options

Establish Park & Ride and/or Park & Walk locations and programs to diversify transportation options to Camosun campuses.

² See <u>www.biketoworkvictoria.checkfront.com/reserve</u> for a listing of available courses and workshops.

With parking pressure a continued issue at Camosun, particularly at the Interurban campus, there is a need for as many alternative options as possible to help reduce the number of SOVs coming to campus. Park & Ride locations provide one such option allowing people to drive and park their vehicle at off campus location, and to subsequently, bus, bike, or walk to campus. From the 2019 Ancillary Services Survey, 21% of respondents selected "Park & Ride" as an option that would motivate them to leave their vehicle at home.

Through the Parking Management Services contract, the Transportation & Parking Office has already established one Park & Ride program at the Tillicum Mall. Managed by Robbins Parking, this Park & Ride provides free parking and easy access to a variety of bus routes. Initial uptake by students has been positive and encouraging for future locations. Additional Park & Ride opportunities will serve a greater number of students commuting from different locations in the region.

Action:

1. Seek to develop and implement Camosun Park & Ride/Walk options. This will include landlord agreements and relations, site preparation, student registration logistics, communications and promotion materials, and monitoring and reporting.

4.6 Advocate for and facilitate the development of Low Carbon Travel Policies for Staff

Update the College's existing travel policy to incentivize and reward staff who choose to travel more sustainably.

The College's Parking & TDM Three Year Plan (2013-2016) included a recommended to develop a Low Carbon Travel Policy for staff and fleet vehicles. The policy has not been developed or adopted at this time but warrants re-consideration in this TDM Strategy.

Informed by and supporting its Sustainability Plan, the College's Strategy Plan & Progress Report (2016-2021) includes a performance indicator around total college emissions. Given the College's strategic direction around sustainability and the environment (see Camosun College Sustainability Plan), along with its recognition of the significant GHG impact from transportation, there is an opportunity to formally develop and adopt a Low Carbon Travel Policy to mitigate GHG emissions from staff travel.

The College's existing Travel Policy (O-4.3) was adopted in March 2001. As such, it is an outdated policy document with no mention of low carbon or sustainable transportation options for staff travel. The policy should be updated to reflect the College's new strategic direction and the goals in this TDM Strategy.

Currently, public sector Carbon Neutral Action reporting is not required to account for emissions related to business travel. However, as per Watt's recommendations and in line with BC's climate leadership mandate, Camosun should consider implementing GHG reduction goals into its travel policies and procedures.

Actions:

1. Advocate for the College to update its Travel Policy with a new Low Carbon Travel policy that includes the following:

- a. The distance rate should include cycling, carpooling, and carsharing as viable forms of transportation. Reimbursement for distance travelled on College business should be paid to employees who use their own vehicles, carshare, carpool, or a bicycle in the performance of their duties.
- b. Update the travel arrangements section (Section 3 of the Travel Policy) to allow for telecommuting, which provides flexible work arrangements in appropriate circumstances and mitigates GHG emissions by reducing travel to campus. The specific rules around telecommuting should be consistent with the College's telecommuting policies, which are currently in draft form.
- 2. Advocate and develop mechanisms for the College to start tracking and accounting for GHG emissions related to its business travel with a goal of using this information reduce or offset travel-related emissions where possible.

5. COORDINATION & PARTNERSHIPS

Internal coordination refers to scheduling of classes, which strongly influences travel demand to and from campus. Coordination and partnerships also involve external actions to work with organizations such as BC Transit and local municipalities to facilitate improved transit service, enhance pedestrian infrastructure, and advocate for the provision of more housing nearby campus.

5.1 Stagger Class Times

Explore class times and schedules to determine if and what structural changes could be made to better manage parking as well as more effectively utilize transit resources.

There is an opportunity to better distribute parking demand over the course of the day (or week) by scheduling a larger proportion of class times outside peak parking demand periods. The successful implementation of this strategy would have a significant impact on reducing peak period parking demand. Staggering class times can also enable more efficient use of transit resources and reduce the occurrence of "pass ups" whereby full transit vehicles drive past waiting passengers.

Robbins Parking conducts an annual survey of the number of available parking spots at both campuses over two weeks at the end of October. This count period represents the busiest time of the year in Camosun's parking lots. The most recent counts were completed October 15 – 26, 2018, during morning and afternoon periods. Interurban campus is know for a short parking supply compared to demand; the lowest availability in parking occurred on Tuesday, Wednesday and Thursday mornings with availability ranging from 2% - 9% (a minimum acceptable standard in the parking sector is usually considered 10%). Parking utilization is much lower on Friday afternoons. At Lansdowne, parking availability is much higher, with the lowest point being 18% (Monday at 12pm). Parking availability counts are a useful starting point to understand how parking demand varies over the course of the day and week.

Over the longer term, staggering class times—particularly those in the morning—could also be considered to reduce transit over-crowding and pass ups and to redistribute service to offer greater frequency across the day rather than multiple trips at the same time to try to manage peak passenger loads.

Actions:

- 1. Using parking utilization data, work with Data Management (or Registration) to determine whether the system can schedule class times in consideration of the availability of campus resources such as classrooms and parking supply.
- 2. Over the longer term, determine if there is also an ability to stagger class start times to avoid the morning peak that currently occurs, reduce transit overcrowding and redeploy transit service frequency across more of the day.

5.2 Schedule Classes to Avoid Inter-Campus Travel

Offer programs and courses at one campus to minimize inter-campus travel.

Reduce the need for students to travel between campuses. Information from the College indicates that course and program locations are already taken into consideration when developing and finalizing the class schedules for individuals. However, some students do need to travel between campuses. As the College and its offering and enrollment grow, care should be taken in campus planning decisions to continue to minimize the incidence of this type of travel.

Action:

1. Seek to minimize student travel between campuses by ensuring that courses/programs are consolidated at single campuses as much as possible.

5.3 Improve Transit Service and Scheduling

Continue to work with BC Transit, area municipalities and stakeholders to improve the frequency and reliability of transit service, as well as supporting infrastructure.

From the 2019 Ancillary Services Survey, 47% of respondents selected "improved public transit service" as an option that would motivate them to leave their vehicle at home.

The table on the next page (p.22) summarizes the key student concerns heard by BC Transit staff regarding transit service to the two campuses. One system change since this feedback was received was the September 2018 start of the new route 9 Crosstown route between Royal Oak, Camosun Interurban, Tillicum Mall, Hillside Mall, Camosun Lansdowne and UVic.

The College and its student leadership should continue advocating for improved transit service to address the requests at right. In addition to lobbying for change, the College could make it more likely that it will receive improved service by doing the following:

- Address the functional design of the existing Interurban campus transit exchange, as its shape and size prevent easy operation of buses within it and BC Transit staff have identified that further capacity is required.23
- In partnership with the District of Saanich, • support the development of further residential and employment density in the vicinity of the Interurban campus, including its proposed town centres at Tillicum Mall and Royal Oak and the transportation corridors between them. This is because ridership and density are the biggest drivers of transit and the transit system will normally prioritize service improvements to routes that are performing well or which are serving new areas of population or employment growth.
- Improve pedestrian linkages in the Interurban corridor, which can help make it easier for nearby students to walk to school as well as enable nearby residents to walk to an Interurban transit hub, thereby enabling BC Transit to consolidate services at this point and funnel time savings into further frequency.

KEY TRANSIT REQUESTS

BC Transit staff identified the following main requests for transit improvements from students at the College's two campuses during 2017 engagement for Local Area Transit Plans:

Interurban Campus

- Add further frequency on routes 8, 21 and 39 to improve trip choices, shorten connection times and reduce overcrowding.
- Ensure sufficient capacity to meet demand for Health Sciences campus expansion.
- Work with District of Saanich to improve road network in vicinity of Interurban and Wilkinson to address delays and unreliability of transit, as well as pedestrian improvements along Interurban corridor.
- Implement real time technology.

Lansdowne Campus

- Reduce overcrowding and pass ups on routes 4 and 14.
- Implement more frequent direct service to Camosun Interurban Campus and Tillicum area.
- If funding is available, wait until end of • exam period rather than the start to reduce service frequency.
- Implement real time technology.
- As part of campus planning, consider further ways to consolidate the road network between the Interurban campus, Vancouver Island Technology Park and Royal Oak, as this consolidation groups together destinations and density that prioritize service improvements.
- Consider opportunities to stagger class times (as described in *Strategy 5.1*) to reduce transit demand at peak times and more effectively implement service across the day.
- Look at ways to partner with Saanich to implement transportation changes and transit priority measures to reduce the impacts of congestion on transit running times and reliability, since this will also enable resources saved to be channelled into further service.

Actions:

- 1. In collaboration with neighbouring stakeholders such as the Vancouver Island Technology Park and the Pacific Institute for Sports Excellence (PISE), continue partnering with BC Transit to improve transit service to campuses, particularly Interurban. One way to stay top of mind is to create two regularly scheduled meetings during the year—such as end of September and end of January—with BC Transit staff and potentially also including Camosun College Student Society representation, as well as attending key Victoria Regional Transit Commission meetings. The purpose of the two meetings would be to align plans and address concerns.
- 2. Undertake the supportive measures (as described above) that creates a positive foundation for transit service improvements.

5.4 Liaise and Advocate with Local Municipalities on Priority Areas

Establish prioritization of sidewalk and bike lane improvements nearby both campuses and approach the Districts of Saanich and Oak Bay to facilitate upgrades.

Both the District of Saanich and District of Oak Bay have established pedestrian and cycling plans to guide the improvement of sidewalks in the future. Saanich's plan – Moving Saanich Forward – was completed in June 2018 and identifies sidewalk improvements in the vicinity of both campuses. Refer to **Figure 2**. The College should review the identified sidewalk improvements in cooperation with the on-going Campus Master Plan and develop a list of sidewalk upgrades in order of priority. This will help ensure that off-campus walking routes are established in cooperation with on-going campus development, as well as give direction to the municipalities on where desire lines are to/from each campus. The Camosun campuses are significant walking trip generators and should take priority in municipal infrastructure provision.



Actions:

- 1. Establish a priority list for sidewalk and cycling improvement projects in the vicinity of both campuses.
- 2. Approach the Districts of Saanich and Oak Bay to advocate for upgrade sequencing to reflect the College's prioritized list.

Action Plan

The tables below present a summary of all the five-year strategies and related actions, according to strategy area. Specific actions within each area are described in more detail in their relevant sections within the TDM Plan document. Within the annual business plan of the Transportation & Parking Office, as well as through coordination with other departments (primarily Facilities Services), more detailed implementation plans will be developed.

Prioritization of actions will be guided by the following:

- Target Audience: whether the strategy is intended for staff, students, or both.
- **Campus**: which campus the strategy is intended for.
- Partners: which may need to be involved to help support the action.
- **Impact**: whether the strategy is expected to have a low, medium, or high impact (solid circle) on shifting to sustainable modes.
- **Staff Resources**: identifies whether the strategy requires a low, medium, or high (solid circle) degree of staff time / resources.
- Estimated Cost: TBD with business planning

1. Campus Fac	1. Campus Facilities						
Action	Target Audience	Campus	Partners	Impact	Staff Resources		
1.1 Continue to advocate for student housing on (or near) campus	Students	Both	TBD				
1.2 Integrate Mobility Planning with Building Siting/Design	Students/Staff	Both	Internal				
1.3 Implement Integrated "Mobility Hubs" over the long- term	Students/Staff	Both	N/A				
1.4 Improve Transit Facilities	Students/Staff	Both	BC Transit				
1.5 Improve Bike Parking Facilities and Amenities	Students/Staff	Both	Internal				

2. Services, Technology & Emerging Mobility Solutions					
Action	Target Audience	Campus	Partners	Impact	Staff Resources
2.1 Increase Camosun Express Ridership	Students/Staff	Both	Wilsons / Internal		
2.2 Expand Electric Vehicle Charging Opportunities	Students/Staff	Both	Internal	0	

3. Pricing & Finand Action	Target Audience	Campus	Partners	Impact	Staff Resources
3.1 Reduce Carpool Costs	Students	Both	N/A		
3.2 Explore Reduced Rates for Daily Motorcycle Parking	Students	Both	Robbins	0	
3.3 Reduce Secure Bike Parking Costs (i.e. Bike Lockers and Cages)	Students/Staff	Both	N/A		
3.4 Advocate for the inclusion of the ATD Program for other Employee Groups	Staff	Both	Internal		

4. Programs and Marketing					
Action	Target Audience	Campus	Partners	Impact	Staff Resources
4.1 Develop an Annual Outreach Action Plan and Resource Appropriately	Students/Staff	Both	Potential Class Involvement		
4.2 Develop a TDM Annual Overview	Students/Staff	Both	N/A		
4.3 Facilitate Ridesharing	Students/Staff	Both	Camosun College Student Society	0	
4.4 Host Cycling Skills Workshops	Students/Staff	Both	Victoria Bike to Work Society	\bigcirc	
4.5 Develop Park & Ride/Walk to encourage multi- modal	Students (and Staff for West Shore options)	Both	External		

transportation options				
4.6 Advocate for and facilitate the development of Low Carbon Travel Policy	Staff	Both	N/A	\mathbf{O}

5. Coordination and Partnerships					
Action	Target Audience	Campus	Partners	Impact	Staff Resources
5.1 Stagger Class Times	Students	Both	BC Transit		
5.2 Schedule Classes to Avoid Inter- Campus Travel	Students	Both	BC Transit		
5.3 Improve Transit Service + Scheduling	Students/Staff	Both	BC Transit		
5.4 Liaise and Advocate with Local Municipalities	Students/Staff	Both	Saanich, Oak Bay, Victoria		

Monitoring and Evaluation

Transportation demand management is an iterative process intended to influence travel behaviour over an extended period of time. The College will adopt the following monitoring and evaluation protocols to test how well it is achieving the actions identified in this Strategy and, more importantly, how well it is meeting the goals.

Annual TDM Overview

<u>Strategy 4.2</u> identifies an annual summary of TDM options and performance against its TDM goals. While it has been positioned as an explicit strategy with the Programs + Marketing Strategy Area, once established, it would also serve as a monitoring and evaluation tool. Importantly, it is recommended that the Overview include a visual scorecard on how the College is performing on its TDM metrics, which will serve as valuable data for students and staff alike and help reinforce non-SOV travel as the behavioural norm at the College.

Five-Year Comprehensive Review

A TDM Strategy should be a living document and be updated to reflect changing context and lessons learned. A five-year update horizon will provide an adequate monitoring and evaluation window to understand how well the strategic actions are meeting the goals of this Strategy. Over time, there may be a need to refine and/or update the goals, which may require new actions to be developed accordingly.

Continuation & Expansion of Bi-annual Screenline Count

The College has been collecting mode share data every two years since 2010 with the exception of 2014. To ensure data reliability and consistency over time, the College will replicate the travel mode share survey (e.g., screenline counts) that were completed for this TDM Strategy. In addition, the College may wish to expand the counts beyond the AM and PM peak periods and include a midday count, which would capture students and staff travelling to campus at that time. For instance, items such as scheduling of Camosun Express trips are currently being made based on assumptions about midday travel patterns which may or may not be accurate.

Involve Students in Future Data Collection + Monitoring

Students are an excellent resource to assist with future bi-annual screenline counts. Involving students in screenline counts alleviates pressure on staff resources. In keeping with the College's Sustainability Plan, it also integrates sustainability as part of the educational experience that could teach students data collection methods and familiarize them with TDM more broadly.

Incorporate TDM Metrics into Annual Institutional Accountability Plan/Report and Sustainability Plan

The College publishes its annual Institutional Accountability Plan and Report, which provides educational research and statistical reporting for the College community and support in strategic information, provincial government reporting, survey research and planning support. The report includes a number of performance measures to highlight how specific outcomes align with the strategic plan. Performance measures include [a] total credentials awarded, [b] student spaces in developmental programs, and [c] total spaces for Indigenous students, among others.

To formalize TDM into the College's institutional strategy and direction, consideration should be given to including select TDM metrics to demonstrate the College's TDM performance year over year. Metrics could include:

- College travel mode share, shown by campus
- Camosun Express ridership
- Transportation related GHG emissions
- FTE-Parking ratio

STRATEGY GOALS & TDM METRICS

The following table illustrates a variety of TDM metrics that are specific to the goals developed in this Strategy. The strategic actions will ultimately determine how the College is performing relative to the metrics and goals.

TD	M Strategy Goals	Sample TDM Metrics
1.	Reduce parking demand and total single occupancy vehicle (SOV) trips.	FTE-Parking RatioSOV Mode Share
2.	Improve the quality and diversity of active transportation choices.	 Bike Racks Per FTE Total Bike Infrastructure to Campus* (KM)
3.	Improve the quality and coordination of non- SOV vehicle connections to/from campus.	 Enrolment in ProPass Program Camosun Express Ridership Number of Carpool Permit Holders
4.	Maximize cost effectiveness of existing infrastructure and facilities.	Parking RevenuesParking Expenditures
5.	Enhance the campus experience through transportation. cluding bike lanes, separated or protected bike facilities, or	Overall Student Satisfaction with Transportation