

Proposed Fully Separated Active Transportation Pathway from Lakestone to Downtown Lake Country

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Executive Summary

Policy Problem and Scope

The District of Lake Country is experiencing an unprecedented amount of growth in its human population numbers, and this is projected to continue with 87% growth in the next 20 years (Barnes, 2024). Global climate change is also making its impact felt and governments around the world are working towards reducing their carbon emission. Physical inactivity has also grown as a problem, with only 45% of Canadians getting recommended amount of physical activity (Colley et al., 2023). Air pollution from personal vehicular travel has also emerged as a growing health problem around the world (Alessio, 2021). Given these diverse problems, active transportation has emerged as a solution, which includes walking, biking, rolling, and other modalities.

Context

Through the Transportation for Tomorrow report (Strategic Infrastructure Management, 2014), Official Community Plan (District of Lake Country, 2018), Mobility Master Plan (Baumgartner et al., 2021), and the Mobility Improvement Program (Align Engineering, 2022), the District of Lake Country already heavily supports development of new active transportation infrastructure. These District plans all support equity within active transportation, stating the District will “[c]onsider all ages & abilities when planning, designing and implementing [mobility projects]” (Baumgartner et al., 2021, p.59).

Studies show that active transportation is adopted by more diverse sub-sets of the population when pathways are fully separated from car traffic (Winters et al., 2018). The spread of new technology in e-bikes/e-scooters has also shown promise in opening active transportation to older adults, people with disabilities, and other people that would otherwise be excluded from the possibilities of active transportation (Hansmann et al., 2022; Hoj et al., 2018).

A new housing development by the MacDonald Corporation in Lakestone on Okanagan Lake is currently underway, with nearly 200 lots and a high-occupancy condo building being built (Lakestone, n.d.). With an influx of new residents expected to this area, an active transportation route needs to be developed between Lakestone and downtown Lake Country.

Recommendations

Build 3.6km of new multi-modal active transportation pathway (3m width, paved) along existing roads and 200m of new path through public lands (see pg. 7-8 of this proposal for detailed maps). 200m path should be a naturalized corridor with native plants to provide habitat and meet the District’s conservation goals. This also includes improving the safety of the Highway 97 crossing at Berry Rd. The proposed 3.8km of new path would connect existing active transportation infrastructure including Tyndall Rd Multi-Use Pathway (2.1km) and Okanagan Rail Trail (16km).

This would cost approximately \$611,800 (Align Engineering, 2022), not including naturalization costs and highway crossing improvements. This cost is likely a conservative estimate. Key stakeholders include the provincial government for improving the highway crossing, federal government for funding, and local community members particularly cyclists. Next steps include discussing a partnership with Lime Micromobility (2024) or a similar e-bike/e-scooter rental provider, as well as contracting a designer for the new pathway. While the new path would be fully separated, it does connect to existing bike lanes that are unseparated but protected on Bottom Wood Lake Rd and Lodge Rd. Also, while the Tyndall path and the new proposed path are paved, the Okanagan Rail Trail is unpaved and is likely not accessible to wheelchairs and other mobility aid devices.

Conclusion

This new multi-modal active transportation pathway (only 3.8km new build, estimated cost \$611,800) has the potential to connect Lakestone and downtown Lake Country. A large influx of residents will soon be arriving in Lakestone, making this project a pressing issue. A fully separated pathway is safer and will lead to increased community uptake. If the District partners with an e-bike rental company, this pathway can be used by a more diverse range of users. By encouraging transportation through methods other than personal vehicles, the District can reduce its carbon emissions and increase its sustainability.

1) Problem Statement

Given global climate change and the large amount of carbon dioxide emitted by cars, sustainable solutions for human transportation are needed. Reliance on cars for transportation is an equity issue and has also been shown to increase air pollution such as particulates that cause human health impacts, as well as the health impacts from decreased physical activity (Alessio, 2021). Active transportation, such as walking, rolling in a wheelchair, or cycling, has been identified as the solution to this problem. An opportunity exists for Lake Country because the area is not yet built up as heavily as other nearby cities, such as Kelowna, and it is expecting a large influx of new residents in the coming years (District of Lake Country, 2018). Therefore, prior to these new residents arriving the district must continue to prioritize new active transportation infrastructure to support its goals of increasing active transportation in the region. This proposal will focus on enhancing mobility through active transportation infrastructure between the new Lakestone development on Okanagan Lake and downtown Lake Country.

2) Context

Travelling by car is a privileged mode of transport given the cost of owning a vehicle, maintaining it, insuring it, and fueling it. People in lower socioeconomic brackets, newcomers to Canada, and youths cannot afford the cost of owning a car and this problem has been particularly noted in Lake Country (District of Lake Country, 2018, p. 8-6). It has also been shown that equity-deserving populations are disproportionately exposed to air and noise pollution of car traffic as well as more incidences of being injured or killed by a car as a pedestrian (Dreger et al., 2019; Hamann et al., 2020). Transportation equity was a key concern highlighted by citizens in the Transportation for Tomorrow report. Additionally, within the Mobility Master Plan adopted by council, one of the recommendations is to “[c]onsider all ages & abilities when planning,

designing and implementing [mobility projects]” (Baumgartner et al., 2021, p.59). Increasing active transportation infrastructure can thus provide a means of increasing equity within Lake Country.

Lake Country has a low population density with an average of 142 people per km² in 2022 (City Population, 2023b), compare this to Kelowna with a density of 724 people per km² in the same year (City Population, 2023b). This low population density makes it difficult to develop public transportation and see a large percentage of the population use it. While Lake Country has a public transportation system, it does not have a high uptake and the district aims to increase uptake to 10% to meet its goals as set out in the Mobility Master Plan (District of Lake Country, n.d.). However, Lake Country has seen a large increase in population at 3.7% per year from 2005-2016. This trend is expected to increase by many magnitudes, as latest estimates project Lake Country’s population will grow 87% over the next 20 years to 32,566 people by 2046 (Barnes, 2024).

Public transit is also frequently linked to active transportation projects, as promoting this public service and increasing uptake further reduces the number of vehicles on the road. In addition, public transit can provide connections to biking/walking/rolling trails where a built bike trail connection from one part of a municipality to another does not yet exist (Lachapelle & Pinto, 2016). With the increased availability of electronic bikes and scooters, active transportation will become more desirable to larger subsets of the population. Contrary to popular opinion, e-bikes do provide similar cardiovascular health benefits to conventional bikes (Hoj et al., 2018). While e-bikes have the potential to increase availability of active transportation to disabled and elderly people, there is a gap in the literature on barriers to the inclusion of these stakeholders as well as a lack of intersectional analyses on age, disability,

socio-economic factors, gender, and race that impact uptake and safety of active transportation for various people (Lee & Sener, 2023).

According to the official community plan of the District of Lake Country (2018), the Transportation for Tomorrow report (Strategic Infrastructure Management, 2014), the Mobility Master Plan (Baumgartner et al., 2021), and the Mobility Improvement Program (Align Engineering, 2022), transportation and equity within transportation is a key area of focus for the municipal government with the framework of “getting around Lake Country in safe and enjoyable ways” (Baumgartner et al., 2021, p.1). In 2021, the Master Mobility Plan (Baumgartner et al., 2021) was adopted that currently governs the priorities of the local government around transportation for the next 40 years. Notably, there is a shift in transportation modalities in these reports, placing cars at the bottom of a modal hierarchy where they have traditionally been places at the top. The hierarchy places pedestrians first, followed by cyclers, ending with single-occupancy automobiles. Multi-modal paths are to be prioritized, with the district’s definition of multi-modal including car, pedestrian, cycling, rolling, and other modes of mobility. This proposed project fits within the municipality’s goal to increase pedestrian and cycling pathways 50km respectively by 2030.

3) Proposed sustainability solution

Lake Country, BC has an opportunity to increase the implementation of active transportation development projects and community adoption of active transportation. This proposal entails the construction of a new multi-modal active transportation pathway of hard pavement that can be used by e-bikers, conventional bikers, pedestrians, and wheelchair users. The proposed path would run from the new Lakestone development on Okanagan Lake to downtown Lake Country near Woodsdale. The Lakestone development is a new and in-progress

residential development by the MacDonald Development Corporation, with nearly 200 lots for sale (of which the majority are sold) along with a large high-occupancy condo building (Lakestone, n.d.). With an increase of new residents to the Lakestone area, a multi-modal path linking this rapidly expanding residential area to the stores and services available in downtown Lake Country is vital. In addition, this pathway will provide a safer active transportation route for residents of downtown to visit the Lakestone area for its beaches, views, and the Lake Country Museum & Archives (2024).

Only 3.8km of new path needs to be constructed to connect already existing infrastructure, including the Okanagan Rail Trail (16km) and Tyndall Road Multi-Use Trail (2.1km) (Walk Around lake Country, n.d.). This path will be fully separated from vehicular traffic as this has been shown to increase uptake of active transportation by residents (Winters et al., 2018). A fully separated path is safer and more attractive to larger subsets of the population, including families with young children and novice bikers. The design of the path will be modelled after the already existing Tyndall Road Multi-Use Trail. 3.6km of the proposed path would be build along existing roadways, while 200m would be build separate from any existing roads, running through public land to connect Okanagan Centre Rd W with Read Rd. This increases the feasibility of this project as private land acquisition will not be necessary. This 200m is also proposed to be a naturalize corridor to increase plant, animal, and insect habitat as has been done with the Meadoway in Toronto and Arbutus Greenway in Vancouver. This would contribute to conservation goals of the District such as goal 3.1.13 of the OCP “mitigate the environmental impacts of existing neighbourhoods and development” through policy 3.1.14.g. “encourage the planting of native, flowering plant species to support native bees.” (District of Lake Country, 2018, p.3-4).

This project also proposes an enhanced highway crossing between Berry Rd and Highway 97, improving this crossing has already been identified as a priority by the District of Lake Country (n.d.). See Images 1 and 2 below for details on placement of proposed new paths. While the Tyndall Road Trail and our proposed new sections of the trail are paved, the Okanagan Rail Trail is not and thus it is not accessible to people using wheelchairs. Another important caveat is while the new proposed trails will be fully separated, it will connect to two sections that are unseparated but protected with the bike lanes along Bottom Wood Lake Road and Lodge Road.

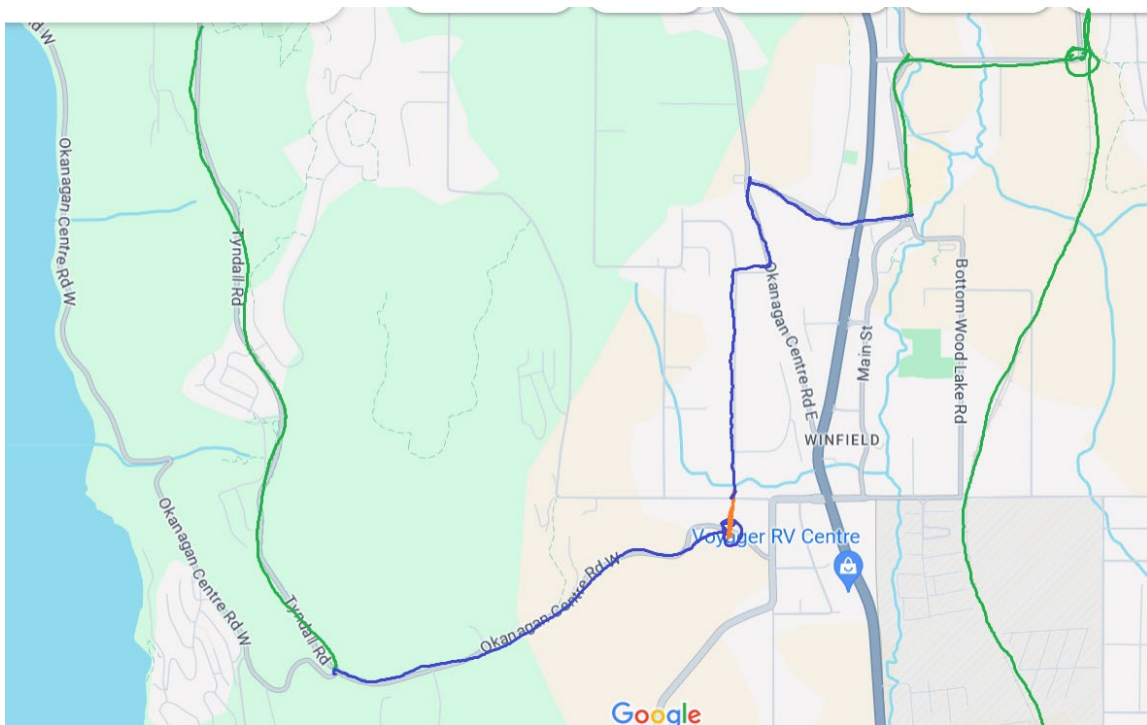


Image 1: Proposed fully separated active transportation path. Blue (3.6km) and orange (200m) paths indicate new builds, with orange path running through public land and not beside an existing road. Green paths indicate already existing infrastructure, Tyndall Road Multi-Use Path (2.1km) and Okanagan Rail Trail (16km). From left of image, Tyndall Road Multi-Use Path (in green) connects to Okanagan Centre Rd W (in blue) where new build starts and runs east. It then turns into orange path that connects to Read Rd, turns back to blue path and runs along Read Rd which curves east, turns north along Okanagan Centre Rd E, then east at Berry Rd. It then crosses Highway 97 on Berry Rd, connecting to existing bike lanes (in green) north along Bottom Wood Lake Road (unseparated, protected) and east on Lodge Road (unseparated, protected) which connects it to the Okanagan Rail Trail (fully separated). Map from Google, lines drawn in Microsoft Paint.

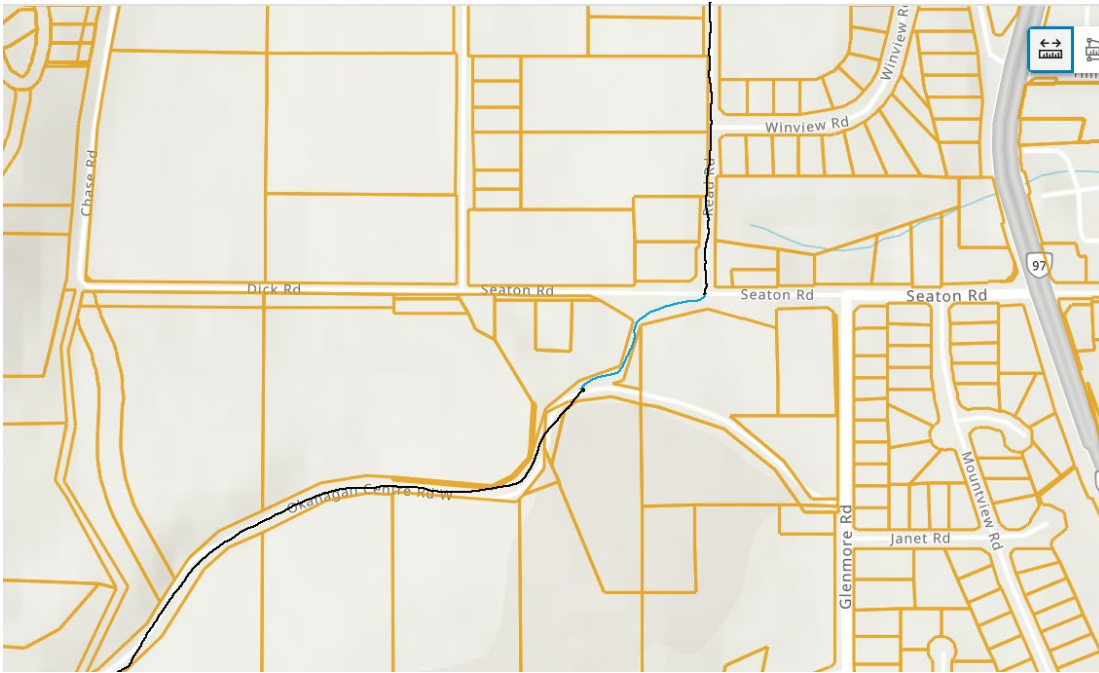


Image 2: Close up of 200 m path through public lands, represented by blue line (equivalent to orange line in Image 1). Black lines represent new paths along existing roads (Okanagan Centre Rd W and Read Rd). This map includes land parcel information, demonstrating feasibility of the project. Map from:

<https://www.arcgis.com/apps/mapviewer/index.html?layers=ce7fd87476b54100a3b158c9dae7e9b7>

The approximate cost of this new pathway would be \$611,800, which includes the cost to build 3.8km of new multi-modal pathway at 3m width as well as potential costs from resolving property boundary conflicts. This estimate is based on Align Engineering's (2022) cost estimate of \$161,000 per km of multi-modal pathway. Note that these cost estimates do not include the proposed highway crossing improvement nor the naturalization costs of the 200m corridor between Okanagan Centre Rd W and Read Rd (see image 2).

This proposal has a number of benefits including increasing activity levels of community members enabling positive health outcomes, reducing air pollution in Lake Country by reducing personal vehicles on the road, and increasing sustainability by reducing Lake Country's carbon footprint from personal transportation. In this way, the proposed active transportation pathway can further sustainability and resilience goals in Lake Country.

4) Key Actors

This project rests within the scope of the municipal government of Lake Country as the maintenance and improvement of roads and transportation rests within their scope at the local level. This makes the project more feasible since there will be less collaboration needed with multiple government actors. However, the improvements to the Highway 97 crossing will require collaboration with the provincial government of BC since highways rest within their purview under the Constitution Act of 1867. The federal government is a key actor in this project since they are a potential source of funds. In 2021, the Government of Canada (2023) launched the \$400M Active Transportation Fund that is “the country's first coast-to-coast-to-coast strategic approach for promoting active transportation and its benefits” (para. 1). The District of Lake Country can apply directly to the federal government for funding to support this project.

Non-governmental actors are also important to this project. In the Okanagan, cycling advocacy groups have been very effective at pushing forward issues of active transportation infrastructure to local governments. They have also been effective at enacting social and cultural change around the prevalence of bike travel by educating and encouraging people to cycle to work, stores, and for leisure. An example organization is GoByBike (n.d.), that hosts the annual GoByBike Week that encourages people to commute to work and school by bike for one week a year (dates for 2024 are June 3-9th) to increase social impetus around changing dominant paradigms of personal vehicle use. General community members will also be important actors for this project as much of the desire for active transportation in Lake Country has come from individuals (District of Lake Country, n.d.). This project will need the help of supportive community members to push it forward and to increase uptake of the new active transportation pathway when it is built.

5) Next steps

A more detailed cost estimate of this proposed trail will need to be developed, that includes the cost of the 200m naturalized corridor and the highway 97 crossing at Berry Road. It is also likely that the estimate of \$611,800 for the 3.8km of new pathway is a conservative estimate. The District will need to contract a design firm to create plans for the new pathway which will enable a clearer idea of the potential cost of this project. More detailed design of the highway 97 crossing at Berry Road will also need to occur. This project can also be broken into phases, potentially three with first being the Okanagan Centre Rd W, second the 200m corridor section, third Read Rd and Berry Rd. However, community stakeholders should be consulted to determine the order of these phases. Cyclists may want the 200m pathway to be build first in order to eliminate the dangerous crossing at the end of Okanagan Centre Rd W that connects to Glenmore Rd.

Community consultation and engagement with this plan would increase the potential uptake of the build path once it is completed. It would also allow community members to tell the District of possible sticking points to the plan detailed in this proposal, thus allowing the District to avoid costly mistakes. Community workshops that offer an opportunity for people to express their emotions and thoughts around safety and active transportation can allow city planners to account for safety issues in a more holistic manner. These can also be opportunities for education around active transportation.

Further next steps needed include providing end of trip biking facilities such as bike racks people can lock up at. If commercial districts don't have enough end of trip facilities people will be unable to commute to them by bike. The District could also consider partnering with an e-bike/e-scooter rental company such as Lime Micromobility (2024). Having a higher availability

of e-bikes will increase uptake of the new path and increase its use by equity-deserving populations (Hoj et al., 2018; Lee & Sener, 2023)

6. a) Examples from elsewhere

Example 1: The Meadoway, Toronto, Canada

The Meadoway is an innovative multi-use trail system in Toronto, Canada that provides a link between eastern Toronto and the downtown core. This provides an opportunity for people to use this active transportation network between Rouge National Urban Park, located in Scarborough, and downtown metro Toronto. 10 km of the trail have been built to date, with an added 6 km that is projected to be built. As their website notes: “Opportunities to expand and construct new trail networks in urban environments are typically limited. Hydro corridors, however, have the potential to be re-purposed as accessible, ecologically diverse green spaces that permit active trail use” (para 2, Toronto and Region Conservation Authority, n.d.). As a major city with a large amount of built-up area, Toronto faces different challenges from Lake Country. Lake Country has an even greater opportunity since it has less built-up areas and lower density of buildings, although it faces challenges of topography that Toronto does not have.

The Meadoway is a great example of a project that has included multiple sustainability goals through a combined human active transportation/mobility and environmental conservation project, this enables people to move safely throughout the city by modes other than car as well as providing habitat for various other plant, insect, fungi, and animal species. One of the main goals of the project is to restore meadow habitat, this gives the added benefit of enabling increased carbon drawdown via the meadow plants. In the absence of the current meadow trail, European grass which is much less efficient at carbon drawdown. The meadow does require fire for

regeneration, and while there are safe protocols to follow for this, Ontario Hydro is quite nervous about allowing this to take place. This is also relevant to the proposed Lake Country project as controlled and cultural burns are an evolutionary requirement of Ponderosa forests – Syilx people have been using it since time immemorial – however many settler residents fear this phenomena (Burr, 2022).

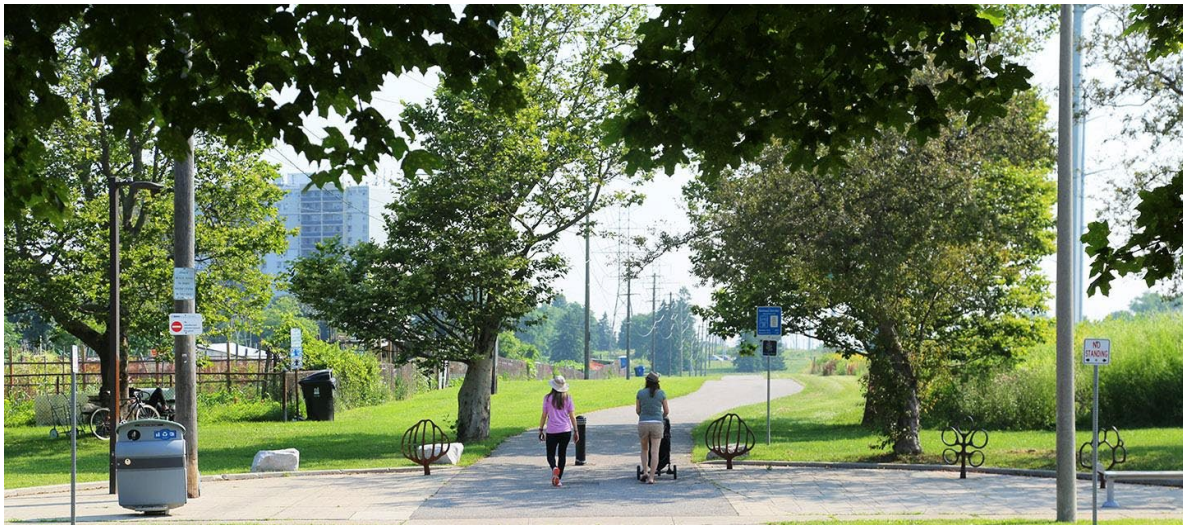


Image 1: A photograph of the Meadoway in Toronto (Toronto and Region Conservation Authority, n.d.)

Example 2: Arbutus Greenway, Vancouver, Canada

This 8.8km active transportation trail stretches from False Creek to the Fraser River in Vancouver on the unceded territories of the Musquam, Squamish, and Tsleil-Waututh Nations (City of Vancouver, 2018). The Arbutus Greenway also contains space for plant habitat, fulfilling dual goals of conservation and active transportation similar to the Meadoway. In 2016, the City of Vancouver bought this former rail trail from the Canadian Pacific Railway and developed it into a temporary paved trail while the final plans are being developed (City of Vancouver, n.d.).

In the future, a streetcar will also run through this corridor although specifics on this plan have yet to be developed.

The City of Vancouver shares a similar commitment to equity with its path as the District of Lake Country and this proposed Lake Country path: “In light of its success, in 2018, Council endorsed enhancing the path to give people of all ages and abilities places to gather and rest and enjoy the surrounding landscape” (City of Vancouver, n.d., para. 2). This project has also included a number of community engagement activities to gauge people’s interest in it and gather their opinions on it. This will ensure less resistance to the project as concerns can be integrated throughout the planning process rather than being a surprise at the end of the process. While Lake Country has already done a number of community engagement sessions around transportation, it would likely be a good idea to hold a couple community engagement sessions on the proposed new multi-modal path linking Lakestone to downtown. Residents might see potential issues that city staff have not foreseen and can help to ensure the project is a success, along with garnering community buy-in for the project. An important difference from the Vancouver project to the Lake Country project is the ecology is quite different, this will impact the ecological goals of the path and how the land will need to be managed. An example being controlled burns as discussed in the Meadoway example above.



Image 2: A photograph of the Arbutus Greenway in Vancouver (City of Vancouver, n.d.)

Example 3: Bogota, Colombia

The city of Bogota recently underwent a large transformation of its transportation infrastructure to encourage and make biking a more desirable mode of transport. They now have the largest cycling infrastructure in Latin America with 540km of biking trails (Helme, 2021). The impetus for this was started by a cycling advocacy group in 1974 for one day that closed down roadways to cars in Bogota and taken over by cyclists. This prompted a cultural shift and now every Sunday and national holiday, roads are only open to bicycles and pedestrians. This day is known as Cyclovía and “from 7am to 2pm, a north-south circuit of 121km opens up to families, joggers, dog walkers, and people on bicycles” (Helme, 2021, para. 4). This case study shows similarities to Lake Country as the cycling advocacy groups are highly active in encouraging this shift away from personal vehicles as the primary mode of transportation. See Key Actors section of this report for more details about the Okanagan’s Go By Bike Week that encourages this cultural shift.

There is also a large e-bike and conventional bike sharing program facilitated by Tembici and PBSC Solutions that has encouraged people to use active transportation. This company has 3,300 bikes available for people to rent within Bogota. As per PBSC Solutions (n.d.), “this customized solution makes active commuting more accessible to a wider range of people, including those who might hesitate to ride a regular bike because of their physical condition, the travel distance or the effort involved” (para. 3). This is a possibility for a Lake Country as well, who could partner with Lime or another relevant e-bike rental company. Making e-bikes available to people can also forward the District’s equitable transportation goals.

6. b) Relevant literature

Summary of Alessio et al. (2021) study

This study examines three societal problems – climate change, air pollution, and physical inactivity/human wellbeing – from an interdisciplinary health studies approach. The authors conclude that active transportation (walking, cycling, rolling) can provide a solution, at least in part, for all three problems. On climate change, the burning of carbon dioxide by cars is linked to increased global warming (using a US-specific example), causing significant human health issues such as premature death and chronic disease linked to the breakdown of the Earth’s life supporting capacities including a stable climate and weather. On air pollution, cars emit nitrogen dioxide, ozone, and particulates that cause cardiopulmonary diseases in humans. An interesting US-specific example: “there were 55,000 premature deaths linked to outdoor air pollution in 2010, which is 64% more than the number of deaths in motor vehicle crashes” (pp.1171-2). The dominance of cars for transportation has created a physical inactivity problem that scientists have linked to chronic diseases. “In 1969, 40.7% of U.S. schoolchildren walked or biked to school, but by 2001 only 12.9% actively commuted to school” (p.1171). The explanation of these three

issues is followed by an analysis of how active transportation can improve quality of life by addressing the identified issues.

This article provides global evidence for the importance of this work, providing information for the context and justification of this proposal. The specificity of the location of our project, Lake Country, BC, Canada, provides a grounded basis for impact. Given the statistics included in this article are US-based, the additional source of Colley et al. (2023) gives Canadian statistics on physical inactivity. Only 45% of adults are achieving the recommended 150min of moderate to vigorous physical activity/week, and this number is worse among equity deserving populations especially single black mothers (Collet et al., 2024). This provides justification for the equity focus of our proposal.

Summary of Lee & Sener (2023) study

This study summarizes existing research on the potential for e-bike technology as an inclusive mobility option, expanding transportation options for older adults and people with disabilities. It also contributes new research to examine how this technology can be expanded to people with different abilities by examining positive perceptions and barriers to uptake to fully realize the inclusive potential of this technology. Although this study is also within a US context, important barriers to uptake include lack of appropriate infrastructure and concerns of safety. Thus, by increasing safe active transportation infrastructure, this project can help increase equitable transportation in Lake Country. As previously stated in the Context section of this report, equity within transportation is a key area of concern for Lake Country as they will [c]onsider all ages & abilities when planning, designing and implementing [mobility projects]" (Baumgartner et al., 2021, p.59).

Lack of knowledge, limited access, and high purchase cost were also barriers to e-bike adoption for equity-deserving populations. The findings of this study recommend that education programs be put in place to address some of these issues. In addition, our study proposes the District partner with an e-bike rental partner such as Lime (see Next Steps), this would increase availability of e-bikes and barriers to entry by removing the high upfront cost of buying an electric bike outright. In the Okanagan, the NGO GoByBike provides many educational resources that increase biking and active transportation adoption. However, they do not directly address their educational materials to equity-deserving populations, this is a possible future project to ensure new active transportation infrastructure is used by diverse populations.

Summary of Winters et al. (2018) study

The previous two academic articles have been in the context of the US. This article is situated in Canada and thus has a greater applicability to Lake Country. There are however many similarities to the first two articles on the discussion of benefits of active transport, including health benefits and reduced carbon emissions. Similarly to other articles, the issue/concern of safety is raised. Notably, this article discusses differences between European uptake of cycling (15-40% of trips) with North America (1-2% of trips). North America's low uptake has led many cities to develop fully separated infrastructure to address people's concerns around bike safety. The article also discusses how to equity within active transportation is a common theme across cities. Within North America, cycling shows marked differences across gender with men aged 20-40 being the most common to cycle. In Europe the spread is even across sex and age. This can be linked to the safety concerns people have, as well as the actual safety outcomes. This article suggests, based on cited research, that separated paths are more safe than unseparated paths. This justifies our proposed fully separated pathway will have more uptake.

The authors developed a methodology for studying the effectiveness of City of Victoria's planned active transportation infrastructure under three aspects: "(1) estimate changes in active travel, perceived safety and bicycle safety incidents; (2) analyse spatial inequities in access to bicycle infrastructure and safety incidents; and (3) assess health-related economic benefits" (p.1). They plan to do this through surveys, spatial distribution, and economic benefits through WHO's Health Economic Assessment Tool. This methodology could also be used by the District of Lake Country after the new cycling infrastructure is built to evaluate the efficacy of this proposal. Although, the methods may need to be adjusted as this study was for a mid-sized city while Lake Country is a small city.

7) Conclusion

Given the large influx of population Lake Country has already seen, and will continue to see in years to come, it is vital that more active transportation infrastructure projects are undertaken to meet the increased demand of a larger population in the years to come. Active infrastructure has a number of benefits including reduced carbon emissions, increased physical activity, and decreased air pollution. The large new housing development at Lakestone will draw new people to that area, therefore a route connecting existing active transportation infrastructure from Lakestone to downtown Lake Country is urgently needed. Only 3.6km of new fully separated pathway needs to be constructed along existing roads and 200m of pathway through public lands are needed to complete this project, which is estimated to cost \$611,800. This proposal fits within existing plans of District of Lake Country to improve their active transportation infrastructure, including the Official Community Plan (District of Lake Country, 2018) and Mobility Master Plan (Baumgartner et al., 2021).

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