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Good News from the 2022 CRD Travel Survey

Survey Shows Progress Toward Community Goals: Less Driving, More Non-Auto Travel, and Potential for More Efficient and Equitable Transportation

25 May 2025

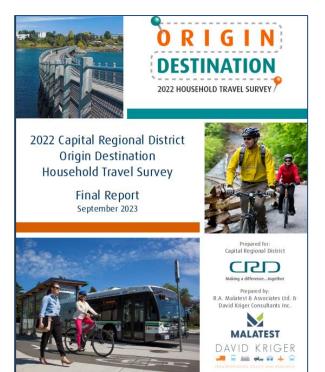
By Todd Litman

Summary

The Capital Regional District (CRD) recently released the <u>2022</u> <u>Origin Destination Household Travel Survey</u>, the latest in a <u>series</u>.

This survey shows large increases in active mode (walking and bicycling) trips and declines in motor vehicle travel. Active mode shares increased 7% through the region, and 23% in the City of Victoria, and per capita daily vehicle trips declined 20%, from 1.52 in 2017 to 1.22 per in 2022. Some of these changes may result from the lingering effects of the Covid-19 pandemic, but they also reflect long-term demographic and economic trends that are reducing demand for automobile travel and increasing demand for other modes. These reductions are particularly large in communities that have improved walking, bicycling and public transit conditions.

This is good news! These changes reflect significant progress toward our transportation goals. Shifts from driving to nonmotorized travel provide many benefits to individual travellers and communities including household savings and affordability (savings to lower-income families), reduced traffic and parking



congestion, road and parking infrastructure savings, public health and traffic safety, emission reductions, and reduced sprawl-related costs. Motorists benefit significantly from reduced traffic and parking congestion, increased safety and reduced chauffeuring burdens.

Don't stop now! These trends reflect changing traveller preferences; although few motorists want to give up driving altogether, surveys indicate that many want to drive less and rely more on walking, bicycling and public transit, provided that they are convenient, comfortable and affordable. Everybody benefits, including motorists, if local, regional and provincial transportation agencies continue to improve sidewalks, crosswalks, bikeways and public transit services so travellers can use the best option for each trip: walking and bicycling for local errands, public transit when travelling on busy corridors, and automobiles only when they are truly the best option, considering all impacts and goals.

Introduction

To reduce traffic and parking problems, and help achieve our community's equity, public health and emission reduction goals the CRD, the BC Government, and local municipalities have goals to reduce driving and approximately double walking, bicycling and public transit trips, as summarized below.

Mode Shift Targets

- <u>Victoria</u>: Increase active mode shares to 55% and transit mode shares to 25% by 2041.
- <u>Saanich:</u> Increase active mode shares from 11% to 22% by 2036, and 30% by 2050.
- The CRD <u>Regional Transportation Plan</u> has targets of 42% active and transit mode shares by 2038 region-wide, with higher rates in dense neighborhoods.
- <u>British Columbia</u>: Double active mode shares by 2030. The <u>CleanBC Roadmap</u> has targets to reduce light duty vehicle travel by 25% and increase walking, bicycling and transit mode shares to 30% by 2030 and 50% by 2050.

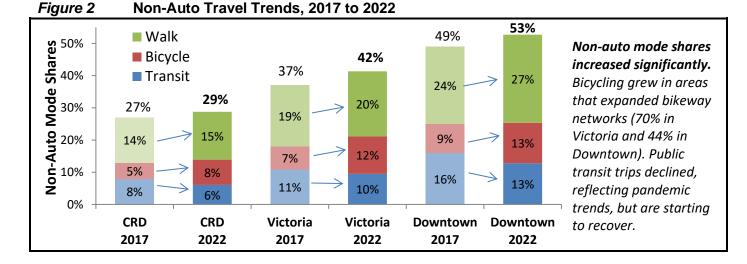
The 2022 CRD Origin Destination Survey shows significant progress toward these targets, as illustrated below. Walking and bicycling increased, with particularly large gains in areas that expanded sidewalk and bikeway networks. Public transit trips declined during the pandemic trends but are recovering.





In 2022 31% of trips were by non-auto modes including 15% by walking, 8% by bicycle, e-bike or

micromode, 6% by public transit and 2% by other. Non-auto mode shares are much higher in more compact neighborhoods with complete sidewalk networks and bikeways.



Key findings:

- The region is making significant progress toward sustainable travel goals. Currently, 29% of total trips are made by non-auto modes, a 7% increase since 2017. Almost one-quarter of trips are by active modes, 15% on foot, 8% by bicycle or e-bike, and 6% by transit. This brings us close to our 2038 targets of non-auto mode shares of 30% region wide and 50% in denser areas.
- **Total automobile trips declined 13%** despite 9% population growth (Figure 2). Average daily vehicle trips per capita declined 20%. Driving declined in Core communities (Esquimalt, Oak Bay, Saanich, Victoria and View Royal), but increased in suburban areas (Colwood, Highlands, Langford, Metchosin Saanich, Sidney and Sooke).

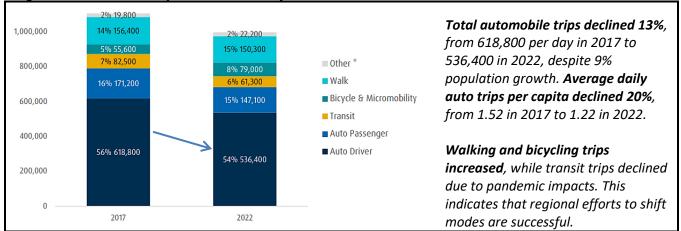


Figure 3 Total Trips and Shares by Mode, 2017 to 2022



4 24-hour Flows 2022 (larger numbers) and 2017 (smaller numbers)



Travel volumes between Victoria and the West Share increased about 8% (from 93,900 to 101,300 daily trips) but declined about the same amount (from 61,900 to 54,200).

Trips among Core communities declined 15% (from 714,200 to 606,800) but increased 5% (from 137,600 to 144,400) among Westshore communities.

 Although these changes may partly reflect Covid-19 pandemic effects, they are consistent with broader trends. Per capita vehicle travel <u>peaked</u> about 2005 in North America due to factors such as aging population, increased urbanization, changing consumer preferences and new technologies including e-bikes and telework (telecommunications that substitute for physical travel) (<u>NHTS</u>). Figure 3 shows this effect in the CRD: per capita daily trips peaked in 2006 and declined in each subsequent survey. These declines were particularly large in core communities that invested in non-auto modes and increased housing supply in walkable urban neighborhoods, while vehicle travel increased in suburban areas.

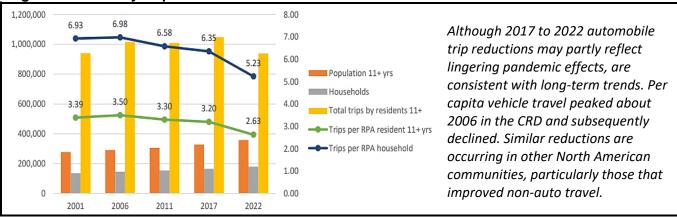
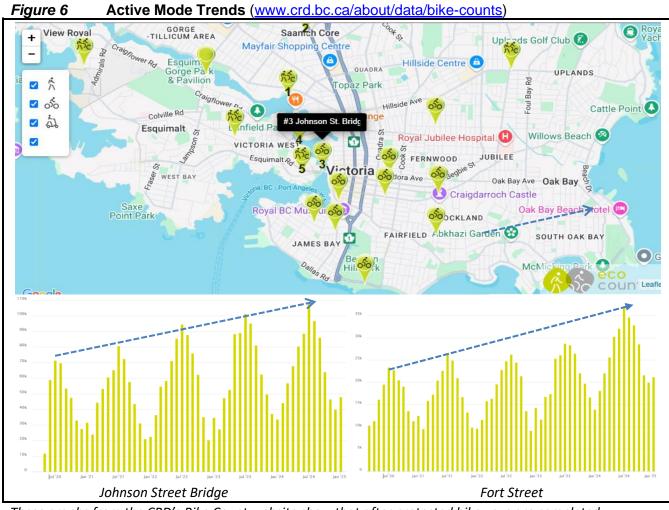


Figure 5Daily Trip for Persons 11+ Years

- Victoria vehicle ownership rates declined 7% from 0.61 vehicles per capita in 2017 to 0.57 in 2022, about 6,000 fewer vehicles, offset by higher vehicle ownership on the Saanich Peninsula.
- The proportion of zero-car households increased from 7.5% in 2017 to 8.9% in 2022, and the portion of "car-light" households, which have fewer vehicles than workers, increased from 18% in 2017 to 20% in 2022.
- Two-thirds of households (66%) have at least one adult bicycle or e-bike, and 70% of households with children have at least one child-sized bicycle. E-bikes make up 11% of adult bicycles but 30% of bike trips, indicating that they are used more than pedal bikes. This suggests that e-bikes significantly increase the portion of trips that can be made by bicycle, and people bicycle more after they purchase an e-bike.
- **Bicycling increased significantly in areas that improved bicycle facilities.** For example, in Victoria, average weekday bicycling trips increased 37%, from 33,490 in 2017 to 45,880 in 2022 (12,390 more trips), and Downtown Victoria bike trips increased 10%, from 15,550 in 2017 to 17,050 in 2022 (1,500 more trips). During that period, Victoria automobile trips declined 20%, from 226,290 in 2017 to 180,170, a reduction of 46,120. Of course, many factors may contribute to these changes, but bicycle facility improvements probably played a major role. The CRD's automated bike counts indicate that bicycle trips increase significantly after bikeways are completed, as illustrated below.



These graphs from the CRD's Bike Count website show that after protected bikeways are completed, walking and bicycling trips significantly increase and are likely to continue growing as the network expands.

• More than half of auto trips (54%) are short enough that they could be made by walking or bicycling, particularly with e-bikes which significantly increase bicyclists' potential speed, distance, load and climbing abilities.



Figure 7 Portion of Motorized Trips Within Walking and Bicycling Distances

• Automobile mode shares are higher in suburbs than in core communities. Victoria's active mode share is almost the same as its auto share. Almost one-third of Victoria trips are walking and another 13% are by bicycle.

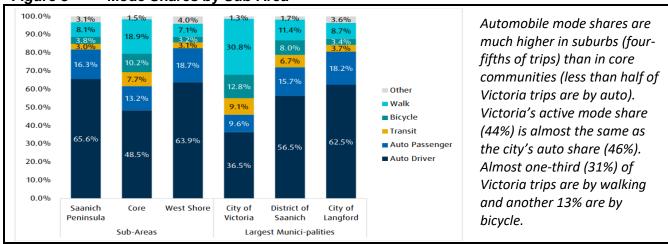


Figure 8Mode Shares by Sub-Area

- Walking is pervasive among all age groups, though its share varies by age. The highest shares are among pre-16 children (23% for the 5-9 population and 21% for the 10-14 population). The lowest shares are in the 45-64 population, though never less than 11%.
- **Peak-period vehicle trips declined significantly**, as illustrated below. This reduced traffic congestion and therefore the need for more roads and parking facilities. Congestion did not disappear but is less severe than would have occurred had traffic volumes grown at previous rates.

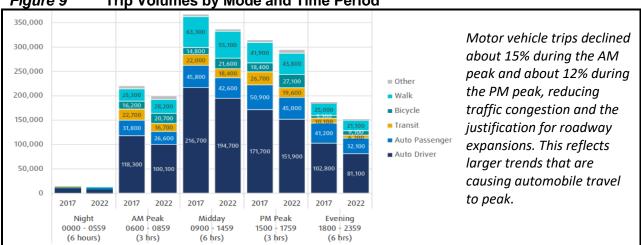
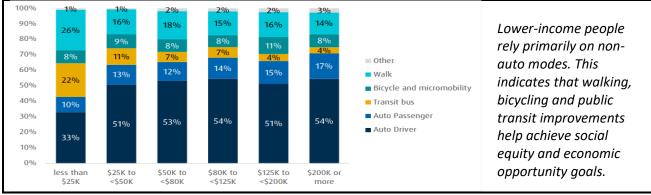


Figure 9 Trip Volumes by Mode and Time Period

- Car-light households (households with fewer vehicles than workers) increased from 18% of households in 2017 to 20% in 2022.
- About one in six workers (16%) work at home and one-third (32%) of full-time workers have a • hybrid working arrangement (they sometimes work at home).
- Lower-income families use walking, bicycling and public transit for two-thirds of their trips. This indicates that improving these modes helps achieve equity and economic opportunity goals.





The number of households living in compact, multimodal communities increased significantly • due to infill in existing urban neighborhoods and urbanization of suburban centers. For example, the number of households in Victoria's downtown increased 42% from 5,740 in 2017 to 8,150 in 2022, and households in Sidney increased 7% from 5,650 in 2017 to 6,040 in 2022.

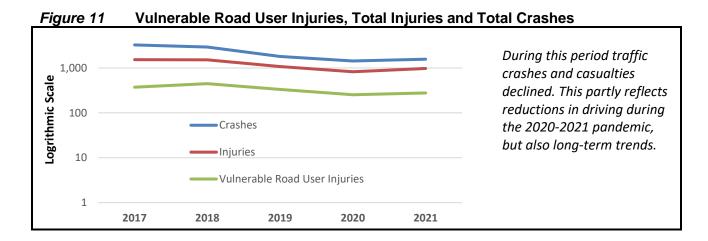
Traffic Safety Impacts

The following data are from the report, Analysis of Motor Vehicle Related Crashes, Injuries and Fatalities: 5-year Statistics for Capital Regional District, 2017-2021, by Helia Sehatpour of the University of Victoria.

Tables 1 summarizes traffic deaths, police-reported (PR, which tend to be more serious) and insurance claim reported (CR) injuries and crashes, and vulnerable road user injuries. Figure 11 shows that most crashes and injuries declined during this period. This may partly reflect temporary Covid-19 vehicle travel reductions but also reflect long-term trends. Figure 12 compares per capita crash rates by jurisdiction showing that urban municipalities have far lower crash rates than suburban and rural areas.

Table 1		Total Deaths, Injuries and Crashes							
Year	Deaths	Injuries		Crashes		Vulnerable Road User Injuries			
		PR	CR	PR	CR	Ped.	Bicyclists	Motorcycle	Totals
2017	6	1,530	5,250	3,256	22,297	172	85	117	374
2018	12	1,520	5,442	2,912	21,406	170	162	115	447
2019	6	1,078	5,176	1,798	20,304	119	131	81	331
2020	8	823	3,457	1,430	15,119	93	93	67	253
2021	9	976	3,651	1,565	17,356	102	106	69	277

This table shows crash trends. Police reported (PR) tend to be more severe than claims reported (CR) crashes.



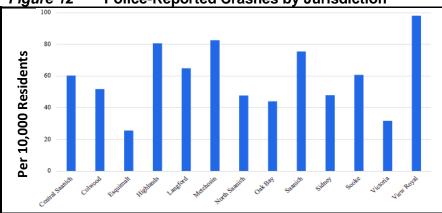


Figure 12 Police-Reported Crashes by Jurisdiction

Per capita crash rates vary by jurisdiction. The most urban areas, such as Victoria and Esquimalt, have far lower crash rates than suburban areas such as Highlands, Metchosin and View Royal.

Implications for Transportation Planning

These surveys indicate that per capita automobile travel demand has peaked while demand for nonauto travel is increasing. This can justify shifting planning priorities

Victoria's bikeway program costs about \$35 million over ten years, about \$3.5 million annually or \$40 annually per capita. In 2023 <u>Victoria</u> spent about \$37 million on street improvements, which averages about \$400 per resident, plus \$2.2 million on sidewalks and paths which averages about \$25 per resident, and \$0.6 million on bikeways and bike parking which averages about \$7 per resident.

Since these improvements were completed, average weekday bicycling trips in Victoria increased 37%, from 33,490 in 2017 to 45,880 in 2022 (12,390 more trips), and Downtown Victoria bike trips increased 10%, from 15,550 in 2017 to 17,050 in 2022 (1,500 more trips). During that period, Victoria automobile trips declined 20%, from 226,290 in 2017 to 180,170 (46,120 fewer trips), and Downtown automobile trips declined 28%, from 68,190 in 2017 to 49,190 (\$19,000 fewer trips). During this period Victoria vehicle ownership rates declined 7%, from 0.61 vehicles per capita in 2017 to 0.57 in 2022 (about 6,000 fewer vehicles).

Assuming that vehicle travel in Victoria imposes road and parking facility costs averaging \$2 per trip, 46,120 fewer weekday trips provide about \$23 million in infrastructure savings, and assuming that annual vehicle ownership costs (depreciation, financing, maintenance, insurance) average \$4,000 plus \$1,500 for residential parking, 6,000 fewer vehicles saves households about \$40 million. Although sidewalk and bikeways improvements are not the only cause of these savings, the growth in non-auto travel and reduction in automobile trips is much larger in Victoria than jurisdictions that invest less in active mode facilities. This suggests that Victoria sidewalks and bikeway investments provide very favorable financial returns: the city spends up to \$6 million annually on active mode facilities which provide an up to \$23 million annually in automobile infrastructure savings and \$40 million in household vehicle and residential parking savings.

The province currently <u>spends</u> about \$2.5 billion annually on roadway construction and operations which averages about \$500 per capita; about \$960 million on public transit which averages about \$200 per capita; and about \$20 million active transportation infrastructure program which averages about \$4 per capita. Some provincial highway projects include transit and active transportation components but these are modest. For example, the McKenzie Interchange project included an active travel path that represents a tiny portion of its \$96 million total cost, and recent improvements to Highway 14 (\$120 million) and the Keating Crossroads flyover (\$76.8) have minimal active transportation improvements.

Municipal governments spend millions of dollars annually on streets and traffic services such as law enforcement, crash response and roadway stormwater management. All jurisdictions require property owners to provide offstreet parking at most destinations, which results in three to six off-street spaces per vehicle. Considering land, construction and operating expenses, a typical surface parking space has \$1,000 to \$2,000 total annual costs, structured parking (such as garages and parkades) cost twice as much, and underground parking costs about three times as much. As a result, government-mandated parking costs typically total \$3,000 to \$6,000 annually per capita.

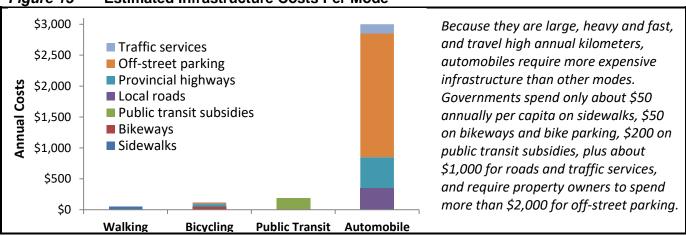


Figure 13 Estimated Infrastructure Costs Per Mode

This analysis suggests that less than 10% of total transportation infrastructure dollars are currently spent on walking, bicycling and public transit, which is less than their share of current trips and far less than local, regional and provincial mode share targets. This indicates that more investments in non-auto infrastructure can be justified to respond to changing travel demands and community goals.

Conclusions

During the last five years in the CRD, walking and bicycling trips increased about 20% while motor vehicle trips declined about 13%, with particularly large shifts in core communities. Although some changes may reflect the temporary effects of the Covid-19 pandemic, others are apparently durable and reflect progress toward community goals. Key factors that contributed to these shifts include:

- Changing consumer preferences (many people want to drive less and rely more on non-auto modes).
- More telework (telecommunications that reduce vehicle travel), allowing more working at home.
- More multimodal planning including sidewalk and bikeway improvements, and traffic speed reductions.
- More infill development in walkable urban neighborhoods.
- More e-bikes and car-sharing.

These shifts provide significant benefits. Vehicle-travel reductions can provide large consumer savings, increase traffic safety, reduce traffic and parking congestion in the short-run, and provide long-term roadway and parking facility savings, and other savings summarized in Table 2. Although motorists still encounter traffic and parking congestion, they are significantly less than what would have occurred if vehicle travel had grown at previous rates. For example, the average number of weekday automobile trips to the City of Victoria declined 19% (from 80,890 in 2017 to 65,760 in 2022), freeing up thousands of parking spaces. Assuming this reduced the need for 5,000 urban spaces, with land, construction and operating costs averaging \$2,000 per year, this provides \$10 million annual savings.

Table 2Benefits of Shifts to Non-Auto Travel

Economic	Social	Environmental						
 Reduced traffic and parking congestion, providing road and parking cost savings. Vehicle and fuel savings, leaving households with more money to spend on local goods. Improved employment access and expanded labor pool for local businesses. 	 Improved accessibility for non- drivers, increasing their economic and social opportunities. Improved public fitness and health, and traffic safety. Reduced chauffeuring burdens. Improved neighborhood livability. 	 Energy conservation. Pollution reductions. Reduced stormwater management costs and heat island effects. Openspace preservation. Reduced sprawl costs. 						

Vehicle travel reductions and shifts to non-auto modes can provide many direct and indirect benefits.

Local policies can support these positive trends and maximize their benefits by:

- Complete sidewalk and crosswalk networks, so all urban streets have safe walking facilities.
- Expand bikeway networks, including in suburban areas where e-bikes are particularly beneficial.
- Reduce urban traffic speeds with traffic calming and streetscaping to create safer streets.
- Eliminate parking minimums so non-drivers are no longer forced to pay for costly facilities they don't need.
- Implement TDM incentives such as commute trip reduction programs to encourage more efficient travel.
- Improve public transit and carshare services.
- Increase affordable housing options in walkable urban neighborhoods.

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