

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

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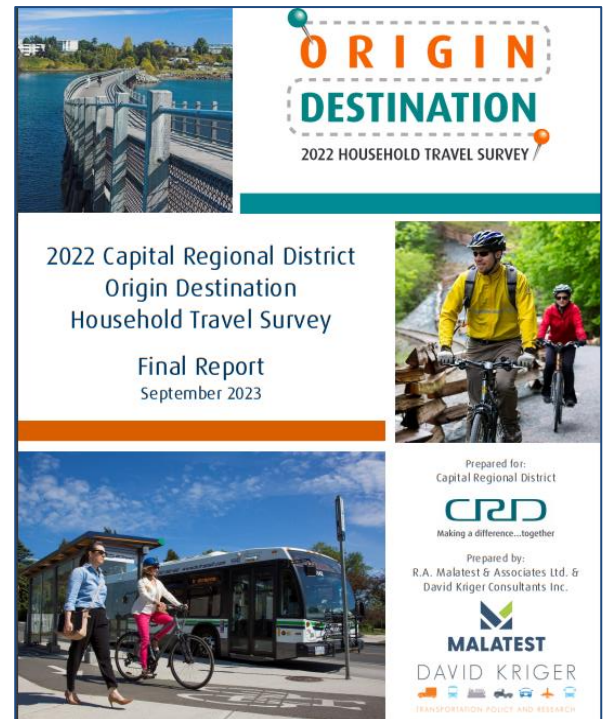
Summary

The Capital Regional District (CRD) recently released the [2022 Origin Destination Household Travel Survey](#), the latest in a [series](#).

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 non-motorized 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 trips: 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

- [Victoria](#): Increase active mode shares to 55% and transit mode shares to 25% by 2041.
- [Saanich](#): Increase active mode shares from 11% to 22% by 2036, and 30% by 2050.
- [CRD](#): Increase [walking and bicycling](#) modes share to 30% region-wide and 50% in denser areas by 2038.
- [British Columbia](#): Double active mode shares by 2030. The [CleanBC Roadmap](#) 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.

Figure 1 Daily Mode Shares, Person 5+, 2022

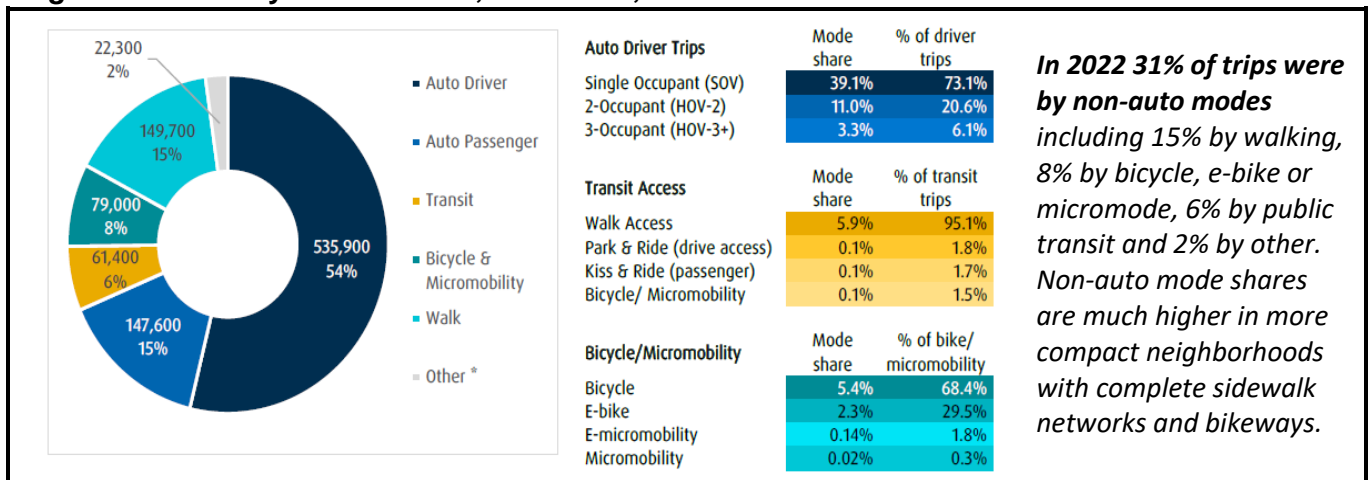
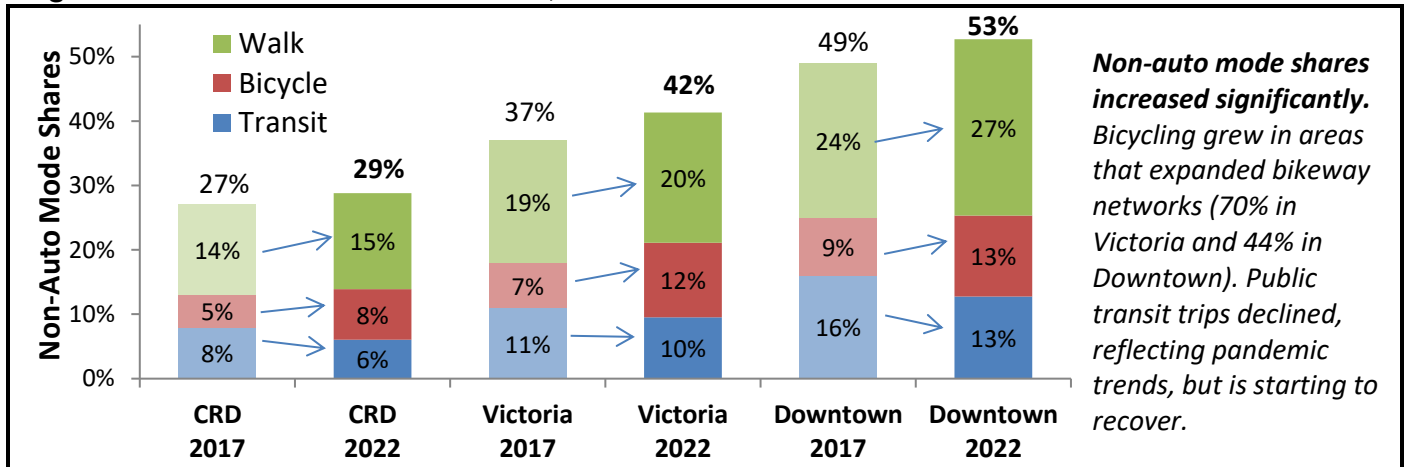


Figure 2 Non-Auto Travel Trends, 2017 to 2022



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

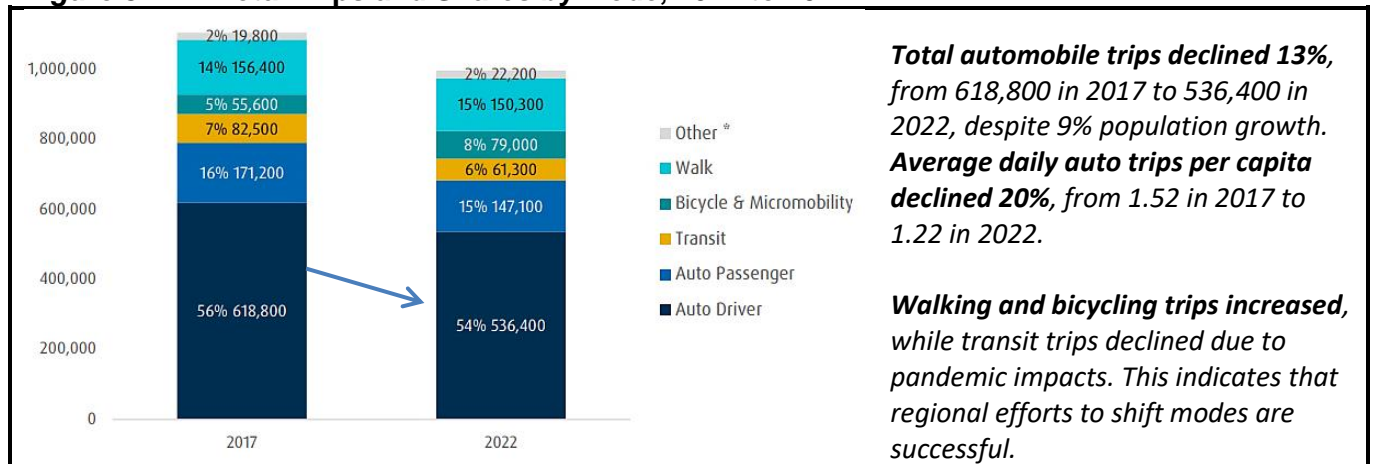
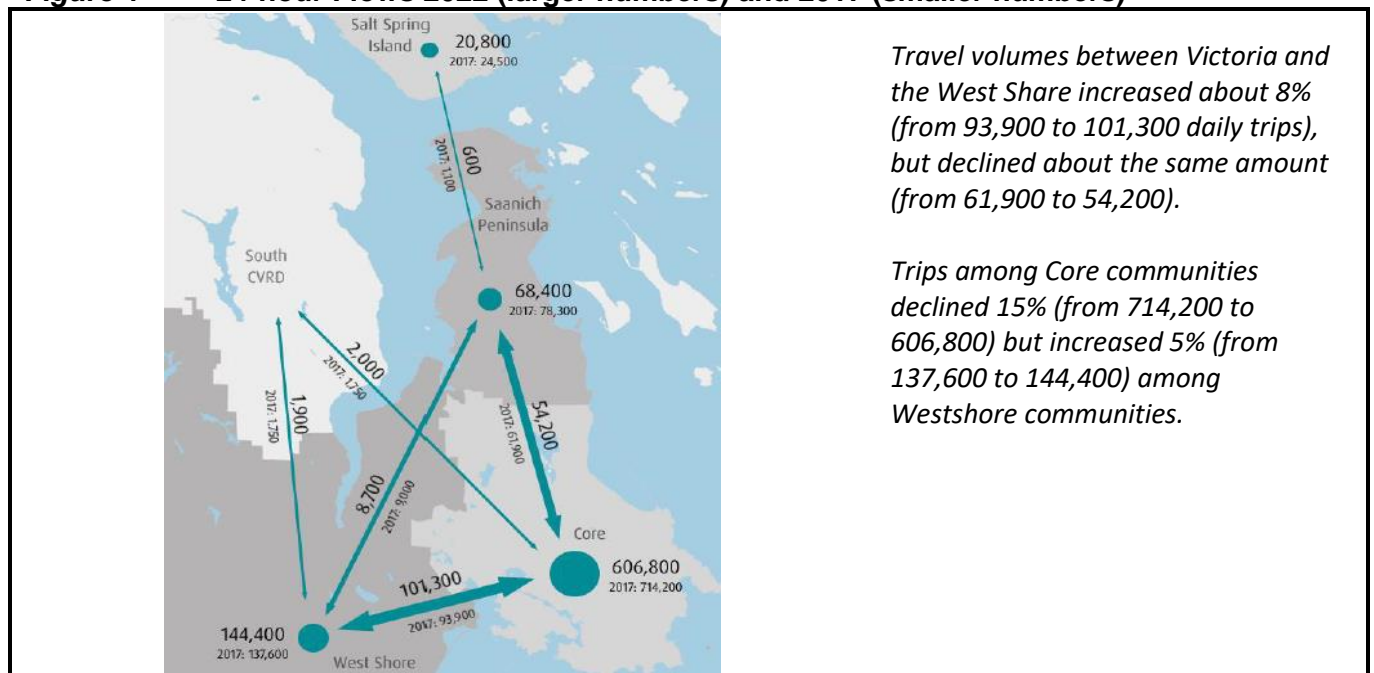
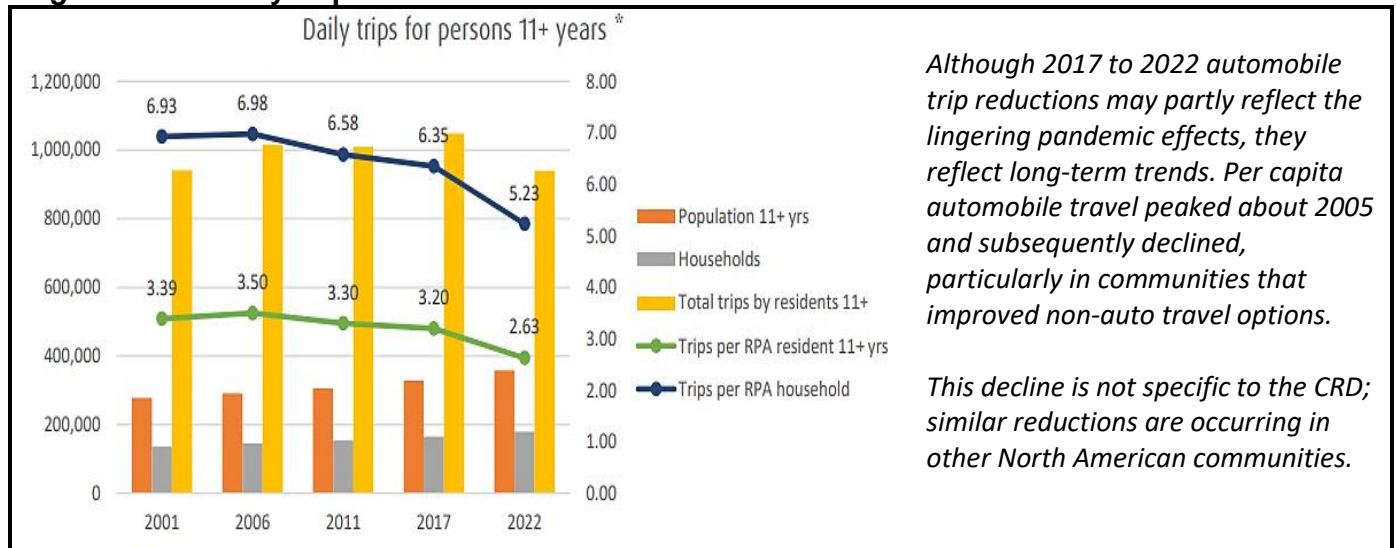


Figure 4 24-hour Flows 2022 (larger numbers) and 2017 (smaller numbers)



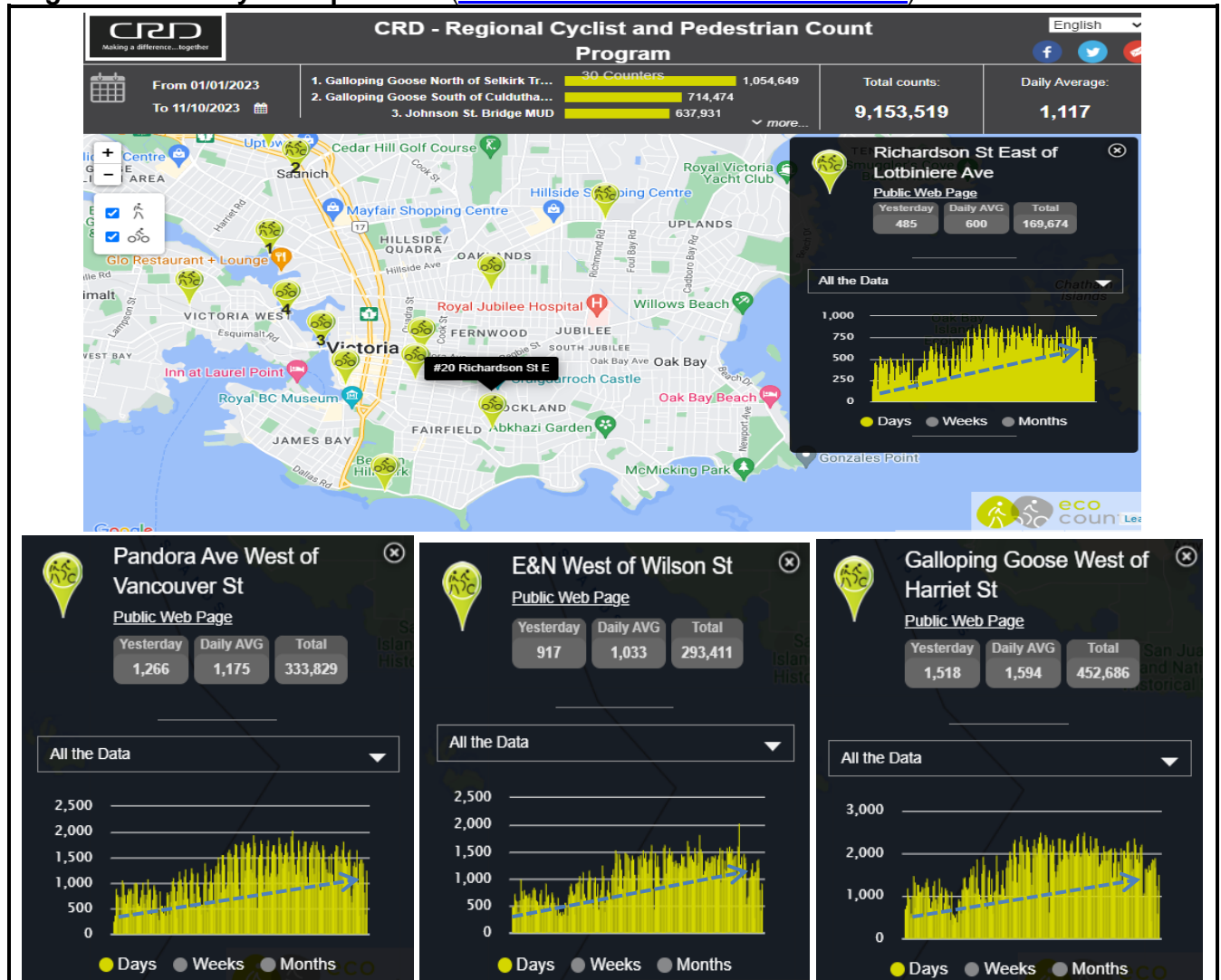
- Although these changes may partly reflect the Covid-19 pandemic’s lingering effects, they are consistent with long-term trends elsewhere (Table 21). Per capita vehicle travel peaked about 2005 in North America due to demographic and economic trends including aging population, increased telework and working at home, more e-bikes, increased urbanization, plus changing consumer preferences (NHTS). Figure 3 shows this effect: 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 5 Daily Trip Trends



- 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 17.8% in 2017 to 19.9% 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 expand the portion of trips that can be made by bicycle, and people bicycle much more after they purchase an e-bike.
- Bicycling increased significantly in areas that improved cycling 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). The CRD’s automated bike counts indicate that bicycle trips typically double or triple after bikeways are completed, as illustrated below.

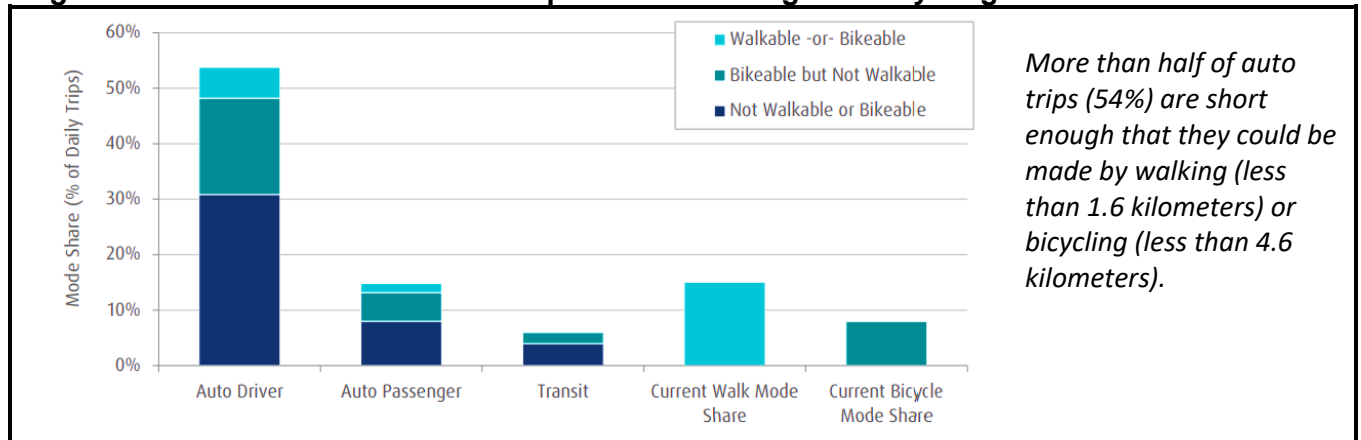
Figure 6 Bicycle Trip Trends (www.crd.bc.ca/about/data/bike-counts)



These graphs from the CRD's Bike Count website show that after protected bikeways are completed, bicycle trips on a corridor typically double or triple, and are likely to continue to grow as the network is completed, allowing more travellers to bicycle and reduce driving.

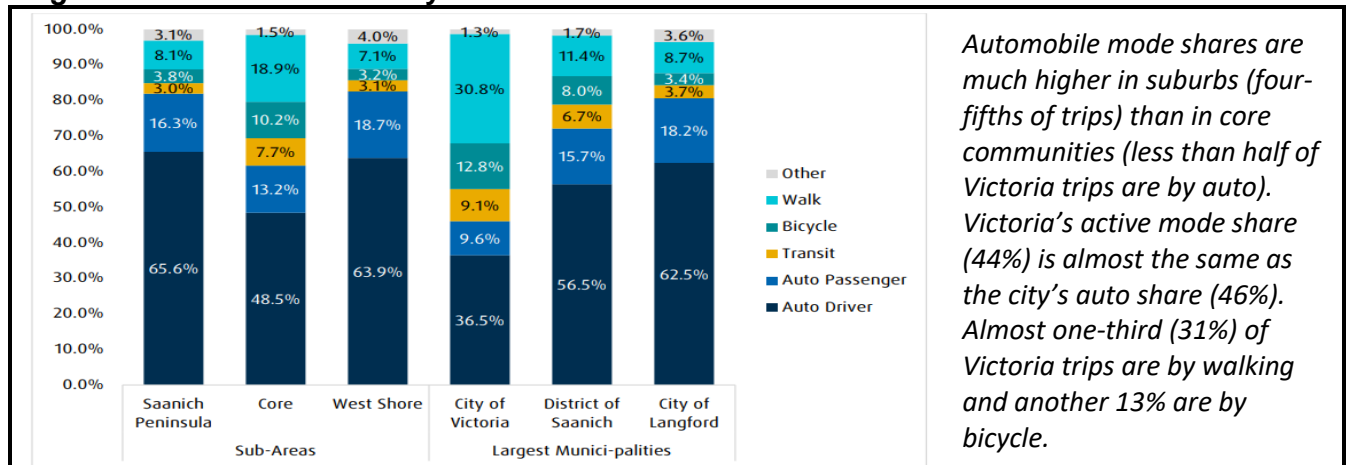
- More than half of auto trips (54%) are short enough that they could be made by walking or bicycling, particularly with e-bikes which significantly increase bicyclists' potential speed, distance, load and climbing abilities.

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.

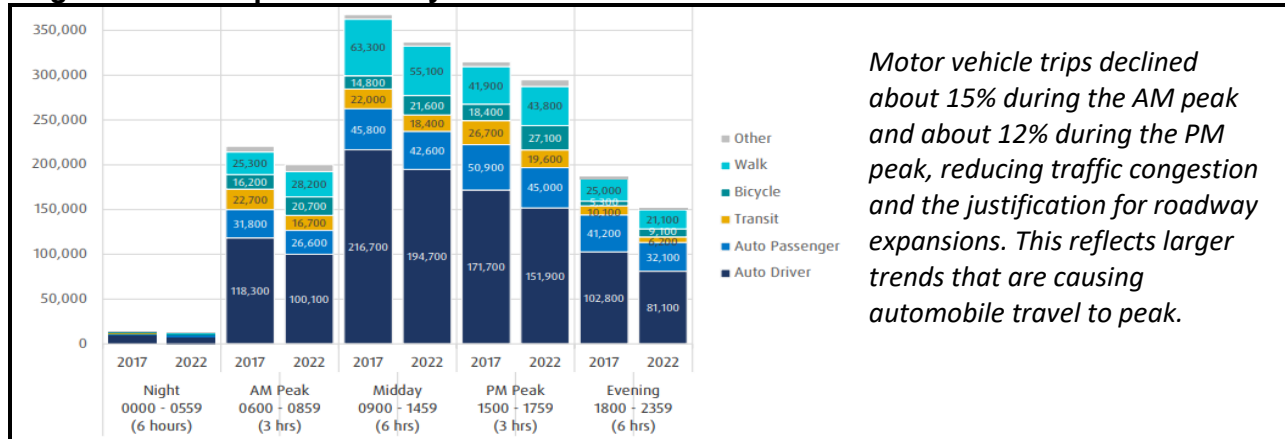
Figure 8 Mode Shares by Sub-Area



- **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%.
- **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).

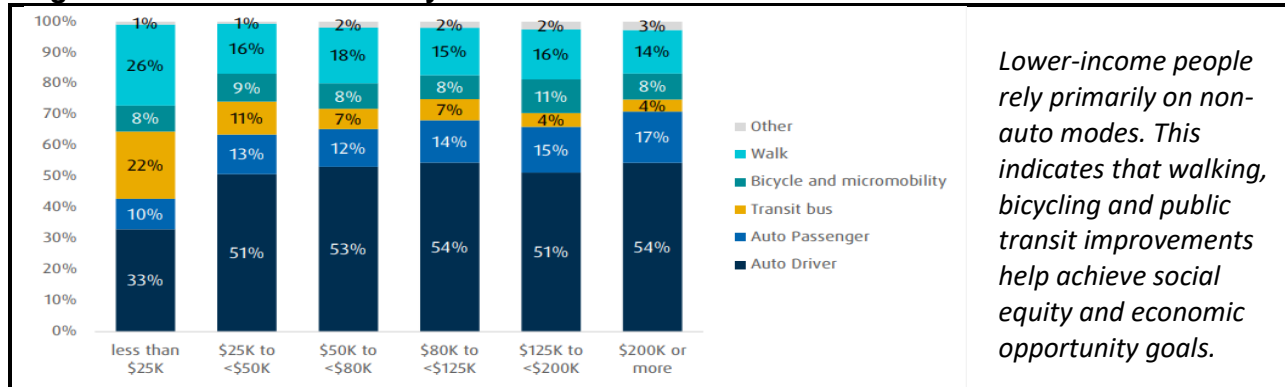
- **Peak-period vehicle trips declined significantly**, as illustrated below. This reduced traffic congestion, and therefore the need to expand roads and parking facilities. Of course, traffic congestion did not disappear, but it is far less severe than would have occurred if vehicle travel volumes had grown at previous rates.

Figure 9 Trip Volumes by Mode and Time Period



- **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.

Figure 10 Mode Shares by Income



- The number of **households living in compact, multimodal communities increased significantly** due to more infill housing in existing urban neighborhoods and more 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 the number of households in Sidney increased 7% from 5,650 in 2017 to 6,040 in 2022.

Current Spending Compared with Travel Demands

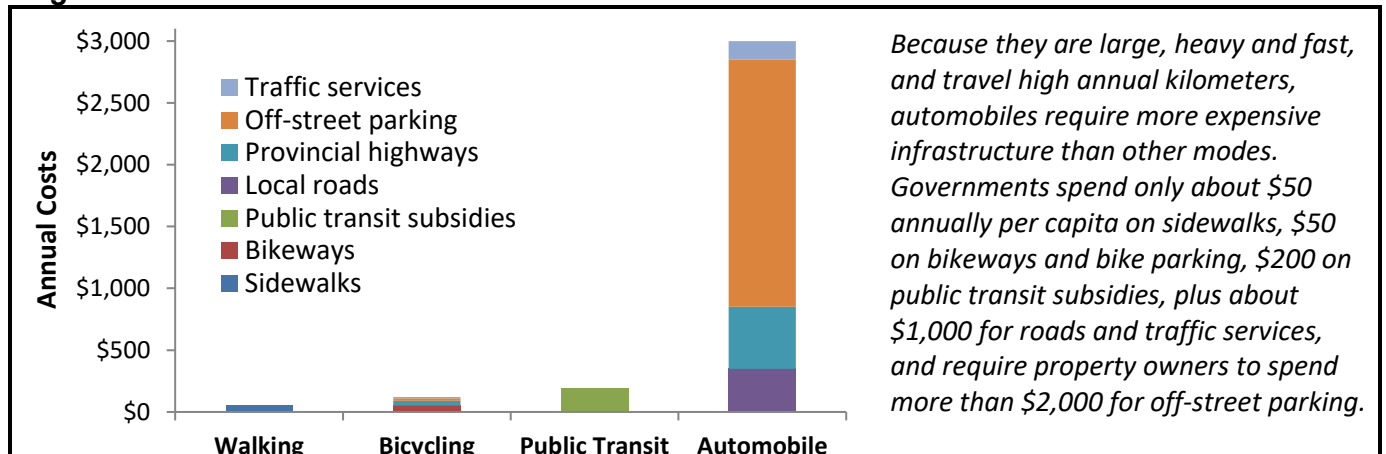
This analysis can help guide future planning and investment decisions.

The province currently [spends](#) 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.

Victoria’s bikeway program costs about \$35 million over ten years, or about \$40 annually per capita. In 2023 [Victoria](#) will spend about \$37 million on street improvements, some of which include sidewalks, bikeways and bus stops, which averages about \$400 per resident, plus \$0.6 million on bikeways and bike parking which averages about \$7 per resident, and \$2.2 million on sidewalks and paths which averages about \$25 per resident. The City also spends millions of dollars annually on traffic services such as traffic law enforcement, emergency response and roadway stormwater management, which probably averages about \$150 annually per capita.

All jurisdictions require property owners to provide offstreet parking at most destinations, which result 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 11 Estimated Infrastructure Costs Per Mode



This analysis indicates 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 walking and bicycling trips increased significantly while motor vehicle trips declined in the CRD. These shifts were particularly large in core communities. Although some of these changes may have been temporary effects of the Covid-19 pandemic, others are likely to be 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 bicycling, due to bikeway improvements and improved e-bike technologies.
- More e-bikes and car-sharing.
- More infill development in walkable urban neighborhoods.

These shifts can provide significant savings and benefits. The 13% reduction in total vehicle-travel reduced traffic and parking congestion in the short-run, and road and parking facility costs over the long run. Although motorists still encounter congestion, it is significantly less than what they would have experienced if automobile travel had grown at previous rates.

These provide large economic savings. 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 several thousand downtown parking spaces. Assuming that this reduced the need for 5,000 urban spaces, with total land, construction and operating costs averaging \$2,000 per year, this reduction provided \$10 million annual savings to travellers, businesses and governments.

Reduced driving and more non-auto modes tends to provide the following benefits:

Table 1 Benefits of Shifts to Non-Auto Travel

Economic	Social	Environmental
<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Energy conservation. • Pollution reductions. • Reduced stormwater management costs and heat island effects. • Openspace preservation. • Reduced sprawl costs.

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.