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## REPORT TO TRANSPORTATION COMMITTEE MEETING OF WEDNESDAY, SEPTEMBER 13, 2023

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**SUBJECT**    2022 Capital Regional District Origin Destination Household Travel Survey

### **ISSUE SUMMARY**

To provide the results of the 2022 Capital Regional District (CRD) Origin Destination Household Travel Survey (OD Survey).

### **BACKGROUND**

The CRD 2022 Origin Destination Household Travel Survey (profiles residential travel patterns on an average fall day). The OD Survey provides comprehensive data about how residents travel around the region and the underlying demographic and household factors that influence people's travel behaviours. The survey provides key data points about where people go, for what purpose and how they get there. The CRD, local governments, the Province and other agency partners use the data to support transportation and land use decisions, track progress toward regional transportation goals and guide additional research. The 2022 OD Survey is provided in Appendix A.

The OD Survey covers the Regional Planning Area, inclusive of the CRD's 13 municipalities and the Juan de Fuca Electoral Area. Since 2017, the OD Survey has also included Salt Spring Island. The OD Survey is statistically representative of travel behaviour in the region. Over the duration of the survey, 62,500 households were contacted, and 8,581 valid surveys were completed, exceeding the target of 7,650 surveys by 11%. This completion rate represents 4.6% of all households in the Regional Planning Area and Salt Spring Island combined.

The 2022 OD Survey methods were adjusted to respond to administrative, societal and technological changes since 2017:

- Added questions about e-bikes and e-micromobility
- More nuanced questions relating to work from home and hybrid work from home
- Replaced 'other' with 'non-binary', 'prefer to self-describe' for gender
- Asked questions about dwelling tenure (rented or owned)
- Asked about household income
- Asked about access to electric vehicle (EV) charging
- Distinguished plug-in hybrid from hybrid vehicles

The above noted changes ensure that the data is robust and reflective of the times and that the 2022 OD Survey aligns well with other OD surveys undertaken in mid to large-sized regions in Canada. Additionally, they better support the CRD's climate action and equity goals.

Although it followed the same general procedure as previous surveys, the 2022 OD Survey is unique in that it took place following severe pandemic-induced impacts on travel. As a result, the report notes differences in travel behaviour from previous surveys and how the pandemic or other factors may have influenced these changes.

## Key Findings

Regional transportation goals are listed below. The OD Survey provides data that helps track the region's progress toward achieving these goals.

### **Goal 1: Reduce congestion in the morning and afternoon peak periods**

People are taking fewer trips, with a 10% reduction in total trips in 2022 despite a 9% increase in population since 2017. This trend can be attributed to changing travel behaviours in the densely populated Core (Victoria, Saanich, Oak Bay, Esquimalt and View Royal). However, trips within the Westshore (Langford, Colwood, Highlands, Metchosin and Sooke), and between the Westshore and the Core and the Saanich Peninsula (Central Saanich, Sidney and North Saanich), are slightly higher in 2022.

Trip volumes are also slightly down. People taking fewer trips throughout the day correspond to reductions in work and school commutes, as well as shopping, restaurant/bar, social activities and other activities that occur outside the commuter peaks. All these reductions are consistent with the lingering effects of pandemic activity shifts.

### **Goal 2: Increase the number of people walking, cycling and taking transit**

Mode share continues to trend in the right direction, with 29% of trips made by walking, cycling and transit use. This is up from the 2017 mode share of 26.6%. The regional mode share goal is 45%. As with trip volumes, mode share varies depending on where you live in the region.

### **Goal 3: Reduce greenhouse gas (GHG) emissions from the transportation sector**

In addition to gains in mode share, the region is also showing gains in the number of EVs-only. The gain in EVs between 2017 and 2022 is significant from 1,900 to 11,900 vehicles. EVs now represent 4% of the region's private vehicles, with hybrids at 3% and plug-in hybrids at 1%. Note that the numbers in the OD survey reflect the responses of surveyed households and may not correspond to the Insurance Corporation of British Columbia's vehicle population breakdown.

## **IMPLICATIONS**

### *Environmental & Climate Action*

Car travel is a significant contributor to GHG emissions. GHG emissions can be reduced in two ways: reducing car trips and switching to EV, hybrid and plug-in hybrid vehicles.

To better understand the rollout of a higher percentage of EVs, the OD Survey collected information on access to EV charging. Access is highest in five+ storey apartments, with 42% of these respondents having access in their building (33%) or nearby (9%). The access rate was 28% for single-detached dwellings, 26% for ground-oriented dwellings and 18% for apartments of less than five storeys.

The OD Survey also collected information on electric bicycles and e-micromobility devices. It found that 11% of adult bicycles were electric, representing 30,490 bicycles and that 2.3% of households had access to an e-micromobility device.

Survey data show that 32% of full-time workers who usually commute to an external workplace now work from home at least once a week. This trend has had a direct impact on daily travel volumes. With more people commuting and working, remote work could be another way to reduce the number of car trips.

*Regional Growth Strategy Implications*

The Regional Growth Strategy (RGS) has set a goal of 42% of all trips made by walking, cycling and transit (sustainable modes) by 2038. Since adoption of the RGS, the regional target has been adjusted upwards to 45% to reflect the Victoria Regional Transit Commission increased the transit mode share target from 12% to 15% in 2020.

For 2022, 29% of trips were made using sustainable modes, up from 26.6% in 2017. Table 1 provides more detail about the change in mode share over time.

*Table 1 Details of sustainable mode shares, persons 11+, 2001-2022*

	2001		2006		2011		2017		2022	
Travel Mode	Daily Trips	Mode Share	Daily Trips	Mode Share	Daily Trips	Mode Share	Daily Trips	Mode Share	Daily Trips	Mode Share
Transit	65,000	6.9%	71,500	7.0%	65,500	6.5%	82,000	7.8%	60,900	6.5%
Bicycle	24,500	2.6%	35,100	3.5%	27,200	2.7%	53,400	5.1%	73,900	7.9%
Walk	109,300	11.7%	101,100	10.0%	133,500	13.2%	144,200	13.7%	136,800	14.6%
<b>Sustainable</b>	<b>198,800</b>	<b>21.2%</b>	<b>207,700</b>	<b>20.5%</b>	<b>226,200</b>	<b>22.4%</b>	<b>279,600</b>	<b>26.6%</b>	<b>271,600</b>	<b>29.0%</b>

Mode share gains are from a 2.8% increase in cycling since 2017. Notable is that while e-bikes only make up 10% of bicycles, they represent 30% of the cycling trips. Among sustainable modes, transit has the highest share for trips between the Core, Westshore and Saanich Peninsula.

Sustained effort is needed to meet the 45% regional mode share target by 2038. A preliminary assessment of mode shift potential indicates that more than half of car driver trips could be made by bicycle or on foot. Additional research is needed to understand whether walking or cycling is a suitable mode for the trip purpose.

*Equity, Diversity & Inclusion (EDI)*

Survey wording was adjusted and new questions were added to better address EDI.

The OD Survey also provides insight into equity gaps. For instance, women and men make nearly equivalent numbers of walking trips, but women have only about two-thirds as many cycling trips as men. Other research supports that this difference is at least partially attributable to women being more reluctant to ride on infrastructure that is not physically separated from vehicle traffic.

Additionally, the OD Survey found that most people travelling by sustainable modes had access to a vehicle, except for transit users. A third of transit users did not have access to a vehicle, possibly making them ‘captives’ to taking transit. Further, a greater proportion of transit users are in households earning under \$22,000. This suggests the need to make transit more attractive so that it is a choice rather than a necessity to expand transit mode share.

*Intergovernmental Relations*

The findings of the report were shared with local government staff at the September 11, 2023, joint meeting of the Regional Transportation Working Group, Development and Planning Advisory Committee and Climate Action Inter-Municipal Working Group. CRD staff will continue to support local government staff as they use the information for transportation and land use decisions.

*Service Delivery*

Information from the OD Survey will be used to support further research by CRD staff such as an update to the CRD Housing and Transportation Cost Estimate Study and to support ongoing work related to transportation governance. Additionally, information will be available to support other CRD divisions such as Regional Parks and Climate Action with their initiatives. The OD Survey will be available publicly on the CRD website.

*Strategic / Corporate Plan*

Information from the OD Survey can contribute to the following corporate plan initiatives:

- 4b-2 Prepare policy positions to support advocacy for infrastructure investments and service improvements to achieve regional transportation priority items related to mass transit, general transit improvements, active transportation and multi-modal and safe highways
- 4b-3 Support local governments to implement consistent approaches to transportation demand management, active transportation and safety policy
- 4d-1 Shift travel behaviour through education, encouragement, and information

**CONCLUSION**

The CRD 2022 Origin Destination Household Travel Survey, conducted every five years, provides valuable insight into the travel patterns of the region’s residents. The CRD, local governments, the Province and other agency partners will use the results to support transportation and land use decisions, track progress toward regional transportation goals and guide additional research.

**RECOMMENDATION**

There is no recommendation. This report is for information only.

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**ATTACHMENT**

Appendix A: 2022 Origin Destination Household Travel Survey