From:	"Mochrie, Paul" <paul.mochrie@vancouver.ca></paul.mochrie@vancouver.ca>
To:	"Direct to Mayor and Council - DL"
CC:	"City Manager's Correspondence Group - DL"
	"LaClaire, Lon" <lon.laclaire@vancouver.ca></lon.laclaire@vancouver.ca>
Date:	3/5/2021 5:07:59 PM
Subject:	Memo - 2020 Transportation Trends Summary
Attachments:	Memo - 2020 Transportation Trends Summary.pdf

Dear Mayor and Council,

Please see the attached memo from Lon LaClaire. It outlines transportation data trends in 2020 as they relate to traffic volumes, safety, and travel choice:

- Pedestrian, cyclist, and motor vehicle volumes have experienced large reductions in 2020 as a result of the COVID-19 pandemic.
- Large reductions in traffic-related injuries and fatalities were observed in 2020 compared to previous years. In fact, the number of traffic fatalities is at a notable low with 8 compared to 9 during the Olympics year.
- A mini-panel survey was conducted in the Summer of 2020 to determine changes in travel behavior brought about by the COVID-19 pandemic. Findings indicate 41-51% of respondents worked predominantly from home during the pandemic.

If you have any questions, please feel free to contact Lon LaClaire at 604-873-7336 or <u>lon.laclaire@vancouver.ca</u>.

Best, Paul

Paul Mochrie (he/him) Acting City Manager City of Vancouver paul.mochrie@vancouver.ca



The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the $x^w m \partial \tilde{M}$ (Musqueam), $\tilde{M} O w v$ (Squamish), and salilwatat (Tsleil-Waututh) Nations.



MEMORANDUM

March 5, 2021

- TO: Mayor and Council
- CC: Paul Mochrie, Acting City Manager Karen Levitt, Deputy City Manager Lynda Graves, Administration Services Manager, City Manager's Office Maria Pontikis, Director, Civic Engagement and Communications Rosemary Hagiwara, Acting City Clerk Anita Zaenker, Chief of Staff, Mayor's Office Neil Monckton, Chief of Staff, Mayor's Office Alvin Singh, Communications Director, Mayor's Office Paul Storer, Director, Transportation
- FROM: Lon LaClaire General Manager, Engineering Services

SUBJECT: 2020 Transportation Trends Summary

The purpose of this memo is to summarize transportation data trends over the 2020 calendar year, including:

- 1. preliminary injury data provided by our partners at Vancouver General Hospital (VGH) and
- 2. multi-modal traffic volumes obtained by City traffic count infrastructure.

The analysis also looks at how changes on the transportation network occurred relative to the COVID-19 phases set by the Provincial Health Officer (PHO).

Overall, 2020 VGH traffic-related emergency room visits and travel volumes have both decreased when compared to VGH 5-year averages and 2019 traffic count data, respectively. **Appendix A** contains the detailed month-by-month statistics.

To respond to the global COVID-19 pandemic, Council directed staff on substantial rapid reallocation of road space to create room for safe physical distancing while walking and cycling, shopping for groceries, and meeting with friends and family. Reallocating road space will make more room for walking/rolling, cycling and transit, so that we can welcome more people to the city, increase jobs, and move around efficiently and enjoyably.

In 2019, Council passed a motion to reallocate, over the long term, 11% of the city's road space away from private vehicles. In November, City Council approved the Climate Emergency Action



Plan that included transport pricing, expanding citywide parking, improving bus speed and reliability, expanding the walk/bike network and promoting active transportation and transit. These actions support the 11% reallocation goal and will help to reduce carbon emissions to mitigate climate change.

Safety

While data from the Insurance Corporation of B.C. (ICBC) is typically used to evaluate collision trends, 2020 collision claims have not yet been received – there is usually a significant lag before the City receives this data. As such, January to October 2020 injury data received from VGH was the primary source to evaluate safety outcomes. Based on this data, there has been a 55% decrease in emergency room visits between January and October 2020 versus VGH's 5-year average for the same period.

Eight traffic-related fatalities were reported in 2020 based on data from the Vancouver Police as shown in Figure 3, a 39% decrease over the previous 5-year average. As data continues to be provided and collected, staff will continue to monitor this positive trend of decreasing traffic-related emergency room visits.

Pedestrian Volumes

The City has a limited number of automated pedestrian counters, all of which are located along Davie, Nelson, and Robson Streets in the West End. These counters saw reductions of up to 60% during the start of the pandemic in late March 2020 and early April 2020. Figure 3 in Appendix A provides weekday comparisons between days in 2020 as compared to a similar period in the previous year. While volumes have recovered slowly since, they remain significantly lower than the previous year. Staff expected the West End pedestrian volume trends are also reflective of pedestrian volumes for commercial areas throughout the City, although not necessarily aligned with more recreational walking routes.

The City's automated pedestrian counting infrastructure is limited, as the current equipment requires that sensors be installed directly over the sidewalk, which typically means that equipment must be mounted on building canopies. Due to this challenge of installing equipment on non-City owned property, City staff has been collaborating with partnering agencies (e.g. BIAs and the Vancouver Board of Parks and Recreation) to install additional pedestrian counters. Staff are continuing to work with our partners to install more counters, as well as investigating equipment with fewer limitations as the technology evolves.

Cycling Volumes

Cycling volumes from bicycle count stations were separated into either predominantly 1. Commuter, 2. Recreational, or 3. Multi-purpose routes. Figure 5 illustrates the various cycling routes where the City has count stations.

Figure 6 provides weekday comparisons between months in 2020 as compared to a similar time frame in the previous year. As shown, recreational route volumes increase in 2020 compared to 2019, while commuter route volumes dropped.

Figure 1 compares bicycle volumes from the COVID response project on Beach Avenue to the next busiest automated count stations from the same time period; summer 2020 represents the highest individual bicycle volumes recorded within the City.

Motor Vehicle Volumes

Figure 7 illustrates the change in average daily traffic (ADT) vehicle volumes in Vancouver. Vehicular count stations have been classified as either City limit counters (located along Boundary Road and Lions Gate Bridge) and Downtown counters (generally located along Downtown bridges and Columbia/Carrall area). As shown in Figure 8, motor vehicle traffic volumes dropped to their lowest levels in the first week of April (40-50% below typical), after which they have gradually recovered to approximately 85%-90% of pre-pandemic levels. Segments along the downtown entry points have experienced larger relative reductions than traffic counters located along the City limits.

Mini Transportation Panel Survey

Since 2013, the City has conducted an annual travel survey of residents to assess typical (fall/commuter) travel patterns. During the summer of 2020, a less-detailed survey was conducted to collect preliminary data on travel choices and behavioural changes related to the COVID-19 pandemic. Figure 9 and 9 summarize respondents' change in preference regarding their typical mode choices for personal and work trips, respectively. As shown:

- Significant reduction in transit usage with 85% reporting decreased usage
- Remote working increased from 7% before the pandemic to 41-51%
- During phase 1 of the pandemic, many people shifted to working from home, including: 60% of people who took transit to work

50% of people who walked or biked to work

40% of people who drove to work.

These proportions do not represent overall mode splits, as detailed trip diaries were not collected as part of the summer survey; only "typical" mode choices were evaluated in the summer survey to get a preliminary indication of City transportation trends. The 2020 Panel Survey Report, which will be complete in summer 2021, will provide more detailed breakdowns relating to overall mode split.

Next Steps

The COVID-19 pandemic has had a significant impact on the daily travel routines of Vancouver residents. Staff will continue to collaborate with our partners to monitor transportation trends and safety data throughout the City. Staff will provide Council with another update later in 2021, along with the results of the more comprehensive Transportation Panel Survey.

Please contact me directly if you have any questions.

Lon LaClaire, M.Eng., P.Eng. General Manager, Engineering Services

604.873.7336 | lon.laclaire@vancouver.ca

Appendix A – Charts



Figure 2 - Change in Average Daily Traffic (ADT) & Change in VGH Traffic-Related ER Visits







Figure 4 - Downtown West End - Change in Pedestrian Volumes

Figure 5 - Permanent Bicycle Counter Locations by Route Type



Figure 6 - Change in Cycling Volumes along Recreational and Commuter Routes







Beach Ave Temporary Path Cycling Volumes

Please note The City of Vancouver is not liable for any errors or omissions in the provided data. Missing Data: The data reflected in this table contain estimations to fill gaps in raw data and equipment calibration. Data is not available for July 22, Aug 6, 7.





Appendix B – Mini Panel Survey – Typical Mode Choice

Figure 9 - Personal Trip Typical Mode Choice



Figure 10 - Work Trip Typical Mode Choice

