

From: ["Mochrie, Paul" <Paul.Mochrie@vancouver.ca>](mailto:Paul.Mochrie@vancouver.ca)

To: ["Direct to Mayor and Council - DL"](#)

Date: 5/31/2022 5:01:26 PM

Subject: Council Memo - RTS 14613 - Scooter Bylaw Council Update

Attachments: ENG - RTS 14613 - Memo - Scooter Bylaw Council Update - May 2022.pdf

---

Dear Mayor and Council,

Please see the attached memo from Lon LaClaire regarding Scooter Bylaw Council Update. A short summary of the memo is as follows:

- In Sept 2022, Vancouver's participation in the Provincial Motor Vehicle Act Pilot Project began which allowed residents to ride privately owned e-scooters on local streets and protected cycle lanes
- On Vancouver streets, for every 20 people riding a bike, one person is using a micromobility device such as an e-scooter (around 0.5% of all modes)
- Per Vancouver Coastal Health data, for every 7 emergency-department (ED) admitted injury related to cycling there is 1 ED admission related to e-scooters, a significantly higher rate
- Initial community feedback has been mixed with some residents being supportive and others reporting conflicts on sidewalks and paths

If you have any questions, please feel free to contact Lon LaClaire at 604-873-7336 or [lon.laclaire@vancouver.ca](mailto:lon.laclaire@vancouver.ca).

Best,  
Paul

**Paul Mochrie** (he/him)  
City Manager  
City of Vancouver  
[paul.mochrie@vancouver.ca](mailto:paul.mochrie@vancouver.ca)



The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the x<sup>w</sup>məθkəḡyəm (Musqueam), Sḡwx̱w̱ú7mesh (Squamish), and səlilwətał (Tsleil-Waututh) Nations.

## MEMORANDUM

May 31, 2022

TO: Mayor and Council

CC: Paul Mochrie, City Manager  
Armin Amrolia, Deputy City Manager  
Karen Levitt, Deputy City Manager  
Katrina Leckovic, City Clerk  
Lynda Graves, Administration Services Manager, City Manager's Office  
Maria Pontikis, Chief Communications Officer, CEC  
Anita Zaenker, Chief of Staff, Mayor's Office  
Neil Monckton, Chief of Staff, Mayor's Office  
Alvin Singh, Communications Director, Mayor's Office  
Theresa O'Donnell, General Manager, PDS  
Doug Smith, Director, Sustainability Group

FROM: Lon LaClaire  
General Manager, Engineering Services

SUBJECT: E-scooter Bylaw - Update

RTS #: 14613

---

### Purpose

This memo provides an update on RTS 14613 report back - Minor Amendments to the Street and Traffic By-law 2849 to Allow Electric Kick Scooters on Protected Bike Lanes and Minor Streets, requested by Council on June 23, 2021. This includes a summary of the results of the initial data findings and next steps. Staff will return to Council in 2023 with additional information and recommend changes to the bylaw, if needed.

### Background

In June 2021 and as part of the Amendments to the Street and Traffic By-Law No. 2849, Vancouver City Council approved the use of privately-owned electric kick scooters ("e-scooters") along protected bicycle lanes and minor streets. Council directed staff to provide an update one (1) year after of the approval (July 2022).

### Pilot Project Scope

In April 2021, the Province of British Columbia (BC) announced the approval of a three-year electric kick scooter pilot program with the City of Vancouver being one of six municipalities

---

participating. The Vancouver pilot officially began in September 2022 after the pilot was enabled by the province and by-law changes were enacted by Council.

### **Operational Requirements**

As part of this pilot, electric kick scooters can be used in the City of Vancouver on:

- Minor streets
- Protected bicycle lanes

Electric kick scooters may not be ridden on sidewalks, major streets, park paths or the Seawall.

Furthermore, the Province has requirements for electric kick scooters including:

- A motor that does not move the device faster than 24km/hr
- Motor power output must not exceed 500W
- A braking system
- Lights are required if operating between sunset and sunrise
- Users must wear a helmet and be 16 years of age or older

### **E-scooter Use in Vancouver**

To understand the prevalence of e-scooters in Vancouver, manual counts of micromobility devices were conducted at 50 locations citywide as part of the 2021 transportation monitoring program. Selected locations were concentrated along commercial streets and nearby bike routes. Devices categorized by staff as micromobility devices included all motorized and non-motorized small personal mobility devices such as e-scooters, electric unicycles, skateboards and rollerblades. Pedestrians, bicycles and motor vehicles are counted separately.

Overall, micromobility volumes were relatively low, making up on average 0.5% of all transportation modes at the observed locations. On average, there was one micromobility rider for every 20 bicycle riders. A large concentration of micromobility riders were within the downtown core, a radius of about 2km. In comparison, the area of high bike ridership is significantly larger, about a 4km radius from downtown. The locations with highest micromobility ridership were along the Beach Avenue protected bike lane and in Robson Square (800 Robson) which both saw around 200 riders over the 12-hour period.

Although regulations currently do not allow riding micromobility devices on busy streets without bike lanes, riders was commonly observed along busy commercial corridors in downtown. Granville Street, Davie Street, and Robson Street all had over 100 micromobility riders, potentially reflecting the users need to access commercial destinations and pick-up food for delivery. On minor streets and arterial streets with protected bike lanes, sidewalk riding was relatively low – typically less than 10%. On busy streets without protected lanes, on average, more than half of riders chose to use the sidewalk – about double the sidewalk riding for people on bikes. This is an early indication that separated paths are an important way to encourage e-scooter users to ride on the street rather than the sidewalk.

There is anecdotal evidence that many private e-scooter owners are gig workers engaged in food or goods delivery. Staff will investigate the role of e-scooters in this type of work.

## **Injury Rates in Vancouver**

According to surveillance data<sup>1</sup> from Vancouver Coastal Health (VCH), emergency room visits involving standing e-scooters are increasing along with growing awareness and popularity of e-scooter ridership. Among Vancouver acute care sites and/or residents, the ratio of e-scooter related visits compared to bicycle related visits is approximately 1 to 7. Seasonality plays a role in VCH surveillance trends as the number of visits in 2021 peaked during summer months. A small portion of e-scooter related visits were hospitalized. However, more than half were seen urgently within the emergency department. Although there are limitations<sup>2</sup> with surveillance data (e.g. changes in data entry behaviour) that can effect trends, an increase in e-scooter related visits was observed in recent months (March and April 2022).

## **Engagement**

Initial engagement efforts have focused on informing users about travelling safely on their e-scooters in Vancouver. At the same time, staff heard from e-scooter owners, and other street users, about the need for more education, enforcement and separation to ensure safety and comfort for all.

A social media e-scooter safety awareness campaign launched online last fall and was shared on our Twitter, Facebook, LinkedIn and Instagram accounts. Analysis of the feedback indicated a high level of public interest in the use of these devices and a desire to see more robust safety measures and bylaw enforcement, particularly in relation to pedestrian safety.

The safety messaging is also applicable to the Parks Board (PB) sections of the seawall and PB staff is notified ahead of any online posts. The campaign was intentionally designed to allow easy amplification of the content on any of our partner social media channels.

Further engagement will seek feedback from those who use their e-scooters for recreation, commuting and work, as well as industry, equity-denied and advocacy groups, safety partners and others. Staff are also consulting internally with Vancouver Police Department (VPD) staff on managing devices like e-scooters that are abandoned or improperly stored on the right-of-way.

---

<sup>1</sup> Surveillance data is subject to change as new information and methods become available.

<sup>2</sup> ED surveillance uses registration data for timely results. Registration data is less reliable and complete, but more timely than validated sources such as NACRS/DAD. A keyword algorithm was used to extract e-scooter related visits in the absence of e-scooter ICD-10 coding. The algorithm identifies visits where mechanism of injury, activity at time of injury, or nature of injury fields contain variations of the keyword “e-scooter”. As new codes are integrated at acute care sites, data quality is expected to increase. Surveillance data is subject to change as new information and methods become available. An e-scooter drop down menu was added to the Cerner registration system in December 2020. Training materials were supplied with the introduction of this selection option to focus on standing e-scooters rather than mobility scooters or mopeds; However, miss-classification is possible. Among the 9 hospitals represented in VCH’s ED surveillance data, 6 are on the Cerner registration system and 3 are on the Carecast registration system. Cerner sites may overestimate e-scooter related visits and non-Cerner sites may underestimate e-scooter related visits. Nine acute care sites are included in the VCH ED surveillance system: Vancouver General Hospital (VGH), St. Paul’s Hospital (SPH), University of British Columbia Hospital (UBCH), Mount Saint Joseph Hospital (MSJ), Richmond Hospital (RHS), Lions Gate Hospital (LGH), Pemberton Health Centre (PEM), Squamish General Hospital (SGH), and Whistler Health Care Centre (WHC). Acute care sites on the Cerner registration system include SPH, MSJ, LGH, PEM, SGH, WHC.

Staff will aim to learn more about device use and report back to Council and the Province in 2023.

### **Initial Community Feedback**

So far, initial feedback has been mixed with some supportive and others reporting conflicts on sidewalks and paths. Most agree that e-scooter users should not be on the sidewalks and walking paths, particularly at high speeds, and suggest enforcement and improved infrastructure (separated lanes and paths) to encourage safer use. The Canadian National Institute for the Blind (CNIB) wrote to identify their concerns, many of which related primarily to shared e-scooters which are not allowed under the pilot. An additional issue for City staff is that many concerns are related to use on Park paths and the Seawall, outside of City jurisdiction and the pilot area. City staff will use this feedback to inform recommendations and continue to work with the Park Board and VPD to address community concerns.

Staff learned more about the use of e-scooters by residents through the data collected during Vancouver-led transportation surveys in the summer of 2021. Of those surveyed:

- 98% said they have never used an e-scooter
- Of the small sample size who had used e-scooters (~2% of Vancouver residents)
  - 29% used e-scooters to travel to work;
  - 22% used them for personal business; and,
  - 66% used e-scooters for recreation trips.
- 78% of those survey agreed e-scooters provide a way to get around
- 53% felt e-scooters helped connect people to the city

### **Shared E-Scooters**

Building a better understanding of how shared and rental e-scooters could be supported on City streets will ultimately be one of the key parts of the Provincial pilot program. However, Vancouver's pilot currently focuses on monitoring privately owned e-scooters as a starting point, due to the complex issues around safety, accessibility, equity, and balancing public realm uses to be considered when introducing this new transportation mode to City streets. In parallel with monitoring privately owned e-scooters through the pilot, City staff have been conducting best practices research and liaising with other municipalities on rental and shared programs, to learn from their approaches about how shared scooters could be supported in Vancouver in the future.

A key factor in the recommendation to limit the pilot to privately-owned electric kick scooters, rather than introducing rental or shared fleet scooters at this time, was to manage the number of new riders on City streets and the associated safety risks. The introduction of e-scooters brings forward new safety considerations for pedestrians, especially those with mobility constraints, given the high rate of e-scooter sidewalk riding. Concerns from residents and stakeholders, notably the CNIB, include the challenge of detecting noise coming from e-scooters, traveling alongside riders moving at high speeds and navigating hazardously parked e-scooters on the sidewalk. Shared e-scooter technology is evolving and could potentially limit sidewalk riding. Staff will continue to speak with e-scooter operators to determine the effectiveness of these new technologies.



Additionally, shared e-scooter operators are still trying new approaches to address affordability, geographic access and other equity issues, especially those which have been more likely to impact racialized and equity-burdened communities. City staff continue to discuss with operators their successes and challenges in other cities to better understand potential operational models should shared e-scooters be implemented here. Currently, staff have seen potential with equity programs that target equity-burdened communities by working with local partners, presenting educational programs or providing flat (or free) access to the system. However, to date only bike share programs have brought all these together and they are not offered in combination by shared e-scooter operators.

Balancing multiple competing uses and transportation modes also presents challenges in introducing a new transportation mode, such as shared e-scooters. Common among all e-scooter operators is the desire to focus their service area in the downtown peninsula, where the tensions between uses in City streets are already high. Growing numbers of e-scooters, whether shared or privately owned, will need to share the limited space on protected bike lanes and multi-use pathways. Additionally, downtown curbside space is already under pressure from existing uses such as patios, parklets, loading zones and passenger zones. Finding additional space within the downtown core for e-scooters, whether station based or free floating will require careful management through a permitting program.

## Next Steps

Next steps for the project are:

- Required annual report back to Ministry of Transportation and Infrastructure - June 2022
- Engagement and promotion – Ongoing
- Multi-agency coordination with participating municipalities and Province - Ongoing
- Monitor in coordination with VCH and VPD – Ongoing
- Parking and storage discussions with COV, VPD & Project 529 - Ongoing
- Council Report - mid-2023

If you have any questions, please do not hesitate to contact me directly.



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

604.873.7336 | [lon.laclaire@vancouver.ca](mailto:lon.laclaire@vancouver.ca)