

Report to Council



Date: November 22, 2021
To: Council
From: City Manager
Subject: Micromobility Permit Program - 2021 Program Evaluation Report
Department: Integrated Transportation

Recommendation:

THAT Council receives for information, the report from the Integrated Transportation Department dated November 22, 2021, regarding the Micromobility Permit Program 2021 Program Evaluation Report;

AND THAT Council approve the amended Micromobility Permit Program for the next permit season with existing restrictions remaining in place, in conjunction with the new recommended changes outlined in this report;

AND FURTHER THAT Council directs staff to bring forward amendments to Traffic Bylaw No. 8120 to implement the Micromobility Permit Program changes.

Purpose:

To provide Council with the 2021 Program Evaluation Report for the Micromobility Permit Program and recommended changes for the upcoming permit season.

Background: The City is currently participating in a three-year provincial pilot program to better understand if electric scooters can help reduce the growth of traffic congestion and curb carbon emissions that contribute to extreme heat, fires, and floods. Kelowna Council's priorities include "emerging technologies make it easier to get around" and "greenhouse gas emissions are decreasing." E-scooters show promise in helping to deliver on these objectives and are in active use in many communities worldwide; in some cases, for several years.

On April 12th Council started the process to update Kelowna's traffic bylaw, enabling e-scooters to be used citywide, in the same locations and following similar rules as bicycles. Council also directed staff to report back before the end of 2021 to evaluate the Micromobility Permit Program. The program evaluation was developed using a range of community engagement and data collection techniques, including:

- ridership data from e-scooter companies
- a survey of e-scooter riders

- ongoing community feedback
- injury information from Interior Health
- a community survey.

A detailed summary of findings is provided in Attachment 2. Key highlights and recommendations for next steps are summarized in this report.

Discussion: The first five months of the program (from mid-April through mid-Sept) saw 225,000 trips taken by shared e-scooter in Kelowna (an average of 1,500 trips per day). The average trip lasted 16.5 minutes and covered a distance of 2km.

While the initial high levels of ridership indicate there is demand for this type of service, it has also meant a big change for Kelowna in a short amount of time. Approximately 69,000 e-scooter customer accounts have been created since mid-April. The majority of these accounts (46,000) belong to residents of Kelowna or the Central Okanagan. Staff estimate that 20% - 30% of Kelowna’s population aged 16 or over has tried a shared e-scooter.

Congestion and Climate: Results of the most recent rider survey indicate that 33% of e-scooter trips in 2021 replaced car trips (personal car, taxi or ride-hail). This is similar to observations in other North American cities. This means that from mid-April to October, shared e-scooters replaced enough car trips to prevent 148,500 kilometers of vehicle travel on our roadways (the equivalent of driving around the Earth almost four times). This equates to 29 metric tonnes of CO₂ prevented from being released into the atmosphere from tailpipe emissions. However, among Kelowna residents that are repeat riders, 55% of e-scooter trips replaced car trips. This indicates there may be potential for greater benefits as the program becomes more established.

Injuries and Safety: Data on scooter-related injuries was collected by Interior Health and shared with the City of Kelowna. From January to August 2021, 51 confirmed e-scooter-related injuries were registered with the Kelowna General Hospital emergency department, and zero fatalities occurred. Over the same period, 203,000 shared e-scooter trips were taken. This equates to an injury rate of 25 injuries per 100,000 trips (0.025%), which is similar to e-scooter injury rates experienced in other jurisdictions (as reported by Interior Health in Attachment 4) and in line with the bicycle and e-scooter injury rate research presented to Council in June¹. The research concluded that “the risk of an emergency department visit for an e-scooter rider is similar to that for cyclists”. The injury rates that we are seeing for e-scooter riders (0.025%) and bicyclists (0.01%) in Kelowna in 2021 are on par with the average injury rate ranges presented for these modes around the world:

Mode	Injury Rate (Emergency Room Visits)	
E-scooter	8 – 25 per 100,000 trips	.01% - .03%
Bicycle	11 – 18 per 100,000 trips	.01% - .02%

Source: Safe Micromobility, OECD International Transport Forum, 2020

A clearer picture emerges when examined by month, where injury rates were highest in April and May (first 40 days) and then declined over the summer. The data supports this, as research shows 33% of e-

¹ OECD / International Transport Forum (2020). [Safe Micromobility](#)

scooter injuries occur during first rides² and 72% of Kelowna riders had never ridden an e-scooter before the program launched in April.

Staff have reviewed the injury data provided by Interior Health in Attachment 4 and incorporated the policy and program considerations into the report recommendations in the Conclusions Section (and described further in Attachment 2). Additionally, staff recommend partnering with Interior Health moving forward to comprehensively understand injury rates across all modes (rather than looking at single modes in isolation).

Community Feedback: Since program launch, staff have been monitoring the number of public contacts with the City regarding the e-scooter program. From mid-April through October the City received a total of 211 complaints, or roughly one complaint for every 1,000 shared e-scooter trips. The most common concerns submitted have been related to improper e-scooter parking (32% of complaints), sidewalk riding (23%), and lack of helmet wearing (19%). In response to the concerns, the City has implemented approximately 85 amendments to how shared e-scooter service is delivered since the start of the program, which has helped reduce the number of complaints over time.

Additionally, the City recently conducted a broad community survey to collect feedback from the general population. A total of 698 responses were received with 41% of respondents saying they had tried an e-scooter. Responses were weighted by age, gender, and postal code to reflect Kelowna's population. Still, it was an opt-in survey, not a random sample of residents, which means people with stronger opinions on e-scooters were more likely to respond.

Overall, 53% of respondents supported continuing the e-scooter program, while 42% were opposed to continuing the program and 5% were unsure. Support for the e-scooter program varied most by age and by whether the respondent had tried an e-scooter:

- Respondents under the age of 55 were more likely to support continuing the program (66% support), than those 55 or older (34% support).
- Respondents who had tried an e-scooter were more likely to support continuing the program (86%) than those who had not tried an e-scooter (30%). Notably, this was a consistent trend across all demographic groups. For example, 79% of people 55 or older who had tried e-scooters support continuing the program.

Support for the program was also highest among residents in the V1Y postal code (Central Kelowna) where e-scooters are ridden the most. No significant difference in support for the program was observed by income, gender, or disability status.

Equity and Accessibility: One of the key concerns staff have heard is that improperly parked e-scooters blocking sidewalks can create challenges for people with disabilities, older residents and pedestrians. E-scooter companies have been fining riders that park incorrectly and staff have been conducting parking audits to monitor compliance rates. The results indicate the rate of improperly parked e-scooters has decreased over time, and since mid-May, 95% or more e-scooters are found to be parked correctly.

² City of Austin (2019, April 22). [Dockless electric scooter-related injuries study](#)

In addition, e-scooters being ridden on sidewalks has also been identified as a key concern for people with disabilities. Like biking on the sidewalk, sidewalk riding with an e-scooter can be dangerous for the rider and for people walking. Education on each e-scooter and in the app informs riders that sidewalk riding is not permitted. Actions the City has taken to help address this issue include the installation of sidewalk decals reminding people to walk their wheels, and requiring the e-scooter companies to implement sidewalk riding detection technology as of July 1st. The sidewalk riding detection data indicates that sidewalk riding is declining as riders receive education, warnings, and fines helping to correct their behaviour.

Conclusion: Several actions have been taken since program launch to address the issues and concerns raised by the community. Staff recommend keeping the existing restrictions in place and incorporating some additional recommendations for 2022, based on the findings of this report. One notable new recommendation is requiring e-scooter companies to include a helmet attached to each shared e-scooter and e-bike. While safety and health considerations of shared helmets remain, the industry has seen companies develop or enter the market with this offering recently, whereas previously, companies had ceased offering this feature.

Issue / Concern	Corresponding Action to address concerns	Existing Action (recommended to continue in 2022 permit season)	New Action (recommended for 2022 permit season)
Too many e-scooters/providers	Total Fleet Cap	700 shared e-scooters citywide	
	Downtown Fleet Cap	No more than 30% of an operator's fleet	
	Limit the number of operators to no more than 2 companies		✓
Riding on Sidewalks	Sidewalk riding detection technology	✓	
	"Walk your Wheels" decals	✓	
E-scooters blocking sidewalks / Improper Parking	Preferred Parking Areas	✓	
	Parking Audits and Fines for Non-Compliance	✓	
	1 hour timeline requirement to repark improperly parked vehicles	✓	
	24-hour timeline to retrieve vehicles with dead batteries or needing maintenance	✓	
Riders not wearing helmets	Helmet selfie providing a financial incentive for wearing a helmet	✓	
	Helmets attached to shared e-scooters *		✓
	Free helmet distribution program**	✓	
Injury prevention	Low Speed First Ride*	✓	
	Encourage providers that offer pricing plans that mitigate rushing*		✓
	E-scooter features that improve safety (bells, front and rear lights, reflectors, brake lights)*	✓	
Intoxicated Riding	Riding prohibited downtown from 10:30 pm to 4 am*	✓	

Issue / Concern	Corresponding Action to address concerns	Existing Action (recommended to continue in 2022 permit season)	New Action (recommended for 2022 permit season)
	Sober riding pledge*	✓	
Speeds / conflicts with pedestrians on multi-use pathways	Riding prohibited on Bernard closure and Waterfront shared pathway	✓	
	Speed restrictions in high conflict areas*	✓	
	Share the Path Education*	✓	
	Build out Kelowna's all ages and abilities active transportation network, including separated and protected facilities where warranted*	✓	
Underage riding	Age Verification via ID Check	✓	
	Group Ride Feature Disabled	✓	
Unsafe riding behaviors	In person educational events held every two weeks	✓	
	Street teams (e-scooter staff that provide in-person education and enforcement)	✓	
	Photo-based enforcement process	✓	
	E-scooter safety education campaign*		✓
	Safety knowledge quiz for riders*		✓
Covid-19 and public health considerations	Daily sanitization and other Covid-19 protocols	✓	
Affordable transportation options	Low Income Access Plans	✓	
	Access without a data plan and for the unbanked	✓	
Bring back bikeshare	Require companies to offer both e-scooters and e-bikes		✓
Cost of Program Administration	Two-year permits		✓
	Administration fee for service providers		✓

*Action aligns with Interior Health policy considerations

**This program would be discontinued once helmets are attached to each shared e-scooter and e-bike starting in the 2022 permit season.

For the 2022 permit season, staff recommend amending the Micromobility Permit Program to limit the number of e-scooter companies operating to no more than 2 companies and issuing two-year permits to reduce staff administration time and provide more certainty for both operators and riders. Staff also recommend adding an administration fee that would help cover the cost of program management.

The last key recommendation is designed to help offer e-bikeshare service in Kelowna. Over the past few months, many new and existing companies have started delivering shared e-scooters and e-bikes. By modifying the Micromobility Permit Program to bundle e-scooter and e-bike permits together the City can incentivize companies to offer both vehicle types.

Next Steps: Current e-scooter operation permits will expire on April 19th, 2022. If Council chooses to continue the program into the next permit cycle, staff will need to open the application process in December 2021 to allow time for application submission, application review, field testing, permit issuance and new service launch by April 20th, 2022. This schedule would provide uninterrupted service, which is important for establishing the program as a dependable service that residents can rely upon.

Internal Circulation:

City Clerk
Communications
Community Safety
Infrastructure
Parking Services
Planning & Development Services
Policy & Planning
Risk Management

Considerations applicable to this report:

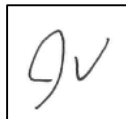
External Agency/Public Comments: See Attachment 4: Injury data and report from Interior Health
Existing Policy: Council priorities 2019 – 2022: “Emerging technologies make it easier to get around” and “Greenhouse gas emissions are decreasing”

Considerations not applicable to this report:

Communications Comments:
Financial/Budgetary Considerations:
Legal/Statutory Authority:
Legal/Statutory Procedural Requirements:

Submitted by: Mariah VanZerr, Strategic Transportation Planning Manager

Approved for inclusion:



J. Vos Divisional Director, Infrastructure

Attachment 1: Presentation

Attachment 2: Micromobility Permit Program - 2021 Program Evaluation Report

Attachment 3: E-scooter related injuries in Kelowna, BC (Interior Health)

Attachment 4: Community Survey Summary